

What Feelings Can't Do

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Abstract: Arguments over whether emotions and moods are feelings have demonstrated confusion over the concept of a feeling and, in particular, what it is that feelings can—and cannot—do. I argue that the causal and explanatory roles we assign emotions and moods in our theories are inconsistent with their being feelings. Sidestepping debates over the natures of emotions and moods I frame my arguments primarily in terms of what it is emotions, moods and feelings *do*. I provide an analysis that clarifies the role feelings can play in our psychology that is consistent with current psychological and neurological data.

1. Introduction

It is a widespread assumption that emotions and other affective states are *feelings*.¹ This assumption is reflected in our everyday language when we talk about feeling blue, feeling angry and so forth, and in both the philosophical and psychological literature on affect, where the terms 'emotion' and 'feeling' are sometimes used interchangeably. The nature of the relationship between emotions and feelings has been the subject of debate in the philosophical literature. Some philosophers (for example, Kraut, Tye, Bennett and Hacker) hold that emotions are feelings. Others (for example, Solomon, Pitcher) have argued that they cannot be feelings. And many others (Stocker, Goldie, to name a few) have featured feelings as important components of emotions. The term 'feeling' has suffered some abuse through all of this. Evocative, but rather metaphorical uses of 'feeling' have been employed in order to capture the unique, felt character of emotions. Given all this, it is sometimes difficult to ascertain precisely what it means to say that emotions are (are not, are in part) feelings. However, it is important to do so, particularly if we want our theories of what emotions *are* to be consistent with the causal and explanatory roles we assign them in both our folk and scientific theories.

The aims of this paper are twofold. One is to revisit the question of the relation between emotions (and moods) and feelings, but to do so from a different perspective. Previous arguments against the identification of emotions and feelings have drawn upon a 'cognitive theory' conception of what emotions are. Cognitive theories of emotion identify and define emotions in terms of cognitive states such

I thank Ernie Alleva, Jesse Prinz, the members of the PATF reading group, and two anonymous reviewers for their useful comments and helpful discussions.

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¹ I will use the terms 'affect' and 'affective state' to refer to both emotions and moods.

as beliefs, judgments and desires. This conception of what emotions are, combined with a view that feelings are not important contributors to cognition, has driven the conclusion that emotions are not feelings. For instance, Solomon states that, '... the aim of cognitive theories is to break down the insidious dualism that would separate rational life from the merely affective and reduce emotion to unintelligent "feeling"' (1990, p. 277). However, many emotion theorists and researchers reject traditional cognitivist conceptions of emotion, and would therefore not be persuaded by arguments against feeling theories that are based upon a cognitive picture of emotions. Furthermore, cognitive theories of emotions have had little to say about other affective states such as moods. Therefore it is fruitful to examine the relationship between affective states and feelings from another perspective.

My arguments for a distinction between emotions and feelings are not based upon cognitivist conceptions of emotions and I do not relegate feelings to a suspicious realm of the 'unintelligent' or unimportant. My approach is to examine what emotions and moods *do*—the causal and explanatory roles they play in our theories—and ask whether feelings are the sorts of things that can play those roles. The strategy is to see whether current conceptions of emotions and moods and the causal and explanatory roles or functions they perform, both in our scientific and 'folk' psychological theories, are consistent with viewing them as feelings. I will argue that they are not; we should distinguish between emotions (and moods) and the feelings of emotions (and moods). All of these states influence cognition and behavior but, as I will argue, they do so in different ways. To conflate emotions or moods with feelings is to lose the ability to discriminate between the different roles played by the affective states themselves and the feelings of those states. This is equally important if one views an emotion as a process of which feeling is a part, as it clarifies the unique and important roles played by each component.

This leads me to the second aim of the paper: to draw some conclusions about the role of affective feelings that are partially informed by and consistent with current neuroscience. This view of feelings does not render them epiphenomenal; instead it clarifies and emphasizes the important role feelings play in our lives. My analysis of affective feelings echoes claims made about other kinds of feelings, including pain feelings and the feeling of conscious will. This suggests that these conclusions may be applied more broadly to all feelings.

The distinction between affective states and the feelings of these states suggests that some of the current debates in the affect literature are misdirected. Instead of offering competing theories, researchers may be focusing on different aspects of an unfolding process of which emotion or mood and feeling are distinguishable parts. Feelings are certainly an essential part of our emotion experiences; there is a feeling or 'something it is like' to be cheerful or sad. But this does not license the conclusion that the feeling and the affective state are one and the same, or that the feeling is responsible for bringing about all the effects associated with the affective state. What follows is an attempt to clarify what the feelings associated with affective states can and cannot do.

2. Feelings

Contributing to the difficulties surrounding these issues is the fact that the term, 'feeling' has a number of different uses and connotations. Ryle (1951), for example, discussed seven different uses of the verb 'to feel' ranging from feeling sleepy or feeling an itch to feeling like having a drink and feeling for the light switch. Some of these are clearly not what people mean when they say emotions are feelings. I take it that they have in mind that emotions are conscious, qualitative or phenomenological states of some sort. To use Block's (1998) terminology, feelings are essentially phenomenally conscious states. A feeling may also have representational properties or be access conscious, in the sense that it may, in addition to its phenomenal character, stand in some indicator or representational relation to something else.² This, then, is a property the state has in virtue of its functional or relational properties, not its intrinsic properties. Indeed it is plausibly the *function* of a feeling to play an informational or representational role, something it does in virtue of its phenomenal content standing in certain relations to other states and states of affairs. Therefore I will use 'feeling' to mean a phenomenally conscious, sensation state that one occupies (as opposed to an action one performs). I don't think this is a particularly odd or controversial notion of 'feeling' and so I will let the preliminary discussion of the issue go at that, but will say more about the informational roles played by feelings later on.³

There are several different categories of feelings that are consistent with the definition I am using. There are fairly localized sensations such as itches and tickles. These could be considered paradigmatic examples of feelings because the kinds (e.g. itch) and their characteristics (e.g. dry, scratchy) are specified entirely by how they feel. There are also what Ryle calls 'all-overish' conditions such as queasiness or chill. These differ from itches and tickles primarily in not being localized (or, in the case of queasiness, being perhaps less localized). One can, of course, talk of one's foot being cold, in which case the chill is a localized sensation. But to talk of oneself (one's self) being cold or fatigued is, I take it, simply a way of indicating that one feels cold all over.

To this list one could add a third category of feelings: the more global, occurrent, subjective and qualitative feel of *the way things are with you now*. This use of 'feeling' is different from the previous two in that it refers to a significantly more complex experience. For example, it would seem to include the experience of having

² If one takes a purely representationalist approach to qualia then *all* of the content of a feeling is captured by its representational content. See Tye, 1995; Dretske, 1995, for examples. Dretske, however, does not explicitly extend his thesis to feelings, and in fact voices some reservations about its plausibility for certain moods (p. 102–3). I discuss Tye's view later on in this paper.

³ Of course people do also use 'feeling' as simply a synonym for 'emotion.' I assume that this use rests on some assumptions about emotions, and it is these assumptions that I wish to question.

certain thoughts or attitudes in addition to a number of sensations of the above sort. This sort of feeling might be what Nagel has in mind when he talks about the 'what it is like' to be you (or a bat), and what Damasio (1999) refers to as 'the feeling of what happens'. This is, in other words, the *feeling* of occurrent conscious experience. If you are chilled or have an itch on your big toe, then part of what it is like to be you right now is to feel chilled or itchy-about-the-big-toe. If you are also currently desiring some gouda then part of what it is like to be you right now is for you to be desiring gouda.⁴

A number of philosophers have advanced conceptions of affective feelings that are more complex than bodily feelings and include emotion relevant thoughts and attitudes. One example of this sort of complex feeling as the essence of emotion is given by Michael Stocker (1996), who uses the term 'psychic feeling' to describe emotions.⁵ While Stocker does not give a full account of the nature of psychic feelings, he does contrast them with more bodily feelings in that psychic feelings can take propositional objects and are subject to rational and normative evaluation. Quoting Descartes, he explains that bodily feelings 'we relate to our body or some of its parts . . . which we perceive as though they were in our members' whereas psychic feelings 'we feel as though they were in the soul itself.'⁶ Goldie (2000) gives us a similar notion, which he terms 'feeling towards' and describes as 'thinking of with feeling' and as, 'Our entire mind and body . . . engaged in the emotion experience, and all the feelings . . . "united in consciousness in being directed towards it object"' (p. 55).⁷ Both Stocker and Goldie are presenting characterizations of affective feelings that are hybrids of cognition and feeling or in some way include the influences of various thoughts and attitudes as well as sensations. This more all-encompassing notion of feeling is perhaps a better candidate for identification with emotion since it satisfies the intuition that emotions include cognitive, as well as bodily dimensions.

