# **Qualitative Assertions as Prescriptive Statements**

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Abstract The primary question regarding prescriptive appropriateness is a difficult one to answer for the qualitative researcher. While there are certainly qualitative researchers who have offered prescriptive protocols to better define and describe the terrain of qualitative research design and there are qualitative researchers who offer research conclusions that might be considered prescriptive by the reader, the nature of qualitative research tends to avoid the prescriptive statement in the research findings. Instead, a transparent process of research design, theoretical framework application or construction, participant population/sample identification, and data collection/analysis are revealed throughout the research manuscript leading not to prescriptive findings but rather to asserted outcomes that are carefully communicated to the reader within the context of the research design and experience.

 $\textbf{Keywords} \quad \text{Qualitative assertions} \cdot \text{Qualitative evidence} \cdot \text{Trustworthiness of qualitative findings}$ 

When the editors of this special issue framed the question "When is it acceptable to make prescriptive statements in educational research articles?", they were not framing a debate between those who do qualitative research and those who do quantitative research, but rather as a discourse around the different ways of considering the rules of evidence associated with diverse frameworks of knowledge. In quantitative research, issues of power,

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effect sizes, and sample sizes are often discussed and debated with respect to the quality or strength of evidentiary claims. Consequently, there exist clear directions for the quantitative researcher to proceed. However, for the qualitative researcher, there still exists the great mystery: how much is enough? How much data needs to be collected in quantity and type? How much theory needs to be integrated in the conceptual framework? How much data reduction needs to take place before the researcher can make claims? How much should the researcher be present in the setting? How much consideration should the researcher give to alternative explanations?

The answer to any and all of these questions is, "It depends." It should not be construed that qualitative research has no structure or a consensus of agreed upon protocols and processes that constitute a paradigm. Leaders in the field of qualitative theory have disaggregated the idea of qualitative method into a taxonomized hierarchy of designs (Denzin and Lincoln 2008; Creswell 2007; Glaser and Strauss 1967; Yin 2009). These designs, including Grounded Theory, Phenomenology, Ethnography, Narrative Inquiry, and Case Study all have established conventions of practice and assumptions of rigor. That said, there still exists the perception among consumers and perhaps even practitioners of research that the distinction between the quantitative and qualitative paradigms is firmly rooted in how they have operationalized the issue of persuasive evidence.

The primary question regarding prescriptive appropriateness is a difficult one to answer for the qualitative researcher. While there are certainly qualitative researchers who have offered prescriptive protocols to better define and describe the terrain of qualitative research design and there are qualitative researchers who offer research conclusions that might be considered prescriptive by the reader, the nature of qualitative research tends to avoid the prescriptive statement in the research findings. Instead, a transparent process of research design, theoretical framework application or construction, participant population/sample identification, and data-collection/analysis are revealed throughout the research manuscript leading not to prescriptive findings but rather to asserted outcomes that are carefully communicated to the reader within the context of the research design and experience.

The Popperian theory of falsification supports claims by demonstrating that a competing hypothesis (A') is unlikely, one indirectly supports the likelihood of hypothesis (A) (Bamford 1993). There is indirect verifiability due to the belief that scientific theories cannot be directly tested, thus the basis for null hypothesis testing. The probability of the evidence supporting a claim is based on a statistical gamble by the researcher. "Do I risk being wrong by saying it is true when it is not?" (type I) or "Do I risk being wrong by saying it is not true when it is?" (type II). In either case, the researcher makes a claim based on a statistical probability that the evidence supports that claim.

Rather than try to eliminate false competing hypotheses, qualitative induction takes a confirmatory approach by showing that evidence (A) is a better explanation of a hypothesis (A) than of a competing hypothesis (A'); or that evidence (A) is a better explanation of a hypothesis (A) than other evidence (A'). This reasoning is not conducted through statistical probability, but through a collection of evidence and the constant comparison of new evidence with what is already existing or known. Claims can be made when the sources of evidence converge to form a conclusion. Based on the strength of that convergence, the researcher can make a stronger claim (Denzin and Lincoln 2008; Freeman *et al.* 2007; Lincoln 2005; Yin 2009).

