

TECHNIQUES OF ANALYSIS: CONTENT ANALYSIS

Introduction:

Content Analysis is described as the scientific study of content of communication. It is the study of the content with reference to the meanings, contexts and intentions contained in messages. The term Content Analysis is 75 years old, and Webster's Dictionary of English language listed it since 1961. In 1952, Bernard Berelson published Content analysis in Communication Research, which heralded recognition for the technique as a versatile tool for social science and media researchers. Some scholars adopted it for historical and political research as well (Holsti, 1968). However, the method achieved greater popularity among social science scholars as well as a method of communication research.

It is a method of analysing written, verbal or visual communication messages. It was first used as a method for analysing hymns, newspaper and magazine *RESEARCH METHODOLOGY JAN 2007*. Today, content analysis has a long history of use in communication, journalism, sociology, psychology and business, and during the last few decades its use has shown steady growth (Neundorf 2002). In nursing it is mostly used in psychiatry, gerontological and public health studies (Table 1). Content analysis as a research method is a systematic and objective means of describing and quantifying phenomena (Krippendorff 1980, Downe-Wamboldt 1992, Sandelowski 1995). It is also known as a method of analysing documents. Content analysis allows the researcher to test theoretical issues to enhance understanding of the data. Through content analysis, it is possible to distil words into fewer content-related categories. It is assumed that when classified into the same categories, words, phrases and the like share the same meaning (Cavanagh 1997).

Origin:

The development of content analysis as a full-fledged scientific method took place during World War II when the U.S. government sponsored a project under the directorship of Harold Lasswell to evaluate enemy propaganda. The resources made available for research and the methodological advances made in the context of the problems studied under the project contributed significantly to the emergence of the methodology in content analysis. One of the outcomes of the project, the book entitled *Language of Politics* published in 1940s (Lasswell et. al. 1965), still remains a classic in the field of content analysis. Later on, the method spread to other disciplines (Woodrum, 1984).

Definition:

A number of definitions of content analysis are available. According to Berelson (1952) *content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication*. Holsti (1968) says that it is *any technique for making inferences by systematically and objectively identifying specified characteristics of messages*. Kerlinger (1986) defined content analysis as *a method of studying and analyzing communication in a systematic, objective, and quantitative manner for the purpose of measuring variables*. Krippendorff (1980) defined content analysis as *a research technique for making replicable and valid inferences from data to their context*. According to Stone, content analysis refers to *any procedure for assessing the relative extent to which specified references, attitudes, or themes permeate a given message or document*.

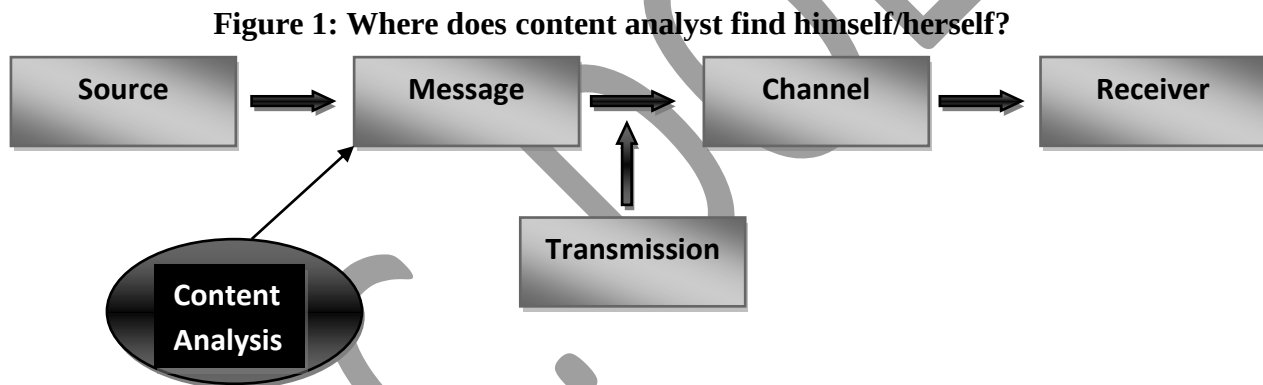
A careful examination of the definitions of the method show emphasis placed on aspects such as system, objectivity, quantification, context and validity - with reference to the inferences

drawn from the communication content about the sender, the message or the receiver of the message. Thus, content analysis is all about making valid, replicable and objective inferences about the message on the basis of explicit rules. The material for the content analysis can be letters, diaries, newspaper content, folk songs, short stories, messages of Radio, Television, documents, texts or any symbols.

