

Occupational Titles? Hard to Eat, Easy to Catch.¹

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Economic modernisation in the 19th and 20th century and the (almost) concomitant rise of modern science intensified the debates on the nature and the change of social stratification. Since then, measuring social positions is a central task of almost any researcher who examines the past. Both the theories and data sources that are today used by historians and sociologists to measure social positions have their roots in this period.

The main theoretical perspectives on social stratification that were developed since then can be summarised by a discussion of Marx, Weber and Davis and Moore. Large-scale industrialisation and the intensification of capitalism in the 19th century made Marx (1818-1883) aware of the crucial importance of the property of means of production. Hence his strongly dichotomous view on social stratification: capitalist owners were distinguished from those who only had their labour power to sell. Weber (1864-1920) experienced capitalist society at a later stage. He developed a more nuanced view in that he was much more aware of the importance of skill as a determinant of life chances, next to property. Weber went even further and added status, or prestige, and party as other determinants of life chances that could not be reduced to someone's class position. Davis and Moore wrote their influential 'Functional Theory of Stratification' in 1945. Their society was one in which class differences seemed to be blurred and social mobility was truly possible. Their analysis was based on occupational prestige, which they saw as an overall indicator of the functional importance of this occupation for society as a whole. In this way, Davis and Moore's view was diametrically opposed to Marx' view. Both the form of stratification (differentiation of social stratification into a multitude of occupational ranks versus Marx' dichotomous view) and the underlying logic (societal evaluation of the functional importance of occupations versus Marx' stress on the means of production as a power source) could not be more different.

These three theoretical perspectives shape our view on social stratification. But the weight of the past is also observable in more practical terms. The vital registration of particularly marriages, the population and industrial censuses and all kinds of tax registrations are some of the serial administrative sources that are used by historians and sociologists. These databases are the product of the efforts of the nation states to keep or increase their grip on modernising society. They give us the

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necessary information on which empirical research can be based, but do of course also limit and shape our efforts.

One prominent strategy to measure social positions within the limits and possibilities imposed by these theoretical perspectives and data sources that was adopted during the last decades was the use of occupational titles. This operation of measuring social position via occupational titles requires two steps. The first step is to polish the rough material, viz. the occupational titles found in the sources, and to classify these into a still relatively large number of occupational categories. Thus, a standardised list of occupational titles is created. The second step involves the classification of these categories into a social scheme by which these occupations are assigned to classes, strata, ranks or whatsoever.

The methodology of measuring social positions has always provoked much controversy. This discussion focused on four specific points: 1. the bad quality of occupational information, and the bias provoked by the 'social production' of occupational titles by the procedures used by contemporary administrations, 2. the lack of validity of occupational information for social stratification research, 3. the loss of information by classifying occupations into occupational categories and classes, and 4. the neglect of context when applying 'universal' classification systems.

Nevertheless, this did not prevent researchers to continue to measure social position via occupational titles. It seems that there is no option but moving forward. Stopping to use occupations is simply no good idea, given the widespread use of occupational titles in current research. Unfortunately, the debate on whether and how to use occupations became less and less explicit. Many scholars used occupations, others despised it, but not too much energy was lost in responding at the criticisms. The aim of this book is to continue this debate by looking for explicit improvements in the daily practices of using occupations in historical research.

In this introductory chapter we will first rehearse and evaluate the criticisms towards the use of occupational titles. We continue by presenting the other chapters in this book within the perspective of this debate.

1. Historical Critique on The Use of Occupations

The first line of criticism focuses on the quality of occupational information. Maybe occupational titles are useful to measure social position, but according to this line of criticism, the quality of the information in the sources is that dramatically bad that it is a strategy not worth the effort (Gubin & Van Neck, 1981). Some of the problems can be related to the 'production' of occupational titles (the under-registration of second occupations, the lack of information on the artisanal career, the lack of

information on women's occupations, ...). Administrations use implicit and explicit criteria that are informed by administrative and ideological standards (Vanhaute, 1999, 233). The recent work by Bracke (2008, 337, 347) provides a good overview of the administrative and ideological standards, and practices, underlying the production of occupational titles for the Belgian case.

These procedures changed rather dramatically in the course of history. Important, for example, is the changing evaluation of 'unpaid (female) work'. While it did not make sense to classify women working alongside their husband as 'without occupation' in the early 19th century, this more and more became the case in more recent periods (see for example Vanderstraeten, 2005 on the Belgian population census). In this way, many women were classified as having no occupation, as they did not perform paid work outside the home. A similar observation was found when examining 19th-century marriage certificates. Occupational titles for brides and their mothers have the highest number of missing values. In the second half of the 19th century, it became even more and more difficult for brides to be connected to qualifications that refer to income (such as 'rentenier'; renter) (Van de Putte, 2005). The central problem is of course that the distinction between 'ideological' and 'real' changes is not always easy to make.

