Qualitative Research Synthesis
How the Whole Can Be Greater than the Sum of Its Parts

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ABSTRACT: The rise of the knowledge society has led to an increase in the amount of research that is produced and an increased demand from decision makers for summaries of this research. As a result, research syntheses have become increasingly important in applied research, especially within the health sciences. However, this methodology has not been adopted with the same enthusiasm in the field of anthropology. In this article, we describe the main principles of this approach and the history of its development and discuss whether qualitative research synthesis can be seen as compatible with (the goal of) anthropological methodology. Finally, we argue for a greater adoption of research synthesis within applied anthropology and call for a greater engagement from anthropologists in the further development of this methodology.

Keywords: anthropology, applied research, education, health sciences, qualitative methods, qualitative research synthesis

Introduction
The rise of the knowledge society has led to an increase in the amount of research that is produced and an increased demand from decision makers for summaries of this research. As a result, research syntheses have become increasingly important in the applied sciences. But should anthropologists conduct qualitative research synthesis?

Background
The synthesis of individual research studies has become increasingly common. The explanation behind this trend is multifaceted. ‘Knowledge society’ and the practice of knowledge-based decision-making have led to demands from policy makers and other decision makers for systematic reviews and syntheses of research that depict the state of the art in fields of interest. In addition, while traditional research reviews have been accused of being unsystematic and heuristic (Glass 1976; Gough and Elbourne 2002), new technology and the Internet have allowed researchers to access the growing amounts of research in ways previously unimaginable. Thus both policy needs and technological realities have made comprehensive syntheses of existing research evidence both relevant and feasible.

The health sciences have been at the forefront in the growth of research synthesis (Dixon-Woods et al. 2005). This development has occurred alongside the growth of the evidence-based healthcare movement, and has focused on methods for synthesising quantitative data on the effects of interventions. However, in the last few years there has also been a growing interest in the synthesis of qualitative research. While researchers within the health sciences have also been in the forefront here, this method has in addition been discussed and applied within the fields of education and organisational studies (Au 2007; Denyer and Tranfield 2006; Major and Savin-Baden 2010a, 2011; Savin-Baden 2007; Weed 2002, 2005). In all of these fields, syntheses of qualitative research are typically being carried out to support decision makers in practical choices regarding policy issues and are increas-
ingly regarded as an important addition to syntheses of research on intervention effectiveness. A recent example is WHO’s development of guidelines regarding maternal and newborn care. In the process of developing guidelines, reviews of (quantitative) research regarding the effectiveness of lay health workers’ assistance were supported with qualitative research reviews regarding acceptability and feasibility of such assistance. In addition, to provide information for guidelines on acceptability and feasibility, the information provided by the QRS (qualitative research synthesis) was used to develop implementation considerations for recommended options (Glenton et al. 2013a). Despite the growing interest in the field, QRS is seldom used in anthropological research.

In this article, we describe the main principles of qualitative research synthesis and give an overview of the history of its development. We discuss if this approach can be compatible with (the goal of) anthropological methodology, and point to several links and connections to the comparative analytical method of social anthropology (Barth 1972a, 1972b) as well as sociological meta-studies (Zhao 1991). We ask whether applied anthropology could profit from engaging in QRS and if anthropologists could contribute to the further development of this methodology.

What is QRS?

Qualitative research synthesis can be defined as an approach that ‘uses qualitative methods to synthesise existing qualitative studies to construct greater meaning through an interpretive process’ (Major and Savin-Baden 2010b: 27). A variety of approaches exist for synthesising qualitative research, and the number of terms in use, including ‘meta-ethnography’, ‘narrative synthesis’, ‘meta-synthesis’ and ‘knowledge synthesis’, reflects this. The term ‘qualitative research synthesis’, or QRS, as it is used here, does not designate a specific way of carrying out syntheses of qualitative research but is used to denote a general interpretative approach to synthesis. Most described approaches adopt well-established qualitative research methods such as cross-case comparison (Miles and Huberman 1994; West and Oldfather 1995); the constant comparative method of grounded theory (Kennedy and Lingard 2006; Weed 2005, 2008); qualitative comparative analysis (Caren and Panofsky 2005; Ragin 1987; Ragin and Zaret 1983; Rantala and Hellström 2010); and inductive narrative analysis (Jones 2004).

