What are grounded theories made of?

Abstract

Grounded theory (GT) is a popular methodology in qualitative research, and is founded on an iterative inductive and deductive cycle where theory is allowed to emerge directly from data and is ultimately tested (grounded) against 'the real world'. However, two problems are immediately apparent. Firstly, the actual nature of grounded theory as a methodology is contentious due to a split between the two originating theorists, Secondly, it is unclear what kinds of data are acceptable in GT apart from traditional and explicitly recognised forms of contemporaneous observation and interview. This article explores implicit links in the original GT literature between 'traditional' and 'non-traditional' forms of real-world data. It is proposed that other kinds of data, including that available from survey questionnaires, may be legitimate sources of data in grounded theory studies. Some suggestions are offered for selecting appropriate forms and sources of data in GT studies.

Origins of grounded theory

The nature of grounded theory is contentious due to differences that grew up between Barney Glaser and Anselm Strauss who were the co-authors of the original and seminal text *The Discovery of Grounded Theory* published in 1967. It is common ground that both argued for a 'rationale of theory that was *grounded*- generated and developed recursively through interplay with data' as Strauss and Corbin put it recently (1998b p.162). Their approach was seen as revolutionary at the time because it challenged the dominant quantitative model in social science research both in terms of its 'artificial' divisions between theory and research, and in the inferior role assigned to qualitative research (Charmaz, 2000 p.511).

Grounded theory has bifurcated roots in the rigorous positivist traditions that Glaser grew up with, and in the empirical traditions of Chicago school field research and Herbert Blumer's symbolic interactionism of Strauss' upbringing (Charmaz, 2000 p.512; Strauss and Corbin, 1998a p.8). The result was that grounded theory emerged as a tool which combined Glaser's deductive attitude to data analysis, with Strauss' inductive methods. It is intended to be used in an iterative deductive/inductive 'successive approximation' approach to theory generation.

The extended grounded theory family

After publication of *The Discovery of Grounded Theory* Glaser and Strauss worked separately. Glaser developed the theoretical side of grounded theory in his 1978 book *Theoretical Sensitivity*, while Strauss developed a more 'hands-on' approach in his 1987 book *Qualitative Analysis for Social Scientists* (Charmaz, 2000 p.512). The differences between them became more explicit with the first edition in 1990 of Strauss and Corbin's *Basics of Qualitative Research: Grounded Theory and Procedures and Techniques* and Glaser's (1992) response to it (*Basics of Grounded Theory Analysis: Emergence vs. Forcing*). Strauss and his co-author took the view that grounded theory should be verificational and legitimately influenced by the researcher's existing ideas, whereas Glaser insisted data must be acquired without 'forcing' it into pre-existing frameworks pathways: he contended that "Categories emerge upon comparison and properties emerge upon more comparison. And that is all there is to it" (Glaser, 1992 quoted in Charmaz, 2000 p.512).

It seems that by 1992 the differences between the two originators of grounded theory had become irreconcilable:

> *'After… 1991 the exchange of letters ensued with myself pleading and Anselm saying "no" to a pulling and correction of Basics of Qualitative Research.'* (Glaser, 1992 p.3)

Although Glaser's avowed intention was to produce a basic text for 'yeoman researchers', he also makes it clear that a primary purpose of *Emergence vs. Forcing* is to correct what be sees as basic errors propagated by Strauss and Corbin in *Basics*, his riposte targets the first edition of *Basics* chapter by chapter:

> *'This book follows the exact chapter sequence and nomenclature in Basics of Qualitative Research… The last chapter considers the problem and prospects of ownership of intellectual property.'* (1992 p.10)

The second (1998a) edition of Strauss and Corbin's *Basics of Qualitative Research* acknowledges Glaser's contribution to the development of grounded theory up to 1978 but appears to ignore his 1992 riposte apart from a single mention of its existence (1998a p.9). In their introduction to the second edition Strauss and Corbin appear to reject Glaser's accusation of allowing preconceptions to pollute theory generation: they insist that in 'their' grounded theory, a researcher 'does not begin a project with a preconceived theory in mind'.

However, they allow that this is acceptable provided that the purpose is to "elaborate or extend existing theory" (1998a p.12).

The differences between the two could be summarised by saying that Glaser's grounded theory comes from a 'purist' approach that relies on an 'open' attitude to the research enterprise where the researcher is professionally naïve: in this way, theory generation is not compromised by researchers' prejudices but emerges directly from the data.

