The Psychology of Emotion

Chapter · January 2003

CITATIONS
16

READS
3,095

1 author:

George Marcus
Williams College
78 PUBLICATIONS **3,189** CITATIONS

SEE PROFILE

Oxford Handbook of Political Psychology

EDITED BY

David O. Sears

Leonie Huddy

Robert Jervis

OXFORD
UNIVERSITY PRESS

2003

6 The Psychology of Emotion and Politics

George E. Marcus

Understanding emotion has for a very long time been central to the ongoing attempt to understand human nature. And this understanding has also been central in the debate about the proper political regime that human nature can sustain. Indeed some have argued that it was concern about the noxious impact of emotion that gave rise to philosophy in ancient Greece (Nussbaum, 1994). Most share with many ancient Greek philosophers the presumption that emotions are a problem, indeed *the* problem that hinders our ability to sustain individual and collective just rule. Consider the following quote from John Locke's Second Treatise (1993): "The freedom then of man and liberty of acting according to his own will, is grounded on his having reason, which is able to instruct him in that law he is to govern himself by, and make him to know how far he is left to the freedom of his own will" (p. 45). That view is representative of dominant tradition: rationality is the mental faculty that makes us free and that gives us the capacity to establish political regimes that are democratic and just. With this claim comes the companion view that emotion, a powerful enigmatic force, too often intrudes and undermines our capacity to reason. The tradition has it that if reason cannot be autonomous we must abandon not only this ennobling ideal but also the political programs of democracy and justice that rest on reason's foundation.[1]

But perhaps there are other possibilities; perhaps emotion is not as we have long imagined it, mysterious and detrimental.[2] Perhaps a reexamination of emotion will offer an escape from the following conundrum: if people are emotional creatures, they cannot thereby also be rational creatures—leaving us with little prospect for achieving democratic rule and justice. We have placed collective rule founded on reason's sovereign nobility beyond the reach of humans. Whether emotion is a help, or hindrance, in achieving democratic and just regimes is perhaps the highest-stakes issue current in political psychology.

I have three goals for this chapter. First, I illuminate the normative presumptions that have shaped the study of emotions and politics. Second, I review how the predominant approaches in political psychology attempt to deal with the scientific study of emotions and politics, with special attention to each of their strengths and weaknesses. I argue for neuroscience as the preferred scientific literature to derive insights as to how emotions impact on politics. Finally, further progress requires resolving an ongoing dispute over the structure of emotion. I offer some suggestions as to the

research necessary to resolve the dispute. Notably absent in this list is a comprehensive discussion of the research literature. I have recently published such a review (Marcus, 2000). Other recent reviews on emotion in the psychology literature are also readily available (Bradley, 2000; Cacioppo & Gardner, 1999; Zajonc, 1998). Also available is an excellent history of the treatment of emotions in psychology from William James onward (Cornelius, 1996). What is most needed at this juncture is theoretical clarity to direct the future course of research on emotions, thinking, and their various roles in politics.

Foundations for Inquiry

Perhaps the oldest presumption regarding the psychology of emotion is the separation of emotion from the mind. We are familiar with common metaphors to depict this formulation; among the most widely used is that emotion and cognition reside in separate locations; passions arise from the "heart" and reason from the "mind." Emotion is one kind of force, reason another. Moreover, it is perhaps most common to view reason as existing within a container (the "mind") and emotion existing "outside" but forcefully attempting to intrude. Since Epicurus it has often been thought that emotions are "deep" and "hidden."[3] Again, emotion exists outside the mind, the seat of reason, buried deeply "beneath." This familiar conception lives in current psychological conceptions, with "cognition" being a surface phenomenon of the neocortex and "affect" being located deep within in the "older" regions of the brain (MacLean, 1990).[4]

This view is reflected in the presumption that emotions *undermine* the capacity to reason, a view shared with Plato, especially in the simile of the Cave (Plato, 1974) where he places human beings deep within the bowels of the earth, entrapped by their desires, self-indulgently preventing themselves from moving up and out into the light of reason. This view is today well represented in contemporary political psychology by the program of research of David Sears (Sears, 1993, 2000; Sears, Hensler, & Speer, 1979; Sears, Lau, Tyler, & Allen, 1980). As in Plato's cave, emotion in the symbolic politics view ties people to their ancient desires and blinds them so that they do not engage in accurate and rational assessment of their condition. As I will show, this is not the only instance wherein contemporary research programs on emotion are congruent with ancient conceptions.

The qualities assigned to reason and emotion have a long-established genealogy. Before I move to these familiar qualities, I note the equally familiar normative imperatives that loom over the tradition of exploring the emotions. The primary reason we, and the ancients, have given so much attention to the emotions is that it is believed that they have the capacity to undermine the sovereign dignity of reason. Emotion has been and remains largely understood as a force that invades and cripples reason's oth-

erwise autonomous capacity to rule and do so publicly, justly, and wisely. Hence emotion continues to be thought of as a detrimental force that must be controlled, if not extirpated. These conceptions not only were largely at play throughout the classic Greek period (with variations to be discussed later) but remain influential in modern psychology. Thus, as Martha Nussbaum (1994) has argued, the passions were significant because they played such a detrimental role in "undermining" reason.

Emotion has been conceived as separate from reason and forceful not only with respect to the misuse of reason but also because it is able to wrest control of behavior away from reason. Hence the presumptive claim that we can too often act out of "blind" passion. We are thus "blinded" by passion because only reason properly grasps the world as it is and guides our behavior in a rational fashion. Implicit is the presumption that only the conscious mind has provides a veridical portrait of the world given by the senses and displayed solely within conscious awareness. Reason can be autonomous if and only if it is a faculty of the mind that requires nothing other than the mind for its realization. And if this presumption is accurate, then of course it follows that emotion located elsewhere can have at best a neutral and more likely a negative relationship to reason. This pivotal presumption remains potent today in much of the traditional literature on decision-making (Irving L. Janis & Mann, 1977) as well as political philosophy (Steinberger, 1993). This has led, of course, to considerable interest in how emotions intrude and impact decision-making (Abele & Petzold, 1994; Baron, 1994; Bodenhausen, Sheppard, & Kramer, 1994; Forgas, 1994, 1995; Isen, 1993; Johnson & Tversky, 1983; Loewenstein, Weber, Hsee, & Welch, 2001; Mayer, Gaschke, Braverman, & Evans, 1992; Ottati, 1988; Ottati & Isbell, 1996; Ottati & Wyer, 1993; Petty, Gleicher, & Baker, 1991; Schwarz & Bless, 1991; Schwarz & Clore, 1983, 1996). Much of the relevant work holds that people can either rely on heuristics, of which feeling states are held to be an example, or they can engage in explicit deliberation.[5] In the modern era the thinking is much the same as in ancient times: feeling and thought are alternative and often antagonistic foundations for decision-making.

We can organize our understanding of the resulting possibilities by setting them in a simple taxonomy based on these two questions: First, can reason be shielded from the influence of emotion? and second, Should reason rule by itself or only in conjunction with emotion?

The first and most stringent normative perspective is that offered by Plato and developed by the Stoic school of philosophy. Because it was held that passion is so detrimental to rationality and clarity of vision and judgment, it followed that people must learn sole reliance on reason and exclude emotion from any part of their lives. Plato drew the conclusion that the necessary discipline to realize this radical eschewing of passion would be plausible only for the specially trained philosopher-kings; only they would be able to rule wisely and justly.

Epicurus and the Stoic school developed and taught a discipline, for this was a therapeutic application of philosophy, that could be more widely applied. Thus this normative view of emotion is not necessarily aristocratic in its relationship to politics. But the presumption that feeling must be removed from political judgment as a precondition to just political rule is one that continues through Descartes and Kant.[6] And, as noted earlier, studies of decision-making retained this presumption as it was applied to rationality, that is, efficient and prudent linkage of means to ends (Janis, 1982; Janis & Mann, 1977). But problems began to arise. The influential work of Daniel Kahneman, Richard Nisbett, and so many others, which demonstrated how substantially humans depart from the rational decision-making judgments, has serious and far-reaching consequences, inasmuch as it confirmed these ancient presumptions about the limitations of human nature (Kahneman, Slovic, & Tversky, 1982; Nisbett & Ross, 1982). Humans do not normally weigh the evidence fairly and accurately, consider all points of view, or accurately evaluate the outcomes under consideration. This conclusion has troubling implications, as it is widely believed that only reason can validate public judgment in matters political. Hence evidence that people will not, or cannot, reason has had grave consequences for the normative status of popular rule (Kornhauser, 1959; Sartori, 1987).

The second formulation is no less stringent in its normative attitude to emotion. But holding that emotion cannot be extirpated from human psychology means that an accommodation must be established to control and limit the impact of emotion. Perhaps the most widely known and honored of the accounts of how and why this can and should be achieved is that offered in the *Federalist* papers (Madison, Hamilton, & Jay, 1961). While emotion's impact is serious and largely detrimental, a wisely drawn constitution can mitigate the most severe impacts of passion and make positive use of the energizing force of emotion to drive politics through the refining institutions that will yield justice and the public good (Marcus, 2002; Scanlan, 1959; White, 1987). Thus, according to this formulation, emotion need not and cannot be removed, but reason can remain sovereign and in control.

The most influential modern formulation of this view, offered by Freud (1961, 1962), holds that civilization cannot aspire to replace the passions with reason. But in Freud's view, at least for properly socialized individuals, reason can be generally, if not exclusively, in executive control. Thus an accommodation can be found: emotions drive us to action, but reason retains its status as sovereign master. Emotions do not disappear, and not just because that would be impossible, given human nature. A wise regime can make use of emotion in engendering action while at the same time ameliorating emotion's detrimental impacts by shielding passion from civic decisions. Civilization is precisely the achievement that results when humans find the institutional means of removing the passions and their power. This is so even if, as Hobbes so famously proposed, the most potent of emotions,

fear of death, is used to achieve that end (Hobbes, 1968). For in Hobbes, fear leads us to seek and accept a sovereign who will ensure public peace and mutual compliance with freely made agreements and their resulting obligations.

The third formulation also accepts the fundamental distinction between reason and emotion but understands their relationship to be harmonious and productive for the most part rather than antagonistic and destructive. Only erroneous beliefs are likely to generate problematic passions. Accurate beliefs and just beliefs can be bolstered by appropriate emotions, yielding a productive alliance between thought and feeling. So care must be given to avoid the destructive consequences of passion: we must undertake a critical consideration of the merit of our beliefs. Furthermore, if we take appropriate care to match valid belief with suitable feeling, both emotion and reason are fortified in the bargain. This perspective is generally associated with Aristotle and has its contemporary expression in political philosophers who, as did Aristotle, see a constructive integrity between emotion as a motivational force and as a cognitively rich tool for evaluation and communication. In this view, emotion offers a unified group of faculties necessary to individual and collective action (Aristotle, 1954; Bickford, 2000; Koziak, 2000; Leighton, 1996; Nussbaum, 1996; Rorty, 1996; Stiker, 1996). The integration of belief, context, and feeling generates a beneficial capacity for appropriate action and response to the fluid experience of civic life (Ben-Ze'ev, 2000; Nussbaum, 2001).

The fourth formulation reaches its fullest expression in the Scotch enlightenment (Hume, 1975, 1984; Smith, 1959, 1986). Unlike the British and French versions of the Enlightenment, the major figures of the Scotch enlightenment saw that reason could not be sundered from its emotional roots. The privileged position of reason as the sovereign judge is turned topsy-turvy. Reason becomes a faculty of the mind that is called into service by emotion, which now holds the commanding role. Rather than accepting the elevation and normative superiority of reason, emotion is now understood to be the foundation of human action, with reason placed in a subordinate role as useful for critical calculation and public deliberation.

This formulation holds that reason is given its force and vitality from its dependence on emotion and has been well supported by recent work in philosophy and neuroscience. The philosopher Bernard Williams (1983) noted that Kant's categorical imperative had no motivational engine to drive people to implement its conclusions, an insight also corroborated by experiments on how people respond when they have no emotional cues (Bechara, Damasio, Tranel, & Damasio, 1997). Reason yields analysis, but absent some motivation, reason cannot itself impel us to act. As we gain greater insight into how the brain is organized, we may well learn more about how humans function as social and reasoning creatures (Damasio, 1994; Goleman, 1995). Even in the task of moral judgment, recent research

in neuroscience establishes the central role of emotions in the resolution of moral dilemmas (Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). Taken as a whole, this and other work simplifies the schema of possibilities. We can discard the normative and empirical combinations that seek to preclude emotion from human experience, for humans cannot function without their emotional capacities.