Researchers have attempted to map this rapidly developing field by describing and making typologies of the different approaches (Denyer and Tranfield 2006; Dixon-Woods et al. 2005; Jones 2004; Sandelowski and Barroso 2007; Suri and Clarke 2009; Weed 2005). The typologies show that approaches vary with regard to their paradigmatic stance, and in a way a scale is created from positivism to interpretivism. Furthermore, textbooks are appearing describing methodologies more thoroughly and in ways that allow newcomers to judge the relevance and applicability of approaches according to their stance and need (D. Gough et al. 2012; Major and Savin-Baden 2010b; Paterson et al. 2001; Sandelowski and Barroso 2007).

QRS has come to prominence as a consequence of the growing importance of research to policy, which spurred the evidence-based movement first in health and later also in social and educational matters. Methods for conducting large-scale syntheses summing up evidence from quantitative research were developed and refined through the 1980s, and alongside grew movements such as the Cochrane collaboration. The Cochrane collaboration is a not-for-profit organisation working to produce and make publicly available credible, free-from-interest health information. Through collaboration with a wide range of researchers, the idea is to gather and synthesise all sound evidence from research on a particular topic. Quality is secured through methods for assessing research, thus including only valid and reliable studies, and stringent methods synthesising evidence across individual studies. Meta-analysis of studies based on randomised controlled trials (RCT) is regarded as the most important approach. The Campbell collaboration within the field of education, KNAER in Toronto, The Norwegian Knowledge Centre and Danish Clearinghouse are other similar bodies contributing to a growing amount of research syntheses, as well as development of methodology. Time and experience has shown that valuable knowledge and insight may be dismissed if meta-analysis of RCTs is the only method for synthesising research. Thus the development of qualitative research syntheses has travelled alongside the described trend and presently the Cochrane collaboration includes synthesis of qualitative studies as part of their work as illustrated by the cited work on guidelines in cooperation with WHO. This allows WHO to extend their conclusions beyond that of effects of interventions to include relevant information on acceptability and feasibility and to reduce the use of anecdotal information, in addition to develop considerations regarding implementation of guidelines (C. Glenton et al. 2013b).

QRS thus represents a development of the idea of building on existing knowledge through synthesising previous research. However, given the different na-
ture of quantitative and qualitative methods, it requires at the same time a different procedure than a quantitative meta-analysis.

When conducting a synthesis of qualitative research, the following principles apply: A synthesis starts with a problem or a question which addresses a qualitative aspect of an issue or a topic rather than effect or generalisability. It involves a process of identification of the studies to be included based on their relevance to the research question, typically the number of studies to be included can be discussed with regard to the capacity of handling the data material. It implies transparency regarding the process of selecting the studies and conducting the analysis of these studies. The primary data for analysis is the written reports of the included studies, rather than the original primary data on which these studies are based. Analysis typically builds on reiterative reading of the studies, paying attention to context in a wide sense, including both original researcher’s intention and stands as well as the analytical and methodological framing of the study. We will use our own work to illustrate how these principles can be applied.

The example is taken from education, when conducting a study of peer learning practices it was acknowledged that there was a gap in research regarding how the quality of peer relations influences learning. Acknowledging that research had addressed the quality of peer learning processes in ways that might inform this gap, a qualitative research synthesis was conducted in order to build on existing evidence (Riese, Samara and Lillejord 2012). Having identified the problem and defined peer learning, a set of search terms were decided upon and six relevant databases were searched for studies. Using the research problem to define relevance and a set of guidelines for scrutinising the quality of the methodological design, description and conduct of studies, an initial recovery of 727 studies was reduced to a set of seven studies to be included. These studies addressed relevant problems, they included information on the researchers’ background, intent and conduct of research, and they described the methodological and analytical frames in ways that allowed them to be compared. The seven studies were analysed in three steps inspired by the meta-ethnographic approach developed by Noblit and Hare (see below). Each step was first carried out by two researchers separately, then discussed and agreed upon by all three researchers.

The first step implied identifying relevant themes, concepts and descriptions according to the research problem in each study, paying special attention to how concepts used in different studies could be said to address the same phenomenon. The second step implied analysis of findings across studies comparing results from the included studies. This step identified seven themes relevant to all included studies and characterising the interactional processes in peer learning situations. The validity of these themes was constantly checked by returning to the context of these findings, namely the original studies. In the third step of the analysis the relationship between the seven themes were investigated in order to identify possible new insights from the cross-study comparison. This phase, the third-order interpretation, moves beyond the interpretation of the included studies, and reveals the importance of peers’ relational knowledge to interaction and learning.

