

Emotions in Context: A Socio-Dynamic Model of Emotions

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**Abstract**

We propose a socio-dynamic model of emotions, in which emotions are seen as dynamic systems that emerge from the interactions and relationships in which they take place. Our model does not deny that emotions are biologically constrained, yet it takes seriously that emotions are situated in specific contexts. We conceive emotions as largely functional to the socio-cultural environment in which they occur; this is so because socio-cultural environments foster the emergence of emotions that positively contribute to social cohesion. The role of the social context includes actual, online shaping --affordances, constraints, and reward structures--, and thus goes beyond merely providing the content of cognitive representations (e.g., goals, concepts).

**1. What are the essential elements of your theory of emotion? Which elements are shared by different theories? What element(s) distinguishes your theory from the others?**

There are two facts that most models of emotion fail to capture. First, the large majority of our emotions occur in the contexts of social interactions and relationships, and unfold in conjunction with these interactions and relationships (Boiger & Mesquita, 2012a; Butler, 2011; Parkinson, 2012). Second, emotional response selection tends to be functional (i.e. more often rewarding than not) within the specific socio-cultural contexts in which it occurs (e.g., Kitayama, Mesquita, & Karasawa, 2006; Mesquita, 2003). The socio-dynamic model we have developed tries to capture these two facts (Boiger & Mesquita, 2012a, 2012b, forthcoming; Mesquita, 2003, 2010; Mesquita, Deleersnyder, & Albert, forthcoming).

First and foremost, the model proposes that emotions emerge from social interactions and relationships, which they in turn constitute, shape, and change. The point is not that emotions occur in response to social events; rather, it is that social interaction and emotions form one system of which the parts cannot be separated (Butler, 2011; Barrett, 2013). For example, think of how to properly describe a couple's emotions in the course of a dispute, without also describing the unfolding interaction. The features of the system—recurrent states, and states to be avoided, as well as the (positive and negative) feedback loops between the partners—cannot be reduced to each individual's emotions; nor can the emotions be fully disentangled from the interaction, in this case the dispute. Moreover, interactions at any point in time are afforded and constrained by the ongoing or developing relationships in which they take place. Again, the emotions of the couple at one point in time cannot properly be described without reference to the couple's relationship history (Butner, Diamond, & Hicks, 2007; Schoebi, 2008). Thus, emotional interactions are closely tied to the interpersonal contexts in which they take place.

A second aspect of our model is the assumption that emotions are functional to the specific social and cultural context in which they emerge. Thus, functionality according to our model is tied to the current social context, not necessarily to the evolutionary past of our ancestors (although this evolutionary past may have some characteristics in common with current social contexts). To the extent that emotions produce better outcomes within a certain context, they have been shown more frequent. This is true across different levels of “social context.” Child aggression is more likely to be observed when family members withdraw or lessen their demands (Patterson et al., 1998, quoted in Oatley et al., 2007); crying is more frequent when compatible with one’s gender role (Van Hemert, van de Vijver, & Vingerhoets, 2011); and shame, which expresses a concern with others’ view of oneself, is more frequent in cultures that underline interdependence than in cultures of independence (Boiger, Mesquita, Uchida, & Barrett, 2013; Kitayama et al., 2006). We contend that functionality is no invariant property of the emotion or emotional response itself. Thus, shame is not generally dysfunctional, but only in cultures that highlight individual success and self-sufficiency (Mesquita & Karasawa, 2004). Similarly, emotional suppression as a strategy of regulation is not always dysfunctional, but only in cultural contexts that value authenticity (Butler, Lee, & Gross, 2007). Functionality is contingent on the particular match with the social context in question.

