

THOUGHTS AND PERSPECTIVES ON TECHNIQUES AND TOOLS OF QUALITATIVE DATA ANALYSIS IN POLITICAL INQUIRY

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Abstract

This paper interrogates the techniques and tools of qualitative data analysis in political inquiry. Beyond identifying and explaining the specificities of qualitative data analysis, the objectives of this study is largely to provide epistemological and innovative insight into the broad typologies as well as techniques and tools of qualitative data analysis. The paper hypothesizes firstly, that qualitative data analysis exhibit certain specificities and that against the backdrop, that there are characteristic techniques and tools of conducting qualitative data analysis. Accordingly, the paper posits that there are clear techniques and tools necessary for requisite analysis of qualitative data. In providing and arguing the proposition, the study relies substantially on private and public documentary sources as materials for the generation of data; while grounded theory techniques and analytic inductive technique enabled one to effectively analyse the data. The findings of this study identified three broad techniques and tools of qualitative data analysis. The broad tools are General Analytic Technique, Data Specific Technique and Case Study Technique. In the quest for effective applications of tools of qualitative data analysis, it is possible to take advantage of methodical triangulation in data analysis and while at the same time relying on the combination of two or more techniques and tools.

Key words: Data Analysis, Qualitative research, Techniques and tools of analysis.

Introduction

Research and benefits of research are part of human beings' everyday life and heritage, offering much more than is sometimes acknowledged. Whether the purpose of research is to solve specific problems or add to the quantum of knowledge, it is important to undermine the fact that the generation or collection of data for research has little or no benefit, unless it is subjected to profound analysis. Accordingly, data analysis in scientific research, which could be qualitative, quantitative or combinational, is a sine qua non in every veritable research.

Given the fact that it is often logical to conceive and conduct scientific researches in political science and related disciplines from the prisms of either how qualitative or quantitative the research is, the question of what differentiates the former from the latter as well as what constitutes qualitative data analysis in political inquiry need to be problematized and properly appreciated. Furthermore, it also necessary to explore and interrogate the typological options available in the analysis of qualitative data in political

inquiry. Against this backdrop, what in the first place makes qualitative research unique, and what are the specificities and factors of qualitative data analysis. Secondly, which techniques and tools of data analysis are available and appropriate in the qualitative analysis of data in political inquiry?

In response to the foregoing anchor questions, it makes good sense to state that the purpose of this paper is largely to specify relevant techniques and tools of qualitative data analysis in political inquiry. Doing the aforementioned necessarily entails conceptualizing the nature of qualitative research and qualitative data analysis, underling the specificities and factors of qualitative data analysis in political science and other disciplines as well as enumerating and explaining the specific techniques and tools of qualitative data analysis in the discipline. Accordingly, following this brief introduction is a discourse on relevant literature and conceptual issues. This is followed in part three by methodological and propositional considerations. Part four of this study addresses the specificities and factors of qualitative data analysis while part five is on the techniques and tools of qualitative data analysis in political inquiry. Part six which is the concluding analysis, contains the summary and conclusion.

Relevant Literature and Conceptual Issues.

Data analysis or analysis of data is a key element in every research procedure, but has incidentally been variously conceived. For Asika (1991), for instance, analysis is simply the breaking down and ordering of the quantitative information gathered through research. The shortcoming of this view is that it sees research information or data merely in quantitative terms. This should not be. Correctly stated, data analysis is a method of obtaining fresh knowledge that take on different forms according to or depending on the nature of the object or phenomenon being studied. It is obviously with this in mind that analysis of data has been usefully defined as:

... those techniques whereby the investigator extracts from the data information that was not apparently there before and which would enable a summary description of the subject studied whether human or material to be made ...[it] will enable the investigator to obtain the summary descriptive information with which he can answer such questions (Nwana, 2005: 250).

The implication of the foregoing is that analysis of data presents a researcher with a strong scheme for making sense out of a mass of data in accordance with the nature of the object. Following similar trajectory, Best (in Best, ed. n.d.: 62) analysis is “the detailed study of any situation using specific framework, paradigms and methods; or the study of a problem, which aims to bring about a patterned systematic understanding of certain issues under focus”. Simply stated, researchers conduct data analyses with due recourse to appropriate and specific frameworks, paradigms and methods. Against this backdrop, analysis in this study is conceived as a detailed study of a problem or object, with the aim of bringing about a patterned systematic understanding of issues under focus, in accordance with the nature of the object, using specific framework, paradigms and methods. To make good sense, a worthwhile data analysis necessarily aligns with

paradigms, approaches or prisms that are in tandem with issues in focus in the particular research as designed.