Before I turn to a more careful consideration of how these formulations are displayed in contemporary political psychology, I should consider the first issue of any science: conceptual clarity. Implicit in the foregoing discussion is that categories of emotion and reason are clear and agreed on, yet careful examination of emotion finds it to be a category in which many perhaps different qualities are often included (Rorty, 1985). Are appetites and drives forms of emotion? Are motives? What about feelings, passions, and moods? Are they all fully within the domain of emotion? Resolving these definitional and taxonomic questions is perhaps the most immediate barrier to progress in the scientific study of emotion. I shall devote the principal section of this chapter to describe the current state of affairs, as well as to suggest where research is most required to address current shortcomings.

Defining emotions: The difficulty of clearly categorizing emotion is not a new problem. For example, in the seventeenth and eighteenth centuries a major rethinking led to new formulations, giving rise to new taxonomic categories. "Interests" and "sentiments" emerged as a new category of emotion, a calculating version of emotion. This formulation was useful to explain the newly emergent forms of economic activity then taking place (Hirschman, 1977; Rorty, 1982, 1993; Rothschild, 2001). These new taxonomic creations—the interests and sentiments—were initially created as variants of emotion. Over time, interest and sentiments increasingly become thought of as independent categories of psychological activity. Thus the original clarity of two distinct psychological categories—reason (thinking or cognizing) on one hand, and feeling (emotions and passion) on the other—becomes a triumvirate, with "interests" and "sentiments" not just a compound of thinking and feeling but independent constructs in their own right. These new constructs are neither fully rational nor fully emotion, having some of the qualities of each, adapted to explain human actions political, economic, and civic (Burke, 1973; Madison et al., 1961).[7] Since it is common now to treat interest as an entity distinct and separate from emotion, emotion then becomes, in the modern period, a narrower category more closely associated with the passions and zeal—the dangerous variants of emotion.

But even with this complication, the terms "emotion" and "reason" remain notoriously confused, even in contemporary psychology, notwithstanding the application of "scientific" terms to replace lay terminology. The terms "cognition" and "affect" are no more clearly defined even in formal texts than are the ancient antecedents "reason" and "emotion." Perhaps the

most serious taxonomic issue is the treatment of emotion as distinct from reason. The treatment of emotion as a distinct property results in the casual presumption that being "emotional" has uniform results, principally those already mentioned. The more emotional a person, the greater the likelihood that obsession, delusion, and demagoguery will hold sway (Hatfield, Cacioppo, & Rapson, 1994). And the more intense the emotion, the less the mind is in command. Nor is this conclusion restricted to some emotions, such as anger or rage; it is equally applicable to the "positive" emotions such as love. The problems of obsession, delusion, and demagoguery are no less problematic when experiencing "positive" emotions, for love or desire can cause one to "lose one's mind" no less so than anger or rage.

Central to the long tradition of the opposition between emotion and reason is the too often unexamined presumption that emotion is a singular and homogenous state. If emotion is not a coherent phenomenon but rather a class of disparate elements, it naturally follows that the presumption of its unity is deeply flawed (Ben-Ze'ev, 2000). Similarly, the conscious mind is taken to be the autonomous seat of reason. Thus it is not surprising that emotion and reason have been seen as two autonomous agents wresting for sovereign control. And given the lauded position of reason, political psychologists are often led to approach "affect," the "scientific" term for emotion, with the presumption that affect is not only unnecessary but also detrimental to "cognition," the "scientific" term for reasoning. A representative example of this view in political psychology is that constructed by Jim Kuklinski and his colleagues (Kuklinski, Riggle, Ottati, Schwarz, & Wyer, 1991): "In a democratic society, reasonable decisions are preferable to unreasoned ones: considered thought leads to the former, emotions to the latter; therefore deliberation is preferable to visceral reaction as a basis for democratic decision making" (p. 1) Here we see the presumption of autonomous reason fully at play. It is not only possible to be reasonable and thoughtful without being emotional, it is necessary that emotion be excluded from judgment.

The newly emergent findings derived from neuroscience challenge much we had thought we knew about emotion and reason. And neuroscience challenges not only these traditional understandings but also the established approaches to emotion in political psychology. In the section that follows I explore what the established approaches hold with respect to emotion and how research in neuroscience modifies these understandings. I will now turn to each of the major approaches to emotion in political psychology, beginning first with the psychoanalytic perspective.

The Psychoanalytic Perspective on Emotion

While Freud introduces a rich set of metaphoric understandings, at heart his approach is a hydraulic model that shares many features with Galen's

theory of the humors. But instead of four factors (one for each of the humors), each driving a temperamental quality, Freud envisioned a simpler system in which there are only two dynamic forces at play. On the one hand, the pleasure principle, libidinal energy, strives for immediate gratification, a process in which an eroticized conception of passion is fully displayed. On the other hand, the reality principle is articulated in the dispassionate mind attempting to resist, control, and manage the subterranean pressures applied by the passions arising from the "unconscious," the site of eros (the *id*). The war between emotion and reason is central to the Freudian conception, and in this respect it is largely in accord with the Hellenistic schools of ancient Greece in its empirical and normative presumptions.

I will not discuss the principal feature of psychoanalytic orientation to personality and temperament. There is a considerable literature on this application (George & George, 1998; Post, 1993; Renshon, 1998; Rogow, 1963; Volkan & Itkowitz, 1984; Volkan, Itkowitz, & Dod, 1997). Suffice it to say that there is considerable agreement with the Stoic and Skeptical schools of philosophy that passions are often early formed in life, deeply buried, and, unless set aside by heroic action, have enduring effects throughout the life of a person.

Emotion is attached to the salient features of experience (*cathexis*), and emotions, once formed, control our reactions, orientations, dispositions, and behavior toward these objects—to persons, events, and circumstances—whether favorably or unfavorably. The emotional bond, once formed, fixes these objects in memory, where they remain unless through strenuous and sustained effort this connection is broken (*decathexis*). The conscious ego, through introspection, can descend into the unconscious by its own autonomous efforts to reconstruct this subterranean territory. This feat is often supported by a trained therapeutic guide. Emotion is understood as a unified if inchoate force existing outside the realm of reason but intruding when and where it can.

But apart from this general conception, the psychoanalytic has no specific theory of emotion, (Davies, 1980) apart from its claim that emotion is the force by which the id overwhelms the ego (hence the presence of "defense mechanisms," which operate both internally, in that war between the two antagonistic principles, each with its separate domain, and externally, against the assaults of reality, which can frustrate, or reward, both principles). And while emotion is taken as unitary in its opposition to reason, the *expression* of emotion takes on a multifaceted quality. Each of the passions—understood by Freud as discrete entities: the "basic" emotions, emotion now becoming plural—are articulated in different ways in different circumstances. The structure of the passions is held to be discrete—each "basic" emotion supposedly results from the intersection of one of the two principles and fundamental beliefs. Thus when the pleasure principle is at play and some desired object is secured, we experience plea-

sure. When the object is lost, we experience sorrow; when it is taken by someone else, anger; when its acquisition is blocked, frustration, and so on. However, among psychoanalytic theorists, there is no agreement as to what these "basic" emotions are, each nominates a different set in number and content (Marcus, 1991), and there is no biological account to provide a neurological foundation for these "basic" emotions.

Discrete theories of the structure of emotion were formulated by the Greeks, principal among them Aristotle, Galen, and others in the Hellene schools of philosophy (Nussbaum, 1994; Plutchik, 1980a). In discrete theories of emotion, belief is the organizing imperative by which an otherwise inchoate generalized emotion is made definite. Something bad happens to generate a "negative" or "bad" emotion, but which emotion is generated depends on the associated belief. If I perceive that I am the cause, then "blame" or "guilt" might be the experience (or "shame" if the action is public or widely known). On the other hand, if I am not the cause but perceive others to be the cause of my loss, then "annoyance," "resentment," "anger," or "rage" might be the designation of the consequential emotional experience. The number of discrete emotions thus derives from the variety of beliefs thought to be salient to the construction of emotion (hence the method by which cultural factors are thought to become significant (Lutz, 1988)). But psychoanalytic accounts are not alone in accepting some variant of discrete formulations. Social psychologists have also subscribed to the discrete theory of emotion (Frijda, Kuipers, & Schure, 1989; Kinder, 1994; Parkinson, 1997, Roseman, 1979, 1984, 1991; Roseman, Antoniou, & Jose, 1996; Smith, 1989). Rather than review these in any detail, I shall instead consider the principal structural alternative, dimensional theories of emotion, in the next section.

Social Psychological Perspectives on Emotion

As I have elsewhere provided a useful history of the treatment of emotion in political psychology (Marcus, 2000; Marcus, Neuman, & MacKuen, 2000, app. A and B), and an excellent history of the research on emotion in academic psychology is also readily available (Cornelius, 1996), I will here review in an abbreviated fashion the three primary structural approaches to emotion: the valence, discrete, and dimensional theories of emotion.[8] The problem begins, as does all science, with description. The lexicon of emotion is rich in providing different nominal categories; by one estimate over seven hundred different terms exist (Storm & Storm, 1987). But are these each distinct or are some equivalent (i.e., synonymous)? Does this richness of emotion language clarify or confuse us with what are nothing more than an abundance of synonymous terms?

For poets, from Homer onward and for sculptors, painters, and other artists—the task is how to depict both the particular and the general. This

person (specific) is angry (universal). How emotion can be depicted has long intrigued artists and philosophers. What general rules apply so that we can recognize the particular emotion? The face as the palette on which humans, and other creatures, display emotion has been a particular subject of inquiry. In the seventeenth century Charles Le Brun, a French academician, developed and presented a lecture on the emotions and their representation that proved to be very popular and influential (Montagu, 1994). His work derived from Descartes's work on the psychology of emotion (Descartes, 1989). Charles Darwin (1998) and, more recently, Paul Ekman (1982, 1984, 1992; Ekman & Davidson, 1994; Ekman & Friesen, 1982; Ekman & Oster 1979; Ekman & Rosenberg, 1997), have continued the project to discover the rules and display characteristics that differentiate one facial display of emotion from another.

The effort to find "pure" or "basic" emotions seems analogous to the task of discerning the structure of colors. Mixing different proportions of basic colors can create millions of different colors. Different emotions might similarly arise from some smaller set of emotions. Alternatively, differently named emotions may really be equivalent, reflecting synonymous experiences. When one person says he is happy while another says she is elated, are they in agreement or disagreement? There are many variations in emotional experience; hundreds have been named (Storm & Storm, 1987). In the interest of parsimony we resist the impulse to generate thousands of emotion names to apply to each and every observable and distinguishable variant.

Faced with the task of reducing the many variants of feeling to a much smaller set of categories, social psychologists have advanced three different solutions. The greatest reduction is offered by "valence" theories of emotion. Here the solution is straightforward: emotions are the means by which living creatures solve the problem of "approach" and "avoidance" (Tooby & Cosmides, 1990a, 1990b). Initial investigations suggested that humans apply a single bipolar valence dimension of evaluation to all objects in their ken (Osgood, Suci, & Tannenbaum, 1957). However, while it is certainly the case that we all can readily respond to instructions to classify our perceptions into binary oppositions, such as good or bad, that does not mean that emotional experiences are fully and adequately captured by such a severe reduction in presumptive structure, even though the methodology of binary oppositions, as in semantic differentials and feeling thermometers, is widely practiced.[9]

Discrete theories of emotion reject the valence extreme reduction of all emotional experience to a single liking-disliking dimension. Discrete theories of emotion attribute emotion to the application of multiple concurrent cognitive evaluations. The theory of the psychologist Ira Roseman (1984) is representative. He argues (Roseman, 1984) that *"it is interpretation of events rather than the events per se that determine which emotions will be felt"* (p. 14, italics in the original). This produces a "structural model" that results

from applying a hierarchy of considerations. He begins with whether the events are perceived as positive or negative and then differentiates further according to whether reward is present or punishment absent for positive assessment and reward is absent or punishment present for a negative assessment. Then circumstances are either deserved or undeserved and, within that, certain or uncertain. Finally, the scheme incorporates whether the object of evaluation is the self or someone else. The number of discrete emotions results from the number of applicable considerations and their subcategories within each consideration (normally these are binary oppositions, e.g., rewarding *or* punishing). Different discrete theories reduce the hundreds of discernable emotional states, whether observed in others or felt, to some manageable set of 8, 10, 12 or 16 "basic" emotions. There is a substantial literature of such cognitive accounts of emotion (Ekman, 1992; Ellsworth, 1991; Forgas, 1995; Frijda et al., 1989; Mauro, Sato, & Tucker, 1992; Ortony, Clore, & Collins, 1989; Parkinson & Manstead, 1992; Smith, Haynes, Lazarus, & Pope, 1993). And the body of work demonstrates that people do distinguish one emotion from another by its suitability to the circumstances in which they are placed.

