The Use of Grounded Theory in Research: Knowledge Sharing in the Australian Film Industry

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Selecting the most appropriate research method is one of the most difficult problems facing a researcher. Grounded Theory is presented here as a method of choice as it is.

This paper tracks a Grounded Theory research project undertaken to study the phenomena of collaboration and knowledge sharing in the Australian Film Industry. The detailed, rigorous, and systematic approach of the theory Grounded Theory also permits flexibility and freedom rendering Grounded Theory suitable for the investigation of complex multifaceted phenomena. Grounded Theory is also well equipped to explore socially related issues. This chapter describes the techniques, utility, and ease of use of grounded theory, discussing them in a practical sense to assist potential users in applying the method.

Introduction

Among interpretive and qualitative research methods, Grounded Theory (GT) offers unique benefits. GT 'is an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data' (Martin & Turner 1986, p. 141). GT provides a detailed, rigorous and systematic method of analysis, which has the advantage of reserving the need for the researcher to conceive preliminary hypotheses. It provides the researcher with greater freedom to explore the research area and allow issues to emerge (Bryant 2002).

This chapter provides a guide for researchers considering the use of GT. It provides a focused critique, which can guide adoption. This chapter also details and explains the steps researchers must undertake in order to reap the benefits GT has to offer. To ensure a complete understanding of how to use the method, the paper tracks a GT research project undertaken to study the phenomena of collaboration and knowledge sharing in the Australian Film Industry.

This chapter proceeds as follows. First, the value and benefits GT has to offer is articulated. Then, the chapter tracks the steps taken in a study of knowledge sharing in the Australian Film Industry (AFI), using GT, with the aim of providing the reader an illustrated step-by-step guide. The theoretical underpinnings for the practical research steps are provided as well.

The value of using Grounded Theory

The benefits offered by GT include the method's capacity to interpret complex phenomena (Charmaz 2003), its accommodation of social issues (Glaser & Strauss 1967), its appropriateness for socially constructed experiences (Charmaz 2003; Goulding 1998), it's imperative for emergence (Glaser & Strauss 1967; Glaser 1978), its absence from the constraints of a priori knowledge (Glaser & Strauss 1967; Glaser 1978), and the method's suitability for different types of research or contexts (Martin & Turner 1986).

The film environment is complex and multifaceted. A full conceptual understanding of it requires the grappling of many interwoven and overlapping issues and themes. Interpretive research provides to the researcher the thick description, which provides value to those who will benefit from its outcomes by providing meaningful emergent concepts (Charmaz 2006, 2008; Fernández 2004). A GT study which closely follows the guidelines presented by Glaser and

Strauss (1967) will transcend thick description to provide substantive theory (Fernández et al. 2006; Goulding 2001).

Overview of the research project – Knowledge sharing in the Australian film industry

The study is part of a larger investigation of the AFI, focusing on knowledge sharing in a project environment. The research reported here focuses on the information flow between participants, looking for events of knowledge sharing and factors enabling it.

The results of this study found five groups of factors impacting on the success of the process of knowledge sharing during collaboration: individual, relationship, network, organisation and knowledge. In addition, the results show that individual motivation has the potential to override the influence of all other factors and to support a successful knowledge sharing process. The full results of this project can be found in Alony et al. (2007). The aim of this chapter is to provide the reader with some understanding of how Grounded Theory is used for such research. The following section details the methodological process undertaken in this study.

Using the Grounded Theory method

This section integrates the GT design by interlacing theoretical guidelines with *practical insights* from the study described above. For ease of communication, this discussion necessitates a mix of *first* and third person, *where first person represents the practical side of the example (also underlined for clarity)* and third person represents theoretical doctrine. *An advantage of the first person here is that it provides a more subjective view of the research process, and since subjectivity is an inherent component of qualitative research, this strategy is appropriate.*

The process of GT encompasses an acknowledgment of the researchers' bias, the selection of a data collection site, the data collection process, the process of coding and analysis, and the compilation of results. Coding and analysis includes three stages: open coding, selective coding, and theoretical coding. Open coding employs constant comparison and memo-ing and results in themes, sub-categories, and core categories. These outcomes guide the subsequent sampling of participants through theoretical sampling. The next stage of coding – selective coding – also employs constant comparison and memo-ing. This stage results in dense, saturated core categories. The core categories are then sorted, written, theorised, and cross-referenced with literature, during theoretical coding. The results of this last stage of coding are a basic social process and a theoretical model. This is the final product of GT research. This research process is summarised in Figure 1. This section explains each part of the process, and illustrates how it was undertaken in the study of the AFI.