What all of these categories of feelings have in common is that they are conscious, phenomenological states or experiences.⁸ I take it that terms such as 'itch' and 'tickle' refer unequivocally to such feelings. In contrast 'heart attack' and 'indigestion' do not

⁴ I am ignoring the interesting question of whether there is a distinct feeling associated with believing vs. desiring, since the answer does not matter for my purposes here. For present purposes, I am happy to be inclusive about what contributes to our conscious experience.

⁵ More precisely, Stocker holds that 'psychic feeling' is a '... common term for the affectivity common to emotions, moods, interests and attitudes'. He goes on to say that, 'It will thus often be useful to read "emotions" as "feelings, emotions, moods, interests, or attitudes"' (1996, p. 20).

⁶ Descartes, from *The Passions of the Soul* I.25 and I.24, as quoted in Stocker, 1996, p. 19.

⁷ Goldie does not *identify* emotions with 'feeling towards', but holds that it is an important component of emotion. For Goldie, an emotion is a complex process that involves 'episodes of emotion experience, including perceptions, thoughts, and feelings of various kinds, and bodily changes of various kinds; and it involves dispositions, including dispositions to experience further emotional episodes, to have further thoughts and feelings, and to behave in certain ways.' (2000, p. 12–13).

⁸ This does not entail that they are, as Block and Goldie put it, reflectively conscious; we are not necessarily focused on and aware *that* we feel this way.

refer to feelings. These terms refer to bodily states that, while associated with feelings (there is something it is like to experience indigestion or heart attack), are not feelings themselves. The heart attack, not the feeling causes damage to heart muscles, but it is the feeling that alerts you to your condition and motivates you to call an ambulance. The question I am asking, then, is whether emotions and moods are more like itches and tickles or heart attacks and indigestion. This is not merely a terminological question. How we use the terms should reflect what we understand about emotions and moods, and should be consistent with the causal and explanatory roles we assign them in our theories. If we understood 'heart attack' to refer to the feeling, for example, we could no longer say that heart attacks cause heart muscle damage. Feelings, after all, cannot *literally* break hearts. Likewise, viewing emotions and moods as feelings affects how we construct our theories of emotions and moods and how we understand their contributions to other features and operations of mentality. It is certainly not the intention of this paper to argue that feelings are not important contributors to our affective experiences. However, as research and theorizing about affect progresses, we need to examine whether an *identification* of affect and feelings is sound, and how feelings can and do contribute to our affective lives.

3. Emotions and Feelings

Many people, including emotion theorists, researchers and 'lay' people, think of emotions as feelings. Robert Kraut (1986) calls this the 'common-sense view', and Ohman *et al.* (2000) note that '(t)he notion of emotion as experience is typically part of the common sense view that all causally important psychological events converge in consciousness before they, for instance, are channeled into action' (p. 298). Richard Shweder states that '(t)hree-year olds, Ifaluk islanders, and psychoanalysts (in other words, almost everyone, except perhaps the staunchest of positivists) recognize that emotions are *feelings*' (1991, p. 241, italics in original). Putting aside Shweder's somewhat idiosyncratic characterization of what constitutes 'almost everyone', he is right that the identification of emotions and feelings is consistent with our everyday emotions talk. We refer to the giddy feeling of being in love, the throb of anger in one's veins, and so forth. We do *feel* our emotions. Indeed we may come to know our emotions in part through how they feel.

William James (1884) famously exploited this fact in arguing for his 'feeling theory' of emotions. James held that emotions are the feelings of bodily change. On his view anger just is the feeling or conscious experience of increased heart rate and adrenaline, blood rushing to the periphery of the body, and so on. One of his arguments for this contended that if we imaginatively subtracted out the feelings of bodily change from the experience of the emotion, we would be left with nothing but 'cold cognitions'—nothing emotion-like at all.

If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its characteristic bodily symptoms, we find

we have nothing left behind, no 'mind stuff' out of which the emotion can be constituted, and that a cold and neutral state of intellectual perception is all that remains' (James, 1884, p. 193).

James' theory has encountered more than its fair share of criticism over the years⁹ and a generation of philosophers of emotion made criticisms of James' theory the launching pad for their own theories of emotion.¹⁰ Here I will discuss three different lines of argument against the feeling theory.

The intentionality argument: A number of philosophers (for example, Alston, Gordon, Lyons, Solomon) have argued that a feelings account of emotions fails to capture the intentionality of emotions. Emotions, they argue, are essentially about or directed toward particular objects, events or states of affairs. One does not simply feel angry; one is angry *at* someone, *for* some reason. These philosophers emphasize the cognitive components of emotions, and therefore these theories are often referred to as 'cognitive theories' of emotions. They view emotions as responses to objects or events, represented in a particular (emotionally salient way), where the representations (judgments, beliefs or other propositional attitudes) of or about that object are the essential and determining aspects of the emotion. The cognitions capture the intentionality of emotions and are what make an emotion the kind of emotion it is. Feelings, however, are not intentional states; they do not have intentional content.¹¹ While the pain I feel upon stubbing my toe can be located (in some sense) in my toe, it is not *about* my toe. Therefore, emotions cannot be feelings.

The argument, then, is beautifully straightforward:

- 1) Emotions are intentional states
- 2) Feelings are not intentional states

Emotions are not feelings

Closely related to the intentionality argument is the *rationality argument*: the claim that emotions are normally rationally related to our beliefs and desires and, because feelings are not the sorts of things that admit of such rational or normative evaluation (because they lack intentional content), feelings cannot be emotions. However, several philosophers have pointed out that many emotions seem to be completely independent of our beliefs and desires such that judgments of ir/rationality do not apply. Indeed the cognitive theory's difficulties in dealing

⁹ Most famously, Cannon, 1927.

¹⁰ See, for example, Gordon, 1987; Lyons, 1980.

¹¹ Recently Solomon (2003) has responded to criticisms of his earlier cognitive conception of emotion by expanding the notion of judgment that is central to his account to include feelings—what he calls 'judgments of the body.' He is therefore no longer using what I am calling the intentionality argument. I will say more about the move Solomon and others have made later.

adequately with such 'reflex' or 'primitive' emotions has been seen as a strike against the theory. Because the rationality argument is related to, and in some sense dependent on the intentionality argument, I will focus my discussion on that.¹²

There are several drawbacks to pursuing the intentionality argument, namely that each of the two premises may very well be false. First let us examine the quite plausible claim that emotions are intentional states. As a quick glance through the literature on cognitive theories of emotions reveals, it has proved quite difficult to specify the intentional contents of emotion states. Take, for example, Joe's fear of the spider in the corner. What is the intentional content of his fear? Is it that spiders are dangerous? This is certainly not sufficient since one can believe that something is dangerous without fearing it (one may even believe that the thing right there in front of me and within striking range is dangerous-to-me without fearing it; there are some people who simply love danger). Neither is it necessary. Joe may know full well that this type of spider is not dangerous and fear it nonetheless.

Perhaps Joe's fear includes a desire to be rid of the spider. Surely this is a desire Joe has. But this is not sufficient to capture the fear either. Mary, too, would rather that the spider not be there—perhaps in part because she believes it's dangerous—but she is not afraid. And so the arguments go that really *any* specification of intentional content, any collection of beliefs, desires and other intentional states, seems to leave out the very thing under discussion: the emotion. To echo James, we are left with 'a cold neutral state of intellectual perception'. We can always imagine someone who has all the requisite intentional states, but not the emotion. Proponents of cognitive theories of affect have wrestled with this problem with mixed results. Suffice it to say that specifying the intentional content of emotions can be rather difficult.¹³

Furthermore empirical studies suggest that many emotional responses unfold independently of or prior to any involvement of those higher cognitive processing centers of the brain associated with cognitive states such as beliefs, desires and so on (Zajonc, 1980; LeDoux, 1996). In other words, Joe's fear response is off and running long before (in terms of processing time) he cognizes that there is a spider there, that spiders are dangerous, and so on. This explains how we can have emotional responses that seem to be detached from or are inconsistent with our beliefs and desires. If the involvement of cognitive, intentional states occurs *after* we begin to respond emotionally, then emotions cannot be intentional states.

Of course, the preceding arguments depend upon a certain conception of what it means for a state to have intentional content, namely, that it must have propositional content¹⁴. But certainly emotions can be intentional (be about or

¹² See Deigh, 1994, for a more extensive critical discussion of the rationality argument.

¹³ For a more extended discussion of problems with cognitive theories of emotion see Armon-Jones, 1991; Deigh, 1994; Griffiths, 1989, 1997.

¹⁴ Deigh states that this move, what he refers to as the 'fallacy of inferring propositional thought from intentionality,' (p.848) can be seen repeatedly in the cognitivist literature on emotions.

directed towards something) without having *propositional* content. A different, broader notion of intentional content might make it true that emotions are intentional. However, it would also make it the case that feelings are intentional as well. Therefore this strategy will not be of help to proponents of an intentionality argument against feeling theories of emotion.