Central to discrete theories is the presumption that these emotional states are by definition discrete, that is, mutually exclusive.[10] Perhaps the most important study in political psychology of that claim is that done by Robert Ableson and his colleagues (Abelson, Kinder, Peters, & Fiske, 1982). Abelson and his colleagues were interested in the emotions citizens experienced when confronted with the major presidential candidates during elections.[11] Using a list of discrete theory–based emotional reactions to presidential candidates, derived from Roseman, they asked, in the American National Elections pilot study of 1979, how people rated the presidential candidates on the discrete terms: hope, pride, sympathy, disgust, anger, fear, and uneasy (Kinder, Abelson, & Fiske, 1979).

The two theoretical structural accounts, valence and discrete, discussed up to this point would predict quite different results. The former would find that these terms are all readily arrayed from most negative, most likely disgust, to the most positive, perhaps pride, with all other terms arrayed intermediately on a single bipolar dimension. The latter would find that each candidate would probably provoke only one discrete emotion, that most aptly resulting from the germane cognitive considerations (hence we would find very low correlations among the various terms that subjects used to evaluate each candidate). Since each of these arises from a distinct set of cognitive considerations, the general expectation was that people who felt fear when thinking of a particular candidate would not also report feeling hope, pride, sympathy, anger, disgust, or unease (and so on).

As is well known, neither theoretical account provided an acceptable description of the empirical results. Instead of either the discrete pattern of mutually exclusive states or one valence dimension, the results required two

orthogonal dimensions. This gives rise to the third alternative, dimensional theories of emotion. Unhappily, as I will show, they chose to name the two dimensions "positive" and "negative," which produced two unfortunate consequences. To anticipate a fuller discussion hereafter, there are two problems with these labels. First, the terms *positive* and *negative* imply a binary opposition (comparable to the semantic differential oppositions, such as good-bad, strong-weak, etc.), when the results showed that people often experience, concurrently, both varieties of emotional reactions. That is, for most people a single candidate elicited both positive and negative feelings. Second, the terms *positive* and *negative* reinforce the premise that approach-avoidance lie at the heart of these emotional evaluations, again suggesting a singular consideration that the data contravene.

By now it has become well established that when a diverse array of stimuli is used—faces, words, objects such as those used in Peter Lang's Universal Affective Picture System (Bradley, Greenwald, Petry, & Lang, 1992; Cuthbert, Bradley, & Lang, 1996; Lang, 1994; Lang, Greenwald, Bradley, & Hamm, 1993)—a two-dimensional array is necessary to account for the emotional responses experienced. That is to say, objects elicit not one emotional response arrayed along a bipolar dimension, from negative (disliked, avoidance) to positive (liked, approach) but two simultaneous dimensions of emotions (Almagor & Ben-Porath, 1989; Clark & Watson, 1988; Feldman, 1995; Kern, 1989; Larsen & Diener, 1992; Mayer & Gaschke, 1988; McCrae & Costa, 1989; Meyer & Shack, 1989; Plutchik, 1980a, 1980b; Plutchik & Kellerman, 1989; Remington, Fabrigrar, & Visser, 2000; Russell, 1980, 1983; Watson, 1988a; Watson & Clark, 1992b; Watson, Clark, & Tellegen, 1984; Watson & Tellegen, 1985).[12] These findings, of which the foregoing citations are only a sample, had consequences for the valence view of emotion (Zajonc, 1998) and also for the other competing account, the aforementioned discrete theory of emotion. More important, these findings fueled interest in dimensional theories of emotion that hold that specific emotion terms are place markers that identify values along underlying continuous dimensions of appraisal.

A representative example is displayed in figure 6.1. This example is drawn from a study in which subjects were asked how often they experienced each of 48 feelings during the course of a day. If the valence model is valid, then the 48 words used to label different emotions would array on a single line going from the most positive (e.g., enthusiastic, delighted, elated, etc.) to the most negative (e.g., sad, unhappy, miserable, etc.). If the discrete model were the valid solution, then feelings would be grouped into 8, 10, or 12 clusters (the number depends on the specific discrete theory and the number of synonymous terms included in any given study). However, neither result obtained (Rusting & Larsen, 1995). Instead, as with other similar studies, whether as in this instance self-report of feeling states or emotional reactions to politicians, or various objects, or faces, a two-

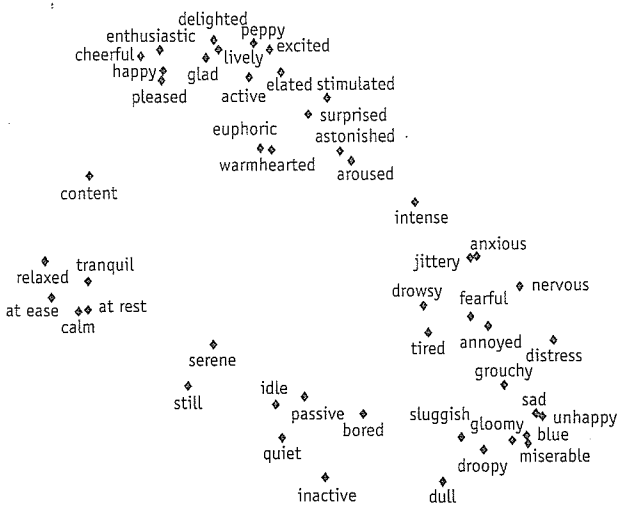

Figure 6.1. Emotions experienced during a day. Adapted from Rusting & Larsen, 1995

dimensional array is generally required to summarize the variance, because the 48 terms neither fit along one dimension nor cluster into synonymous groups. Instead, the 48 terms are distributed in a two-dimensional space.[13]

When even more emotion terms are used, and when other objects are used to generate emotional reactions, as in Peter Lang's work on pictures (Cuthbert et al., 1996; Ito, Cacioppo, & Lang, 1998; Lang et al., 1993), the two-dimensional space becomes even more densely filled. This led psychologists to surmise that the variation from one feeling to another reflected more than one underlying appraisal. Feelings, though many and varied, might then be expressions of some analytic appraisals or evaluations (Scherer, Schorr, & Johnstone, 2001). Appraisals produced by one system would probably yield variations along a single axis. As the space is two-dimensional, psychologists have surmised that two different appraisal systems are continuously active. The resulting variations in feelings, though many and varied, might then reflect just two ongoing assessments, much as variations in just three base colors, red, green, and blue, can generate millions of shades of color. But what underlying appraisals might generate this two-dimensional space?

The "circumplex," as these emotion spaces have been labeled (Almagor & Ben-Porath, 1989; Larsen & Diener, 1992; Plutchik, 1980a; Remington et al., 2000; Russell, 1980; Russell, Lewicka, & Niit, 1989; Watson et al., 1984), suggests that the many different feelings are distributed in a two-dimensional dense space. At about the same time, the psychologist Robert Zajonc published a series of articles that argued that emotions can arise

prior to and independent of explicit conscious awareness, hence independent of cognitive appraisal (Kunst-Wilson & Zajonc, 1980; Moreland & Zajonc, 1979; Zajonc, 1980, 1982). This suggests that preconscious and nonconscious appraisals other than cognition are at play.[14] For if conscious considerations follow rather than precede the expression of feelings, the central premise of discrete or cognitive appraisal theories fails. Zajonc's account suggests that preconscious emotional evaluations arise before as well as outside of consciousness.[15] Hence we may understand our anger and come to know its source, but this understanding derives from reflection on our feelings and is not the basis for the feelings themselves.

Hence discrete and dimensional theories differ not only in their depiction of the structure of emotion; they also differ on their view of the temporal relationship of emotion (affect) and reason (cognition). The former argues that emotions are subordinate to and derivative of cognitive activity. The latter, informed by work in neuroscience, argues that emotions arise prior to and independent of cognitive activity (Adolphs, Tranel, Damasio, & Damasio, 1995; Armony & LeDoux, 1997; Damasio, 1999, 1994; Davis, 1992, 1997; Gray, 1987a, 1987b; LeDoux, 1991, 1992, 1993a, 1993b, 1995, 1996; Rolls, 1999). These two views need not be mutually contradictory. That is to say, emotional systems may produce emotional states that subsequently, when sufficiently strong and enduring as to enter into conscious awareness, give rise to conscious assessment that then yields explicit and more differentiated semantic labels. It is of course of interest whether the subsequent cognitive processing alters the effects of preconscious emotional appraisal. But there are other differences between discrete and dimensional views of emotion.

The most important difference is that the discrete view suggests that emotion is generated by just one process: the cognitive appraisal of a situation. On the other hand, the dimensional view suggests that there may be multiple sources for the expression of emotion, hence the multiple dimensions needed to describe emotional experience. Perhaps there are emotion-generating systems, each with different properties and hence consequences. With at least two dimensions comes a challenge to the longstanding presumption that emotion has uniform and coherent effects (contrasting emotion, and its effects, with reason, and its effects).[16] Hence preconscious emotional appraisals may generate feelings that, when consciously apparent, may be further elaborated by cognitive appraisal.

It has long been argued that humans have two different modes of information, feelings that have long seemed mysterious in their origins and the seemingly veridical representation of reality that arises through conscious awareness. Each of the three theories of emotion argues that feelings are not very mysterious. Each of the three models offers an account of the underlying appraisal that gives rise to emotional expression. However they arise, the coexistence of feelings and thoughts generates the likelihood that people can rely either on their thoughts and/or their feelings. Psychologists

have been exploring this vein of thought assiduously. Gerald Clore and his colleagues (Clore, Schwarz, & Conway, 1994; Schwarz, 1990) have developed the suggestion that people use feelings as information, presuming an assimilation relationship (e.g., I feel happy, so I like these new people I have just met), though others have found counterassimilation effects (Ottati & Isbell, 1996). Indeed the search for "affective" and "cognitive" influences is now a rich industry (Crites, Fabrigar, & Petty, 1994; Erdley & D'Agostino, 1988; Fabrigar & Petty, 1999; Greene, 1998; Ingram, 1989; Kuklinski et al., 1991; Marcus, Sullivan, Theiss-Morse, Flathman, & Healy, 1990; Millar & Tesser, 1986; Mischel & Shoda, 1995; Ottati, 1988; Ottati, Riggle, Wyer, Schwarz, & Kuklinski, 1989; Ottati, Steenbergen, & Riggle, 1992; Stangor, Sullivan, & Ford, 1991). And feelings resulting from preconscious emotional appraisals may have unique impacts, apart from working with cognitive components (Loewenstein et al., 2001).[17]

The idea that affective reactions, feelings, can have powerful effects as "heuristics" used in lieu of serious deliberation in decision-making circumstances (Forgas, 1994, 1995) returns us to the basic presumptions of the Hellene schools of philosophy. Some argue that use of such affective heuristics is acceptable, by virtue of being a "reasonable" if not reasoned method of making decisions (Baron, 1994). But others find reliance on heuristics, whether affectively based or not, is not an acceptable alternative to thoughtful explicit consideration (Arkes, 1993). Such disputes replicate the disagreements among the Stoic, Skeptic, and other schools of philosophy. Contemporary theoretical accounts such as the elaboration likelihood model (Petty & Cacioppo, 1986) argue that people can either be thoughtful and deliberate or thoughtlessly receptive to heuristics and persuasive messages, again reflecting the attraction of binary oppositions such as emotion versus reason (Chaiken & Trope, 1999). When contrasting reason and emotion, we ignore the possibility that there are multiple systems of emotion, suggesting a more complex set of relationships, with different emotion systems having different impacts not only on the expression of feeling but on various aspects of "cognition" and behavior. Recent work in neuroscience gives us a preliminary and provisional understanding of the multiple systems of emotional appraisal.

