

Emotional Cognition in the Real World

Paul Thagard (pthagard@uwaterloo.ca)

Department of Philosophy, University of Waterloo
Waterloo, ON, N2L 3G1 Canada

Peter Ditto, phditto@uci.edu

Department of Psychology and Social Behavior, University of California-Irvine
Irvine, CA 92697 USA

Jonathan Gratch, gratch@ict.usc.edu

Department of Computer Science, University of Southern California
Los Angeles, CA 90089 USA

Stacey Marsella, marsella@isi.edu

Department of Computer Science, University of Southern California
Los Angeles, CA 90089 USA

Drew Westen, dwesten@emory.edu

Department of Psychology, Emory University
Atlanta, GA 30322 USA

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Introduction

There is increasing appreciation in cognitive science of the impact of emotions on many kinds of thinking, from decision making to scientific discovery. This appreciation has developed in all the fields of cognitive science, including, psychology, philosophy, artificial intelligence, and linguistics, and anthropology. The purpose of the proposed symposium is to report and discuss new investigations of the impact of emotion on cognitive processes, in particular ones that are important in real life situations. We will approach the practical importance of emotional cognition from a variety of disciplinary perspectives: social psychology (Ditto), clinical psychology (Westen), computer science (Gratch and Marsella), and philosophy and neuroscience (Thagard). In order to provide integration across these approaches, we will try to address a fundamental set of questions, including:

1. How do emotions interact with basic cognitive processes?
2. What are the positive contributions of emotions to various kinds of thinking in real world situations?
3. How do emotions sometimes bias thinking in real world situations?
4. How can understanding of the psychology and neuroscience of emotional cognition be used to improve the effectiveness of real world thinking?

Participants

Peter Ditto, Psychology, University of California-Irvine

Emotional Cognition in Everyday Moral Reasoning

Because moral claims cannot be supported by reference to “facts,” people generally defend specific moral positions by invoking general moral principles. Principles (e.g., “one should never sacrifice innocent life even for a greater good”) have the appearance of being foundational rules that can guide judgment across a variety of situations, making specific moral claims (e.g., “terrorism is wrong”) seem like aesthetic preferences and more like rationally-derived inferences. In this talk, however, I report a number of studies showing that people faced with everyday moral dilemmas shift their reliance on moral principles to rationalize desired conclusions. Specifically, I present a dual process model of motivated moral reasoning that predicts that when evaluating a moral transgression, people use intuitive deontological rules if the transgression evokes a positive emotional response (e.g., a disliked actor doing a bad thing), but use more complicated consequentialist logic if the transgression evokes a negative emotional response (e.g., a liked actor doing a bad thing). Because both deontological and consequentialist thoughts produce plausible rationales for specific moral claims, people often show inconsistent moral reasoning when faced with similar moral scenarios that differ only in their affective implications. These ideas are relevant to both personal ethical judgments and everyday political reasoning.

Jonathan Gratch and Stacey Marsella, Computer Science, University of Southern California

Emotional Cognition in Social Interaction

Emotions are highly social. They arise from our understanding of the social context, impact our behavior in ways that communicates our beliefs, desires and intentions to social partners, and elicit social responses that alter the social context and, thereby, transform our initial emotional response. Recent scholarship has emphasized the interdependence between emotional and cognitive processes and the functional role of emotions in social cognition, communication and coordination (Keltner and Haidt 1999). According to this view, humans evolved to survive through social relationships and emotions motivate social behavior in ourselves (e.g., feelings of guilt and shame help enforce social norms and promote prosocial behavior) and our social partners (e.g., emotional displays transmitting coordinating information and elicit adaptive social responses). Despite this social nature, the dominant theoretical perspective on emotion, appraisal theory, treats emotion as largely an intrapersonal, self-centered process (see Smith et al. 2005). In this talk, we review the posited social functions of emotion, review our ongoing work on computational models of emotional cognition based on appraisal theory (Gratch and Marsella 2004), and discuss the prospects of extending such models to more fully embrace the social function of emotions. Through this discussion, we argue that social emotions provide an often overlooked window into human cognitive processes, and discuss their implications for the design of general cognitive architectures.

Paul Thagard, Philosophy, University of Waterloo

Emotional Cognition in Decision Making

Conflicts of interest arise when people make decisions biased by their personal goals, neglecting responsibilities to consider the interests of others. Such conflicts are ubiquitous in government, business, journalism, and academic research, whenever an agent has a responsibility to look after broader interests that are neglected because of the agent's own interests. This talk will describe the moral psychology of decisions that involve a conflict of interest. My approach draws on the burgeoning field of affective neuroscience, which is the study of the neurobiology of emotional systems in the brain. In particular, I show how neurocomputational models of how the brain integrates cognitive and affective information in decision making can help to answer some important descriptive and normative questions about the moral psychology of conflicts of interest.

Drew Westen, Psychology and Psychiatry, Emory University.

Emotional Cognition in Political Judgment.

This talk will describe a model of motivated political

judgment. Political judgments reflect the simultaneous satisfaction of two sets of constraints: cognitive constraints (imposed by data and logic) and emotional constraints (imposed by emotional associations and anticipated emotions). In five studies of high-stakes political situations in American politics (e.g., judgments about abuses at Abu Ghraib), cognitive constraints accounted for limited variance, but emotional constraints (e.g., feelings toward the two parties) accounted for much of the variance in seemingly "cold" cognitive judgments. A neuroimaging study identified circuits involved in motivated political judgment, particularly in ventromedial prefrontal cortex and anterior cingulate.

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