

Contemporary trends in qualitative research and the use of qualitative software

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Outline of Talk


- I. Qualitative software (CAQDAS - Computer Assisted Qualitative Data Analysis) and the development of qualitative research
 - ❖ A technology that developed to answer a need in social sciences, not one invented for other purposes and then adapted
- II. Diverse uses of CAQDAS - from positivist to postmodern and arts-based approaches
 - ❖ Neo-positivist research: Evaluation and 'gold standards' criteria
 - ❖ Mixed methods research
 - ❖ Citizen research
 - ❖ Performative and arts-based research
 - ❖ New Openings: Qualitative Geography and Qualitative Psychology
- III. Different understandings of what qualitative research is for, and of what qualitative software needs to do



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Computers as 'transformative'

- 'Computers, like every technology, are a vehicle for the transformation of tradition'.
- Winograd, T. & Flores, F. 1986. *Understanding Computers and Cognition*, Norwood NJ: Ablex Publishing Corp.




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Transformative qualitative software

- 'Every aspect of the handling of qualitative data is dramatically changed by computers ... What we are seeing is a methodological revolution ... Computers challenge the dichotomy of quantitative and qualitative method ... encourage recognition of methodological diversity ... and alter the experience of research, reshaping the research process' .

Richards, L. and Richards, T. (1991) 'The transformation of qualitative method: computational paradigms and research processes', in N. Fielding and R.M. Lee (eds.), *Using Computers in Qualitative Research*, London: Sage: page 39.



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A Timeline of Social Science Data Analysis Software

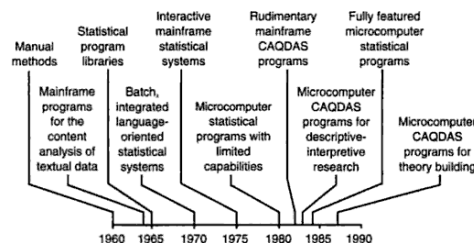




Figure 1.1 Historical development of data analysis software in the social sciences (Brent and Anderson, 1990; Tesch, 1990)




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Qualitative research and fear of the computer

- 'in learning to use the computer the fieldworker is consuming a culture of control, not just a tool' (pp. 86-7).



Lyman, P. 1984. Reading, writing and word processing: towards a phenomenology of the computer age. *Qualitative Sociology*, 7 (4), 75-89.



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Variations on the CAQDAS theme

- The Ethnograph
 - ❖ Used in applied fields, eg., nursing
 - ❖ <http://www.qualisresearch.com/>
- HyperRESEARCH
 - ❖ Hypothesis testing
 - ❖ <http://www.researchware.com/>
- QUALRUS
 - ❖ Expert systems /automation
 - ❖ <http://www.ideaworks.com/qualrus/index.html>



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The 'gold standards' for social research methods

- US National Science Foundation
- UK Cabinet Office 'Spencer Review'
 - ❖ Spencer, L., Ritchie, J., Lewis, J. & Dillon, L. (2003) *Quality in qualitative evaluation*, London: National Centre for Social Research
- The Cochrane Reviews (health) and Campbell Collaboration (crime, social policy)
- Randomised Control Trial research designs



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Denzin and Lincoln's post-positivist criteria

- 'Credibility, transferability, dependability and confirmability replace the ... positivist criteria of internal and external validity, reliability and objectivity' (p. 14).
- Denzin, N. & Lincoln, Y.. 1994. Introduction: entering the field of qualitative research. In N. Denzin & Y. Lincoln, eds., *Handbook of Qualitative Research*, London: Sage, 1-18



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Mixed Methods

- Example: Mixing closed response survey items with Open Ended Question data
- Qualitative data are 'an attractive nuisance'.
 - Miles, M.B. 1979. Qualitative Data as an Attractive Nuisance: The Problem of Analysis. *Administrative Science Quarterly* 24: 590-601.



