PART IV

The Experience of Emotion
Many aspects of emotion are said to be valenced and labeled *positive* or *negative*. Indeed, valence is generally considered to be a central feature of emotion. For example, it is probably not an exaggeration to say that “many investigators consider the valence of emotions to be the single most important dimension of affective experience” (Fossum & Barrett, 2000, p. 679). Yet, despite its theoretical proclivity, the philosophical status of valence in emotion science remains largely unexplored. What is valence? Is it an objective, intrinsic property of emotion experience, a “given” that is discovered? Or is it instead an outcome of emotion experience, a “product” that is subjectively created in consciousness?

In what follows, emotion experience will be defined rather strictly. Following John Lambie and Anthony Marcel, “emotion experience” is understood as “referring to and including (1) the phenomenological aspect of an emotion state, and (2) second-order awareness of this experience, although the latter is not always present” (Lambie & Marcel, 2002, p. 230). An emotion state, in turn, is defined as “what is common to a certain set of evaluative representations, attitudinal behaviors, and physical states (pp. 229–230). The definition is meant to capture the bare minimum of
what “people are referring to in mutually understood discourse that uses the term ‘emotion’” (p. 230). The principal reason for introducing this particular conception of emotion experience is its important distinction between first-order phenomenology and second-order awareness. That distinction plays a central role in our discussion.\(^1\)

Technically stated, the central claim of this chapter is that valence understood as hedonicity (pleasure or displeasure) is not an intrinsic objec-
tive property of felt affect in first-order emotion experience. Rather, it is a property of second-order emotion experience that is highly variable and fundamentally indeterminate. Because the scientific literature on valence and affect is so idiosyncratic and complex, explaining and defending this thesis requires considerable background preparation. But intuitively the point should be clear. Very simply, feelings are not intrinsically pleasant or unpleasant in themselves. Their “positive” (pleasant) or “negative” (unpleasant) character is not an objective property that is intrinsic to them. Instead, valence is fixed by the process of attending to feelings in second-order awareness. Some element of “interpretation” appears to be involved (Lambie & Marcel 2002, pp. 220, 244).

The culmination of this argument is called the indeterminacy thesis. According to this thesis, there is no intrinsic objective scientific fact about what the valence of a particular emotional affect or feeling is apart from its elaboration in second-order awareness in emotion experience. Valence is objectively indeterminate because it is impossible to report or measure it without at the same time changing it. The exact character and personal meaning of an emotional feeling is created in second-order awareness by attention. But attention does not create the underlying phenomenology out of which valence is created. Neither does it create the nonconscious mechanisms that underlie valence. Here it is crucial to distinguish between the conscious subjective experience of valence and the nonconscious mechanisms that underlie it.

One important consequence of the indeterminacy thesis is that descriptive structural models of the valence dimension of affect probably fall much shorter of their explanatory goals than is typically thought. This is because the indeterminacy thesis poses serious problems for the idea that felt valence is an objective commodity that can be measured reliably. But that is a central assumption of many scientific efforts to explain affect (Carroll, Michelle, Yik, Russell, & Barrett, 1999; Barrett, Chapter 11; Russell, 2003; Watson & Tellegen, 1985).

DESCRIPTIVE STRUCTURAL THEORIES OF AFFECT

To get a clearer grasp of what is at stake in our opening questions, consider the well-known circumplex model of emotion (Russell, 1980; Barrett & Russell, 1998). According to that model, emotion experience is said to include a component of “affect,” which informally is referred to as “feeling.” Lisa Feldman Barrett probably speaks for many emotion researchers when she says that “self-report represents the most reliable and possibly only window that researchers have on conscious, subjective, emotional experience” (Barrett, 1996, p. 47). She and many others employ self-reports
to inquire into valence. The conscious felt subjective experience of valence in these discussions is construed as a component of affect—which, in turn, is considered to be a fundamental constituent of emotion experience (Russell, 2003).

Certainly, much valuable work has been done in mapping the descriptive structure of valence and other components of affect using self-reports (Barrett & Russell, 1998; Cacioppo & Berntson, 1999; Carrol et al., 1999; Larsen & Diener, 1992; Russell, 1980; Watson & Tellegen, 1985). It is interesting that the word *description* is often used in characterizing the epistemological aim of these studies. Thus the aim is to *describe* affect (Carroll et al., 1999, p. 14; Russell & Carroll, 1999, p. 5; Larsen, MacGraw, Meter, & Cacioppo, 2001, p. 692). What is sought is an explanatory model of the “descriptive structure” of affect (Barrett & Russell, 1998, p. 967; Carroll et al., 1999, p. 14).

But how can description capture something that is inherently evaluative? How can we hold valence still, to measure and describe it objectively, without at the same time changing its normative character? Of course, evaluations can sometimes be treated descriptively: thus “formally, an evaluation is a valenced (i.e., positive or negative judgment about a stimulus” (Fossum & Barrett, 2000, p. 669; emphasis added). But resorting to evaluative judgments does not solve our problem. The reason is that, in substance as opposed to form, valence is a very peculiar characteristic of conscious experience. To explain why, it is helpful to distinguish two different but related senses of the term *valence*: (1) a pretheoretical, substantial, experiential one; and (2) an abstract, theoretical, formal one. Note that it is the explanation and description of the *experience* of valence that is at issue here, not the explanation and description of the nonconscious mechanisms which may correspond or contribute to it (Lambie & Marcel, 2002, p. 227; Larsen et al., 2001, p. 686).

