

How to measure class from occupation

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1. OCCUPATIONS, MOBILITY AND SOCIAL STRATIFICATION

"Expressions like 'upper and lower classes', 'social promotion', 'N.N. is a climber', 'his social position is very high', 'they are very near socially',... and so on, are quite commonly used in conversation, as well as in economic, political, and sociological works. All these expressions indicate that there is something which could be styled 'social space'. *And yet there are very few attempts to define social space and to deal with corresponding conceptions systematically*" (Sorokin, 1927, 3, our italics).

Without a clear conception of 'social space' it is impossible to talk about social 'mobility' in a meaningful way, let alone measure how much of it there might be. It is now eighty years since Sorokin began his celebrated and pioneering study with the words above, but in our view, a lack of conceptual clarity continues to characterise historical approaches to the study of stratification and mobility. In this paper we propose a solution to this problem by describing how to build a stratification scheme which is conceptually robust yet sensitive enough to be generally applicable across time and space.

There are good reasons why historians have been reluctant to address the issue of defining social space with conviction. The most important is probably the nature of their source material – most often occupation, or more accurately occupational titles – which is necessarily partial, and usually laconic or ambivalent into the bargain. There is thus a feeling that to attempt to conceptualise, and theorise from, historical indicators is to place more weight on fragile data than they can bear. This leads in turn to the conclusion that it is necessary to be flexible and 'pragmatic' when designing social classification schemes to accommodate such data.

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This tendency towards empiricism has been bolstered by recent trends in intellectual fashion. The advent of 'post-structuralism' has called into question the whole domain of the 'social' and in particular the idea that 'class' can be anything more than one competing narrative in an ongoing process of (re-)constructed and relative social reality. In terms of the relationship between data and classification, this position lends itself to a preference for inductive over deductive approaches to the generation of social schemes, in other words, for letting the data 'speak for themselves'.

To our way of thinking, such influences and approaches create more problems than they resolve because they risk obscuring and at worst misrepresenting the processes they claim to be addressing. At issue is the centrality of 'occupation', not only as the primary historical (and indeed sociological) source used in studies of stratification and mobility, but as a 'real' and key indicator of social position in the nineteenth century. And in order to understand how (and how far) occupation provides such a measure, we would maintain that it needs explicit consideration in *class* terms.

To return to Sorokin then, we need a systematic definition of social space but we also need to be clear about how that space is generated. To be sure, class is not, and was not even in the nineteenth century the only dimension of social stratification, and occupation is not the only available indicator of class. But it is often the case in historical, and sociological, research that indicators, occupation included, are misused as proxies for social categories and relationships that are not properly specified and/or which they do not actually represent.

2. A DEFINITION OF CLASS

Before approaching the question of how to construct a class-based classification scheme using occupation, we need to address the definition of class. Drawing on a Weberian model of stratification, and more particularly John Scott's adaptation of this model (Scott, 1996), we view class as economically-mediated 'social power', or the ability to influence one's life chances through the control of resources via one's economic role (Van de Putte & Miles, 2005). Central to our concept of class is the notion of 'power sources', which refer to the assets and capacities that are associated with particular situations and positions within the economic sphere. We distinguish between property

(the possession of material capital), skill (what someone is able to do), and hierarchical position (what one is allowed to do in an organisational context). We also recognise two status or prestige dimensions, one relating to 'pure' status, as reflected in formal social rankings (e.g., membership of the nobility), and the other in the functional division between manual and non-manual forms of work (the 'collar divide').

Our definition of class is in one sense a broad one, in that it includes different mechanisms and dimensions underlying the production of social power. At the same time it is very particular in specifying the different ways in which power is produced in the economic domain. Perhaps the most familiar part of our argument is that power is produced via the control of material resources in relation to a formal set of economic institutions and relationships. In a society based on private property and free labour, ownership and skill are important determinants of life chances. Secondly, and closely linked to this first dimension, power is produced through the occupancy of command positions within organisations. This mechanism, like the first, is dependent upon broad social and cultural acceptance of the prevailing arrangements, in this case the idea that organisations allow certain people to exercise delegated power over others. However, both are underpinned by formal regulations that guide and safeguard their application (e.g., laws protecting private property, certification to verify the possession of skills, organisational rules regarding the rights and duties of employees). For these reasons, we define the exercise of control through these mechanisms as 'economic' power.

Thirdly, power is produced by social evaluation. Society defines positions as being more or less 'honourable'. People occupying such positions acquire prestige, which is likely to enhance their life chances. While this type of power is typically less crystallised in terms of organisational and legalistic regulation, it can have formal consequences (such as different welfare arrangements for non-manual and manual workers). This type of power, based on non-material sources, we call 'cultural' power. Economic power and cultural power are typically related but they do not overlap completely. We therefore distinguish between redundant and additional cultural power. The latter refers to cultural power that does not coincide entirely with the economic power structure (e.g., the additional cultural power of being a non-manual employee).