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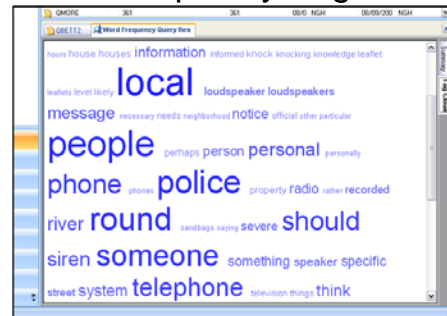
Interrelating closed and open survey questions using CAQDAS

- More easily automate the process of coding textual responses
- Move instantly between analytic expression and underlying data – explore the data in context
- Form collections of response to OEQs by theme or respondent characteristics
- Make use of textual data visualization features like those used for statistical visualization
- And maintain an analytic 'audit trail'- increase transparency and conduct checks for validity and reliability.



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A Word Frequency Tag Cloud



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Frequently Used Phrases

Phrase	FREQUENCY	NO. CASES	% CASES
DON'T LISTEN TO LOCAL RADIO	8	8	0.5%
DON'T LISTEN TO THE Q1/B	8	8	0.5%
JUST DON'T LISTEN TO Q1/B	8	8	0.5%
LISTEN TO Q1/B	8	8	0.5%
NEED TO	8	8	0.5%
DO NOT LISTEN TO LOCAL RADIO	8	8	0.5%
NEVER LISTEN TO THE RADIO	8	8	0.5%
WE WERE NOT IN DANGER	3	3	0.2%
WE WERE NOT IN	3	3	0.2%
WE WERE NOT IN DANGER OF	3	3	0.2%
WE WERE LISTEN TO THE RADIO	3	3	0.2%
WE DO NOT NEED TO	3	3	0.2%
NEVER LISTEN TO LOCAL RADIO	3	3	0.2%
DO NOT NEED TO DO ANYTHING	3	3	0.2%
DO NOT NEED TO DO	3	3	0.2%
DON'T LISTEN TO THE	3	3	0.2%
DON'T LISTEN TO	3	3	0.2%
JUST DON'T LISTEN TO	3	3	0.2%
NEVER LISTEN TO	3	3	0.2%
FROM LOCAL TELEVISION NEWS	3	3	0.2%

Coded Terms Summary

Code System	where = House	where = Outer	where = Inaff	SUM
ADVICE	9	10	13	32
brochures	1	5	1	7
cars	1	2	3	6
cleanup	1	2	3	6
codes	1	2	3	6
danger	1	3	1	5
evacuate	3	14	15	32
leaflets	23	49	44	116
monitor	2	6	10	18
neighbours	1	3	1	5
performance	2	9	11	22
rose	7	16	17	40
red	1	6	5	12
roads	3	13	26	42
sandbags	3	1	26	30
wire	1	1	1	3
warnings	2	8	2	12
watch	2	9	7	18
walkers	16	36	21	73
vehicles	4	20	6	30
warm clothing	1	1	2	4
watch	1	1	1	3
wellingtons	1	2	2	5
SUM	84	221	205	510

- ### Floods and Sandbags
- Boolean query
 - 'If flooded = no'
 - AND 'advice = sandbag'
 - (AND 'why sandbags not used = none available'
 - OR 'why sandbags not used = not given any')

- ### Citizen Research
- Research 'affordances' of new digital media
 - Wide range of uses
 - Unpredictable range of uses

- ### Citizen Researchers
- Resources
 - ❖ Internet, Web 2, Blogosphere, Facebook, Second Life and FarmVille, Twitter,
 - ❖ Open government eg. **Directgov**
<http://www.direct.gov.uk/>
 - Uses
 - ❖ Where's the best school for my kids?
 - ❖ Could local sports facilities be better and what do people want from them?
 - ❖ How can we stop the town council cutting the Youth Service?

