

## Appendix B: Coding Occupational Data To Social Class Schema

Social class is one of the most common variables in sociological research. How is it coded?

### **The British system of occupational classification**

The British government's Office of National Statistics publishes a three-volume book called *Standard Occupational Classification*. This lists (in volume 2) virtually every occupational title, allocating each to a code based on an assessment of the "qualifications, training, skills and experience commonly associated with the competent performance of constituent tasks" (*Standard Occupational Classification, Vol.1*, London, HMSO, 1990, p.ix). These Standard Occupational Codes (SOCs) are then translated into both 'socio-economic groups' (SEGs) and 'social classes':

- The classification of 17 *SEGs* aims to categorize people in terms of their "social and economic status". In addition to knowing somebody's occupational title (and hence their SOC code), you also need to know their 'employment status' (i.e. whether they are an employer, self-employed, or an employee). Self-employed professionals, for example, are in SEG 3, while professionals who are employees make up SEG 4.
- The classification of '*social classes*' has over time been based on different principles (e.g. it changed from a classification of people's "standing in the

community” in 1971 to a classification based on skill differentials in 1981 and 1991) and the schema was overhauled completely for the 2001 census. As with SEGs, to code somebody’s social class, you need to know more than their occupational title – additional information required includes their employment status and the number of people they manage.

### **Social class schema**

Until 1991, the government’s classification of ‘social classes’ (sometimes called the ‘Registrar-General’s classification) consisted of five categories, one of which (Class III ‘skilled occupations’) was sub-divided:

- I Professional occupations
- II Managerial and technical occupations
- III Skilled occupations:
  - (N) non-manual
  - (M) manual
- IV Partly skilled occupations
- V Unskilled occupations

In our Smoking Survey we coded respondents who had jobs to a ‘social class’ using this system of classification, for the revised version was not available at that time. This classification has, however, long been criticized as bearing little relation to sociological conceptions of ‘class’, and in the 1970s, John Goldthorpe developed an alternative system of classification which has since been used in other studies (for

more details, see Gordon Marshall, et al., *Social Class in Modern Britain*, London, Hutchinson, 1986).

The new class schema developed by the Office of National Statistics in 1998 was heavily influenced by the Goldthorpe schema. It divides the population into 8 classes which (like the Goldthorpe classes) are distinguished according to the labour market conditions associated with different kinds of jobs (principally, the economic rewards they offer and the degree of control and job security they bring). If you are conducting your own survey, you should code to this new system rather than the old one.

**The government's new classification of social classes**

1. Higher managerial and professional occupations
  - 1.1. Employers and managers in larger organizations
  - 1.2. High professionals
2. Lower managerial and professional occupations
3. Intermediate occupations
4. Small employers and own account workers
5. Lower supervisory, craft and related occupations
6. Semi-routine occupations
7. Routine occupations
8. Never worked and long-term unemployed

See: David Rose and Karen O'Reilly, *The ESRC Review of Government Social Classifications* (London, Office for National Statistics, 1998). A full description of this new schema can also be found on the Office for National Statistics web site: [www.statistics.gov.uk/methods\\_quality/ns\\_sec](http://www.statistics.gov.uk/methods_quality/ns_sec)

There is a long-running debate within sociology about whether *any* of these classificatory systems make much sense. Some sociologists now argue that we should move away from systems of classification based on distinct 'categories' and instead rank people on a continuous scale – a much more realistic way of capturing social differences.

### **Continuous occupational scales**

This alternative approach ranks different occupations on a continuous numerical scale without attempting to draw cut-off points between different clusters of occupations.

- One way of doing this ranks occupations according to their *status*. A survey is carried out in which people are asked to rank different occupations against each other (e.g. a doctor against a filing clerk, a filing clerk against a bus driver, and so on), and the results are amalgamated to produce a scale of perhaps 100 points or more on which any one occupation can be placed.
- A different approach, pioneered at the University of Cambridge, ranks occupations according to the *social distance* between them. A survey is conducted to find out which occupational groups typically associate socially with (or inter-marry with) which other groups, and the results are analyzed to create a

scale in which the numerical distance between any two occupations represents the likelihood of their interacting socially with each other.

