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Making Critical Connections: How to Apply the Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) in Qualitative Data Analysis

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Abstract
Qualitative researchers often find data analysis to be challenging, thus resulting in a process of seeking out and conforming to ready-made analytical methods to substantiate the analyses. However, ready-made analytical methods do not necessarily fully fit with all or any data; instead qualitative methodologies and analysis require adaptations. In this paper, a practical 4-step analytic approach that applies a 2-part framework is proposed. The Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) form a practical and theoretical platform for complicated analytic processes to occur. In this paper I describe how use of this approach enables qualitative researchers to make critically reflexive connections through an interrogation of their methodological and analytic decisions. Additionally, the audit trail that this approach provides helps justify the occurrence of an analytic shift.

Keywords
Analytic Guiding Frame (AGF), Overall Guiding Frame (OGF), Critical Reflexivity, Analytic Shift, Qualitative Data Analysis

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Qualitative researchers often find data analysis to be challenging, thus resulting in a process of seeking out and conforming to ready-made analytical methods to substantiate the analyses. However, ready-made analytical methods do not necessarily fully fit with all or any data; instead qualitative methodologies and analysis require adaptations. In this paper, a practical 4-step analytic approach that applies a 2-part framework is proposed. The Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) form a practical and theoretical platform for complicated analytic processes to occur. In this paper I describe how use of this approach enables qualitative researchers to make critically reflexive connections through an interrogation of their methodological and analytic decisions. Additionally, the audit trail that this approach provides helps justify the occurrence of an analytic shift.

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In the last four decades, the qualitative research movement has gained significant traction such that we have seen a build-up of qualitative research analytical methods that have all but cemented the way mainstream qualitative analysis is carried out. Although the paradigm wars may not have ended (Given, 2017), qualitative researchers have welcomed this development. Narrative inquiry, phenomenology, grounded theory and symbolic interactionism are among some of the methodological movements that have become staples. Expert and widely used references (e.g., Bazeley, 2013; Creswell, 1998; Crotty, 1998; Denzin & Lincoln, 1994; Glaser & Strauss, 1977; Huberman & Miles, 1994; Ritchie & Lewis, 2003) offer important arguments about research paradigms, approaches of methods rooted in the different paradigms and provide many useful and practical accounts of real research carried out in line with some of the research traditions. What this does is establish structured bases for doing social scientific research. In so doing however, the cyclical process remains of only establishing what is already entrenched in mainstream thinking, without pushing new boundaries, or in the Kuhnian sense, shifting paradigms (Kuhn, 1966). This may contribute to extending false universalism(s) thus forming a unilateral and hegemonic perspective to how reality is defined and understood (Denzin & Lincoln, 2005). Hammersley (2008, p. 157) speaks about this when he discusses research rhetoric, particularly in terms of how “guidelines can...(transform) into fixed rules that are rigidly enforced...through their mechanical application.” Hammersley advocates for researchers to embrace the challenge of staying honest with the complexities of their research findings. This means being able to exercise critical reflexivity when confronting unpredictable data and data analytical decisions. It is this need to exercise critical reflexivity and the question of how the connections are made that will be addressed in this paper.
The Challenge with Making Critical Connections

When shifting from data management to data analysis, qualitative researchers often find the process “daunting and bewildering” (Smith & Firth, 2011, p. 4). Thus, what this comes down to is the challenge of having to make critical connections that link raw data with the broader research discipline such that researchers can “draw valid meaning from qualitative data” (Miles & Huberman, 1994, p. 1). However, one of the main challenges in making critical connections is the unpredictable, context-bound way in which data are collected, analysed and understood.

This challenge is also a strength; the fundamental principle of qualitative research lies in the way that it is contextually-bound. As Snape and Spencer (2003) described:

There is no single, accepted way of doing qualitative research. Indeed, how researchers carry it out depends upon a range of factors including: their beliefs about the nature of the social world and what can be known about it (ontology), the nature of knowledge and how it can be acquired (epistemology), the purpose(s) and goals of the research, the characteristics of the research participants, the audience for the research, the funders of the research, and the position and environment of the researchers themselves. (p. 1)

As such, qualitative inquiry and analysis require not only the acknowledgement of critical reflexivity but also, more importantly, the ability to negotiate and write coherently about this in relation to or even against the grain of ready-made analytic methods in the field. It is important that the researcher negotiates the complexities that have emerged from the analytical process. If the complexities are not explicitly negotiated, the audit trail is weakened. Fundamentally, when established methodologies and the corresponding analytical methods cannot fully fit the researchers’ context and fieldwork, reasons for why and how there is absence of fit must be given.

