Exploring Structured Thematic Inquiry in Social Research

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Abstract
The overall objective of this paper is to demonstrate the relevance of deduction (with/out falsification) to qualitative research. It provides the reader with a concise synopsis of an alternative approach to qualitative research enquiry. The philosophy is supported by Hyde [1] who believes that both qualitative and quantitative research possess deductive and inductive components. It supports this by proposing that a quasi-deductive approach based on focused probing during structured interviews is pragmatic. It implies that the researcher has already known (from content analysis of secondary sources) what themes are important for understanding a phenomenon, process, structure or system and so seeks to obtain the relevant empirical data to support or add to them. This approach is an adaptation to a priori coding in which the researcher avoids having to look for themes in grounded theory approaches. There are two major variants or strains of structured thematic inquiry: the simple and the extended. The major difference between them is the depth of interviewing. In the simple variant the data collection ends once the researcher is satisfied that structures or processes are adequately validated from respondents’ accounts of phenomena. In the extended variant the researcher goes in-depth proposing new structural units to the initial structure.

Keywords
Structured Thematic Inquiry, Complementation, Simple Variant, Extended Variant

Subject Areas: Anthropology, Politics, Sociology

1. Introduction
Qualitative research is dynamic, open-ended and exploratory. Qualitative studies are tools used in understanding and describing the world of human experience (Meyers [2]). They are especially useful for exploring the lives of subjects in ways that statistics cannot. Most authors identify five types of qualitative research designs: grounded
theory, phenomenology, case study, ethnography and historical (Creswell [3]). However, content analysis, discourse analysis, action/participatory research and Generic Qualitative Method (GQM) are valid designs for conducting non-statistical/qualitative research.

There is so much debate about quantitative and qualitative research that I have refused to comment on their distinctions. Instead I propose to focus on the common scientific principle (of being structured) that they share. Positivists and interpretivists alike must structure their research if it is to be accepted as scientific knowledge (and not common sense knowledge).

In a 2008 study I used the telephone directory to find suitable participants (elderly persons 65 and over) who lived in the same neighborhood all their lives (Berkeley [4]). Participants lived in north, south, east and west Trinidad. They were asked to complete a 15-item open-ended questionnaire that investigated neighborhood change both social and physical or environmental. From their responses a number of common themes were developed e.g. loss of community, commercialization—the replacement of homes with small business centers, social disorganization, youth culture and generation gap.

Following analysis of the data obtained from the open-ended questions additional elderly participants (65 and over) were contacted (via telephone). Twenty three consented to being interviewed in order to provide more detailed accounts of the themes, e.g. commercialization, in order to test their relevance to neighborhood change. Interviews varied in duration between 30 minutes and one hour. The 23 participants were subdivided into two groups. The first group of 10 (65 - 69) was interviewed using the simple structured thematic approach aimed at defining the concepts/themes. In analyzing the data I sought to look only for evidence which illuminated the concepts in a manner similar to analytic induction used in ethnography (Bodgan and Biklen [5]). The second group of 13 (70 and older) was interviewed for a longer time. Participants were given the opportunity to validate themes, describe them in greater detail and suggest new changes which they perceived had taken place in their neighborhood. The rationale for the groupings and interviewing was that those who were oldest would have more experience of the changes that occurred.

A technique of constant comparison and contrast of neighborhood changes was employed in the analysis of data generated in group two. This strategy resembled grounded theory approaches propounded by Chamaz [6]. However, it differed from grounded theory in that no theory was being grounded-new changes were identified. I sought to discover new concepts/themes or constructs while trying to gain an understanding of the proposed themes. Two of them were environmental degradation via loss of forest cover and suburban development through private housing schemes for the growing middle class. In this manner the extended version of structured thematic inquiry (STI) was instituted. Quite noticeably it subsumed the surface variant of STI. The extended variant includes the surface variant but not the other way round. It is for this purpose that through self-reflection about the process I deduced the concepts surface or simple variant and extended or deep variant of STI.