A similar example concerns the artisans. It has been found, for example, that qualifications referring to artisanal careers became less and less observed during the 19th century. This may be related to a different attitude by administrators (who evaluated this as a backward form of economic organisation) or may refer to the 'real' decreased relevance of these titles. Being a 'master', for example, was no longer a solid guarantee for 'economic' independence (Alter, 1978; Crossick, 1978).

But the administrators cannot be blamed for everything. Some occupational titles are inherently vague, such as 'farmer' and 'merchant', or refer to occupations of which we do (no longer) know what their precise job content was.

This criticism, while evidently very important, must to some extent be put into perspective. First, every piece of historical information is subject to some vagueness. Measuring income via wages, for example, is also far from easy. It is not evident to collect wage information for a representative set of persons. Furthermore, the information itself is typically difficult to interpret (how many days did the wage-earner work? Did that wage-earner have to pay assistants himself?, ...). To give another example, any information that was used for tax calculation is problematic, as we know that under-registration due to tax-avoidance behaviour may be a serious problem. In other words, vagueness is always a problem, not only when using occupational titles. Secondly, we are not always interested in too much detail. Some reduction is important in order to make reality interpretable. When using occupational titles, one can survive with some ambiguity. Most research instruments based on

occupational titles are rather robust. If occupations are grouped into a small number of classes or categories, this reduces the amount of misclassifications due to vagueness seriously. Thirdly, even though some frequent occupations (e.g. farmer, merchant) are indeed inherently vague, it is not the case that every occupational title is problematic. Or in other words, using occupational information in rural areas in which 80% of the population can be entitled a farmer, is something different than using occupations in highly-differentiated cities.

A second line of criticism is that occupations are sometimes deemed to be totally useless to measure social stratification. For a notorious example of this argument we can refer to the work of De Belder (1973-1974). In his view, social stratification is based on property. Property is *the* criterion to distinguish classes. De Belder opposes this Marxist view to the Weberian view that social stratification is based on prestige (or 'social honour', 'status'), on the basis of which we can distinguish estates ('*standen*'). In De Belder's view it is nonsense to use the subjective evaluation of the occupation as a basis to measure someone's social position, as this prestige does not necessarily match the property situation of that person... (De Belder, 1973-1974, L, LI). This argumentation is legitimate, that is, it is the choice of a researcher and it is based on his vision on reality.

But, one can wonder whether this is an argumentation strong enough to stop using occupations in social stratification research. First, De Belder's evaluation of Weber is misleading. Weber's point is not that prestige is *the* criterion on which social stratification is based, it is an additional one, and even not the most important one (Weber, 1994). In the eyes of Weber, a first dimension of stratification is class, which is based on property and skill. Next to class, there is prestige and party, interpreted by Scott (1996) as the hierarchical position within an organisation (a company, a state institution, a church, etc.). Secondly, some scholars, particularly Treiman (1976) claim that prestige can be used to measure underlying dimensions of social power (namely property, skill and hierarchical position). In other words, occupational prestige is often used as an indicator that refers to these underlying power sources. Although this view is also rigid (and not uncontroversial, see Van de Putte & Miles, 2005), it shows that this debate is far more complicated than suggested by De Belder. Thirdly and most important, even though occupations may be used to measure prestige, they do also give direct information on other sources of power, namely skill, property and hierarchical position. To sum up the latter two arguments, even if one does not want to rely on prestige as a basis of social stratification, one can use occupational titles.

The third criticism points at the problems of coding occupational titles into a small number of occupational categories, or even smaller number of strata or classes. A first argument concerns the fact that "grouping occupations involve presumptions, value judgments and ideological schemes that

may alter reality” (as rephrased by Bouchard, 1998), or stated differently, “classifying is not neutral, it is based on historian’s preconceived notions on how society was structured and what constituted a social group” (Van den Eeckhout & Scholliers, 1997, 157). In our opinion this criticism is exaggerated. Fortunately all scientists have preconceived notions on reality, otherwise it is impossible to observe anything (Bouchard, 1998). Yet, this criticism has a point in that in practice it seems that preconceived notions on reality are not always finetuned enough to deal with the complex nature of society. Historians and sociologists with expertise knowledge on specific economic niches, areas or time periods, may have more information available to judge the occupational titles in the sources than typically is required to apply the procedures imposed by standard classification schemes. This would plea for a more inductive approach in which the data speak for themselves – with the help of these experts. The danger of such a strategy, however, is that much of the decision making becomes less explicit and less controllable by other researchers. Therefore, it is perhaps meaningful to counter this criticism on the use of preconceived notions on reality by the development of more explicit, logically coherent and sound classification rules to be applied on the classification of occupations. In other words, the preconceived notions should be made open for discussion.

