Microware Review

Len Proctor

The Ethnographer

Reviewed by Margaret Thompson

This program will be of interest to anyone who has to analyze text, whether it be interview transcripts, documents, letters, student essays, or open-ended questions from questionnaires.

In 19851 was enrolled in a master's program, about to embark on a study concerning the attitudes of occupational therapists towards their students. This study entailed using qualitative research methods and the analysis of interview transcripts. As I talked to my committee members and began to read through the various texts relating to the analysis of text data I began to realise the magnitude of such a task.

Qualitative research studies such as mine involve the manipulation of segments of text. To do this the text being analyzed usually has to be duplicated several times in order for it to be appropriately catalogued. Should the researcher change his mind about his analysis, then the material has to be reorganised and perhaps recopied. As I was pondering which of the various methods I would choose to organise my data I was fortunate enough to hear of a computer program that another student was using called the Ethnograph. I investigated, I saw, and I was convinced. This was the system for me. It was a program that could turn the mountain of paperwork generated by qualitative research methods into manageable mole-hills.

I used Ethnograph (version 2) on an IBM XT compatible PC with two diskette drives and 640 K memory. Recently I received the updated version (version 3). This review is based on my experiences with version 2 but I will also describe the changes that have been incorporated into version 3.

Preparation of Files

The text to be analyzed is typed into the computer using any word processor that is capable of generating standard ASCII text files. Text must be prepared according to a certain format (i.e., only the left half of the page is used and there are certain rules concerning indentations).

At this point, the researcher can choose to insert information relating to

the identity of the speaker as well as the contextual comments. This ensures that each time a segment of text is extracted it comes tagged with this information. These tags remain unchanged until new information concerning the speaker and context are added.

The speaker can be identified with a code word up to 10 characters long. I used this feature to identify my speakers sex, age, experience, country of education and location of practice. This meant that any extract of text generated by the computer was automatically tagged with demographic information. This process facilitated the formation of patterns based on the demographics of respondents and their attitudes.

Information relating to contextual comments allows the researcher to indicate the context from which a segment of text arises. This comment is restricted to 35 characters. I used this feature to identify the page of the verbatim transcript from which the segment was extracted and the question the respondent was answering. This phase of the program is completed by having the computer number each line of text. At this point no further changes to the text or the speaker identifiers and contextual comments can be made without starting from scratch and renumbering the text.

Coding

The print-out that is generated following the numbering procedure covers the left hand side of the page and consists of: the text; the speaker and contextual identifiers; and an assigned number for each line of text. The right side of the page is left empty for your handwritten comments relating to coding decisions. Once the file has been manually coded on the printout, it is entered into the computer.

Entering the codes is a slow process to begin with, somewhat akin to using the number keys on a typewriter when you are only used to the letter keys. However, once the rhythm of the process is developed this phase of the program can be completed fairly rapidly. This is especially true of the updated version which makes use of the arrow keys to move freely in any direction.

The beauty of the Ethnograph is that codes can be added, changed, or deleted as the study progresses with the pressing of just a few keys. Version 2 had some restrictions to this feature but version 3 has made recording as easy as the original coding process. The program permits the researcher to use up to 80 different codes. There is a restriction of no more than 12 codes per line of text of 7 clumps of texts nesting within each other. So far, I have not found these restrictions to cause any limitations.

Code Searches

Now comes the exciting part of the program when the results of the preparatory work becomes evident. Two options are available to the user: a single code search or a multiple code search. The single code search enables the files to be searched for up to 80 codes, one at a time. The program will search through the files for all incidences of the first code and then will return and start searching

through for all instances of the second code. Up to 80 files can be searched at one time. Version 3 makes use of catalogues which will be explained later. This feature not only expands the number of files you can search but also facilitates the process of identifying the files that have to be searched.

The multiple code search mode permits search combinations of two codes. For examples, segments where x and y are present or where x is present but y is not can be extracted. It is possible to search for up to 15 of these combinations.

Results of searches can be sent to the screen, to disc, or to the printer and provides the user with the following information:

- the file the extract is taken from;
- the time and date the search was made (a feature of version 3);
- the page number;
- the code being retrieved;
- the speaker identifier;
- the contextual comment;
- symbols identifying the parameters of the segment relating to the code being searched; and
- a list of any other codes present in the extracted segment, together with an indicator of the extent of these segments.

With Version 3, codes can be searched in alphabetical order, or as they have been listed. Files which contain no segments relating to the search code are also identified. The combination of speaker identifier, contextual comments, and codes, when linked with the speed and manipulative ability of a computer and printer, produce an unbeatable combination for anyone whose work involves the analysis of text.

Version 3 Features

Some of the new features of version 3 have already been described but there are some additional ones that enable researchers to add another dimension to their studies. Such features include: listing code words/speaker identifiers; compiling catalogues of files; and producing face sheets for each file.

Listing code words/speaker identifiers. Ethnograph has the capability of reviewing each data file and generating a list of code works and/or speaker identifiers. These lists can be generated in alphabetical order, according to frequency or in both formats. This is a very useful feature because it allows a check to be made on code words that have been used to code a file, in case of spelling errors. It also provides the user with a very basic frequency count.

Compiling catalogues of files. In version 2 all the files that were to be searched had to be manually listed. With version 3 files can be grouped into catalogues and given names so that the insertion of one name containing x number of files will enable all the files within that catalogue to be searched. This feature will be a great time saver and also prevent the accidental omission of files.

Face sheets. Version 3 of the Ethnograph has the capability of generating a face sheet listing various variables for each file. Searches can be conducted for segments of text relating to a certain code in conjunction with specific parameters relating to the variables of a file. Up to 40 different variables can be identified. These variables can be either text or numeric (Note, the printout will only contain a listing of the first 6 variables used in the search). For example, a search of code x can be restricted to only those incidences occurring in interview data of males between the age of 16 and 17, who had failed two exams, were from urban schools with a population of more than a 1000, and who had been taught solely be female teachers!

Manual

This review would not be complete without commenting on the manual that comes with the Ethnograph program. If you can read a newspaper, you can understand this manual. It is the easiest, most user-friendly manual I have ever come across. Version 2 was a delightful surprise from your standard unintelligible computer manual but version 3 is a dream.

Each chapter starts with an explanation of the philosophy behind the particular phase of the program. This enables the user to understand the concepts and apply some meaning in terms of their own use of the program. Thus the manual goes beyond the giving of a "recipe" and allows the reader to create their own recipes using the ingredients they have at their fingertips, to meet their own needs.

Conclusion

Some readers will note that this review has been one of praise with no criticisms. I used the Ethnograph (version 2) to analyze approximately 600 pages of single spaced interview transcripts and a simple questionnaire. I found it was invaluable for my needs. My quick review of version 3 makes me impatient to use it on another project. However I do have one criticism and that relates to the support that is provided to owners of the Ethnograph. Written enquiries receive no response, an experience that I understand is shared by other owners of the Ethnograph. However one colleague of mine found that support was provided when contact was made by telephone. Whether the proliferation of Ethnograph as Version 3 hits the marketplace will change this problem of satisfactory written communication remains to be seen.

I recommend the program highly. Just remember that if you want help, be prepared to phone not write!

REVIEWER

Margaret Thompson is a recent graduate of the Department of Communications, Continuing and Vocational Education. She is currently working as a Occupational Therapist in the Department of Occupational Therapy at the University Hospital in Saskatoon.