We are proposing that three conditions must be satisfied for a qualitative knowledge claim to be made with confidence. These conditions are that the researcher be fully transparent in his or her strategy of data analysis and reduction; the study itself must be born out of the existing research literature; and that the role of the researcher in relation to



the researched is clearly described. We will argue that specific assumptions must be met in order for legitimate evidentiary assertions to be offered by qualitative researchers. The role and responsibility of the researcher will be discussed as well as the responsibility of the reader when consuming the research literature. All of this will be examined in the context of establishing transparency across the various processes (i.e., literature review, data collection, data analysis, etc.).

### Unpacking "Qualitative Research"

The field of qualitative research has gone through five historical "moments" that has marked the evolution of the field. The Traditional period (1900-1945) was born out of sociology and anthropology and included such notable ethnographers as Malinowski, Radcliffe-Brown, Margaret Mead, and Gregory Bateson. The Modernist or Golden Age (1945-1970) that is most notable for the emphasis on validity and the development of qualitative experimental designs (e.g., The Discovery of Grounded Theory by Glaser and Strauss 1967). The blurred genres period (1970–1986) was distinguishable for qualitative researchers abandoned empirical research designs for interpretive pieces such as essays. This moment was also marked by changes in the lexicon to further distinguish qualitative research as a separate methodology warranting its own field of study. For example, objectivity was replaced and redefined as confirmability, and reliability be replaced with dependability (Lincoln and Guba 1985). The crisis of representation (1986–1990) was a moment in qualitative history that was marked by more disaggregation of the field. Theorists were focusing on social and cultural perspectives such as critical and feminist epistemologies. The present moment emphasizes postmodernism or how the other is represented in naturalistic inquiry. Research design centers on small-scale and local narratives, and stresses subjectivity and emotionality (Denzin and Lincoln 2008). With each qualitative design transition, one factor has remained constant—all qualitative design approaches are descriptive in nature and the protocols for data collection, data analysis, and data representations result in narrative data that are thick and descriptive in scope as the data collected takes the form of words or pictures rather than numbers. Sari Biklen asserts, "... qualitative researchers approach the world in a nit-picking way" (Bogdan and Biklen 2006, p. 5).

Whether the qualitative design is "loose" or "tight" in its prescriptive protocols, the focus on representing thick—descriptive data is essential. Creswell (2007) describes this characteristic of qualitative approaches by noting, "The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting." (p. 193). Consistent with Creswell's assertion are Denzin and Lincoln (2008) who see qualitative research design as a bricolage using different tools, perspectives, and genres, "Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. ...Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping to get a better fix on the subject matter at hand." (p. 29).

As clearly illustrated by Creswell, Denzin, and Lincoln, qualitative research design, while often times identified as overly loose or improvisational in its protocol standards, is in fact a highly focused and perhaps even a prescriptive research paradigm as illustrated by the specific design traits, sampling procedures, data collection, and analysis protocols that characterize each of the qualitative design approaches (e.g., case study, ethnography, grounded theory, narrative inquiry, and phenomenology).



## The Role of Philosophical and Theoretical Lenses

When researchers undertake a qualitative study, they are tacitly agreeing to its underlying philosophical assumptions. It is imperative for the qualitative researcher to engage in philosophical and theoretical inquiry as a guidepost for the lens that will be applied in design selection, sampling procedures, data collection, and data analysis protocols. Perhaps Robert Bogdan's assertion best exemplifies the necessity of the qualitative researcher to situate him or herself within the distinctive philosophical and theoretical qualitative paradigm.

"Learning to do qualitative research means unlearning the social construction of [quantitative] research and opening oneself to the possibility of employing a different vocabulary and way of structuring the research process. While qualitative research shares with quantitative research an emphasis on disciplined data collection, it differs in other ways" (Bogdan and Biklen 2003 p. 4).

A primary distinction is the qualitative researcher's understanding of the role of the philosophical and theoretical influences on the design and data decision-making components within a qualitative study. How a qualitative researcher proceeds is based on the philosophical and theoretical assumptions that are either a priori represented in the literature or as a result of inductive posteriori grounded theory development.

The philosophical influences are those ontological, epistemological, and axiological questions posed by the qualitative researcher that impact the design decision making, choice of data collection methods, and data analysis procedures. Ontological inquiries and assumptions influence the way the researcher believes social reality should be viewed and guides the qualitative researcher's interpretation of what is the nature of reality regarding the current condition of the topic being studied and the lives of the participants (e.g., objectivism vs. constructivism as an applied philosophical lens; Schwandt 2003). Epistemological inquires and assumptions impact the way the researcher thinks social phenomena should best be studied in order to be able to represent the most truthful depicted interpretation of the data; essentially asking, "How do the researcher and the participants know what they know to be true?" (Schwandt 2007). The axiological inquires and assumptions are closely aligned with the theoretical framework (e.g., literature undergirding the study) in that the perceived and applied values expressed by the researcher, the participants, and the larger community setting where the research is taking place ultimately impacts the interpretation of the values highlighted in the data.