Several philosophers have argued persuasively that emotions and feelings are intentional even though they do not (or do not always) express propositional content. One route to this is to view emotions and feelings as similar to—or a variety of—perception, where perceptual states are directed, contentful, but not propositional.¹⁵ On this approach, using a causal or information semantics conception of representational content, one can argue that emotions are as intentional as can be. However, this also makes it the case that feelings are intentional as well.

This is the move that Solomon makes in his more recent work. Responding to the criticisms that his cognitive theory leaves out the important felt dimension of emotion, Solomon argues that feelings can also be viewed as intentional (but not propositional) states. He expands the notion of judgment that is central to his account of emotions (the central claim being that, 'Emotions *are* judgments', 1984, p. 312 and also 2003) to include what he calls 'kinaesthetic judgments' or 'judgments of the body'.

I now agree that feelings have been 'left out' of the cognitive account, but I also believe that 'cognition' or 'judgment' properly construed captures that missing ingredient. The analogy with kinaesthetic judgments suggests the possibility of bringing feelings of the body into an analysis of emotion in a straightforward way (Solomon, 2003, p. 13).

Nonetheless, while Solomon now allows that feelings can be part of the complex of judgments constituting an emotion, he still maintains that the more cognitive judgments are both necessary and identifying.¹⁶ In this revised, but still cognitive, theory of emotions, Solomon allows that feelings are intentional (in the broader sense) and can play an important componential role. Therefore, he is no longer using an intentionality argument to reject a feeling theory. However, he does not equate emotions with feelings and argues that feelings alone are not sufficient to make something an emotion.

Tye in his (1995) discussion of emotions and moods uses a similar strategy regarding the intentionality of feelings, but Tye does conclude that emotions and

¹⁵ See Goldie, 2002; Prinz, 2004; Solomon, 2003 for some examples.

¹⁶ Perhaps old habits die hard, though. At one point Solomon states that, 'an emotion may last much longer than any given feelings, and feelings may outlast an emotion by several minutes or more' (2003, p. 13) which suggests that emotions and feelings are still viewed as distinct from each other. This should be read, I take it, as making the point that the judgments of the body may persist or occur in absence of the cognitive judgments that make the entire set of judgments constitutive of a particular emotion.

moods are feelings. Specifically, he argues that they are bodily sensory experiences like itches and tickles. However he also argues that they (indeed all feelings and conscious experiences) have intentional content. Tye makes use of a Dretskean causal/information semantics approach to content that identifies the intentional content of a state with the information it carries.¹⁷ The content of a state is determined by what, under optimal conditions, is its normal cause. If there is reliable causal covariation between a state and certain environmental conditions or factors, then the state means whatever is its normal cause. For example, the position of the needle on the gas gauge means that the tank is empty if there is a reliable causal covariation between the state of the tank and the position of the needle such that, when optimal conditions obtain, the needle points at 'E' only when the tank is empty. Tye argues that feelings ('sensory representations') represent the bodily states that are their normal causes. For example, pains are sensory representations of bodily damage or disorder (1995, p. 113). Likewise anger is a sensory representation of the suite of changes the body undergoes: an increase in blood pressure, changes in muscle tension, faster, shallower breathing, and so on. The feeling, anger, is a sensory representation of these changes and therefore has that as its intentional content (1995, p. 126). Tye's view is very similar to James' except that he explicitly argues that the feelings that are identified with emotions are intentional states. They—indeed all feelings—are sensory *representations* of bodily change. If this is plausible, then the second premise of the intentionality argument may be false.

Is there a sense of 'intentional' that makes the first premise true for all emotions without making the second false? I'm not sure there is. But my point here is not to show that the intentionality argument is a bad one, but that it is problematic, particularly if one accepts the broader notion of intentionality. However, I think that the claim that emotions are not feelings can be established without getting bogged down in the difficult questions of whether (or in what sense) emotions and feelings are intentional and without commitment to a cognitive theory of emotions. If one accepts a cognitivist account of emotion then a distinction between emotion and feeling is (perhaps) easier to maintain. One can argue as Solomon now does that even if feelings can be components of emotion, they cannot provide the necessary (cognitive) components that identify and define the emotion. However, for a variety of reasons many people now find cognitivist approaches to emotion unsatisfactory (in whole or in part) and noncognitivist accounts abound. Therefore I propose to look elsewhere. Another argument gets at a problem with James' feeling view without specifically advocating a cognitive theory of emotions and without addressing their intentional status.

The epiphenomenal argument: Gordon (1987) points out that on James' view emotions are largely epiphenomenal. As James himself argued, it is not the emotion that gets us running from the bear, crying out in fear or laughing at the joke. The

¹⁷ See Stampe, 1977; Dretske, 1992, 1995.

emotion is merely the feeling or experience of those changes. Gordon argues that this strips emotions of the causal and explanatory powers we usually ascribe to them. We think of emotions as states that cause us to behave in certain ways. Fear causes me to tremble; anger explains why I lash out. If we accept James' identification of emotions with feelings, emotions lose their ability to play many of these common sense causal and explanatory roles.

Gordon's point has merit independently of any commitments to the intentionality of emotions or to a cognitive theory of emotions. If we accept James' feeling theory, then we must accept that the emotions themselves (identified with feelings) are not what motivate us to run, cry, lash out, laugh and so forth. They lose the ability to play those causal/explanatory roles because they are merely the epiphenomenal conscious experiences (feelings) of the complex pattern of responses going on throughout the body. While I do not accept Gordon's cognitivist response to the problem, I do think that his point gets at the real problem with identifying emotions with feelings. If we are going to identify emotions with feelings then whatever causal/explanatory roles we want to assign emotions in our theories had better be the sorts of roles feelings can play.

Even though Tye's view is similar to James' in identifying emotions with feelings, Tye rescues emotions from epiphenomenalism by assigning them the causal/explanatory roles we associate with emotions. So he seems to present a feelings view that escapes the epiphenomenal problem.

Part of what makes a given state an instance of anger is its effects on what the person wants and/or believes, and relatedly on how he or she behaves. Anger, for example, normally causes the desire or urge to act violently with respect to the perceived cause. Fear normally causes the impulse to flee. Any sensory state that did not play causal roles like these would not be classified as an instance of anger or fear (Tye, 1995, p. 127–8).

The problem is that there are reasons to doubt that the feelings actually do play these causal roles. Does the *sensation* of anger cause a desire to retaliate? Is it the *feeling* of fear that gets us running? Perhaps sometimes, but in the case of fear, the answer is usually no. The feelings of fear—the sensations of a pounding heart, cold hands, trembling—often occur *after* we have reacted or begun to react to the fear-eliciting stimulus (Gray, 1999). And it's a good thing. When faced with potential danger we need to react quickly. If we waited for our feelings to tell us what to do, it would be too late. We need to act first, feel later.

Data from neurophysiological studies support this view of the chain of events. LeDoux (1996) for example argues that fear responses are initiated without the involvement of conscious processes (like feelings). Feeling the fear occurs after the fear response is initiated and involves a number of added steps, including the representation of the bodily responses in other brain systems.

If these data are correct, then Tye's account is wrong. The sensory state of fear (the feeling of fear) is not what gets us to flee, at least not in all cases. Tye is right,

however, that the feelings are not epiphenomenal. The feeling of fear plays an important role in alerting us to salient features of the environment, and affecting our future behavior and attitudes. Having encountered a rattlesnake during a previous walk through the woods, my feelings upon embarking on such a walk again might remind me to think twice—at least not to proceed without a sturdy pair of boots and a sharp eye for snakes in the path.

One might at this point protest that the ‘bodily responses’ LeDoux identifies with fear are not really what we consider to be the emotion. The emotion is the *feeling*, regardless of when in the chain of events it occurs. This is of course James’ view. The emotion is the feeling, the conscious experience, of the bodily changes. The identification of emotions with the feelings has the added benefit of being in line with some of our intuitions. This view is acceptable as long as one is willing to acknowledge—as James did—that the emotion (the feeling) is not what initiates many of the behaviors we assume are caused by the emotion. In other words, if you want to say that emotions are feelings, you have to revise the causal, explanatory roles assigned to them. So there is a conflict of intuitions here. Too notice that in this case we still have to say that there is something else (which we can’t call the emotion, because the emotion is the feeling) that does play the role of causing us to run when scared, explaining our urge to strike out when insulted, and so on. Regardless of how one decides to arrange the labels, there needs to be an acknowledgement that there are two distinct events, what I will, for the time being, call the emotion response and the emotion feeling.

Antonio Damasio, who has described himself as offering a neo-Jamesian account of emotions (1994), makes just such a distinction between emotion response and emotion feeling or experience. Damasio distinguishes between *emotions*, which he argues are coordinated suites of changes in the body and brain (increased heart rate, musculoskeletal changes, fluctuations in hormone levels, etc.), and the *feelings or conscious experiences of emotions*, which are the experiences or perceptions of these changes. Damasio states explicitly that emotions are not feelings (2001), distinguishing them on both functional and neurophysiological grounds.

