

Moral Emotions and Conflict Motivate Actions

By René Weber and Frederic R. Hopp

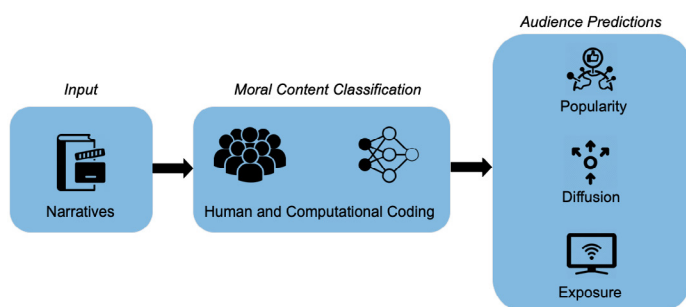
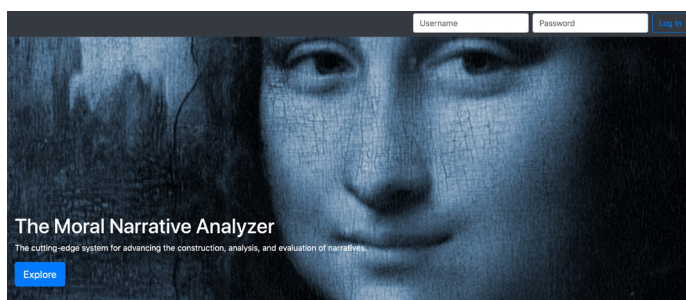
In this brief article, we contend that moral emotions and moral conflicts are instrumental in motivating a wide range of human behaviors. Accordingly, we emphasize that effective, compelling persuasive messages benefit from a narrative that presents moral information and triggers moral emotions. However, empirical, large-scale assessments of which kinds of moral information and moral conflicts are present in narratives, shape their popularity, and motivate audiences varying in moral intuitions are rare. To provide a solution, we introduce the Moral Narrative Analyzer (MoNA). MoNA is an online platform combining both human and computational intelligence to extract moral information and moral conflict from narratives at scale and determine their popularity among diverse audiences. We envision MoNA will become a versatile assistant in creating compelling, persuasive narratives and analyzing their impact on an unprecedented scale.

MORAL EMOTIONS AND CONFLICT

It is a well-known fact that emotions motivate actions¹. The right composition and dosage of emotions can create lasting and powerful memories which in turn determine the effectiveness of persuasive messages by shaping intentions, decisions, and behavior^{2,3}. At a fundamental level, emotions are superordinate adaptive programs⁴ designed to orchestrate subordinate cognitive mechanisms to prepare humans for an optimal, survival relevant response. For instance, fear is an adaptive response to threat that leads to increased attention, faster thinking, and the deactivation of lower order needs such as craving food or sleep. Basic emotions (e.g. anger, disgust, fear, happiness, sadness, and surprise⁵) only require monitoring one's own physical response to an emotional trigger. In contrast, social emotions (e.g. guilt, envy, elevation, pride, embarrassment) require the monitoring and understanding of others' thoughts and actions⁶. A special class of social emotions are moral emotions. Moral emotions are not only experienced as positive or negative, but as right or wrong in special ways (like in virtues and vices)⁷. Moral emotions, like

social emotions, depend on others' thoughts and actions, but also on others' intentions and the specific circumstances of their behaviors⁸. Crucially, moral emotions depend on individuals' moral intuitions that are universal and hardwired into our cognitive architecture⁹. Moral Foundation Theory¹⁰ assumes five innate moral foundations that are represented in all known cultures: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and sanctity/desecration. Basic and social emotions are mostly triggered by appetitive or aversive emotion displays in the proximate environment (e.g. an attractive person versus a venomous snake). Moral emotions are more complex and require processing sequences of agents' intentions, actions, and outcomes – they require a narrative.

In this article we argue that effective, motivating persuasive messages benefit from a narrative that presents moral information and triggers moral emotions. Narratives that represent moral conflict (i.e. simultaneously uphold and violate moral norms) are especially motivating¹¹. This argument is bolstered by



evidence demonstrating the instrumental role of moral narratives and conflict in decision-making processes, including voting¹², persuasion¹³, charitable donations¹⁴, message diffusion¹⁵ and in the selection and evaluation of media content. The Model of Intuitive Morality and Exemplars^{16,17} (MIME), for instance, allows predicting specific audience responses to persuasive messages by analyzing the interaction of message receivers' moral intuition profile and the moral information presented in narratives. Yet, empirical, large-scale assessments of which kinds of moral information and moral conflicts are present in narratives, shape their popularity, and motivate audiences varying in moral intuitions are rare. To fill this gap, we introduce the Moral Narrative Analyzer platform (MoNA; <https://mona.medianeuroscience.org>).

THE MORAL NARRATIVE ANALYZER PLATFORM (MoNA)

MoNA is an online platform that combines both human and computational content analysis to detect which kinds of moral information and moral conflicts permeate narratives. MoNA has successfully been utilized to extract moral conflicts from global news stories to track their diffusion and forecast future real-world events, assess the moralization of political speeches, and detect moral conflicts in movie scripts and song lyrics to predict their popularity. We envision that MoNA has unprecedented future potential for understanding how moral conflicts unfold and motivate actions at scale.

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received his B.A. in Media Psychology from the University of Mannheim, Germany, and his M.A. in Communication Science from the University of California in Santa Barbara. He is currently a Ph.D. student at the Department of Communication at UCSB and a senior researcher at UCSB's Media Neuroscience Lab (<https://medianeuroscience.org>). He employs a combination of natural language processing, computational modeling, and fMRI to investigate how people process, evaluate, and behaviorally respond to morally-salient narratives. He has developed several methodological advancements to improve the computational extraction and forecasting of moral conflicts at scale. His research has been published in flagship communication journals and presented at both academic and commercial enterprises.

The Media Neuroscience Lab

conducts and promotes research and teaching at the intersection of communication, technology, and neuroscience. The Lab encourages collaboration among communication scholars, media professionals, and cognitive neuroscientists to build a richer understanding of shared research questions and methods. In keeping with its multidisciplinary orientation, the lab fosters unconventional ideas and critical thinking within a collegial environment. As a service to scholarly, public, and commercial communities, the Media Neuroscience Lab provides consulting, produces research tools, and organizes events. A selection of projects can be found at <http://medianeuroscience.org>.