
10-8-2012

Methodological Precision in Qualitative Research: Slavish Adherence or “Following the Yellow Brick Road?”

John R. Cutcliffe
University of Maine, jcutcliffe@roadrunner.com

Henry G. Harder

Follow this and additional works at: <https://nsuworks.nova.edu/tqr>

 Part of the [Quantitative, Qualitative, Comparative, and Historical Methodologies Commons](#), and the [Social Statistics Commons](#)

Recommended APA Citation

Cutcliffe, J. R., & Harder, H. G. (2012). Methodological Precision in Qualitative Research: Slavish Adherence or “Following the Yellow Brick Road?”. *The Qualitative Report*, 17(41), 1-19. Retrieved from <https://nsuworks.nova.edu/tqr/vol17/iss41/2>

This Article is brought to you for free and open access by the The Qualitative Report at NSUWorks. It has been accepted for inclusion in The Qualitative Report by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.



Qualitative Research Graduate Certificate
Indulge in Culture
Exclusively Online • 18 Credits
LEARN MORE

NSU
NOVA SOUTHEASTERN
UNIVERSITY

NOVA SOUTHEASTERN

Methodological Precision in Qualitative Research: Slavish Adherence or “Following the Yellow Brick Road?”

Abstract

Qualitative research has withstood many challenges on its way to becoming a credible research paradigm, though it remains the case that the paradigm contains ongoing methodological debates. One such debate is, for want of a better expression, the necessity for methodological precision (fundamentalism or purity). While it is accurate that research methodologies are somewhat fluid in that they are refined over time, it is equally correct that some researchers fall into a trap in claiming such fluidity is the reason for their imprecise use of a research methodology. Given that scientific knowledge is inextricably linked to the practice of method (at the very least for those who subscribe to positivist, post-positivist and to some extent modernist views) and that method is prefaced and underpinned by methodology, if methodological slippage has occurred and there is resultant incongruity between methodology and method, then an argument can be made that the study is not a scientific study and consequently cannot make the claim that it has produced scientific knowledge. Even allowing for some movement from the abstract, idealization of a given methodology into the “real world” application of the method, it is essential to note that variation in or movement away from a method’s underpinning methodology and epistemological stances can and does occur in well-designed studies; but if such movement occurs purposefully and/or has an robust rationale, grounded in the method’s original methodology.

Keywords

Qualitative, Research, Method, Methodology, Precision, Ontology, Epistemology

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).



Methodological Precision in Qualitative Research: Slavish Adherence or “Following the Yellow Brick Road?”

John R. Cutcliffe

University of Maine, Orono, Maine, USA

Henry G. Harder

University of Northern British Columbia, Canada

Qualitative research has withstood many challenges on its way to becoming a credible research paradigm, though it remains the case that the paradigm contains ongoing methodological debates. One such debate is, for want of a better expression, the necessity for methodological precision (fundamentalism or purity). While it is accurate that research methodologies are somewhat fluid in that they are refined over time, it is equally correct that some researchers fall into a trap in claiming such fluidity is the reason for their imprecise use of a research methodology. Given that scientific knowledge is inextricably linked to the practice of method (at the very least for those who subscribe to positivist, post-positivist and to some extent modernist views) and that method is prefaced and underpinned by methodology, if methodological slippage has occurred and there is resultant incongruity between methodology and method, then an argument can be made that the study is not a scientific study and consequently cannot make the claim that it has produced scientific knowledge. Even allowing for some movement from the abstract, idealization of a given methodology into the “real world” application of the method, it is essential to note that variation in or movement away from a method’s underpinning methodology and epistemological stances can and does occur in well-designed studies; but if such movement occurs purposefully and/or has an robust rationale, grounded in the method’s original methodology. Keywords: Qualitative, Research, Method, Methodology, Precision, Ontology, Epistemology

Scientific literature, quite rightly, allows if not actually encourages room for methodological debate and the methodological literature emanating out of the academic disciplines of the authors is no different. Some journals have sections dedicated to methodological papers and methodological debates/advances. Research method and methodology are themselves phenomena that are subject to epistemological questions and issues; they have a duplicitous nature being both firmly grounded in original (or/and traditional) well documented philosophical positions, yet simultaneously are subject to evolution, adaptation and development (see for example Cutcliffe, 2005; Greene, 2007; Johnson, Long, & White, 2002).

However, it can be argued that purported methodological developments can actually weaken the potency of the method(ology), especially if changes in the design are incongruent with the method’s underpinning philosophy, epistemological stances and

methodological tenets. Some authors have written to defend if not actually advance the position that adherence to established (published) methodological procedures is contraindicated. Johnson et al. (2002) declare, for example, that,

whilst rigid adherence to particular published procedures might be possible, we argue that in many cases this is neither necessary nor more likely to increase the validity of the research outcome. (p. 243)

Mindful of these documented positions, the authors of this current paper wish to attempt to advance the associated debate for the following reasons: Firstly, few scholars would disagree with the view that they want to conduct research that is regarded as high quality and ethical, or research that produces findings that have a high degree of accuracy and/or utility. Similarly, the authors of this paper doubt that there are many credible scholars who wish to advance the legitimacy, credibility and value of their study on the basis that it was poorly designed. While the position highlighted in the previous sentence might be regarded as axiomatic, unfortunately the academic literature contains too many examples of research reports that would be difficult to describe as meeting the criteria outlined in the previous sentence. This view is shared by numerous authors. Hammerley's (2003) fine scholarly work, for example, makes the case that within the qualitative paradigm, there are serious methodological issues that still need addressing. Similarly, Carter and Little (2007) remark that qualitative research reporting is frequently insufficient in the areas of epistemology, methodology and method. As a result, these authors feel that such papers indicate a lack of engagement with and comprehension of these important concepts. Secondly, the authors wish to contribute to the debate regarding, for want of a better expression, the search for methodological precision and in so doing, explore the possible deleterious effects of publishing research reports that lack methodological precision.

