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Scherer, Klaus R.; Ellsworth, Phoebe C.

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Author Reply: The Unbearable Heaviness of Feeling

Klaus R. Scherer

Swiss Center for Affective Sciences, University of Geneva, Switzerland

Phoebe C. Ellsworth

Research Center for Group Dynamics, Institute for Social Research, University of Michigan, USA

Abstract

The comments by Brosch and Sander, de Sousa, Frijda, Kuppens, and Parkinson admirably complement the four main articles, adding layers of complexity, but perhaps at the expense of theoretical parsimony and stringency. Their suggestions are inspiring and heuristic, but we must not forget that science is about testing concrete predictions.

Keywords

appraisal, causality, flexibility, nomothetic versus ideographic approach, predictability

It is no accident that emotions were so long neglected by empirical scientists bent on testing concrete hypotheses—emotions are so complexly multiform and multidetermined that deriving testable hypotheses is a daunting task. The commentators have done an excellent job of documenting this complexity and demonstrating the lacunae in current appraisal theories.

Brosch and Sander (2013) rightly urge researchers to seriously study the neurophysiological mechanisms underlying appraisals. Their brief overview shows the richness of information already available, although appraisal processes have rarely been the focus of attention. This approach is all the more promising as the results of focused neuroscientific research on appraisal processes can directly address the plausibility of appraisal theories, and provide comparative evidence about competing approaches (rather than relying on vague inferences about the compatibility of brain processes with ill-specified notions of “locationism” or “constructivism”; see Scherer, 2012).

De Sousa (2013) provides an excellent aperçu of the conceptual complexities in theorizing about emotion in general and appraisal theories in particular. On causality: This issue should be examined as a process rather than an event, and will require taking the idea of “recursive causality” seriously, as de Sousa

recommends in his final section on appraisals and emotions in response to one’s own emotion. On dimensions: We agree that dimensions can be multiplied ad infinitum. This is why the projection of high-dimensional spaces to low-dimensional ones is so important in science. Valence seems to be the most general factor in such low-dimensional spaces. In general, appraisal theorists attempt to theoretically construct the most economical low-dimensional space that is sufficient to make and test predictions. The art is not to proliferate, but to reduce the number of dimensions (and to accept the resulting lack of precision). On levels of processing: We propose that the schematic level is based on uniform, holistic templates, whereas the associate level is based on multiform association spreading (but we agree that this requires further elaboration).

De Sousa (2013) also notes our relative neglect of narrative and the stories of emotions developing over time with evolving situations and appraisals of those situations. People are moved by novels and films from different countries, even when the language and expressions are foreign, and the topic of universal versus culturally specific *situations* is ripe for investigation.

Parkinson (2013) rightly insists that appraisal is not the only road to emotion. Most appraisal theorists have acknowledged this. Thus, Ellsworth and Scherer (2003) mentioned brain stimulation, hormones, and drugs as elicitors of emotion. Scherer and Zentner (2001) discussed music in this context, identifying a number of “routes” from music to emotion, of which appraisal is only one (see Scherer & Coutinho, in press, which postulates five types of routes: appraisal, memory, entrainment, emotional contagion, and empathy; see also Ellsworth, 1995). Parkinson (2013) also addresses the complexities of the dynamic unfolding of multiple emotions due to multiple causes. Most appraisal theorists will be in complete agreement with this description. However, for purposes of empirical research we have to identify specific emotion episodes that have identifiable causes. Otherwise, we will end up with an infinite number of

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Corresponding author: Klaus R. Scherer, Swiss Centre for Affective Sciences, University of Geneva, Rue des Batoirs 7, CH-1205 Geneva, Switzerland. Email: Klaus.Scherer@unige.ch

“*roman-fleuves*.” And “stimulus” is a generic term in psychology—a relational meaning is also a stimulus.

Parkinson (2013) suggests that the search for an emotional starting point “implies a baseline state of zero emotion” (p. 181). But why should there be such an implication? Emotions can change from one to another as a person’s perception of the situation changes; what usually starts a new emotion is an appraisal of change, but nothing requires a person to be purged of all emotions before any new emotion can begin. Ellsworth (2013, p. 126) mentions a background emotional default mode, analogous and probably simultaneous with the mental default mode, “daydreaming and drifting among internally-generated thoughts and images,” and a person in this state also drifts among vague *feelings*. One of these feelings, or some external event, may focus the person’s attention, and we may call this the beginning of emotion, but that doesn’t mean that there was no feeling at all beforehand. Likewise, even when the person is feeling strong emotion, new information can rapidly change that emotion to a different one.

Kuppens (2013) criticizes appraisal theorists for what he considers a rigid view of the relationships between appraisals and responses, suggesting that this repeats the errors of affect program theories. He suggests that even dimensional appraisal theories show signs of the same inflexibility as basic emotions theories, and imply that “associations between emotion components always and for everyone occur in a fixed manner” (Kuppens, 2013, p. 177).

There are many different associations between appraisals and other emotion components—associations between appraisals and biological processes, expressions, action tendencies, actual behavior, and subjective feelings. Associations between appraisals and biological processes are an exciting new direction for research, allowing us to study questions that were previously beyond our reach with promising new results, as cogently argued by Brosch and Sander (2013). Kuppens (2013) cites literature showing other determinants of physiological reactions. We would certainly not argue that appraisals are the *only* influences. We are at a very early stage in research on brain processes, and our primary question is whether there *are* brain processes that correspond to appraisals and if so what they look like.