In contrast, Strauss and Corbin's grounded theory could be described as a 'pragmatic' approach with a more 'structured' attitude to theory building. It prescribes the use of a set of analytical tools and guiding principles (1998a p.13).   The researcher is encouraged to mix grounded theory with other methodologies (1998a pp.28-33) and to apply existing insights and experience to the subject matter where appropriate (1998a p.33)

Other twists on grounded theory include Kathy Charmaz' (1995) constructivist interpretation, which appears to draw more on the original writings of Glaser and Strauss than the later writings of, for instance, Strauss and Corbin.

[pic]

Figure 1- key stages in grounded theory development (adapted from Harwood, 2002 p.67)

Will the real grounded theory please stand up?

When discussing methodologies with other research students, some quite animated arguments can break out regarding the authenticity of the GT brand adopted. Charmaz puts it this way:

> *So who's got the real grounded theory? …different proponents assume that grounded theory essentials ought to include different things… [but] grounded theory offers a set of flexible strategies… Should we expect grounded theorists to remain committed to their written statements? Not completely… Strauss and Corbin's (1994) chapter in the first edition of this handbook has a considerably more flexible tone than is found in the first edition of Basics.* (Charmaz, 2000 pp.513-4)

In other words, people can be expected to adapt their ideas as they go through life, and grounded theorists are no exception. However, there are some irreducible elements that all published grounded theorists seem to agree on, and these are described next.

Anatomy of grounded theories

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Figure 2- the grounded theory 'data dance' (adapted from Kelsey, 2003)

Both interpretations of grounded theory share a recursive approach to data collection and

analysis where each round of data collection is conditioned by what has been learned in the preceding round of data analysis (figure XX). This 'data dance' proceeds iteratively so that theory is progressively refined, until a point of theory saturation is reached (Strauss and Corbin, 1998a p.212; Kelsey, 2003). Glaser's approach places much less emphasis on the deductive phase:

> *'In grounded theory the analyst just lets concepts emerge and their theoretical codes emerge, which becomes hypotheses- induction- and then maybe for theoretical sampling, conceptually elaborates a bit to get more data on a thin area through more data collection. Grounded theory is induction from data, with a bear* (sic.) *minimum of deduction from the emergent, to further data collection.'* (1992 p.85)

Charmaz puts it that Glaser, in his 'purist' insistence on the paramount importance of professional naivety, 'assumes that we can gather our data unfettered by bias or biography' (Charmaz, 2000 p.522). She also critiques Strauss' and Corbin's guidelines as 'didactic and prescriptive rather than emergent and interactive' (2000 p.524) and advocates instead a 'constructivist' adaptation to GT. This represents a third strand of GT which Charmaz positions between the post-modern positions of Denzin (among others) and the post positivist positions of Rennie et al. (2000 p.525).

In grounded theory generation, recurrent themes are identified in the data and coded as *concepts*.

As explained earlier in section XXX, Strauss and Corbin's (1998) prescription for using GT for theory building was used to generate emergent theory. The analysis follows the basic coding sequence (open(axial(selective) iteratively between primary data and the emerging theoretical framework. It is important that the codes and categories that label emergent concepts are derived directly from the data. Authenticity is enhanced by the use of *in vivo* codes which are labels named from the actual verbatim words found in the data (Strauss and Corbin, 1998a p.105).

When gaps in the data are recognised during analysis, one returns to the field with questions that are designed to fill the gaps and one asks them of people who are well qualified to answer them. This important element of grounded theory is referred to as *theoretical sampling* (Strauss and Corbin, 1998a pp.201-215; Glaser and Strauss, 1968b pp.45-49).

The different phases of Strauss and Corbin's GT coding sequence could be illustrated as follows:

[pic]

Figure 3- the grounded theory analytic process (adapted from Harwood, 2002 p.76)

Coding

Coding consists of identifying and labelling the key concepts in each transcription. The examples chosen by Strauss and Corbin are interview transcripts, but the same interpretive process can be applied to, for example, free-text survey responses (pp.281-282). This seeds axial coding.

Memos are to be recorded throughout the coding process as a way of fixing impressions of what was 'going on', and are to be written at the same time as, or shortly after, data collection and analysis in order to retain the freshest impression.

According to Strauss and Corbin, *coding* is 'the analytic process through which concepts are

identified and dimensions are discovered in data'. *Categories* are defined here as 'concepts that stand for phenomena' identified in the data, and *dimensions* in this context are the ranges 'along which general properties of a category vary, giving specification to a category and variation to the theory'.

Coding can be thought of as the stage where the data is fractured into the smallest possible elements of meaning before being put back together in the final stages of analysis. The procedure can be simply put as labelling concepts in the data and then classifying them as categories, sub-categories or dimensions depending on their presumed their relationships with each other:

> 'Before each category was labelled, the researcher tried to stand back and ask 'what is going on here? And does what I see fit the reality of the data?' (p.45).