To this end the authors consider: What is this phenomenon called "scientific research method(s)" and how does it pertain to qualitative research? When the literature refers to research method and methodology, is this a reference to the same thing(s)? Next, the authors consider two broad positions on this issue and these can be categorized (loosely) as those who champion the idea of methodological precision, sometimes referred to as methodological purists or fundamentalists (Johnson et al., 2002; Carter & Little, 2007) and those who are comfortable with imprecision, "method slurring" and so-called "methodological pluralism" (Morse, 1991, p. 15; Baker, Wuest, & Stern, 1992; Johnson et al., 2002). We then explore what methodological precision is supposed to do and why it is necessary. Following this we give thought to what happens to the credibility of findings from studies where methodological slippage has occurred.

The So-Called Scientific Method(s) as it Pertains to Qualitative Research

At the outset it should be acknowledged that the nature of scientific method is a matter of unresolved debate (see for example, Feyerabend, 1978; Kuhn, 1962). Epistemologists and philosophers of science have attempted to examine the logic of the so-called scientific method, and most importantly (in the view of the authors of this paper) have also tried to identify what (if anything) separates science (and the knowledge

produced by science) from non-science (and the knowledge produced by these non-scientific methods) (see for example, Popper, 1959). Drawing on only a sample of the extant literature from the first author's academic discipline, numerous authors (Carper, 1978; Cronin & Rawlings-Anderson, 2003; Estabrooks et al., 2005; Robinson & Vaughan, 1992) have made important contributions to this debate. Interestingly, each clearly identify and argue for recognizing the different forms of knowledge used in nursing. Carper (1978) for example, offered a taxonomy of nursing knowledge, suggesting that in any given nursing situation there are elements of knowledge being utilized from each of her four categories of empirics, ethics, aesthetics and personal knowledge with Carper's Empirical category referring to knowledge gained through observation and scientific testing of theories. As a result, there is little (if any) documented dispute within the extant nursing literature that nurses access and use different types or forms of knowledge and further that there is a broad consensus that scientific/empirical knowledge is distinct from other forms of knowledge.

The scientific method, which appears to have crystalized during the 17th and 18th centuries (see Francis Bacon, 1620 and/or Rene Descarte's 1637 seminal contributions), is synonymous with 'natural sciences' and quantitative research methods and those who hold positivist, post-positivist and to some extent modernist views. Irrespective of one's 'methodological bent' or ideological stance, it remains important to understand the background and evolution of science and its inextricable link with method. *One cannot understand the epistemological product and function of science without simultaneously acknowledging how science is tied to method* (our emphasis). In order to 'qualify' as science, or be termed scientific, according to Sir Issac Newton, (1999) a method of inquiry must be based on gathering empirical and measurable evidence subject to specific principles of reasoning. For Newton, there are rules for the study of natural phenomena and these distinguishable features separate and differentiate scientific inquiry from other methods of obtaining knowledge. For example, scientific method should include a measurable/testable hypothesis (or testable propositions within the hypothesis), have steps to test the hypothesis that must be repeatable, be as objective as possible, and the research method/design should be comprehensively documented so as to allow replication/reproducible findings.

Given that a single observation might be a random event (and thus is deemed to have little long-term predictive value), confirmation (or refutation – see Popper, 1963) of the original observation is necessary. Accordingly, more observations of the phenomenon of interest are sought. Staying with the example of gravity, consider for example, Eddington's reporting of one of the most important scientific discoveries of the 20th century, namely confirmation of Einstein's Theory of General Relativity (Dyson Eddington, & Davidson, 1920). Though Eddington's observations provided unequivocal support for Einstein's theory, confirmation of these findings was still required (by a team from the Lick Observatory; Kennefick, 2009), and many others more latterly in order to confirm the findings and move them into the realm of established scientific fact.

If the data and measurements support the proposition(s) and if our predictions turned out to be accurate, then we have an increased degree of empirical confidence in the accuracy of our hypothesis. Once subjected to multiple confirmations, if these repeated studies also confirm our proposition(s), then the hypothesis may well be promoted to the status of scientific theory (e.g., Einstein's theory of relativity). On the

other hand, if the hypothesis is not supported by the findings then our theory was erroneous and/or needs to be reconstructed, and/or our propositions were incorrect and we need to refine them, and/or our research design was flawed.

Hammersley (2003) reminds us that, during the second half of the 20th century, there was an increasing recognition of the well-documented failures of quantitative research and that the corresponding rise in influence of qualitative research resulted (at least in part) as a consequence of this enhanced recognition. Qualitative research was regarded as separate from quantitative research and with that, separate from the (so-called) scientific method. While espousing distinctiveness and difference from the scientific method, qualitative researchers did not completely abandon or reject the idea (and associated practices) of research underpinned by method; method was still present and necessary – albeit a method(s) different from the so-called scientific method. For example, qualitative researchers still acquired and analyzed data (though commonly linguistic rather than numerical in origin) and had various strategies, techniques and procedures for collecting/analyzing this data. Qualitative research still involved samples and sampling (and therefore had to have associated procedures on how and who to sample). Qualitative research might not have needed or used hypotheses but it still included research questions, even if these were as nebulous as Glaser's (1978) *general wonderment*. Qualitative research accounts or reports still included description of the research design, the steps, stages or procedures that the researcher followed in order to undertake the study. Accordingly, this brief review of the relationship between science and method serves to illustrate a number of important points:

- 1) That scientific knowledge is produced as a result of the practice of the method – even for many qualitative researchers and moreover for those who subscribe to positivist, post-positivist and to some extent modernist views;
- 2) That research method has a specific form(s);
- 3) And that scientific research methods, whichever paradigm they are associated with, still have labels for concepts and practices and unique analytical procedures that differentiate scientific research method(s) as different from other forms of knowledge generation (e.g., logical, semantic, systemic or aesthetic.)