On a pretheoretical experiential level, valence is a felt conscious tendency or orientation toward or away from features of experience. This is reflected in the etymology of the term, which signifies a power or capacity to react. It is crucial that valence is not viewed simply as the experience of brute and blind physiological urges. On the contrary, it is laden with personal meaning and is inseparably tied to an experience of the personal significance of what events in the environment mean for us. This personal meaning is what makes valence fundamentally evaluative and interpretive. Through valence, we feel moved toward or away from things, in a manner that is accompanied by an experience of what those things mean to us personally. This pretheoretical conscious felt sense of valence is what the scientific study of valence is meant to explain. It serves as the *explanandum* for many theories of valence. Other starting points are possible. But this one has the notable distinction of starting with the assumption that,
paradigmatically, valence is a property of conscious emotion experience. The question then is whether objective descriptive methods that employ self reports can adequately capture the evaluative and interpretive core of this subjective phenomenon. How well can self-report measures succeed in capturing this qualitative aspect of emotion experience, the subjective “qualia” that self-reports are allegedly about (Scherer, Chapter 13). How can science capture what it is that these reports allegedly report (Scherer, Chapter 13)?

We can now restate our opening questions. Is the special felt qualitative tendency in valence, as it is structurally represented in descriptive theories, an intrinsic feature of emotion experience as such; that is, something that exists prior to the self-reports that describe it? Or is it instead created and structured by features of second-order awareness, such as these self-reports? The argument here is that valence is created by attention in second-order awareness. There is nothing scientifically objective or precise that we can say about valence apart from its elaboration in second-order awareness. Second-order awareness does not create the underlying phenomenology of emotion experience, but it does shape and articulate what exactly it means to us. This conclusion would appear to threaten the scientific foundation of descriptive theories of affect, because it undermines the objectivity of the phenomenon they claim to study. It also contradicts the driving assumption of several dominant neuroscientific theories of valence, according to which valence is an intrinsic objective property of affective experience.

Affect and valence are the central terms involved in our discussion; both have widely variable uses. There are several options available for defining affect, and the matter is partly subject to stipulation (Carroll et al., 1999, p. 21; Russell & Carroll, 1999, p. 7). For present purposes, affect is initially defined as the conscious felt experience of emotion (Berkowitz, 2000, p. 4; Cacioppo & Bernston, 1999, p. 134; Russell & Carroll, 1999, p. 3). Affects, then, are “subjectively experienced feelings” (Buck, 1999, p. 301). In some theories, affect is said to consist of two dimensions; valence and activation; the latter is also sometimes referred to as arousal or activity. This, for example, is how affect is understood in the circumplex model of emotion (Russell, 1980; Feldman, 1995): It treats valence as a component dimension of affect, which in turn is treated as an element of emotion experience.

The circumplex model of emotion and theories like it generally treat valence as a component of affect; other approaches treat valence as an attribute of emotions (Frijda, 1986; Lazarus, 1991; Ben-Ze’ev, 2000; Prinz, 2004). Accordingly, one of our first tasks is to clarify the distinction between affect valence (i.e., valence attributed to individual distinct affects) and emotion valence (i.e., valence attributed to individual whole emotions). This
distinction will enable us to focus on affect valence without, hopefully, inviting too much confusion. It is the valence of the subjective feelings or affects in emotion experience with which we are concerned, not the valence of emotions as such.

**DISTINGUISHING EMOTION VALENCE AND AFFECT VALENCE**

Valence can be defined as the positive or negative “charge” associated with a particular physical or mental state, or a particular combination of these. The view that individual emotions have valence is widespread in both philosophical and psychological theories of emotion (e.g., Ben-Ze’ev, 2000; Gordon, 1987; Lazarus, 1991; Ortony, Clore, & Collins, 1988; Prinz, 2004). In this case, valence is held to be a property of individual emotions. Thus it is often said that fear is a negative emotion, whereas, joy is a positive one. Call this emotion valence. Normally, emotion valence is considered to be an intrinsic objective property of individual whole emotions. A given emotion is simply said to be positive or negative.

Sometimes it is not individual whole emotions that are said to be positive or negative but, rather, individual affects (e.g., Barrett, 1996; Larsen & Diener, 1992; Russell, 1980; Watson & Tellegen, 1985). In this case, valence is held to be a property of individual affects. Thus it is often said that feeling frightened is a negative affect, whereas feeling joyful is a positive one. Call this affect valence. Note that valence can also be attributed to the individual affects in moods. However, in what follows, it is the valenced dimension of affect in emotion experience that concerns us.

To summarize, there are at least two kinds of valence that are sometimes referred to in emotion theory: emotion valence and affect valence. The distinction is helpful exegetically. For example, sometimes individual emotions are said to inherit their emotion valence from the valence of their underlying affective states; that is, affect valence (Russell, 2003). At other times, the valence of individual affects is said to be determined by the valence of their underlying emotion states; that is, emotion valence (Damasio, 2003). There are also cases in which emotion valence is treated as if it were a distinct phenomenon of its own, and affect valence is not mentioned (Gordon, 1987; Lazarus, 1991). Finally, there are cases in which affect valence is the object of study, and emotion valence is not mentioned (Zajonc, 1980).

Evidently, the distinction between emotion valence and affect valence is not trivial, and there are important reasons to respect it. But it is a rather crude distinction. As described, it does not address the various internal components of emotion episodes that might be valenced, such as goals and
appraisals. Neither does it address cases in which the cause or object of an emotion is said to be valenced. The point is simply that it is often considered useful to list individual affects or emotions under columns labeled positive and negative. This practice is what the distinction between emotion valence and affect valence is meant to capture.

**PLEASURE AND ITS OPPOSITES**

The general definition of valence provided above characterizes it as bivalent; a contrast between two polar opposites. There is a positive “charge,” on one hand, and a negative “charge” on the other. The definition is meant to remind us of the chemical connotations of the term but says nothing specific about what valence is. The reason is that specific proposals vary considerably. Typical interpretations of the concept of valence in emotion theory include the polarities of good and bad (Kahneman, 1999), hot and cold (Berkowitz, 2000), pleasant and unpleasant (Russell, 1980), pleasure and pain (Frijda, 1986), approach and withdrawal (Davidson, 1992), and joy and sorrow (Damasio, 2003).