To recap: this definition of class is essentially Weberian. We start from Weber's (1914) definition of class *stricto sensu* (based on property and skill)

and add his 'party' (or 'command', see Scott, 1996) and status dimensions. However, in contrast to Weber, who sees the latter two categories as separate dimensions of social stratification, we use them as dimensions to define different ways in which power is produced *within one's economic role*. By doing this we are able to accommodate pivotal contributions to the debate on social stratification and class which stress the importance of social evaluation and organisational authority – such as Parkin (1972) on the importance of the distinction between non-manual and manual workers, Runciman (1990) on ownership, control and marketability and Wright (2000) on property, skill and authority – within an overarching Weberian framework (see Van de Putte & Miles, 2005). In sum, our conception of class as economically mediated social power is broadly in line with classically rooted, mainstream research on social stratification.

3. APPROACHES TO MEASURING STRATIFICATION

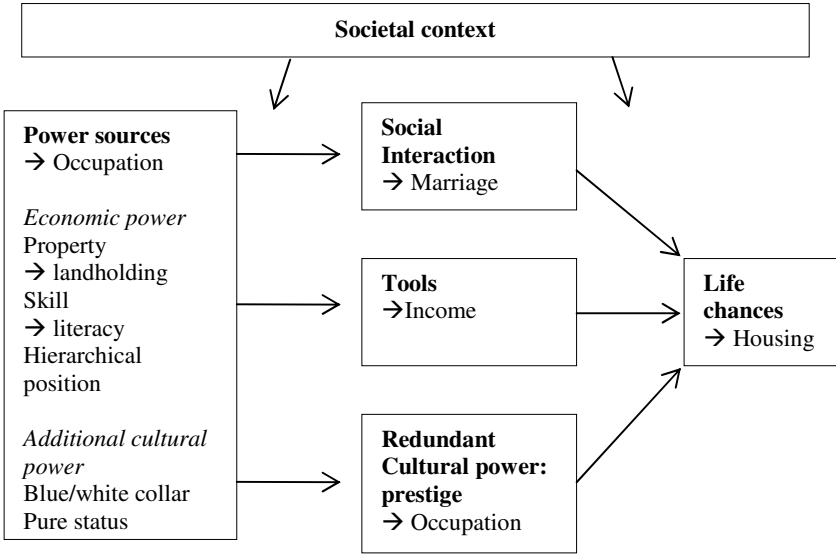


FIGURE 1: THE CLASS PROCESS

The problem of how to construct a class scheme has been addressed in very different ways. Generally speaking, researchers working on social stratification have tried to grasp class and social inequality by using indicators that measure one or other location in the scheme presented in Figure 1. For the sake of illustration, in this section we briefly outline some example studies, noting how their authors legitimate their choice of indicator before going on to discuss some of the problems these approaches seem to us to entail.

3.1. Example studies

Maas and Van Leeuwen (2005; see introductory chapter of this issue) develop an *a priori* scheme based on occupation to measure class. 'Hisclass' defines class in terms of "persons with the same life chances" (Maas & Van Leeuwen, 2005, 280). The organisational root of the scheme lies in a starting distinction between manual and non-manual employment, so that these categories are separated into entirely different groups. Adding each of the other dimensions one by one then leads to a subdivision of the basic manual and non-manual group into a series of 'classes'.

In their study of marriage in early modern Japan, Tsuya and Kuroso (2005) use landholding information (the amount of land held and the hereditary social status of a household) as an index of social position. The authors assume that, in rural Japan, this combined measure of landholding is sufficient to allocate individuals or families to a given class position.

In common with the approach taken in a number of other studies of historical stratification and mobility, Bonneuil and Rosenthal (1999) use literacy as a proxy for education, which by extension in a period before universal and free provision of schooling, they treat as an indicator of social status. They argue that during the nineteenth century 'transition' to a fully literate society, literacy can be used to create a constant, scalable measure of prestige.

In a similar way, Lambert, Zijdeman, Maas, Prandy, and Van Leeuwen (2006; see also chapter by Zijdeman & Lambert in this issue) use marriage to create measures of occupational distance from which they too generate a continuous, hierarchical social scale. This leads them to claim that "the structure of social stratification [is] primarily defined by social interaction

relationships", such as marriage, and that occupations themselves constitute indicators of relative stratification positions (Lambert et al., 2006, 2).

Blumin (1968) objects altogether to the use of occupation as a measure of social stratification and mobility, preferring the "far more tangible concept" of economic mobility (Blumin, 1968, 3), based on wealth or income data. However, the lack of suitable economic data in the historical record on which to base such an approach forces him to resort to making inferences about wealth from occupational mobility.

For Treiman (1976) too, social stratification is indicated by occupational prestige, which, he argues, is ultimately the product of skill, authority and economic control (property). The link between power and prestige is not perfect and some functions are more important in one society than in another (depending on the demand for that function). However, although prestige is not universally distributed in the same way, Treiman maintains that the differences that emerge from this are relatively unimportant given the overwhelming similarity of prestige rankings across different contexts.

In her work on nineteenth-century Ghent, Vermeulen (1983) uses housing as an indicator of social position, arguing that it encapsulates indicators such as occupation, income and property. Most people live in houses with a value that reflects their wider financial situation. Given that housing is also a status symbol, the underlying assumption is that people will only invest in better quality (and luxury) housing in cases where more basic needs have been satisfied.