Before these positions are advanced any further, it should be noted and acknowledged that *the development and importance/relevance of method is inseparable from the history (and/or the emergence) of science itself* (our emphasis). Crucial issues about what we know (and what we don't) go hand-in-hand with epistemological and methodological questions concerned with how are we going to find out. As a result, the overarching issue and question of methodological precision (or purity/fundamentalism) is inextricably linked to a parsimonious yet immensely important question: What is science and inversely what is not (see for example Popper, 1963).

When is a Door Not a Door? Methodological Fundamentalism and Precision

Though perhaps esoteric musings for some and irrelevant omphaloskepsis (i.e., navel-gazing as a self-absorbed and/or egotistical pursuit) for others, for the authors of this paper the question of what can legitimately be classified as science (and with that empirical knowledge) goes to the heart of the matter of methodological precision. In addition, as we have pointed out earlier, in order for a research study to produce scientific knowledge, the study needs to include (at least implicitly) a methodology and/or articulated research method, given that scientific knowledge is inextricably linked to the practice of method, especially for those who hold positivist, post-positivist and to some extent modernist views (Rolfe, 2006).

Research methodologies or any of the synonyms used to depict the distinct strategies for approaching qualitative research (see for example *A Set of Reconstructed Logics*, Carter & Little, 2007; *Strategies of Inquiry*, Denzin & Lincoln, 2000; *Traditions of Inquiry*, Cresswell, 1998) inevitably depict the distinct strategies for approaching research and justify the particular methods used in that methodology. Accordingly, methodologies are not a free for all where, metaphorically speaking, anything goes. Several authors who have made seminal contributions to the qualitative research methodological literature remind us *that methodology and method do matter* (our emphasis). Morse and Field (1995) declare that,

Each of the qualitative methods answers different questions; *the methods are distinct* (emphasis added) and the results provide a different perspective on the phenomenon. (p. 36)

Similarly, Guba and Lincoln (1994) affirm this view stating,

The methodological question: how can the inquirer (would-be-knower) go about finding out whatever he or she believes can be known?That is, *not just any* (original emphasis) methodology is appropriate. (p. 108)

While it appears to be the case that certain methodologies are more/less prescriptive than others about the resultant methods and actions that flow from methodology, to a greater or lesser extent each contains some level of prescription. As a result, it can be argued that an awareness of and adherence to these actions is at least in part a potential indicator of methodological precision and/or fundamentalism. In order to illustrate this argument and re-affirm the understanding that there are differences which exist between various qualitative methodologies, the authors highlight some of the methodological tenets and resultant methodological actions of four common place qualitative approaches. With apologies to Barney Glaser, the authors acknowledge that grounded theory is not a qualitative method *per se*, but a general method. It is, however, very commonly used as a qualitative method.

Phenomenology

Phenomenology is concerned with experiences, lived-experiences and embodied experiences. It is a rigorous, critical and systematic study of the “essences” of life experience. In other words, it seeks to capture and describe the structure or “essence” of the lived experience of a phenomenon in the search for the “unity meaning” (Cutcliffe & Ramcharan, 2002). Van Manen (1997) declares that phenomenology seeks the identification of the essence of the phenomenon and its accurate description through everyday lived experience. According to Levering (2006), phenomenology is inextricably linked to the subject. Subject position involves the production of a description (and in some cases interpretation) of lived experiences and how meaning is created through embodied perception (Starks & Trinidad, 2007). Sampling is purposeful (not random) and seeks to gain access to informants who have experienced the phenomenon of interest. A variety of data collection techniques can be employed and numerous sources can be “mined” to obtain data (e.g., interviews, observations, artifacts, poetry). While dissimilar approaches to phenomenology have different, nuanced approaches to data analysis, each to a greater or lesser extent involve descriptions of the phenomenon. Determining the experiential structures that make up that experience, and textual analysis and structural analysis or some related clustering/condensing of the non-parsimonious data in some representation are the ‘essence’ of the experience.

Grounded Theory

Grounded theory (GT) is a general method used commonly as a qualitative method for generating or inducing theory for (psycho) social research (Glaser & Strauss, 1967; Glaser, 1998). GT’s basic and central theme is generating theory from data that is systematically obtained from social research. Consequently, GT is an inductive process (Glaser & Strauss, 1967). It is a method for inducing and developing theory that should provide clear enough categories and hypotheses to explain and aid understanding of the basic (psycho)social process being studied (Cutcliffe, 2008). Research questions in GT (if present at all) are markedly different to research questions postulated at the start of a deductive study; indeed, Glaser (1992) repeatedly purports that a “true” GT begins only with a general wonderment. Data collection is via theoretical sampling (Glaser, 2001) whereby choices about who/what/where data units are sampled are driven by the emerging findings as data analysis is undertaken. Accordingly, future data collection cannot be arranged in advance of the emergence of the theory, conceptual categories and their properties. Data analysis uses a process referred to as the constant comparison method, whereby the four key process (compare incidents applicable to each category, integrate categories and their properties, delimit the theory and write the theory) occur simultaneously, in a cyclic, iterative, rather than linear, fashion (Glaser & Strauss, 1967; Glaser, 1998). And the product of GT, not surprisingly, should be an explanatory theory of how the participants in the study solve their key social/psychosocial problem, described by Glaser as the key problem in the population/setting of interest. A well-

constructed GT will meet its four most central criteria: fit, work, relevance, and modifiability (Cutcliffe, 2008; Glaser, 2001).