There are at least three broad factors that might have contributed to this difficulty in making connections. First, detailed reporting of qualitative research is not immediately forthcoming because the nature of qualitative analysis is iterative, organic and often implicit. However, for readers of qualitative studies, the language of analysis can be confusing. It is sometimes difficult to know what the researchers actually did during this phase and to understand how their findings evolved out of the data that were collected or constructed. (Thorne, 2000, p. 68)

Thorne (2000) is not referring to the generic meaning of language use but points to the matter of coherence that is a result of explicit workings that shows a convincing audit trail. A convincing audit trail requires raising questions about how field notes are interpreted, how data is aggregated and interpreted and how methodological procedures are decided upon, carried out and reviewed (Miles & Huberman, 1994). A good example of how the act of journaling or diary-writing is critical in describing the audit trail can be found in Watt’s (2007) work. In her work, she demonstrated the importance of reflexivity in not just the analytical stage but also across her study Elsewhere; in her attempt to address tensions in qualitative research, Charmaz (2007, p. 82) encourages researchers to negotiate with both the obvious and subtle data by “get(ting) beneath the surface and construct(ing) a frame for building nuanced analyses.” Such negotiations of explicit and implicit data form the basis of audit trails for how the researcher
will make critical connections across the data and data collection process. However, taking the example of Watt’s (2007) journaling, it might be more useful to researchers were it located in a particular framework. Hence, this paper sets out to develop a framework.

Second, because the analytical stage occurs at the latter part of the research process, it is often difficult to know if the initial proposed research methodology will lead to corresponding analytical methods that will neatly account for data collected from the field. Often, researchers find that the collected data cannot be fully accounted for by the analytical methods. In these kinds of situations, the researcher has to make a convincing argument for why the analytic fit is not a complete match and where the analytic method requires expansion.

Third, the researcher’s biographical stance is sometimes absent in the reporting. This is particularly stark when the researchers’ stance appears not to chime with mainstream methodologies. According to Snape and Spencer (2003, p. 19) “practising researchers appear reluctant to acknowledge and delineate the boundaries of their beliefs and practices where these do not mesh with existing recognised traditions of qualitative research.” Although Snape and Spencer were referring to recognised research traditions by way of qualitative, quantitative or mixed methods research, their point is equally important to underscore the absence of researchers’ discussions of epistemology and ontology in their work. This effectively means that practising researchers may not be demonstrating how they negotiate complexities that show up during the data analysis stage. “As a result, certain practices are generally acknowledged or aspired to, but the beliefs underlying these practices are rarely explicitly discussed or debated.” (Snape & Spencer, 2003, p. 19).

As I confronted these above factors in my own research, I initially experienced the disconnect in terms of how qualitative data is expected to be analysed and made sense of. In trying to address this disconnect, I found Crotty’s (1998) delineation of how the qualitative research design is linked with the practical aspects of research to be useful. In his methodological theoretical argument, Crotty (1998) links questions of epistemological value with more practical approaches of methodological theoretical perspectives and methods. This allows him to usefully link methodology with the research aim and the issues that the research questions set out to address. Particularly, Crotty categorises them into four elements. The elements are epistemology, theoretical perspectives, methodology and methods. However, these elements encompass the first half of any research design but do not immediately address the latter half which is related to data analysis. Although Crotty discusses this connection, the real researcher must be able to know how to critically make these connections and explain analytical shifts and decisions, thereby linking the first and latter halves together. In the following sections, a practical 4-step analytic approach that applies a 2-part framework is proposed as a way through which these connections and analytical shifts can be negotiated upon and explained.