3.2. The sources and consequences of power

What most of the previous approaches have in common is that they do not measure the sources of social power but their consequences, whether these be specific tools, forms of social interaction, status, or more tangible outcomes. This is not to say that they don't tell us anything that is interesting or useful, and, in so far as they might be easier to measure or the nature of the available evidence encourages a pragmatic approach, they are entirely defensible. But for our purpose of building a generally applicable stratification scheme, their outcome focus is problematic. What do classifications based on the consequences of social power really mean?

The lack of clarity regarding the underlying sources of social power not only hinders interpretation, it may also cause misunderstandings. If there is no explicit link made with these sources, it is possible to confuse the impact of different types of social stratification. If, for instance, we take a society that is strongly stratified by race or ethnicity, this is, of course, very likely to shape life chances and the formation of social networks. Assume, further, that individuals belonging to a given ethnic group race are overrepresented among specific occupations; men, say, among plumbers, and women, perhaps, among office cleaners. In such a situation, where the available networks and the notion of 'desirable' associations are, above all, informed by an ethnic cultural imperative, marriages between *skilled* plumbers and *unskilled* office cleaners are highly probable but the social interaction approach to classification will place the two people involved (or, more accurately, their occupations) in the same class, or, alternatively, very close to each other on a continuous stratification scale.

It is also the case that homogamy and the class structure do not necessarily evolve in the same way over time. A process of equalisation through the class structure may not be reflected in patterns of association, and vice versa. Suppose that in the later decades of the nineteenth century intermarriage within the lower class increases. In this case, the lower class occupations will have scores that lie closer to each other on the scale than they did before that period, but this might reflect spatial processes associated with migration patterns and urban development rather than changes to objective class positions.

These problems arise from the fact that classifications based on the effects of social power sources measure class position at a 'later stage' in the class process. Before that stage is reached, however, other factors may interfere or interact. In other words, power sources need to be transformed into life chances, via social networks, prestige and tools such as income and education. The outcome is dependent upon the starting position (class) and the influence of the social, cultural and political contexts in and through which the transformation happens. In these 'later stage' cases, therefore, the class structure will be conflated with these contexts.

3.3. Universality and context

Another major concern with existing approaches is whether they can be used in many different temporal and spatial contexts. This is typically not the case. A first problem here is the lack of adequate information. A good example concerns the use of literacy in a literate world. Literacy cannot be used in every context because as the literacy rates rises it ceases to be a variable and becomes a constant. A further compounding factor in this particular case is that literacy trends are not consistent across time and space.

The issue of context should however not be reduced to a lack of information. Context problems arise when a given power source has more or less importance in one spatial-temporal context than in another. Some approaches cannot be universally valid as they only focus on one or a limited number of social power sources. An obvious example would be that of the landholding approach, which cannot be applied in societies that are not primarily based on landholding. From the point at which there is a relatively large group of people working in the non-agricultural sector, the indicator is no longer useful.

3.4. Theory and application

A final issue is that most classification tools or approaches do not make their underlying theory of stratification explicit. This makes it difficult to apply them to data and contexts beyond those which were the original focus and subject of the researchers. In these circumstances, how exactly does one go about classifying occupations that are not yet coded, or that may have a different meaning in a different context? Our argument is that this should be done with reference to the types and amounts of power which different occupational positions confer on their incumbents, and in order to operationalize this approach, a theory is needed about how particular combinations of different power sources lead to specific class positions.

School teaching provides a good example of an occupation that has changed over time. With the advent of universal state-sponsored educational systems it might be argued that someone with the title 'school teacher' should be coded to a lower class position in the twentieth century than in the early nineteenth century. We would argue that the best solution to this kind of issue is to examine the changing profile of teaching in relation to the sources of

social power that are associated with it over time. So if it remains a non-manual occupation that still requires a certain level of skill there would be no case for devaluing it. The de-skilling of craft or artisanal occupations is another familiar example of this type of coding problem. If such a process does not change occupational titles but does change the content of the occupations, we will classify them incorrectly unless our classification system is time-varying. The solution here is to use contextual knowledge in order to assess whether power sources are still 'available' for a person with a specific occupation.

It may be that the whole system of stratification changes (e.g., in the case of communist regime supplanting a liberal democracy) but the principle remains the same. We need to address the issue of whether specific power sources became more or less relevant in communist societies. If we are fortunate, this type of economic and social transformation will be reflected in the type of occupations that are present (e.g., no occupations that refer to private property). If we are unlucky, occupations will remain the same by name but mean something different. Reclassifying these occupations is an empirical matter. To do so, we need to know more about the power sources associated with them.

4. A GENERAL PRACTICAL TOOL TO MEASURE CLASS?

The examples above lead to the same conclusion. If we want to grasp the differences in time and space when representing the class structure through occupational positions, we need a flexible tool; one that allows us to classify individuals on the basis of their economic role, according to power sources associated with that role and one that is underpinned by theory. For this purpose we propose the SOCPO scheme (Social Power Scheme) (for a description see the introductory chapter of this issue; Van de Putte & Miles, 2005). The SOCPO scheme was initially applied using occupational information from mainly urban contexts in the nineteenth century. Subsequently, it has been used to analyse both rural contexts and more modern societies.