Ethnography

Traditional (or classic) ethnography has its roots in cultural anthropology and sociology (Boyle, 1994) and is concerned with describing and interpreting culture, sub-culture or a specific social group (O’Byrne, 2007). Ethnographies attempt to account for human behaviours from the emic perspective; that is, from the perspective of those who are on the inside, those who participate in the behaviour. As a result, irrespective of the particular school of or approach to ethnography adopted by the researcher, they each will incorporate the study of people’s lives over a prolonged time period through observation (direct and/or participatory), interviews, field notes and mute evidence collection (Cresswell, 1998). Sampling is purposeful, as the researcher deliberately and purposefully selects the cultural unit to be explored and hopefully understood, and within that cultural unit further purposeful sampling of participants belonging to (or part of that culture) takes place. While various schools of or approaches to ethnography may make use of different, nuanced approaches to data analysis, each to a greater or lesser extent involve creating a *thick description*; that is, a depiction of the shared meaning within the cultural norms or the patterned behaviour that is indicative of the culture and the cultural context (Hammersley & Atkinson, 2005). Indeed, O’Byrne (2007) asserts that in order for a study to be characterized and classified as ethnographic it must contain a large proportion of four specific criteria, namely,

- a) The study is undertaken to explore social phenomenon; b); the collected data may be coded before collection is complete; c) the number of case studies is small... and; d) qualitative analysis is used to interpret the meaning and functions of human practices. (p. 1382)

Discourse Analysis

Discourse analysis is concerned with language and the use of language. More specifically, discourse analysis attempts to understand how individuals achieve various goals (personal, inter-personal, social and political) through the use of language (Gee, 2005; Johnstone, 2002). According to Johnstone (2002) what differentiates discourse analysis from other forms of research is not the questions discourse analysts ask, but in the ways they try to answer them:

- By analyzing discourses, that is by examining aspects of the structure and function of language in use. (p. 4)

For some scholars of discourse analysis, words and language are in and of themselves meaningless; the specific meaning of words and language is brought about by the creation of shared, mutually agreed upon meanings. For Starks and Trinidad (2007),

Language both mediates and constructs our understanding of reality. (p. 1374)

While some proponents of discourse analysis (see for example Cheek, 2000) advance the position that this approach is more of an instrument of analysis rather than a research method(ology) *per se*, these authors simultaneously point out that the researcher must clearly articulate the understanding of the approach being used. Examination of the various approaches to discourse analysis shows that while these emphasize different aspects of language use, each of these still view language as social interaction and are concerned with the social contexts in which discourse is embedded (Cheek, 2000). Moreover, all approaches to discourse analysis focus on texts (as representations of reality), though what constitutes a text is a matter of debate. Similarly, all such approaches seek to unveil hidden politics within the dominant orthodox view, as well as all other discourses by means of applying critical thought to the social situations depicted in the text. Likewise, while most approaches to discourse analysis would eschew rigid approaches to data analysis or sampling, all these are interpretative and involve the deconstruction of the text, and it can be argued that sampling is purposeful in that the researcher(s) inevitably deliberately seek out certain texts.

In these overviews, even while acknowledging their brevity, it can still clearly be seen that each approach includes certain prescribed methods and actions. Whether these actions refer to the types of research questions the method can (and inversely cannot) answer, or how, where, with what/whom the study can be undertaken, what types of data are collected and how these are obtained, the nature and size of the sample, or the particular approach(es) to data analysis or even what form the specific product of the study should look like (e.g., a theory, a thick description), these actions identify the approach (at least in part) as that particular method and simultaneously differentiate it from others. Having illustrated some of the methodological tenets and resultant actions of these qualitative approaches, the next logical questions that should be asked are:

1. Can a method be characterized or described as a phenomenology, grounded theory, ethnography, or discourse analysis if it does not include evidence of these methodological tenets and actions?
2. At what point does movement away from these tenets and actions mean that one is no longer using one of these methods? When does one's method actually cease to be the method that drives the study?

It may help to think about this issue by considering the spectrum of light and transition from one color to another. The blue-green spectrum (or palette) can be described as having the end points of blue and green and a mid-point of cyan (Bruno & Svoronos, 2005). Strictly speaking, there are no clear demarcations between one color and another; however, categories of wavelength and frequency have been used as approximations to designate individual colors. To travel along the spectrum from blue to green, one first encounters navy blue. This has moved the color ever-so-slightly away from blue and towards green. Continuing the journey, one encounters dark blue, then medium blue, deep sky blue, medium turquoise and then the mid-point, cyan. At this point in the

spectrum, it is not clear whether the color in question is blue or green as it is approximately halfway between blue and green. Continuing the movement along the spectrum further away from blue and towards green, one encounters colors such as light sea green, dark cyan, sea green and eventually arrives at green.

Analogously, a similar 'journey' along a continuum from one method to another can help illustrate the insidious nature of methodological conflation and the authors draw on the previously discussed "slurring" of grounded theory and phenomenology (Baker et al., 1992). Beginning with GT, if the researcher moves slightly away from GT by changing one of its methods/actions to one associated with phenomenology (e.g., attempts to use GT to study lived experiences and not psychosocial processes), then the method, while still mostly a GT, is now also partly a phenomenological study. With each successive replacement of a GT methodological action with a phenomenological methodological action, the researcher moves further away from GT and closer to a Phenomenological study. At some point (perhaps just past the mid-point?) the study purporting to be a GT study can no longer legitimately call itself a GT as its methodological actions define it, or identify it, more accurately as phenomenology.

Research Methodology and Method: Isomorphic Concepts, Close Affiliates or "Distant Cousins?"

Examination of the extant literature emanating from nursing and psychology shows that in some cases there appear to be some confusion and perhaps misunderstanding as to the nature of research method and methodology (see also Carter & Little, 2004). While these concepts are clearly closely related and linked, it is inaccurate to posit them as one and the same (as many papers published in the above mentioned literature do, perhaps inadvertently?). Not only is it necessary in terms of conceptual clarity to understand how these are not isomorphic phenomena but also to understand the differences simultaneously allows us to see how they are related. We can see which comes first (so to speak), and what happens when there is incongruity between study methodology and study method.

