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Affect Control Theory and the Sociality of Emotion: Reply to Comments

Kimberly B. Rogers

Department of Sociology, Duke University, U.S.A., krogers@duke.edu

Tobias Schröder

Centre for Theoretical Neuroscience, University of Waterloo, Canada, post@tobiasschroeder.de

Christian von Scheve

Department of Sociology, Freie Universität Berlin, Germany, christian.von.scheve@fu-berlin.de

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Abstract

We are pleased that all commentators seem to agree that a theory-driven integration across disciplines is a worthwhile endeavor to better understand the social constitution of emotion. In our reply, we first take up the idea of relating Affect Control Theory (ACT) to cultural priming and suggest links to an ACT-inspired constraint satisfaction explanation of priming. Second, we address reservations concerning ACT's capability to account for emotions with non-conceptual content and to explain stability and change in affective meanings. Third, we clarify the relation of affect control theory to psychological constructionism, in particular with regard to conceptualizations of culture and society. Finally, we suggest that computational models are an adequate tool to address multi-level issues in the study of emotion.

Keywords: emotion, multi-level mechanisms, affect control theory

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By demonstrating the conceptual compatibility of Affect Control Theory (ACT; Heise, 2006) with major theories of emotion operating at multiple levels of explanation, we hoped to contribute to a unified understanding of the sociality of emotion (Rogers, Schröder, & von Scheve, 2014). We are pleased that all commentators seem to agree that such a theory-driven integration across disciplines is a worthwhile endeavor.

In applying ideas from ACT to their work on cultural priming, Pornpattananangkul and Chiao (2014) have started to engage in the kind of mutually informative debate we envision. ACT could benefit from their perspective on the affective content of culturally significant symbols (e.g., “dragon” or “Mickey Mouse”), complementing existing cross-cultural studies of meanings for more general concepts. This would also help answer questions related to transient shifts of identity meanings in affective space. Schröder and Thagard (2013) have proposed an ACT-inspired constraint satisfaction explanation of priming effects, where constraints stem from the affective meanings of concepts.

Salmela (2014) points out some limitations of ACT, particularly in accounting for emotions with non-conceptual content. While we would employ a broader understanding of “concepts” to be rooted in sensory-motor representations, Salmela correctly highlights ACT’s emphasis on symbolic representations. This focus stems from ACT’s symbolic-interactionist heritage and is confined to *emotions*, whereas we see no inherent limitations regarding the “non-conceptual” components of *affective meanings*, as revealed by our introduction of semantic pointers and levels of meaning (Eliasmith, 2013) into ACT.

Salmela is also correct that ACT presently has little to say about how stable fundamental meanings come about in the first place and shift in response to societal change (but see Heise,

2006). Indeed, this is an issue explored by recent scholarship. Both social position and connectedness have been linked to disparities in affective meanings for some types of concepts, although remarkable consensus and stability have been found in more institutionalized meanings; social influence networks are an important means by which consensus is reached and sustained (Rogers, 2013). The Bayesian variant of ACT (BACT; Hoey, Schröder, & Alhothali, in press) helps address the issue of stability versus change by representing concepts as probability distributions in affective space (rather than fixed vectors), learning how these adapt to experience, and maintaining multiple hypotheses about the identities of self and others.

Lindquist and MacCormack (2014) point out that the psychological constructionist approach is also an explicit multi-level framework. We wholeheartedly agree that there is no “need for an either-or distinction between ACT and constructionism” (p. XXX). The frameworks have complementary strengths and weaknesses, while sharing fundamental assumptions about the sociality of emotion. Discussing psychological constructionism under the neural level of explanation was not intended to restrict its scope to brain mechanisms. We do think, however, that the constructionist framework’s strengths are on the levels of neural and psychological mechanisms, and that its conceptualization of culture and sociality could profit from consideration of ACT’s propositions (e.g., understanding sociality beyond dyads and groups). In return, ACT can benefit from incorporating the more biologically-grounded perspective offered by psychological constructionists.

This conceptual alignment is a good example of employing theories at multiple levels “that can sensibly interact with each other” (Robinson, 2014, p. XXX). It is often infeasible, as pointed out by Robinson, but also unnecessary for single studies to be multi-level, as long as empirical findings at multiple levels relate to each other. We believe that computational models

are powerful tools to provide theoretical connections between empirical findings at different levels, as exemplified by our linking ACT's cultural-level impression change model with functional affective networks in the brain through semantic pointers.

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