The Neuroscience Perspective on Emotion

The literature on emotion and neuroscience is large and growing ever larger. (For a useful set of readings consider Adolphs, Damasio, Tranel, & Damasio, 1996; Adolphs, Tranel, & Damasio, 1998; Adolphs, Tranel, Damasio, & Damasio, 1994; Adolphs et al., 1995; Bechara et al., 1995, 1997; Borod, 2000; Cacioppo, Berntson, Crites, & Stephen 1996; Damasio, 1994, 1999; Davidson, 2000; Davidson, Jackson, & Kalin, 2000; Davis, 1992, 1997; Etcoff, 1986; George et al., 1993; Gray, 1985a, 1987a, 1987b, 1990; Jeannerod, 1997; Lane, Nadel, & Ahern, 2000; LeDoux, 1991, 1996; LeDoux, Romanski, & Xagoraris, 1989; Panksepp, 1991; Tomarken, Davidson, Wheeler, & Doss, 1992; Tranel, Damasio, & Damasio, 1995; Zuckerman, 1991.) Before I turn to the currently recognized multiple emotion systems, I should mention that it is now agreed that there are some common features to all of these emotion systems. First, emotion systems have access to the sensory stream well before the brain systems that generate conscious awareness can complete their work and, further, the emotion systems produce appraisals that then initiate emotional, cognitive, and behavioral actions (Libet, 1985; Libet, Gleason, Wright, & Pearl, 1983; Libet et al., 1991; Libet, Wright, Feinstein, & Pearl, 1979).[18] Moreover, these appraisal systems attend to the full sensory stream, while consciousness only attends to a very small and preselected sample (Zimmermann, 1989). Indeed, one of the functions of the preconscious emotion systems is to focus and direct conscious attention.

Neuroscience offers another crucial insight into the multiple systems of memory (Mishkin & Appenzeller, 1987; Schacter, 1996; Squire, 1987). Memory had previously been conventionally thought of as unitary or, more recently, divided into "short-term" and "long-term" (Forgas, Burnham, & Trimboli, 1988; Lau & Sears, 1986; Lodge, McGraw, & Stroh, 1989). Perhaps the two most important systems of memory, one labeled associative (or sometimes procedural) and the other declarative (or semantic), demonstrate how much rethinking is required in exploring the role of emotion in political psychology. Associative memory, generally accepted to be active in the prefrontal cortex, is not only the realm of emotional predispositions (i.e., our "likes" and "dislikes") but also where our learned actions are located. A simple task, such as reaching for and lifting a cup of water from a table to one's mouth, is actually a very complex set of integrated and learned skills (linking sensory and somatosensory streams with prior experience). How firmly we will grip and how much effort we will apply to lift that cup depends on how full it appears to be (sensory data), how far away it is, and whether it is made of paper, plastic, or glass. Each circumstance will probably be somewhat different from a prior occasion (perhaps the table is lower or higher, nearer or farther, the cup less full, smaller, larger, slipperier, etc.). Associative memory is where all these variations, and how to enact and manage such familiar actions, are stored. And emotion plays a crucial role in these actions, as well as resolving conflicting concurrent goals (Gray & McNaughton, 2000).

Declarative memory manages the recall of "facts" such as: what I had for breakfast, what color shirt I wore yesterday, my birthday, and so on. The amygdala and the hippocampus, two regions in the limbic area of the brain, are specifically engaged in these memory systems.[19] Political psychologists have attended almost exclusively to declarative memory, yet much of what we now know about political judgments, such as in deciding whom to vote for, reflects the powerful impact of associative memory, for example

ideology and partisan identification, both of which are influential, because of the affective component, on political judgment (MacKuen, Neuman, & Marcus, 2000; Marcus et al., 2000).

Studies of patients who have suffered bilateral damage to their amygdala exhibit complete impairment of their capacity to experience an emotional response to the world in which they exist. It is interesting to note that not only is the capacity to experience preconscious emotional reactions eliminated but also the capacity to experience "discrete" emotions. But perhaps most interesting is that these patients have no cognitive impairment (Bechara et al., 1995 1997). That is to say, these patients can do all the things that a bright, fully reasoning subject can do, except for their one crucial inability to experience emotion. They cannot enact the behavior recommended by their contemporary reasoning—even when they know what the best course of action to take is. They are unable to initiate the behavior recommended by their own analysis. Thus the ancient dream of obliterating the impact of emotion on reason can now be actually realized, but its full consequences are quite different from those long thought. For with emotion comes the capacity to enact behavior, something of which reason alone is not capable. All of which suggests that Aristotle had it more right than his philosophic competitors, emotion and reason are both cooperatively necessary to fully realize all that emotion and reason enable.

But what do we know about the emotional systems and how they work? The identification of emotion systems has been explored through the issue of where to locate the axes, or dimensions of appraisal, using data resulting from subjects' emotional reactions to various stimuli. And these studies, as noted earlier, report that two dimensions are the minimum necessary to adequately represent the resulting variance. Although there is an infinite set of possibilities, two competing dimensional theories of emotion emerged in social psychology.[20] One, most associated with the work of David Watson and his colleagues (Watson, 1988b; Watson et al., 1984; Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985) describes the two dimensions as "positive" and "negative." In this account, the axes would be located, in figure 6.1, vertically and horizontally, identifying on the vertical dimension variation from depressed to elated and enthusiastic (the dimension of positive affect). The horizontal dimension reveals the expression of variation from calm to anxious that has been generally labeled negative affect, adopting the same problematic labels used by Abelson and his colleagues (1982). The other account, most associated with James Russell (Russell, 1980; Russell, Lewicka, & Niit, 1989; Russell, Weiss, & Mendelsohn, 1989) argued for a different location of the dimensions, a rotation of 45 degrees, yielding axes that describe emotions as varying on valence, low to high, and arousal, low to high.

Unfortunately, the terminology used in these two structural models has lent considerable confusion as to what the terms "positive emotion" and "negative emotion" mean. This can best be shown by example. Consider

figure 6.2. It shows the data from figure 6.1 superimposed on a representative idealization of the "circumplex" of emotional response. Below are schematic representations of the two-dimensions solutions with their axes locations. As you can see, the valence model identifies two regions where positive and negative emotions are located, but these regions are different from the regions that the positive-negative model identically labels. Thus,

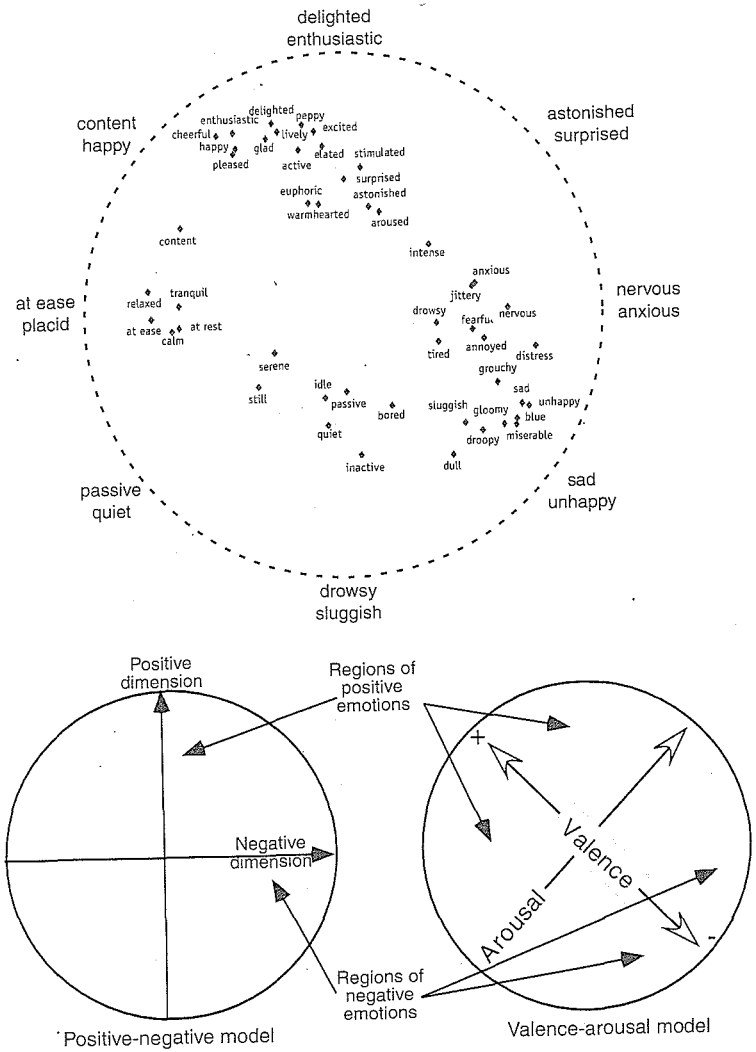

Figure 6.2. The circumplex and competing structural models of emotion

for example, sad is characteristically a "negative" feeling state according to the valence model but not for the positive-negative model (rather it is a feeling state that arises from the absence of positive feeling). Anxiety is the characteristic negative feeling state of the positive-negative model, but that feeling state is located as close to the arousal dimension of the valence model as to the negative region in the valence model, leaving its status rather ambiguous. Since both models use the same terms, *positive* and *negative,* but identify quite different feeling states, considerable confusion arises, unless great care is taken in reading research reporting on the effects of "positive" or "negative" feeling states on judgment and behavior.[21] Many articles report, for example, that "positive" emotion induces people to rely on what they already know, but these reports are really derived not from studying all variants of positive emotion but rather only "happiness" (Bless et al., 1996; Bless & Fiedler, 1995; Schwarz & Bless, 1991). Similarly, studies of negative emotion making categorical claims about what "negative affect" does conflates what are really quite different negative emotion states (more on this shortly).

The bulk of the research reported on the structure of emotional responses focuses on data reduction in isolation from any substantive theory. Each of the two models account for the variety of feeling states excepting emotion terms of animus (Barrett & Russell, 1998). But there are serious problems evident in these studies.

If the two alternative models were not 45 degree rotations, one to the other, the evidence collected to date on the effects of "positive" and "negative" emotion might be more useful. Dimensions that are orthogonal one to the other (i.e., 90 degrees) are uncorrelated (so their distinct relationships to third factors are not confounded). Dimensions that are located 45 degrees apart (as are the two proposed "negative" emotions and the two "positive" emotions (see fig. 6.2) means that findings purporting to show the effects of sadness may fit one of three alternative accounts, as follows. First, sadness or *any other* negative emotion has this effect (i.e., all negative emotions are equivalent in their effects on human judgment and behavior). We could use any "negative" emotion. It matters not which is selected for use in research; any would generate the same findings.

Second, the relationship is actually due to another negative emotion, say anxiety, not sadness, but because the dimensions are positively correlated this effect is falsely attributed to sadness. This would be revealed had separate measures of the two negative responses, sadness and anxiety, been included so that multivariate controls could establish their distinctive effects, if any, and control for this possibility. Few studies have done this, and therefore conclusions about the effects of "happiness" and "sadness" (as in Bless & Fielder, 1995) do not support their principal conclusions. Third, sadness, but only sadness, has this effect. The vast array of research on *the* impact of "negative" and "positive" emotions has not been conducted so as to effectively distinguish among these three alternatives.[22]

Yet another article that compares yet another factor solution on yet another data series will not determine which model is superior (not surprising, as fitting factor axes to *any* arbitrary location is going to fit this kind of data as well as any other location of factor axes). It is apparent then that neither of these structural models actually accounts for the full range of feeling states that people experience. There are other issues that neither the valence-arousal nor the positive-negative views explain. These structural investigations share an unstated premise that the dimensions identify independent qualities of emotional response (though they do not agree on the nature of these primary characteristics). Hence each model fits orthogonal solutions, implicitly requiring the two dimensions to be uncorrelated. But Abelson and colleagues (1982) have found, as have others since, that the relationship between "positive" and "negative" dimensions is dynamic, moving from more to less orthogonality as the stimulus becomes more familiar to the subject. Neither structural model attempts to depict this dynamic pattern. Imposing uncorrelated factor solutions obscures this feature of emotional response and prevents further research as to when and why such dynamic shifts arise.

Accounting for Aversion

But there is an additional issue that directly challenges the presumption that these models provide comprehensive descriptions of all forms of emotional response. Neither structural model accounts for the emotions of aversion (e.g., disgust, contempt, hatred, anger, and so on). Studies of emotional reactions to candidates, to issues, and to other political stimuli often show that people experience this third variant of emotion (Conover & Feldman, 1986; Marcus et al., 2000; Mikula, Scherer, & Athenstaedt, 1998). And, studies have shown that forms of aversion (e.g., contempt, disgust, hatred, etc.) have quite different effects on people from the other primary negative affects of anxiety and depression (Ax, 1953; Bodenhausen, Kramer, & Süsser, 1994; MacKuen, Marcus, Neuman, Keele, & Wolak, 2001). When these mood terms are included, and when aversive stimuli are present, a third dimension of emotional response is required to account for the variance in subject responses (MacKuen et al., 2001; Marcus et al., 2000). Watson, and Clark (1992a) have offered one effort to integrate these emotions in the positive-negative model, but the scholars advocating the valence-arousal model has not attempted any such integration. The valence-arousal model is especially inattentive to the third dimension of emotional response—aversion—and the dynamic character of emotional responses. Given the frequent and powerful role of anger, hatred, and the like, in politics, it seems unlikely that either of these models offers much promise for political psychology.

