

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

Welcome to the first issue of the Bulletin

This Bulletin will be appearing regularly over the next two years as a product of the Assessment and Development of New Methods for the Analysis of Media Content project within the ESRC Research Methods Programme. It is one of the 30 projects currently funded in the Programme, which is aimed at improving the standards of research methods across the UK social science community.

The project is located in the Communication Research Centre (CRC) in the Department of Social Sciences at Loughborough University. The project directors are Professor Peter Golding, Professor Michael Billig, and Mr. David Deacon. The project staff are Dr Thomas König and Dr Katie MacMillan (see end page for address and contact details).

The overall aim of the project is to test and develop methods for the analysis of media content. Our main substantive concern is with the topic of news media representations of power, politics, and policy. Over the next two years we will:

- assess computer software for the analysis of media content,
- apply a number of methods of analysis to media texts, comparing such methods as quantitative content analysis, frame analysis, evaluative assertion analysis, and a broad range of discourse analyses, in order to assess their strengths and weaknesses and, in particular, to explore the areas of compatibility and incompatibility between methodologies,
- analyze time series data, including an analysis of UK electoral data sets (held in our Media and Communication Research Archive within the department),
- conduct international comparative research. This will primarily involve collaboration with colleagues in Finland who have adapted and used coding schedules, designed by Loughborough, for analyses of Finnish media.



*From left to right:
David Deacon, Michael Billig, Katie MacMillan, Peter Golding, Thomas König*

We will publish our work to the widest possible community of users, including academics, media regulatory agencies, government departments, political parties, community and voluntary associations, media organizations, and social research organizations generally. We will also be holding two formal training seminars next year – one will be designed for postgraduate students, and the other for more experienced researchers.

The project team

Peter Golding **Professor Of Sociology and Co-Director of CRC**

Peter Golding's main research interests are in the sociology of the mass media generally, and especially in the role the media play in the democratic process, as carriers of information and images about social and public policy. He has investigated this role in looking at media coverage of social security and poverty, social work, charities, the poll tax, and more generally political communications, including studies of election coverage for the Guardian. He was principle investigator of an ESRC funded study investigating public policy information in all the news media nationally.

Michael Billig **Professor of Social Sciences and Co-Director of CRC**

Michael Billig was a founder member of the Loughborough Discourse and Rhetoric Group (DARG), which has been pioneering new forms of doing social psychology, based upon the study of language. His particular contribution has been to stress how thinking (both conscious and unconscious) is shaped by the rhetorics of argumentation. Michael Billig's work reflects his parallel concerns with theory and with studying ways of thinking, especially ideological thought, and the influence of ideology on everyday patterns of thinking.

David Deacon **Senior Lecturer in Communication and Media Studies**

David Deacon's main research interests lie in political communication, public relations and news management and journalism. Since 1990 he has been responsible for the conduct and management of several major media-based research projects, including ESRC funded projects on the news reporting of quangos in Britain; media reporting of social science research; the voluntary sector in a changing communications environment; and media coverage of the poll tax. With Peter Golding and Michael Billig, he has conducted media monitoring for the Guardian newspaper on election campaigns since 1992.

Dr Thomas König **Research Associate, Social Sciences**

Thomas König recently arrived from the University of Göttingen, Germany, to work in Loughborough. His main interest lies in the fusion of qualitative and quantitative methodology, particularly with respect to frame analysis, categorical data analysis, and international comparative methodology. He applied these methods in studies of social movements and collective behaviour. His dissertation, which he completed at the European University Institute in Florence, Italy, explores the New Age movement. He also worked on 'identity movements'.

Katie MacMillan **Research Associate, Social Sciences**

Katie MacMillan has worked on a number of research projects, including an ESRC funded project investigating public policy information in the national news media. She is interested in the critical appraisal of research methods; as well as the topic interests of therapy, and therapeutic interactions; and the analysis of news discourse (and in particular how the press construct stories and accounts, cite sources, and manage their own values and opinions, as part of the production of 'fact').

Software for News Analysis

An important part of our research is evaluating a variety of computer software packages which have been, or could be, used to analyze media content (often claiming to provide support for qualitative analysis or even theory-building). We hope to develop a resource for the research community which will help researchers considering using such software.

Currently there are two main types of programmes for textual analysis: software that organizes and annotates of textual data for further (qualitative and/or quantitative) analysis; and programs that perform (mainly quantitative) dictionary-based content analyses. An additional two hybrid programmes aim to do both of these tasks.

Selected Programs for Organizing and Annotating Textual Data

ATLAS.ti

[<http://www.atlasti.de/>]

ATLAS.ti helps to annotate textual, visual and audio data. It facilitates the categorization process of these types of data and enables the user to organize evolving categories into a (causal) network. Data can be coded in ATLAS.ti and then exported to other programs for further analyses - particularly SPSS, for which ATLAS.ti has a syntax generating interface.

Ethnograph

[<http://www.qualisresearch.com/>]

Ethnograph, the grande dame of computer-assisted qualitative analysis, supports hierarchical coding, text annotations, and advanced data search strategies. Unfortunately Ethnograph has not been updated since 1998.

MAXqda

[<http://www.maxqda.com/>]

MAXqda is the successor of winMAX, a software similar to NVivo and ATLAS.ti.

N6

[<http://www.qsrinternational.com/products/n6.html>]

N6 is the newest version of NUD*IST. It is designed to code textual data and also to search and navigate research material efficiently.

