

CAQDAS - Contributor to social scientific knowledge?

Sarah Bulloch and Christine Rivers, QUIC node, University of Surrey

The focus of extensive debate in the late nineties¹, this question benefits from reconsideration in the light of advances in CAQDAS software. In evaluating affordances and limitations of CAQDAS software and its potential contributions to social scientific knowledge, we must contextualise feedback from critics and users within methodological understandings.

Recent improvements in CAQDAS software allow increasingly sophisticated qualitative data exploration, yet there are still technical limitations. Image and video data analysis tools in particular are still in their infancy, providing less finely grained coding, referencing, linking and extracting possibilities than found for textual data². Interestingly, discussions of affordances of CAQDAS are often both package-related and methodologically driven, whereas discussions its limitations are primarily methodologically driven.

The importance of methodology

In evaluating the role of CAQDAS in the creation of social scientific knowledge, appreciation of current understandings of what constitutes such knowledge, as well as dissent regarding the role of social sciences, are crucial. Generalisability, reproducibility, contextual understanding, underlying dynamics, macro and micro-level explanations for phenomena are prioritised differently according to methodological practices.

This importance of methodological orientation is reflected in findings from a longitudinal study focussing on user experience of learning CAQDAS. A user analysing textual data by means of discourse analysis said: "I have become worried about becoming too reductionist and losing the effect of holism." This user is approaching the analysis from a consciously methodological perspective rather than assuming that using the software itself constitutes a method. However, the concern expressed by the user is clearly methodologically contextualised: data fragmentation through coding can be seen as an analytical goal, but also as a threat.

The importance of skilled use

Knowledge of the available CAQDAS packages accommodates different methodological approaches. For example, linking tools facilitate various representations of discourse, quotations or clips can be produced and extracted to exemplify different phenomena, and annotated text segments can retain their embeddedness within context. It is, therefore, not necessary to code data in order to gain insights and each analytical task has the potential to be more or less appropriate, depending on the methodological aims and, ultimately, the research area to which one wants to contribute³.

Regardless of methodological standpoint, moving from early stages of annotating, coding and linking to more explicitly analytical stages is both crucial and challenging in qualitative research, and not exclusively in CAQDAS. For example, in a code-based project, going beyond coding requires both analytical skill and methodological clarity. A lack of either requirement results in a danger of overcoding, especially in CAQDAS packages due to ease of code creation. Yet CAQDAS packages offer bespoke interpretive tools that facilitate moving beyond this analysis stage, such as retrieval and query functions, graphics, and maps/models. These tools help in examining data from different angles, identifying patterns and relationships and developing insights. Thus, hypotheses are tested, theories emerge, and new understandings are gained. This process is significantly facilitated within the framework of CAQDAS due to the flexibility of the interpretive tools.

Conclusions

Whilst CAQDAS itself cannot contribute to social scientific knowledge, because it is not actually a method, the skilful and thoughtful use of its tools within any methodological framework can make such contributions. Additionally, its automatic logging of analytical processes strongly supports rigour and transparency, strengthening the credibility of qualitative research as a whole. Where CAQDAS software is still perceived to be falling short, the challenge for the research community is to express its needs in terms of the functions required to satisfy its methodological aims.

About CAQDAS software and QUIC

Computer Assisted Qualitative Data Analysis (CAQDAS) software facilitates the storage, management, transcription and analysis of data, outputting of findings and logging of analytical processes. Significant recent improvements include integration of multi-media data, synchronisation and linking of data (e.g. Geo-Referencing), advanced team-working facilities and presentation of findings in qualitative and quantitative forms.

The NCRM Qualitative Innovations in CAQDAS (QUIC) node provides practical support, training and information in the use of a range of software programs designed to assist qualitative data analysis. QUIC builds on the work of the CAQDAS Networking Project, commenced in 1994 to further explore technological and methodological developments in qualitative software. For further information about CAQDAS and QUIC see <http://caqdas.soc.surrey.ac.uk>

The challenge for the CAQDAS community, on the other hand, is to contextualise feedback within methodological orientations and translate this into software functionality. If both communities rise to these challenges, it should become clearer that CAQDAS packages can play a significant role in the furthering of social scientific knowledge.

References

- 1 Coffey, A., B. Holbrook & P. Atkinson (1996) 'Qualitative Data Analysis: Technologies and Representations', *Sociological Research Online*, vol. 1, no. 1.
- 1 Lonkila, M. (1995) 'Grounded theory as an emerging paradigm for computer-assisted qualitative data analysis' in U. Kelle (ed.) *Computer-Aided Qualitative Data Analysis*. London: Sage.
- 2 Silver C. & Patashnick J., (2011). Finding Fidelity: Advancing Audiovisual Analysis using Software. *Forum: Qualitative Social Research*, 12(1), Thematic Issue: Is Qualitative Software Really Comparable?
- 3 Silver C & Fielding N, (2008). Using Computer Packages in Qualitative Research, in Willig C & Stainton-Rogers W (eds.) *The Sage Handbook of Qualitative Research in Psychology*. London. Sage.