In this QRS the status of each included study is similar to that of a separate but comparable case. Special attention was paid to how findings related to theoretical and methodological framing of the research in the original studies. This was also discussed as part of the analysis in the QRS. Special attention was also paid in order to make the methodological procedures of the QRS stringent and transparently reported, and the included studies were richly described in the article. The added value of a third-order interpretation moving beyond the original studies is not necessarily a product of a QRS, but rather a bonus when discovered. Syntheses that do not yield this kind of results may still be valuable in the capacity of sorting and confirming insights across cases and contexts.

Recent History

As previously mentioned, the health sciences have been at the forefront in the use of QRS and it is within this field that methodological prescriptions have been most developed and discussions most elaborated (Bondas and Hall 2007). However, it is the work of two educational ethnographers that is generally given credit for the establishment of this methodology. In their book Meta-ethnography (1988), George W. Noblit and R. Dwight Hare describe how they developed this approach after attempting to make sense of six different case studies studying the social processes at work in desegregated schools in different contexts in the U.S.A. in the 1970s. The studies aimed at giving account for varied outcomes in different schools, and the synthesis should integrate and summarise the findings. Their first attempt was to try to sum up or aggregate the results of the studies. However, this failed to yield any additional or informative results. This made the researchers conclude that the assumptions
underlying this reasoning/approach were inappropriate considering the ontological and epistemological framework of the original/included studies. Aggregation and summing up are used in quantitative meta-analyses. However, they belong to a positivist paradigm, thus they treat the included studies in a way that failed to deliver the expected outcome of an ethnographic analysis. Contextual meanings, such as distinct meanings of race and desegregation, disappeared. The attempts at synthesising the research on desegregation has been both criticised and credited for contributing to a more nuanced and complex picture of desegregation and the importance of the larger social forces to the varied school outcomes (Schofield 1992). Noblit and Hare’s proposal for a meta-ethnography of individual studies builds on an understanding of ethnography as residing in an interpretive paradigm. As ‘interpretive explanation [is] essentially translation’ (ibid.: 7) the endeavour of ethnography can be described as involving an element of translation. A synthesis should in this perspective aim at preserving the holistic and unique character of qualitative research across several studies. The stance of Noblit and Hare is that:

qualitative researchers need to be culturally multilingual, able to facilitate discourse between cultural languages. If effective translations are to be accomplished, we must be able to render the idiomatic meanings of one culture in terms of the idiomatic meanings of another. (ibid.: 7)

Within Noblit and Hare’s meta-ethnographical approach, the same principle is applied when synthesising the results of several studies. This implies that each included study is translated or interpreted in relation to the other studies included in the meta-ethnography.

Noblit and Hare’s approach to synthesising ethnographic studies within an interpretative paradigm has inspired the development of several methods for synthesising different forms of qualitative data of which some are cited above. Approaches have been developed operating with strict rules for kinds of studies to be included, paying close attention to the conduct of research, in addition to more pragmatic approaches aimed at meeting the needs of policy makers (Jones 2004).

Ties and Connections to Sociology and Social Anthropology

In essence, the synthesising of qualitative studies may be seen to be a natural development of the overarching idea in the social sciences about how knowledge and theory is developed. In order to move a field forward, reflecting upon existing research – its theory, methodology and results – is necessary. According to Zhao (1991), the practice of reflecting upon existing research is the very essence of what is termed a meta-study and he shows how this practice has roots in sociological traditions since Max Weber and Talcott Parsons. Zhao argues that the meta-study ‘is more systematic and comprehensive than research reviews’ (ibid.: 379). However, it also differs from a review in its aim: a meta-study implies a higher degree of reflexivity; it ‘involves not only the description of “what is” but also the reflexive search for “what should be”’ (ibid.: 379). In other words, a meta-study is not only a description of existing studies. It reflects upon its data (the included studies) expecting that the outcome of the inspection will yield meaning that exceeds that of the included studies. Such an understanding should be able to contribute to advance the field under study.