Several authors have put forward definitions of methodology (Bogdan & Biklen, 1998; Carter & Little, 2004; Crotty, 1998; Greene, 2007; Harding, 1987; Schram, 2003; Schwandt, 2001; 2004). Methodologies have been described as discourses that are comprised of epistemological views, edicts and assumptions through which scientists construct approaches (or methods) for understanding the world (see for example Schwandt, 2001). Some refer to methodology as the study of method. Crotty's (1998) definition purports that methodology is,

The strategy, plan of action, process or design lying behind the choice and use of particular methods. (p. 3)

While acknowledging the vintage of the work, Kaplan's (1964) definition, for the authors, captures the key differences between methodology and method, stating that methodology is

The description, the explanation and the justification of the methods – *not the methods themselves*. (p. 158, emphasis added)

Whereas (research) method has been described as the actual action or “doing” of research, the actualization or operationalization of the methodology, is defined as

The procedures, tools and techniques of research (p. 158)

Accordingly, there is a broad consensus that research method is prefaced by research methodology; that methodology comes first and is followed by method; and that methodology justifies method (Carter & Little, 2007). This relationship between methodology and method is captured succinctly and cogently by Guba and Lincoln (1994), who state,

The methodological question cannot be reduced to a question of methods; methods must be fitted to a pre-determined methodology

and they continue,

Questions of method are secondary to questions of paradigm, which we define as the basic belief system or world view that guides the investigators; not only in the choice of method but in ontologically and epistemologically fundamental ways. (pp. 104-105)

With the hegemony of methodology clearly established (over method), what follows is the requirement for the researcher to design a research method for his/her study that is congruent with the underpinning methodology. The answers to the researcher’s research methodological quandaries will be driven and contextualized by the underpinning methodology. The particular research design challenges associated with the given method will (should) be framed and viewed through the particular methodological “lens.”

To draw on some examples from the qualitative research approaches previously outlined, the phenomenological researcher who wonders about what questions to ask in an interview with a subject is guided, if not driven, by the phenomenological methodological need to focus on and access the lived-experiences (Cutcliffe, Joyce, & Cummins, 2004; van Manen, 1997; Levering, 2006). The Grounded Theorist who wonders about the “correct” methodological procedure(s) for data collection and analysis recognizes that the underpinning methodology requires him/her to undertake both simultaneously. The Ethnographer who wonders about what the product of his/her study needs to look like accepts that the ethnographic methodology requires the production of a thick description. As well, the Discourse Analyst, when questioning the structure and content of a certain text, understands that he/she needs to pay analytical attention to the words that are missing just as much to as the words that are there.

If one accepts the robustness of this argument, then the view that the researcher need not attempt to adhere to the methodological underpinnings of any given method is further challenged and eroded. Moreover, for those researchers who, as Carter & Little (2007) declare, have engaged in insufficient attention to matters of methodology and

method and have clear incongruity evident between study methodology and method, it can be argued that the product of such a study may not even qualify as legitimate scientific knowledge. This requires further explanation. As we have established earlier in this paper, scientific knowledge is inextricably linked to the practice of method, and that method is prefaced and underpinned by methodology. Given that methods must be fitted to a pre-determined methodology, if methodological slippage (Morse, 1991) has occurred, and there is resultant incongruity between methodology and method, then the study is not a scientific study and consequently cannot make the claim that it has produced scientific knowledge.

Nevertheless, even the most ardent supporter of philosophical and methodological purity will concede that methodologies are (a) Abstractions (or as Carter & Little, 2007, assert – idealizations) rather than realities in the practical “real world” of research and, (b) Methodologies and with that methods can and do evolve, develop and change over time (see for example Glaser and Strauss’s acknowledgement that their pioneering 1967 book represented only the beginning of grounded theory and that it was entirely appropriate for the methodology to evolve and develop over time.) Consequently, this apparent tension needs to be acknowledged and considered. The authors are mindful of Carter and Little’s (2007) statement that research methodologies themselves are idealizations and they will always differ or be abstract from the researcher’s diverse “logics-in-use”. To paraphrase, the explications and articulations of a research methodology may be an idealized version of the actual application or utilization of the methodology. Perhaps by way of an example, we can draw upon the key phenomenological methodological tenet of seeking to understand the ‘moment-as-lived’ (van Manen, 1997; Levering, 2006; Kirova & Emme, 2009). Van Manen (1997; 2002; 2006) reminds us in his approach to phenomenology that the phenomenological researcher deliberately eschews *ex post facto* reflection on or thinking about the moment-as-lived, but seeks instead to access and understand the *actual moment-as-lived* (our emphasis).

Kirova and Emme (2009) advance this argument, purporting that humans act and experience before attaching language to their actions or experiences. As such, these are *pre-reflexive* (our emphasis) experiences that are of particular interest to phenomenological researchers. However, it has to be acknowledged that these are idealized methodological tenets given that once the person has experienced his/her lived-moment, it has already passed and thus moved into the realm of past and strictly speaking is no longer a pre-reflexive moment. In engaging in this approach to phenomenology then, one obtains the closest possible approximation to the actual moment-as-lived by getting participants to talk about moments as they lived through them – rather than what they now think about those moments as they look back and reflect on them (Cutcliffe et al., 2004; van Manen, 1997, 2002, 2006). But this remains then somewhat abstracted from the methodological idea of accessing moments-as-lived.

Allowing for the fact that there is likely (if not inevitably) going to be some difference between the original methodology and the actual method used in a contemporary research study, this brings the debate back to the key issue: At what point does deviation away from the methodology (an idealized abstraction and one subject to evolution over time) and resultant method mean that the researcher is no longer faithful

(or pure) enough to central tenets of the methodology to mean that the research is no longer legitimate science?

The Deleterious Effects of *ad hoc*, Unthinking and Inattentive Methodological Pluralism: Standing on the Precipice of Illegitimate Science?