Like James, Damasio describes emotion feelings as representations of the bodily and brain changes that comprise the emotions themselves. He adds, however, that emotion feelings can also involve experiences of the mental images (literal images but also thoughts) that initiated the changes. ‘That process of continuous monitoring, that experience of what your body is doing while thoughts about specific contents roll by, is the essence of what I call a feeling’ (1994, p. 145). He argues that different neural systems are involved with producing the emotions and the feelings of emotions. He identifies structures in the hypothalamus, basal forebrain and brainstem (especially the nuclei in the periaqueductal grey) as primarily responsible for directing the physiological changes associated with emotion response. The feeling of emotions, however, is associated with neural systems involved in monitoring and sensing changes in the body and brain, areas such as the second somatosensory region (S2), the cortices in the insula and portions of the cingulate region (Damasio, 2001, p. 781). Joseph LeDoux, likewise, claims a

neurophysiological basis for distinguishing between emotion response and the experience of emotion.

Equally compelling, however, is the claim that emotions and emotion feelings serve different functions.

Emotions . . . provide an immediate response to certain challenges and opportunities faced by an organism, the feeling of those emotions provides it with a mental alert. Feelings amplify the impact of a given situation, enhance learning, and increase the probability that comparable situations can be anticipated (Damasio, 2001, p. 781).

Joseph LeDoux makes a similar distinction, stating that,

[e]motional feelings result when we become consciously aware that an emotion system of the brain is active . . . The brain states and bodily responses are the fundamental facts of an emotion, and the conscious feelings are the frills that have added icing to the emotional cake (LeDoux, 1996, p. 302).

Emotion states (coordinated suites of bodily changes) are responses to situations presented to us by the environment,¹⁸ and they perform these functions independently of our feeling them. Indeed, as both Damasio and LeDoux point out, it is an important feature of certain emotion responses that they occur immediately and automatically—without the need for conscious intervention. The feeling or conscious experience of the emotion occurs *after* the processes of emotional response begins to unfold. Feelings occur too late to do much of the work we ascribe to emotions such as motivate us to fight or flee, to smile or frown. Too, James seems to have been right in at least one respect: the character of the emotion experience (what the feeling is a feeling *of*) is determined at least in part by character of the bodily response. If the feeling is a feeling (or representation) *of* certain bodily responses, then it cannot be what *causes* those responses.

Our ability to feel our emotions plays an important role, however. It allows us to make conscious connections between a certain stimulus or environmental feature, our thoughts, and an emotion. Feeling the fear allows us to learn, for instance, that we should be cautious in the future about walking through a certain section of woods (or a particular neighborhood after dark). Likewise, experiencing happiness and pride after completing a difficult task may encourage us to take up such challenges again in the future. In short, the feelings of our emotions allow us to not only experience our emotions, but to learn from the experiences, and apply that knowledge to future situations.

¹⁸ This holds for both primary and secondary emotions. Damasio argues that primary emotions are innate, preorganized responses to evolutionarily salient stimuli, whereas secondary emotions are acquired or learned responses to situations the individual organism encounters.

There is a strong intuitive appeal to the position that emotions are feelings. Emotional feelings occur throughout our days and are sometimes overwhelming; they are certainly the aspect of our emotional lives we know best. But there are compelling reasons for rejecting the view that emotions are feelings. I am now going to follow Damasio and LeDoux in using the term 'emotion' to refer to the emotional responses and 'emotion feelings' to refer to the conscious experiences of these responses. Emotions can give rise to feelings, allowing us to talk about what it feels like to be angry, afraid and so on.¹⁹ But the feeling is not the emotion. Emotions, in other words, are more like heart attacks and indigestion than itches and tickles. But like the feeling of a heart attack, emotional feelings do play important roles. They alert us to features of the world and ourselves that require attention and they allow us to learn from our experiences.

But what about the claims that emotions are feelings in the third sense: that emotions are the experiences of felt bodily responses, thoughts, behavior and so on? This seems to be what Bennett and Hacker (2003), for example, have in mind when they criticize Damasio and LeDoux for distinguishing between emotions and feelings. They state that 'there is no significant difference between having an emotion and feeling an emotion' (Bennett and Hacker, 2003, p. 214), and that, '*for the most part, "feeling angry" and "being angry" are intersubstitutable*' (2003, p. 203, italics in original). This is because they view emotions as necessarily conscious states. They explicitly reject the view that emotions are merely felt 'bodily perturbations', however, and endorse a fairly cognitivist conception of emotion, suggesting that the conscious experience they identify with emotion is the more global experience of bodily responses *plus* emotion-related cognitions.²⁰

This claim has a certain intuitive pull. And certainly the conscious feelings or experiences of our emotions are complex. But is labeling this the emotion consistent with the causal, explanatory roles our theories assign to emotions?²¹ One response to this view is to point out that if the experience is an experience *of* certain thoughts and responses (bodily and behavioral), then the experience cannot be what causes or explains those thoughts and responses. If our theories cite

¹⁹ And, according to Damasio, invariably do if we are conscious and functioning normally.

²⁰ In rejecting the view that emotions are feelings of bodily perturbations Bennett and Hacker use many of the arguments I have presented, including the intentionality and rationality arguments (as well as some others. See in particular, 2003, p. 211). They are somewhat unfair to Damasio since he allows that the feeling of emotion can also include the experience of the mental images or thoughts that initiated the bodily changes. They do rightfully point out, however, that Damasio could be read as occasionally conflating the cause of the emotion with its object, and that in claiming that emotion feelings are 'about the body' he should make clear that while the body provides content in a certain sense, the subject's emotional thoughts are not *about* or directed toward the bodily states. To read Damasio as making this sort of claim is rather uncharitable, however. See Goldie, 2002, for a discussion of the distinctions and relations between causes and objects of emotions.

²¹ Keep in mind that the question is whether we should consider the *experience* of these thoughts, attitudes etc. to be the emotion, not the thoughts, attitudes etc. themselves.

emotions as causing us to have certain thoughts or behave in certain ways, then it would seem that the emotion cannot refer to this complex feeling. But this is too quick; a full answer to this requires a more extended discussion of what feelings can and cannot do.

4. What Feelings Do

A conception of the functions or causal/explanatory roles that feelings can play falls out of the preceding discussion. Here I present a brief sketch of the roles or functions of feelings. While the target of my analysis is affective feeling, my conclusions could be applied more broadly to feelings in general. An account of what feelings can and can't do may help clarify what is often rather muddy usage of the term, and requires that we think more carefully about the roles we assign feelings and experiences in our theories and explanations.

I began with the claim that feelings are essentially phenomenological, conscious states. They are sensations of various sorts that are, by what I take to be definition, *felt*. While this does not require them to be reflectively conscious or the objects of focused awareness, they are necessarily *conscious*. To talk of unfelt feelings is, I think, to misuse the term. There may be something unfelt that co-occurs, but it is not the feeling. Feelings have their phenomenal content essentially, but they can also have representational content when the phenomenal content or *qualia* stands in a certain relationship to other states of affairs such that the feeling can be said to indicate or carry information about those states of affairs. What, then, do feelings inform us about?

To begin with, the neurophysiological story (as much as we currently know) seems to corroborate James and Tye's claims that feelings represent bodily states. It is now thought that the neural systems associated with feelings, including both particular, localized sensations (itches, tickles, twinges and so forth), more general bodily states, and conscious experience are ones that monitor and represent information about the current state of the body and brain. These areas include the somatosensory cortices as well as cortices in the insular and cingulate regions (Damasio, 2001). More specifically, Lane (2000) argues that different areas of the anterior cingulate cortex are associated with phenomenal awareness of emotion and reflective awareness of emotion. These areas not only receive information about bodily changes, but also about the emotional significance of stimuli and the goals of the subject. The claims about the neural substrates of conscious experience in particular are, not surprisingly, fairly speculative. But there is some consensus among neuroscientists who have addressed the issues that feelings and conscious experience arise from the brain systems that monitor and represent the body and brain, and that these systems are neurologically distinguishable from systems involved in processing affectively salient stimuli and initiating and coordinating emotion responses.

The state of affairs that a feeling alerts us to is most immediately a state of the self. Consulting our feelings is a good way to find out if we are tired, sick, thirsty and so on.²² However, feelings can also signal and inform us about states outside of ourselves in virtue of being reliably associated with those states of affairs. Indeed in most cases we take our feelings as informing us about something outside of ourselves. The character of a feeling is provided by the body, but we often take it to be *about* something else.²³ A feeling of disgust in response to the smell of meat is useful because it signals something about the meat. It is because feelings often reliably covary with certain environmental conditions that we can learn about the world from our feelings and use them to guide our behavior.