2. Structured Thematic Inquiry

Some of the innovators of qualitative methods of inquiry have oftentimes forgotten their audience. Glasser and Strauss’ [7] classic work on grounded theory is a good example of an esoteric philosophy and methodology. Their works are so difficult to translate into research action that it makes it challenging for the effective employment of this method in social research. I propose to devise an alternative qualitative research design that would spell out in a systematic manner the nature and practicality of data gathering; namely STI.

STI is a qualitative research design which seeks to deepen our understanding of specific themes, processes, structures and institutional entities that have the ability to shed light on aspects of human behavior without the arduous task of analyzing volumes of data generated from unstructured or in-depth interviews. There is another dimension to STI. This is its suitability for use in comparative studies as the researcher may wish to discover the effect of social change on people’s experiences without carrying out historical research. For instance, to study changes in gender roles over time STI can be employed to ascertain whether men and women’s traditional instrumental and expressive roles (Parsons) are changing as a result of the modernizing effects of education and industry.

3. Why Structured Themes?

I use the term structured to refer to the principle that the themes for investigation are identified first before the data is collected via structured, conceptually or process driven interviews. Concept driven interviews (concerned
with the exploration of concepts, constructs, categories) are tightly structured; all participants answer the same questions in the same order. The interview schedule is constructed based on predetermined themes. This is time efficient since it makes the process of attributing (a substitute term for coding) the data easier and faster. The collection of a large amount of qualitative data can become more manageable as it allows the researcher to exert greater control over its analysis. This is the case since significant themes, topics, processes and concepts knowledgeable to a sample of respondents are presented for validation or confirmation. STI is based in part on the principle of a priori coding. On the other hand it is based in part on the principle of structure that strengthens its efficiency on time.

Secondly the term structured is associated with a well-defined ordered process or product. This suggests that the researcher is interested in developing a mind or concept map depicting the structure of an organization, institution, process or phenomenon within an institution such as a school, police department or hospital. Research may or may not begin with a “qualitative hypothesis”. The primary objective is the testing or development of a structure of the phenomenon or research topic. For instance the question can be asked: how is the Accident and Emergency department of a large hospital structured? Put another way we wish to test its system, what processes and procedures are instituted or how they have transformed over time given changes in financing, management styles and staffing.

4. Variants of STI

There are two main variants or strains of STI: the surface variant and the extended/deep variant. The surface variant involves mere falsification or confirmation of themes from previous researches. It seeks to confirm the relevancy of well-established themes using a purposive sample of respondents. Alternatively the deep variant is more dynamic and resembles traditional exploratory qualitative research designs such as grounded theory and ethnography. Its major objective is to assess the impact of social change on the lives of subjects, institutions and human systems. I propose that both variants of STI can be used autonomously or in combination with other qualitative research designs. They are of similar philosophy to The Generic Qualitative Method/Approach which prioritizes the qualities of validity and reflexivity. On the other hand, STI prioritizes all features of trustworthiness in qualitative research: credibility, dependability, generalizibility and confirmability.

It is imperative that the data generated by STI is credible. Researchers must use the most appropriate tools for collecting and analyzing and reporting the data. Coding techniques before and during data analysis must be consistent and should lead to replication. The researcher must be aware that his/her findings are context specific and thus cannot be generalized to other situations. Finally researchers must declare their bias (bracketing) as the phenomenological researcher does.

5. The Surface Variant of STI

The surface variant of STI is so called because it requires less detailed analysis of data than the deep variant. The researcher is committed to the validation or confirmation of themes which were identified in previous research or in secondary sources such as books, magazines and newspapers. It is convenient for challenging or testing theories. The quickest way of collecting the data is through the use of structured interviews where each interviewee answers the same questions in the same order.

The surface variant is useful when the researcher wants to determine the fit of a process, structure or organization to a particular context or situation. It is analogous to indexicality proposed by Garfinkel in 1967. An organization’s design can be verified by way of collecting and analyzing data related to the different roles in its structure. These roles act as themes which can be explicated within the changing or emerging context of the organization.