When it is defined in terms of pleasure, valence is sometimes referred to as hedonicity (Lambie & Marcel, 2002). This is probably the most common understanding of the term. Generally, pleasure and one of its putative opposites are the qualities referred to by the positive and negative “charges” of valence, respectively (e.g., displeasure, unpleasantness, pain etc.). This is true for both emotion valence and affect valence. Indeed, this usage and its variants are so common that sometimes affect, hedonic quality, and valence, are all used synonymously to denote a pleasant–unpleasant quality, or positive and negative affect, respectively (Barrett, 1996; Russell, 1999). It is, of course, true that affect is often said to have other dimensions, such as activation or arousal. But affectivity, as such, is more closely allied with hedonicity. In the words of John Lambie and Anthony Marcel, “the most markedly affectively valenced aspect of emotion experience is hedonic tone or quality: pleasure and displeasure” (Lambie & Marcel, 2002, p. 343). Lisa Feldman Barrett makes the same point when she states that “the valence dimension typically refers to the hedonic quality of an affective experience (pleasant or unpleasant)” (Barrett, 1996, p. 48).

The distinction between emotion valence and affect valence is fundamental to how pleasure figures into emotional valence. To say that positive emotions are associated with pleasure is one thing. To say that positive affects are associated with pleasure is another. The supporting theories and arguments are usually quite different. One theory ranges over emotions, the other over affects. As we saw above, it may be that individual emotions inherit their pleasurable characteristics from the pleasurable qualities of
their underlying affects (Russell, 2003). An alternative model of the genealogy of valence might be that the pleasurable qualities of affect are derivable from the pleasurable qualities of individual emotions (Damasio, 2003). Both of these proposals involve valence; they simply differ on which aspect of valence is primary in the genealogy of valence. According to the former, affect valence is primary. According to the latter, emotion valence is primary. These two examples should reinforce the reason why it is important to distinguish between emotion valence and affect valence.

To summarize, in the context of emotion theory, valence is generally defined in terms of pleasure and its opposites. This is the most common and central sense of what is meant by the term. In this sense, valence “is an obvious and central feature of emotion” (Lambie & Marcel, 2002, p. 434). An emotion or affect is said to be “positive” because it is associated with pleasure. An emotion or affect is said to be “negative” because it is associated with some opposite of pleasure; perhaps unpleasantness, displeasure, or pain.

One of the most interesting areas of debate in contemporary emotion theory involves affect valence in this hedonic sense. The issue is whether pleasure and its opposites are statistically independent measures, or whether they are linked by correlation (Barrett & Russell, 1998; Russell, 1999; Watson & Tellegen, 1985). This issue is an excellent example of what scientific historian Thomas Kuhn meant by “puzzle-solving” in “normal science” (Kuhn, 1970). There is a widely shared body of experimental practices, or paradigms, and a thriving research industry working on related problems. The association between positive and negative valence, and pleasure and its opposites, is equally popular in discussions of emotion valence. But here we do not find the same focus on sharply defined problems and experimental techniques. Scientific efforts to understand valence therefore tend to be focused in the area of affect valence. The widespread use of the concept of valence in this domain is a prominent feature of the scientific study of emotion. To be sure, there are theorists who downplay or ignore the contribution of valence to emotion (James, 1890/1981; Mandler, 1984; Schacter & Singer, 1962). Nevertheless, when it is combined or identified with hedonicity, valence is fundamental to large segments of emotion theory. Indeed, it is so pervasive that it is hard to imagine emotion theory without it.

**WHEN EMOTION VALENCE IS INTRINSIC**

In a provocative critique of emotion valence, Robert Solomon and Lori Stone claim that the origins of the concept of valence lie in ethics (Solomon & Stone, 2002, p. 418). This may be true in the case of emotion valence, but it is inaccurate in the case of affect valence, which they hardly mention. In
fact, a plausible history of the scientific origins of affect valence can be found in the development of the physiological concept of irritability (Hall, 1975; Pagel, 1967; Temkin, 1964). And certainly many contemporary theories of affect valence do not originate in ethics, although they may have implications for ethics. Solomon and Stone therefore appear to be wrong that the origins of affect valence lie in ethics. But actually their critique of emotion valence ignores affect valence almost entirely. As a result, their discussion of valence is incomplete. However, Solomon and Stone are right in claiming that the concept of emotion valence is more problematic than is commonly realized. In particular, they are right in stating that valence cannot be a fixed *objective* and *intrinsic* feature of emotions.

Very roughly, what Solomon and Stone (2002) argue is that valence is always a matter of interpretation and that interpretation is always relative to a context and a scheme of meaning or evaluation. It therefore makes little sense to say that an emotion is positive or negative, in itself, apart from some scheme of meaning that provides criteria for the application of the “positive” and “negative” valence operators. Hence, it makes little sense to speak of emotion valence as if it were a fixed objective and intrinsic feature of emotion states themselves. It is neither objective nor intrinsic because it is based on interpretation, which involves the assignment of a positive or negative value to those states.

