

# Chapter 79

## Computer–Aided Deductive Critical Discourse Analysis of a Case Study from Mauritius with ATLAS–ti 6.2

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### ABSTRACT

*This chapter considers computer-aided deductive critical discourse analysis with ATLAS-ti 6.2 using a case study on eco-social work research from Mauritius. Data for this case study were gathered in digital audio format from eight focus group discussions, three semi-structured interviews and various reports from secondary sources. For the analysis, a literature review using ATLAS-ti was first carried out, in order to develop a conceptual/theoretical framework related to eco-social work. Then, the gathered data were directly plugged into ATLAS-ti for a computer-aided deductive critical discourse analysis using the developed eco-social work conceptual/theoretical framework from the literature review. Using the case study as an example, this chapter (a) demonstrates the techniques, and (b) appraises the opportunities, limitations and challenges of computer-aided critical discourse analysis.*

### INTRODUCTION

Critical discourse analysis (CDA) – where meanings, motivations, ideologies and power are analysed through the deconstruction of text and talk – can be a complex process for novice researchers. When a large volume of research evidence is gathered through the use of new technological tools such as new social media (Facebook, Twitter, Skype, YouTube and so on) and digital

recorders (graphics, audio, video), CDA becomes challenging even for experienced researchers. Fortunately, over the last few decades a number of Computer-Aided Qualitative Data Analysis Software (CAQDAS) has been developed allowing more rapid, as well as more rigorous, data analysis (Rambaree, 2007; Rambaree & Faxelid, 2013).

CAQDAS packages are designed to aid researchers to interpret qualitative data through the identification, development and exploration of

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themes, concepts, and processes through coding and management of data. The identification and development of codes, themes, concepts and processes with CAQDAS facilitate the construction of explanations/theories or the testing/expansion of an existing theory (Lewins & Silver, 2007). ATLAS-ti is one among the range of CAQDAS systems currently available in the market, and its use within the field of qualitative research has been growing over the last few years (Konopásek, 2008). Like any other CAQDAS, ATLAS-ti is a tool for supporting the process of qualitative data analysis, particularly through automating and speeding up the coding and linking processes for a more efficient and effective way of exploring gathered data in breadth and depth (Barry, 1998; Rambaree, 2007; Frieze, 2012; Stewart, 2012). Comparing some of the CAQDAS, a number of researchers argue that ATLAS-ti is relatively more advanced in terms of software development – with a more complex inter-connected, hypertext structure, and it is also more intuitive and easier to learn, as well as more versatile (Barry, 1998; Lewis, 2004; Stewart, 2012). In relation to data management, ATLAS-ti can be considered user-friendly software, with almost all the essential capabilities for undertaking different types of qualitative analysis, within which different formats of data (text, graphics, audio and video) can be input directly for analysis (Barry, 1998; Lewis, 2004).

It is generally argued that several CAQDAS present a number of features and functions without a clear approach for undertaking different types of qualitative analysis (Stewart, 2012). In addition, most contemporary literature has mainly focused on describing, evaluating and or appreciating the programme functions of the software, rather than providing clear directions for undertaking certain types of qualitative data analysis using CAQDAS. Within qualitative research discourses, therefore, there is still a noticeable gap in terms of basic guidelines and procedures for how to undertake different types of qualitative analysis

(such as Thematic, Narrative, and CDA) using the features and functions of CAQDAS. In a similar vein, Hwang (2008) argues that not many scholarly works have been published to show how to use CAQDAS with actual research cases. Given that CAQDAS, such as ATLAS-ti, provides new possibilities for dealing with data, a systematic and methodological approach for qualitative data analysis needs to be further elaborated, in order to exploit the benefits of such software (Frieze, 2012). Moreover, qualitative data tend to be voluminous and vast in nature; therefore, without proper guidance it is easy for researchers to get lost and confused within the data analysis process. In order to discover the benefits of CAQDAS, it is important to have step-by-step procedures for guiding the different types of qualitative data analysis. In particular, a step-by-step guide can provide researchers more insight in understanding, evaluating and appreciating the discovery that could be made by using ATLAS-ti for qualitative data analysis, such as CDA.

In her book, Frieze (2012, p. 92) presents ‘*Notice, Code and Think*’ (NCT) as a general model of qualitative data analysis using ATLAS-ti tools. NCT, in fact, represents a very simple model of processing qualitative data (Seidel, 1998). Hence, Frieze (2012) calls upon researchers to use this particular simple NCT model to work with ATLAS-ti for reporting what else may be discovered. She provides an interesting analogy stating:

*The data material is the terrain that you want to study; the chosen analytic approach is your pathway through it. The tools and functions provided by ATLAS.ti tools are your equipment to examine what there is to discover. (p. 4)*

How is the NCT model applied within ATLAS-ti for CDA? What can be discovered when using ATLAS-ti for CDA? Such information is still missing within qualitative research discourses. In this connection, this chapter focuses on demonstrating

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