References

Churchland, Paul M. and Churchland, Patricia S. (1998) "Recent Work on Consciousness: Philosophical, Theoretical, and Empirical", in F Churchland, P.M. and Churchland, P.S. *On the Contrary: Critical Essays 1987–1987*, pp. 159–76. Cambridge, MA: MIT Press.

Russell, J.A. (2003) "Core Affect and the Construction of Emotions", *Psychological Review* 110:145–72.

Trends and developments: research on emotions

Courants et tendances: recherche sur les émotions

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Defining emotion: a clinical perspective

Klaus Scherer has done a masterful job of elucidating important issues and controversies surrounding the two tasks of distinguishing emotions from other affective phenomena and of adequately measuring emotions. As a clinical psychologist, I was particularly impressed with a number of implications of Scherer's paper for the study of psychopathology and, in particular, for examining what have come to be referred to as "disorders of emotion".

Beginning his paper, Scherer notes the "inherent fuzziness" of everyday use of the concept of emotion, a situation not unlike that of the use of the term "depression", which is used variously to describe a feeling, an emotion, a mood state, and a psychiatric syndrome. Feeling as frustrated as Scherer does with this situation, I am completely sympathetic to the need to refine our definitions of central constructs. In this context, Scherer offers a component-process definition of emotion and then carefully and systematically delineates how "emotion" is differentiated from other related constructs. This is a critical endeavor – one, I believe, that must be augmented by a similar focus on disordered emotion. That is,

the question "what are emotions?" is intimately related to the questions "what is disordered emotion?" and, more generally, "what are emotional disorders?" Given the prevalence of what have come to be termed "emotional disorders", a comprehensive understanding of emotion is clearly important to the conduct of sound clinical research and practice. Thus it is reasonable to expect that scientists and practitioners working to understand problems like depression, anxiety disorders and personality disorders have grappled with this problem, and there already exists a body of essays concerning the definition and measurement of emotions and, importantly, the implications of these definitions for research on emotional disorders. Sadly (or depressingly?), however, this is not the case. It seems that clinical researchers either assume that they know what an emotion is, or believe that implications of this debate are not relevant for clinical research and practice. I argue here, however, that these assumptions and beliefs are wrong, that clinical scientists and practitioners must pay close attention to these issues because they have important implications for how we think about emotional disorders and how we treat them.

One important implication of Scherer's article is that what is disordered in emotional disorders might not actually be "emotion". The need to distinguish and differentiate emotion from other affective phenomena such as preferences, affective dispositions, attitudes and moods is an important point that Scherer makes clearly in this article; indeed this aspect of Scherer's paper should stimulate lively debates within the clinical literature. It is of particular note that Scherer subsumes emotional pathology under the category of affect dispositions, a categorization that suggests that emotional disorders are characterized by stable personality traits and behavior tendencies. One implication of this classification is that it is not the experience of emotional episodes that distinguishes people with and without emotional disorders but rather their tendencies to experience particular moods and to respond more or less easily with certain emotions. Does this mean that the term "emotional disorders" is a misnomer? Certainly this is an empirical question (and one that has not been the focus of attention in clinical research). Is the experience of sadness by a depressed person the same as that by a non-depressed person? Is the fear experienced by a person with spider phobia who is confronted with a spider the same as (or similar to) the fear experienced by someone walking down a busy road who almost got hit by a car? Scientists examining this important question would benefit by using the criteria for emotional episodes outlined in Scherer's paper. Similar clinically relevant questions arise from related points in the paper. Are depressed and

non-depressed individuals characterized by the same automatic and voluntary appraisals and evaluations of events? Can we distinguish different patterns of bodily symptoms in spider phobics and non-phobic individuals who are experiencing anxiety? Is there the same degree or level of response *synchronization* in disordered and non-disordered individuals' emotional responses to certain events, despite possible differences in relative *levels* of response? And, if there are such differences, are they important with respect to treatment? Certainly some of these questions will be easier to examine empirically than others, but none would be accorded the importance it warrants without Scherer's discussion of the value of clearly defining the concept of emotion.