While it is true that the qualitative researcher brings to the study their own philosophical worldviews that shape the direction of the study; it would be imprecise to assume that these worldviews should not be carefully examined against the backdrop of the research literature informing the focus of the study as well as the philosophical questions that must be applied prior to and during the study's operation. This is where the theoretical inquires and assumptions are most prominently represented in the qualitative research design decision-making process.

Researchers should know a substantial amount about their subject or topic prior to entering the setting. Qualitative researchers who already have a broad theoretical knowledge are more likely to identify promising leads or emerging assertions than those who are starting naively. The downside of this preparation a priori is the researcher may enter the field with preconceptions that interfere with the development of new insights.

Once in the setting, researchers should focus on evaluating and extending theory through the research process. Almost every qualitative investigation has the potential to do so if the



researcher pursues the right leads. The key is to link these leads to theoretical and substantive knowledge—to study them in light of existing theories or models (e.g., as confirmatory or disconfirmatory) and to use insights to revise old or invent new theories.

Furthermore, researchers should use theory to aid site and case selection. Comparison of sort, kind, or quality is central to much qualitative work. Existing theory usually foreshadow promising comparisons a priori. Once the study is underway, the researcher's evolving concepts and theories will identify other fruitful comparisons. While these cannot be known in advance, researchers can assess the kinds of comparisons that might be feasible before beginning their research, based on existing knowledge of the theory representative cases in the selected site. These inter-study cross-case comparisons provide fruitful ground for testing theoretical models.

The theoretical lens applied from the selected literature influences the researcher's decision making as she asks, what is the language of research that will inform and bracket the study (rhetorical)? What methods will be used and how will the methods be used in the process of research (methodology)? In essence, these questions allow the researcher to integrate the theoretical inquires and assumptions in order to thoroughly reveal the applied philosophical assumptions (i.e., ontological, epistemological, and axiological) that influenced the qualitative research methodological decision making and data interpretation.

### **Approaching Transparency**

Transparency in qualitative research is essential. The process of qualitative research requires the researcher to engage her/his reader in a conversation that is both instructive in process and protocol as well as inclusive in the revelation of data collection, interpretations, and assertions that have been reached. Transparency is in itself a loaded concept when applied to the qualitative research paradigm. Certainly, it is essential for the qualitative researcher to provide absolute transparency to the research process/ protocol undertaken. It is also essential for the qualitative researcher to offer the reader full disclosure of his or her role in the collection and analysis of the data. This disclosure is in the context of whether the researcher has undertaken the difficult task of removing him or herself from the interpretive process (unobtrusive role of the researcher) or is fully engaged as an analytical participant in the interpretive process (participant researcher). In addition, the clarity of the a priori theoretical framework that is applied for contextualizing the research and analyzing the data collected must be revealed to the reader with a full argument of justification. Even in the case of the a posteriori development of a grounded theory, the qualitative researcher must fully reveal the development of the data into the patterns that emerged, the categories and themes that were constructed, and then the reduction of the data to its most consistent parts. Thus, the process of the research procedures can be transparent; however, the interpretation of results are perhaps never without some element of refraction due to the application of the a priori lens (i.e., theoretical framework) or the a posteriori construction of a lens (i.e., ground theory) in which data are analyzed, interpreted, and asserted as evidence of the revelation of answers to the posed research question.

By allowing full view and access to the research process, the reader can have confidence that what is presented is not merely the matter of opinion, but rather a claim that is warranted and justified by the evidence.