While a socio-dynamic view focuses attention on emotions as interpersonal systems (see also Butler, 2011), it does not preclude that emotions can be described at an intrapersonal level. However, our model is agnostic with respect to what exactly constitutes an emotion at the intrapersonal level. There is increasing evidence that emotions are psychological constructions (or emotional meta-experience) (e.g., Barrett, 2006, 2012; Russell, 2003). However, our model also allows for a representation of emotions in terms of patterns of emotion “components” such as appraisals, action tendencies, physiological responses,

behaviors, etc. The crucial point is that emotions, whether represented as psychological constructions or in terms of component patterns, emerge in interplay with and derive their specific function from the social context. This means that emotional experience and behavior will be differently constructed across various contexts. Being angry with your boss may be a different emotion than being angry with your child; anger in a soured relationship may be different than anger in a flourishing one; and the modal construction of anger in Japan may be different than that in Belgium. Our model suggests a shift in research paradigm, but it does not have a full explanation for all phenomena ever counted to be emotional.

We see commonalities with all other approaches represented in this issue. Consistent with psychological constructionist theories and some appraisal theories, we submit that emotions are constructed in the moment, and that they emerge from lower-level systems (Barrett, 2006, 2009; Barrett & Russell, forthcoming; Gendron & Barrett, 2009; Russell, 2003; Moors, this issue). However, our model places “construction” at the interface between individual and environment, and not primarily in the head of the individual. The role of the social context includes the actual, online shaping of emotions by the social environment. Examples are the reinforcement structure of the social environment, including reinforcements within interactions or relationships; the socio-cultural opportunities and constraints for emotional interpretation and behavior; and the affordances offered by the unfolding interaction (see Parkinson, 2012 for a similar view). Importantly, social context goes beyond merely providing the content of the representations (i.e., the former experiences, concerns, values, and goals, or even (socially consensual) concepts) that serve as input for the emotion.

Our view is also consistent with evolutionary accounts (e.g., Tracy, this issue) at least to the extent that we equally emphasize the functionality of emotions (and emotional responses) for (social) life. We are less inclined to attribute specific functions to “distinct emotions” (Tracy, p. X), because we think of the functionality of an emotion as context-

specific, rather than as an inherent quality of the emotion. While we agree, for instance, that anger is often associated with the overarching goal of dominance and self-assertion, this may be functional in some types of relationship contexts (a male boss to his employee), but not in others (a female boss to her employee).

**2. One way to clarify just what a claim includes is to ask what it excludes. That is, what would falsify a claim? Please elaborate on those distinguishing elements of your theory by stating how, at least in principle, they would be falsified.**

Our model specifies the following predictions:

*i. Emotions are situated: They are dynamically changing in conjunction with changes in the social context*

This prediction would be falsified by finding that the course of an individual's emotions is not contingent on social context. This would be the case, for instance, when the type of emotion determines its temporal course, but not the type of situation (interaction, relationship, culture). Research charting temporal changes in emotions is scarce, and only a handful of studies have examined the course of emotions in conjunction with the development of social situations. However, so far these studies have found an association between the duration of the emotion and the course of the event (Verduyn, Delvaux et al., 2009)

Our claims would be equally dismissed by the finding that having or expressing an emotion is in no ways dependent on the emotions of (close) others and, in turn has no influence on them. The growing evidence that emotions are co-regulated between partners (see Butler & Randall, 2012) and the finding that emotional co-dependencies within interacting dyads depend on the dyad's relational history largely supports our claims so far.

*ii. The social functionality of emotions (or emotional components) predicts their occurrence.*

The prediction would be falsified if the social rewards for an emotion were not predictive of its frequency or intensity. Evidence so far is consistent with our theoretical perspective: Emotions and emotional responses that are valued in a particular socio-cultural context, tend

to be more prevalent and more intense (see the example at the beginning of this article). Moreover, at the level of social interactions and relationships, we would predict to see that socio-culturally valued emotions are afforded and promoted, while disvalued emotions are prevented and discouraged. The jury is still out on this prediction, but disconfirming it would challenge our model.