How then to resolve this dilemma? Since data fitting will not be identify the superior model, perhaps it is best to turn to more relevant and deter-

minative criteria. A theory of political affect requires not just a measurement model but, even more, a substantive theory. A substantive theory generates testable propositions about how emotion arises and the consequences for judgment and behavior. Producing the research that resolves which measurement model is more promising, on substantive criteria, will have the additional benefit of offering real and new insights into how emotion influences political behavior.

So what are the substantive theories that lurk behind the two structural models? The valence-arousal model is a return to the old idea that the primary function of emotion is to identify and mark approach-avoidance circumstances with "arousal" dimension measuring the strength of the response. Why such a system would equally apply to the emotions experienced when the self is the object of assessment (as in fig. 6.1) is not well explained. The positive-negative model is problematic, as the term "negative" is applied to one region (nervous, anxious, etc, the section to the right in fig. 6.1) but could equally be applied to the bottom region of the display (i.e., terms such as *sluggish, blue,* and *gloomy*), which identify feelings of depression, a subjective state that would appear to most to be "negative."[23] Since neither measurement model offers discriminating predictions as to the behavioral and cognitive effects, as well as the specifying predictions regarding emotional expression, I turn to a theory that has explicit measurement and substantive elements: the theory of affective intelligence (Marcus et al., 2000). Unlike either measurement models, this theory begins with a biological account of the emotions. The theory evolved from a program of research begun by Jeffrey Gray (Corr, Pickering, & Gray, 1997; Corr et al., 1995; Gray, 1970, 1973, 1981, 1985b, 1987a, 1987b, 1990; Pickering & Gray, 1999; Wilson, Kumari, Gray, & Corr, 2000), largely in animal studies. It has been translated into political psychology by Marcus and colleagues (Marcus, 1988; Marcus & MacKuen, 1993; Marcus & Rahn, 1990; Marcus, Wood, & Theiss-Morse, 1998; Marcus et al., 1995, 2000). It elaborates the fundamental insight of Aristotle that emotion and reason are cooperatively interrelated and mutually advantageous to the challenge of achieving a full life.[24]

Space precludes a full exposition of Gray's work (Carver & Scheier, 1990; Carver, Sutton, & Scheier, 2000) here. Suffice it to say that one system of emotion—Gray calls it the behavioral activation system and my colleagues and I have renamed it the disposition system, functions to manage learned behavior, what we have called habits and predispositions in all their variety (Marcus et al., 2000). Many habits are thoughtless; their execution requires considerable mental resources though not much in the way of conscious attention.[25] Thus this system is deeply implicated in the power of previously learned attachments, often attributed to "symbols," to control political judgments (Marcus, 1988; Sears et al., 1979, 1980). This system gives rise to emotions that fall along the continuous ranges of happiness-sadness and those that depict aversion (e.g., contempt, bitterness, anger, and hatred).

The second system, Gray's behavioral inhibition system (we have renamed it the surveillance system), functions to warn us of unusual and/or threatening circumstances. The system gives rise to the emotions that vary along the continuous range of anxious to calm. The first system is efficient in storing strategically successful behaviors in associative memory, enabling them to be reused whenever their specific goals are salient. This function is crucial, as most learned behaviors are not well executed by reliance on conscious attention.[26] Yet this efficiency becomes highly vulnerable when displayed in environments that may not display the same features as those experienced previously. The task of this system is to swiftly scan the contemporary environment, comparing its features to those expected, when executing the current ongoing plans. As long as the comparison is favorable—I am at a rally hosted by my political party, and all that is taking place is congruent with prior experience, speeches, people, and red, white, and blue balloons and bunting—then this system remains unobtrusive, apart from generating feelings of calm reassurance. However, if there is a mismatch—perhaps the new candidate of my party gives a terrible speech, inept and clumsy—then in addition to intruding with feelings of anxiety, this system causes people to give heightened attention to the moment, disinhibits people from reliance on the ongoing behavior, habit, and invokes conscious considerations, including not only attention but also learning (Marcus & MacKuen, 1993).

Both of Gray's systems, along with a third, the fight/flight system (Gray & McNaughton, 2000), depend on multiple concurrent appraisals of ongoing plans, via somatosensory and sensory streams executed well before conscious awareness. One appraisal is strategically devoted to the habitual execution of plans for obtaining familiar rewarding goals and avoiding familiar punishments (hence the deployment of emotions of happiness in the case of the former and aversion in the case of the latter). When habits fail, we feel frustration and sadness. The other appraisal is strategically devoted to quickly identifying the unexpected novel change in our familiar environment or unexpected challenges to our plans, hence the deployment of the emotions of anxiety.[27]

One clear implication of this theory is that we respond to the familiar quite differently from how we respond to the unfamiliar. Furthermore, the theory offers a substantive account of the three different "negative" affects: anxiety, sadness, and anger. Anxiety is the output of the surveillance system, identifying the unexpected appearance of unfamiliar and or threatening circumstances. Sadness arises when exhaustion and failure accompany the execution of our otherwise rewarding habits. Anger arises when familiar threats impede our way. This offers a theoretical account of the dynamic pattern between anxiety and enthusiasm in campaigns found by (Abelson et al.,

1982). Early in campaigns candidates evoke both anxiety and enthusiasm, while latter in the campaign the same candidates evoke generally just one or the other. This pattern arises because many things begin as unfamiliar, for example presidential candidates early in the campaign period. But repeated exposure enables citizen to familiarize themselves with these aspirants, turning them into familiar objects of hope, for those who identify with them, or danger, for those who oppose them.

This account matches Watson's interpretation of emotional experience discussed earlier, that is to say, the Gray account argues that the "positive" dimension of affect is the emotion generated by the disposition system and that the "negative" dimension of affect is the emotion generated by the behavioral, or surveillance, system. Thus we have a merger between biological and psychological accounts with amply substantive hypotheses to explore.[28] On the other hand, the valence-arousal interpretation does not have a biological account, and its substantive account, describing little more than approach-avoidance, is rather meager.

The principal claim of Gray's multiple systems of emotion theory holds that different emotion systems operate to subserve behavioral learning as well as control attention. These systems enable attention to be shifted from one thing to another but also sustain the ability to focus attention more deeply and ignore distraction. Further, these systems inhibit or strengthen reliance on habits (of action and of thought) as circumstances warrant. Emotions thus enhance the ways politics can be engaged, sometimes casually, sometimes with great seriousness of purpose, sometimes thoughtfully, sometimes deliberatively, sometimes committed to existing loyalties, sometimes open to new possibilities, sometimes focused on self-interest, sometimes setting aside parochial commitments and loyalties for the needs of strangers. Emotions generated by the disposition system motivate our capacity to rely on our habits, eschewing explicit consideration of alternative courses of action. But emotions generated by the surveillance system motivate reliance on reason. Thus emotion is intimately involved not only in habits, prejudices, and other instances of reliance of learned behavior but in the recruitment of reason and the full display of cognitive activities (Marcus, 2002).[29] Thus the theory of affective intelligence provides a measurement model for each of the three negative emotions: depression, anxiety, and aversion.[30] It also provides a substantive theory on the sources, the biology, and the impact of these emotions on judgment and behavior.

How does the theory of affective intelligence differ from the two alternative structural models, valence-arousal and positive-negative? In depicting the strategic dimensions of emotional response, the theory of affective intelligence aligns with the positive-negative view of the structure of emotion, but with an important codicil. When familiar and strategically salient stimuli associated with punishment appear, then the theory of affective intelligence holds that the distinct emotional dimension of aversion will be apparent, and, further, that the dimension of aversion will function much

as the dimension of enthusiasm functions for familiar strategic stimuli associated with reward; that is, it is controlled by the disposition system. More important, what does each model offer in the way of generating insights of interest to political psychology?

It is important to reiterate that the valence dimension of the approach-avoidance view of emotion identifies different emotions from those identified by either the positive-negative model or the theory of affective intelligence. The former identifies as "positive" and "negative" different emotions from those so labeled by the latter. For example, anxiety is not identified as a crucial emotion in the valence-arousal view of the structure of emotion. Rather, valence identifies liking and disliking and arousal, which, as can be seen in figure 6.2, locates the salient emotions as happy versus sad (valence) and quiet versus astonished (aroused). Affective intelligence, on the other hand, argues that the salient emotions are variations along the enthusiastic and anxious axes (labeled "positive" and "negative" in figure 6.2). It is important that in that research the emotions specific to each model are measured when testing their respective hypotheses (hence when testing the claim that negative stimuli generate greater scrutiny, the valence-arousal model would test different "negative" emotions from those either of the other two models would). Moreover, the theory of affective intelligence identifies aversion as a significant emotion, while this emotion is essentially ignored by the two alternative structural models. More important, neither of the two-dimensional models have much to say about when and why people are motivated to learn, or when and why people are likely to abandon habits for new plans of action and belief or when they are likely to strongly hold to established belief and actions. Resolving which theory is the more productive requires research that tests the competing claims of these three accounts.

Conclusion

The primary thrust of this chapter is to call for two major changes in the way research is conducted on the role of emotion in political judgment and behavior. First, conceptual clarity on the alternative theoretical models is imperative, for without such clarity we cannot expect to collect the date necessary to properly compare the competing claims. Second, we need to collect rich arrays of data on emotional response that can differentiate between hypothesized factors enabling competing theories to be properly tested. It is only in this way that political psychology can fully explore the ways that emotion impacts on learning, persuasion, attention, and action.

It is useful to point out that this or other biologically based research has the capacity to add new evidence on old arguments about the capacities for reason and emotion and what roles both capacities sustain, individually and collectively. Much of political psychology has unreflectively accepted

the millennia-old conception of two diametrically opposed forces, reason (recast as "cognition") and emotion (recast as "affect"). It has also, in the main, accepted the presumptive features of each that were first depicted in Hellenic schools of philosophy. Thus the normative imperative to strengthen reason and, necessarily, weaken or control emotion has been adopted as well. I believe that the most important contribution of neuroscience to the study of emotion is that it has provided new perspectives that offer a way out of the conundrum that was posed by the ancients and largely accepted since then: that humans are emotional, yet because emotion is so detrimental to reason, our capacity to rule ourselves, individually and collectively, is suspect. It is my hope that continued work will suggest, contrary to our long tradition, that emotion enhances our capacity to reason and indeed that to reason requires emotion not just to recruit its abilities but also to execute its conclusions.

Notes

Eugene Borgida and Leonie Huddy offered very useful suggestions during the drafting of various iterations of this chapter. I would also like to thank three of my political psychology class, Elizabeth Chase, Heather Foran, and Nick Hiza, who gave excellent suggestions to improve the exposition.

1. It is hard to argue with the presumption that in democracies policies and the choice of leaders should be a matter of deliberate reasoning rather than fervent loyalty or dogmatic belief.

2. I offer one possibility (Marcus, 2002).

3. The discovery of the "unconscious" thus predates Freud by at least two millennia (Nussbaum, 1994).

4. It is of course familiar to presume that reason is the newer, as well as "higher," faculty while passion is designated the older and "lower" force.

5. I postpone to a later section a fuller discussion of this work, as it embodies a theoretical confusion that requires a lengthier discussion than is germane here.

6. One might think it appropriate to add Rawls (1971) here, but as Okin (1989) has noted, Rawls requires citizens behind the veil of ignorance to bring beneficence with them to mobilize their conclusions into action.

7. This new triumvirate is a precursor to the concept of "attitude" in psychology. Attitudes are defined in psychology as having three components: conation, what we believe about the object; affect, what we feel about the object; and behavioral, what we normally do to or with the object (Breckler, 1984).

8. It remains equally the case that emotion in social psychology is a rather mysterious entity. Though clearly a mental phenomenon, emotion is a subjective experience that is better described than explained in social psychological theories (Cornelius, 1996).

9. It did not help that the semantic differential methodology imposes a binary opposition. Still, this has been a popular approach to emotional assessment, most often seen in survey research, where "feeling thermometers" are efficient if nonetheless problematic means of discerning what people feel about some candidates, group, or policy (see Marcus, 1988, app.).

10. I feel anger when hurt by another's duplicity. But I will not feel guilty unless my incautiously placed trust in a false friend was my fault.

11. A line of work more extensively studied by Roger Masters and Denis Sullivan (Masters & Sullivan, 1993; Masters, 1991; Masters, Frey, & Bente, 1991; Masters & Sullivan, 1989; Masters & Way, 1996; McHugo, Lanzetta, Sullivan, Masters, & Englis, 1985; Sullivan & Masters, 1988).