NVivo

<http://www.qsr.com.au/products/nvivo.html>

NVivo, a derivative, but not necessarily a replacement for NUD*IST, helps the user to annotate and organize qualitative data. While it has less coding capabilities than N6, NVivo's organizing functions are more elaborate, allowing data to be linked in a variety of ways.

Qualrus

[<http://www.qualrus.com/>]

Qualrus is the most general program in this category. It allows for a number of coding strategies, has sophisticated search possibilities, and can handle a variety of data types. Its facilities for data structuring are a little less developed than their counterparts in ATLAS.ti and NVivo.

Selected Programs for (Quantitative) Content Analysis

CatPac

[<http://www.thegalileo.com/products/catpac.php>]

CatPac lemmatizes (groups together words that share the same word stem) and performs cluster analyses of textual data.

Concordance

[<http://www.rjcw.freemove.co.uk/>]

Concordance performs lemmatizations and computes concordances for further analysis by SPSS, SAS, or STATA.

Diction

[<http://www.scolari.co.uk/diction/diction.htm>]

Diction analyzes political texts using a dictionary based on a categorization scheme developed by Roderick P. Hart. Hart's scheme distinguishes 5 main semantic features – activity, optimism, certainty, realism and commonality. This package also attempts to analyze the tenacity of a speech.

General Inquirer

[<http://www.wjh.harvard.edu/~inquirer/>]

General Inquirer performs content analyses with dictionaries based on the Lasswell and Harvard IV-4 dictionaries.

TextQuest

[<http://www.textquest.de/>]

Apart from generating readability and stylistic statistics, TextQuest uses Colin Martindale's Regressive Imagery Dictionary, the Harvard Psychological Dictionary, the Hamburg Communication Sociology Dictionary, the Dresdner Angswörterbuch, and a dictionary for the analysis of 'personal' dating adverts, to analyze written texts.

Hybrid Programs**AQUAD**

[<http://www.aquad.de/>]

AQUAD supports data coding and structuring techniques, as well as dictionary based analysis. Its dictionaries are user-defined.

Textpack

[<http://www.social-science-geis.de/en/software/textpack/index.htm>]

Textpack combines coding features with analytical capabilities. It focuses on quantitative techniques, e.g., computing word frequencies, or concordances. Its analytical dictionaries are customizable.

Methods of Textual Analysis

We will also be examining a number of methods used in the analysis of media texts. Some of the main methods are summarized below.

Content Analysis

Content analysis is a systematic method used to turn items (mainly texts) into content categories. This method (more usually intended to inform quantitative research) is replicated by following explicit rules of coding, and enables large quantities of data to be categorized with relative ease. Content analysis offers a quick, broad overview of data sets, and as such can be used to support (and be corroborated by) other more detailed methods of textual analysis.

Evaluative Assertion Analysis

This approach, based on work in the 1950's by the psychologist Charles Osgood, attempts to map texts and their object referents by reducing them to fairly unequivocal evaluative ("nuclear") statements. EAA was later developed using Computer-Assisted Evaluative Text Analysis (CETA).

Frame Analysis

Frame analysis looks for key themes within a text, and shows how cultural themes shape our understanding of events. In studies of the media, frame analysis shows how aspects of the language and structure of news items emphasize certain aspects (and omit others).

Discourse Analysis

Discourse Analysis (DA) examines how the social world is constituted through discourse. Within DA there are various distinct traditions including conversation analysis and ethnomethodology; sociolinguistics; discursive psychology; critical discourse analysis; Bakhtinian research; and Foucauldian research.

Case Study 1

No Smoking Gun: The UN weapons inspection report to the Security Council

On 27th of January 2003 chief UN weapons inspectors Hans Blix, head of the biological and chemical weapons inspection teams, and Mohamed El Baradei, head of the International Atomic Energy Agency, and in charge of nuclear inspections, delivered their now famous report to UN Security Council. This report was an update of the six weeks of inspections that had been carried out in Iraq to produce evidence that Iraq, under Saddam Hussein, were co-operating adequately with the UN in their search for chemical, biological and possibly nuclear weapons.

Immediately after the UN report there was fierce political debate on whether the findings supported a case for, or against war with Iraq. Although the inspectors were calling for more time to carry out their investigations, Britain and the US in particular, were pushing towards an inspections deadline of the end of February.

This report, a globally significant statement occurring in the news at the beginning of our research project, forms the basis of our first case study. Our data set for this study is based on news items from January 27th – January 29th (the time at which the press first began to actively report the Blix/El Baradei findings). We collected 278 news reports from ten of the main British national dailies; eight of the US dailies; and six German daily newspapers.

Taking the Blix/El Baradei report to UN Security Council as our focus, our interest is in the mediation of announcements, and how the press take a statement such as the UN declaration, and repackages it in the form of ‘significances’ – the ‘bits’ the press decide are newsworthy. The data also provides a vehicle for the assessment of computer software and an exploration of methods – for example, content analysis informs us of category (actor and topic) frequency and proximity, and the extent to which this varies between the United States, Germany, and the UK. Discourse Analysis, which treats all descriptions as functional, examines the details of how news reports work persuasively, and how, for example, descriptions such as ‘smoking gun’ are used by the press to support a particular (pro or anti) position on an impending war. Our research on this case study will provide some preliminary indications of the differing approaches and character of the methods we are assessing.

Contact details

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