

Chapter 3

Engaging Technology–Based Manifestos Three Ways: (1) Manual Method–Based Coding, (2) CAQDAS–Supported Manual Coding, and (3) Machine Reading and Autocoding

ABSTRACT

Researchers today have a variety of ways to engage with their textual research data. Three main approaches include (1) manual method-based coding (with light computational supports), (2) Computer-Assisted Qualitative Data Analysis (CAQDAS)-supported manual coding (with data queries), and (3) machine reading and autocoding. To enable deeper understandings of data coding, exploration, and knowing, the above three approaches were applied in the above sequence to a corpus of technology-based manifestos. This work resulted in observations of different types of findable data from the three textual coding approaches, which may be used to inform research design.

INTRODUCTION

Contemporary researchers, almost invariably, will engage with textual data during their work. The text may be a set of formal research articles collected for a review of the literature. The text may be responses to open-ended survey questions, interview questions, focus group prompts, or other elicitations. The

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text may be various types of data extractions from social media platforms. Regardless of the origin of the texts, researchers have to code the text for understandings—whether through light reading (and note-taking) for decoding or more intensive coding work. Augmentations to human coding of textual data involve data query features in Computer Assisted Qualitative Data Analysis (CAQDAS) tools as well as new software features like machine reading and autocoding. To broadly overgeneralize, it is possible to divide coding of textual data into three approaches, with increasing levels of technology application: (1) manual method-based coding (with light computational supports with non-CAQDAS tools), (2) CAQDAS-supported manual coding (with data queries), and (3) machine reading and autocoding (Figure 1). In this conceptualization, manual coding (1) involves the researcher reading the data, coding for important aspects, and even using non-CAQDAS tools for data analytics. Some software tools may include linguistic analysis tools, basic quantitative analytics tools, and spreadsheet software programs. CAQDAS-supported manual coding (2) involves the digitization of the codebook, the coding of the text in the software, and the running of various data queries against both the original source texts and the coding and other mixes (like matrix queries combining both source texts and coding). Machine reading and autocoding (3) involves the use of both supervised and unsupervised machine learning applied to research texts and research data. Researchers who have experiences with these various approaches may project what they gain from each textual coding method, but as with most research work, a project is likely inaccurate and preliminary; researchers have to do the work and see where it actually goes.

In general, the data analytics sequence may start with some “close reading” of the text and manual coding (whether based on *a priori* methods or emergent ones). This early engagement ensures that the researcher has some familiarity (even intimacy) with the data. Then, once that stage is generally complete, researchers may move on to data exploration with the data queries and autocoding capabilities of the CAQDAS tools. (Some researchers, especially those dealing with big data, may work in the complete opposite approach—by exploring the big data with data queries and autocoding—and then spending some time for selective “close reading.”)

To simplify the research, this work assumes that there are no frictions over theory, methodological practice, or epistemological approaches. A theoretical purist might suggest that computational and quantitative means do not have a

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