Several authors have previously wrestled intellectually with some of the issues focused on in this paper (see for example Greene, 2007; Carter & Little, 2007; Annells, 2006; Greckhamer & Koro-Ljunberg, 2005). To somewhat simplify the terms, we will say that on the one hand is the stance advocated by so-called methodological (and philosophical) purists or fundamentalists, and on the other hand is the stance advocated by qualitative researchers whose actions suggest they have little to no difficulty with the evolution and development of and/or deviation away from the tenets of a given methodology. Which leads Carter and Little (2007) to point out that this produces a

Methodological label to a study design which is at odds with even the most relaxed interpretation of that tradition. (p. 1319)

The authors of this current paper need to highlight a particularly important point here. It should be noted in papers that advocate, shall we say, a more relaxed approach to following the tenets of a given methodology (such as Johnson et al., 2002), they do not advance such arguments on the basis of constructionist or relativist assumptions which celebrate imprecision, deconstruct validity/credibility and oppose clarity. As we have pointed out earlier in this paper, such authors advance the argument that methodological precision does not increase the validity of the research findings. They argue against the need for methodological precision and/or rigor in qualitative research by stating that,

the arguments for pluralism in qualitative research are to us overwhelming. They are epistemological, pragmatic and political. There are no 'pure' qualitative methods. (Johnson et al., 2002, p. 248)

The authors of this current paper would propose the existence of a third position or stance. They contend that, if some of the qualitative research reports that can be found in the extant literature are anything to go by, that there appear to be some qualitative researchers who arguably do not fully understand their reported method; they appear to have paid insufficient attention to matters of epistemology and methodology. In the sense that these "deviations" or "developments" away from their stated method's traditional methodological underpinnings are not some deliberate attempt to advance the method; neither do they represent some stance against methodological precision/fundamentalism. They are simply misapplications, misunderstandings, and we would argue, not good examples of qualitative research and *ipso facto* – not good science.

The authors stand with others who have drawn attention to the potentially deleterious effects of *ad hoc*: unthinking, inattentive methodological pluralism and conflation. In answering their own rhetorical question about whether or not the methods or analytical steps of methods can be transferred between different research approaches, Greckhamer and Koro-Ljunberg (2005) argue that such actions,

May result in conceptual (methodological) confusion...and misunderstandings proliferate regarding the core concepts, actions and practice associated with a given method. (p. 741)

While subject to development and evolution, methodologies that drive research methods are themselves subject to context, (original) philosophical positions and epistemological stances. Even allowing for some degree or extent of development and evolution, the looseness of application of the method's analytical techniques is not unlimited; it is still bound by epistemology. Changing the "lens" through which the researcher views the world, de-contextualizing the method from its original conceptualization, and detaching the method from the methodology are likely to lead to abuses and misinterpretations/misapplications of a method (Greckhamer & Koro-Ljunberg, 2005).

Lincoln and Guba (2000) are among the many research methodologists who are adamant about the importance of philosophical purity because a researcher's choices in research design are framed directly and indirectly by his/her ontological positions. In other words, method(ology) and philosophical views (ontology) are inextricably linked. We can no more divorce the underpinning philosophy from method than we can detach method from research *per se*. As a result any purported methodological development or design choice has to be considered in the context of the method's underpinning philosophy(s). Guba and Lincoln (1994) accentuate this point when they state,

Differences in paradigm assumptions cannot be dismissed as mere 'philosophical differences'; implicitly or explicitly, these positions have important consequences for the practical conduct of inquiry, as well as for the interpretation of findings and policy choices. (p. 113)

Accordingly, the position of Johnson et al. (2002), who purport that mixing, combining, triangulating or otherwise using various qualitative methods concurrently is, "from both philosophical and pragmatic viewpoints such an approach is not only sensible, it is increasingly inevitable" (p. 243) is a mistaken proposition, and what is more, a pathway to producing poor quality research.

The authors need to be very clear about this point. There is legitimacy to Johnson et al.'s (2002) position that so-called purity of method is uncommon. As stated previously, deviation away from the abstract, idealization of a given methodology into the "real world" application of the method is, it seems, inevitable. Such deviations (some would say adaptations and/or developments) do not automatically lead to (ill-thought out) conflation or blending of qualitative methods. It is essential to note that variation in or movement away from a method's underpinning methodology and epistemological stances *can and does occur in well-designed studies; but such movement occurs purposefully and/or has an robust rationale, grounded in the method's original methodology* (our emphasis). As a result, any so-called methodological evolution, development or conflation it is undertaken in order to add to the research design: to solve a problem. It should not happen by mistake, by accident, through sloppiness or sloth, or as a result of not understanding the nature of one's methodology. Carter and Little (2007) offer comparable remarks when they state,

Methodologies can be combined or altered, providing that the researcher retains a coherent epistemological position and can justify the choices made, preferably in relation to both the theoretical context of the methodology and the impact of the change on method and the final research product. (p. 1326)

Not only is there a requirement for the researcher who wishes to conflate qualitative methods to do so purposefully rather than accidentally, but at the same time, such methodological choices need to be described, justified and explained. As Greckhamer and Koro-Ljunberg (2005) state very clearly,

It is vital for qualitative researchers to be aware of and lay open the theoretical and epistemological foundations of their research to the community of interested readers. (p. 732)

The ‘Slippery Slope’ or ‘Thin Edge of the Wedge’ Argument

Though cautious about engaging in catastrophic predictions, since such predictions are seldom grounded in solid evidence, and serve to shut down rather than encourage debate and “appeal” to a person’s fears rather than intellect, the authors do wish to add their tentative voices to those of others who have speculated and warned of the dangers of methodological slippage. Furthermore, we sincerely hope that these points, while deliberately cursory, might serve as focal points for further discussion and we welcome additional, much needed debate about these issues.

1) Bad science – if the findings can legitimately be described as ‘science’ at all

In cases where qualitative researchers do not appear to fully understand their reported method, pay insufficient attention to matters of epistemology and methodology and unintentionally blend or conflate their methods, such research reports are not good examples of qualitative research and not good science. Examples of ill-thought out methodological conflation only fuel the detractors and skeptics of qualitative research. Such papers only add weight to the argument that qualitative research isn’t “real science” or a *bona fide* research paradigm.