Therefore, feelings influence thought and behavior by providing an alert or kind of *information* (about the self and, indirectly, external states of affairs). The information that feelings provide is often particularly salient and compelling enough to intrude on other cognitive activities. Arising from the body, feelings are intrinsically valenced; they are 'prepackaged' as positive or negative, pleasant or unpleasant.²⁴ As such, they serve as cues or motives to act in certain ways. The feeling of an itch, for example, acts as a cue to scratch. If it persists, it may motivate me to go to the store and buy some calamine lotion. Likewise the feelings of our emotions act as cues or motives, alerting us to salient states of affairs. The feeling of fear or unease associated with a particular dark street may cue increased vigilance or motivate me to walk another way home; the feeling of disgust in response to a rancid odor motivates me to avoid food that smells that way.

Viewing feelings as conveying a kind of information via their phenomenal content suggests certain limitations on what feelings can do. Our feelings *qua* feelings cannot *do* anything but signal, inform, motivate. Feelings can influence controlled, deliberate processing but they cannot influence automatic, pre-conscious processing. This is because feelings inform by bringing certain states of affairs to conscious attention. One way of thinking about it is that feelings allow us to learn and profit from what our body already knows.²⁵

²² Goldie makes the point that bodily feelings provide only *prima facie* reasons for believing that one is in a certain emotional state. (2002, p. 237) Feelings can indicate that we are experiencing some emotion or another and I maintain that they have the function of doing so. However they are not phenomenologically fine-grained enough to communicate on their own which emotion it is. This is yet another reason for denying that emotions are feelings, and one I will discuss later.

²³ This point has also been made by Damasio, 1999, and Goldie, 2002.

²⁴ This allows that some feelings might be only mildly pleasant or unpleasant.

²⁵ Various caveats are required here. For instance, the distinction between controlled and automatic processes is not an either/or one (see Bargh, 1996) and the fine distinctions in levels of conscious awareness and the role of attentional mechanisms need to be factored in. But the basic point is still sound. Feelings function by informing us (where the 'us' here is some sort of executive deliberating system) about ourselves. Their causal power begins and ends with what we can do with the information. One way of putting the point is that feelings cannot influence cognitively impenetrable processes.

This claim is similar in some respects to ones made by Tye and Dretske, who give analyses of phenomenal experience in terms of the informational content carried by such states. My claim is different in a number of ways however. First, I am not claiming that the information carried by feelings provides an analysis of what feelings *are*. Informing and alerting is what feelings do; it does not exhaust what they are. For this reason my claims about feelings are not intended to address the very difficult issues of the nature of qualia or conscious experience; I focus only on the causal and explanatory roles assigned to such states in our theories.

A difference between Tye's analysis and my proposal is that I do not maintain, as Tye does, that there are systematic relations between components of sensory representations and what is going on in the body such that the sensory representations become, in his words, *transparent* to the bodily goings on. 'Moods, emotions, and bodily sensations, in my view, are importantly like maps of our own internal physical workings, guides to our inner body states, graphic representations of what is going on inside (and to) our skins' (1995, p. 94). While it is tempting to view feelings as live (or slightly delayed) broadcasts of our bodily states, this is not necessarily accurate. It is not clear, and is in fact doubtful, that the systems responsible for feelings have access to everything going on in the body and brain that we would want to include as part of the emotion or mood.

Furthermore, emotions and moods may influence and shape the character of conscious experience in ways that cannot be registered as content. As Weiskrantz states, 'Awareness is not just switching on a monitor. It is a condition that allows cognitive manipulation of the material, and in so doing greatly enhances and manipulates and filters that material' (2000, p. 290). As I will discuss in the next section, moods in particular are thought to influence our conscious experiences by biasing attentional mechanisms and information processing strategy and efficiency. In other words, they colour conscious experience as much by influencing what *isn't* represented, as what is.²⁶

In recent years, philosophers and psychologists have advanced similar claims about other kinds of feelings. Weiskrantz' (1986) work on blindsight, for example, suggests that the feeling of seeing (conscious awareness) is neurally distinct from the processing of visual information. Hardcastle (1997) and others have argued that pain is not identifiable with the sensation of pain. Activation of certain subsystems

²⁶ Tye might respond that he is talking only about the conscious experience of emotion and mood and therefore whatever is going on outside of consciousness is not his concern. We should, therefore, read his claims as an analysis of affective feelings, not the affective states themselves (indeed, Tye does sometimes put his claims in terms of 'felt emotions', but uses this terminology interchangeably with 'emotion'). If so, then we need to reject the notion that the experience is transparent to what is going on in the body. If it is transparent at all, then it is selectively so. Too, if a representational theory of conscious experience only captures the *explicit* content of consciousness, it seems that something has been left out of an account of 'what it is like.' Moods colour our conscious experiences without (or in addition to) adding explicit content. It is not clear how a purely representational analysis can capture this.

of the pain processing system occurs prior to, and in some cases, independently of, the feeling of pain. It is not the feeling of pain that motivates you to remove your hand from the hot stove; by the time you feel the pain, your hand has already started to move.

The sensation of pain is not what is most important in pain processing. It is but one minor aspect of our entire pain and pain inhibitory systems From an evolutionary perspective, visual sensations are not the *raison d'être* of our visual system, and auditory sensations are not the ultimate goal for our auditory system. Sensations of pain are no different (Hardcastle, 1997, p. 408).

Likewise, Wegner (2002) argues that the feeling of consciously willing a voluntary action occurs after the action has been initiated. The feeling in each case (the pain feeling or the experience of consciously willing an action) is hypothesized to serve the purpose of alerting or informing us of the state of affairs so that we may modify our behavior and learn from the encounter. These cases lend further support to the general claim that feelings serve distinct functions and are different from the processes that give rise to them.

In saying that feelings are conscious and function to inform and alert us to states of affairs in the body and (indirectly) the environment, I am not claiming that the information they carry is always telegraphed clearly or that we always attend fully to their messages. Feelings can be subtle, often contributing a background or backdrop to whatever else it is we might be focused on. As such they may influence our thoughts and behaviors in subtle, fleeting ways, like the mild itch that causes one to scratch absent-mindedly while still participating in an on-going conversation. Too, even not-so-subtle feelings can be ambiguous in their messages, even with our full and focused attention. This is most often the case when the feeling is not accompanied by the customary auxiliary information. These characteristics of feelings highlight the fact that feelings *qua* feelings do not do anything except inform and alert. When their messages are too subtle or unclear, we are unsure of what to make of them or dismiss them altogether, and their influences on thought and behavior are subsequently muted or cut short.

This point is illustrated by the case of David, a patient with severe amnesia studied by Damasio and Tranel (Damasio, 1999; Tranel and Damasio, 1993).²⁷ David is not only unable to learn new facts, he cannot recall old ones either. He lives in a perpetual present (spanning about 40 seconds in duration) and is unable to remember the names and faces of even those people he has met again and again. Nonetheless, David seems to have a sort of emotional memory for people he has encountered in the past. He demonstrates preferences for those people with whom he has had positive experiences in the past, and behaves somewhat aversively when

²⁷ Thanks to an anonymous reviewer for pointing out the relevance of such cases to my analysis.

he encounters those with whom he has had negative interactions. This, even though David professes no conscious memory of ever having met these people previously.

Damasio and Tranel set up what they call the 'good guy/bad guy experiment' to test this. They arranged for David to have encounters of equal duration and frequency with several study confederates: a 'good guy' who was friendly and gave David treats, a 'bad guy' who was rude and asked David to perform very long, boring experimental tasks, and a neutral party who was neither pleasant nor unpleasant. After these encounters they showed David sets of photographs that included pictures of one of the three confederates in the experiment along with pictures of people he had never seen before, and asked David, 'Whom would you go to if you needed help?' and 'Who do you think is your friend?' (Damasio, 1999, p. 45).

The results of the experiment are striking. David consistently (over 80 percent of the time) chose the 'good guy' when that person's picture was included in the set of photographs and almost never chose the 'bad guy.' Even though David had no memory of ever having met any of the people pictured, and had no recollection of any encounters ever having taken place, David's behavior during the task demonstrated clear preferences for the person with whom he had had positive encounters. This was consistent with his behavior in more natural settings, where he would regularly seek out some nurses and assistants over others when he needed help although, again, he had no conscious sense of doing so intentionally because he had no memory of ever having met them before.

One possible interpretation is that even if David cannot consciously recollect these previous encounters, he perhaps has implicit memories of them—memories that unconsciously influence his thoughts and behavior. Psychologists have shown that patients with a variety of disorders that affect their ability to consciously recognize or recall information, still demonstrate the effects of that information when subjected to indirect tests.²⁸ One such disorder is prosopagnosia—an inability to recognize familiar faces. Studies have shown that prosopagnosics have discriminating skin conductance responses (SCRs) for familiar faces, even when they cannot consciously recognize them. This has been taken to show that prosopagnosics retain an implicit memory of faces that causes them to have these SCRs towards the familiar ones (Young and DeHaan, 1993). Perhaps, like prosopagnosics, David has implicit memories of past encounters that inform his present behaviors. If this is the case, then it is an unconscious process that is at work, not a conscious feeling.