A second argument against classifying occupations is that this activity is artificial. Occupational categories are supposed to be homogenous (Van den Eeckhout & Scholliers, 1997, 157), while in reality, occupations classified into the same category might differ (a lot), or might be similar to occupations classified in other categories. In short, it is sometimes believed that in ‘reality’, occupations refer to continuums rather than to separate categories, and this is not taken into account when classifying these. Also this argument is, as such, exaggerated. There is no way of avoiding categorisation in any science. Moreover, this loss of information is not necessarily problematic. Too much detail might even distort the understanding of major social processes (Bouchard, 1998). But, again, this criticism can be read in a more useful way as a plea for making explicit and logical coherent classifications.

A third argument against classifying occupations is that the mechanisation of this practice, which is a logical consequence of the use of large scale databases, leads to an uncritical view vis-à-vis the historical sources. In this way, potential problems in the quality of the occupational problems will less easily be discovered. This is a reasonable critique. The only way of dealing with it is to establish some procedures to limit the effects of this. A first procedure may be to compare the performance of the different coders involved in the coding process. Another procedure is a bias analysis in which the frequency differences in time and space of specific occupational titles are examined in order to detect changing strategies of administrators in the definition of occupations.

A final line of criticism concerns the lack of contextualisation in social stratification analysis. This argument was for example put forward by Vanhaute (1999). He claims that (universal) a priori models to study group formation are problematic in the sense that they do not recognise the impact of the specific social context (the relationships between the individual, the household, the community, ... the world system), while this social context does determine the life chances of that individual. In other words, time and place are important. This argument is, in our opinion, valid. The social power of a carpenter is per definition dependent upon the social context in which that carpenter works. At the most simple level, the number of other carpenters in his area strongly influences the 'value' of his skill.

While we do think that much more can be done to deal with this context problem, we must also point at the fact that context-specific social classifications (further called 'local schemes') are as such not unproblematic themselves. First, constructing these classifications is typically rather time-consuming. The question is then whether the incorporation of social context in the classification tool is worth the effort. Secondly, only using local schemes may distort the overall picture as the results produced by these schemes will evidently lack comparability. Nevertheless, this context problem is important.

What Now?

These criticisms have been raised during the past decades. At the same time the majority of researchers in the international scene has continued to use occupations to measure social position, and most of them have done so without extensively responding to the issues raised. There is no "critical reflection on the act of classifying as such" (Van den Eeckhout & Scholliers, 1997, 157). While ignoring occupations in social stratification research is not a good idea, neither is it acceptable that the aforementioned criticisms remain without answer. Important however, the research field has evolved in such a way that some of the issues raised can be seen from a new perspective.

First, in the past decades we saw an increasing number of *large-scaled databases* containing information drawn from population censuses and vital registration records. This stimulated the use of occupations even more – occupational titles were easy to catch as typically recorded in this type of source. In contrast, collecting property information, is far more difficult and time-consuming for large-scaled databases.² The construction of large-scaled databases also attenuated some of the problems mentioned before. When using a dataset with thousands of occupational titles, it becomes

² But there are exceptions, see for example the Scanian Demographic Database that is used by Van de Putte & Svensson in this volume.

very clear that misclassification of 'difficult' titles is unproblematic, as it does not at all have consequences for the statistical analysis.

Secondly, to increase the comparability of historical occupational titles, which was previously very difficult due to lingual and regional differences and changes over time in occupational titles, historians and sociologists designed a historical classification based on the International Labour Organisation's 'contemporary' classification ISCO68 (*ILO, 1969*): HISCO, the Historical International Standard Classification of Occupations (Van Leeuwen et al., 2002). With the development of HISCO a new tool is available to deal with the crude occupational title and produce a first standardisation and classification. As HISCO is also widely used throughout this issue, we describe its features in some more detail.

In HISCO occupations are categorised according to tasks that need to be fulfilled in that occupation. HISCO divides occupations into eight major groups (e.g. major group 5 'Service Workers'), each of which is divided in two to ten minor groups (e.g. minor group 5.3. 'Cooks, Waiters, Bartenders and Related Workers'). These 83 minor groups are again subdivided into 284 unit groups (e.g. 5.31 'Cooks'). Finally, these unit groups consist of 1,881 occupational categories, the lowest level of detail (e.g. 5.31.50 'Ship's Cook'). Occupations with comparable tasks are grouped into one of these categories. Apart from occupational titles, historical documents sometimes provide more information closely related to the occupation at hand. HISCO provides the possibility to categorise this additional information into three subsidiary classifications: *status* (containing information on ownership, level of artisan career, etc.), *relation* (containing information on retirement, voluntary or honorary status of the occupation, etc.) and *product* (containing information on the products that are traded or manufactured).