*iii. The patterns of components constituting an emotion will vary across contexts; i.e., across different interactions, relationships, and cultural contexts.*

This prediction would be falsified if research yielded invariant patterns of emotion components (i.e., appraisals, physiological changes, localized brain activation, expressions, behaviors) across different instances of a similar emotion. Evidence from emotion research is currently consistent with the prediction of variance within an emotion category. For instance, there are individual differences in the appraisals that people experience when angry, and no one appraisal appears to be sufficient or necessary for the experience of anger (Kuppens, Van Mechelen, Smits, & De Boeck, 2003; Kuppens, Van Mechelen, Smits, De Boeck, & Ceulemans, 2007). Furthermore, there is some evidence of differences in the emotional components associated with amusement, according to relational context: Friends' emotional expressions and appraisals of amusement were found to be more similar than those of strangers (Bruder, Dosmukhambetova, Nerb, & Manstead, 2012). Finally, there is cultural variation in the appraisals and action tendencies that people commonly associate with anger and shame. In our own research, we found that, the typical appraisals associated with shame and anger (and with shame and anger situations) differed appreciably between participants from the U.S., Japan and Belgium (Boiger, De Leersnyder, et al., 2013). Using a statistical classification model, it was possible to infer participants' cultural origin, both based on the patterns of appraisal and action readiness that were associated with particular antecedent events, and based on the patterns of appraisal and action readiness predicting the intensity of

the emotion (either shame or anger). This means that the profiles of emotion appraisals and action readiness associated with antecedent situations on the one hand, and with the emotions of shame and anger on the other, were specific to particular contexts cultural contexts. While the evidence for contextual variation in emotions is spotty, it has proved consistent with our predictions so far.

We remark that falsification is only one criterion by which to evaluate a theory: The other would be whether it produces interesting questions, connects findings that were hitherto not connected, and provides insightful explanations for findings that were poorly understood before. By making the socio-cultural contexts in which emotions unfold a topic of investigation, our perspective has shed light on the situated nature of emotions. Rather than aggregating emotional experiences across instances, our model suggests examining the situated responses. Rather than averaging responses across different situational contexts per emotional category, we suggest to differentiate between different types of situations. This will yield a more fine-grained understanding of person-related, relationship-related, and culture-related differences, distinguishing contexts of difference and similarity. By specifying the multiple, nested contexts and the interdependencies between them, we provide a meta-theory that can explain and combine context-specificities at multiple levels of contextuality which were hitherto largely investigated in isolation – e.g., interactions, relationships and cultures (Boiger & Mesquita, 2012a). Finally, by highlighting the context-specific social functions of emotions, our perspective allows to analyze cultural variation in components that previous research frequently failed to sufficiently explain (e.g., Scherer & Wallbott, 1994). The importance of falsification notwithstanding, we think that our theory is especially valuable by these latter criteria.

**3. How does your theory view the relation of emotional experience (the subjective conscious feeling in an emotion) to the perception of emotion in another? What is each process? Are they qualitatively different processes? The same process? Are they linked?**

Emotional experience can be seen as “the perception of emotions in oneself”. Both emotional experience and the perception of emotions in other people share with other perceptual processes that they combine top-down and bottom-up processes (Barrett, 2006). Top down processes for both emotional experience and emotional perception in others include conceptual and situational knowledge. We submit that these top down processes are in flux themselves, as ongoing interactions and relationships afford selection and update. Some of the bottom-up processes are shared in principle: Both emotional experience and emotion perception in others have access to contextual information. However, there will also be differences between the bottom-up processes constituting emotional experience and perception of emotion in others respectively: Emotional experience accesses interoceptive information, whereas emotion perception in others can draw on certain expressive information to which an individual him or herself has no access.

