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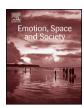
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Book review

Uncomfortable Situations: Emotions between Science and the Humanities, Daniel M. Gross. The University of Chicago Press, Chicago and London (2017). 182 pp. US\$40 cloth. ISBN: 978-0-226-48503-4

This short monograph comprises an introduction, the four case study chapters, and an epilogue co-authored by Stephanie Preston, an ecological neuroscientist. Some of the writing is a re-working, or extension of, previous projects which Gross acknowledges in the preface to the book, whereas the book as a whole is a sequel to an earlier work titled The Secret History of Emotion: From Aristotle's Rhetoric to Modern Brain Science. Gross reveals that he was motivated to write the sequel in order to extend the cross-disciplinary conversation that he had already started - one in which he calls into question a basic theory of emotion for its failure to account for the complexities of emotional experience. Gross, instead, points to the fruitful dialogues and intersections between the neuroscience of 'situated cognition' and a rhetoric of emotion derived from the humanities. In both, he believes, there is an understanding and appreciation of the work that emotions do, the way they are culturally scaffolded and performed, and the way that the cognitive dynamics of emotion are ecologically determined.

In the introductory chapter, Gross deploys several literary examples to demonstrate what he means by situated emotion. He finds 18th century sentimental literature to be particularly useful in this regard for the way that it draws attention to the exigencies that give rise to emotional experience. He goes on to distinguish this approach from a phenomenological one, by arguing that a rhetoric of emotion is concerned less with how emotional experience is constructed but rather how it *emerges* from the transactional nature of relationships (i.e., as mimetic, cathartic, prosthetic, performative, voluntary, or systematic). Emotions are situational in so much as they arise in response to unspoken expectations that exceed individual feelings. Emotions are intimately embedded in performances that do emotional labour. The significance of literature in the study of emotion is the way it demonstrates how emotions take place 'amidst the chaotic idioms of transaction' (p17).

In Chapter 1, Gross defends the importance of the humanities with reference to Darwin's work on emotional expression. Gross claims that reductionist theories of emotion purport to draw on Darwin's earlier work but instead have conveniently diluted and distorted it to support a basic theory of emotion that runs counter to induction. Darwin's rhetoric, Gross argues, is essential to a non-reductionist science of emotion because it accounts for the emotion's medium, occasion, and social situation. Darwin's studies were comparative, across culture and species, and deliberately avoided the type of reductionist thinking upon which a basic theory of emotion depends. This not only allows for a science of emotion which is descriptive, but also one that has the capacity to account for negation (or 'inactive' emotions). We need the arts and literature, Gross suggests, because they transpire on a level where things happen. By way of illustration, he demonstrates how sentimental

literature is particularly adept at testing how emotionally unstable characters find 'composure' in unlikely circumstances.

In Chapters 2 and 3, Gross more strenuously pursues his goal to navigate the space between the sciences and humanities in the realm of emotional experience. He does this by focusing on two types of situations. The first is 'bearing up' - or, loosely, a sense of well-being - and the second is 'environmental hostility' - or being uncomfortable to the point of being unhinged. In the first of two literary case studies (The Interesting Narrative of the Life of Olaudah Equiano), Gross draws parallels between the Equiano's autobiographical testimony, the sciences of happiness and situated cognition, attachment/feeling, and the unity of experience to demonstrate how it is possible to feel the improbable – to be a 'happy slave'. In Chapter 3, Gross considers the ways in which we navigate hostile environments through the literary example of Ann Radcliffe's The Romance of the Forest. In doing so, he compares and contrasts affordance theory, literary Darwinism, evolutionary psychology, and cognitive approaches to literature, arguing that they should be seen as 'additive' rather than 'subtractive' (p88). Gross considers evolutionary psychology and cognitive approaches to literature to be part of a hierarchy of interpretation from biological to cultural.

In the fourth and final literary example, Gross examines 'mixed feelings' in Jane Austen's *Sense and Sensibility*. Continuing to critique theorists of basic emotion, Gross turns to neuropsychologists who have experimentally demonstrated that emotion is grounded in situated conceptualisation. Emotion is not a simple response to a stimulus, as basic emotion theory would suggest, but is fundamentally situated. Furthermore, in studies of situated cognition participants can interpret how these situations work even when the situations themselves are ambiguous, and particularly when they are from a second-person perspective.

In the final chapter - the epilogue titled Irreconcilable Differences? -Gross, in collaboration with Stephanie Preston, set out the enduring nature-culture divide that has plagued research on emotions since the mid-1800s. They explain why it persists, and why previous efforts to 'bridge the gap' have failed. They then continue by considering the limitations of the laboratory science of emotion. Their critique ranges from the methodological to the financial, the institutional, the media, and the imperative to publish results that communicate singular findings at the expense of complexity. They go on to examine, in detail, recent research on fear and empathy, pointing out the failures of interpretation that occur when scientists neglect historical, social, and cultural explanations for the phenomena they investigate. This final chapter is an excellent, stand-alone essay which could readily sit in a collection of readings for an undergraduate neuroscience course or a humanities course on the history of emotions. The book itself is highly recommended for academic scholars in cultural studies, cultural geography, museum studies, and cognitive psychology for its stimulating and respectful treatment of both literary and scientific forms of knowing.

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