The issue and place of data analysis as an integer of research design has also attracted the attention of many authorities in both qualitative and quantitative research designs options. For instance, while positing that research design is a plan or overall scheme of research, Kerlinger (1973) points out that research designs is essentially what the researcher will do, and “this includes methods to be used to gather and analyse the data and the strategy “(in Biereenu-Nnabugwu, 2018:5). This understanding largely explains why specification of method of data analysis is easily one of the key element of every research design.

On the concept or meaning of qualitative research, McNabb (2009: 341) opines that it is essentially a set of non-statistical inquiry techniques and processes used to gather and analyse data about social phenomena. Strictly stated, qualitative research is the use of predominantly non-numeric techniques and tools or instruments in the generation and analysis of data. Thus, qualitative research typically involves studies in inductive, theory-generating, subjective and non-positivist processes (Lee, 1999). It is necessary that we dig deeper on the characterization or the qualities of qualitative as opposed to quantitative research.

In a more practical terms, Mack, N., Woodson, C., MacQueen, K. M., Guest, G. and E. Namey (2005) point out that there are two major distinctions between qualitative and quantitative researches. The first is that qualitative research is concerned with a particular research problem in a specific population. Accordingly, qualitative research seeks to understand a given research problem, topic or situation from the perspective of the local population it involves. Secondly, qualitative research differs from quantitative research in that it is “especially effective in obtaining culturally specific information about the values, opinions, beliefs and social context of particular populations” (Mack et al, 2005:1). Effectiveness of qualitative research in this regard is hinged on or possible on account of the inert capacities and attributes of quantitative method.

The implication is that data is deemed qualitative when collection of words, symbols, pictures or other non-numerical records, materials or artefacts involved are collected by, or relied upon by the researcher. In doing this, qualitative research relies more on careful personal observation, in-depth interview and focused group discussion as well as logical reasoning, intuition and sequential evidence. As is often the case, collected qualitative data are not easily measurable in profound manners such as elaborate mathematical and statistical calculations. Accordingly, qualitative researches are generally amenable to textual descriptions, as well as nominal (classificatory) and ordinal (ranking) levels of measurement. See for example, Biereenu-Nnabugwu (2006), sub-chapter 4.3.

Whatever is the case, the guiding principle is that in qualitative research, the data in question, and the method used in gathering and analysing it, must have relevance to the phenomenon or social group being studied. This partly explains why qualitative research studies are said to typically involve what has been described as inductive, theory-generating, subjective and non-positivist processes. In contrast, quantitative research “involves deductive, theory-testing, objective and positivist processes (Lee,1999 and

McNaab, 2009). Interestingly, there are five theme-based or thematic yardsticks and basis for the differentiation between qualitative and quantitative research studies (Creswell, 1994 and Biereenu-Nnabugwu, 2006).

The thematic yardsticks or basis for differentiation between qualitative and quantitative research studies are (a) *Ontological yardstick*. Ontology has to do with the science of real being, reality and the necessary characteristics of all existence. The issue of concern here is 'what is the goal or how does the researcher perceive reality'? Oftentimes, qualitative researches are inclined towards concrete reality, value orientation or grand goals rather than factual or incremental studies. (b) *Epistemological yardstick*. Epistemology is interested in the critical investigation of the nature, grounds, limits and validity or criteria of human knowledge. As a yardstick, epistemology enables one to focus on the role or functions undertaken by the researcher in respect of the mode or status of the knowledge and relevant method of analysis. Accordingly, it is useful to establish whether the mode is qualitative or quantitative, basic or applied or even deductive or inductive.

Other yardsticks or basis for differentiation between qualitative and quantitative research studies also exist. They are (c) *Axiological yardstick* Axiology has to do with the study of value or the nature of value itself. The major concern here is to what extent is the study concerned with value assumptions, in terms of whether it is good or bad, and whether it is preoccupied with the issue of what is or with what ought to be. (d) *Rhetorical yardstick* The term rhetoric refers to the art of discourse, skill in the use of written and language or oratory, and the power of pleasing and persuading. Rhetorical yardstick focuses on style of language used by the researcher. Qualitative studies are more inclined to sequential and logical order as well as and argumentative traditions. On the other hand, quantitative studies rely more on statistical and numerical calculations. (f) *Methodological yardstick*. Simply stated, methodology is concerned with the science of method or of arranging in due order. Essentially, there are two broad orders, approaches or methodological paradigms in political inquiry. Methodological yardstick enables a researcher to align either with Interpretivist-constructivism / qualitative paradigm or with positivism / quantitative paradigm. While the former emphasizes logical argument and non-numerical generation and analysis of data, the later emphasizes numerical generation and analysis of data.