In rural societies property in land is the crucial power source. Consequently it makes no sense to rely exclusively on occupational information, which rarely differentiates between types of farmer. In other words, we needed to find a

way to redistribute the farmers who were initially classified, based on their occupational title, in SP (Social Power) level 4, into the other SP levels. As the SOCPO scheme refers to five power sources – skill, hierarchical position, property, non-manual status and cultural power – and has an explicit logic of how to classify people with a given landholding position, the application of the scheme is straightforward. We used information from tax records to classify farmers in the SOCPO property dimension. This was not unproblematic as it needed a great deal of knowledge about the local context and required further specification of the SOCPO rules. But the general principles did allow us to perform this exercise successfully (see Van de Putte & Svensson, in this issue).

In terms of more modern data, the issue here was the increasing importance of large, formal, bureaucratic organisations. This was the main problem that confronted us when classifying occupations from the Dutch Genlias database, which is a collection of marriage certificates containing information up to 1922. Many occupational titles specified a position within an organisational hierarchy. Reference was made to 'assistants', 'bosses', 'helpers', '1st class' occupations, 'directors', 'assistant-directors', and so on. However, this issue could be handled in the SOCPO scheme because it has a dimension that relates to hierarchical position. As such the issue of organisational complexity – which is likely to increase still further with data from later in the twentieth century – is not so much a coding problem, rather it is related to the problem of the expansion of the middle class.

5. VALIDATING SOCPO

In this section we examine whether the individuals with occupations coded to the different SP levels also show differential characteristics or patterns of behaviour which we know from other studies to be class-linked. If this is the case, we can reasonably claim that the SOCPO scheme grasps 'reality' to some extent – that it has empirical power as a tool for measuring class. We analyse three indicators that are often used to measure standards of living (Nicholas & Nicolas, 1992): wages (perhaps the most direct indicator), height (as an example of anthropometric information, typically related to food

consumption during childhood) and literacy (as an example of the possibility to invest in long-term determinants of well-being).²

For this purpose we collected information from various databases apart from our own, coding the occupational titles they contain into the SOCPO scheme in order to look at the relationship between SP level and the various indicators. Such an exercise is, however, far from simple. Firstly, it is difficult to find datasets which simultaneously record good quality information on both these indicators and occupation for specific individuals. Secondly, because these indicators are never only determined by one's class position. Wages for example depend on the state of the economy at any particular moment and on individual characteristics such as age. In fact, extensive multivariate analysis is necessary for all of these indicators, but finding information on all of the necessary control variables is even more problematic. For these reasons this exercise is limited to 19th century Belgium and the United Kingdom.

The aim of this exercise, however, is not to examine the connection between class and each indicator in full detail, but to examine whether the SP level is relevant. The results are straightforward. They all point to the same conclusion. For all of these very different indicators it is clear that the classification of occupations into the different SP levels of the SOCPO scheme grasps differences that matter.

5.1. Wages

Wages are, seemingly, a straightforward product of one's social power. Skill differentials are typically reflected in wage differences. But there are many more factors that influence wage differences: the age and sex of an individual, the duration of employment, the presence of other benefits (e.g., payment in kind), sector specific wage negotiations, the type of employer (e.g., state or non state employer), geographical differences, the hours and days worked, and so on. These factors make it difficult to interpret wage statistics as a direct product of social power.

² Previously, we also examined rather more indirect indicators related to class in the form of behaviour that is known to be typical for specific classes. These include the employment status of married women, age at marriage, the use of language as a status identifier, and migration distances as an indicator of people's geographical horizons (Van de Putte & Miles 2006).

In addition there are few sources that link occupational titles and wages. Basically, these are of two types: specific industrial surveys (*industrietellingen*); and archives of companies and state institutions. The former have as a disadvantage that they aggregate wage statistics per economic sector or occupational group (e.g., 'bakers', 'blacksmiths'), while not distinguishing between the different occupations within the sector (e.g., 'bakers', 'assistant baker' and 'helpers' are in the same group). These groups and sectors combine different occupations, and it is impossible to 'translate' these sectors into occupational titles that can be classified in a class scheme. For the industrial survey of Leuven in 1846, for example, there was no occupational group that clearly referred to unskilled work. All unskilled workers are classified in specific economic sectors, together with semi-skilled or skilled workers. Also the wage information is imprecise, with only intervals rather than precise figures being recorded. For our purposes, then, a source such as this cannot be used.

The second type of source has the advantage that distinctions between specific occupations are made. Yet, the drawback is that this occupational information is too precise to be perfectly comparable to the occupational titles typically found in marriage certificates. For example, in company archives in the textile sector we can find all manner of job titles referring to highly specific tasks in the process of preparing or finishing fabrics, which on a marriage certificate may well simply be subsumed within the generic term 'factory worker'. Another disadvantage is that these occupations do not cover the whole economy, nor the whole class spectrum, but only some of the wage workers employed in rather large institutions or companies.