HISCO stimulates international comparative research, and most important, it enables researchers to communicate about the occupations in their databases and to be much more *explicit* about the underlying classification principles. It became easier, and therefore mandatory, to show what occupations were assigned to what specific class or stratum. Indeed, critical reflection on the use of occupations becomes more and more possible.

Thirdly, as a follow-up on the development of HISCO, there is now a new generation of social schemes, typically linked to HISCO, that classify occupations into social positions (be it classes, status groups or prestige indices) which are much more explicit: the SOCP0 scheme (Van de Putte & Miles, 2005), HISCLASS (Maas & Van Leeuwen, 2005), HIS-CAM (Lambert et al., 2008), ... These schemes have in common that they are very explicit in the constitution of each class or rank, and have made automatic coding procedures available that can be applied on any dataset in which occupations are

coded into HISCO. The explicit coding procedure and underlying logics make criticism possible, which is a huge step forward. These schemes include instructions for categorising occupations into social class schemes (SOCPO and HISCLASS), and scales that provide convenient metrics to indicate the relative social advantage or disadvantage typically associated with an occupation (HIS-CAM, for instance, is a scale in which occupations are ranked according to empirical patterns of social interaction between the incumbents of occupational positions, and those ranks are interpreted as indicators of relative position within a hierarchical structure of social stratification).

As the SOCPO scheme and HISCLASS are used in many of the articles in this issue, we describe these in some detail. The central concept of the SOCPO scheme is social power, which is seen as the general principle underlying the class structure. The degree of social power available to an individual through his economic role determines his or her level of dependency. Those who are not independent differ in their level of dependency according to their replaceability, controllability and the amount of formal, delegated authority they possess. Two types of social power are distinguished. Economic power is based on material resources of power, such as property. Cultural power is based on non-material power sources and concerned with social evaluation. These forms of power are typically related but they do not overlap completely. We therefore distinguish between redundant and additional cultural power. Five dimensions are used to further specify economic and cultural power: property, hierarchical position (the command position one has in an organisational structure, e.g. 'manager', 'foreman'), skill, whether a person's work comprises predominantly manual or non-manual tasks, and 'pure' status (in other words, a title that refers to more or less ascribed qualities, such as 'knight', and does not directly refer to skill, property or hierarchical position).³

An important principle of the scheme is that these dimensions cannot be combined in a rigid or dichotomous way. For example, although it can be an important discriminator (Parkin, 1972), being a manual rather than a non-manual worker is not an attribute that divides all manual and all non-manual workers into separate groups.⁴ In SOCPO, this dimension is not operationalised at all for unskilled (SP level 1) and semi-skilled workers (SP level 2). This is because the additional social power related to the non-manual aspect of unskilled and semi-skilled work is irrelevant given the fact that there are virtually no material power sources present. An average shop assistant, for example, has a similar level of social power as a semi-skilled manual worker. It is important, therefore, that a class scheme not only defines dimensions and their relation to social power but makes explicit how the

³ In historical sources these titles are often used as an alternative for an occupation. Often they are based on economic power, but these titles of pure status also reflect the presence of additional cultural power.

⁴ E.g. classifying the *manual*, unskilled, unpropertied in one group, the *non-manual*, unskilled, unpropertied in another group.

dimensions are connected to each other. In this regard, the SOCPO scheme is founded upon a clear set of arguments and practical procedures.

The result is a scheme with five Social Power Levels. These levels are labelled 'elite' (SP level 5), 'middle class' (SP level 4), 'skilled workers' (SP level 3), 'semi-skilled workers' (SP level 2) and 'unskilled workers' (SP level 1). Taken together, the latter three levels can be grouped under the heading 'lower class'. To be clear, these SP levels are equivalent to objective class positions, and are not necessarily collectivities of persons. One aim of mobility research is to examine whether these objective positions lead to the formation of *social* classes in the Weberian sense. Table 1 presents the basic dimensions of the SOCPO scheme.

Table 1. *The SOCPO Scheme: Basic Dimensions (Taken from Van de Putte & Miles, 2005)*

SP level	Property	Hierarchical position	Skill and manual/non-manual	Pure status
SP level 5 Elite	Macro-scaled self employed	High commanders	Non-manual super skilled	Nobility
SP level 4 Middle class	Medium-scaled self employed	Medium commanders	Non-manual skilled, manual super-skilled	
SP level 3 Skilled		Low commanders	Manual skilled	
SP level 2 Semi-skilled	Micro-scaled self employed		Semi-skilled	
SP level 1 Unskilled			Unskilled	

The constructors of HISCLASS aimed at “a historical social class scheme that is both theoretically grounded – in identifying and closely following the underlying dimensions of social class in the past – and firmly tied to an empirical body of knowledge on these dimensions” (Maas & Van Leeuwen, 2005). As theoretical underpinning the authors constructed a scheme of the following dimensions: manual/non-manual division, skill level, degree of supervision and economic sector. The dimensions are an evaluation of what “historians with self-construed local class schemes seem to agree [upon as] the main dimensions of [a] social class scheme” (Maas & Van Leeuwen, 2005). The scheme is derived by cross-classifying these dimensions in a manner that identifies twelve classes. The allocation of

occupations in each class was validated by seven experts in the field of work. The HISCLASS scheme is presented in Table 2.