Solomon and Stone (2002) conclude their critique of emotion valence in a rather iconoclastic manner. They write:

The analysis of emotions in terms of “valence,” while it recognizes something essential about emotions (that is, that they involve appraisals and evaluations of the world and are relevant to a life well or ill-lived), is an idea that we should abandon and leave behind. It serves no purpose but confusion and perpetrates the worst old stereotypes about emotion, that these are simple phenomenon unworthy of serious research and analysis. (p. 432)

This certainly is a radical conclusion that would mean the end of large segments of emotion theory as we know it. However, on closer look Solomon and Stone (2002) appear to endorse a more moderate conclusion. They write:

All emotions involve some positive or negative appraisals (Solomon, 1993). But to collapse all appraisals into a single evaluative polarity, positive-and-negative, is, to put it simply, simple-minded. (p. 427)

What, then, is the correct interpretation of Solomon and Stone’s conclusion? The first passage states that we should give up the concept of valence entirely, and the second one denies this. This seems blatantly inconsistent. However, there is a way to resolve the inconsistency. What Solomon and
Stone are really arguing against is the “facile” and “simple-minded” monolithic application of the concept of valence to emotions (p. 433). More specifically, they object to emotion valence as a monolithic concept; that is, a concept that is indiscriminately applied to all the various emotions in an attempt to reduce their multifarious evaluative aspects to a single uniform bipolar dimension. As they say, “our argument is not that there is no such thing as valence or no such polarity or contrasts, but rather that there are many such polarities and contrasts” (p. 418). To document their case, they list 18 examples of how positive and negative bipolarity is understood in emotion theory (p. 418). They also appeal to Aaron Ben-Ze’ev’s rich account of the subtlety of emotion (Ben-Ze’ev, 2000).

So, on closer examination, what Solomon and Stone are against is the “facile” and “simple-minded” monolithic application of the concept of valence to emotions. They do not believe that we should give up the concept of valence entirely. Instead, their point is that there are many varieties of emotion valence. This still means doing away with the idea that valence is an intrinsic feature of emotions. That is quite a radical conclusion. As we shall see, the same conclusion applies in the case of affect valence, with equally radical consequences. But here the argument will be quite different; it is the indeterminacy thesis. The consequences will also be more drastic, since they create doubt over the very possibility of a scientific approach to affect valence.

**WHEN AFFECT VALENCE IS INTRINSIC**

We have seen that a strong case can be made that valence cannot be an intrinsic objective feature of individual whole emotions. The assignment of valence to individual emotions always depends on interpretation and context. What about affect valence? Is the valence of individual conscious feeling states (“affects”) ever an intrinsic objective feature of those states?

The various descriptive theories of affect discussed earlier all appear to endorse the assumption that valence is an intrinsic objective feature of affect states. An especially vivid expression of that assumption can be found in two recent neuroscientific theories of affect valence (Damasio, 2003; Panksepp, 1998). These proposals share the assumption that valence somehow resides in individual affects as an intrinsic objective feature of those states themselves. Thus, in affect valence, subjective affects or feelings are often thought to be positive or negative in themselves. They wear their meanings—their “charges”—on their sleeves. In this view, when we report the valence of an affective state, we uncover and reveal something determined and fixed that is already there. In other words, the assignment of a positive or negative value to that state is verified by the fact that the state is
positive or negative—prior to being assigned that value. Let us very briefly consider two important examples.

According to Jaak Panksepp, the mammalian brain is genetically predisposed to develop several basic emotion command systems. These natural kinds of emotion embody and reflect values that are fundamental to the survival of the organism. According to Panksepp, there are probably seven basic emotion systems: seeking, rage, fear, panic, play, lust, care (Panksepp, 2001, p. 156; see also Panksepp, 1998). The language of values is important here. What it means is that each basic emotion system provides a distinct kind of evaluative orientation to the world; that is, each system specifies a particular kind of direction the organism may take as it deals with changing features of its environment.

Panksepp’s basic emotion systems are all valenced, and, at times, he uses the standard chemical metaphor of positive and negative “charges” to characterize valence (Panksepp, 2001, p. 156, Table 2). But note that in his view, some basic emotions can generate both positive and negative charges, depending on the circumstances. Thus lust can generate erotic feelings, which are pleasurable, and jealous feelings, which are not. And seeking can generate interest, which is pleasurable, and frustration, which is not (p. 156). Clearly, for Panksepp there is sometimes more to valence than simply pleasure and its opposites. However, this does not prevent him from resorting to that simple opposition in order to organize and simplify his overall discussion of affect valence.

Another important example of the view that valence is an intrinsic feature of affective states can be found in the work of Antonio Damasio. He presents a vigorous defense of the idea that valence is an intrinsic and objective feature of affective states themselves. Damasio has a distinct view of the genealogy of affect valence. First, there is the emotion body state. Each basic emotion constitutes an automatic response and particular evaluative orientation to the world and is designed to protect and improve the conditions of the organism (Damasio, 2003, pp. 34–35). Then comes the corresponding affective feeling state, which is the consciousness of that underlying body state. According to Damasio, the feeling state inherits its valence from the underlying emotion state that gives rise to it. In short, “a feeling of emotion is an idea of the body when it is perturbed by the emotion process” (p. 88). This account of the genealogy of affect is accompanied by a thoroughgoing commitment to bivalence. Thus we are told that “all feelings contain some aspect of pain or pleasure” (p. 123). Indeed, in Damasio’s view, it is a “well-established” fact that feelings are bivalent:

There are organism states in which the regulation of life processes becomes efficient, or even optimal, free-flowing and easy. This is a well-established physiological fact. It is not a hypothesis. The feelings that usually accompany
such physiological conducive states are deemed “positive,” characterized not simply by the absence of pain but by varieties of pleasure. There also are organism states in which life processes struggle for balance and can even be chaotically out of control. The feelings that usually accompany such states are deemed “negative,” characterized not just by absence of pleasure but by varieties of pain. (p. 131)

In a complex series of steps, Damasio extends these observations about the origins of bivalence in bodily regulation and homeostasis to the psychological and social domains. He presents a classification of emotions in which social emotions such as shame and sympathy are labeled as positive or negative, depending on their innate valenced character (p. 156). Damasio actually traces the bivalent character of valence all the way back to the mechanisms of cellular activity. Even the “unbrained paramecium” is capable of emotional reactions, according to him. In this case, valence is characterized as “detection of the presence of an object or event that recommends avoidance and evasion or endorsement and approach” (p. 41).