It may not be a coincidence that a seminal work on synthesises originated in ethnography considering the roots of ethnographic tradition in social anthropology, where the idea of developing knowledge in cooperation with both informants and other researchers is well founded (Lassiter and Campbell 2010). One important aim in social anthropology is to provide a comparative view of culture and social organisation. Our key tools in this endeavour are cross-case comparison and comparative analysis. Social anthropologists use comparison in two central ways. First, it is a constant practice in data collection and interpretation within any study. In order to interpret interaction within a particular field, social relations, actions, contexts and situations are constantly compared in order to produce data. Second, it refers to the comparison across time and space of different ethnographic studies (Barth 1972a, 1972b; Bateson 1958). Comparisons of different ethnographic studies ‘are fruitful because they lead to empirical generalizations, they expose analytical problems and they allow for falsification of hypotheses’ (Barth 1972a). Thus data on a particular phenomenon becomes richer and more nuanced, which allow for empirical generalisations. These generalisations may, together with new analytical reflections, contribute to the building of theory with regard to the field or topic studied. However, there are certain premises that must be fulfilled: comparison should be built on solid analytical descriptions, and the content and quality of these descriptions should decide what kind of comparisons can be made (Barth 1972b). In other words, the selection of the cases/studies to be compared should be done according to the kind (and quality) of data they provide as this sets the
limits to the conclusions that can be drawn from the study. In sum, active comparison of different cases and reflection upon how these cases resemble or differ from each other is an important way of building both data and theory within social anthropology.

To summarise, QRS may be seen as a development of the practice within the social sciences of meta-studies involving theory building on the basis of interpretation across separate studies, and building on the principles of comparative analysis similar to its practice within social anthropology. This raises the question of whether anthropologists should embrace QRS? We argue that QRS could be relevant to anthropologists, and that anthropologists’ interest in QRS could be valuable to the development of the methodology. In the next section we will sum up our main arguments for these claims.

What Can a QRS Yield, and Why Should Anthropologists Conduct Qualitative Research Syntheses?

Syntheses are conducted for several different reasons but, as noted, the approach has mostly been used in health sciences in order to map current knowledge that can support decision makers make practical choices. Anthropologists have generally not engaged in QRS, even though their competence should be well suited for conducting syntheses. We argue for the relevance of QRS to anthropologists for two main reasons. Firstly, QRS represents a way of developing fields of research by contributing to empirical generalisations, building theory and exposing analytical problems. Secondly, QRS can represent an important contribution to the crucial scientific practice of reviewing a research field. The challenges associated with the growing amount of research and its increased availability cannot be ignored, and the relevance of this practice to applied research has been clearly demonstrated by the health sciences.

Our first argument may be the more controversial of the two and merits some further deliberation. It relates to the general practice of doing qualitative research. QRS represents an important contribution to the challenge of generalisability of qualitative research in suggesting how one may proceed in order systematically and interpretatively to integrate findings from several studies representing different contexts (place, time, researchers). As referred to earlier, Barth (1972a) states that in order to compare different social forms, comparison has to build on solid analytical work that includes the necessary dimensions for comparison. In creating options for how to merge findings from more than one qualitative study in a systematic manner, researchers may be able to state their results more boldly, based on more nuanced and varied evidence, as well as expose new problems and create new insights. In relation to applied anthropology this may also represent an opportunity to increase the comparative potential of a study, as illustrated by Noblit and Hares’ study of desegregated schools.

This option has however been debated from a scientific perspective as representing an ‘accumulative value’ of synthesis, and has been accused of building on improper foundational assumptions. To avoid these pitfalls, a QRS needs to be conducted according to the general principles of qualitative methods. A re-interpretation of other researchers’ accounts should minimise/not imply unnecessary loss of richness or contextual meaning. We argue that QRS allows the synthesiser to gain insight from several studies in a broader set of contexts and from a larger number of informants, as well as for more informed interpretations building on a more complex set of data. This may stimulate broader discussions of the issue, and allow for new insights as well as suggest new questions for research.

Still it might be questioned whether anthropological material can be synthesised. We believe that each study included in a QRS should be considered as an individual unit of analysis. In this way, we suggest that QRS is comparable to cross-case comparison, where each study could be regarded as a case in a case study. The researchers behind the included studies will, in this picture, be the key informants and their considerations through the research process will be embedded in the way they represent the case. Based on this argument we will argue that anthropological material potentially may be synthesised.