The sources we used have information for a series of economic sectors, such as construction, metal, food, textile, transport, clothing, and the service sector. Occupations were coded into HISCO (Historical International Standard Classification of Occupations) and then SOCPO and wages per SP level were then calculated. To make the figures comparable and interpretable, we calculated relative wage scores using SP level 3 (the skilled) as the reference point. Table 1 shows very clearly that wage differences correspond closely to SP level. SP level 1 has wage levels that are between 62% and 76% of the wages of SP level 3. For SP level 2, this percentage is between 76% and 94%, while for SP level 4 the wages are between 112% and 141% of the SP level 3 wages. Of course, for some occupations the wage level recorded in these sources was closer to the average of another SP level than to the average of the own level. Nevertheless, the main pattern is clear.

Location	Brussels	Belgium	Brussels	Ghent
Time	1814-1910	1913-1914	1922	1898-1890
Institution	Public institutions	Industrial companies	Private companies	Industrial companies
Economic sector	Construction, hospital, city staff	Diverse: metal, food, textile, etc.	Diverse: metal, transport, clothes, etc.	Cotton, flax, metal
SP level 1	0.70	0.62	0.74	0.76
SP level 2	0.76	0.94	0.86	0.92
SP level 3	1	1	1	1
SP level 4	1.41		1.12	

TABLE 1: WAGE DIFFERENCES BETWEEN SP LEVEL 1 TO 4 IN VARIOUS ECONOMIC SECTORS IN THE 19TH AND EARLY 20TH CENTURY IN BELGIUM³

5.2. Height

While stature has been used in the standard-of-living debate, its link with social power is also determined by many other factors. As Nicholas and Steckel (1991, 940) claim, height is a net rather than a gross measure of nutrition, depending on the nutrition available for physical growth after the claims made by body maintenance needs, illness, and work. Therefore, the individual's ability to generate a surplus for growth depends on the body's efficiency, on the intensity of work performed, the disease environment and the state of public health. Many factors such as place of birth (urban or rural), birth cohort and working conditions therefore influence height. Apart from differences in standard-of-living, height differences by social origin may also be related to specific selection mechanisms. For example, the children who worked in coal mining were employed because they were shorter than other lower class children. Despite their stature they were, nonetheless, reasonably well-fed (see Kirby, 1995; Humphries, 1997; Nicholas & Steckel, 1991; for more general information on height as a social indicator, see Floud; Wachter, & Gregory, 1990; Steckel & Floud, 1997).

³. Sources: Brussels (1814-1910): Van den Eeckhout (1979); Belgium: Scholliers (1979a); Brussels (1922): Scholliers (1979b); Ghent: Van den Eeckhout & Scholliers (1988).

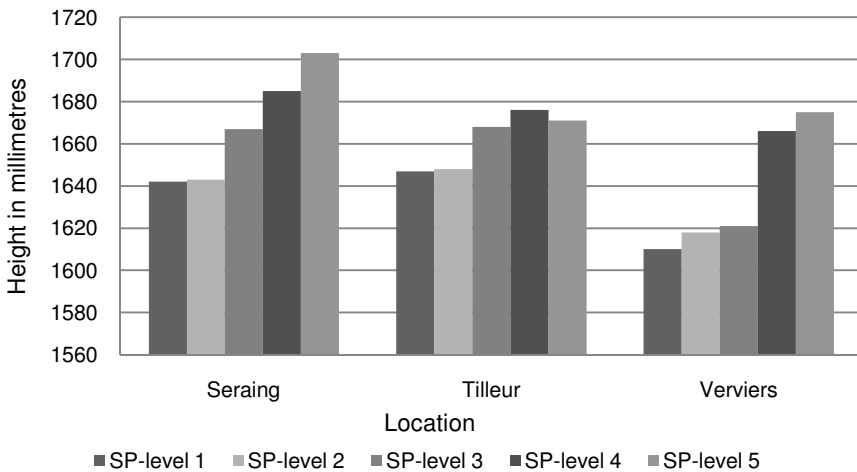


FIGURE 2: MEAN HEIGHT. A COMPARISON OF ARMY RECRUITS BY SOCIAL ORIGIN, VERVERS, SERAING, TILLEUR (1813-1900)⁴

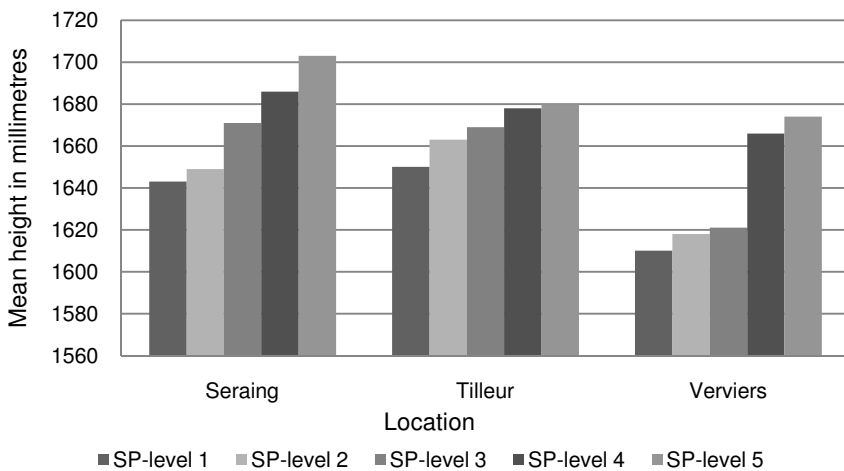


FIGURE 3: MEAN HEIGHT. A COMPARISON OF ARMY RECRUITS BY SOCIAL ORIGIN, MINERS EXCLUDED, VERVERS, SERAING, TILLEUR (1813-1900)⁵

⁴. N is respectively 359, 987, 757 for Seraing, Tilleur and Verviers.