However, David is unlike prosopagnosics in one respect that provides a reason to reject this interpretation of the findings. Tranel and Damasio tested David's

²⁸ Young and DeHaan, 1993; Kelley and Jacoby, 1993. An indirect test is one that is designed to detect an effect of prior information on present performance without asking a subject directly what she can recall or remember.

SCR when shown pictures of both strangers and people that he had encountered in the past. The one difference between this experiment and the one described above was that the 'previously encountered faces in this test were of people with whom David had had fairly affectively neutral interactions. In other words, while these were all people (doctors, nurses etc.) that he encountered before, their interactions had been neither strikingly pleasant nor unpleasant. David showed no discriminating SCRs for the faces of those he had encountered previously, suggesting that mere memory (implicit or otherwise) of past encounters was not influencing his present behavior.

However, David did show discriminating SCRs for 'good guys' in the second phase of the experiment – those individuals with whom he had had positive encounters. This suggests that David was influenced by the emotional qualities of these encounters, not by memories of the encounters themselves. This is consistent with the fact that the damaged areas of David's brain included the entire medial temporal lobe, including the hippocampus, an area associated with the formation of memories for new facts. While David cannot form any factual memories of his encounters with people, he is able to form 'emotional memories' of some sort.

This leads to another, related interpretation of the findings. Perhaps David has no conscious emotion feeling related to his past associations with the participants, but does have unconscious emotion responses that, among other effects, exert some unconscious influences on his preferences in the task, and subtly modulate aspects of his behavior.²⁹ This interpretation is aided by the fact that David does not (and cannot) report any feelings associated with the people pictured because all of the pictures are, as far as he is concerned, photos of strangers. However, the fact that David did demonstrate large SCRs for the good guys suggest that he is feeling *something*. Large SCRs are indicative of significant affective response.³⁰ Under normal circumstances,³¹ emotional responses give rise to emotion feelings, and there is no reason (according to Damasio) to think that the relevant pathways between brain regions responsible for communication between response and feeling are part of the damage in David's brain. This is further bolstered by the fact that David's emotional responses and feelings seem normal in situations where memory is not involved. This suggests that if David is having an emotional response to the pictures that would, under normal circumstances, give rise to a feeling, it is doing so for David within the task as well. Perhaps it is not the feeling that is unconscious, but the memories of the past encounters that would help David make sense

²⁹ It is likely that he is having emotional responses that have unconscious effects. The question is whether unconscious effects alone explain his behavior, and feelings play no role.

³⁰ Skin conductance responses vary according to affective intensity and valence. In this later experiment in which Damasio and Tranel measured SCR, they used individuals with whom David had had 'naturally' (as opposed to experimentally contrived) positive and neutral interactions. There were no 'bad guys' in this experiment.

³¹ That is, in people who are not afflicted with significant brain injury and whose emotion systems are, by all accounts, in good working order.

of them. In David's case such memories are not only unavailable for conscious recall, they perhaps were never properly formed or stored.

This suggests a third interpretation: David has emotional responses and conscious emotion feelings caused by his previous encounters (good or bad) with the participants, but they are not accompanied by any corroborating information (memories of past encounters, the belief that he has met these people previously, etc.). In fact, David has no reason to believe that he has ever seen these people before. Absent the corroborating information, and because the emotion is called up by a photograph (as opposed to, say, a charging lion) the feeling is subtle and vague in its message, and is easily dismissed or ignored. It is this interpretation of what is going on with David that Damasio endorses.

I have no doubt that the sight of the bad guy induced a brief emotional response and brief here-and-now feeling. However, in the absence of an appropriately related set of images that would explain to him the cause of the reaction, the effect remained isolated, disconnected, and thus unmotivated (Damasio, 1999, p. 46).

David is in a similar position to us when we have an intuition or 'bad feeling' about someone we have just met, perhaps because the person resembles someone we had a bad experience with in the past, or their behavior sets off subtle alarm bells (Ekman, 2001). Unless the feeling is strong or one is the sort of person who pays attention to such cues, we may dismiss or ignore the message.³² The case of David serves as a good illustration and reminder that feelings and their messages can be subtle or vague. Under normal circumstances, feelings are only part of an entire complex of information we use to form judgments, make decisions, and inform our behavior.³³ When corroborating information is missing, contradictory, or confusing, the information conveyed by feelings may be ignored or dismissed, their phenomenological character experienced as part of the often ineffable what-it-is like of our here-and-now. This also supports my claim that the power of feelings to influence our thoughts and behavior begins and ends with our ability to take up and do something with the information. When the message is subtle or we are not sure how to take it, the power of the feeling to influence is muted or quashed.

5. Moods and Feelings

I have argued that we should distinguish between emotions and feelings, but what about moods? The claim that moods are feelings has even more intuitive pull than

³² People vary with respect to their sensitivity to such cues. Ekman (2003) argues that we can learn to be more attentive to them and improve our ability to profit from the information they convey.

³³ In addition to the many nonconscious influences on cognition and behavior.

the claim that emotions are feelings. This may be due to the fact that moods are experienced as relatively ineffable, nebulous phenomena; one can't easily specify what the mood is about, or even what being 'in' a mood consists of. In this way they are similar to feelings, particularly 'all-overish' feelings such as fatigue. Too, like feelings, our moods are experienced as passive—states that simply descend upon and envelop us. Moods and feelings are not viewed as things we *do*, but things we have. Affective states are often described as 'passive' but moods seem especially so, perhaps because they rarely have specifiable causes. Like some feelings (of fatigue, for instance) moods are usually not associated with a particular identifiable environmental elicitor. If they have causes, their causes are an accumulation of events (like the many hours of sleeplessness that cause a feeling of fatigue). So perhaps, unlike emotions, moods are feelings. But here too I will argue that we should distinguish between moods and the feeling or experience of the mood. The argument is harder to make out in the case of moods because much less is known about them than emotions. But I think some of the same arguments (and some new ones) can be applied. The conclusions about moods that I present here are more speculative than my points about emotions. I will argue that there are compelling reasons for thinking that moods are not feelings, and for the sake of clarity in our continued research on moods, we should keep the possibility of such a distinction in mind.³⁴

Previously I argued for a distinction between emotions and feelings on both functional and neurophysiological grounds. Emotion responses and emotion feelings are associated with distinct neurophysiological processes and serve different functions. Furthermore and most importantly, feelings are not the kinds of things that can serve the functions associated with emotion responses. The question, then, is whether there are similar grounds for distinguishing between moods and feelings of moods, or for concluding that moods cannot be feelings. To begin with, we need to know more about moods.

At this point little is known about the neurophysiology of everyday moods. If moods are associated with the same neural systems responsible for emotions then any conclusions we can draw about a distinction between emotions and feelings could be extended to mood.³⁵ But more information is needed to license any

³⁴ In Sizer, 2000, I presented a more developed theory of moods. The view presented there is consistent with the claims I am making here and, although it does not address the issue directly, suggests other reasons for rejecting a moods-as-feelings view.

³⁵ Panksepp (1994), for example, suggests that the same neural systems are involved in both emotion and mood. Much of the empirical work done on moods as distinct from emotions has concentrated on the biochemistry of moods. Thayer (1989) has argued that different moods are associated with distinct patterns of change in levels of neurotransmitters such as neuroepinephrine, dopamine, and serotonin in neural systems associated with general arousal such as the reticular activation system, limbic system, cerebral cortex and autonomic nervous system. Given the diffuse, unspecified character of mood experience, the association between moods with such general arousal systems is not surprising. However, it is not clear how such biochemical changes affect those areas associated with feelings.

significant conclusions about the neurophysiology of moods or their distinction from feeling systems. The more promising line of argument is to be found by examining the nature and functions of moods.

There are two features commonly presented as defining or characteristic of moods. One is that they, unlike emotions, are objectless, or nonintentional states. They are not about or directed towards particular objects, events, states of affairs. This difference between moods and emotions blocks an extension of the cognitivist argument that emotions are not feelings to moods. The basis of that argument was that emotions are intentional, and feelings are not. If moods are not intentional then that is something they have in common with feelings—further recommendation for viewing moods as feelings.³⁶

Another defining feature of moods is that moods bring about pervasive, global changes in cognitive processing. Research suggests that our moods affect cognition in distinctive ways. For example, moods are associated with biases in memory such that people in positive moods more quickly and readily recall positively toned memories and concepts than negative ones, and subjects in negative moods more quickly and readily recall negatively toned material (Clark and Teasdale 1982; Isen, 1984). Moods are also associated with biases in attention and processing strategy. Subjects in positive moods take in a wide range of information and process it quickly, relying more heavily on heuristics and past experience (Sinclair and Mark, 1992). They also make associations between ideas and categorize stimuli faster (Isen, 1984; Isen and Daubman, 1984). Negative moods, on the other hand, are associated with a narrowed focus of attention, more analytic thinking and greater concentration on details. Judgments and categorization proceed more cautiously and draw more heavily on the evidence at hand (Isen, 1993; Sinclair and Mark, 1992).