However, a particular challenge in doing a QRS is how to preserve the context of the original cases (Bondas and Hall 2007; Major and Savin-Baden 2010b; Sandelowski 2006; Weed 2002). This practical challenge has particular relevance to anthropological knowledge, and thus must be considered. One way of addressing this problem is to regard the researcher as the key informant of a case; the context of the original study can then be regarded as preserved through the primary researcher’s presentation of the research process and results. This may also allow the QRS researcher to communicate with the key informant, that is the primary researcher, in order to ask questions or secure the validity of interpretations made in a QRS. Alternatively, rather than considering the researchers to be key informants, the QRS researcher could con-
sider the included studies as texts in a document analysis. The claim that the included studies are scientifically and empirically contextualised still holds for this analogy. However, the different metaphors indicate a certain difference in the epistemological stance of the researcher. We would argue that as the primary studies are conducted within different paradigms, so is the QRS. The research interest and the research question will contribute to the decision on which perspective to choose.

A related question is whether anthropological texts lend themselves to the kind of quality assessments QRS procedures often imply, or if they will fall short on this kind of procedures. One part of the answer to this question can be linked to the above argument about treating the studies as cases and the researchers as key informants. This metaphor allows us to regard the analysis across ethnographic studies as a continued hermeneutic process, rather than as a synthesis of objective knowledge, securing methodological coherence. We also believe that this question must be discussed in relation to the anthropological writing tradition as not necessarily lending itself to an easy identification of the traditional components of a research report. Within QRS literature the question of which parts of a study are to be included in a synthesis is debated. Our stand in this debate is that this need not be a problem, if a QRS is regarded as related to the tradition of meta-studies described in the first part of the article. In accordance with the idea of a meta-study implying reflection upon theory, methodology and results, we believe this question needs to be rephrased into a question of how the different parts of the included studies should be treated. We side with Paterson et al. (2001) who claim that in order to achieve a real synthesis, one that brings a field forward, it takes more than just synthesising the results. An analysis of theory and method and the way these shape the results is important in order to read the meaning that lies in a single study. In line with this argument we see also anthropological writing as lending itself to synthesis.

It is reasonable to sum up this first argument with a call for soberness. There are many approaches to qualitative synthesis, and opinions about the quality criteria for the syntheses will vary. Some approaches do not follow general principles for good-quality in-depth research, for instance by including too large numbers of studies. In practice, the nature of qualitative research sets limits on the amount of data that can be analysed/the number of studies that may be included, as the idea of interpretation differs from the idea of aggregating or summing up as stated in the beginning. Thus, even if QRS does not lend itself to positivism as such, in practicing the approach one should not be tempted to compromise with scientific ideals. Thus, if practiced soundly, QRS allows us to retain our own scientific ideals and, as anthropological methods contain many of the tools needed, the participation of anthropologists in the development of the methodology would be very valuable.

In terms of the second reason for doing QRS, we see an obvious future utility related to the development of the knowledge society. There has been a fruitful but challenging change in research practice with the opportunities of searching and retrieving research publications from all over the world through the use of new technology. This often puts researchers in situations where the topic of interest presents itself as increasingly explored and complex from the outset. A traditional narrative, descriptive exploration of previous research before starting an investigation will become more problematic the more research there is to relate to. This situation is reflected in an ongoing critique of the traditional literature review for lack of systematic approaches and scientific rigour (Glass 1976; Gough and Elbourne 2002). QRS represents an approach to how this challenge can be met. With its systematic way of treating existing research, QRS allows researchers to relate more thoroughly to previous research, and to make informed choices about what to include and exclude when reviewing existing research. The readers have the opportunity to judge the presentation of previous research critically with regard to both inclusion/exclusion criteria as well as with regard to how it informs the research that follows. Additionally, one might envision a future where qualitative researchers/anthropologists may be able to find already conducted reviews and research syntheses for most subjects and thus spare themselves the effort of starting every empirical study with a systematic review of previous research.

Concluding Remarks

We believe that QRS is compatible with anthropological methodology and anthropologists should therefore be well suited to carry out qualitative research syntheses, as well as participating in the further development of the methodology. We also see QRS as particularly closely related to social anthropology, because we use comparison as an interpretative tool. As such, QRS could be easily adopted within applied anthropology (and the social sciences in general). Furthermore, we suggest QRS can be carried out in a
manner that is consistent with an interpretive epistemology, and that interpretive research would profit from more and more systematic syntheses of former studies. In addition, it is our belief that the development of QRS could profit from more engagement from researchers with extensive experience of qualitative methodology and an interest in scientific theory. It is our hope that anthropologists will contribute to the further development of methods for synthesising qualitative research.

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