Table 2. *Dimensions of Social Class in HISCLASS (Taken from Maas & Van Leeuwen, 2005, 281)*

Non-manual/manual	Skill	Supervision	Sector	Class labels	Number
Non-manual	Higher-skilled	Yes	Other	Higher managers	1
			Primary		
		No	Other	Higher professionals	2
			Primary		
	Medium-skilled	Yes	Other	Lower managers	3
			Primary		
		No	Other	Lower professionals, clerical and sales personnel	4
			Primary		
	Lower-skilled	Yes	Other		
			Primary		
		No	Other	Lower clerical and sales personnel	5
			Primary		
	Unskilled	Yes	Other		
			Primary		
		No	Other		
			Primary		
Manual	Higher-skilled	Yes	Other		
			Primary		
		No	Other		
			Primary		
	Medium-skilled	Yes	Other	Foremen	6
			Primary		
		No	Other	Medium-skilled workers	7

			Primary	Farmers and Fishermen	8
	Lower-skilled	Yes	Other		
			Primary		
		No	Other	Lower-skilled workers	9
			Primary	Lower-skilled farm workers	10
	Unskilled	Yes	Other		
			Primary		
		No	Other	Unskilled workers	11
			Primary	Unskilled farm workers	12

These new developments do not mean that all problems are solved, far from it. It is clear that the limits of the use of occupational titles need to be formulated. In other words, these efforts to develop powerful research tools suited for modern empirical research need to be brought in accordance with the historical critique on the careless use of occupational titles. This is precisely the aim of this book.

2. Overview of The Chapters in This Book

We present here a set of studies that attempt to carefully use occupations in historical studies or to evaluate its use. This is a hard, difficult and unfinished exercise. The exercise we undertook in this book can be subdivided in three domains. First, we aim at shedding more light at the production of occupational titles. Secondly, we compare different classification methods. And thirdly, the context-issue is addressed.

Chapter 1. The Production of Occupational Titles

The first chapter concerns the ‘production of occupational information’ in the historical sources. The contributions have an empirical focus, they analyse the output. These contributions can be seen as complementary to the studies of Vanderstraeten (2005) and particularly Bracke (2008) who analysed the guidelines underlying the production of the historical sources. Oris examines different datasets for the provincial town of Huy, Belgium, viz. population registers, the voters lists of the Council of Industry and Labour (*‘Listes d’électeurs du Conseil de l’Industrie et du Travail’*) and the patent registers (*‘régistre des patentes’*). His conclusion is that occupations drawn from these sources cannot learn us too much detail on the economic structure of activities, understood here as the distinction between the primary, secondary and tertiary sector of the economy. ‘Day labourers’, for

example, can be found in almost any economic sector. The same goes for more skilled occupations like 'carpenter' and 'painter'.

The question is: is this too big a problem? It depends on what you want to do, Oris argues. Occupational titles like 'day labourer' may not be easily classified according to the economic sector they belong to, it is clear that these titles can be used as a 'social indicator'. A day labourer's job is rather easy to describe: "day by day, without stable engagement, consequently unskilled". This is important. Some would argue, as Van de Putte and Svensson do in their contribution to this book, that economic sector is not important to estimate someone's class position. Their argument, which is based on the SOCPO strategy, holds that not every aspect of economic reality is important to understand an individual's social power situation. A title such as 'day labourer' does not make clear in what economic sector this person is employed in, but we do know that this occupational title does not refer to skilled work, property, a hierarchical position nor prestige. In other words, occupations may be meaningful to understand social stratification even though they are (sometimes) imperfect to study economic sector. Others (such as HISCLASS, see supra) would claim that economic sector is relevant, particularly the distinction between the rural and the non-rural economic sector. If economic sector cannot be estimated by occupational titles, class schemes that use sector as a class dimension need to look for alternatives. Maas and Van Leeuwen (2005) for example use the number of inhabitants in a location as a criterion to distinguish between rural and urban economies. They assume that day labourers in the former category are agricultural workers, while day labourers in the latter are not. In this way, a distinction is made between agricultural and non-agricultural day labourers.