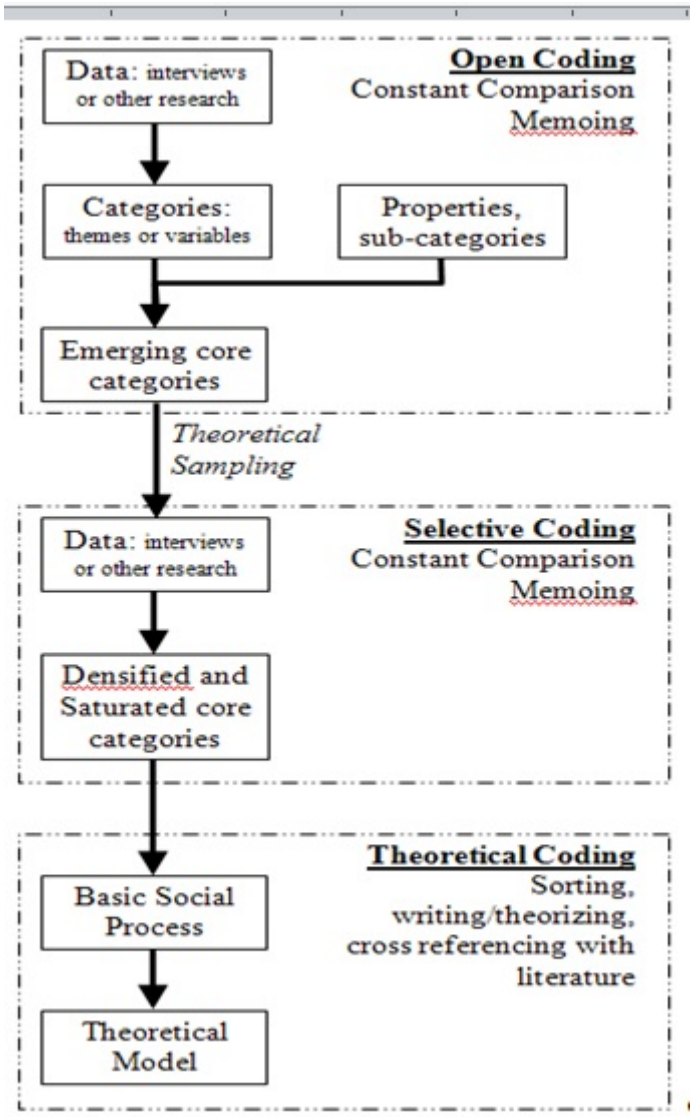

Figure 1. The Process of Grounded Theory

As a research method, GT has not gone without criticism. The following section discusses and addresses the most widespread of these criticisms.

Acknowledge biases

An initial step in qualitative research, in particular, GT, is for the researcher to disclose influences which may bias the study. By acknowledging researcher biases, the work gains a degree of scientific hardiness. In addition, Glaser and Strauss (1967) recommended researchers enter the field without preconceived or *a priori* ideas of the subject area, of what may be discovered, or where it may lead. However, as many writers have testified (Charmaz 2003; Hettinga 1998), it is very difficult, if not impossible, to totally divorce one's self from the accumulations of knowledge and experience that temper understanding, observation, and interpretation. Researchers must therefore disclose information that may affect understanding. Disclosure will do two things. First, it will inform the reader of areas where objectivity may be at

risk of not being absolute. More importantly though, it will communicate that we, as researchers, are aware of these potential biases and have endeavoured to account for them.

We entered the study with little prior knowledge of the AFI, knowing nothing about film production. In order to gain some initial knowledge of the film industry, of the jargon used, and to gain some of the requisites for the development of theoretical sensitivity (Glaser 1978) we undertook an initial pilot study. Following this, we interviewed several film producers at a film conference. These activities served to provide some basic general knowledge. Glaser and Strauss (1967) stressed that developing theoretical sensitivity is essential for the emergence of theory.