Like Panksepp, Damasio is a believer in intrinsic valence. In his view, the positive or negative character of the various affective states is not a contextual matter of interpretation requiring comparison with some external standard of meaning. One simply detects and experiences what it is like to be in that state and that’s it. The experience of valence is seen as a kind of conscious registration of information. Damasio does insist that consciousness and perception are dynamic. However, in his account of affect valence, the information that a state is valenced is not fundamentally changed or altered by the awareness of it, nor is it altered by the process of becoming conscious of it. It is simply read off as that state.

To conclude, both Panksepp and Damasio appear to endorse some form of the thesis that valence is an intrinsic objective feature of affective states themselves. In this they agree with the defenders of descriptive structural models of affect discussed earlier, who also maintain that valence is an intrinsic objective property of affective states. If our indeterminacy thesis is true, then this assumption must be wrong. To explain why, we turn to John Lambie and Anthony Marcel’s novel account of emotion experience. Although they do not defend an indeterminacy thesis, such a thesis can be constructed from their account of emotion experience.

THE HETEROGENEOUS CHARACTER OF EMOTION EXPERIENCE

In a highly original discussion of emotion experience, John Lambie and Anthony Marcel argue that emotion experience is not single or uniform.
According to them, “emotion experience takes various forms and is heterogenous” (Lambie & Marcel, 2002, p. 219). They also argue that “there is no one essential type of content of emotion experience” (p. 256). Thus there is a variety of emotion experiences, and the content of emotion experience is both “varied and variable.”

There are important lessons in Lambie and Marcel’s discussion for our understanding of affect valence. First, their account of the varieties of emotion experience poses special problems for the view that affect valence is a single uniform phenomenon. Valence, for Lambie and Marcel, turns out to be multidimensional and multiple. Secondly, their claim that valence is multidimensional and multiple points toward an even more radical thesis—which they, however, do not explore. This thesis is that affect valence is fundamentally indeterminate. However, before this thesis can be stated, it is first necessary to consider more closely Lambie and Marcel’s account of emotion experience.

Lambie and Marcel (2002) start by distinguishing two orders of emotion experience, which they refer to as phenomenal experience and awareness (p. 220). These constitute emotion experience, in their sense of the term (p. 230). First-order phenomenal experience is a very basic “what-it’s-like” experience. Second-order awareness is normally directed at first-order phenomenal experience (p. 220); it is a kind of reflexive knowledge of that first-order phenomenology (p. 228). First-order phenomenology does not have propositional structure (p. 239); it is ineffable, although it is not inexpressible or indescribable (p. 237). Nevertheless, it is significant that “reports of phenomenology tend to distort it” (p. 237). Second-order awareness is a kind of knowing directed at first-order phenomenology; its content is created by attending to first-order phenomenal experience, which is logically and temporally prior. Normally, we can only know first-order phenomenology through second-order awareness, “which usually transforms it” (p. 237). Attention is central to second-order awareness. Lambie and Marcel (2002) actually state that “focal attention in particular creates awareness” (p. 235).

Lambie and Marcel (2002) cite numerous sources of evidence for their distinction between first- and second-order emotion experience. They illustrate the distinction by arguing that “blindsight is a first-order problem, and Anton’s Syndrome, or unawareness of a sensory deficit, is a second-order problem” (p. 228). They also mention the case of people who remember pains or sensations of which they were previously unaware. To make sense of these and other similar phenomena, it is necessary to suppose that phenomenal experience can be independent of awareness. This supposition requires something like the distinction between first- and second-order emotion experience.

Phenomenology can be independent of awareness, although usually it is not. Normally, they are linked by focal attention, a mechanism whereby
some part of first-order phenomenal experience can become the content of second-order awareness (Lambie & Marcel, 2002, p. 234). Lambie and Marcel are careful to note that even though "phenomenology as such is independent of and prior to focal attention, it is nonetheless subject to two aspects of attention" (p. 234). These are general directedness and attentional mode. General directedness addresses whether one's experience is oriented to the self or to the world. Mode of attention addresses whether one's stance is analytic or synthetic and/or immersed or detached. An analytic perspective tries to break things down into their component parts. Its opposite is the synthetic perspective, which considers the whole (p. 235). The detached perspective tends to remove the self from the object of attention. Its opposite is the immersed perspective, which puts the self closer to the object of attention (p. 235). With all these factors operating in emotion experience, it is a far more complex and variable affair than is typically supposed. So is the question of the supposed content of emotion experience. The consequences of this line of thinking for the concept of valence are enormous, particularly when valence is understood as hedonically.

Lambie and Marcel (2002) sometimes distinguish between valence and hedonically. They limit hedonically to pleasure and pain and relegate valence to positive and negative evaluation (p. 229). For them, there is a distinction between the evaluation underlying and causing an emotion—namely, valence—and the pain or pleasure of the experience—namely, hedonically (p. 243). However, as we have seen, many writers on affect valance appear to identify valence with hedonically. And recall Lambie and Marcel's claim that "the most markedly affectively valenced aspect of emotion experience is hedonic tone or quality: pleasure and displeasure" (p. 243). For our purposes, the central point at issue is the claim that valence is an intrinsic feature of affective states. On that question, Lambie and Marcel also appear to defend a form of the thesis that affect valence is intrinsic. However, somewhat ironically, they also provide good reasons for doubting it. To see why, we need to look closer at the relationship between attention and hedonically. Recall that, according to Lambie and Marcel, hedonically is the most "markedly affectively valenced aspect of emotion experience" and "an obvious and central feature of emotion" (p. 243; emphasis added).