Then there are associations between appraisals and behavior. Kuppens (2013) talks about “emotional behavior” and apparently equates it with emotion. We think that this is a mistake. There is convergence on the view that emotion includes action tendencies and thus is one determinant of behavior, but behavior is determined by a multitude of additional factors, including habitual behavior dispositions, context, and situational constraints (see Mulligan & Scherer, 2012). Appraisal theorists have *never* seen the association between appraisals and expressive or instrumental behavior as absolute. Almost 30 years ago Frijda (1986) discussed the variety of behaviors that can accompany fear (fight, flee, freeze, beg, etc.) or anger (attack, boil inwardly, compromise, etc.), anticipating Mischel and Shoda (1995) in arguing that the actual behavior depends on the situation, or, more accurately, on the person’s *appraisals* of the situation.

So appraisal theorists have repeatedly argued that neither appraisals nor emotions inflexibly predict specific behaviors. Their idea of the evolutionary advantage of decoupling afforded by emotion included both the reinterpretation of the stimulus and the reinterpretation of the behavioral response: “Emotions allow flexibility both in event interpretation and in response choice” (Ellsworth & Scherer, 2003, p. 572). In many cases the initial action *tendency* or action readiness may be a nearly automatic response to the initial combination of appraisals, but often this impulse is rejected as impossible or unwise. Moreover, culture or upbringing or other factors that instill habits of thought can influence the initial action tendency itself, so that a person raised to believe that anger and revenge are the only honorable responses to an insult will feel different when insulted than a person raised to believe that anger and vengeance are signs of a feeble and intemperate character. Appraisal theorists would argue, and this is an important point, that these differences occur because people’s individual or cultural backgrounds have shaped their appraisals of the developing situation in the first place. So appraisal theorists believe that neither the initial appraisal, emotions, nor action tendencies inflexibly predict the actual behavior.

Flexible associations between appraisals and subjective experience are a different matter. Whether the theorist believes that appraisals are causes or components of the emotional experience, a fundamental principle of appraisal theory is that the same combination of appraisals corresponds to the same subjective experience across individuals, experiences, and cultures. Kuppens (2013) claims that the very same appraisal outcome configurations produce different emotions in different individuals. What is the basis for this claim? Kuppens refers to a handful of self-report studies which, according to him, show that

the same (set of) appraisal outcomes do not lead to the same reported emotional experience in all contexts or individuals. For, instance, evidence shows that while one person’s anger may be highly contingent on the frustrating nature of an event, another person’s anger is more strongly associated with the appraisal of blaming someone for what has happened (2013, p. 177).

The example given, rather than supporting the claim, invalidates it. “Frustration focus” versus “blame focus” are very different, at least with respect to the weighting of the respective appraisal criteria (goal conduciveness and agency attribution). Appraisal theory predicts that the resulting feelings will differ, and while one might call both the emotional experiences “anger,” they are clearly rather different members of the large anger family and only look the same because of the imprecision of our verbal measures. Of course there is flexibility in people’s emotional responses to frustration, opportunity, unfairness, loss, and risk as a function of their dispositions and considerations at the moment, but that is because differences in people’s dispositions and considerations at the moment are reflected in their appraisals at the moment. Appraisals are complex and keep changing as our attention moves across different aspects of the event: the situation, the people, the details of the event, the appropriate response. Our cultures and backgrounds, the circumstances, and our previous emotional states all affect our

emotional responses through our appraisals; they all affect our perceived IF in Mischel and Shoda's (1995) IF-THEN relationship.

So, although we allow for enormous variability in appraisals and in emotions, we do not allow the possibility that the exact same combination of appraisals can produce different feelings in different people or circumstances. If that were the case we might as well pack up and go home because the system would be indeterminate, allowing neither prediction nor explanation. Any attempt to understand emotional processes would necessarily be post hoc and ideographic.

In sum, we believe that Kuppens' (2013) view of flexibility is misguided. The infinite variety of emotional experience is generated by the complex and subtly weighted combinations of different appraisals and their constant flux in the emotion process, not by indeterminacy. We are well aware that current appraisal theories, each with only a few appraisal dimensions, get us only to the neighborhood of a particular emotional experience, not to the exact street address (Ellsworth, 2013). These theories have allowed us to test predictions that distinguish among emotions at a general level. Finer distinctions among emotions (e.g., among different forms of anger) will require additional appraisal dimensions that may be specific to particular emotional experiences, as in the different forms of valence (Scherer, 2013).

We also agree with the commentators that the appraisal processes may be much more complex than current theories suggest. Frijda (2013) proposes a multitude of interesting factors that are likely to intervene in certain contexts. One could add many more factors to the list, including many that reflect individual differences and biases. And, of course, all of these factors interact in unique ways, making the complexity of feeling quite unbearable, especially for empirical, hypothesis-testing research. An ideographic approach to appraisal may be fascinating, but we believe that the nomothetic approach is the road to understanding appraisal as a lawful process. We know that we are at the beginning of the journey, not at the end.

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