Interestingly, Mack et al (2005) agree that there are five basic differences between qualitative and quantitative research methods, but hinge their differentiation on a set of entirely different and more practical yardsticks. They are (a) General Framework. The research instruments in use in qualitative researches are more flexible, iterative in style, and semi-structured methods. On the other hand, quantitative research instruments are rigid in style of questions and relies on highly structured methods. (b) Analytical objectives: while qualitative researches are inclined towards the description of variation and explanation of relationships, quantitative researches quantify variation and predict causal relationships. More still, while qualitative researches describe individual experiences and group norms; quantitative researches are characterized by the description of the population. (c) Question formats: the type of questions posed by qualitative and quantitative research methods also differ; while the questions posed by qualitative

researches are open-ended, questions posed in quantitative research methods are often close-ended. (d) Data format: the focus here is on the types of data collection instrument they use, and the form of data they produce. While qualitative research data types and forms are essentially textual, that is, obtained from field notes, videotapes, audiotapes etc; quantitative research types and forms are characteristically numerical, that is obtained by assigning numerical values to responses. (e) Flexibility in study design: the focus here is on the degree of flexibility that is built into the design of the study. In the first place, while some aspects of the study in qualitative research are flexible, for example, the wordings of particular interview questions, that of quantitative research is stable from beginning to the end. Secondly, in qualitative researches participant responses affect how and which questions researchers ask next; whereas in quantitative researches participant responses do not influence or determine how and which questions researchers ask next. Thirdly, in qualitative researches, the study design is iterative, this is because here data collection and research questions are adjusted according to what is learned in the process of research; whereas in quantitative researches, study design is subject to statistical assumptions and conditions.

Methodological and Propositional Considerations

This paper relies largely on techniques for the analysis of data from documentary sources especially personal and public documentary sources. This entails the use of library materials, internet sources, journals and course books for the generation of relevant data. The generated data were analysed by examining the critical issues that have come to assume importance in qualitative data analysis. General analytic technique enabled us to analyse gathered data closely alongside inductive analytic technique and textual analysis.

Putting the foregoing in perspective, it is now necessary to set out two interrelated prepositions to guide the study. Accordingly, we hypothesize, first, that qualitative data analysis exhibit certain elements, specificities and factors. Secondly, that against the backdrop of the foregoing, that there are characteristic techniques and tools of conducting qualitative data analysis. Accordingly, the paper posits that there are clear techniques and tools necessary for requisite analysis of qualitative data. Let us first explore and discuss elements of qualitative research as well as features and factors qualitative data analysis in political inquiry.

Elements of Qualitative Research in Political Inquiry

Beside the five basic differences between qualitative and quantitative research methods identified by Mack et al (2005) a range of elements, particularly issues and instruments, are associated with qualitative research techniques and tools. As pointed out in Biereenu-Nnabugwu (2019) there are really six key elements of qualitative research and analysis that need to be clearly acknowledged. The first element of qualitative research is that it is holistic and multi-dimensional. It sees research enterprise from the prism of synthesized units that is part of an organic whole. As a corollary, qualitative research often considers research to be an activity that has many sides, extents or dimensions. On account of the

foregoing, a major concern of qualitative research is to clearly understand historical developments of reality and to explain social and political conditions in totality.

The second element of qualitative research is that it is essentially descriptive and in-depth. Qualitative research is essentially descriptive, just as it strives to be in-depth. The act of description has to do with giving account or describing so as to delineate, contest, compare, classify analyse, interpret and explain conditions, prevailing events, practices, beliefs, attitudes and on-going processes. Qualitative research is not only associated with and known for providing in-depth or detailed narratives but also for explaining issues or events and their relationships over a long time.

The third element of note in qualitative research is that it deals with the real world. The fact that the ontology of qualitative research deals with the real world constitute the third element of qualitative research design and analysis. Qualitative research is usually interested in studying reality, that is in terms of institutions, processes, peoples' behaviour and attitudes. In doing this using, it employs a rhetorical tradition that hinge on ordinary and natural language rather than mathematical and statistical models or complex numerical expressions.

The fourth significant element in qualitative research is that it does not aim at statistical test of hypothesis. Qualitative research designs and analyses do not aim at statistical test of hypothesis. This is largely because data collected are not easily measurable: they are generally at the textual, nominal and ordinal levels. Qualitative research designs and analyses rely heavily on logic, rigorous thinking, sufficient evidence and alternative considerations in both the formulation of research propositions and analysis of generated data.