2) Lacking validity

A number of authors have highlighted how inconsistency or incongruence between epistemology, theoretical stance and research method(s) only serves to obfuscate and moreover, erodes the validity of the research undertaken (see Carter & Little, 2007; Greckhamer & Koro-Ljunberg, 2005; Guba & Lincoln, 1994; Lincoln & Guba, 2000).

3) *Methodological confusion and lack of conceptual clarity*

Erosion of a method makes it complicated to identify and define what is (and isn't) a method. (Greckhamer & Koro-Ljunberg, 2005, p. 738)

If the extant nursing and psychology literature is any indication, methodological slippage results in methodological confusion and lack of conceptual clarity. The boundaries between one research approach and another become blurred, important differences between methodologies and methods are lost, and there is a homogenization of research method per se. Further, while transfer of methods or analytical steps from one theoretical stance/epistemology to another is possible it complicates the uses and applications of a method.

4) *Imprecision begets further imprecision; it becomes the norm, the next methodological orthodoxy*

Qualitative research that pays insufficient attention to matters of epistemology and methodology and unintentionally blends or conflates methods means a continuous cycle of more bad examples. It means that methodologically imprecise research reports can become the "norm". As future students access these papers as examples of how to design and undertake a qualitative study, this could result in a proliferation of research reports that have all these identified major limitations.

5) *Findings lack credibility and lack utility/application*

As Greckhamer & Koro-Ljunberg (2005) have pointed out, undertaking qualitative research that pays insufficient attention to matters of epistemology and methodology and unintentionally blends or conflates methods means that the theory of knowledge (of the method) is now inconsistent with the theory of knowledge the researchers purportedly produce. As a result, findings from such qualitative research lack utility and application. They do not extend our knowledge base, cannot enhance practice, education or inform policy; or indeed even highlight the next research questions.

Conclusion

Method, or more accurately methodological precision, goes to heart of the matter. Studies that contain evidence of methodological slippage undermine the very nature of the study; moving away from qualifying as legitimate science to being something else (pseudo-science?).

Decisions about methodology matter because they will influence (and be influenced by) the objectives, research questions, and study design and provide the research strategy and thus have a profound effect on the implementation of the research. (Carter & Little, 2007, p. 1326)

While we accept that methodologies are abstract idealisations of “logics in use”, and are themselves subject to development and evolution, the authors argue that they remain subject to context, (original) philosophical positions and epistemological stances. Consequently, the looseness of application of the method’s analytical techniques is not unlimited; it is still bound by epistemology.

Qualitative researchers must stay true to their methodological ontologies and epistemologies unless they can present their reasons for altering direction clearly and concisely in a way that is replicable by other researchers. Contrary to what some may believe--that discovery in qualitative research happens by happenstance--it in fact happens through the application of the scientific method employing qualitative research methods following a rigorous qualitative research methodology.

References

- Annells, M. (2006). Triangulation of qualitative approaches: Hermeneutic phenomenology and grounded theory. *Journal of Advanced Nursing*, 56(12), 55-61.
- Bacon, F. (1620). *Novum Organum (The New Organon: Or true directions concerning the interpretation of nature)*. Retrieved from http://www.constitution.org/bacon/nov_org.htm
- Baker, C., Wuest, J., & Stern, P. (1992). Method slurring: The grounded theory/phenomenology example. *Journal of Advanced Nursing*, 17, 1335-1360.
- Bogdan, R., & Biklen, S. (1998). *Qualitative research for education: An introduction to theory and methods* (3rd ed.). Boston, MA: Allyn & Bacon.
- Boyle, J. S. (1994). Styles of ethnography. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 159-185). Thousand Oaks, CA: Sage.
- Bruno, T. J., & Svoronos, P. D. N. (2005). *CRC handbook of fundamental spectroscopic correlation charts*. New York, NY: CRC.
- Carper, B. A. (1978). Fundamental patterns of knowing in nursing. *Advances in Nursing Science*, 1(1), 13-23.
- Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies and methods in qualitative research. *Qualitative Health Research*, 17, 1316-1328.
- Cheek, J. (2000). *Postmodern and postcultural approaches to nursing research*. London, UK: Sage.
- Cronin, P., & Rawlings-Anderson, K. (2003). *Knowledge for contemporary nursing practice*. St. Louis, MO: Mosby.
- Crotty, M. (1998). *The foundations of social research*. London, UK: Sage.
- Cutcliffe, J. R., & Ramcharan, P. (2002). Levelling the playing field: Considering the ‘ethics as process’ approach for judging qualitative research proposals. *Qualitative Health Research*, 12(7), 1000-1010
- Cutcliffe, J. R. (2005). Adapt or adopt: Developing and transgressing the methodological boundaries of grounded theory. *Journal of Advanced Nursing*, 51(4), 421-428.
- Cutcliffe, J. R. (2008). Grounded theory. In R. Watson, H. P. McKenna, J. Keady, & S. Cowman (Eds.), *Nursing research: Designs and methods* (pp. 221-229). Edinburgh, UK: Churchill Livingstone - Elsevier.