Another problem raised by Oris concerns the tertiary sector. The distinction between producing and selling goods is not at all clear-cut. This finding is not surprising but does impose some challenges for those who want to use these occupational titles as a basis of class schemes. Take for example skilled occupations. If there is no indication of sales activities (e.g. 'tanner', or 'shoemaker' rather than 'merchant tanner', or 'master shoemaker'), the typical solution is to classify these occupations based on their skill level, disregarding the fact they may also sell goods as an independent producer. This is a conservative approach based on the fact that most of the persons with this title indeed will be a skilled worker rather than an independent producer/seller. Of course, this may be context-specific (see Chapter 3 on context issues). And what if there is no indication that these persons did produce themselves (e.g. 'merchant' rather than 'merchant tanner')? In that case, the only option is to classify these as merchants, and differentiate amongst them according to their scale of activity. Hence, 'wholesale merchants', 'retailers' and 'pedlars' will end up in different categories. Yet, for the more

general titles such as 'merchants', a more conservative approach is the most likely option. This means coding them into the category of the retailers.

The main target of Vanderhallen and Buyst is to compare the results of three surveys containing occupational information that were held in 1910 and 1930: an occupational survey organised within the framework of a population census, an occupational survey organised within the framework of an industrial and commercial census and an industrial survey organised within the same framework. In this way, they contribute to an important task: comparing the nature of occupational titles produced in different sources. One of the reasons why different results may appear is the different goal underlying these surveys. The goal of the population census was basically social. The population had to be classified according to occupation and not according to industrial or commercial sector. The goal of the industrial and commercial census was economic: to estimate the industrial and commercial structure in Belgium. Also the method differs. The data for the industrial survey was compiled by questioning employers, while the data for the occupational survey was compiled by questioning the population. This may lead to several forms of bias. For example, unemployed people might refer to their former occupation, and be included in the occupational surveys, but would not be integrated in the industrial survey, as the data in this case stems from the employers. Vanderhallen and Buyst conclude, however, that the thesis of De Brabander that the population census tends to overestimate industrial employment, can be rejected as far as the food industry is concerned. Their results show that the industrial survey shows a tendency towards overestimation of industrial employment, even though the underlying reason is not clear.

The main lesson for those using occupational titles to measure social stratification is that much awareness regarding the type of source is needed. Occupational titles drawn from marriage records may differ from those drawn from population or industrial census. This view echoes the suggestion made by Vermeulen (1985) that occupational titles recorded in marriage certificates seem to overstate the real situation (e.g. the under-registration of assistants, helpers, etc.). Comparisons between different types of sources, preferably at the individual level, are needed. Not that such studies have not yet been before (see Oris; Vanderhallen & Buyst in this book), but these studies should be done in a more systematic way, with the aim of providing clear rules regarding specific topics. In short, a connection is needed between the analysis of guidelines (Vanderstraeten, 2005; Bracke 2008), the empirical analysis of bias (see Oris; Vanderhallen & Buyst in this book) and the development of classification schemes.

Such an exercise could provide answers on several questions. For example, how many persons for whom an occupational title is observed are truly working and not unemployed? Are persons referred

to as 'retired' typically poor or rich? Are artisanal qualifications in a given context meaningful or not? Answers to these and similar questions can help in two ways. They may provide a basis for re-classifying occupational titles, for example by classifying masters not as self-employed but simply as skilled worker. Or these studies may help in estimating the magnitude of the bias problem. For example, suppose that we know that 5% of the individuals for whom an occupation is recorded is in reality unemployed. In this case, this will lead to mistakes in the observation of social (im)mobility. Take the following example. A groom was unemployed at the time of marriage but in the marriage certificate was stated that he was a carpenter. At the time of having a first child, he was employed as a carpenter and the birth certificate stated precisely so. This person will be defined as immobile (officially being a carpenter at both occasions), while in practice he was mobile (from unemployed to carpenter). If we know that this maximally happened for 5% of the persons involved in the sample, we can estimate the effect of measuring mistakes and specify a minimum and maximum amount of social mobility. These can be calculated by assuming extreme 'theoretical' scenarios. In the first we assume that all bias leads to defining persons as being mobile while they were not. In the second we assume that all bias leads to defining persons as being immobile while they were not. In reality, the social mobility level will fit in between these two margins. This will, indeed, lead to a more conservative analysis, but it would help to protect research from large-scaled bias.

The contribution of Vandebroek and Van Molle addresses one of the most difficult problems: the registration of women's work. Their analysis is based on the idea that the historical sources are vulnerable to the definitions that administrators, the enumerators and the men and women filling out the census forms held on what is 'work'. Consequently, ideology is one of the ingredients of the occupational cake. Using this perspective, the authors examine the case of women's work in the Belgian post-World War II censuses of 1947, 1961 and 1970. This is the age in which the breadwinner ideology bloomed, and, if we may believe the official output of the census, very few married women worked, ... But this finding is related to the assumption of a rigid line between paid productive work outside the home and unpaid domestic work. Part time work, odd jobs, family assistants, ... are three examples of situations in which women do perform paid work, but that are typically under-recorded in the official documents.