Fifthly, qualitative research is essentially dialectic and interactive. On this account, it is important to also note that given the epistemology of qualitative research designs and analyses, that critical issues in qualitative research are substantially mutually reinforcing, inform one another and therefore interactive. This is largely on the ground that qualitative researches are oftentimes mutually reinforcing and interrelated such that it interacts with man and society. In addition, qualitative research permits researchers to look at problems from the insider perspective based on certain axiological assumptions.

Qualitative research reaches out to and uses descriptive statistics. To strengthen its methodological sagacity, qualitative research oftentimes reaches out to and uses descriptive statistics. In doing this, qualitative research relies on tools of descriptive statistics at three levels (a) At the level of measures of description, qualitative research relies on largely ratio, proportion and percentages to simplify, summarize, and illustrate on the research problem and hence the research hypothesis (b) The interest of the second level is the measures of central tendency, namely: mean, mode and median. The trio are helpful in indication and description of a set of data with a single number. (c) The last of the three levels is measures of dispersion. The tools at this level is on range, mean deviation and standard deviation. The focus of the tools is to state how the data are spread or scattered below and above the mean. There is need also to examine the key features and factors of qualitative data analysis.

Features and Factors of Qualitative Data Analysis in Political Inquiry

To look closely at the features and factors of qualitative data analysis, recall first that analysis in this study is conceived as a detailed study of a problem or object, with the aim of bringing about a patterned systematic understanding of issues under focus, in accordance with the nature of the object, using specific framework, paradigms and methods. Against this backdrop, qualitative data analysis connotes the deployment of relevant research techniques and tools in the thorough examination and interpretation of qualitative research data. Three features of qualitative data analysis are identified and discussed here. They are, first, the analytical prowess of the researcher. Analytical prowess of the researcher himself is a major feature of qualitative data analysis. Qualitative data analysis relies substantially on the skill and abilities of the researcher in a way that is not normally expected and acknowledged in quantitative research (McQueen and Knussen, 2003) No wonder then that the researcher is deemed very central, not only in qualitative data analysis stage, but actually all through the stages in the process of quantitative research.

Secondly, qualitative data analysis is characteristically more involving. As noted when qualitative research was characterized earlier, analysing qualitative data entails more intense participation that is characteristically iterative and more involving. The expectation, and in deed, the reality here is that the researcher is deeply involved in the study in focus. The third feature of qualitative data analysis is that it often intertwined. The import is that in qualitative research, data analysis is closely related, in fact in many occasions intertwined, and this entails particularly the fact that in qualitative data analysis oftentimes begin from data generation stage. Having examined the features of qualitative data analysis, it is not out of place to also focus on the factors that are necessary in the quest for a veritable qualitative data analysis

In line with the foregoing, three factors are deemed very fundamental in the conduct of qualitative analysis of data. The factors are, firstly rigorous thinking. To be rigorous in the way one thinks simply entails being logical, accurate and exact. A hallmark of being rigorous in qualitative data analysis is recourse to appropriate methods and thorough use of relevant tools of data presentation and data analysis in a manner that is not only logical and systematic, but also accurate and credible.

The second factor in the conduct qualitative data analysis is sufficient evidence. Good research is driven by search and the provision of relevant and due evidence. Evidence serves as proofs and enables a researcher to arrive at conclusions that are fully substantiated. In this way evidence constitutes not only the ground or reason for knowledge, but actually the bases for what is known. The third factor of importance is alternative considerations. This is because in qualitative data analysis, qualitative explanations oftentimes have alternatives. A qualitative researcher needs to bear in mind that issues under consideration in data analysis can and are likely to be given alternative explanation. Further still, the same issue could be manifest for consideration in other forms. The import is that nothing is entirely as it seems to be.

Techniques and Tools of Qualitative Data Analysis in Political Inquiry

Techniques and tools of qualitative data analysis refer to specialized methods and explanatory devices for detailed, logical and systematic study of a problematic data or object, with the aim of probing, arguing and bringing about a patterned and systematic understanding of the problematic or issues under focus. This is usually conducted in accordance with the nature of the object, using specific frameworks, paradigms and relevant methods. Broadly speaking, there are three main techniques and tools in the analysis of qualitative data. The broad tools are General Analytic Technique, Data Specific Technique and Case Study Technique (Strauss, 1985; Obikeze, 1990 and Biereenu-Nnabugwu, 2006). There is need to explore and discuss each of the identified three broad techniques and tools.

