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Abstract

In recent data analytics research, much has been written about the function of data visualisations as storytelling media that improve comprehension of large and complex datasets for both expert and non-expert users. Concurrently, the availability of consumer applications that allow for easy manipulation and display of data has given rise to what is known as casual data visualisation. These casual visualisation systems bring new applications of data to new audiences, and so research into the nature of data visualisations in casual modalities must be carried out. This paper investigates the storytelling opportunities in the new paradigm of casual data visualisation by devising and applying a framework for analysing casual data visualisations as narrative media. In this research paper, I first establish the context of casual data visualisations in the era of Big Data before investigating the narrative dimensions of casual visualisation systems. Through this methodological analysis, I devise and define a taxonomy of the narrative dimensions of casual data visualisation. In the final chapter, I analyse three casual data visualisation systems by applying the devised framework. The systems are selected as applications that represent three interesting areas of casual data visualisation: online cultural database (Rap Stats), lifelogging (Reporter) and casual tools for exploring social media data (YouTube Trends). Opportunities and barriers for successful narrative in each system are identified through the analysis, and my conclusions demonstrate the functional utility of my framework for designers, researchers and critics engaging with casual data visualisations as narrative media.