⁵. N is respectively 210, 704, 756 for Seraing, Tilleur and Verviers.

A good source of information on stature is provided by the army administration of the tests that males underwent before conscription in nineteenth century Belgium. As individuals who were shorter than the minimum height requirement were not selected for service, the measurement of stature was quite precise (in millimetres). Also the occupation of both the person tested and his father is given in the sources. We use a database containing information on the Walloon cities of Verviers, Tilleur and Seraing.⁶ Verviers is a historical city and an early industrial textile centre. Tilleur and Seraing are suburbs of Liège, with an economy mainly based on coal mining and siderurgie.

	Miners included	Miners excluded
<i>Intercept</i>	862.1***	767.0***
<i>Location</i>		
Seraing	25.3***	31.4***
Tilleur	22.2***	28.6***
Verviers (ref.)		
<i>Social origin</i>		
SP level 1 (ref.)		
SP level 2	2.9	9.5 (p= 0,06)
SP level 3	15.4**	14.7**
SP level 4	39.5***	39.8***
SP level 5	42.6***	45.1***
<i>Year of test</i>	0.8*	0.8*
<i>Age</i>	-0.4	-0.4
<i>N =</i>	2100	1692

Note: * = p < 0.05 ** = p < 0.01 *** = p < 0.001

TABLE 2: GENERAL LINEAR MODEL, DIFFERENCES IN HEIGHT OF ARMY RECRUITS BY SOCIAL ORIGIN, VERVIERS, SERAING, TILLEUR (1813-1900)

Figure 2 shows the average height of those tested who are compared by social origin. This is a simple analysis which doesn't control for birth place or cohort, for example. Nevertheless, even with this simple design, mean heights are to some extent correlated with social origin. The difference between SP level 1 and SP level 5 is about 6 cm in Seraing and Verviers. Only in Tilleur are the SP levels not ranked in the expected order. The average height for SP level 5 is somewhat lower than the average for SP level 4. Also, the difference between SP level 1 and 2 is small, in particular in Seraing and Tilleur,

⁶ Source: "Historical Database of the Liège Region", Indiana University at Bloomington and Liège University.

although here the main reason for this is the presence of the mining industry where the effect of selection for short stature is probably compounded by the high rates of father-son continuity in the mining industry. When miners are excluded from the sample, the difference between SP level 1 and 2 becomes larger (Figure 3). The results of a simple general linear model using period, age, location as control variables, confirm this picture (Table 2).

5.3. Literacy

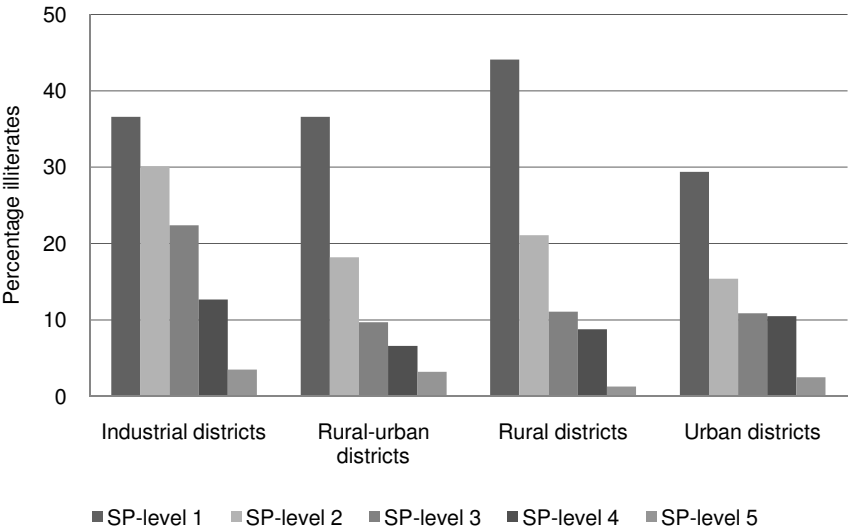


FIGURE 4: GROOMS' ILLITERACY BY SOCIAL ORIGIN, ENGLISH DISTRICTS (1839-1914) (N = 3858, 2255, 1990, 1967)

Literacy rates are a second factor that has been used to address the standard-of-living debate when it became clear that wage information was not a sufficient indicator in this context (Nicholas & Nicholas, 1992). Literacy can be seen as an investment in human capital. Because in hard times families had to economise on all inputs, and investment in food, education and the quality of housing were under pressure, differences in literacy, it is argued, reveal differences in standards-of-living (*Ibid.*, 1992). Literacy might furthermore be a necessary condition of entry to or acceptance within a particular social milieu. According to Bonneuil and Rosental (1999), literacy is so strongly

related to class position that it can be used as a direct measure of class in the period before literacy became quasi-universal.