Lambie and Marcel (2002) argue that "hedonically may be of different kinds" partly because "hedonic tone is not a single simple dimension but differs according to the specific intentionality of the emotion" (p. 244). For example, "the pleasure in relief is different from that in simply satisfying an unhindered concern" (p. 244). Likewise, the "pain of grief is different from that of frustration" (p. 244). In other words, each distinct emotion episode can have its own particular hedonic tone. This pluralistic position on
hedonicity appears to be inconsistent with Damasio's theory of affect valence, and others like it. However, the divergence from traditional approaches to valence gets even more pronounced when we add the fact that Lambie and Marcel are not simply saying that each individual emotion episode has its own single hedonic tone. In addition, they also maintain that within a single emotion experience there can be different, sometimes contrasting, varieties of hedonicity. As they put it, "the different sources of hedonics do not contribute to a single hedonic tone but to different hedonic tones coexisting at one moment" (p. 245). Thus the object of love may be experienced as pleasant while the state one is in is not. This means that even within a single emotion experience there can be multiple sources and experiences of hedonicity that range from the appraisal itself, to what is appraised, the result of the appraisal, and the experience of the action tendency associated with that particular emotion state (p. 245).

ATTENTION IN EMOTION EXPERIENCE

So, according to Lambie and Marcel (2002), different hedonic tones can be experienced at a given time; attention determines (1) which one enters awareness, (2) the degree of awareness, and (3) how pleasant or unpleasant it is. The key to all this is the relationship between hedonicity and attention. Hedonicity is determined by mode of attention (p. 243). Focal attention also plays an important role in the generation of hedonicity by selectively focusing consciousness on a particular hedonic tone and making it available for awareness. This formulation sounds very much as if hedonicity were entirely a psychological construction effected by attention. Yet Lambie and Marcel also say that hedonicity is intrinsic: "Hedonicity both is intrinsic to bodily states, movements, and rhythms and depends on the interpretation placed on them" (p. 244). But what really does this statement mean? Is hedonicity somehow there, determinate and fixed, temporally and logically prior to its revelation in awareness through attention? And, if so, what is the nature of the theoretical vocabulary used to capture it scientifically?

One way to understand what Lambie and Marcel (2002) mean by the claim that hedonicity is intrinsic is to suppose that the set of hedonic tones one experiences at a given moment is determinate in the sense of being fixed and constrained by the specific nature of the particular emotional episode in question and its attendant circumstances. What varies is the particular hedonic tone that enters awareness and the degree to which the person becomes aware of it (determined by attention). Thus even though there may be variation and fluctuation in awareness of hedonic tone, there is still
something fixed and determinate underneath it all: namely, the first-order experience in which multiple hedonic tones are normally present. Yet there are problems making sense of the claim that hedonicity might be intrinsic in this way.

Recall that in Lambie and Marcel’s (2002) view, attention affects the hedonic tone of which one is aware. For example, a detached stance can make hedonicity virtually disappear, whereas an immersed stance can allow it to dominate one’s being. Attending to the self or to the world brings different features of each into focus while others disappear. And, of course, this happens not only with different emotion experiences; it can also happen within a single ongoing emotion experience. A good example is pain. Lambie and Marcel note that “the more analytically that one attends to a painful sensation, the less its painfulness: The more that one attends to the sensations themselves and the less one’s attention encompasses [their] signification, the less is [their] hedonicity” (p. 235). They even go so far as to say that “if one attends to one’s bodily sensations in a sufficiently analytic and detached manner, hedonic tone may be distanced, diminished, and disappear” (p. 243). In this way, “the painfulness of the pain is often reduced and sometimes vanishes” (p. 243).

The same mechanisms of attention govern the hedonic character of pleasure, and secondary appraisal can also influence hedonicity. Thus “judging that one can change the situation or that nothing can be done has a large effect” (p. 244). Here Lambie and Marcel (2002) cite the fact that “the pain of torture is increased by knowledge of helplessness” (p. 243). Note that although variations in attention and appraisal may alter the character of hedonicity in second-order emotion experience, they do not create the underlying phenomenology of first-order experience. Nevertheless, as Lambie and Marcel clearly state, the precise nature of first-order experience normally eludes us until it is shaped and revealed in attention (p. 228); this is a crucial point. We are now ready to consider the indeterminacy thesis for affect valence.

INDETERMINACY OF AFFECT VALENCE

Lambie and Marcel (2002) tell us that there is something “it is like” to be in a first-order phenomenological emotion state prior to attention. The character of that particular experience may be expressible but it is not reportable apart from second-order awareness and its mechanisms and processes (p. 229). It is a sort of experience-in-itself that cannot normally be captured except through awareness, which forms and shapes it and therefore changes it. In general, “one’s experience is not independent of how one
attends to it” (p. 226). Different forms of attention therefore translate into different forms of emotion experience. The “what-it’s-like” underneath it all is there but cannot be captured verbally. The problem is that whenever we try to capture, in words, the hedonicity of an emotion state—its hedonic valence—we also change the nature of what is being experienced. The key here is the special subjective evaluative character of the awareness of hedonic valence. Although it may true that the mechanisms underlying first-order emotion experience can be explained scientifically, the first-order subjective evaluative character of that experience—its emotional meaning—cannot. To try and capture the subjective character scientifically is simultaneously to change and transform the nature of what is supposed to be explained. This is the principal reason behind the indeterminacy thesis for affect valence.