What to do with this finding? One radical option could be to simply ignore women. While it does make some practical sense to use the occupation of the male head of the household as the indicator of the household's class position – it is the only piece of information we typically dispose of. This approach evidently is biased. Another radical option is to choose for other sources and methods, as is suggested by Vandebroek and Van Molle. Oral testimonies are one example. While valuable, and perhaps not often enough practiced in historical research, this does not really solve all of the

problems, certainly not if one examines periods further back in time. An option somewhere in between is to incorporate the information we do have concerning women. But how this should be done, is not very clear. In her contribution to this book, Moreels undertakes a serious attempt to do so (see next chapter).

Chapter 2. Comparing Different Classification Schemes

The next chapter concerns the transformation of standardised occupational information into research instruments. The article by Miles & Van de Putte first of all provides a general framework that can be used to compare the different approaches at the theoretical level. Doing this, they claim that much more attention needs to be paid at theoretical assumptions underlying research instruments that are designed to measure class and stratification. Their conclusion is that the comparability of results and the interpretation of these results would benefit from the use of class schemes that are based on the measurement of power sources. Secondly, they provide a validation analysis of the SOCPO scheme. This analysis demonstrates that persons assigned to the five different classes identified by the scheme have different scores on a series of indicators such as literacy, wages and height. This finding shows that, regardless of all lines of criticism that do make a point, it is possible to construct classification schemes that do measure social stratification, in the sense that people are assigned to classes with demonstrated differences in life chances. Evidently, this does not mean that the class scheme is perfect, nor that it cannot be improved. An attempt to do the latter is undertaken by Van de Putte & Svensson in the next chapter.

The article by Zijdeman & Lambert is complementary, as it focuses on the empirical comparison of various occupation-based classification approaches. Their conclusion is that the class schemes SOCPO and HISCLASS are fairly congruent to each other, and that these schemes are also congruent to the dominant contemporary EGP (Erikson, Goldthorpe, Portocarero) class scheme. Likewise, HIS-CAM, a procedure by which occupations are assigned to different ranks, is fairly congruent to other, more modern occupational stratification schemes (Van Tulder's Occupational prestige scale and the Ultee and Sixma Occupations Scale). This shows that even though occupational information is believed to be of higher quality in more recent times, research instruments using historical occupational information are 'fit for the job'. Of course, this conclusion here is produced by a specific study focusing on global patterns of association using large-scaled datasets. Moreover, the congruency of HIS-CAM with the SIOPS scale developed by Treiman (1977) is far from adequate. The reason for this, claim the authors, is the weak performance of the SIOPS scale when applied to agricultural contexts.

In her contribution to this book, Moreels undertakes a serious attempt to construct a class scheme that takes the position of women into account. She proposes the GENCLASS scheme. It is a family-based class scheme. A woman's social power level is determined by her own situation and that of her husband. Women are assigned to a class position using a double code, one for women and one for their husband (e.g. woman elite, husband middle class). Hence, women for whom no occupational title is available (e.g. women without occupation, housewives) are not excluded from the analysis, as for these women the husband's class position may (typically) be known. This avoids the presence of many missing values. Nevertheless, this procedure does of course not make the reality behind the notions of 'without occupation' and 'housewife' visible. If women falling in these categories were truly performing some kind of paid work, we will still have biased results. But at least Moreels' attempt does show us a way to do something with the information we have at our disposal. How biased the results are, is still uncertain. Moreels does show that using GENCLASS makes a difference. In general, the use of GENCLASS avoids alleged misclassification of women as downwardly mobile due to a move from being an ironer to a housewife, simply by taking into account the stability of the husband's position. Intuitively one can think of this as an improvement, yet, a future step in Moreels' project is to evaluate whether the results based on this method produce not only different but also more correct results. A validation exercise using an (atypical) database containing more information than just occupation, might bring some clarity on this topic.

Chapter 3. The Context Problem

The last chapter deals with the context problem. The three contributions have in common that they start from the premise that, under some conditions, more sources of information are needed than occupational titles in order to satisfactorily measure social position. Hanus analyses social stratification in 16th-century Den Bosch. The appearance of a study on a 16th-century city may look odd in a journal devoted to 19th- and 20th-century history, but its design is very useful for the debate addressed in this issue. Hanus claims that occupation-based schemes ignore the fact that (financial) property is a crucial constitutive variable of class. In other words, failing to incorporate information on, for example, housing and other forms of property, will lead to a biased estimation of someone's class position. This claim makes sense and its implications are for sure not restricted to the period under scrutiny. Even in societies with well-developed education institutions and a modern free market this kind of property is a strong determinant of life chances. At the other hand, housing property is to some extent redundant information, as people ranked high in the social stratification via their economic role (e.g. by owning means of production or being skilled, etc.) will be the ones who will have the most chance of having valuable property. Moreover, denying the fact that these other power sources determine one's property situation, is to ignore the true basis of social power,

and this diminishes the interpretative power of the use of property information (see Miles and Van de Putte discussed before). Admittedly, via one's family one can inherit housing that is not in line with one's own social power level (as measured by one's occupation), and therefore measuring it explicitly is a refinement to an approach that is solemnly based on measuring class via the economic role. At the other hand, of course, there are also important entrepreneurs without real estate ownership as they do not want to immobilise their capital.