Further, like any other research method, content analysis conforms to three basic principles of scientific method. They are:

1. **Objectivity:** Which means that the analysis is pursued on the basis of explicit rules, which enable different researchers to obtain the same results from the same documents or messages.
2. **Systematic:** The inclusion or exclusion of content is done according to some consistently applied rules where by the possibility of including only materials which support the researcher's ideas – is eliminated.
3. **Generalizability:** The results obtained by the researcher can be applied to other similar situations.

Now, if content of communication forms the material for content analysis, where does a content analyst find himself/herself in the communication process? Figure 1 shows the communication process and where the analyst figures.



As can be seen, the analyst figures at the point of the message, and as Holsti (1968:601) points out, draws inferences about sender(s) of message, characteristics of message itself, or the effects of the communication on the audience – that is the researcher interprets the content so as to reveal something about the nature of the audience or of its effects.

What Content Analysis can do?

- It goes beyond the impressionistic observations about the phenomena and can help you make a quantitative expression about the phenomenon i.e. express it in numbers, in percentages, which will be more specific, and objective.
- It is an unobtrusive research technique useful to study sensitive research topics.
- It is context-sensitive and therefore can process symbolic meanings of data. Though predominantly seen as a quantitative method, it can effectively capture qualitative content as well (Stempel, 1989:121). The context-sensitivity of the method will be useful in articulating the qualitative dimensions such as for example, the direction of coverage of news items as favorable or unfavorable.
- It is a safe method in the sense that if the researcher found that a portion of the necessary information was missing or incorrectly coded, it is possible to return to the text and

supplement the missing data. This is not always possible in experimental or survey research (Woodrum, 1984).

- It can deal with large volumes of data. Processing may be laborious but of late computers made the job fairly easy.
- It is a shoestring methodology, which is typically labour-intensive and requires minimum capital investment.

What it cannot do?

- Its inferences are limited to the content of the text only. Similarly, symbols are processed and coded according to the attribution given by the researcher or coder. There is no guarantee that the sender or receiver shares the same attributed meaning.
- When it deals with semantic differences or differences in regard to the meanings of words, the findings can be less valid and reliable.
- It is argued that content analysis which confines itself to counting the individual units and their frequency of occurrence such as for example the number of times the word ‘globalisation’ appeared, may fail to capture the meaning or significance with which these symbols are used in the texts analyzed.
- The reliability and validity issues in content analysis still remain unresolved (Krippendorff, 1980)
- The method cannot be used to test casual relationships between variables (Chadwick, et. al., 1984).

Process of Analysis:

Two approaches Content analysis is a method that may be used with either *qualitative* or *quantitative* data; furthermore, it may be used in an *inductive* or *deductive* way. Which of these is used is determined by the purpose of the study. *If there is not enough former knowledge about the phenomenon or if this knowledge is fragmented, the inductive approach is recommended.* The categories are derived from the data in inductive content analysis. *Deductive content analysis is used when the structure of analysis is operationalized on the basis of previous knowledge and the purpose of the study is theory testing.*

An approach based on inductive data moves from the specific to the general, so that particular instances are observed and then combined into a larger whole or general statement. A deductive approach is based on an earlier theory or model and therefore it moves from the general to the specific. These approaches have similar preparation phases.

Types of Content Analysis:

In this guide, we discuss two general categories of content analysis: **conceptual analysis** and **relational analysis**. Conceptual analysis can be thought of as establishing the existence and frequency of concepts – most often represented by words or phrases – in a text. For instance, say you have a hunch that your favorite poet often writes about hunger. With conceptual analysis you can determine how many times words such as “hunger,” “hungry,” “famished,” or “starving” appear in a volume of poems. In contrast, relational analysis goes one step further by examining the relationships among concepts in a text. Returning to the “hunger” example, with relational analysis, you could identify what other words or phrases “hunger” or “famished” appear next to and then determine what different meanings emerge as a result of these groupings.

- ***Conceptual Analysis***

Traditionally, content analysis has most often been thought of in terms of conceptual analysis. In conceptual analysis, a concept is chosen for examination, and the analysis involves quantifying and tallying its presence. Also known as thematic analysis [although this term is somewhat problematic, given its varied definitions in current literature--see Palmquist, Carley, & Dale (1997) vis-a-vis Smith (1992)], the focus here is on looking at the occurrence of selected terms within a text or texts, although the terms may be implicit as well as explicit. While explicit terms obviously are easy to identify, coding for implicit terms and deciding their level of implication is complicated by the need to base judgments on a somewhat subjective system. To attempt to limit the subjectivity, then (as well as to limit problems of reliability and validity), coding such implicit terms usually involves the use of either a specialized dictionary or contextual translation rules. And sometimes, both tools are used--a trend reflected in recent versions of the Harvard and Lasswell dictionaries.