### How to Make Critical Connections

In order to make critical connections, researchers must be able to link the philosophical underpinnings of the research with the practical decisions of the fieldwork and analysis. Although the process of making critical connections is necessarily iterative, a certain amount of systematicity is still required in order for the audit trail to be clear and traceable. In order to do so, I forward two intertwining frames that upon which the iterative process of analysis can be performed. These two frames are Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF).
What is an Analytic Guiding Frame (AGF)?

Analysis is understood to take place when explicit steps through using specific analytic strategies transform raw data to conceptual notions of the phenomenon being investigated occurs (Thorne, 2000, p. 68). As such, the Analytical Guiding Frame (AGF) provides the technical and therefore analytical framework which guides how raw data from the research can be unpacked and analysed. In the following paragraphs, I will illustrate how the AGF was formed in my previous work.

Drawing from my previous work that aimed to understand the reading experience of multilingual undergraduates (Chong, 2014), the methodological perspective that I initially proposed was phenomenology. Phenomenology as a research methodology has been applied in fields like psychology, education, nursing and organizational behaviour. This methodology is able to:

1) examine a phenomenon that is taken-for-granted
2) arrive at the heart of the matter by focusing on the essence, meaning and structure of that specific human experience
3) account for how a phenomenon is a construction of the individual’s socio-cultural make-up
4) account for the researcher’s role, presence and influence over how the meanings are constructed and interpreted.
5) generate new and unencumbered meanings to the phenomenon being examined

However, a particular philosophical challenge with the application of phenomenology as a research method lies in the way the phenomenon being investigated is objectified. Phenomenological methodologists have offered various solutions to this challenge (e.g., Giorgi, 1985; Schutz, 1967). However, in my context, I began to uncover that the phenomenon of reading is an on-going act and does not benefit from being objectified. At this juncture of my data analysis, I shifted from applying a purely phenomenological approach to a phenomenographic approach. Phenomenographic data analysis aims to describe, analyse and understand experiences as lived and understood by the research participants who were selected for the study (Marton, 1981). This means that the researcher uses an interpretivist or constructivist perspective to trace a basic pattern of how a phenomenon is experienced across a group of participants.

In order for me to make the analytical shift, I had to ensure that the iterative process of interrogating my data using my analytical framework was systematically done. The presence of the AGF allowed me to see the link between phenomenological principles and phenomenographic principles. This helped me to show a clear audit trail that explained how and why I made this shift. For example, my audit trail could explain that the shift was made at the point between the methodological consideration and data analytical process as it continued to be shaped by on-going fieldwork.

The example above illustrates how the AGF is used when shifting from phenomenological to phenomenographic perspectives. The AGF is also amenable to other methodological perspectives like narrative analysis or ethnography. The guiding principle lies in the understanding that methodological decisions in the qualitative research design are necessarily open to adjustments due to its context-bound nature. While this is to be expected, its audit trail must be made clear. Thus the AGF can be used for any qualitative research methodology because the assumption is that critical reflexivity needs to be exercised.
What is an Overall Guiding Frame (OGF)?

The three elements that form the Overall Guiding Frame (OGF) are the research objective, research questions and the researcher’s ontological position. These three elements will be discussed in succession.

First, the research objective forms the backbone to the research design. The research objective drives the overall research aim in important ways particularly as it provides the scope to the entire research endeavour. This is critical because when qualitative researchers find themselves confronted with unexpected data or findings that may not seem to fit original assumptions made prior to the research, they need to return to their research objective to decide the way forward. Important questions to be asked are:

1) How does this data illuminate my research objective?
2) How does this data raise new questions about my research objective?

These two questions will provide critical and creative connections between unexpected findings and research objective.

Second, research questions which are based on the research objective provide the practical means through which fieldwork can be carried out. Particularly, the research questions provide the practical link between methodology and methods because they translate the philosophical, theoretical and therefore methodological perspectives (e.g. phenomenology) into empirical conduct bound by the actual research method (e.g. interview). A continued interrogation of the research questions is necessary to keep the fieldwork in check. Important questions to be asked are:

1) How are the methods selected for data collection able to yield findings?
2) How do findings drawn from preliminary analysis inform the future of the fieldwork?