Table 1: BROAD TYPES OF TECHNIQUES AND TOOLS OF QUALITATIVE DATA ANALYSIS

S/N	Broad Types	Key Elements and Focus
1	General Analytic Technique	<ul style="list-style-type: none"> * Tailored to align with specific types of data from a range sources. * Seven types of general analytical techniques are identified
2	Data-Specific Technique	<ul style="list-style-type: none"> * Specific to identifiable sources of qualitative data. * Unlike the general analytic techniques which are applicable to qualitative data from a range of sources, data specific techniques align with specific qualitative data generation instrument. * In line with key qualitative instruments of data generation, four types of data-specific techniques are identified.
3	Case Study Technique	<ul style="list-style-type: none"> * Essentially in-depth, thorough and well-ordered examination of the status of the issue at hand and the interaction of various elements within it. * Useful in the validation and justification of conclusion and interpretation made by researchers. * Enriches and facilitates the presentation of different kinds of data

Source: Compiled by the author from various sources

General Analytic Techniques The general analytic techniques represent a general approach to qualitative data analysis from a wide range of sources. Accordingly, the techniques are tailored to align with specific types or sources of data. Seven types of general analytical techniques are identified here. They are highlighted and discussed below: (a) *Narrative analytic technique*. This involves detailed description and interpretation of observed events and interactions. Sometimes called ethnographic descriptive technique,

narrative analysis technique enables the researcher to grasp the exact meaning of actions and words used or employed by actors and respondents. The technique is useful in proper interpretation of terms, events and interactions and also makes for proper understanding of words and actions in the context of the people or reality under study. (b) *Sequential analytic technique* Sequential analytical technique involves a more systematized analysis and some elementary quantification such as use of clearly formulated research problems, frequency tables, etc. it also involves operationalization of concepts / indicators, checking the frequency and distribution phenomena as well as interpreting the result in the context of the evident data. Sequential analytical technique is a derivative of or closely related to quantitative orientation; accordingly, the technique is useful when full quantification is not possible.

Other general analytic techniques are (c) *Constant comparative technique*. As the name suggests, constant comparative technique enables a qualitative researcher to go through series of stages from particular to general. It may involve individual case observation, leading from subgroup characteristics to grand generalization. (d) *Analytical inductive technique*. As an analytical inductive tool, analytical inductive technique is geared towards the development of a theory or explanatory model based on the issues which emerge, or that was observed in the population. The technique seeks to account for phenomena, issues and problems that come to light in the course of the field work. Six stages of analytical inductive technique are identifiable. They are: (i) Rough definition of phenomenon (ii) Formulation of hypothetical explanation (iii) Study of a particular case (iv) Reformulation or re-definition if need be (v) Involve a number of case (vi) Continue, until a universal relationship is established.

Table 2: TYPES OF GENERAL ANALYTIC TECHNIQUES AND TOOLS OF QUALITATIVE DATA ANALYSIS

S/N	Types	Goals and Attributes
1	Narrative analytic technique.	Involves detailed description and interpretation of observed events and interactions. Enables researchers grasp and properly understand the exact meaning of actions and words employed by actors and respondents in the context of the people or reality under study.
2	Sequential analytical technique	Involves a more systematized analysis and some elementary quantification such as use of frequency tables, percentages, etc Involves operationalization of concepts / indicators, checking the frequency and distribution phenomena as well as interpreting the result in the context of the evident data. Closely related to quantitative orientation and useful when full quantification is not possible
3	Constant comparative technique	Enables a qualitative researcher to go through series of stages from particular to general. Involves individual case observation, leading from subgroup characteristics to grand generalization.

4	Analytical inductive technique	Geared towards the development of a theory or explanatory model based on the issues which emerge, or observed in the population. Seeks to account for phenomena, issues and problems that come to light in the course of the field work. Six stages of analytical inductive technique are identifiable
5	Textual analytic technique or textual analysis	*Entails careful reading and examination of the contents of documents and written records in the light of research problematic, relevant realities, narrations and meanings. *Describes and interprets the characteristics of documents, written records and visual messages. *Involves employing logical reasoning and argumentation to arrange, classify and organise collected data into a form that enables meaningful and relevant interpretation. *Unlike content analysis, textual analysis approaches data analysis in less numeric manner by focussing more on the meaning of the content rather than the number of times that particular phrase, term or communication content appears. *Discussion is a factor of textual analysis that attempts to answer the why and how questions in communication; and involves systematic, interpretive and logical statements designed to exhaustively expose the implication. *As textual analysis, discussion could be a form of short comments which a researcher makes.
6	Grounded theory technique.	*Emphasizes the generation of theory from data in which the theory is grounded. *Expects a researcher to analyse data closely: sentence by sentence, phrase by phrase of the field note, interview, etc and constantly compare. *Can be used alongside other techniques.
7	Discourse analytic technique	Explores the meaning produced by coherent sequences of sentences, propositions, speeches and talk shows involved in the use of political communications. Entails the study of written or spoken language in relation to its social context. Interest is really on political discourse analysis as a field of discourse that focuses on political forms of communication such as debates and speeches as the phenomenon of primary interest.