### Transparency in Data Collection and Analysis

Qualitative research is not grounded in probability theory as the researcher has chosen to study a relatively small number of cases, sometimes a single case in an in-depth manner. The trade-off for in-depth knowledge is that the researcher usually must forfeit the opportunity to amass a large N and utilize probability theory. As a result of the focus on a small number of cases, many users and consumers of educational research, even those who are not critical of qualitative research find this type of research suggestive rather than definitive. Because there is less separation and distinction between data collection and data analysis in qualitative research, the path from data to results tends to seem less transparent than in quantitative projects. However, what the qualitative researcher offers is a web of connections within and across cases. The accumulation of evidence comes not from the observation of many cases, but from multiple observations of a given phenomenon. These can include multiple observations of a process or a meaning system across the developmental arc of a phenomenon. The key point, however, is that the evidence is multiple and interconnected. In the highest quality studies, these multiple within-case observations are based on different data collection modalities that can be used to triangulate or verify the assertion.

While the romantic conception of fieldwork wherein the researcher enters the setting armed with a tabula rasa, a toothbrush, a notebook, and a camera is appealing for qualitative researchers, one can argue that even with the purest intentions, schemata is an ever-present refractor of the events observed and how they are to be observed. As researchers, we bring our interpretations or frames of meaning into that which is observed and our task is to become increasingly aware of these culturally laden interpretations and how these frame what we observe. We are also tasked with capturing the cultural meanings and interpretations of those we observe, apart from ourselves resulting in a reflexivity as characterized by Creswell (2007), Denzin and Lincoln (2008), and Merriam (2009).

Considering field work as a process of deliberate inquiry in a setting, the participant observer engages in a progressive series of problem solving around issues of sampling, hypothesis generation, and hypothesis testing. Strategic decisions must be made about the nature research questions and about the nature of the study itself. These decisions include when and where the observer goes; with whom does he or she talk to and watch, with whom does he or she participate in daily activities more actively and with whom to observe at a distance, what documents to gather, and what trace evidence to document. While some of these decisions must be made in the presence of the setting allowing for induction and intuition, the central issue of transparency is to align the research questions with the data collection strategy into a collaborative relationship.

In the absence of such deliberation around data collection, the risk of inadequate evidence emerges when the data are analyzed and assertions are made. Ad lib data collection offers no guarantee that the right data were collected from the right sources. Questions would remain unanswered and assertions would go unfounded.

The conclusions should also be assessed by the researcher's ability to provide a credible explanation for some aspect of educational processes. That explanation should capture the participants' tacit knowledge of the educational processes that were observed, not just their verbal statements about these processes or what is made implicit for the observer. Tacit knowledge is the unarticulated, contextual understanding that often appears in nods, silences, inflection, and nuances. It is reflected in participants' actions as well as their words and in what they fail to state but nonetheless feel deeply and even take for granted (Altheide and Johnson 1994). This level of local knowledge is indiscernible to the casual observer but



with careful abstraction and analysis, is uncovered and given meaning and context by the knowing researcher.

Confidence in the conclusions are also strengthened by an honest and informative account of how the researcher interacted with the participants in the field, what problems he or she encountered, and how these problems were or were not resolved. Such an account is important due to the evolving and variable nature of qualitative research. By reporting how the researcher's decision rules around site selection, sampling, data collection, and analysis, the reader can assess the extent to which the researcher's perspectives could have influenced the outcomes. Memos and notations should be provided or described to support and clarify the researcher's logic.

#### **Assertions versus Conclusions**

Qualitative research is not conclusion oriented as it is directed at capturing life as it is lived. With the passing of time and changes within or among the informants themselves, there is no assumption that a study's findings would not change as well. Qualitative researchers embrace the temporal nature of a "truth" that is context dependent and therefore do not claim that findings can close an argument; findings simply begin a new conversation. Reflecting the situational nature of findings, researchers make assertions rather than conclusions.

These assertions are no less based on evidence than conclusions. However, Erickson (1986) identified evidentiary inadequacies that undermine a researcher's assertions. Most notably, the researcher is often at fault for not collecting enough evidence or enough varieties of evidence. We are drawn to Erickson's word choice of "evidence" rather than "data". One can collect volumes of data, but if they are misdirected or only confirmatory in nature no warrants of evidence can be made. Here again lies the importance of the aligning the research questions with the data collection plan. The onus is on the qualitative researcher to ensure that while collecting data, the fieldwork includes experiences that provide a variety of sources and kinds of data. Variety in data collection allows the researcher to warrant assertions through triangulation. If the researcher does not seek triangulation while in the field, it is unlikely the data will be collected to establish triangulation. Triangulation, along with peer review, member checking and multiple researchers are markers for validity in qualitative research (Lincoln and Guba 1985; Creswell 2007; Miles and Huberman 1994; Freeman et al. 2007). While validity in qualitative research cannot be defined or prescribed in advance of data collection, it must be attended to constantly as the study emerges (Freeman et al. 2007) through the intentionality and reflexivity of the researcher.

