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Text Analytics to Support Sense-Making in Social Media: A Language–Action Perspective

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Abstract

Social media and online communities provide organizations with new opportunities to support their business-related functions. Despite their various benefits, social media technologies present two important challenges for sense-making. First, online discourse is plagued by incoherent, intertwined conversations that are often difficult to comprehend. Moreover, organizations are increasingly interested in understanding social media participants' actions and intentions; however, existing text analytics tools mostly focus on the semantic dimension of language. The language-ction perspective (LAP) emphasizes pragmatics; not what people say but, rather, what they do with language. Adopting the design science paradigm, we propose a LAP-based text analytics framework to support sense-making in online discourse. The proposed framework is specifically intended to address the two aforementioned challenges associated with sense-making in online discourse: the need for greater coherence and better understanding of actions. We rigorously evaluate a system that is developed based on the framework in a series of experiments using a test bed encompassing social media data from multiple channels and industries. The results demonstrate the utility of each individual component of the system, and its underlying framework, in comparison with existing benchmark methods. Furthermore, the results of a user experiment involving hundreds of practitioners, and a four-month field experiment in a large organization, underscore the enhanced sense-making capabilities afforded by text analytics grounded in LAP principles. The results have important methods in LAP principles.

Keywords: Design science, text analytics, social media, natural language processing, language-action perspective, conversation disentanglement, coherence analysis