Source: Developed by the author with inputs from Obikeze (1990), Biereenu-Nnabugwu (2006) and other sources

The fifth general analytic technique for consideration is (e) *Textual analytic technique*. Textual analytic technique refers to a tool of qualitative data analysis that describes and interprets the characteristics of documents, written records and visual messages. Also called textual analysis, textual analytic technique entails careful reading and the

examination of the content of documents and written records in the light of research problematic, relevant realities, narrations and meanings. Unlike content analysis, textual analysis approaches data analysis in less numeric manner by focussing more on the meaning of the content rather than the number of times that particular phrase, term or communication content appears (<http://www.coursehero.com>). Textual analytic technique involves employing logical reasoning and argumentation to arrange, classify and organise collected data into a form that enables meaningful and relevant interpretation. Strictly speaking, the main purpose of textual analysis is to describe and interpret the content, structure and functions of the communication messages inherent in a text or written record. In doing this, textual analysis relies on the examination of the social content to explain logical patterns and trends in generated data content. It delves deeper to explain the social factor that is associated or responsible for what is observed or that has contributed to the study at hand.

Discussion is by and large a factor of textual analysis. Discussion attempts to answer the why and how questions in communication. It involves systematic, interpretive and logical statements designed to exhaustively expose the implication. Discussion could be a form of short comments which a researcher makes. Simply stated, discussion refers to “short comments the researcher makes after each data is presented as well as detailed discussion on the result leading to the expected interpretation” (Uzoagulu, 1998: 131). As pointed out in Biereenu-Nnabugwu (2006), discussion as textual tool of data analysis, may for example, follow the pattern of question and a table depicting the responses to the question.

The first of the two remaining general analytic techniques is (f) *Grounded theory technique*. Grounded theory technique emphasises the generation of theory from data in which the theory is grounded. In doing this, it is important that the researcher analyses the data closely: sentence by sentence, phrase by phrase of the field note, interview, etc and constantly compare. Grounded theory technique can be used alongside other techniques. (g) *Discourse analytic technique* Discourse analytic technique, or simply discourse analysis is a qualitative tool of data analysis for the study of written or spoken language in relation to its social context. As a qualitative method of data analysis, discourse analysis explores the meaning produced by coherent sequences of sentences, propositions, speeches and talk shows involved in the use of communications. As political scientists, our interest is really on *political discourse analysis*. Political discourse analysis is a field of discourse that focuses on political form such as debates or speeches as the phenomenon of interest.

It is perhaps not out of place to also point out that discourse analysis is different from document analysis. No doubt a research tool, document analysis is really a technique for gathering or eliciting what is required from a document early in the process of research. Akin to *literature survey*, document analysis describes the act of reviewing existing documents of comparable sectoral process or system in order to extract pieces of information that are relevant to the current study and therefore be considered. (Chris Adam, www.modernanalyst.com (06|04|2020)). Document analysis is valuable in situations where establishing worthwhile background to a study is needed.

Data-Specific Techniques. As the name suggests, data specific techniques refer to qualitative analytical tools that are specific to identifiable sources of qualitative data. Unlike the general analytic techniques which are applicable to qualitative data from a range of sources, data specific techniques align with specific qualitative data generation instrument. In line with the key qualitative instruments of data generation, four types of data-specific techniques are identified. They are highlighted and discussed below. (a) *Technique for analysis of data from documentary sources.* The most popular technique for the analysis of qualitative documentary data or documentary sources (DOS) is textual analysis. Other equally useful technique for the analysis of qualitative documentary data are grounded theory technique and discourse analysis. Take due note that content analysis is imperative and in deed recommended when the communication content being analysed necessitates quantitative inclined data analysis requiring appreciable level of numeric systematization and clear computation.

Table 3: TYPES OF DATA-SPECIFIC TECHNIQUES AND TOOLS OF QUALITATIVE DATA ANALYSIS

S/N	Type	Goals, Attributes and Procedures.
1	Technique for analysis of data from documentary sources (DOS)	Most popular technique for the analysis of qualitative documentary sources are textual analysis, grounded theory technique and discourse analysis. Content analysis is imperative and recommended when the communication content necessitates quantitative inclined data analysis, numeric systematization and clear computation.
2	Technique for analysis of data from focused group discussion (FGD)	*Begins during the gathering of data, it is accordingly necessary to note who said what in the discussion, observe the facial expressions and tone changes so as to make some judgements with regard to their exact meaning. *Involves transcribing what is recorded in the tape, listening out the tape with transcription for connotations, making necessary notes, organizing the views canvassed in the discussion into themes or headings, followed by synthesized summary. *Entails the description of what was said, interpretation of direct semantic content. *Involves deduction so as to decipher what people mean from what they say and interpretation or assessing the implication of what discussants say in relation to the research problem and the study objectives.
3	Technique for the analysis of data from in-depth interview (IDI)	*Requires personal insight, intuition and imagination and that the researcher describes, in good details, what he did to reach conclusion. *Be guided by the identification of key concepts and categories such as idioms and particularistic expressions used by interview respondents.

