into signifiers and signifieds, Aristotle's view on rethoric, Manheim's statements on ideology and utopia, and Freud's writings on the human psyche are passed in review. The relevance of these theories for communication research is already evident from findings of studies that have used them as a starting point for their analysis of different kinds of media texts (e.g., advertisements). In addition, the author notes other (possible) applications in the field of communication. Little is said however about how to actually conduct – in general – such textual analyses. A comparison with the research method that Berger later describes as 'content analysis' – which is, according to him, essentially 'quantitative' in nature – could have been illuminating here. Part Two (on qualitative research methods) and Part Three (on quantitative methods) cover more 'traditional' topics, and are handled in an even more conventional manner. Berger classifies interviews, historical analysis, ethnomethodological research and participant observation as qualitative research. His section on quantitative research methods includes chapters on content analysis, surveys, experiments and a primer on descriptive statistics. While the author's writings on textual analysis were more theoretical, his chapters on qualitative and quantitative research methods look more like practical guides. Berger describes, for instance, the advantages and disadvantages of different methods, offers checklists on how to conduct certain kinds of studies, suggests ways to analyze the obtained data, and so on. The book ends in the same style. In part Five 'Putting it all together' Berger lists nineteen common thinking errors to avoid and provides suggestions for writing research reports. The glossary at the end of the book defines numerous communication and research concepts.

'Media and Communication Research Methods' thus seems to be everything it was intended to be; an ideal book for beginning research students. Berger's formula may even be a good antidote against the strange physical reaction that some of his students appear to show when they hear the word 'research'; "Their eyes glaze over, and their faces take a pained expression as if they had a migraine or a bad stomachache" (3).

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Neuendorf, K. A. (2002). The content analysis guidebook. Thousand Oaks, CA: Sage. ISBN 0-7619-1978-3 (301 pp.)

Neuendorf's 'The Content Analysis Guidebook' is a book I came across while reviewing texts and journal articles on studies employing content analysis. Reviewing these texts was one of several activities while prepar-

ing my own chapter on content analysis as part of the, yet to be published, book 'Researching New Media' (co-authored with N. W. Jankowski). I assessed Neuendorf's guidebook trying to answer the question whether the employment of computers and the Internet for the conduct of content analyses is discussed. Skimming through the book left me with a sense of optimism, as the value of computer assistance and of electronic archives is mentioned in various parts of the book.

Although located in the back of the book, an eye-catching part is formed by five Resources, some of which are authored by Paul D. Skalski (Neuendorfs' colleague at Cleveland State University). The first Resource mentions (electronic) message archives, open to the consultation by scholars looking for study materials. One of these archives is the online database LEXIS-NEXIS which includes full-text archives of the most popular newspapers, magazines, court- and legislative material and more. Illustrations of how materials are to be searched in this archive are provided in Resource 2. Resource 3 consists of an annotated list of computer content analysis software, Resource 4 of a program for inter coder reliability assessment, whereas Resource 5 describes what materials are available at the online supplement to this book, located at http://academic.csuohio.edu/kneuendorf/content.

Neuendorf describes content analysis as "perhaps the fastest growing technique in quantitative research" (1). This statement shows the author's emphasis on quantitative content analysis and her interest in (recent) development in the employment of this research method. With respect to the first observation the author's position is that the term 'content analysis' does not apply to every analysis of messages. In her definition of content analysis, Neuendorf excludes all forms of qualitative message analysis, by qualifying these as competing with, or complementing content analysis. Neuendorf considers Hijmans' typology of 'qualitative content analyses' applied to media content, which was published in this journal in 1996, to be a good starting point for students who want to become aware of the main options for more qualitative analyses of messages.

With respect to the second observation, Neuendorf considers the increasing popularity of computers and on line services as tools in social scientific research of utmost importance. The proliferation of on-line archives and databases dramatically increased the access to archived textual messages. In addition, the rapid advancement in computer text content analysis software makes is 'easy' to perform at least basic analyses in a rather quick and precise manner.

