

Chasms of time and space – Multimodal representations of Anthropogenic Climate Change in educational videos

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Abstract: The third, the fourth and the fifth IPCC assessment reports state with increasing certainty that the global climate is currently undergoing changes that are anthropogenic in nature, and that we need to take action to mitigate and adapt to the changes (IPCC, 2001, 2007, 2014). Research has also shown that only 3% of climate researchers disagree in this (Cook et al., 2013). Despite this strong consensus, however, anthropogenic climate change remains a topic riddled with inherent uncertainties and complexities, which makes it a challenging for public communication and political action (Hulme, 2009; Moser, 2016; Nerlich, Koteyko, & Brown, 2010, p. 3).

These communicative issues have inspired a large amount of research in climate communication, and among the research that focuses on texts and discourses, media climate discourse in particular has been explored extensively (Schäfer & Schlichting, 2014). However, there is comparatively little research on the ways in which climate change is represented in texts that are intended for use in school education (Román & Busch, 2016). Furthermore, there is a general need for more multimodal research in the field of climate communication, particularly on digitally mediated, online texts (Hansen & Machin, 2013; Koteyko & Atanasova, 2016; Schäfer & Schlichting, 2014).

One such communicative challenge is the spatial and temporal distances that the phenomenon involves, which makes it difficult to represent in theoretical models (Möser, 2010). In this paper we explore how the affordances of kineiconic modality for temporal and spatial organization can be used to tackle such communicative challenges (Burn & Parker, 2003; Ějzenštejn & Leyda, 1949; Metz, 1974). The material for the study is digitally produced educational videos that are available through online educational modules offered by NRK and Save the Children.

The study is theoretically anchored in the functional perspective on semiotics originally developed by M.A.K. Halliday, inspired by among others Bronislaw Malinowski, Ferdinand de Saussure and Louis Hjelmslev. This tradition seeks to understand the intricacies of communication in context by adopting a perspective on communication that is social and choice based rather than cognitive and formal (Halliday, 1978). While Halliday himself mostly concerned himself with verbal language, his model does not give priority to form over meaning, thus making it useful for studying other modes of communication such as images, numbers and music, as well as the interplay between such modes. This notion was first developed further by Gunther Kress and Theo Van Leeuwen, who used Halliday's model of communication to develop a grammar for visual communication (Kress & Van Leeuwen, 2006).