Figure 4 shows the rates of illiteracy by social power level for each of four English district types over the course of the 19th and early 20th century (for contextual information, see Miles, 1999). In each case there is a strong and regular correlation between the two, with the ranking of literacy levels according to class in the expected order in each context. A similar picture emerges from 19th century Ghent (Figure 5), where the level of illiteracy was overall about 55% among the sons of SP level 1 fathers, while only one in a hundred men from SP level 5 backgrounds could not write their names in the marriage register. Prior to the rapid rise of literacy from the 1870s onwards, the differences in class literacy rates are quite consistent over time, a pattern which is repeated in the English data (not shown here for reasons of space).

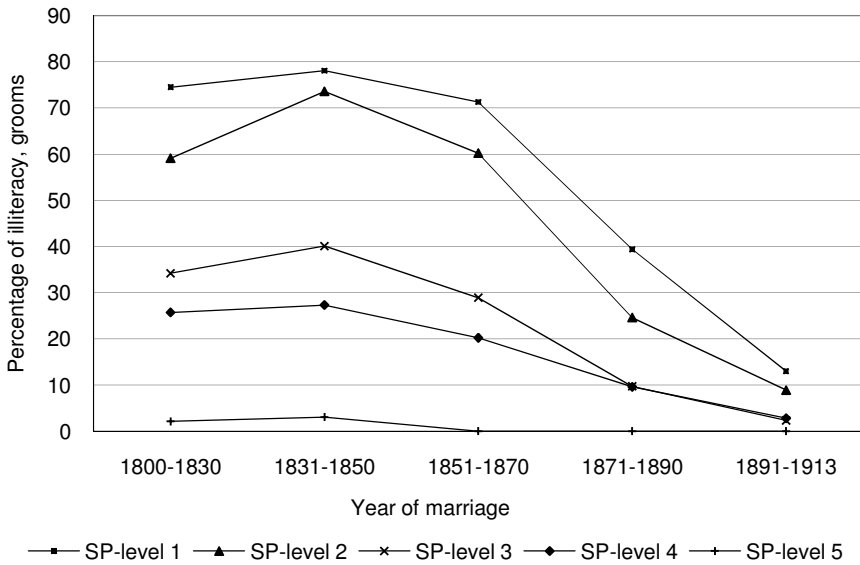


FIGURE 5: GROOMS' ILLITERACY BY SOCIAL POSITION, GENT 1800-1913 (N = 8193)

In Table 3 we show the results of a logistic regression analysis for three Belgian cities (Gent, Leuven, Aalst, for context information, see Van de Putte, 2005). The dependent variable is being literate (*versus* being illiterate), for grooms, and the independent variables are year of marriage, migration

status (place of birth), social origin and location. The results are clear. Controlling for changes over time and differences by place of birth and place of residence, there is a consistent relation between social origin and literacy.

Variables	Odds ratios
<i>Year of marriage</i>	1.032***
<i>Migration status</i>	
Native	0.92
Rural migrant	0.74**
Non-rural migrant (ref.)	
<i>Social origin</i>	
SP level 1 (ref.)	
SP level 2	1.54***
SP level 3	3.57***
SP level 4	4.45***
SP level 5	54.50***
<i>Location</i>	
Aalst	0.50***
Leuven	1.99***
Gent (ref.)	
<i>N =</i>	9963

Note: * = $p < 0.05$ ** = $p < 0.01$ *** = $p < 0.001$

TABLE 3: LOGISTIC REGRESSION, LITERATE VERSUS ILLITERATE GROOMS (GENT, LEUVEN, AALST, 1800-1913)

To summarise, in this section we have sought to test the empirical purchase of the SOCPO scheme by exploring how well it captures differences in attributes that are known to be more or less directly class-linked. The aim of this exercise has not been to examine the connection between class and each indicator in full detail, but to examine whether the five SP levels are relevant. The results are straightforward. They all point to the same conclusion. For all of these very different indicators it is clear that the classification of occupations into the different SP levels of the SOCPO scheme grasps differences that matter.

6. CONCLUSION

This contribution takes the form of a position paper on the social classification of occupational data. It summarises arguments that we have developed

and illustrated elsewhere in support of a class scheme based on the concept of social power and rooted in economic roles, which we call the SOCPO scheme. Our main point here is that previous approaches to measuring stratification using stratification have tended to lack the clarity of definition and conceptualisation called for by Sorokin. As a result, exactly what is being measured is not always evident or easy to interpret. Often, what these approaches capture are the consequences of the class process rather than the power sources which underlie it. In contrast, the SOCPO scheme is informed by an explicit theoretical framework that allows us to systematically evaluate and distil class positions from occupational and other historical data.

Additionally we have shown that SOCPO has considerable empirical purchase, with validation exercises confirming its ability to capture class-based differences in indicators like wages, height and literacy. More recently, work on different contexts suggests that it is also a highly flexible tool with a broad application across space and time. An assessment of just how generalisable it is must await the outcomes of further planned studies of comparative historical social mobility as well as its application to contemporary data.