**4. Emotions are now typically thought of as having components, such as changes in the peripheral nervous system, facial movements, and instrumental behavior. What precisely does your theory say about the relation of emotion to the components?**

We conceive of emotions as constructed from dynamic processes that unfold over time and are situated in interactions, relationships, and ultimately in cultures (Boiger & Mesquita, 2012a; Mesquita, 2010). According to the view that emotions emerge rather than exist a priori, what we call “emotion” is really a collection of different constituents (e.g., cognitive, behavioral, physiological responses) that interact over time (e.g., Barrett, 2009; Lewis, 2005). Moreover, emotions emerge from the interplay between these individual processes and the social context in which they take place. As emotions are constructed “in the moment” during

ongoing interactions, they cannot be properly modeled without considering the interaction between individuals from which they emerge.

**5. Is there variability in emotional responding within a given category of emotion (such as fear, anger, etc.)? If so, how does your theory explain that variability?**

Variability is key to our emotion model. We conceive of emotions as momentary constructions afforded and constrained by social interactions in which they take place. The multitude of possible interactions ensures variability in emotions. This means, for example, that what people call anger may differ across different types of interactions and in different relationships. While finding variability within emotions has not been the focus of much research, there is some evidence in support of our proposal. This means that what we call anger varies across different instances. Even more supportive of the idea of situated emotions is the finding that particular configurations of anger responses co-occurred with particular types of situations (e.g., lower-status versus-higher status target ) (Van Coillie, Van Mechelen, & Ceulemans, 2006).

What people call anger or some translation of anger may also be different across *cultures*. This is the case in part because the conceptual domain is differently carved up, or even differently made. An example of this is the Turkish word for anger, *kızgınlık*, which refers to anger as it occurs in intimate relationships, and has a connotation of sadness or disappointment (Mesquita, 1993). English does not have a word that covers the same palette of feelings (See also Wierzbicka 1992, for other examples). A different concept may itself contribute to a different emergent emotion, creating more opportunity to apply the available concept (Barrett, 2006, 2012).

Perhaps more importantly: The labeling of emotions does not seem to use the same criteria in all cultures. In some cultures, for instance, the equivalent of the word 'shame' is used when the situation is one of threatened honor, rather than for a particular mental state

(Abu-Lughod, 1986); the mental state of 'shame' may or may not be present when a person is ashamed. Variability in the emotional responding associated with a particular category of emotion may thus be due to different conceptions of emotion itself.

Finally, what people call anger may also cross-culturally differ because the words map onto different cultural realities. It is important to be aware that the construction of emotion is an ongoing, dynamic process contingent on the interactions and relationships within the culture. Social constructions of emotion thus result in a mosaic of related, but different situated processes. Within each culture, particular emotion categories refer to this mosaic. The traditional model of emotions as entities has led to describing cultural differences in emotions based on cultural aggregates. Our model of emotions suggests that a cultural category of the emotion refers to a mosaic of situated instances of the emotion. Average cultural profiles of emotion hide a lot of individual variation at the level of emotional episodes, and should thus be unpacked in terms of their variation across meaningful types of situations.

Granted, all these variations beg the question of comparability of concepts across cultures. This is an old question, and our answer would be that it is important to justify and articulate the reasons to compare particular concepts across different languages (Mesquita & Frijda, 1992). In other words, if we were to compare *kızgınlık* in Turkish with anger in English, we would have to articulate in which regards these words are known to be similar. The shared similarity between those words will make any difference between the associated emotions interpretable.

Finally, emotions are not *all* variability. Most cultures have a word for anger (Russell, 1991), and across languages, translations of anger refer to experiences that are at least comparable (or they would not have been translations of each other). Also, human beings all have brains and bodies, and share some potential for emotions. Emotions are thus biologically constrained. However, *what* exactly humans share may not be ready-made emotion packages,

but rather the systems constituting emotions. What human beings also share are social environments with logically limited possibilities for interaction. Think about it: What other possible relational engagements would there be except for being either submissive or dominant, either to approach (be close) or to avoid (be distant), either to oppose (be antagonistic) or to yield (be agreeable)? Thus, even cross-cultural similarity may emerge from similarity in the types of social interactions and relationships that occur across cultures.

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