12. I will set aside discussing a recent controversy sparked by a 1993 article (Green, Goldman, & Salovey, 1993) that seemed to suggest that only one dimension was required once measurement error was considered. This provoked a spate of exchanges (Cacioppo, Gardner, & Berntson, 1999; Green & Salovey, 1999; Green, Salovey, & Truax, 1999; Russell & Barrett, 1999a, b, Russell & Carroll, 1999; Tellegen, Watson, & Clark, 1999a, 1999b; Watson & Tellegen, 1999; Watson, Wiese, Vaidya, & Tellegen, 1999). All parties now agree that two dimensions are necessary, not one (Marcus, 2000).

13. There is an occasional third dimension, best described as aversion, which is occasionally present. For a fuller discussion of this third dimension see, Marcus, 2002, Marcus et al., 2000, and the discussion following.

14. A good deal of sloppy thinking has been at play in psychology. The term "implicit cognition" is one of a number of similarly phrased terms that has been used to cover such nonconscious information processing. But if the term "cognition" is used in this fashion, then, as I have noted previously, it is no longer apt as a synonym for thinking (in its various forms). Further, such usage stretches the meaning of "cognition" to include all information processing in the brain, thereby making the term so imperial in its application as to render it useless (Marcus, 1991).

15. For a brief period this view was controversial and resisted (Lazarus, 1982, 1984).

16. Though it is possible that the different effects of emotion are comparable even if differently sourced.

17. My colleagues and I have explored this approach with some success as applied to political tolerance judgments (Marcus, Sullivan, Theiss-Morse, & Wood, 1995).

18. A useful introduction is provided in Nørretranders (1998).

19. Bilateral damage to the amygdala prevents emotional response to new stimuli, while bilateral damage to the hippocampus has the same impact but on declarative memory (Bechara et al., 1995; Scott et al., 1997; Stanton, 2000; Zola-Morgan, Squire, Alvarez-Royo, & Clower, 1991).

20. I have placed the discussion of these social psychological accounts here rather than in the previous section because the discussion in the social psychological literature there is largely restricted to the question of which model better fits emotion data.

21. In reviewing studies that describe the effects of "positive" and or "negative" affect it is best to ignore these terms and pay particular attention to the exact stimuli used in a given study, as otherwise contrary effects may be not so contrary.

22. It is not uncommon for such studies to include emotional self-report measures of only, for example, happiness and sadness. Absent measures of other positive and negative emotion, such studies cannot test the three aforementioned possibilities. For example, Rahn (2001) has created a single valence conception of "public mood," holding that "positive moods" have one effect and "negative" moods another, yet this measure is based on emotion self-report items that clearly require a two-dimensional solution (Marcus, Neuman, & MacKuen, 2000), so it is not clear whether the effects of negative public mood she reports are due to sadness or anxiety or anger, all three, or some pair of the three.

23. And, as I noted earlier, the occasional appearance of feelings of aversion further muddies the waters, making the term "negative" apply to three quite different emotional states (anxiety, depression, and aversion). For more on this see Marcus et al., 2000, apps. A, B.

24. A view also argued by feminist and Aristotelian political theorists (Bickford, 1996, 2000; Rorty, 1985, 1996; Young, 1990).

25. Many habits do have elements of thought, as when dogmatic and cliched responses are familiarly elicited to manage recurring tasks (e.g., when engaged in familiar banter with a friend over which political party has a better record on crime, the economy, or leadership).

26. If you doubt this then you can attempt the following experiment. Take something you "know" how to do, writing your signature. Put the pen or pencil in your nondominant hand, and unless you are one of the rare ambidextrous individuals, you will find that you cannot consciously "will" that hand to replicate the deft skill you normally display.

27. I refer the interested reader to the work of Gray for the biological details. See also the work of LeDoux, Davis, Panksepp, and Damasio.

28. The work of John Cacioppo (Cacioppo, Gardner, & Berntson, 1997; Ito, Larsen, Smith, & Cacioppo, 1998) is important here as well. He finds that the response of each emotion system has distinguishing characteristics. The "negative" appraisal has a steeper response curve, i.e., we respond more intensely with increasing mismatch, which is to say people are generally risk-averse. On the other hand, we respond to neutral stimuli positively, a "positivity offset", i.e., we are curious (both features are general depictions, there being important individual differences across subjects).

29. It is also worth reconsidering the traditional assignment of women as the more emotional gender, implying their unsuitability for politics and leadership role, now challenged and even reversed. We might well conclude that women are better, not ill, suited for these roles.

30. *Depression* is a better term for this affect than *sadness*, as sadness may arise from either internal or external sources while depression results from inadequate psychic and physical resources to meet the demands of the action that is underway or contemplated.

References

Abele, A., & Petzold, P. (1994). How does mood operate in an impression formation task? An information integration approach. *European Journal of Social Psychology, 24,* 173–187.

Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and semantic components in political personal perception. *Journal of Personality and Social Psychology, 42,* 619–630.

Adolphs, R., Damasio, H., Tranel, D., & Damasio, A. R. (1996). Cortical systems for the recognition of emotion in facial expressions. *Journal of Neuroscience, 16,* 7678–7687.

Adolphs, R., Tranel, D., & Damasio, A. R. (1998). The human amygdala in social judgment. *Nature, 393,* 470–474.

Adolphs, R., Tranel, D., Damasio, H., & Damasio, A. (1994). Impaired recognition of emotion and facial expressions following bilateral damage to the human amygdala. *Nature, 372,* 669–672.

Adolphs, R., Tranel, D., Damasio, H., & Damasio, A. R. (1995). Fear and the human amygdala. *Journal of Neuroscience, 15,* 5879–5891.

Almagor, M., & Ben-Porath, Y. S. (1989). The two-factor model of self-reported mood: A cross-cultural replication. *Journal of Personality Assessment, 53,* 10–21.

Aristotle. (1954). *Rhetoric* (W. R. Roberts, Trans.). New York: Modern Library.

Arkes, H. (1993). Can emotion supply the place of reason? In G. E. Marcus & R. L. Hanson (Eds.), *Reconsidering the democratic public* (pp. 287–305). University Park: Pennsylvania State University Press.

Armony, J. L., & LeDoux, J. E. (1997). How the brain processes emotional information. *Annals of the New York Academy of Sciences, 821,* 259–270.

Ax, A. (1953). The physiological differentiation between fear and anger in humans. *Psychosomatic Medicine, 15,* 433–422.

Baron, J. (1994). *Thinking and deciding* (2nd ed.). New York: Cambridge University Press.

Barrett, L. F., & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of Personality and Social Psychology, 74,* 967–984.

Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science, 175,* 1293–1295.

Bechara, A., Tranel, D., Damasio, H., Adolphs, R., Rockland, C., & Damasio, A. R. (1995). Double dissociation of conditioning and declarative knowledge relative to the amygdala and hippocampus in humans. *Science, 269,* 1115–1118.

Ben-Ze'ev, Aaron. *The subtlety of emotions.* Cambridge, Mass.: MIT Press, 2000.

Bickford, S. (1996). *The dissonance of democracy: listening, conflict, and citizenship.* Ithaca, NY: Cornell University Press.

Bickford, S. (2000, April). *Cultivating citizens: Political perception and the practice of emotion talk.* Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Bless, H., Clore, G. L., Schwarz, N., Golisano, V., Rabe, C., & Wölk, M. (1996). Mood and the use of scripts: Does happy mood really lead to mindlessness? *Journal of Personality and Social Psychology, 71,* 665–679.

Bless, H., & Fiedler, K. (1995). Affective states and the influence of activated general knowledge. *Personality and Social Psychology Bulletin, 21,* 766–778.

Bodenhausen, G. V., Kramer, G. P., & Süsser, K. (1994). Happiness and stereotypic thinking in social judgment. *Journal of Personality and Social Psychology, 66,* 621–632.

Bodenhausen, G. V., Sheppard, L. A., & Kramer, G. P. (1994). Negative affect and social judgment: The differential impact of anger and sadness. *European Journal of Social Psychology, 24,* 45–62.

Borod, J. C. (2000). *The neuropsychology of emotion.* New York: Oxford University Press.

Bradley, M. M. (2000). Motivation and emotion. In J. T. Cacioppo, L. G. Tassinary & G. G. Berntson (Eds.), *Handbook of psychophysiology* (pp. 602–642). New York: Cambridge University Press.

Bradley, M. M., Greenwald, M. K., Petry, M. C., & Lang, P. J. (1992). Remembering pictures: Pleasure and arousal in memory. *Journal of Experimental Psychology: Learning, Memory and Cognition, 18,* 379–390.

Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as dis-

tinct components of attitude. *Journal of Personality and Social Psychology, 47,* 1191–1205.

Burke, E. (1973). *Reflections on the revolution in France.* Garden City, NY: Anchor Books.

Cacioppo, J. T., Berntson, G. G., & Crites, Stephen L. (1996). Social neuroscience: Principles of psychophysiological arousal and response. In T. E. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 72–101). New York: Guilford Press.

Cacioppo, J. T., & Gardner, W. L. (1999). Emotion. *Annual Review of Psychology, 50,* 191–214.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review, 1,* 3–25.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1999). The affect system has parallel and integrative processing components: Form follows function. *Journal of Personality and Social Psychology, 76,* 839–855.

Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review, 97,* 19–35.

Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin, 26,* 741–751.

Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual process models in social psychology.* New York: Guilford Press.

Clark, L. A., & Watson, D. (1988). Mood and the mundane: Relations between daily life events and self-reported mood. *Journal of Personality and Social Psychology, 52,* 296–308.

Clore, G. L., Schwarz, N., & Conway, M. (1994). Affective causes and consequences of social information processing. In R. S. Wyer, Jr. & T. K. Srull (Eds.), *Handbook of social cognition* (2nd ed., vol. 1, pp. 323–417). Hillsdale, NJ: Erlbaum.

Conover, P., & Feldman, S. (1986). Emotional reactions to the economy: I'm mad as Hell and I'm not going to take it any more. *American Journal of Political Science, 30,* 30–78.

Cornelius, R. R. (1996). *The science of emotion: Research and tradition in the psychology of emotions.* Upper Saddle River, NJ: Prentice-Hall.

Corr, P. J., Pickering, A. D., & Gray, J. A. (1997). Personality, punishment, and procedural learning: A test of J. A. Gray's anxiety theory. *Journal of Personality and Social Psychology, 73,* 337–344.

Corr, P. J., Wilson, G. D., Fotiadou, M., Kumari, V., Gray, N. S., Checkley, S., Gray, J. A. (1995). Personality and affective modulation of the startle reflex. *Personality and Individual Differences, 19,* 543–553.

Crites, S. L., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and Social Psychology Bulletin, 20,* 619–634.

Cuthbert, B. N., Bradley, M. B., & Lang, P. J. (1996). Probing picture perception: Activation and emotion. *Psychophysiology, 33,* 103–111.

Damasio, A. (1994). *Descartes' error: Emotion, reason and the human brain.* New York: Putnam's.

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness.* New York: Harcourt Brace.

Darwin, C. (1998). *The expression of the emotions in man and animals* (3rd ed.). New York: Oxford University Press.

Davidson, R. J. (2000). Affective style, psychopathology, and resilience, brain mechanisms and plasticity. *American Psychologist, 55,* 1196–1214.

Davidson, R. J., Jackson, D. C., & Kalin, N. H. (2000). Emotion, plasticity, context, and regulation: Perspectives from affective neuroscience. *Psychological Bulletin, 126,* 890–909.

Davies, A. F. (1980). *Skills, outlooks and passions: A psychoanalytic contribution to the study of politics.* Cambridge: Cambridge University Press.

Davis, M. (1992). The role of the amygdala in fear and anxiety. *Annual Review of Neuroscience, 15,* 353–375.

Davis, M. (1997). Neurobiology of fear and anxiety. *Annals of the New York Academy of Sciences, 821,* 221–235.

Descartes, R. (1989). *The passions of the soul* (S. H. Voss, Trans.). Indianapolis: Hackett.

Ekman, P. (Ed.). (1982). *Emotion in the human face* (2nd ed.). Cambridge: Cambridge University Press.

Ekman, P. (1984). Expression and the nature of emotion. In P. Ekman & K. Scherer (Eds.), *Approaches to emotion* (pp. 319–343). Hillsdale, NJ: Erlbaum.

Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion, 6,* 169–200.

Ekman, P., & Davidson, R. J. (Eds.). (1994). *The nature of emotion.* New York: Oxford University Press.

Ekman, P., & Friesen, W. V. (1982). Felt, false, and miserable smiles. *Journal of Personality and Social Psychology, 39,* 1124–1134.