It is based partially on principles of deduction (Popper) [8] and acts as a challenge to the presupposition that qualitative research is necessarily inductive in nature. The research begins with a working hypothesis—a framework of interrelated concepts or structure. The steps in conducting surface STI are the same as those for the extended version. The main difference between them is the greater depth of interviewing in the latter version.

6. Advantages of the Surface Variant of STI

It is efficient as it reduces the amount of time spent in data analysis i.e. reducing and interpreting a large body of unorganized qualitative data searching for meaningful patterns of relationships within it. STI can be useful for
analyzing documents and other written evidence which the researcher can easily tap into. For instance letters and autobiographies can be used to justify evidence of specific themes or processes in the lives of particular respondents who may be difficult to access or who may be deceased. A man or woman’s diary can assist in elucidating the processes involved in separation and marital breakup. Another example of the efficiency of the surface variant of STI is demonstrated in the following example of nurse management. Using five nurse management principles-organizing, staffing, scheduling, directing and delegating (Nurselabs) [9]; the researcher can develop a structured interview schedule for use among a sample of nursing personnel. They will be asked to describe each of the principles and suggest how they impact on the hospital’s administration system.

7. Limitations of the Surface Variant of STI

The main challenge it poses is control of the amount of data collected. Respondents with much information on a topic may feel that the interviewer is curt and impolite as he moves quickly from one question or issue to another. There may be wastage of data as some of it may not be used once the themes have been explicated. I refer to this as the “qualitative alimentary canal process”—an analogy in which the analysis of data results in the selection of some and the rejection of other pieces of data.

8. The Extended Variant of STI

The extended variant of STI uses the same principles of data collection as the surface variant. However, it is deep because the researcher is interested in much more than thematic validation. S/he is concerned with unearthing new themes based on in-depth exploration of older ones. Therefore it involves greater devotion of time and resources to the reduction and interpretation of large amounts of qualitative data about a structure, process or hierarchy of institutional positions. The process is similar to that of the collection and analysis of data from unstructured and in-depth interviews. The major difference is that the themes have already been identified. Researchers wishing to determine whether changes have occurred to the structure of an organization and the reasons for them can employ this method.

Like all other qualitative research it is exploratory in nature; the main difference between it and other forms of qualitative research is that the themes are used as the springboard for exploration of the phenomenon. It can be used as a research design in its own right or in conjunction with other qualitative designs such as phenomenology, historical or case study. It can add to the reliability of mixed method research. For example it makes the collection, management and analysis of qualitative data more systematic—adding to its efficiency on time.

9. Steps in Designing the Extended Variant of STI

Identification of themes—this entails the review of previous research studies in order to identify the main themes that are of great significance to a particular social problem or group of respondents. It is akin to content analysis which takes two possible forms. Weber [10] discusses basic content analysis. Other writers have elaborated on these forms of analysis, namely conceptual and relational. Each of these will be described since they are capable of developing a tentative hypothesis for detailed analysis later in the research process.

In conceptual analysis the reader examines a number of concepts in a particular text and counts the number of times they appear in it. The researcher then engages in relational analysis by examining the concepts to see if there are any relationships between and among them. Once this is completed the results are framed in the form of themes that can be explored using a sample of respondents. This is compatible with the goals of STI.

An alternative to content analysis is conducting a series of structured interviews using a large sample of respondents. The goal is to determine whether a particular selected theme, concept or issue is relevant to persons who have experienced a specific phenomenon or social problem. For instance, it may entail interviewing victims of domestic violence to determine whether they were depressed, suicidal or experienced any other psychological and emotional trauma. If the preliminary findings suggest that each issue is pervasive the researcher can conclude that it is a theme worthy of confirmation or validation by extensive interviewing.

It must be reiterated that there should be some amount of preliminary review of literature about the topic before deciding that a particular concept is worthy of the status of theme.

