# Notes on Data Analysis following Grounded Theory Approach

#### **Overview**

Originally developed by Glaser and Strauss (1967; 2001), the grounded theory tradition is based upon the goal of deriving theory from the 'ground' up to limit the imposition of *a priori* paradigmatic assumptions on the data. That is, grounded studies start at the descriptive, micro level of the data and work up to mid-level grounded theory. This stands in contrast to the positivist hypothetico-deductive model which works in the opposite direction (viz. first theory, then hypotheses, then data). Most grounded researchers do not adopt the entire grounded theory approach (Bryman and Burgess 1994). Rather, they make pragmatic use of only its analytical tools, including data handling techniques, open coding and thematic category development.

### **Coding**

The coding process is iterative and non-linear. It yields a highly organised, usable data set, but more importantly the emergent themes orient and ground the analysis.

The pivotal first step in the data analysis process is line-by-line coding. Coding is the central task of grounded analysis (Lonkila 2001), and the most foundational for the present study. Specifically, a grounded study begins with "open coding," which Strauss and Corbin (1990: 74) define as "the analytic process by which concepts are identified and developed in terms of their properties and dimensions". This is accomplished by asking mental questions about the data, making comparisons, and developing labels and groupings for similar phenomena (e.g. Strauss and Corbin 1990). Next in the grounded approach is "axial coding", which essentially consists of reconstructing data "in new ways by making connections between a category and its subcategories" (Strauss and Corbin 1990: 97)<sup>1</sup>. Both of these coding procedures can be carried out using CAQDAS (computer-aided qualitative data analysis software).

Kelle (2000: 295) identifies 6 beginning steps with grounded analysis:

1. Formatting textual data

<sup>&</sup>lt;sup>1</sup> The third form is selective coding, which is used to deductively test a core category once it has been constructed.

- 2. Open coding of data
- 3. Memo writing
- 4. Comparing text segments that have been assigned the same code
- 5. Integrating codes, and attaching memos to codes

### **Criticisms of grounded theory**

Despite grounded theory's strength at providing "accessible methodological guidelines", it has often been criticised for its "limited theoretical position" (Kushner and Morrow 2003: 31). In addition, the coding process can lead to increasingly abstracted and de-contextualised data. Consequently, many researchers draw upon broader theoretical perspectives such as critical and feminist theory in order to address some of conventional grounded theory's limitations. These limitations arise "at the levels of metatheory, empirical analysis, and normative implications" (Kushner and Morrow 2003: 33). Moreover, adding the perspective of social theory to grounded methodology can better situate "contexts of action within larger social relations of power and structure" (Strauss and Corbin 1994: 35).

### **Combined Approach**

A combined qualitative methodology has been specifically encouraged by grounded theory methodologists Strauss and Corbin (1998). They indicate that grounded theory "offers a cluster of very useful procedures – essentially guidelines, suggested techniques, but not commandments" (Strauss and Corbin 1998: 4). They also espouse the pragmatist view of social science developed by Dewey and Mead, which implicitly condones the separation of these "useful procedures" from grounded theory from the larger philosophical prescriptions about how a grounded analyst should best think about and study social reality. According to Kushner and Morrow (1994: 37), "grounded theory method may allow- but does not compel- researchers to extend their consideration of structural influences on social processes to depth analysis of the setting and context of intermediate and macrosocial organization".

However in the context of addressing broader theoretical concerns through discourse analysis, Strauss and Corbin (1994: 282) identify the "danger" that such an analysis will "be speculatively remote from the phenomena it purports to explain". In response to this validity threat, "grounded theory methodology insists" that engagement with

social theory "should be developed in that back-and-forth interplay with data that is so central to this methodology" (Lonkila 2001: 282).

## **Computer Aided Qualitative Data Analysis Software**

The use of qualitative data analysis software can facilitate the integration of grounded methodology with other approaches such as discourse analysis. Each layer of codes and memos from the grounded theory element is recorded and annotated to the computerised data set when using a software package such as NVivo, so that subsequent forms of analysis can be continuously informed by the grounded analyses preceding it.