Ekman, P., & Oster, H. (1979). Facial expression of emotion. *Annual Review of Psychology, 30,* 527–554.

Ekman, P., & Rosenberg, E. (Eds.). (1997). *What the face reveals: Basic and applied studies of spontaneous expression using the facial action coding systems (FACS).* New York: Oxford University Press.

Ellsworth, P. (1991). Some implications of cognitive appraisal theories of emotion. In K. T. Strongman (Ed.), *International Review on Studies of Emotion* (pp. 143–161). Cambridge: Cambridge University Press.

Erdley, C. A., & D'Agostino, P. R. (1988). Cognitive and affective components of automatic priming effects. *Journal of Personality and Social Psychology, 54,* 741–747.

Etcoff, N. L. (1986). The neuropsychology of emotional expression. In G. Goldstein & R. E. Tarter (Eds.), *Advances in clinical neuropsychology* (Vol. 3). New York: Plenum.

Fabrigar, L. R., & Petty, R. E. (1999). The role of affective and cognitive bases of attitudes in susceptibility to affectively and cognitively based persuasion. *Personality and Social Psychology Bulletin, 25,* 363–381.

Feldman, L. A. (1995). Valence focus and arousal focus: Individual differences in the structure of affective experience. *Journal of Personality and Social Psychology, 69,* 153–166.

Forgas, J. P. (1994). The role of emotion in social judgments. *European Journal of Social Psychology, 24,* 1–24.

Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin, 117,* 39–66.

Forgas, J. P., Burnham, D. K., & Trimboli, C. (1988). Mood, memory, and social judgments in children. *Journal of Personality and Social Psychology, 54,* 687–703.
Freud, S. (1961). *Civilization and its discontents* (J. Strachey, Trans.). New York: Norton.
Freud, S. (1962). *Totem and taboo: Some points of agreement between the mental lives of savages and neurotics.* New York: Norton.
Frijda, N. H., Kuipers, P., & Schure, E. T. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology, 57,* 212–228.
George, A. L., & George, J. L. (1998). *Presidential personality and performance.* Boulder, CO: Westview.
George, M. S., Ketter, T. A., Gill, D. S., Haxby, J. V., Ungerleider, L. G., Herscovitch, P., Post, R. M. (1993). Brain regions involved in recognizing facial emotion or identity: An Oxygen-15 PET Study. *Journal of Neuropsychiatric Clinical Neuroscience, 5,* 384–394.
Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ.* New York: Bantam Books.
Gray, J. A. (1970). The psychophysiological basis of introversion-extroversion. *Behaviour Research and Therapy, 8,* 249–266.
Gray, J. A. (1973). Causal theories of personality and how to test them. In J. R. Joyce (Ed.), *Multivariate analysis and psychological theory* (pp. 409–463). New York.: Academic Press.
Gray, J. A. (1981). The psychophysiology of anxiety. In R. Lynn (Ed.), *Dimensions of personality: Papers in honour of H. J. Eysenck* (pp. 233–252). New York: Pergamon Press.
Gray, J. A. (1985a). The neuropsychology of anxiety. In C. D. Spielberger (Ed.), *Stress and anxiety* (Vol. 10, pp. 201–227). Washington, DC: Hemisphere.
Gray, J. A. (1985b). A whole and its parts: Behaviour, the brain, cognition, and emotion. *Bulletin of the British Psychological Society, 38,* 99–112.
Gray, J. A. (1987a). The neuropsychology of emotion and personality. In S. M. Stahl, S. D. Iversen & E. C. Goodman (Eds.), *Cognitive neurochemistry* (pp. 171–190). Oxford: Oxford University Press.
Gray, J. A. (1987b). *The psychology of fear and stress* (2nd ed.). Cambridge: Cambridge University Press.
Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. *Cognition and Emotion, 4,* 269–288.
Gray, J. A., & McNaughton, N. (2000). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system* (2nd ed.). New York: Oxford University Press.
Green, D. P., Goldman, S. L., & Salovey, P. (1993). Measurement error masks bipolarity in affect ratings. *Journal of Personality and Social Psychology, 64,* 1029–1041.
Green, D. P., & Salovey, P. (1999). In what sense are positive and negative affect independent? *Psychological Science, 10,* 304–306.
Green, D. P., Salovey, P., & Truax, K. M. (1999). Static, dynamic, and causative bipolarity of affect. *Journal of Personality and Social Psychology, 76,* 856–867.
Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science, 293*(5537), 2105–2108.

Greene, S. (1998, April). Affective and cognitive components of partisanship: A new approach. Paper presented to the annual meeting of the Midwest Political Science Association, Chicago.
Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion.* Cambridge: Cambridge University Press.
Hirschman, A. O. (1977). *The passions and the interests: Political arguments for capitalism before its triumph.* Princeton: Princeton University Press.
Hobbes, T. (1968). *Leviathan.* London: Penguin Books.
Hume, D. (1975). *Enquiries concerning human understanding and concerning the principles of morals* (3rd ed.). Oxford: Clarendon Press.
Hume, D. (1984). *A treatise of human nature.* London: Penguin Books.
Ingram, R. E. (1989). Affective confounds in social-cognitive research. *Journal of Personality and Social Psychology, 57,* 715–722.
Isen, A. M. (1993). Positive affect and decision making. In M. Lewis & J. E. Haviland (Eds.), *Handbook of emotions* (pp. 261–277). New York: Guilford Press.
Ito, T. A., Cacioppo, J. T., & Lang, P. J. (1998). Eliciting affect using the international affective picture system: Trajectories through evaluative space. *Personality and Social Psychology Bulletin, 24,* 855–879.
Ito, T. A., Larsen, J. T., Smith, N. K., & Cacioppo, J. T. (1998). Negative information weighs more heavily on the brain: The negativity bias in evaluative categorizations. *Journal of Personality and Social Psychology, 75,* 887–900.
Janis, I. L. (1982). *Groupthink* (2nd ed.). Boston: Houghton Mifflin.
Janis, I. L., & Mann, L. (1977). *Decision making.* New York: Free Press.
Jeannerod, M. (1997). *The cognitive neuroscience of action.* Cambridge, MA: Blackwell.
Johnson, E. J., & Tversky, A. (1983). Affect, generalization, and the perception of risk. *Journal of Personality and Social Psychology, 45,* 20–31.
Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases.* Cambridge: Cambridge University Press.
Kern, M. (1989). *30-second politics: Political advertising in the eighties.* New York: Westport.
Kinder, D. R. (1994). Reason and emotion in American political life. In R. Schank & E. Langer (Eds.), *Beliefs, reasoning, and decision-making: Psycho-logic in honor of Bob Abelson* (pp. 277–314). Hillsdale, NJ: Erlbaum.
Kinder, D. R., Abelson, R. P., & Fiske, S. T. (1979). *Developmental research on candidate instrumentation: Results and recommendations.* Technical Report submitted to the Board of Overseers, National Election Studies, Ann Arbor, MI.
Kornhauser, W. (1959). *The politics of mass society.* Glencoe, IL: Free Press.
Koziak, B. (2000). *Retrieving political emotion: Thumos, Aristotle, and gender.* University Park: Pennsylvania State University Press.
Kuklinski, J. H., Riggle, E., Ottati, V., Schwarz, N., & Wyer, R. S., Jr. (1991). The cognitive and affective bases of political tolerance judgments. *American Journal of Political Science, 35,* 1–27.
Kunst-Wilson, W. R., & Zajonc, R. B. (1980). Affect discrimination of stimuli cannot be recognized. *Science, 207,* 557–558.
Lane, R. D., Nadel, L., & Ahern, G. (2000). *Cognitive neuroscience of emotion.* New York: Oxford University Press.
Lang, A. (Ed.). (1994). *Measuring psychological responses to media.* Hillsdale, NJ: Lawrence Erlbaum.

Lang, P. J., Greenwald, M. K., Bradley, M. M., & Hamm, A. O. (1993). Looking at pictures: Affective, facial, visceral and behavioral reactions. *Psychophysiology, 30,* 261–273.

Larsen, R. J., & Diener, E. (1992). Promises and problems with the circumplex model of emotion. In M. S. Clark (Ed.), *Emotion* (pp. 25–59). Newbury Park, CA: Sage.

Lau, R. R., & Sears, D. O. (1986). An introduction to political cognition. In R. R. Lau & D. O. Sears (Eds.), *Political cognition* (pp. 3–8). Hillsdale, NJ: Erlbaum.

Lazarus, R. (1982). Thoughts on the relations of emotion and cognition. *American Psychologist, 37,* 1019–1024.

Lazarus, R. (1984). On the primacy of cognition. *American Psychologist, 39,* 124–129.

LeDoux, J. E. (1991). Emotion and the limbic system concept. *Concepts in Neuroscience, 2,* 169–199.

LeDoux, J. E. (1992). Brain mechanisms of emotion and emotional learning. *Current Opinion in Neurobiology, 2,* 191–198.

LeDoux, J. E. (1993b). Emotional networks in the brain. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 109–118). New York: Guilford Press.

LeDoux, J. E. (1993a). Emotional memory systems in the brain. *Behavioural Brain Research, 58,* 68–79.

LeDoux, J. E. (1995). Emotion: Clues from the brain. *Annual Review of Psychology, 46,* 209–235.

LeDoux, J. E. (1996). *The emotional brain: The mysterious underpinnings of emotional life.* New York: Simon and Schuster.

LeDoux, J. E., Romanski, L., & Xagoraris, A. (1989). Indelibility of subcortical emotional memories. *Journal of Cognitive Neuroscience, 1,* 238–243.

Leighton, S. R. (1996). Aristotle and the emotions. In A. O. Rorty (Ed.), *Aristotle's Rhetoric* (pp. 206–237). Berkeley, CA: University of California Press.

Libet, B. (1985). Unconscious cerebral initiative and the role of conscious will in voluntary action. *Behavioral and Brain Sciences, 8,* 529–566.

Libet, B., Gleason, C. A., Wright, E. W., & Pearl, D. K. (1983). Time of conscious intention to act in relation to onset of cerebral activity (readiness-potential). *Brain, 106,* 623–642.

Libet, B., Pearl, D. K., Morledge, D., Gleason, C. A., Morledge, Y., & Barbaro, N. (1991). Control of the transition from sensory detection to sensory awareness in man by the duration of a thalamic stimulus. *Brain, 114,* 1731–1757.

Libet, B., Wright, J., Elwood W., Feinstein, B., & Pearl, D. K. (1979). Subjective referral of the timing for a conscious sensory experience. *Brain, 102,* 1597–1600.

Locke, J. (1993). *Two treatises of government.* London: Everyman.

Lodge, M. G., McGraw, K. M., & Stroh, P. (1989). An impression-driven model of candidate evaluation. *American Political Science Review, 83,* 399–420.

Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin, 127,* 267–286.

Lutz, C. (1988). *Unnatural emotions: Everyday sentiments on a Micronesian atoll and their challenge to Western theory.* Chicago: University of Chicago Press.

MacKuen, M., Marcus, G. E., Neuman, W. R., Keele, L., & Wolak, J. (2001, August). *Emotions, information, and political cooperation.* Paper presented to the annual meeting of the American Political Science Association, San Francisco.

MacKuen, M., Neuman, W. R., & Marcus, G. E. (2000, August). *Affective intelligence, voting, and matters of public policy.* Paper presented to the annual meeting of the American Political Science Association, Washington, DC.

MacLean, P. D. (1990). *The Triune brain in evolution.* New York: Plenum Press.

Madison, J., Hamilton, A., & Jay, J. (1961). *The Federalist papers.* Cleveland: World.

Marcus, G. E. (1988). The structure of emotional response: 1984 Presidential candidates. *American Political Science Review, 82,* 735–761.

Marcus, G. E. (1991). Emotions and politics: Hot cognitions and the rediscovery of passion. *Social Science Information, 30,* 195–232.

Marcus, G. E. (2000). Emotions in politics. In N. W. Polsby (Ed.), *Annual Review in Political Science* (Vol. 3, pp. 221–250). Palo Alto, CA: Annual Reviews.

Marcus, G. E. (2002). *The sentimental citizen: Emotion in democratic politics.* University Park: Pennsylvania State University Press.

Marcus, G. E., & MacKuen, M. (1993). Anxiety, enthusiasm and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review, 87,* 688–701.

Marcus, G. E., Neuman, W. R., & MacKuen, M. B. (2000). *Affective intelligence and political judgment.* Chicago: University of Chicago Press.

Marcus, G. E., & Rahn, W. (1990). Emotions and democratic politics. In S. Long (Ed.), *Research in micropolitics* (pp. 29–57). Greenwich, CT: JAI. Press.