The entire open coding sequence could be illustrated as follows:

[pic]

Figure 4- open coding sequence according to Strauss and Corbin (1998)

So what kinds of data are acceptable?

Reading grounded theory studies has led this writer to the inescapable conclusion that there appear to be just two conventionally acceptable sources for data in GT studies:

- First person observations (Glaser and Strauss, 1968a)

- Face-to-face interviews (most published GT studies)

It is easy to understand why this should be so: first person observation was used by Glaser and Strauss in the 1960's during their original studies on dying in hospitals and is by definition an appropriate data type: face-to-face interviews are used in every GT study I have ever read (this is not to say no other means are used). One reason for this conservative approach may be that GT is still regarded as a rather novel methodology which, in some research areas, has not yet 'won its spurs'. This seems especially to be the case in PhD studies, where the emphasis is often on adopting a well understood, tried-and-tested methodology and leaving the originality for the actual topic.

However, Glaser and Strauss' seminal book *The Discovery of Grounded Theory* has an entire chapter on 'New Sources for Qualitative Data' in which they suggest that, for example, document caches in libraries 'can be regarded much like a set of interviews, done with either a sample of people or representatives of different groups' (Glaser and Strauss, 1968b p.167): such caches might take a number of forms including archived correspondence, interview transcripts and newspaper articles. They go so far as to suggest the use of novels and other works of fiction as 'an early source of categories' (Glaser and Strauss, 1968b p.169).

Charmaz points out that 'grounded theory methods specify analytic strategies, not data collection methods... ' and mentions a few 'rich data' sources suitable for use in GT including 'observations, conversations, formal interviews, autobiographies, public records, organisational reports, respondents' diaries and journals...' (Charmaz, 2000 p.514). Strauss and Corbin make it clear that types of data sources should be considered at the beginning of the research enterprise

as an important element of the design:

> Think, as an exercise in imagination, of the many decisions involved in data collecting. Should we interview? What type or types of interview? How many interviews should we aim for, and on what grounds? Where will we go to find the interviewees? Given the difficulties encountered in a research situation, how will we have to alter our original notions of what to search for in our interviewing? Or, how might we have to change the initial sample population? *On the other hand, one might ask, would it make more sense to use questionnaires to collect our data*? (Strauss and Corbin, 1998a p.28, my italics)

Questionnaire responses may include 'open' questions that resemble interview scripts. The obvious differences between responses given to particular questions during face-to-face interviews, and responses given in questionnaire returns, are that written responses are likely to entail conscious effort and not to be repetitive, whilst an interviewer can interactively explore interesting responses in great depth. However, a large number of questionnaire returns are likely to produce a wider range of responses that a relatively small number of questionnaires and it is common practice to use an initial questionnaire as a trawling device for identifying common themes which can then be focussed upon during formal interviews. It is therefore difficult to understand why categories derived from questionnaire responses should not be combined with categories derived from interview in GT analysis, provided care is taken that they are indeed responses to the same kinds of questions.

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Glaser & Strauss (1967)
The Discovery of Grounded Theory

Glaser (1978)
Theoretical Sensitivity

Strauss (1987)
Qualitative Analysis for Social Scientists

Glaser (1992)
Basics of Grounded Theory Analysis: Emergence vs. Forcing

Strauss & Corbin (1990)
Basics of Qualitative Research- 1st Edn.

Strauss & Corbin (1998)
Basics of Qualitative Research- 2nd Edn.

'Constructivist' GT (Charmaz, 1995 onwards)

Endgame:
- Saturated categories (Strauss and Corbin, 1998a p.212)
- Theory validation against literature
- Statement of Theory

Data collection

Data collection

Initial data collection

Data analysis:

More refined categories

Data analysis:

Refined categories

Data analysis:

Preliminary categories

Further data collection

Further rounds of data analysis:
Further refinements of categories

Deductive domain analysis: more refined categories

Inductive domain

Iterative 'dance' towards greater saturation of categories of categories

Kickoff:
  • Selection of research topic
  • Initial literature review (Strauss and Corbin, 1998a pp.48-52)

Open coding

Axial coding

Uncover relationships among categories:
Mini-frameworks
Conditions & Consequences
The paradigm

Selective coding

Discover the 'core' category   Develop theoretical framework

Categories
Classify concepts: *Properties Dimensions*

Sub-categories
Drill down categories: *When? Where? How? Why?*

Direction of analytic sequence

Wh

Concepts
Fracture & label the data: *In vivo coding*

Categorising
Discover relationships between concepts

Develop properties & dimensions

'Properties' are attributes of category.
'Dimensions' represent location of properties on a range

Conceptualising (abstracting)
'Labelling'
'Fracturing the data'