For a useful review of categorical class schema (the old Registrar-General model, the Goldthorpe model and the new ONS model) and the Cambridge occupational scale, see Ken Roberts, *Class in Modern Britain* (Basingstoke, Palgrave, 2001) chapter 2.

Whichever method of classification we use, there are problems about whether and how people without jobs should be classified. Some sociologists argue that only individuals who are currently in employment can be given a code. Others suggest that retired people should be coded according to the last job that they held and that 'housewives' without their own paid employment should be coded according to their partner's occupation. Sociologists also argue about whether these various schema are equally appropriate for analyzing women's as well as men's social position, given that the labour market is quite sharply segregated on gender lines.

### **Coding occupational data to ONS 'social class' and Cambridge scales**

In the Smoking Survey, we collected information on respondents' occupational titles, and interviewers were told to probe on employment status where this was unclear.

This information was then used to code respondents on two different schema:

- The Office of National Statistics (1991) classification of social classes (coded as a new variable, *var00042*)

- The Cambridge Social Interaction and Stratification occupational scale, CAMSIS (coded as *var00030*)

Only individuals who are currently employed (full- or part-time) were given a code on these two variables. The codes for both ‘social class’ and the Cambridge scale were derived from SOC codes. The first task was therefore to look up the SOC code for each respondent’s job in Volume 2 of *Standard Occupational Classification*. For example:

- A primary school teacher is listed in the alphabetical listing of occupations as:

Teacher – *educational establishments/schools/primary* and has the code number 234

- A car mechanic is listed as:

Mechanic – motor, and has the code 540.

To find a person’s social class, we then looked them up under their SOC code in Table A1 of volume 3 of *Standard Occupational Classification*.

- Code 234 – “Primary (and middle school deemed primary) and nursery education teaching professionals” – is listed (on the old schema) as social class II, irrespective of employment status.
- Code 540 – “Motor mechanics, auto engineers (inc: road patrol engineers)” – is listed as social class IIIM except for those with managerial status who are listed as class II.

Giving each ‘social class’ category a numerical code from 1 to 6, we therefore coded the teacher ‘2’ (Class II) and the mechanic ‘4’ (Class IIIM).

To find somebody's code on the Cambridge occupational scale, you need a copy of the scale. We used the version in K.Prandy, *Cambridge Scale Scores for CASOC Groupings* (Working Paper 11, 1992) but newer versions are being developed – for details, go to their web site at [www.cf.ac.uk/socsi/CAMISIS/intro.html](http://www.cf.ac.uk/socsi/CAMISIS/intro.html)

- Looking up SOC code 234 in the *Cambridge Scale Scores for CASOC Groupings*, we find that our primary school teacher scores 65.06.
- Looking up SOC code 540, the motor mechanic gets a score of 21.15. These scores are then entered as the values for our Cambridge Scale variable, var00030.

### **Social classes and levels of measurement**

One of the advantages which the Cambridge scale has over categorical approaches is that it entails a higher level of measurement. Categorical class schema are *at best* ordinal measures:

- The old 'Registrar General' six class schema ranks the classes in descending order of occupational skill, and therefore qualifies as an ordinal level measure – Class I occupations are deemed to be of higher skill than Class II which are in turn of higher skill than Class IIIN – and so on.
- The newer eight class schema adopted by the ONS is probably only a nominal level measure (classes 3, 4 and 5, for example, are not arranged in any obvious order of declining favourability of labour market conditions).

Occupational scales, on the other hand, are *at least* ordinal measures, and can probably be treated as interval measures. On the Cambridge scale, for example, increasing numerical distance indicates a declining probability of interaction, and the social distance between an occupation coded 20 and one coded 40 is about the same as that between an occupation coded 40 and one coded 60. The authors suggest that, for most practical purposes, this can be used as an interval scale.