Following the prescribed methods of Glaserian Grounded Theory (Glaser 1978, 1992, 1998, 2001, 2005; Glaser & Kaplan 1996; Glaser & Strauss 1967), empirical data was collected from film workers. Initial inquiries were directed toward management practices in general. However, as the basic social process began to emerge, the research became more focused toward the actual social problem as related by the participants. As Glaser and Holton (2004) state:

> *GT provides an honest approach to the data that lets the natural organization of substantive life emerge. The GT researcher listens to participants venting issues rather than encouraging them to talk about a subject of little interest. The mandate is to remain open to what is actually happening and not to start filtering data through pre-conceived hypotheses and biases to listen and observe and thereby discover the main concern of the participants in the field and how they resolve this concern.*

Begin data collection

A GT study begins with a general opening of a subject area. As stated by Dey (1999, p. 3), the researcher will usually start with a 'general subject or problem conceived only in terms of a general disciplinary perspective.' From this initial opening, the study becomes continually focussed towards an area of social concern. Once a data site has been selected, collection of data begins; this is usually in the form of open-ended interviewing and transcription, but can include other forms of data acquisition such as documents and literature. Glaser comments that, 'all is data', meaning just that – 'exactly what is going on in the research scene is the data, whatever the source, whether interview, observations, documents. It is not just what is being, how it is being and the conditions of it being told, but all the data surrounding what is being told' (Glaser 2001, p. 145).

The selection of our initial participants was based on introductions from our university. Introductions were necessary as these people were generally high profile and were also accustomed to working unusual hours. It was both courteous and convenient to secure an introduction before contacting each of the participants. Following the guidelines of Theoretical Sampling (Glaser 1978), each participant was asked to recommend a number of people who would potentially satisfy our expected needs for theoretical sampling and densification. After analysis, we determined which of these potential participants would be most suited to the research by examining their biographies and filmographies. Through this examination of their history and experience we could determine whether they would be suitable according to what we thought they could add to the study in relation to the data we were obtaining. When we determined which of the potential contacts were most useful, we would ask the person we had interviewed if they could contact this person and introduce us.

The first two interviews were held on the same day with two film producers in two separate locations. These initial interviews went from 90 to 120 minutes each, both yielding rich information. The data was of such high quality that nearly all of it was used in the study. After these first two interviews, subsequent interviews became progressively shorter as the study

progressed, with the final interviews running just short of one hour each. Glaser and Strauss (1967) explain that it is customary for interviews to run this way.

Coding

After the empirical data has been collected, the researcher begins the process of coding – categorising the data to reflect the various issues represented. The Glaserian Grounded Theory method uses three levels of coding – *open coding*, *selective coding* and *theoretical coding*. The coding stages are consecutive and sequential and not iterative. The product of each stage guides the following stage.

Open coding

Initially, open coding is employed. At this stage, the raw data (for example, transcripts) are initially examined and are coded through a process that fractures the interview into discrete threads of datum. These data are collated and accrue to form categories of similar phenomena. The process of open coding examines the data without limitations in its scope and without the application of any filters, thus, all data are accepted and none are excluded. This allows the researcher to look for patterns that may lead to social processes, which may be of eventual interest. As the categories begin to fill, those that are most dense become known as *core categories* (Glaser 2001). Through this process of densification, core categories build to become the core focus of theoretical articulation through to the development of a basic social process (Glaser 1978, p. 93).

Almost immediately upon completion, the two interviews were transcribed and coding began. It is important to begin this parallel task of collection and coding in a timely and synchronous manner to ensure a structured discovery of data that more easily illuminates emerging themes and potential areas of enquiry (Blackman & Kyngas 1999). Data were coded following the prescribed process of open coding. This involved systematically reading and considering every comment made by each participant in an effort to find similarities between concepts.

Constant comparison

Open coding utilises a process of *constant comparison* (Glaser & Strauss 1967). Constant comparison is a simultaneous and concurrent process of coding and analysis (Partington 2000). As categories start to accumulate and gain depth, constant comparison compels the researcher to begin to reflect on the data and to commence conceptualisation, usually using 'memos' to record the researchers' reflections and annotations of the data. This eventually leads to hypothesis and theory. Figure 2 illustrates the process of constant comparison. The process does not, however, yield tested theory. It produces a substantive theory derived from a set of plausibly induced (but not scientifically tested) categories, properties, and hypotheses, which regard real social problems (Glaser & Strauss 1967, p. 104)). Validity arises through data saturation – when no new concepts emerge.