		<p>*Establish categories for identified concepts by operational definition so as to facilitate the structuring of data.</p> <p>*Entails coding the data into logical categories comparing and integrating coded interviews from members of the study population that belong to different socioeconomic groups; this helps to bring out differences and similarities that may require some explanations.</p>
4	Technique for the analysis of data from participant observation (POB)	<p>Four stages of analysis are identifiable in POB with the first being clear formulation of problems, hypothetical proposition and the identification of key analytical concepts and indicators for proper understanding and description of social life of the group being studied. Second POB stage involves checking the regularity and distribution of phenomena achieved by examining the data, checking the frequency, and looking at the regularity of the events and factors that informed the hypothesis. All these help to establish the general character of the phenomena being studied.</p> <p>Third stage entails constructing or welding together of a generalised model of social system or phenomenon being studied: entails designing a descriptive model that best explains the data the researcher has assembled, and which involves placing each observed social fact in its social context. This is achieved by tracing how it is connected with, and integrated into the web of other variables and social relationships and welding together so as to enable the researcher make general statements as regards the functions and importance of the studied phenomenon.</p> <p>The fourth and final stage of analysis and presentation of results, and comes after the field work and involves careful rechecks to determine the authenticity and reliability of information used, the validity of earlier conclusion and the meaning-fullness of interpretations. The aim is to establish a synthesis of the partial models</p>

Source: Developed by the author with inputs from Obikeze (1990), Biereenu-Nnabugwu (2006) and other sources

(b) *Technique for analysis of data from focused group discussion.* As is often the case, aspects of qualitative analysis for focused group discussion (FGD) begins during the gathering of data, that is to say during the discussion session. On account of this, it is not only necessary to note who said what in the discussion, but also to observe the facial expressions as well as tone changes so as to make some judgements with regard to their exact meaning. Analysis of data from focused group discussion involves transcribing what is recorded in the tape, listening out the tape with transcription for connotations, making necessary notes, organizing the views canvassed in the discussion into themes or headings, followed by synthesized summary. In describing what was said, interpretation of direct semantic content is oftentimes required (Hedges, 1985). This will first involve deduction so as to decipher what people mean from what they say. Secondly, interpretation entails assessing

the implication of what discussants say in relation to the research problem and the study objectives. Though no visible effort is usually required or expected to be made towards quantification, it is not impossible to achieve some levels of quantification in the summarization of the group's logical statements in discussion.

(c)*Technique for the analysis of data from in-depth interview* Putting individual in-depth interview (IDI) into best use in research requires personal insight, intuition and imagination. It also requires that the researcher describes, in good details, what he did to reach conclusion. In doing this he or she needs to be guided by the identification of key concepts and categories such as idioms and particularistic expressions used by individual in-depth interview respondents. There may be, in addition, need to establish categories for identified concepts. This is done by operational definition so as to facilitate the structuring of data. Code the data into logical categories. Thereafter, compare and integrate coded interviews from members of the study population that belong to different socioeconomic groups. This helps to bring out differences and similarities that may require some explanations.

(d)*Technique for the analysis of data from participant observation* Knowing that a key feature of qualitative research is that analysis of data actually starts while data is being gathered, four stages of analysis are identifiable in participant observation (POB). The first is the formulation of clear problems and the identification of key analytical concepts and indicators for proper understanding and description of social life of the group being studied. In practical terms, this also entails the generation of research hypothetical proposition that directs both the collection of data and how the other operations are undertaken. The second stage, in the analysis of participant observation, involves checking the regularity and distribution of phenomena. This is achieved by examining the data, checking the frequency, and looking at the regularity of the events and factors that informed the hypothesis. All these help to establish the general character of the phenomena being studied. The focus of third stage is on the construction or welding together of a generalised model of social system or phenomenon being studied. This entails designing a descriptive model that best explains the data the researcher has assembled, and as Becker (1970) points out involves placing each observed social fact in its social context. This is in turn achieved by "tracing how it is connected with, and integrated into the web of other variables and social relationships" (Obikeze: 78). Welding together or construction of a generalised model of social system being studied enables the researcher to make general statements as regards the functions and importance of the phenomenon. The fourth and final stage is undertaken after the field work has been completed. It is time for final analysis and presentation of results. This involves careful rechecks to determine the authenticity and reliability of information used, the validity of earlier conclusion and the meaning-fullness of interpretations. The aim is to establish a synthesis of the partial models.