Along with the collection of sufficient and varied evidence, the researcher must make due diligence to address disconfirming evidence to make credible assertions. Researchers should approach their own research skeptically and seek discrepancies. Erickson (1986) posited that the researcher should not only seek disconfirming evidence, but must also produce evidence that a deliberate search was made while in the field. Without such evidence, the researcher invites criticism for only seeking confirmatory evidence to support his or her claims. Nascent assertions that emerge in the field must be identified for what they are by the reflective researcher and evidence should be sought out that confirm and disconfirm those assertions. Analysis of both types of evidence sheds light on and defines the parameters of the developing assumptions. These analyses of the discrepant data can reveal flaws in the emerging assertions allowing the researcher to refine and adjust theoretical presuppositions and data collection if necessary.



### Evaluating Evidence and the Role of the Reader

Those who use or evaluate the findings of a qualitative inquiry must play a different type of role than those who review quantitative research. This is because there are no operationally defined tests to apply to qualitative research. Instead, the researcher and the reader share a joint responsibility for establishing the value of the qualitative research product (Glaser and Strauss 1967). This pragmatic validation means that the perspective presented is judged for its relevance and use by those to whom it is presented. The reader and the researcher negotiate perspective, relevance, and value in a conversation through the text.

The qualitative researcher must embrace the necessity (if not the burden) of conveying a clear, thick, descriptive research protocol to her/his reader. It is then left to the reader to assess the clarity and cogency of the qualitative researcher's descriptions of the research process and asserted outcomes. The researcher continually asks "Did I get this right?" "Did I capture this reality honestly and fully?" Conversely, the reader asks in response "Do I have confidence in the accuracy of your analysis of the data and the precision in conveying the findings?" Therefore, the relationship between the qualitative researcher and the reader of the qualitative research is an active partnership in communicating and considering the impact of the research presented.

Without the declarative signposts for quality that are found in quantitative research, readers of qualitative research have to base their confidence of the quality of the findings on other markers. This requires the reader to critically challenge the text and through a close reading ask the researcher questions such as "How credible were the informants based on your description and sampling method?", "Did you sufficiently address competing explanations or interpretations?", or "Am I satisfied with your explanation of your relationship with the topic, setting, or participants?" Through this dialog with the text, the reader develops a sense of trust or confidence in the evidentiary assertions made by the researcher.

#### Assertive (Concluding) Remarks

We return to the original question posed by the editors of this issue: When is it acceptable to make prescriptive statements in educational research articles? For our purposes, we revise the question to read "When is it acceptable to make prescriptive statements in qualitative educational research articles?" The qualitative research community strongly resists establishing a single set of standards of evaluation which makes answering this question difficult. That is not to say that they do not want to produce high-quality work. Rather, the issues are who decides what the standards ought to be and how one set of standards can be applied unilaterally to such a diverse methodology (Eisenhart 2006; Howe 2009; Lichtman 2011; Torrance 2008).

While we do not disagree with this position, we have identified *values* that a qualitative researcher might adopt that when in practice produces credible research upon which assertions can be made. These values include transparency of data collection, transparency of analysis, and reflexivity when drawing assertions. These values reflect the researcher's intentionality prior to and during fieldwork as well as his or her ability to communicate that intentionality in the finished article. It is possible for a scholar to conduct impeccable research with strong evidence to support declarative or prescriptive assertions; however, if that scholar cannot communicate how he or she arrived at those assertions, the study will hold no credibility with the reader. That implicit and tenuous agreement of trust between writer and reader will be undermined.



When discussing their findings, qualitative researchers can provide detailed and contextually specific suggestions about how different constituencies (i.e., K-12 teachers or administrators, higher education faculty, policy makers, curriculum developers, etc.) might use or apply the findings. Researchers can offer guidance for identifying appropriate groups or settings for use of a study's findings. They might also give guidance about the degree to which the findings can be extended to other experiences or settings beyond the parameters of the study by offering a rubric to determine appropriateness of fit. With a fully articulated theoretical framework, data collection and analysis plan, assertions and suggestions for application, the qualitative researcher offers the reader and the educational research public the tools by which they can add qualitative evidence to their arsenal of decision making resources.

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