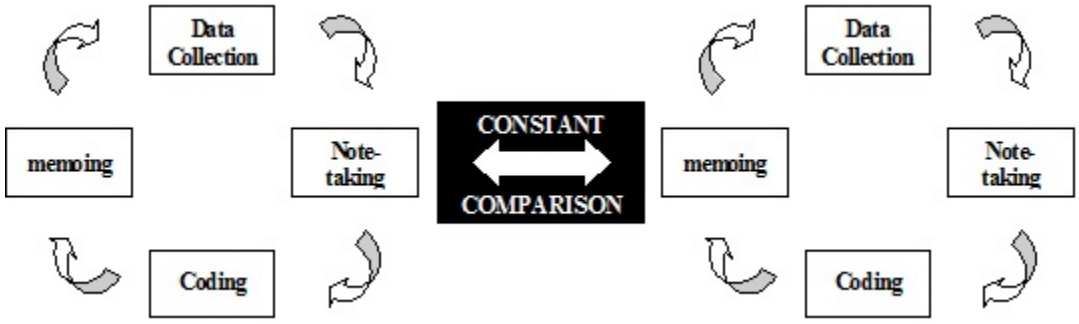

Figure 2. Constant Comparison (derived from Glaser & Strauss 1967; Glaser 1978, 1992, 2001)

This process of constant comparison was employed throughout our analysis from initial open coding until literature was integrated at the stage of theoretical development. In the case of our first two interviews, we compared data during the process of coding within interviews and between interviews. The goal was firstly to compare selections of data to each other to gauge their similarity or dissimilarity, and then to compare them to existing categories to look for fit and whether the data were confirming or disconfirming the existing data.

Memo-ing

Glaser refers to memo-ing as, 'the core stage in the process of generating theory, the bedrock of theory generation' (Glaser 1978, p. 83). Memos have four basic goals: they should develop ideas and codes; these ideas should develop freely, should be stored centrally, and should be sortable (Glaser 1978, p. 83). When recording memos, researchers should reflect on the data, but should not limit their reflection to just the data. Everything is an important reflection.

As data began to accumulate into categories, we needed to reflect on what was emerging. This process of reflection was greatly enhanced through the use of memos. As our categories filled through constant comparison and constant reflection, our memos became rich and reflective. Memos are an important part of the GT process. In our case, they enabled us to become reflective very early in the research, while there was still time to fine tune data collection.

Constant comparison continues until core categories emerge from the data, and no significant new phenomena are reported.

Theoretical sampling

As data are coded, compared and accumulated to form categories and core categories, an on-going process of sampling takes place, known as *theoretical sampling*. Theoretical sampling regards the process of data collection, where new targets for data collection are directed by the results collected from the preceding sample. The aim is to systematically select new participants or data that will guide the researcher to select data samples, which are most salient for the research being undertaken. Theoretical sampling works by selecting subsequent participants based on the information, which emerges from the data already coded (Sarantakos 2005, p. 166). This process provides a means of ensuring that new data contribute to theory development and that they work with the concepts already compiled through a measure of fit and relevance (Glaser 1978). New data are confirmed and disconfirmed to ensure the emerging theory develops rigor and parsimony.

There are two main steps involved with theoretical sampling. In the first step, the researcher targets participants who share minimal differences with regard to the subject under examination. After data from this step have passed the scrutiny of constant comparison, the sampling moves to the second step. In this step, an enlargement of the sample commences until differences between participants are maximised. By initially minimising differences, the researcher is able to quickly develop categories and determine their properties. By maximising differences the researcher can ensure categories have been fully developed and that data saturation is actually occurring (Glaser 1978).

Selective coding

The second stage, *selective coding*, is reached when core categories become apparent. A core category is a category that has developed through densification and that explains most of the variation, which represents the participants' major concern. The core category should be an issue upon which the basic social process is centred. It should relate meaningfully and easily to other categories. It should have clear and grabbing qualities (Glaser 1978).

Selective coding allows the researcher to filter and code data that are deemed to be more relevant to the emerging concepts. Therefore, only the most pertinent passages of a transcript are used and coded. To facilitate this, interview questions are continuously reformulated to encompass the new and more focused direction of the research.

In our case, the core category had been abstracted from various sub-categories to form one core. All of the participants who had been interviewed to this point had expressed concerns which related to this core concept and the concepts which were grouped into this category. It is this degree of saturation – in both breadth and depth – which led to its selection. An issue which was repeatedly mentioned, emphasised, and related to by the participants was that of collaboration. Collaboration was portrayed as being crucial for the success of a project, in this case, film production. Emerging sub-categories included the different factors, situations, and conditions impacting on the success and failure of collaboration.

Through coding we were able to accumulate data into categories which were most relevant to the study. Where data accumulated most densely, we started to focus in on a core category. Interview questions became more focused and the resulting interviews shorter, containing richer data. These interviews were also transcribed and coded. However, at this time, as the direction of investigation was known, we used selective coding.