In conducting interviews the researcher can do either of two things. First he can continue to validate the concept on an individual case basis prolonging the initial interview with a particular respondent only if the theme is
relevant to his/her experience. If it is not he can decide to move on to another or find out if other topics revealed by the subjects are worthy of exploration. This technique is suggestive of a quasi-grounded theory approach since the interview details are more biased and concentrated on a particular theme, topic or concept. Secondly the researcher may choose to move on to other respondents to determine whether a theme is worth pursuing before beginning to collect the data for validation. Conversantly it is palpable that the research may begin with a flow chart or organization structure or a number of concepts and processes describing a phenomenon. The main advantage with this process is that it makes it easier for the researcher to discover his or her saturation point, that is, the point at which he/she feels that once the topic has been sufficiently explored continued interviewing and probing will unearth very little or nothing at all.

Figure 1: Interactions in Quality of Care, adapted from Burley and Greene [11] depicts the pre-structural approach to research that I have been explaining. The complexity of the quality of care patients receive is shown to contain inputs from five major sources: individual, community, health care system, health care organization and health care professionals. The surface variant can be employed in order to describe these features of health care or to confirm that indeed they are significant to health care in Australia or any other society or country. A researcher may opt for the extended variant to uncover new information-inputs which are relevant to the quality of health care in a particular health setting. In effect the research aims to develop a model of health care unique to his/her locale. The five interactions of health care become the structure which is being hypothesized and later tested using structured interviews. Each element of the diagram forms the basis upon which interview questions are framed and asked.

Constructing the interview schedule (hypothesizing) is the second step which requires the researcher to formulate a number of open-ended questions based on the themes to be investigated. A decision has to be taken about the number of questions required for each theme to be sufficiently “fleshed” out. A useful strategy is “anticipatory probing”. This involves trying to go through each interview (question) in one’s head to estimate the kind of questions that would have to be asked for deep and meaningful details to be obtained without having to be too directive or manipulative during the actual interview. At the end of the construction process questions must be organized logically based on the structuring of the themes. A hypothesis or proposed structure is formulated.

Figure 1. Interactions in Quality of Care. Source: Burley and Greene [11].
Locating the sample units/building the sample follows hypothesizing. A purposive sample is recommended since the goal is to find out more about a set of specified themes or issues experienced by a particular group of individuals. Snowballing should be used in times when it is difficult to access suitable respondents. Gaining access to potential respondents via institutions such as doctors’ registers, victim registries and records of institutions such as hospitals, prisons, asylums and half-way houses is palpable.

The next step is conducting the interviews. Once the sample units have been identified and have agreed to participate in the research the interviewing begins. Patton (cited in Maykut and R. Morehouse, [12]) provides an excellent analysis of probing skills relevant for use here. The detail oriented and clarification probes which require asking questions to obtain the essence of issues are strongly recommended. Upon completion of the second or third interview there should be formative evaluation to determine whether or not respondents have the knowledge being sought. Careful evaluation of the adequacy of the quality and quantity of data follows. If the need arises the researcher must be prepared to switch to an alternative plan in order to attain the desired results. Any means of recording the data which allows for comprehensive transcription is suggested. The writing of memos and reflective statements should follow from the first interview.

Comparative analysis of the emerging data is conducted once the data gathering process ends. The interviewer must use techniques of comparison such as identifying the language in each interview (deconstruction) to ascertain the extent to which it adequately portrays the theme or themes. The major goal is the induction of a systematic body of evidence from the different respondents that is capable of substantiating the voracity or relevance of the theme or themes selected for review. For the extended or deep variant, the analytic process continues with the search for new themes by open and axial data coding systems until the additional raw data has been thoroughly reduced and categorized in meaningful (thematic identification) ways.