The indeterminacy of hedonic valence follows from the fact that valence is semantically and evaluatively permeable to attention. The same is true of affect valence, more generally. Valence cannot be intrinsic to first-order phenomenal emotion experience in the manner Lambie and Marcel (2002) appear to suggest. Neither is it externally created by attention ex nihilo outside first-order phenomenal experience. Rather, it is a dynamic relational evaluative phenomenon that emerges out of the interaction of attention with first-order phenomenology. In other words, affect valence is neither purely intrinsic and “found,” nor purely extrinsic and “constructed.” It is enacted (Varela, 1989). A consequence of this ambiguous ontological status is that to attend to the valence of an affective state is to disrupt and change it. Every act of attention is like a new evaluative baptism. In a nutshell: Affect valence is indeterminate until it is fixed by attention.

The perplexing ontological status and indeterminacies of affect valence are reminiscent of early interpretations of quantum mechanics, especially Heinsenberg’s uncertainty principle (Heisenberg, 1958). The analogy lies in the fact that to attend to or “measure” affect valence is to disrupt and change the very phenomenon one is attempting to capture. Until hedonic valence is “measured” and becomes fixed and determined through attention, its precise character must therefore remain uncertain and indeterminate. In slogan form, there is no fact about the exact valence of an affective state apart from the act of attention that fixes and determines it. But note again that the act of attention does not create the underlying phenomenology of emotion experience. What attention does is create the form in which the emotion experience reveals itself in awareness; its particular subjective and evaluative meaning—its emotional meaning—for that person.

This leaves the suggestion that hedonicity might be intrinsic in serious trouble. Because hedonicity is typically the main or sole component of
affect valence, the same conclusion applies to affect valence more generally. The indeterminacy thesis shows valence is not a subjective evaluative phenomenon with emotional meaning until it is created and revealed by attention. For this reason, felt body temperature may not be a good analogy for explicating the nature of “core affect” and affect valence (Russell, 2003), because felt body temperature is subject to the mechanisms of attention just described. “Temperature” in this felt sense falls in the domain of the subjective and evaluative and often has emotional meaning. However, the objective physical temperature recorded by a thermometer is an entirely different matter. Its ontological status is very different: It is not relational in the same way, and it has no subjective meaning. The indeterminacy thesis implies that there is no fact about the valence of felt bodily temperature until that valence is shaped and revealed by attention. To say or assume that the objective temperature recorded by a thermometer is somehow the intrinsic material out of which felt bodily temperature is created therefore seems incorrect. It appears to involve a fallacy of equivocation, because temperature means two entirely separate things in both cases. Similar problems with equivocation are likely to arise in attempts to capture first-order phenomenal emotion experience indirectly (Lambie & Marcel, 2002, 237–238).

The above considerations strongly suggest that there is no scientifically defensible sense in which valence can be intrinsic in first-order emotional phenomenal experience. Affect valence is a dynamic enacted, phenomenon that emerges out of the interaction between attention, second-order awareness, and first-order emotion experience. The indeterminacy thesis also shows that there is no scientific fact about the valence of a particular state until that valence is formed and fixed by attention in second-order awareness. Valence, then, is multiple and multidimensional, as Lambie and Marcel (2002) argue. But it apparently cannot be intrinsic in the manner they seem to suggest, and it is subject to a radical indeterminacy they do not anticipate or countenance. In a sense, valence in emotion theory is much like gravity in Newton’s *Principia*. It is a “force” we can witness and scientifically describe, up to a certain point; but beyond that point it cannot be scientifically captured and analyzed any further. The fundamental nature of valence must therefore remain a scientific mystery.

**CONCLUSION**

This discussion began with a definition of affect as the conscious felt dimension of emotion. It follows that affect is invariably conscious. However, the distinction between first- and second-order emotion conscious-
ness complicates this picture. Based on that distinction, the argument was made that affect valence, as such, is solely and entirely a property of second-order emotion experience, because affect valence is created and sustained by second-order awareness, which selects and shapes it through attention. It follows that, strictly speaking, there is no such thing as unconscious or nonconscious affect valence. There is no scientific sense in which valence can be said to reside intrinsically in mental or physical states that fall outside of the active range of attention. Hence, to speak of first-order phenomenology or stimuli as valenced makes the character of first-order emotion experience even more problematic than it already is. Lambie and Marcel (2002) are certainly right that it is a crucial aspect of emotion experience. They may, however, have overestimated what can be known about it scientifically.

The indeterminacy thesis also contends that the nature of affect valence within second-order experience is problematic. The ontological and semantic vagaries of indeterminacy seriously undermine attempts to generalize about valence as a uniform scientific phenomenon. In particular, indeterminacy makes the concept of core affect particularly problematic and the status of experimental studies that employ it precarious (Barrett, Chapter 11; Russell, 2003). The reason is that there is no verifiable fact underneath it all, nor can there be, because once one tries objectively to isolate and identify a subjectively valenced conscious state, one has simultaneously changed it.

Admittedly, the indeterminacy thesis is hard to reconcile with the fact that there appear to be fixed and determinate unconscious affective processes in emotion experience (Winkielman, Berridge, & Wilbarger, Chapter 14; Clore, Storbeck, Robinson, & Centerbar, Chapter 16). These processes are perhaps best conceptualized as a sort of proto-valence but not valence itself. There is also the problem of modularity. The indeterminacy thesis explains the plasticity of affective experience, which would appear to be important for evolutionary success. Yet there is also convincing evidence that fixed modular affective processes exist and are equally important for evolutionary success. So perhaps not all aspects of affect valence are equally permeable to attention; some may be relatively fixed and modular (Charland, 1995; Zajonc, 1980). Finally, there is the question of animal affect. Homology in underlying neurobiological mechanisms suggests that, like humans, many animals probably have some experience of subjective valence and affect (Panksepp, 1998). But just what that experience consists of may be scientifically impossible to identify. Recall Wittgenstein’s dictum that even if a lion could talk, we would not understand it. All of these facts and findings do seem hard to square with the indeterminacy thesis. But it is also hard to see how they could constitute a total refutation of that thesis,
which has strong independent supporting reasons of its own. This is probably a good place for philosophy to step aside and invite the relevant sciences to the challenge.