Our use of selective coding meant that during coding we only picked out relevant data from the transcripts and only added these to the core category where they added value. As a result, many of the categories building the core category became saturated (the additional data collected yielded no new insights or phenomena). It was now safe for us to assume that the core category was empirically mature (Glaser& Strauss 1967). To ensure that this was the case and to ensure that the categories were wide enough to encompass all relevant phenomena, we acquired second source data from film literature and coded these data into the emerging process to look for concepts that would fill gaps in the model.

Theoretical coding

The final stage of coding is known as theoretical coding. Theoretical coding occurs when core categories have become saturated. Saturation is both a peculiarity and strength of GT. Unlike other methods of qualitative analysis that acquire rigor through multiple levels of confirmation

or triangulation (Mertens 1998), GT builds an analytical case by constantly seeking new categories of evidence. Eventually, after a period of data collection, a point is reached where no new data result from additional data collection. This is the point of saturation.

Theoretical coding examines these saturated categories and provides the researcher with analytical criteria for the development of conceptual relationships between categories and their relevance to the literature (Glaser & Kaplan 1996). As the coding procedure before this phase worked to fracture the data and cluster them according to abstract similarity, theoretical coding, along with sorting, knits the fractured pieces back together again to conceptualise causal relationships between the hypotheses derived through open and selective coding: 'Theoretical codes give integrative scope, broad pictures and a new perspective. They help the analyst maintain the conceptual level in writing about concepts and their interrelations' (Glaser & Holton 2004, p.9). A meaningful schema of interpretation of the causal relationships is produced, linking the conceptual outcomes of the analysis. Glaser (1978, 1998, and 2005) identifies 50 families of theoretical codes to identify what he calls 'latent patterns' (Glaser 2005, p.5). To assist with this process of conceptual development we used theoretical coding to fully explore and analyse all new and existing data (Glaser 1978, 2005). These theoretical codes assisted in the recognition of patterns and in the process of theorising what was actually happening during the process of collaboration and knowledge exchange.

Basic social process and theoretical model

The final result of research using GT as a method of qualitative analysis is a model depicting the *basic social process*. A basic social process is a core category that has been developed through densification and is found to substantially represent a major social process of the phenomenon under study. It is through the articulation and explanation of this basic social process that the explanatory theory emerges. To qualify as a basic social process, the category must have 'two or more clear emergent stages' (Glaser 1978, p. 97). Basic social processes also share other important characteristics. They should be *pervasive*, in that they reflect and summarise the patterns of behaviour that are fundamental to the phenomena, taking into account the moderating variables, which work to alter the process. By being separate from a unit based structure, basic social processes should be *fully variable* and therefore maintain validity in other settings and structures independent of social unit. Basic social processes are not only durable and stable over time; they are also flexible enough to accommodate for temporal change – or *change over time* – maintaining an interchangeable consistency in meaning, fit, and workability through the addition of new conditions and stages, which account for the changing environment (Glaser 1978). A basic social process focuses only on those variables that are related to the core category and those which are necessary in 'relation to resolving the problematic nature of the pattern of behaviour to be accounted for' (Glaser 1978, p. 93).

It is possible that more than one core category will emerge from the research. If this is the case the researcher selects one of the core categories to develop into a basic social process and subsequent theory. Selection, in this case, is based on the core category, which represents the main concern of the participants. The remaining core categories are not developed further, but can be reinstated in future studies. Thus, the basic social process is the discovery of a human process that transcends the typical research boundary of 'social unit' by examining the social process occurring within that unit. Subsequently, studies revealing basic social processes are not grounded by their research context, but gain a degree of universality (Glaser 1978)).

The basic social process identified in our study is the process of successful collaboration and knowledge exchange. We found individual motivation to be the main enabler of this success, dominating the influence of all other factors identified.

Another outcome is a collection of clearly articulated and conceptualised categories, which, once sorted and integrated with relevant literature, become substantial components in the writing up of the research.

Conclusion

This paper demonstrates the contribution GT has to offer researchers and aims to provide annotated guidelines for its use. The paper explains the potential value GT has to offer. The major focus of discussion is its provision of a detailed account of the steps taken during research, the theoretical underpinning for these steps, and a demonstration of the findings resulting from each step. GT appeals to researchers who can comply with these principles, in contrast to those who prefer a more structured, definitive, and, arguably, a more restricted approach.

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