- ***Relational Analysis***

Relational analysis, like conceptual analysis, begins with the act of identifying concepts present in a given text or set of texts. However, relational analysis seeks to go beyond presence by exploring the relationships between the concepts identified. Relational analysis has also been termed semantic analysis (Palmquist, Carley, & Dale, 1997). In other words, the focus of relational analysis is to look for semantic, or meaningful, relationships. Individual concepts, in and of themselves, are viewed as having no inherent meaning. Rather, meaning is a product of the relationships among concepts in a text. Carley (1992) asserts that concepts are "ideational kernels;" these kernels can be thought of as symbols which acquire meaning through their connections to other symbols.

TECHNIQUES OF ANALYSIS: DISCOURSE ANALYSIS:

Introduction:

Discourse analysis as a research technique involves the analysis of language with the above framework in mind, and has become increasingly popular in recent years in the social and management sciences. According to Snape and Spencer (2003), discourse analysis originates from the discipline of sociology and is about "*Examining the way knowledge is produced within different discourses and the performances, linguistic styles and rhetorical devices used in particular accounts.*" According to Jankowicz (2005), discourse analysis is of particular relevance when listening to people's own narratives of a situation – the biographical approach.

Discourse analysis is an analytic technique rather than a theory, and its popularity has arisen from the growing interest, starting late in the last century, in qualitative research and ways of analysing the data it produces. There are a number of similar methods, for example, content analysis, which analyses content according to key variables, narrative analysis, which looks at the patterns people find in their lives and situations, and conversational analysis, which looks at the structure of dialogue.

Discourse analysis has multiple disciplinary origins – sociology, socio-psychology, anthropology, linguistics and philosophy, communications studies, and literature (Grant *et al.*, 2005). It thus brings a multidisciplinary perspective.

Its regard for context sets it slightly apart from ethnographic methods, which, according to Lee and Roth (2006) tend to approach participants' talk and actions at face value. Participant observation often involves the researcher having a relatively "invisible" role, as an observer. In the collection of data for discourse analysis, however, the researcher has a more active role and may "co-construct" the interview process.

It can also be contrasted with behaviourist and cognitivist approaches: discourse is not just a product of a person's cognitive and mental state. Thinking makes use of concepts, and concepts are by definition in the public domain, influenced by a broad range of social and intellectual factors. Discourse analysis is also influenced by social constructionism: people and their doings are not "natural observable facts", but are constantly shaped by the society around them.

Many writers have contributed to the field of discourse analysis, but two of the most prominent are **Norman Fairclough** and **Michel Foucault**. Norman Fairclough is the father of critical discourse analysis. He comes to discourse analysis from a linguistics and language perspective.

In other words, critical discourse analysis sees the language of discourse as a kind of two-way mirror: it both reflects and contributes to the social world, its knowledge systems and its social relationships.

Approaches of Discourse Analysis:

There are two dimensions to critical discourse analysis: the "*communicative event*", or the specific incident of language use, and that which Fairclough terms "discourse order", which is the "discourse practices" or the way language is used within a particular social institution (for example, the particular vocabulary used within an organization) or domain area (for example, linguistics, sociology, or medicine).

Critical discourse analysis uses three levels of analysis (Nielson and Nørreklit, 2009):

- The text of the communicative event itself, with reference to its vocabulary, its use of metaphor and rhetorical forms, its grammar and the relationship between sentences, the types of argument used.
- The discourse practice – i.e. how the particular communicative event changes or copies existing practice within that particular discourse.
- The wider social practice of which the communicative event forms part.

Critical discourse analysis combines an "internal" study of language with "external" study of its context – how the text is affected by social practices and relations (Cheng, 2009). The term "intertextuality" is often used – which means the need for one text to be read in the light of its allusions to and differences from the content or structure of other texts. Critical discourse analysis can often be used to reveal power relationships, and how certain groups can be marginalized.

Nielson and Nørreklit (2009) apply critical discourse analysis to the field of management coaching, which they depict diagrammatically in Figure 1 as follows:



The approach of Michel Foucault, the French philosopher, sociologist and historian, is more abstract and less linguistically based than that of Fairclough. Although he acknowledged the role of language in the creation and formation of knowledge, he was not concerned with the analysis of spoken and written language and texts. He was more interested in the rules that determine which statements are accepted as meaningful, and the links between power and knowledge: expert knowledge in a particular domain can act as a system of control, and knowledge is institutionally contingent (Haider and Bawden, 2007).