There are also important issues that extend beyond these questions. Let us assume we would agree that it is not emotion that is disordered in emotional disorders, and that psychological disorders most centrally involve difficulties around affective dispositions. In this context, Scherer's discussion of different affective phenomena is insightful and helpful. Nevertheless there is an important aspect of psychopathology that seems to be missing, a component that is crucial both to our understanding of emotional disorders and to our ability to apply basic research on emotion to the study of these disorders. Presumably, because it was beyond the scope of his presentation, Scherer does not discuss whether and/or how different affective phenomena are related. For example, even if phobic and non-phobic individuals experience the emotion of anxiety similarly, there is little question that phobic people experience that emotion more frequently. Indeed this observation is critical to our understanding of psychopathology and suggests that the term "emotional disorder" might not be a misnomer after all. Thus it is almost certainly the case that emotional disorders are associated both with more frequent experience of certain emotions and with the experience of these emotions in contexts in which people without a diagnosis would not respond, or would not respond to the same degree.

If Scherer is correct that emotional pathology is best subsumed under affect dispositions, we need to elucidate the underlying processes that characterize these dispositions. We also need to delineate the mechanisms that link affective dispositions to the frequent experience of specific emotional episodes and to the experience of emotions in contexts in which we would not expect the average person to respond similarly. Do individual differences in appraisals, in system regulation or in motivation moderate links between affective dispositions and emotional episodes? Siemer (2005), for example, has described how moods can be conceptualized as appraisal tendencies that increase the likelihood of

responding to a particular situation with certain appraisals, thereby making the experience of a specific emotional episode more likely. In general, therefore, examining associations among different affective phenomena is likely to help us gain a more comprehensive understanding of emotional disorders. Addressing these issues also has significant implications for intervention in these disorders. For instance, how are we to think about recovery if we conceptualize emotional disorders as arising from affective dispositions? Cognitive-behavioral interventions target a broad range of affective phenomena, including attempts to directly change emotional responses through repeated and guided exposure to emotion-eliciting events, and attempts to change appraisals and evaluations of events. If we conceptualize emotional disorders as a function of affective dispositions, our interventions should focus not on changing the experience of an emotion, but instead on making those experiences less likely to occur, or less likely to occur in a particular context. In general, therefore, examining how affect dispositions and emotional episodes are related should inform the processes on which we might most profitably focus in our interventions in order to have the best chance of reducing or eliminating these disorders.

Finally, it is important to consider whether the differentiations of affective phenomena that Scherer proposes have implications for how we distinguish among different psychiatric disorders. In this context, we would do well to pay close attention to affective phenomena other than emotion discussed by Scherer. For example, while anxiety disorders seem to most clearly fall into the category of affect disposition, depression appears to be more easily subsumed under moods, and personality disorders under interpersonal stances. Indeed one could propose that the primary problem in depression, unlike in the anxiety disorders, is not emotion but rather the experience of sustained negative mood states. But how are we to understand high rates of comorbidity of disorders of emotion, like depression and anxiety? This point again brings us back to the viability of subsuming all forms of psychopathology, or even only those forms that involve anomalous emotional experience, under the category of affect disposition. And even if we broaden affect disposition to include both greater frequency and longer duration of emotional responses, it is still important to determine whether the relation between affect dispositions and emotional episodes is guided by the same processes as the relation between affect dispositions and mood states.

In closing, Scherer's article alerts clinical scientists to a debate that has important consequences for how we think about, differentiate, treat, and even prevent, emotional disorders. The components of emotional episodes

that Scherer describes in his paper can guide research designed to investigate differences between disordered and non-disordered people in their experience of emotional episodes. Scherer's focus on differentiating various affective phenomena is clearly helpful in clarifying terminology. From a clinical perspective, what is missing is a discussion of underlying processes that may link the different affective phenomena with the experience of various mood states and emotions. Indeed I believe that identifying and adequately measuring these underlying processes will prove to be important for our understanding of emotional disorders and, consequently, for the development and refinement of targeted interventions for these disorders.

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Reference

Siemer, M. (2005) "Moods as Multiple-object Directed and as Objectless Affective States: An Examination of the Dispositional Theory of Moods", *Cognition and Emotion* 19: 815–45.

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Paul E. Griffiths

Precision, stability and scientific progress

I applaud Klaus Scherer's work to improve communication between researchers and increase the extent to which results from different research traditions are commensurable. This commentary will offer a different perspective from that embodied in the target article on *why* this work is valuable.