Qualitative versus quantitative research

There has been a lot of discussion about the differences between quantitative and qualitative research. Quantitative research deals with numbers, uses statistical models to explain the data, and is considered ‘hard’ research. The best-known prototype is opinion-poll research. By contrast, qualitative research avoids numbers, deals with ‘interpreting’ social realities, and is considered ‘soft’ research. The best-known prototype is probably the depth interview. These differences are displayed in Table 1.3. Much effort has been invested in juxtaposing quantitative and qualitative research as competing paradigms of social research, to the extent that people have built careers in one or the other, often polemicizing on the superiority of hard over soft or soft over hard research. Publishers have been quick to spot a market and have established book series and journals with the effect of perpetuating this distinction.

It is fair to say that much quantitative social research is centred around the social survey and the questionnaire, supported by SPSS and SAS as standard statistical software packages. This has set the standards of methodological training at universities, so that the term ‘methodology’ has come to mean ‘statistics’ in many fields of social science. In parallel, a large

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business sector has developed, offering quantitative social research for a multitude of purposes. But recent enthusiasm for qualitative research has successfully challenged the simple equation of social research and quantitative methodology; and a space has reopened for a less dogmatic view of methodological matters – an attitude that was common among the pioneers of social research (see, for example, Lazarsfeld, 1968).

In our own efforts, both in research and in teaching social research methods, we are trying to find a way of bridging the fruitless polemic between two seemingly competing traditions of social research. We pursue this objective on the basis of a number of assumptions, which are as follows.

No quantification without qualification

The measurement of social facts hinges on categorizing the social world. Social activities need to be distinguished before any frequency or percentage can be attributed to any distinction. One needs to have a notion of qualitative distinctions between social categories before one can measure how many people belong to one or the other category. If one wants to know the colour distribution in a field of flowers, one first needs to establish the set of colours that are in the field; then one can start counting the flowers of a particular colour. The same is true for social facts.

No statistical analysis without interpretation

We think it odd to assume that qualitative research has a monopoly on interpretation, with the parallel assumption that quantitative research reaches its conclusions quasi-automatically. We ourselves have not conducted any numerical research without facing problems of interpretation. The data do not speak for themselves, even if they are highly processed with sophisticated statistical models. In fact, the more complex the model, the more difficult is the interpretation of the results. Claiming the ‘hermeneutic circle’ of interpretation, according to which better understanding comes from knowing more about the field of research, is for qualitative researchers a rhetorical move, but one that is rather specious. What the discussion on qualitative research has achieved is to demystify statistical sophistication as the sole route to significant results. The prestige attached to numerical data has such persuasive power that in some contexts poor data quality is masked, and compensated for, by numerical sophistication. However, statistics as a rhetorical device does get around the problem of ‘garbage in, garbage out’. In our view, it is the great achievement of the discussion on qualitative methods that it has refocused attention in research and training away from analysis and towards the issues of data quality and data collection.

It seems that the distinction between numerical and non-numerical research is often confused with another distinction, namely that between formalization and non-formalization of research (see Table 1.4). The polemic
around these types of research is often conflated with the problem of formalism, and based on the methodological socialization of the researcher. Formalism involves abstractions from the concrete context of research, thus introducing a distance between the observation and the data. In a sense, formalism is a general-purpose abstraction available for treating many kinds of data providing certain conditions are satisfied, such as independence of measures, equal variance and so on. The abstract nature of formalism involves such specialization that it can lead to a total disinterest in the social reality represented by the data. It is often this ‘emotional detachment’ that is resented by researchers of other persuasions, rather than the numbers themselves. However, as we will show below, this is to do with a particular research method, but can be more fruitfully considered in the larger context of knowledge interests. Numerical research has a large repertoire of statistical formalisms at its disposal, while the equivalent repertoire in qualitative research is still rather underdeveloped – despite the fact that its oft-invoked ancestor, structuralism, was rather keen on formalisms (see, for example, Abell, 1987).

Methodological pluralism within the research process: beyond the law of instrument

An unfortunate consequence of the focus in research training on numerical data has been a premature closure on the data collection phase in the research process. With many people competent in handling numerical data, the data collection process is quickly reduced to the industrial routines of questionnaire design and survey sampling, as if this were the only way to conduct social research. Without doubt, much has been achieved in refining these procedures over the years, and the survey’s status as the most important social research method is justified because of this. However, nothing justifies its status as the sole instrument of social research. Here we are in danger of succumbing to the ‘law of instrument’: give a boy a hammer and all things in the world need pounding.

What is needed is a more holistic view of the process of social research, to include defining and revising a problem, conceptualizing it, collecting data, analysing data and writing up the results. Within this process, different methodologies have different contributions to make. We need a clearer notion of the functional strengths and weaknesses of different strands of methods, and of different methods within any one strand.
Time ordering

One way of describing the functionality of different methods is to order them in a design time-line. Traditionally, qualitative research was considered only at the exploratory stage of the research process (pre-design), to explore qualitative distinctions in order to develop measurements, or to get a 'feel' for the research field. More recent formulations consider qualitative research as equally relevant after the survey, to guide the analysis of the survey data, or to support its interpretation with more fine-grained observations (post-design). More extensive designs consider two parallel streams of research, either simultaneously or in oscillating sequences (parallel design; before-and-after design). Finally, qualitative research can now be considered to be a self-contained research strategy without any functional connection to survey or other quantitative research (stand-alone). Qualitative research is seen as an autonomous research endeavour in the context of a research programme with a series of different projects.

The stand-alone function of qualitative research has a weakness that we try to address with this book. While it is possible to consider numerical and non-numerical research as autonomous endeavours, the problem with qualitative research is that it is a 'didactic nightmare'. Compared with the numerical research tradition founded on sampling, the questionnaire and statistical analysis, qualitative researchers, and those who want to become qualitative researchers, find very little procedural clarity and guidance in the literature. Although this is slowly changing as the critical mass of like-minded researchers grows, much of the literature is still preoccupied with demarcating the legitimate territory of this autonomous methodological path. This legitimizing rhetoric has led to an epistemological hypertrophy, producing definitions of positions and counter-positions in a competitive field with more obscurantism and jargon than clarity, and ultimately has been of very little help when it comes to knowing what to do when doing qualitative research. Up to now we have much support for 'feeling good' in the face of traditional critique, but little critical self-observation.