Third, a critical interrogation of the ontology of the researcher must be carried out across the research. Both of these components address the philosophically-bound parameters of knowledge formation and knowledge construction. Because research is fundamentally about knowledge building, it therefore stands to reason that the interpretivist researcher must be able to situate his or her biographical stance within the research project. More than that, the researcher must be able to bring critical reflexivity into the research. This refers to the acknowledgment of the social positioning of the researcher, or what Crotty (1998) referred to as constructionism. Important questions to be asked are:

1) What are the assumptions I bring to bear into the research?
2) How would these assumptions change if my social positioning (e.g., gender, ethnicity, age) were different?

These three elements make up the OGF that provides a bird’s-eye-view of the research as a whole.

Steps to Use AGF and OGF

The AGF and OGF are not used in isolation but in a discursive fashion. Figure 1 illustrates how the AGF and OGF are mapped upon each other.
The general steps undertaken to apply the Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) in qualitative data analysis can be narrowed down to four steps. They are:

1) Propose analytical method
2) Perform preliminary data analysis
3) Adjust fit of analytical method
4) Perform main data analysis

These steps are broadly carried out across the early, early-to-middle and middle-to-late stages of the research. At each step, either or both the AGF and OGF is recommended as the frame upon which the main considerations are made.

**Step 1**

In the early stage of the research, the researcher proposes a suitable analytical method in anticipation of the data that will be collected during the fieldwork. At this juncture, the AGF is the main framework upon which considerations about methodology and methods in the research design are made. Fieldwork commences.

**Step 2**

In step 2, which is expected to occur in the early to middle stage of the research, it is assumed initial data have been collected. The researcher performs preliminary data analysis. At this point, the AGF and OGF are used as the frameworks upon which early analysis is carried out. Here, data complexities may begin to emerge because social research involves complex human behaviour and values. When data complexities emerge, the researcher returns to the research objective and research questions in order to re-orient the research. Staying close to the OGF allows for continued focus as well as reflexivity because it accommodates a shift that can be justified with a systematic audit trail.
Step 3

In the third step, the researcher adjusts fit of analytical method. This means that at this middle to late stage of the research, the increased volume of data extensively collected will need to be analysed through an analytical method that can best transform raw data into meaningful units. The frame to be used is AGF. This third step is especially important for analytical decisions to be made because it will determine the shape of the findings. This will further determine how the implications of the study will be drawn up. Thus, the selected analytical method that makes up the final shape of the AGF is important for how critical connections will be made.

Step 4

At this final stage, the main data analysis continues to be performed and finalised. Fieldwork will be expected to come to a close as this will be the middle-to-late stage of the research. At this stage, the researcher should use both the AGF and OGF so that the collated findings can be assessed for how they have or have not answered the research questions and met or not met the research objective. This helps to provide closure to the whole research process.

Table 1 is a summary of the four steps in relation to the stages, frames and considerations of the analytic process.

Table 1: Steps in using AGF and OGF

<table>
<thead>
<tr>
<th>STEP</th>
<th>STAGE</th>
<th>FRAME</th>
<th>CONSIDERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Propose analytical method (e.g., phenomenology)</td>
<td>Early</td>
<td>AGF</td>
<td>Begin with research design to carry out fieldwork</td>
</tr>
<tr>
<td>2. Perform preliminary data analysis</td>
<td>Early-middle</td>
<td>AGF/OGF</td>
<td>Confront data analysis complexities and check with Research Objective and Research Questions</td>
</tr>
<tr>
<td>3. Adjust fit of analytical method (e.g., phenomenography)</td>
<td>Middle-late</td>
<td>AGF</td>
<td>Continue with fieldwork and arrive at fit of analytical method</td>
</tr>
<tr>
<td>4. Perform main data analysis</td>
<td></td>
<td>AGF/OGF</td>
<td>Continue with focused data analysis and check with Research Objective and Research Questions</td>
</tr>
</tbody>
</table>

This paper began with the argument that qualitative researchers often face the problem of not knowing how to adjust or adapt fixed analytical methods when complexities from real data begin to emerge. This paper has argued that qualitative researchers can benefit through having a framework on which background analytic work can occur. The AGF and OGF allows for critical reflexivity to adapt the research to a specific context. Maintaining critical reflexivity
through the use of the AGF and OGF, a qualitative researcher will be able to not only understand but also, more importantly, theorise the analytical process.

References


Author Note

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