Several authors (Morris, 1992; Thayer, 1989) have suggested that moods function to bias cognition in response to general conditions of the subject and environment. In situations where the subject does not have sufficient resources to address environmental demands, limiting processing demands (by narrowing attention and focusing on problem areas) might be advantageous. This suggests that at least part of the function of moods is to bias or modulate cognitive processing in the ways indicated above. Richard Davidson agrees, stating that '[t]he primary function of emotion is to modulate or bias action The primary function of moods, on the other hand, is to modulate or bias cognition' (1994, p. 52).

If this is the function of moods, are feelings the sorts of things that can perform these functions? Michael Tye, again, suggests that they can. His treatment of moods is similar to his view of emotions in that he holds that moods are feelings and that they perform the sorts of functions described above. Like emotions, he

³⁶ However, some cognitivists argue that moods *are* intentional states, directed towards objects such as 'everything' or 'anything that comes my way.' For a discussion of the problems with such moves see Sizer, 2000.

argues that moods are 'sensory representations'. However, because moods are diffuse and objectless, what they represent is physical changes in the total 'body landscape' (borrowing Damasio's terminology). Tye states that these sensory representations or feelings 'trigger certain styles of reaction and behavior' (1995, p. 130) consistent with the description of mood-related biases I described above. However, Tye does not say much more to flesh this out.

In the social psychology literature one school of thought endorses the view that moods are conscious feelings and that moods/feelings affect cognition, particularly certain kinds of judgments. Psychologists Schwarz and Clore (1983, 1988) have argued for what they call the 'feelings as information' view (also known as the 'moods as information' view, and hereafter referred to as 'MAI'), the claim that moods/feelings directly influence a wide range of judgments and beliefs. They argue that, particularly when asked open-ended, broad questions such as 'What do you think of Mary?' or 'How are things going?' people will consult their current feelings for information.³⁷ Schwarz and Clore refer to this as the 'how do I feel about it?' heuristic.

In a now-famous study, Schwarz and Clore telephoned groups of subjects on rainy and sunny days and asked them questions about life satisfaction. They found a strong correlation between positive reports and sunny days and negative reports on rainy days. The hypothesis was that the weather induced a certain mood in the subjects and that the subjects' felt experience at the time of the question informed their judgments about life satisfaction. This is an example of a misattribution effect. Subjects *mis*attributed their felt moods to the issue of life satisfaction and used it to inform their judgments. Indeed Schwarz and Clore found out that if they commented on the weather before asking their questions, the mood congruency effects disappeared. In other words, if the subject was made to notice her felt mood and attribute it (correctly) to the weather, it was no longer available as information about life satisfaction.

Schwarz and Clore have argued that moods/feelings directly influence judgments of external objects, events and people as well as judgments of self. They argue that the objectless, undifferentiated character of moods allows mood feelings to influence a wide range of judgments. Here, then, is an example of how feelings can and do influence cognition. Feelings of mood might also cue certain mood maintenance and mood repair strategies.³⁸ The feeling of being melancholic, for example, might prompt me to do things I think might change my mood: talk to a friend, go for a run, or watch a funny movie.

But we should not conclude from the fact that mood feelings can influence thought and behavior in *some* ways that they influence cognition in all the ways associated with moods. The MAI model runs into difficulties with those mood

³⁷ The notion of feeling implied here seems to be that of the third category of feelings I mentioned previously: that of 'how things are with me right now', or the overall feeling of conscious experience.

³⁸ See Isen, 1984.

effects that are thought to occur subconsciously and automatically. For example, anxiety is strongly associated with certain changes in attention that occur outside of conscious control. General anxiety is associated with increased levels of vigilance—states of nonspecific readiness to detect and respond to changes in the environment (Davis and Whalen, 2001). Anxiety is also associated with general selective attentional biases toward novel and threat-related material. Mathews and MacLeod (1986) hypothesize that the selective attentional bias to threat is a bias in pre-attentive mechanisms that determine the allocation of further processing resources. In other words these biases are automatic, operating below the level of conscious awareness. Similar conclusions are reached by Ohman *et al.* (2000).

Mood effects on memory and processing strategy are also thought to occur preconsciously. Bower (1981) has suggested that moods bias memory at the points of storage and retrieval by priming those memories, concepts, etc. that are mood congruent. This priming effect then indirectly influences any subsequent judgments because, when in a negative mood, one is more likely to retrieve negative memories and ideas than positive ones. Likewise Parkinson *et al.* (1996) have argued that moods automatically influence processing strategies by affecting attention, processing speed and so on.

There are debates between the proponents of these different approaches over which theory best explains the data. Proponents of the MAI approach have suggested ways in which feelings might influence processing strategies, and proponents of priming or information processing views have tried to explain misattribution effects (why the mood effect disappears when the 'correct' source of the mood is pointed out to the subject). I am not in a position to review that literature here.³⁹ The point I wish to make is that if some mood effects occur automatically, or are of a sort that are unaffected by conscious influence, then feelings cannot be responsible for those effects.

For example, we cannot choose to have an attentional bias towards novel and threat-related material, and if we did so choose there is nothing we could do directly to bring this about. Indeed, this is why the advice to 'just snap out of' a bad mood is so useless and wrongheaded. The operations of these processes are not within our deliberate, conscious control. Similarly, while we can choose to focus attention on a particular task or object (with varying degrees of success), we cannot choose to bias attention *globally*—as occurs with moods such as anxiety. Likewise, while we may be able to deliberately summon up negative memories, the pattern of deliberate recall will be marked as much by content associations (disastrous birthday parties, for example) as by mood. But the mood related memory biases Bower and others have observed are global biases, unaffected by content associations (Parkinson *et al.*, 1996). In short, there is reason to think that at least some of the cognitive biases associated with moods are beyond the reach of our feelings' influences.

³⁹ See Parkinson *et al.* 1996, for discussion.

This is not a reason for dismissing the moods-as-information view. Instead I would suggest that we consider whether there are actually two distinct processes in play here: moods and the feelings of moods. As with emotions and feelings, each functions to influence thought and behavior in certain ways, but they are distinct and perform their functions differently.

But why reserve the label, 'mood' for the processes that are not felt? I would argue, as I did with emotions, that our pretheoretic notions of moods are actually more consistent with the view that moods are not feelings than with the view that they are. Consider a case where a friend comments that you have been irritable all day. You object (angrily) at first, but then agree upon further consideration of the facts. What are the relevant facts? What is it that you examine to make this determination? It is not your feelings; you do not search about in your conscious experience for an irritable sensation. If you did, you would not find one that is uniquely indicative of irritability. Irritability and anxiety, for example, tend to feel very similar. But they are certainly very different moods. The relevant facts here are the pattern of thoughts and behaviors you have exhibited throughout the day. You realize that you have snapped at anyone who came near you, broken a few pencils and even now resent having your irritability pointed out to you. In other words, you recognize your mood by examining the patterns of thoughts and behaviors, by reflecting on how you have thought about and approached the world today, not by considering how you feel.

Why not, then, identify the mood with the more global conscious feeling, composed not only of any bodily sensations (such as feeling keyed up, ready to pounce with nervous energy) but also the fact that your experiences and interactions with the world are being shaped by certain cognitive biases (a tendency to view situations in terms of imposition, attack, perhaps). This is the feeling, the conscious experience of irritability. But notice that if we call this the mood then we can no longer say that the mood explains your behavior—that the mood played a causal role in your snapping at everyone, breaking the pencils and so on. This is more than just wanting an excuse for bad behavior. The intuition (fueled by data) is that our moods play these sorts of causal and explanatory roles—often without our being conscious of their influences. This suggests that the term 'mood' should be reserved for those processes that play these causal and explanatory roles.

6. Conclusion

At first glance it may seem intuitively compelling to identify emotions and moods with feelings—with conscious, qualitative states. But I have argued that, upon closer examination we have seen that such an identification would require a significant revision of our views of what emotions and moods are and the roles they play. Much of the power of emotions and moods to influence our thoughts, behavior, our interactions with the world, lies in what is *unfelt*. Indeed the helplessness we often experience at the hands of our emotions and moods is due in part

to the fact that what we feel is after the fact. What we feel is the consequence of changes that have already begun, and continue to unfold. Feeling our emotions and moods gives us back a measure of control and gives us information about what is going on in the body and brain. But the feeling and the emotion are not the same thing.