ABBREVIATIONS

HISCO	Historical International Standard Classification of Occupations
SOCPO	Social Power Scheme
SP	Social Power

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Hoe klasse meten op basis van beroep

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SAMENVATTING

De notie 'sociale mobiliteit' – wat het is en hoe groot het is – steunt in eerste instantie op de conceptualisatie van de sociale ruimte waarin individuen zich 'verplaatsen'. Toch zijn er echter weinig historische studies van (sociale) stratificatie en mobiliteit die aan deze kwestie expliciet aandacht hebben besteed of die met de noodzakelijke conceptuele duidelijkheid betekenis geven aan wat zij aan het meten zijn. De meeste van deze studies gebruiken beroepen als indicatoren van sociale positie, maar slagen er te weinig in theoretisch te verduidelijken hoe precies met beroepen geassocieerde economische rollen en activiteiten aanleiding geven tot verschillende sociale posities. Het resultaat hiervan is dat deze studies het risico lopen de bronnen en de gevolgen van sociale stratificatie te verwarren. Bovendien kunnen de ondergetheoretiseerde schema's voor de classificatie van beroepen die in dergelijke studies gebruikt worden niet betrouwbaar worden toegepast in verschillende contexten en verschillende periodes.

In dit artikel bespreken we de constructie van een theoretisch geworteld sociaal stratificatie schema (SOCPO) voor beroepsdata en andere economische en sociale data. Dit schema is flexibel genoeg om te worden toegepast doorheen tijd en ruimte. Het SOCPO-schema is een klasse-gebaseerd schema dat voortbouwt op een weberiaans model van stratificatie en gebruik maakt van het concept 'sociale macht'. Het ordent beroeps- en andere gegevens op basis van machtsbronnen die met specifieke posities binnen het economische

domein worden geassocieerd. Deze machtsbronnen zijn bezit, vaardigheid (*skill*), organisatorische autoriteit en status. Het schema bakent een klassensysteem met vijf verschillende 'machtsniveaus' (of *Social Power Levels*) af.

Om de empirische waarde van het SOCPO-schema te bepalen, onderzoeken we of individuen met beroepen gecodeerd in verschillende *SP-levels* ook specifieke kenmerken en handelingspatronen vertonen waarvan we op basis van andere studies weten dat ze klasse-gerelateerd zijn. Op basis van deze analyse weten we dat het SOCPO-schema ook effectief klassenverschillen 'grijpt'. Daarnaast geven we ook aan hoe het SOCPO-schema kan worden toegepast op basis van andere indicatoren van economisch gewortelde sociale macht (zoals bezitsinformatie) en zo kan worden toegepast in contexten waarin beroepstitels minder bruikbare *proxies* zijn voor differentiatie tussen sociale groepen.

Comment mesurer la classe sur la base de la profession

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RÉSUMÉ

La notion de mobilité sociale – ce qu'elle représente et quelle est son ampleur – se fonde, en première instance, sur un concept d'espace social dans lequel les individus se déplacent. Pourtant, peu d'études historiques sur la stratification sociale et la mobilité ont abordé cette question de manière explicite ou avec la clarté conceptuelle nécessaire pour donner de la signification à ce qu'elles mesurent.

La plupart de ces études utilisent les titres professionnels comme indicateurs de la position sociale, mais ne parviennent pas suffisamment à spécifier comment les rôles et les activités économiques qui sont associés aux professions interviennent dans la construction de l'espace social. Par conséquent, ces études courent le risque de confondre les sources et les conséquences des différents types de stratification sociale. De plus, leurs cadres de codification

et de classification des groupes sociaux à partir des professions ne peuvent pas être appliqués de manière fiable à différents contextes et périodes.

Dans cet article, nous nous penchons sur le développement d'un système de stratification sociale enraciné dans le domaine théorique (SOCPO) à la fois pour les données professionnelles et pour d'autres données économiques et sociales, qui soit suffisamment sensible et flexible pour être appliqué en tous temps et en tous lieux. Le système SOCPO est un cadre basé sur la classe qui fait appel à un modèle wébérien de la stratification et utilise le concept de "pouvoir social". Il organise les données professionnelles et autres en fonction des atouts et des capacités potentiels qui sont associés à des positions et des contextes particuliers dans le domaine économique. Ces sources de pouvoir social économiquement médiées peuvent provenir de la propriété, de la qualification, de l'autorité organisationnelle et du prestige. Ce système délimite un système de classes comprenant cinq "niveaux de pouvoir" distincts ('SP-levels').

Afin de déterminer la valeur empirique de SOCPO, nous examinons si les individus dont les professions sont codifiées selon les différents niveaux de pouvoir, présentent également des caractéristiques ou des modèles de comportement spécifiques qui sont, comme d'autres études le montrent, liés à leur classe. Nous observons que le système saisit les différences de classe dans l'ensemble des indicateurs. Nous montrons également de quelle manière SOCPO peut tenir compte d'autres indicateurs de pouvoir social ayant une origine économique et, au cours de ce processus, peut être appliqué à des contextes dans lesquels les titres professionnels sont des indicateurs moins utiles pour différencier les groupes sociaux.