In his contribution, Paping makes a similar claim but based on a study in a totally different context, namely the rural Groningen clay area during the early 19th century. According to Paping, it proved to be difficult to define classes that were accurately distinguishing between the different categories of tax payers simply by using occupations. One important issue is that in agricultural areas the amount of land is a necessary piece of information to make distinctions within the heterogeneous group of farmers. This, and the problem of the wide variety within the group of merchants, shopkeepers and pedlars, can only be addressed by using information other than occupational titles. Interestingly, Paping also claims that more can be done with the occupational titles. Some titles give indications of the amount of gross capital needed to perform the activities associated with the occupational title (e.g. bakers, millers, blacksmiths). To deal with these problems, Paping presents his own 'local' scheme. He integrates information on occupations, land use, secondary economic activities and the extensiveness of the trade (for merchants and similar occupations). The result is a scheme that is well suited to address social mobility and other phenomena in the Groningen clay area at that time. However, the underlying logic is not 'local' and as such his method is also a solid example of a classification procedure that can be used in other contexts. Yet, as Paping admits, the high level of precision reached with his method has a disadvantage as gathering all this information is (very) time-consuming.

Finally we turn to Van de Putte and Svensson. Their contribution resembles that of Paping, as they also integrate information on land size and occupational information. The authors do so by extending the SOCPO scheme, originally constructed with occupational titles in mind, to an instrument that also incorporates land size information. In this way, their scheme can be used in different, urban and rural, contexts, and offers a tool to study, for example, social structure and social mobility in comparative perspective. The advantage of their method is that the link with SOCPO enhances the interpretation in an abstract, non-local fashion. Nevertheless, also the application of this method is time-consuming if it has to be applied on a dataset for which information on landholding is not yet available.

While all this is true, the question is how far researchers should go in focusing on property. In practice, choosing for property seriously limits the analysis. A first disadvantage is that due to regional specificity of taxation rules and registration, and the heavy work load its examination involves, comparative analysis becomes more difficult. While there is, of course, nothing against case studies, reducing the empirical analysis to studies with this type of design would of course seriously hinder the interpretation of social reality. Secondly, one may also turn things around. Only using information on property would of course also seriously limit the empirical power of any stratification scheme. While property is of course important, this does not imply that occupational information should be dismissed. Particularly in urban and modern contexts, other sources of power are important. A solution would be to use 'general schemes' that are made flexible in such a way that they can accommodate the use of information other than occupational titles while still presenting an abstract, universal theoretical framework that may guide the interpretation. The SOCPO scheme as presented by Van de Putte & Svensson may be used for this, but of course also other local schemes (Paping and Hanus) or other universal schemes (HISCLASS, HIS-CAM) can be changed in this way. Thirdly, there are large-scaled databases that have already been widely used in historical research, such as the Historical Sample of the Netherlands, the GENLIAS marriage data, the Flemish marriage certificates dataset, etc. It is of course no option to stop using these even though property cannot be measured. Rather, one may consider alternatives. For example, farmers could be classified according to the average landholding situation of the location in which they live (say, at the municipality level). This would of course not mean that all bias is avoided, far from that. But this option is something that could be explored.

Conclusion

Occupational titles are hard to eat, but easy to catch. The latter is important, as it implies that occupational titles will remain at the forefront of empirical historical analysis. In this book we hope to show that these occupations are also edible, this is, if properly cooked and if the necessary spices are added. What is the progress we have made? The contributions in this book start from the idea that we have to take the historical critique on the use of occupational titles seriously, and that we have to refine our methods in that manner that the underlying problems are adequately addressed. Yet, as we are empirical scientists, we do not want this critique to paralyse our research. Therefore we take a pragmatic point of view: what is the way out of the problems? How can we deal with this in practice, while doing research? It is our hope that this book helps to renovate the foundations upon which empirical research based on occupational titles can be built.

We conclude this introductory article with a short warning. Even though the topic of social stratification is a universal one, and even though some of the authors of the chapters in this book also formulate their claims in universal terms, most authors had the modern, Western society in mind when writing their analyses. And, as explained earlier, the theoretical perspectives and the data on which these analyses are based, are firmly rooted in modern Western society. It therefore remains an open question whether these methods can be applied on non-Western and older societies. While this question is of course extremely interesting it does not fall within the scope of this book.

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