- Cutcliffe, J. R., Joyce, T., & Cummins, M. (2004). Building a case for understanding the lived experiences of suicidal Alberta males. *Journal of Psychiatric/Mental Health Nursing, 11*, 305-312.
- Denzin, N. K., & Lincoln, Y. S. (2000). Part III: Strategies of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 366-378). Thousand Oaks, CA: Sage.
- Descartes, R. (1960). *Discourse on method and meditations*. (L. J. Lafleur, Trans.). The Liberal Arts Press, New York Press. Original work published in 1637.
- Dyson, F. W., Eddington, A. S., & Davidson, C. R. (1920). A determination of the deflection of light by the sun's gravitational field from observations made at the total eclipse of May 29th, 1919. *Philosophical Transactions of the Royal Society A, 220*, 291-333. doi:10.1098/rsta.1920.0009
- Estabrooks, C. A., Rutakumwa, W., O'Leary, K.A., Profetto-McGrath, J., Milner, M., Levers, M. J., & Scott-Findlay, S. (2005). Sources of practice knowledge among nurses. *Qualitative Health Research, 15*(4), 460-476.
- Feyerabend, P. K. (1975). *Against method: Outline of an anarchistic theory of knowledge*. London, UK: Verso.
- Gee, J. P. (2005). *An introduction to discourse analysis: Theory and method* (2nd ed.). London, UK: Routledge.
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emerging versus forcing*. Mill Valley, CA: Sociology.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Greckhamer, T., & Koro-Ljunberg, M. (2005). The erosion of method: Examples from grounded theory. *International Journal of Qualitative Studies in Education, 18*(6), 729-750.
- Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco, CA: John Wiley.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105 - 117). Thousand Oaks, CA: Sage.
- Hammersley, M. (2003). Social research today: Some dilemmas and distinctions. *Qualitative Social Work, 2*(1), 25-44.
- Hammersley, M. (2008). *Questioning qualitative inquiry: Critical essays*. London, UK: Sage.
- Hammersley, M., & Atkinson, P. (2005). *Ethnography: Principles in practice* (2nd ed.). London, UK: Routledge.
- Harding, S. (1987). Introduction: Is there a feminist method? In S. Harding (Ed.), *Feminism and methodology: Social science issues* (pp. 1-14). Bloomington, IN: Indiana University Press.

- Johnson, M., Long, T., & White, A. (2002). Arguments for 'British Pluralism' in qualitative health research. *Journal of Advanced Nursing*, 33(2), 243-249.
- Johnstone, B. (2002). *Discourse analysis*. Oxford, UK: Blackwell.
- Kaplan, A. (1964). *The conduct of inquiry: Methodology for behavioral science*. San Francisco, CA: Chandler.
- Kennefick, D. (2009). Testing relativity from the 1919 eclipse- a question of bias. *Physics Today*, 62(3), 37-42.
- Kirova, A., & Emme, M. (2009). Immigrant children's bodily engagement in accessing their lived experiences of immigration: Creating poly-media descriptive texts. *Phenomenology and Practice*, 3(1), 59-79.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Levering, B. (2006). Epistemological issues in phenomenological research: How authoritative are peoples' accounts of their own perceptions? *Journal of Philosophy of Education*, 40(4), 451-462.
- Levers, M. J., & Scott-Findlay, S. (2005). Sources of practice knowledge among nurses. *Qualitative Health Research*, 15(4), 460-476.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage.
- Morse, J. M. (1991). Qualitative nursing research: A free-for-all? In J. M. Morse (Ed.), *Qualitative nursing research: A contemporary dialogue* (pp. 14-22). Newbury Park, CA: Sage.
- Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals*. Thousand Oaks, CA: Sage.
- Newton, I. (1999). *The principia: Mathematical principles of natural philosophy*. (I. B. Cohen & A. Whitman, Trans.). Berkeley, CA: University of California Press.
- O'Byrne, P. (2007). The advantages and disadvantages of mixing methods: An analysis of combining traditional and autoethnographic approaches. *Qualitative Health Research*, 17(10), 1381-1391.
- Popper, K. (1959). *The logic of scientific discovery* (K. Popper, Trans.). London, UK: Routledge. (Original work published in 1934).
- Popper, K. (1963). *Conjectures and refutations: The growth of scientific knowledge*. London, UK: Routledge.
- Robinson, K., & Vaughan, B. (1992). *Knowledge for nursing practice*. Oxford, UK: Butterworth Heinemann.
- Rolfe, G. (2006). Judgements without rules: Towards a postmodern ironist concept of research validity. *Nursing Inquiry*, 13(1), 7-15.
- Schram, T. (2003). *Conceptualizing qualitative inquiry: Mindwork for fieldwork in education and the social sciences*. Upper Saddle River, NJ: Prentice Hall.
- Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd ed.). Thousand Oaks, CA: Sage.
- Schwandt, T. A. (2004). *Dictionary of qualitative inquiry* (3rd ed.). Thousand Oaks, CA: Sage.

- Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17*(10), 1372-1380.
- Van Manen, M. (1997). *Researching lived experience: Human science for action sensitive pedagogy*. Albany, NY: State University of New York Press.
- Van Manen, M. (2002). *Writing in the dark: Phenomenological studies in interpretive Inquiry*. London, UK: Althouse.
- Van Manen, M. (2006). Writing qualitatively, or the demands of writing. *Qualitative Health Research, 16*(5), 713-722.
-

Author Note

Dr. John R. Cutcliffe, RMN, RGN, RPN, RN, B.Sc (Hon), PhD, Acadia Professor of Psychiatric and Mental Health Nursing, University of Maine, USA, Adjunct Professor, University of Ulster, United Kingdom, University of Coimbra, Portugal and University of Malta, Malta. Correspondence regarding this article can be addressed to: Dr. John R. Cutcliffe Acadia Professor of Psychiatric and Mental Health Nursing, University of Maine, Dunn Hall, School of Nursing, Orono, Maine, 04469, Email: jcutcliffe@roadrunner.com

Henry G. Harder, Ed.D., RPsych. Professor and Chair, School of Health Sciences University of Northern British Columbia, Canada.

Copyright 2012: John R. Cutcliffe, Henry G. Harder, and Nova Southeastern University

Article Citation

Cucliffe, J. R., & Harder, H. G. (2012). Methodological precision in qualitative research: Slavish adherence or “following the yellow brick road?”. *The Qualitative Report, 17*(Art. 82), 1-19. Retrieved from <http://www.nova.edu/ssss/QR/QR17/cutcliffe.pdf>