Case Study Technique Case study refers to an intensive investigation that aim at clear understanding of a given phenomenon. A case study researcher is largely interested in finding out as much detail as possible about a particular research problem. "It involves collecting data that relate to a problem and experience and all the factors that affect the

behaviour of the entities in focus" (Biereenu-Nnabugwu, 2011: 181) They are essentially in-depth, thorough and well-ordered examination of the status of the issue at hand and the interaction of various elements within it.

Case study may not be, strictly speaking, considered a specialized technique of qualitative data analysis. This is because it represents a mode or an approach necessary for organising and presenting data in order to preserve the unitary character of the object being studied (Goode and Hart, 1952; Obikeze, 1990). As a technique of qualitative data analysis, case study is useful in the validation and justification of conclusion and interpretation made by researchers. It also enriches and facilitates the presentation of different kinds of data. Case study is developmental in approach and therefore less time bound and more fruitful in dealing with change over time. Against this backdrop, Walker (1985) Obikeze (1990) Biereenu-Nnabugwu (2011) underline the fact that case study technique does not only enable a researcher explain observed phenomenon as a continuation of past sequence of events, but also permit the invocation of methodological pluralism.

Summary and Conclusion

Research is deemed qualitative when predominantly non-numeric techniques and tools are used in the generation and analysis of data. As a corollary, data is considered qualitative when words, symbols, pictures or other non-numerical records, materials or artefacts involved are collected by, or relied upon substantially by the researcher. Collected qualitative data are not easily measurable, at least not in profound manner as is often associated with or involving mathematical and statistical calculations. Accordingly, qualitative researches are generally amenable to textual descriptions, as well as nominal (classificatory) and ordinal (ranking) levels of measurement. It relies more on careful observation, logical reasoning, intuition and sequential evidence. The guiding principle is that in qualitative research, the data in question, and the method used in gathering and analysing it, must have relevance to the phenomenon or social group being studied. This is such that qualitative research studies typically involve what has been described as inductive, theory-generating, subjective and non-positivist processes in contrast, to quantitative research which involves deductive, theory-testing, objective and positivist processes.

This study also underlined the key elements of qualitative research. The elements range from the fact that qualitative research is holistic and multidimensional, to underlining the fact that qualitative research does not aim at statistical test of hypothesis and at the same time reaches out to and uses tools of descriptive statistics. On the features of qualitative data analysis, the study identified three. The first feature is analytical prowess of the researcher. While the fact that qualitative data analysis is more involving is underlined as point number two, point number three underlined the fact that qualitative data analysis is often intertwined. Similarly, three factors were considered as being very fundamental in the analysis qualitative data. The three factors are rigorous thinking, sufficient evidence and alternative considerations.

Very importantly, three broad techniques and tools of qualitative data analysis were identified, namely General Analytic Technique, Data-Specific Technique and Case Study Technique. Under General Analytic Technique we identified seven techniques and tools of qualitative data analysis. They are narrative analytic technique, sequential analytic technique, constant comparative technique, analytic inductive technique, textual analytic technique, grounded theory technique and discourse analytic technique. For Data-Specific Technique we identified four techniques and tools of qualitative data analysis. The four techniques and tools here are for the analysis of data from documentary sources, DOS; focused group discussion, FGD; in-depth individual interview, IDI; and participant observation, POB.

In the case of Case Study Technique which is essentially an intensive investigation that aim at clear understanding of a given phenomenon a researcher is largely interested in finding out as much detail as possible about a particular research problem. Thus, ordinarily, case study involves collecting data that relate to a problem and experience and all the factors that affect the behaviour of the entities in focus. The point to note really is that as a technique of qualitative data analysis, case study is useful in the validation and justification of conclusion and interpretation made by researchers. It also enriches and facilitates the presentation of different kinds of data.

In conclusion, analysis of generated data is a very important aspect of a research process. For researches that are anchored or inclined to qualitative perspectives and methods, there is need to conduct the research, particularly analysis of the data based on the imperatives of qualitative of data analysis. The objective of this paper has been to interrogate the place of techniques and tools of qualitative data analysis in political inquiry. Beyond identifying and explaining the specificities of qualitative data analysis, the study provided in the main, the epistemological and innovative insights into the broad typologies as well as techniques and tools of qualitative data analysis.

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