The books starts with describing the areas of inquiry to which content analysis is applicable, such as newspaper coverage, naturally occurring language, gender representation on television, or approach strategies used in personal ads. In addition, in the first chapter a number of 'myths' about content analysis, such as "content analysis is easy" (2), "anyone can do content analysis; it doesn't take any special preparation"(8), and "content analysis is for academic use only" (9) are demystified. The author does so by asserting that the conduct of a content analysis is as easy or difficult as the researcher determines it to be, that appropriate training and substantial planning is needed, and that these analyses are undertaken increasingly for other than scholarly purposes. According to the author commercial researchers and organizational communication consultants also use content analyses in their work. In the remainder of the first chapter a review of definitions of content analysis is given, including Berelson's (1952), Krippendorff's (1980), and Riffe, Lacy and Fico's (1998). This review is followed by a six-part definition of content analysis, which is employed in the remainder of the book. This definition emphasizes traditional aspects of content analysis as a scientific method employing an a priori design, with reliable, valid and replicable measurements and being aimed at the testing of hypotheses. Furthermore, it is emphasized that the method is applicable to all contexts (ranging from individual messaging, interpersonal and group messaging, to organizational and mass messaging), and to all message characteristics, such as manifest versus latent, content versus form, and non-textual characteristics (e.g., visual images, nonverbal behaviors, and sound events). Throughout the book parallels are drawn between survey research and content analysis. Although the units of data-collection are different from those of the typical survey (messages versus persons), in both methods an attempt is made to measure all variables as they naturally occur; no manipulation of independent variables is attempted. Some form of random sampling of units of analysis makes the findings generalizable to a larger population. The validity question often posed to human coding decisions also applies to the self-report nature of most surveys. The reason for elaborating on the parallel between content analysis and the survey method is not made explicit, but readers might sense an attempt of proving that content analysis is 'as scientific as' survey research.

In chapter 2 'Milestones in the history of content analysis' the outcome of a literature search employing 20 search tools in different disciplines is presented. It shows an increase in publications on content analytical studies. Further, descriptions of a number of these milestones are provided.

As in most methodological guides, the subsequent steps of a content analysis, such as developing theoretical notions and hypotheses, conceptualization, operationalization, unitizing, sampling, coding, and reporting are discussed. In chapter 3 these steps are depicted in a flowchart. Interesting here is the depictions of two routes in the chart at the level of coding: one route describing human coding procedures, including the development of coding schemes, and the other describing computer cod-

ing procedures, including the development of dictionaries with a description of the method of application. This distinction is returned to in chapter 6 on measurement techniques, as the construction of dictionaries for computer text analysis is discussed.

According to Neuendorf, researchers should be encouraged to address and link up in their content analytical projects both source, messages/ channel, and receiver. She presents in chapter 3 an integrative model of content analysis in order to examine "the role of content analysis in the investigation of the larger framework of the communication process" (62). In this model first, second and third order linkages are distinguished. In studies where first order linkages are at stake, the messages analyzed are the ones created by the source under study, or the ones assessed by the receivers under study. In other words, there is a one-toone correspondence between units of analysis (messages versus sender or receiver). Second order linkages are present when units in the content analysis are not matched with a unit in a source- or receiver study. Instead the content of messages is linked to, for instance, the occurrence of events. A third order linkage refers to 'a logical link'. Here evidence from source or receiver studies is used in order to provide a rationale for a content analysis.

In chapter 4, procedures for unitizing and sampling are described. In the section on 'medium management' the way in which digital technologies have changed a number of tasks important to content analysis, such as archiving messages, searching for messages, preparation of messages for coding, messages handling during coding, and automatic coding, is discussed.

In chapters 5 (selection of variables and the formulation of hypotheses, predictions and research questions), chapter 7 (reliability) and chapter 8 (results and reporting) no reference is made to the salience of computer- or Internet assistance.

It is first in chapter 9, which is about the status of research in many of the main areas of content analysis, that the author picks up the issue of content analysis applied to websites. While touching upon characteristics of these 'texts' such as hypertextuality and interactivity, and pointing to problems with respect to sampling and unitizing of web content, Neuendorf provides no guidelines at this point. Readers are encouraged to explore 'novel genres of Web content, ranging from personal home pages to online auctions' (207). It remains to be seen, however, whether the guidelines presented in this guidebook are as such applicable to analyses of web content.