

# METHODS BRIEFING 7

## Assessment and Development of New Methods for the Analysis of Media Content

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### Background and Aims of Research

The analysis of media has become a major field of interest with British research at the forefront internationally. However, the assessment and development of methodology suitable for media research has progressed surprisingly slowly. This project provides a critical examination of existing methodologies and a systematic analysis of new and evolving concepts and methods. Our substantive concern was with the portrayal of policy, politics, and politicians in the media, with the research designed to enable innovative approaches to media content analysis. This work included four main elements:

- 1 The evaluation of computer software packages for the analysis of media content;
- 2 Discursive analysis of media texts;
- 3 Analysis of time series data;
- 4 Comparative research of news coverage.

### Key Findings

#### Qualitative Software: Overexpectations

Although there has been a proliferation of computer assisted qualitative data analysis software (CAQDAS) over the last decade, media studies have been surprisingly reluctant to use it. Our evaluation of eight programs of this type (*ATLAS.ti*, *NVivo*, *MAXqda*, *Kwalitan*, *Qualrus*, *QDA Miner*, *N6*, *HyperRESEARCH*) shows that the slowness of the adoption process is not necessarily a sign of Luddism.

Despite being advertised as software for any type of qualitative analysis, CAQDAS only enhances some methods and do not integrate multimedia data as well as non-plain-text formats. In a number of cases, CAQDAS rigidities hamper analysis more



than they help. In some cases more specialized software (such as *fs/QCA* for fuzzy-set comparative analysis) or general purpose software is superior to classical CAQDAS. Future opportunities for CAQDAS in media research are primarily in mixed-methods approaches and a limited number of qualitative techniques such as Grounded Theory.

#### Quantitative Software: Underusage

Dictionary-free quantitative programs, developed in computational linguistics, have received almost no attention in media studies thus far. That is regrettable, because newer text mapping tools (such as *Leximancer*, whose automatic mapping of newspaper articles on Turkey's EU accession debate is shown overleaf) can readily suggest patterns in unordered textual data, which might facilitate (but not replace) its analysis.

Dictionary-based programs, on the other hand, are of little use outside the theoretical domains for which they were initially developed. CAQDAS with dictionaries which can be edited, in particular *MAXqda* in combination with *MAXdictio*, are far more versatile in this respect.

### CAQDAS and Discourse Analysis

Our examination of software for qualitative analysis showed that there is little knowledge of Discourse Analysis (DA) as a research method among CAQDAS users. Vice versa, discourse analysts have limited interest in, or understanding of CAQDAS. In order accurately to assess the value of CAQDAS to DA we decided to put it to the test ourselves. Numerous practical concerns were encountered in this exercise (including problems with importing large numbers of news stories; with Boolean searches; with 'coding stripes' that were inadequate for the task; with editing tool limitations; and with lack of flexibility in source files of varying sizes).

However, more importantly, there were theoretical concerns with using the software. While we noted that qualitative data analysis programs are clearly useful for sorting and arranging texts, they cannot bring us to the level of analysis that is required for discourse analysis. Nor can discourse analysis be defined as a universal set of procedures, to be formalized into a computer package. Using CAQDAS with DA can, we caution, be more time consuming than useful, and can even steer the analyst away from the task of analysis.

### Frame Analysis

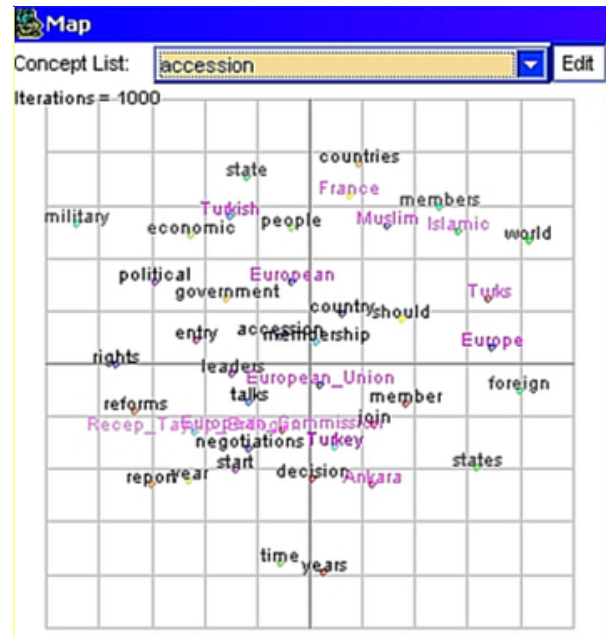
Frame analysis looks for key themes within texts. In studies of mass media, frame analysis shows how the language and structure of news items emphasize certain aspects (and omit others). We reviewed the theoretical development of frame analyses over the last thirty years. This showed that media studies have veered from the initial Goffmanian conception towards more deliberate uses of framing.

Based on this theoretical evaluation, we developed a unified methodology for the measurement of frames, which combines sociolinguistic analysis techniques with some forms of dictionary-free quantitative content analysis and computer-assisted coding techniques. This systematizes recent methodological developments in frame analysis and offers a step-by-step program to synthesize these developments into a single method. Since it combines more interpretative, qualitative elements of frame analysis with advances in quantitative content analysis, it offers generalizable results of high conceptual validity.

### Usage of Digital Newspaper Archives

Our examination of the use of digital archives in media analyses identified four limitations to digital news content

Figure 1: Leximancer Word Clustering Output Example



searches. A limitation of existing digital news databases is that the majority store content in a text-only format. This precludes analysis of visual aspects of news, thereby removing a significant tier of 'meaning making' in news texts. Keyword searches produce lists of individual articles that contain the selected words and phrases. This *de facto* standardization of analytical units fits well with conventional thematic content analysis, but removes any meaningful consideration of the relational positioning of articles with other articles and in their publications. Keyword searching is also primarily suited for identifying names, institutions, places, events, policies ('things'), rather than abstract, subtle and multi faceted concepts ('themes'). Finally, we found that the reliability of digitized archives is over-estimated.

### Key Publications

Billig, M. and MacMillan, K. (2005). Metaphor, Idiom and Ideology: the search for "no smoking guns" across time. *Discourse & Society* 16: 459-480.

MacMillan, K. and Koenig, T (2004). The Wow Factor: Preconceptions and Expectations for Data Analysis Software in Qualitative Research. *Social Science Computer Review* 22 (2): 179-186.

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