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References

- Alston, W. 1967: Emotion and feeling. In P. Edwards (ed.), *Encyclopedia of Philosophy*, Vol.2. New York: Macmillan Publishing Co., Inc. & The Free Press.
- Armon-Jones, C. 1991: *Varieties of Affect*. Toronto: University of Toronto Press.
- Bargh, J. 1996: Automaticity in social psychology. In E. Higgins and A. Kruglanski (eds), *Social Psychology: Handbook of Basic Principles*. New York: Guilford Press.
- Bennett, M. R. and Hacker, P. M. S. 2003: *Philosophical Foundations of Neuroscience*. Oxford: Blackwell.
- Block, N. 1997: On a confusion about a function of consciousness. In N. Block, O. Flanagan and G. Guzeldere (eds), *The Nature of Consciousness: Philosophical Debates*. Cambridge, MA: The MIT Press.
- Bower, G. 1981: Mood and memory. *American Psychologist*, 36, 129–148.
- Cannon, W. 1927: The James-Lange theory of emotions: A critical examination and alternative theory. *The American Journal of Psychology*, 39, 106–124.
- Clark, D. M. and Teasdale, J. D. 1982: Diurnal variation in clinical depression and accessibility of memories of positive and negative experiences. *The Journal of Abnormal Psychology*, 91, 87–95.
- Damasio, A. 1994: *Descartes' Error: Emotion, Reason and the Human Brain*. New York: Avon Books.
- Damasio, A. 1999: *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt, Inc.
- Damasio, A. 2001: Fundamental feelings. *Nature*, 413, 781.
- Davidson, R. 1994: On emotion, mood and related affective constructs. In P. Ekman and R. Davidson (eds.), *The Nature of Emotion*. New York: Oxford University Press.
- Davis, M. and Whalen, P. 2001: The amygdala: vigilance and emotion. *Molecular Psychiatry*, 6, 13–34.
- Deigh, J. 1994: Cognitivism in the theory of emotions. *Ethics*, 104, 824–854.
- Dretske, F. 1998: *Explaining Behavior*. Cambridge, MA: The MIT Press.
- Dretske, F. 1995: *Naturalizing the Mind*. Cambridge, MA: The MIT Press.
- Ekman, P. 2001: *Telling Lies: Clues to Deceit in the Marketplace, Politics and Marriage*. New York: Norton.
- Ekman, P. 2003: *Emotions Revealed: Recognizing Faces and Feelings to Improve Communication and Emotional Life*. New York: Henry Holt and Company.

- Goldie, P. 2000: *The Emotions: A Philosophical Exploration*. New York: Oxford University Press.
- Goldie, P. 2002: Emotions, feelings and intentionality. *Phenomenology and the Cognitive Sciences*, 1, 235–254.
- Gordon, R. 1987: *The Structure of Emotions: Investigations in Cognitive Philosophy*. Cambridge: Cambridge University Press.
- Gray, J. 1999: Cognition, emotion, conscious experience and the brain. In T. Dalgleish and M. J. Power (eds.), *Handbook of Cognition and Emotion*. New York: John Wiley & Sons.
- Griffiths, P. 1989: The degeneration of the cognitive theory of the emotions. *Philosophical Psychology*, 2 (3), 297–313.
- Griffiths, P. 1997: *What Emotions Really Are*. Chicago, IL: The University of Chicago Press.
- Hardcastle, V. 1997: When a pain is not. *The Journal of Philosophy*, 94, 381–409.
- Isen, A. 1984: Toward understanding the role of affect in cognition. In R. S. Wyer, Jr. and T. K. Srull (eds), *The Handbook of Social Cognition*, Vol.3. New Jersey: Lawrence Erlbaum Associates.
- Isen, A. 1993: Positive affect and decision making. In M. Lewis and J. M. Haviland (eds), *The Handbook of Emotions*. New York: The Guilford Press.
- Isen, A., and Daubman, K. 1984: The influence of affect on categorization. *The Journal of Personality and Social Psychology*, 47, 1206–1217.
- James, W. 1884: What is an emotion? *Mind*, 9, 188–205.
- Kelley, C. M. and Jacoby, L. L. 1993: The construction of subjective experience: memory attributions. In M. Davies and G. W. Humphreys (eds), *Consciousness*. Cambridge, MA: Blackwell.
- Kraut, R. 1986: Feelings in context. *The Journal of Philosophy*, 83 (11), 642–654.
- Lane, R. 2000: Neural correlates of conscious emotional experience. In R. Lane and L. Nadel (eds), *Cognitive Neuroscience of Emotion*. New York: Oxford University Press.
- LeDoux, J. 1996: *The Emotional Brain*. New York: Simon & Schuster.
- Lyons, W. 1980: *Emotion*. Cambridge: Cambridge University Press.
- Mathews, A. and MacLeod, C. 1986: Discrimination of threat cues without awareness in anxiety states. *Journal of Abnormal Psychology*, 95, 131–138.
- Morris, W. 1992: A functional analysis of the role of mood in affective systems. *Emotion: Review of Personality and Social Psychology*, 13, 256–293.
- Ohman, A., Flykt, A. and Lundqvist, D. 2000: Unconscious emotion: evolutionary perspectives, psychophysiological data and neuropsychological mechanisms. In R. Lane and L. Nadel (eds), *Cognitive Neuroscience of Emotion*. New York: Oxford University Press.
- Panksepp, J. 1994: Basic emotions ramify widely in the brain, yielding many concepts that cannot be distinguished unambiguously... yet. In P. Ekman and R. Davidson (eds), *The Nature of Emotion*. New York: Oxford University Press.
- Parkinson, B., Totterdell, P., Briner, R. and Reynolds, S. 1996: *Changing Moods: The Psychology of Mood and Mood Regulation*. New York: Addison Wesley Longman Limited.

- Pitcher, G. 1965: Emotion. *Mind*, 74, 326–46.
- Prinz, J. J. 2004: *Gut Reactions: A Perceptual Theory of Emotions*. New York: Oxford University Press.
- Ryle, G. 1951: Feelings. *Philosophical Quarterly*, 1, (3), 193–205.
- Schwarz, N. and Clore, G. L. 1983: Mood, misattribution and judgments of well-being: informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513–523.
- Schwarz, N. and Clore, G. L. 1988: How do I feel about it? Informative functions of affective states. In K. Fiedler and J. P. Forgas (eds), *Affect, Cognition and Social Behavior*. Toronto: Hogrefe.
- Shweder, R. 1991: *Thinking Through Cultures: Expeditions in Cultural Psychology*. Cambridge, MA: Harvard University Press.
- Sinclair, R. C. and Mark, M. M. 1992: The influence of mood state on judgment and action: effects on persuasion, categorization, social justice, personal perception and judgmental accuracy. In L. Martin and A. Tesser (eds), *The Construction of Social Judgments*. Hillsdale, NJ: Lawrence Erlbaum.
- Sizer, L. 2000: Towards a computational theory of mood. *The British Journal for the Philosophy of Science*, 51, 743–769.
- Solomon, R. 1984: Emotions and choice. In C. Calhoun and R. Solomon, R. (eds) *What Is An Emotion?* New York; Oxford University Press.
- Solomon, R. 1990: Emotions, feelings and contexts: A reply to Robert Kraut. *Dialogue*, 29, 277–284.
- Solomon, R. 2003: Emotions, thoughts and feelings: What is a 'cognitive theory' of the emotions and does it neglect affectivity? In A. Hatzimoysis (ed.) *Philosophy and the Emotions*. *Royal Institute of Philosophy Supplement*, 52.
- Stampe, D. 1977: Towards a causal theory of linguistic representation. In P. French, T. Euhling and H. Wettstein (eds), *Midwest Studies in Philosophy 2*. Minneapolis: University of Minneapolis Press.
- Stocker, M. 1996: *Valuing Emotions*. Cambridge: Cambridge University Press.
- Thayer, R. 1989: *The Biopsychology of Mood and Arousal*. New York: Oxford University Press.
- Tranel, D. and Damasio, A. 1993: The covert learning of affective valence does not require structures in the hippocampal system or amygdala. *Journal of Cognitive Neuroscience*, 5, 79–88.
- Tye, M. 1995: *Ten Problems of Consciousness*. Cambridge, MA: The MIT Press.
- Wegner, D. M. 2002: *The Illusion of Conscious Will*. Cambridge, MA: The MIT Press.
- Weiskrantz, L. 1986: *Blindsight*. Oxford: Oxford University Press.
- Weiskrantz, L. 2000: Blindsight: Implications for the conscious experience of emotion. In R. Lane and L. Nadel (eds), *Cognitive Neuroscience of Emotion*. New York: Oxford University Press.
- Young, A. and DeHaan, E. 1993: Impairments of Visual Awareness. In M. Davies and Humphreys, G. W. (eds), *Consciousness*. Cambridge, Massachusetts: Blackwell Publishers.
- Zajonc, R. 1980: Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35, 151–175.