- ### CAQDAS and Citizen Research
- Medical doctors researching the case records of their patients
 - Lawyers analysing evidence statements in the US class action against tobacco manufacturers
 - Environmental activists analysing pollution regulations

Growing research capacity

- Social science accounts for 9% of spending on research across 20 European countries
- Social science graduates were up over 50% between 2000 and 2006
 - ❖ There are 1,500,000 such graduates across Europe
 - ❖ There are 150,000 Full Time Equivalent social science researchers in the 22 largest European economies including Turkey but not including Russia



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Emerging social science research communities

- Higher levels of literacy and education
- More positive view of qualitative research by government and the policy community
- More representative forms of government
 - ❖ Secondary analysis of government bureaucratic data in former Soviet bloc
 - ❖ Action research and participatory research in Latin America



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Blackman's study of an elder of a Canadian First Nation community

- Life history study of Florence Edenshaw Davidson
- Ethnographic monograph
- Some in Haida community did not like what they read
- Competing stories - second edition of Blackman's book
- Life narrative is literature, not data
- Engendering new self-consciousness



Blackman, M.B. (1992) 'The Afterlife of Life History' *Journal of Narrative and Life History*, 2(1), 1-9



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How versatility of CAQDAS helps emergent research communities

- Data representation features, eg., visual data
- Geo-referencing
 - ❖ Important in community based research
- Multiple codes to single extract
- Analytic memoes
- Audit trail features
- CAQDAS analysis is thus open to inspection, reflection, critical review and poly-vocality



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Performative and arts-based research

- The '17,024th Patient Project'
 - ❖ How people are affected by major surgery
- Lapum, J., Ruttonsha, P., Church, K., Yau, T. & David, A. 2011. Employing the arts in research as an analytical tool. *Qualitative Inquiry*, 18(1), 100-115.
- The 'Journal Project'
 - ❖ Expressing diary thoughts in woven textile objects

Davidson, J. 2011. The Journal Project - research at the boundaries between social sciences and the arts. *Qualitative Inquiry*, 18 (1), 86-99.



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Qualitative Geography

- A 'new opening' for qualitative methods and CAQDAS
- New sub-field of social geography/human geography

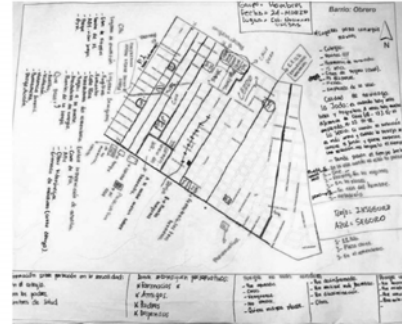


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Greene's vision of mixed methodology

- 'such quantitative forms as graphs, tables and figures; and such qualitative forms as stories, poems and performances; and even such spatial forms as maps and networks' (p. 16).
- Greene, J. 2008. Is mixed methods social inquiry a distinctive methodology? *Journal of Mixed Methods Research*, 2 (1), 7-22.
- The need for an 'integrated data display' that can 'enabl(e) cross-method comparisons and analyses'.
- Lee, Y-J & Greene, J. 2007. The predictive validity of an ESL placement test. *Journal of Mixed Methods Research*, 1, 366-389

Sexual health of youth in Latin America



Distribution of places where youths meet and contraceptives are accessed



Qualitative Psychology

- Another 'new opening' for qualitative methods and CAQDAS
- Discourse Analysis: how language produces social phenomena
 - ❖ Discourse as action
 - ❖ Foucauldian discourse analysis: discourse in legitimation and power

Willig, C. 2003. Discourse Analysis. In Smith J. (Ed.) *Qualitative Psychology: A practical guide to research methods*, London, Sage.

Deconstruction and reconstruction

- "A deconstruction (through the identification of interpretive repertoires and discursive constructions that make up the text) followed by a reconstruction (through writing about and thus re-creating the constructions and functions that characterize the text)" (p. 170).
- Willig, C. 2003. Discourse Analysis. In Smith J. (Ed.) *Qualitative Psychology: A practical guide to research methods*, London, Sage.

- Any questions or comments?

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