TECHNIQUES OF ANALYSIS: NARRATIVE ANALYSIS

Narrative analysis refers to a cluster of analytic methods for interpreting texts or visual data that have a storied form. A common assumption of narrative methods is that people tell stories to help organize and make sense of their lives and their storied accounts are functional, and purposeful. Different approaches to narrative analysis are categorized on the basis of whether they focus on the narrative content or structure, with the thematic version interrogating what a story is about, while the structural version asks how a story is composed to achieve particular communicative aims. To this basic typology, according to Kohler Riessman (2008), one could also add the dialogic/performance narrative analysis, which focusses on the context and view of narratives as being multivoiced and coconstructed and the visual which links words and images in a coherent narrative.

Narrative inquiry is an umbrella term that captures personal and human dimensions of experience over time, and takes account of the relationship between individual experience and cultural context (Clandinin and Connelly 2000). Narrative inquiry is a means by which we systematically gather, analyse, and represent people's stories as told by them, which challenges traditional and modernist views of truth, reality, knowledge and personhood. Narrative research is a term that subsumes a group of approaches that in turn rely on the written or spoken words or visual representation of individuals. These approaches typically focus on the lives of individuals as told through their own stories. The emphasis in such approaches is on the story, typically both what and how is narrated.

Narrative methods can be considered "real world measures" that are appropriate when "real life problems" are investigated. In a basic linear approach, they encompass the study of the experiences of a single individual embracing stories of the life and exploring the learned significance of those individual experiences. However, in most cases one will be creating an aggregate of narratives each bearing on the others.

Narrative research is set out by the validation of the audience. It is a useful part of the social science investigation, but may not always stand alone for evidence and support for the conclusions of a report. Whether or not it is a part of a great presentation or whether it is a stand alone piece of research, it has to be accepted on its own merits as individual experience and the interpretation of thereof. The question arises as to the accuracy of the story looked at objectively even though it must be viewed in its socio-cultural context. The narrative gives one's individual view to be accessed on its merits. Such validation is possible by corroboration from another narrative.

While some types of qualitative analysis have a standard set of procedures, narrative research is questionable in this regard. One of the weaknesses of studying narratives is that the text is by its own nature linguistically subjective. i.e. difficult to quantitatively access in an objective manner since it is subjective i.e. personally meaningful.

A number of data collection methods can be used, as the researcher and the research subjects work together in this collaborative dialogic relationship. Data can be in the form of field notes; journal records; interview transcripts; one's own and other's observations; storytelling; letter writing; autobiographical writing; documents such as school and class plans, newsletters, and other texts, such as rules and principles; and pictures. To this list, one should add audio and video recordings, as these are also useful data in narrative research.

Narrative theory argues that:

- people produce accounts of themselves that are storied (i.e. that are in the form of stories/narratives)
- the social world is itself storied (i.e. public stories circulate in popular culture, providing means people can use to construct personal identities and personal narratives).
- Some of most interview accounts are likely to be storied (i.e. in narrative form)
- Narratives link the past to the present, but
- There is no unbiased account of the past

Using a Narrative Approach

A narrative approach is concerned not only with the story-telling components or characteristics of an account, but also with the social interactions between interviewer and interviewee that encourage and influence the way that an account is presented. To adopt a narrative approach is to choose to understand and analyze interview or other data from that perspective rather than, for example, focusing solely on the content of what interviewees are saying or the conversational forms and rules that underline the interaction. The same section of interview data can be analyzed in different ways. For example, an interviewee might describe a traumatic event involving someone close to them, such as a delay in seeking help for what turned out to be a serious illness. A thematic approach to such data would involve comparing accounts from a sample of interviewees with similar experiences to explore the reasons why those involved either sought or did not seek advice or the nature of encounters with health professionals. An ethnomethodological approach might concentrate on the language used and how conversational devices add emphasis, enhance credibility, deflect possible criticism, or convey the researcher's sympathy. A narrative approach will take account of both the content and the form of the interviewee's account and interactions with the interviewer. More importantly, a narrative approach will ask questions such as 'Why is the interviewee narrating this incident in this particular way?', 'What is the purpose of the story?', 'Why does it occur at this point in the conversation?', 'How have the researcher or others present influenced the narration?', or 'How does this excerpt fit with other parts of the interviewee's life story as narrated during the interview as a whole?'.

Research Methods and Narrative Analysis

Research that focuses on the role of narrative:

- ❖ Usually involves life story research or oral history
- ❖ Usually adopts a qualitative approach, using semi-structured interviews rather than questionnaires
- ❖ Usually the researcher says very little, acting primarily as an attentive listener, but
- ❖ All narratives are always co-constructed, even if the audience is oneself or an imaginary other, or if the story is told to oneself in the form of a daydream