Presentation of data is the pre-final phase incorporating an evaluation of the entire process in order to determine the best way of linking the new information to the old themes or proffering a new thematic structure. There are several mechanisms by which this can be accomplished. Even though narratives or descriptions are popular, pictures, diagrams and flow charts can also be effectively employed. A variety of these is recommended. Hypothesizing with or without refutation is the best way to describe data presentation. That is it does not go so far as Popper [8] suggests. The primary concern is not to engage in cyclic reasoning but to build stand-alone theory. This takes us back to Hyde [1] who affirms that deductive and inductive approaches can be combined. Hyde [1] claims “both quantitative and qualitative researchers demonstrate deductive and inductive processes in their research, but fail to recognise these processes. The research paradigm followed in this article is a post-positivist (‘realist’) one” (p i).

The final stage, report writing, involves a careful synthesis of the results of the study. There is no prescribed format for reporting the results. A research question, description of methods and procedures, and results/findings are central features of the report.

10. Advantages of Extended Variant of STI

It is very appropriate for use in case studies since it will provide greater focus and direction in the collection of data. It enhances the validity of the structured and unstructured interviews as it selects a sample with in-depth knowledge of the topic. Additionally initial ideas are well grounded as they are derived from renowned sources. It is capable of deepening theoretical understandings of issues by challenging them empirically. It is capable of providing the impetus for launching further research especially by the use of surveys or interviews. It is advantageous for conceptual development in questionnaire construction. STI will increase the chance that concepts are culturally relevant and are of greater content validity. In this way the scientist does not have to impose his will upon his subjects by including sub-concepts which he perceives are of significance to them. STI can provide greater opportunity for the development of new creative scales for survey research as hypotheses are tested qualitatively.

11. Limitations of the Deep Variant of STI

It can be argued that STI is better suited to the analysis of content, texts or regularities in human life such as social institutions and structures. It relies on extreme case purposive sampling to be of much real value. It bears some similarity to other qualitative data analysis techniques such as analytic induction.

12. Conclusions

While analytic induction is effectively employed in ethnographic studies and elsewhere, STI can be employed in
any other qualitative researcher design. As stated earlier it can stand alone. There are data gathering techniques useful for structured interviewing with deep or surface probing. In an unpublished paper Berkeley and Thomas examined family conflict between parents and young adults aged 18 - 21 years in which both the surface and extended variants of STI were employed. The first ten participants were asked to describe a number of conflicts they experienced within the family. In this way, we employed only the surface variant of STI. To make use of the deep variant of STI, we had an additional ten participants describe the themes obtained from the first sample and suggest and describe new ones. At the end of the second round of interviewing we had exhausted all themes using the deep variant of STI. Among them were authority defending (parents attempt to exert and maintain authority over them), sibling perpetrated conflict arising from rivalry and jealousy, and poor academic performance at university. We found that while there were sources of family conflict parenting styles varied according to the situation or context. By collecting in-depth data about conflict we concluded that authoritarian, authoritative and permissive styles of parenting are fluid—parents adopt all types at different times depending on the nature and severity of the conflict. We found that fathers had a mediating role in mother-child conflict. Even passive fathers had this effect of reducing the likelihood of conflict escalating into physical and verbal fights.

STI shares some commonalities with other qualitative research designs. The most obvious is the usage of interviews and the reliance on purposive sampling. Its uniqueness comes from the fact that it begins with a structured framework, a kind of hypothesis, whose aim is not mere falsification but confirmation, discovery or contemporizing (bringing up-to-date) a phenomenon. Popper’s [8] stance that deduction is synonymous with falsification is re-interpreted to deduction with confirmation or modification. We are not testing hypotheses to continue the cycle of research. Presumably, we wish to keep the cycle of research alive by re-validating or modifying the structures and processes which come to characterize social life or human existence. Giddens has quite rightly recognized the duality of structure, Giddens [13]. There is no reason why structured approaches are incompatible with hermeneutical research.

Finally I have sought to combine the research traditions of positivism and interpretivism by illustrating the application of hypothesizing in qualitative research. I have always pushed for greater recognition of complementary philosophies in research in the social sciences (Berkeley [4]). I hope to draw others into the discourse of STI. Many would dispute it but others agree that STI is worthy of further examination to assess its contribution to qualitative research in social life.

References