PHILOSOPHICAL POSTSCRIPT

It might be thought that the perplexities of affect valence outlined here are of the same kind as those associated with the qualia problem discussed by contemporary philosophers (Chalmers, 1996; McGinn, 1999). That would be an error. The qualia problem, at least as it is typically discussed by philosophers, has more to do with the descriptive nature of the felt conscious quality of experience. Touch and vision are the paradigmatic sensory modalities discussed, although pain is also often mentioned. But, in fact, pain is a very different kind of phenomenon that has more to do with emotional meaning and valence, which is an evaluative and normative matter. The difference is crucial.

Standard philosophical qualia are typically considered to be descriptive phenomena that inform us about the state of the world and the body. Not surprisingly, these are the paradigmatically favored qualia of “cognitive” science. However, the valenced qualia in emotion are vastly different: They are evaluative and normative phenomena that address the way the world or the body should be. Their primary function is to orient and move us. These are the paradigmatically favored qualia of “affective” science.

So there appear to be two quite different kinds of qualia in our “phenomenological garden” (Dennett, 1991, pp. 43–65). There are qualia that inform us and qualia that move us. The valenced qualia in emotion pull and push us in a way that standard sensory qualia do not. Those valenced qualia involve concern, orientation, and personal meaning of a sort that is very different, and is usually absent, from standard sensory qualia. Valence is what makes the difference. There may also be mixed qualia that somehow combine informative and motivational functions (Millikan, 1996). But the possibility of mixed qualia does not annul the fact that, in mammals at least, cognitive and affective qualia are distinguishable. Indeed, they appear to be under the control of relatively distinct neurobiological systems (Panksepp, 2003; see also Panksepp, 1998, p. 62). This neurobiological distinction constitutes an important strand for the hypothesis that emotion is a special normative natural kind of its own, distinct from cognition (Charland, 1997, 2002; Griffiths, 2003).

To sum up the importance of this philosophical postscript: The significance of the distinction between the cognitive qualia that inform us and the emotional qualia that move us may be reflected in what can be scientifically
known about them. Even if we could solve the famous “hard problem” for standard cognitive qualia, we would not have explained the mysteries and perplexities of affect valence. The difficulties posed by the scientific explanation of affect valence appear to be of a different order. This is not simply a hard problem for the science of mind. It may constitute a genuine inexpli-cable mystery.

ACKNOWLEDGMENTS

Thanks to Aaron Ben-Ze’ev, Sylvia Berryman, John Lambie, Anthony Marcel, Harold Merskey, Jim Russell, Robert Solomon, and Evan Thompson for helpful comments on earlier drafts of this chapter.

NOTES

1. See Buck (1999, p. 304) for an interesting but different variant of this distinction, which he traces to Bertrand Russell’s famous discussion of “knowledge-by-acquaintance” and “knowledge-by-description” (Russell, 1912).

2. Different aspects of valence can be stressed in different contexts. For example, Fossum and Barrett (2000) allude to emotion valence when they state that “the valence of an emotion term refers to both its hedonic tone and evaluative connotation” (p. 670; emphasis added). However, in another context, Barrett alludes to affect valence when she states that “the valence dimension of the circumplex refers to the hedonic tone of the mood” (Barrett, 1996, p. 49; emphasis added). One can also treat affect as the “conscious subjective aspect of an emotion” (Cacioppo & Berntson, 1999, p. 134; emphasis added). The circumplex model can sometimes be interpreted this way (e.g., Barrett, 1998; Russell, 2003).

3. Note that the valence of an affective state in this sense is quite different from its desirability (Barrett, 1996). The “positively” valenced affect allegedly referred to by the statement “I feel good” is different from the “positively” evaluated affect reported by the statement “This is a good feeling to have” (p. 49). However, this does not imply that the valence dimension of affective states is not inherently evaluative. This is precisely what makes valence so special and important.

4. I leave open the question of whether affect valence is so permeable and mutable that a painful affect can be completely transformed into a pleasurable one that is in no way unpleasant. In a fascinating discussion of masochism, psychiatrist Harold Merskey considers the question whether “pain’ is ever solely pleasant” (Merskey & Spear, 1967, p. 122). He states that “it is possible, although it is disputed, that in some cases ‘pain’ is pleasant and in no way unpleasant” (p. 121). Noting that the issues may be semantic as well as clinical, he concludes that the question “must remain open to investigation” (p. 122). I agree. The issue is important, because it bears directly on the validity of the
definition of pain. According to the International Association for the Study of Pain, pain is defined as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in such terms” (Merskey & Bodguk, 1994, p. 210). In this definition “pain is always subjective” (p. 210). The paradoxical possibility of pains that are not subjectively experienced as unpleasant is therefore extremely theoretically significant. As Merskey notes, “if it should prove to be the case that something called ‘pain’ by masochists is experienced without any quality of unpleasantness the definition [of pain] would need revision” (p. 122).

5. The indeterminacy thesis for affect valence is partly inspired by Quine’s (1960) argument for the indeterminacy of translation. Another inspiration is Amelie Rorty’s (1986) argument that emotional states are dynamic and permeable. Finally, a third inspiration is the problem of indeterminacy in quantum mechanics. William Reddy (2001) appears to defend a related thesis. According to him, emotions are a kind of performative utterance, since they “do something to the world” (Reddy, 2001, p. 111). But they are different from performatives, because of the special way in which “they are both self explorative and self-altering” (Reddy, 2001, p. 122; see also pp. 104–111). Reddy makes use of Quine’s principle of the indeterminacy of translation to argue that there is an unavoidable indeterminacy to emotional experience (pp. 78–96, 320, 332).

REFERENCES


