

1 SOFTWARE TOOLS TO AID IN CLASSIFICATION, ANALYSIS, AND THEORY BUILDING.

Once the unit has been identified it is classified according to a preconceived classification scheme or into classification that emerge from the researchers reading. usually this process involves considerable training and this cushion if multiple coders are used. in a quantitative content analysis, the reliability of these multiple coders in critical and should be calculated and presented as an important component of any results. We have found the use of qualitative analysis software packages such as Atlas Ti, nudi, or hyperqual to be very useful in undertaking the coding process. At their most basic level these packages allow the text documents to be imported and conceptually organized. next, the researcher codes the content by highlighting exemplar quotes and assigning them to one or more categories or families of categories. this packages also support a variety of types of automatic coding, which can be used to quickly code and count some types of manifest variables. these packages are also useful during the phase when categories are combined or expanded and relationships between categories clarified. finally exemplar quotes illustrating the category can be quickly retrieved from the content and cut and pasted into publications or final reports. so-called next generation code and retrieve packages provide enhanced features that are useful for mapping, defining, relationships between codes and categories and generating theory that accounts for the grounded observations. The numerical result of quantitative content analysis can be analyzed using a wide variety of statistical techniques. most often these techniques begin with descriptive presentation of this results, often displayed graphically to aid understanding and interpretation by both researcher and subsequent readers. Further analysis for data that are ordinal in nature non-parametric statistical analysis of the relationships between the variables should be undertaken. many researcher also use parametric analysis by making the assumption of interval data is quite common and can produce meaningful results. however be prepared for criticism from informed statisticians if one makes this assumption during the analysis stage. the statistical software producer statsoft provides a useful summary of this issue and suggested nonparametric analysis techniques are being applied to the quantitative results of content analysis. for example sudweek and simoff illustrate how message that have been coded with forty-six binary variables can be subjected to neural network analysis to yield a description of each message. In relation to any other variables for example message that are coded as humorous can be compared to those that are not in terms of length, position in a thread, gender of author, time of posting and numerous other variables.

1.1 TIPS FOR CONTENT ANALYSIS

Spend time carefully reading the content of your study before making irreversible methodology decisions. Clearly identify the type of analysis that will best

answer your research questions . Initially identify the type of analysis and do pilot coding to see if the unit can be reliably identified and coded. Clearly identify the type of variables that you will be looking for in a data. Document through memos to your self the processes involved in the selection of unit and coding so that you will be able to train other in the technique to provide for reliability calculations. Identify exemplars of the concepts and discuss these with any other coders. Use a qualitative analysis package to automate identification of some manifest variables and to aid in recall and organization of coded transcripts. Use appropriate analysis techniques ,often non parametric tests ,when analyzing quantitative content analysis results.

SUMMARY In this chapter ,we have attempted to overview the promise and the perils of content analysis.we strongly believe that there is much to be learned by actually studying ,classifying ,and interpreting the behavior that occurs online.content analysis provides us with a set of tools to undertake this challenge .unlike the subjective opinions provides an empirical grounding for further investigation techniques.however the task can be daunting .over a three year period,a team led by one of the authorsteaching presence of this instruments can be found at the project web site at <http://www.atl.ualberta.ca>.we hope this work will be picked up and improved on by future e-researchers.

Allbritton,b.,collaborative communication among researchers using computer-mediated communication:a study of project h.unpublished doctoral dissertation,university of Albuquerque, New mexico.available :<http://www.arch.usyd.edu.au/~fay/netplay/marcel/>.bauer,m.classical content analysis:a review.in m .bauer and g.gaskell,qualitative researching with text image and sound .london:sage. Berelson,b.content analysis in communication research.clenco,il:free pressbudd,r.thorp,r,donohe,w,l.content analysis of communication .ny:macmillan company. Colford,l.h.writing in the electronic environment :electronic text and the future of creativity and knowledge.occasional papers series dalbousie university. Fahi,p.crawford,g.,ally,m.,cookson,p.,keller,v.prosser,f.the development and testing of a computer conferencing transcript analysis tool.alberta journal of education 6(2),85-88 Hara,n,bonk,c,angeli ,c,2000,content analysis in a kaye,collaborative learning through computer conferencing.london:springer-verlage. Hillman-richardson,cmellar,h.a methodology for the analysis of patterns of participation within computer mediated communication courses.instructional science ,24,47-69. Kanuka,h,Anderson,t.on-line social interchange discord and knowledge construction .journal of distance education,13(1),57-74. available:code.athabasca.ca/vol13.1/kanuka.html. Kelle,u.classical content analysis:a review in m.bauergaskell,computer assisted analysis:coding and indexing. Potter,w,levinse-donnerstein,d rethinking validity and reliability in content analysis journal of applied communication research