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., Flathman, M., & Healy, S. (1990, April). *Political tolerance and threat: Affective and cognitive influences.* Paper presented to the Annual Meetings of the Midwest Political Science Association. Chicago.

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., & Wood, S. (1995). *With malice toward some: How people make civil liberties judgments.* New York: Cambridge University Press.

Marcus, G. E., Wood, S. L., & Theiss-Morse, E. (1998). Linking neuroscience to political intolerance and political judgment. *Politics and the Life Science, 17,* 165–178.

Masters, R. D. (1991). Individual and cultural differences in response to leaders' nonverbal displays. *Journal of Social Issues, 47,* 151–165.

Masters, R. D., Frey, S., & Bente, G. (1991). Dominance & attention: Images of leaders in German, French, and American TV news. *Polity, 23,* 373–394.

Masters, R. D., & Sullivan, D. G. (1989). Facial displays and political leadership in France. *Behavioral Processes, 19,* 1–30.

Masters, R. D., & Sullivan, D. (1993). Nonverbal behavior and leadership: Emotion and cognition in political attitudes. In S. Iyengar & W. McGuire (Eds.), *Explorations in political psychology.* Durham, NC: Duke University Press.

Masters, R. D., & Way, B. (1996). Experimental methods and attitudes toward leaders: Nonverbal displays, emotion, and cognition. In S. Peterson & A. Somit (Eds.), *Research in biopolitics* (Vol. 4, pp. 61–98). Greenwich, CT: JAI Press.

Mauro, R., Sato, K., & Tucker, J. (1992). The role of appraisal in human emotions: A cross-cultural study. *Journal of Personality and Social Psychology, 62,* 301–317.

Mayer, J. D., & Gaschke, Y. N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology, 55,* 102–111.

Mayer, J. D., Gaschke, Y., Braverman, D., & Evans, T. (1992). Mood congruent judgment is a general effect. *Journal of Personality and Social Psychology, 63,* 119–132.

McCrae, R. R., & Costa, P. T., Jr. (1989). The structure of interpersonal traits: Wiggin's circumplex and the five-factor model. *Journal of Personality and Social Psychology, 56,* 586–595.

McHugo, G. J., Lanzetta, J. T., Sullivan, D. G., Masters, R. D., & Englis, B. (1985). Emotional reactions to expressive displays of a political leader. *Journal of Personality and Social Psychology, 49,* 1512–1529.

Meyer, G. J., & Shack, J. R. (1989). Structural convergence of mood and personality: Evidence for old and new directions. *Journal of Personality and Social Psychology, 57,* 691–706.

Mikula, G., Scherer, K. R., & Athenstaedt, U. (1998). The role of injustice in the elicitation of differential emotional reactions. *Personality and Social Psychology Bulletin, 24,* 769–783.

Millar, M. G., & Tesser, A. (1986). Effects of affective and cognitive focus on the attitude-behavior relation. *Journal of Personality and Social Psychology, 51,* 270–276.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102,* 246–268.

Mishkin, M., & Appenzeller, T. (1987). The anatomy of memory. *Scientific American, 256,* 80–89.

Montagu, J. (1994). *The expression of the passions: The origin and influence of Charles Le Brun's conference Sur L'Expression Generale Et Particuliere.* New Haven: Yale University Press.

Moreland, R. L., & Zajonc, R. B. (1979). Exposure effects may not depend on stimulus recognition. *Journal of Personality and Social Psychology, 37,* 1085–1089.

Nisbett, R., & Ross, L. (1982). *Human inference: Strategies and shortcomings of social judgment.* Englewood Cliffs, NJ: Prentice-Hall.

Nørretranders, T. (1998). *The user illusion* (J. Sydenham, Trans.). New York: Viking.

Nussbaum, M. C. (1994). *The therapy of desire: Theory and practice in Hellenistic ethics.* Princeton: Princeton University Press.

Nussbaum, M. C. (1996). Aristotle on emotions and rational persuasion. In A. O. Rorty (Ed.), *Aristotle's Rhetoric* (pp. 303–323). Berkeley: University of California Press.

Nussbaum, M. C. (2001). *Upheavals of thought: The intelligence of emotions.* Cambridge: Cambridge University Press.

Okin, S. (1989). Reason and feelings in thinking about justice. *Ethics, 99,* 229–249.

Ortony, A., Clore, G. L., & Collins, A. (1989). *The cognitive structure of emotions.* New York: Cambridge University Press.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning.* Urbana: University of Illinois Press.

Ottati, V. C. (1988, August). The cognitive and affective determinants of political judgments. Paper presented to the *American Political Science Association Annual Meeting.* Washington, DC.

Ottati, V. C., & Isbell, L. M. (1996). Effects of mood during exposure to target information on subsequently reported judgments: An on-line model of misattribution and correction. *Journal of Personality and Social Psychology, 71,* 39–53.

Ottati, V. C., Riggle, E. J., Wyer, R. S., Jr., Schwarz, N., & Kuklinski, J. (1989). Cognitive and affective bases of opinion survey responses. *Journal of Personality and Social Psychology, 57,* 404–415.

Ottati, V. C., Steenbergen, M. R., & Riggle, E. (1992). The cognitive and affective components of political attitudes: Measuring the determinants of candidate evaluations. *Political Behavior, 14,* 423–442.

Ottati, V. C., & Wyer, R. S., Jr. (1993). Affect and political judgment. In S. Iyengar & W. McGuire (Eds.), *Explorations in political judgment* (pp. 296–320). Durham, NC: Duke University Press.

Panksepp, J. (1991). Affective neuroscience: A conceptual framework for the neurobiological study of emotions. In K. T. Strongman (Ed.), *International review of studies on emotion* (Vol. 1, pp. 59–99). New York: Wiley.

Parkinson, B. (1997). Untangling the appraisal-emotion connection. *Personality and Social Psychology Review, 1,* 62–79.

Parkinson, B., & Manstead, A. S. R. (1992). Appraisal as a cause of emotion. In M. S. Clark (Ed.), *Emotion* (pp. 122–149). Newbury Park, CA: Sage.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change.* New York: Springer-Verlag.

Petty, R. E., Gleicher, F., & Baker, S. M. (1991). Multiple roles for affect in persuasion. In J. P. Forgas (Ed.), *Emotion and social judgments* (pp. 181–199). Oxford: Pergamon Press.

Pickering, A. D., & Gray, J. A. (1999). The neuroscience of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 277–299). New York: Guilford Press.

Plato. (1974). *The republic* (D. Lee, Trans). (2nd ed.). New York: Penquin.

Plutchik, R. (1980a). *Emotion: A psychoevolutionary synthesis.* New York: Harper and Row.

Plutchik, R. (1980b). A general psychoevolutionary theory of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research and experience: Theories of emotion* (Vol. 1, pp. 3–34). San Diego, CA: Academic Press.

Plutchik, R., & Kellerman, H. (Eds.). (1989). *Emotion theory, research, and experience: The measurement of emotions* (Vol. 4). San Diego, CA: Academic Press.

Post, J. M. (1993). Current concepts of the narcissistic personality: Implications for political psychology. *Political Psychology, 14,* 99–121.

Rahn, W. (2001). Affect as information: The role of public mood in political reasoning. In A. Lupia, M. McCubbins, & S. Popkin (Eds.), *Elements of reason: Cognition, choice, and the bounds of rationality* (pp. 130–150). New York: Cambridge University Press.

Rawls, J. (1971). *A theory of justice.* Cambridge, MA: Harvard University Press.

Remington, N. A., Fabrigrar, L. R., & Visser, P. S. (2000). Reexamining the circumplex model of affect. *Journal of Social Psychology, 79,* 286–300.

Renshon, S. A. (1998). *The psychological assessment of presidential candidates.* New York: Routledge.

Rogow, A. A. (1963). *James Forrestal, a study of personality, politics, and policy.* New York: Macmillan.

Rolls, E. T. (1999). *The brain and emotion.* New York: Oxford University Press.

Rorty, A. O. (1982). From passions to emotions to sentiments. *Philosophy, 57,* 159–172.

Rorty, A. O. (1985). Varieties of rationality, varieties of emotion. *Social Science Information, 24,* 343–353.

Rorty, A. O. (1993). From passions to sentiments: The structure of Hume's "Treatise." *History of Philosophy Quarterly, 10,* 165–179.

Rorty, A. O. (Ed.). (1996). *Aristotle's Rhetoric.* Berkeley: University of California Press.

Roseman, I. J. (1979, August). *Cognitive aspects of emotion and emotional behavior.* Paper presented at the Eighty-seventh Annual Convention of the American Psychological Association, New York.

Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In P. Shaver (Ed.), *Review of personality and social psychology* (Vol. 5), pp. 11–36, Beverly Hills, CA: Sage.

Roseman, I. J. (1991). Appraisal determinants of discrete emotions. *Cognition and Emotion, 5,* 161–200.

Roseman, I. J., Antoniou, A. A., & Jose, P. E. (1996). Appraisal determinants of emotions: Constructing a more accurate and comprehensive theory. *Cognition and Emotion, 10,* 241–277.

Rothschild, E. (2001). *Economic sentiments: Adam Smith, Condorcet, and the Enlightenment.* Cambridge, MA: Harvard University Press.

Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39,* 1161–1178.

Russell, J. A. (1983). Pancultural aspects of human conceptual organization of emotions. *Journal of Personality and Social Psychology, 45,* 1281–1288.

Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called *emotion*: Dissecting the elephant. *Journal of Personality and Social Psychology, 76,* 805–819.

Russell, J. A., & Carroll, J. M. (1999a). On the bipolarity of positive and negative affect. *Psychological Bulletin, 125,* 3–30.

Russell, J. A., & Carroll, J. M. (1999b). The Phoenix of bipolarity: Reply to Watson and Tellegen (1999). *Psychological Bulletin, 125,* 611–617.

Russell, J. A., Lewicka, M., & Niit, T. (1989). A cross-cultural study of a circumplex model of affect. *Journal of Personality and Social Psychology, 57,* 848–856.

Russell, J. A., Weiss, A., & Mendelsohn, G. A. (1989). Affect grid: A single-item scale of pleasure and arousal. *Journal of Personality and Social Psychology, 57,* 493–502.

Rusting, C. L., & Larsen, R. L. (1995). Moods as sources of stimulation: Relationships between personality and desired mood states. *Personality and Individual Differences, 18,* 321–329.

Sartori, G. (1987). *The theory of democracy revisited.* Chatham, NJ: Chatham House.

Scanlan, J. P. (1959). The *Federalist* and human nature. *Review of Politics, 21,* 657–677.

Schacter, D. L. (1996). *Searching for memory.* New York: Basic Books.

Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research.* New York: Oxford University Press.

Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In R. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 527–561). New York: Guilford.

Schwarz, N., & Bless, H. (1991). Happy and mindless, but sad and smart? The impact of affective states on analytic reasoning. In J. Forgas (Ed.), *Emotion and social judgments* (pp. 55–71). New York: Pergamon Press.

Schwarz, N., & 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., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433–464). New York: Guilford.

Scott, S. K., Young, A. W., Calder, A. J., Hellawell, D. J., Aggleton, J. P., & Johnson, M. (1997). Impaired auditory recognition of fear and anger following bilateral amygdala lesions. *Nature, 385,* 254–257.

Sears, D. O. (1993). Symbolic politics: A socio-psychological theory. In S. Iyengar & W. J. McGuire (Eds.), *Explorations in political psychology* (pp. 113–149). Durham, NC: Duke University Press.

Sears, D. O. (2000). The role of affect in symbolic politics. In J. Kuklinski (Ed.), *Citizens and politics: Perspective from political psychology.* New York: Cambridge University Press.

Sears, D. O., Hensler, C., & Speer, L. (1979). Whites' opposition to "busing": Self-interest or symbolic politics? *American Political Science Review, 73,* 369–385.

Sears, D. O., Lau, R. R., Tyler, T. R., & Allen, H. M., Jr. (1980). Self-interest vs. symbolic politics in policy attitudes and presidential voting. *American Political Science Review, 74,* 670–684.

Smith, A. (1959). *The theory of moral sentiments.* Indianapolis: Liberty Fund.

Smith, A. (1986). *The wealth of nations: Books 1–3.* New York: Viking.

Smith, C. A. (1989). Dimensions of appraisal and physiological response in emotion. *Journal of Personality and Social Psychology, 56,* 339–353.

Smith, C. A., Haynes, K. N., Lazarus, R. S., & Pope, L. K. (1993). In search of the "hot" cognitions: Attributions, appraisals, and their relation to emotion. *Journal of Personality and Social Psychology, 65,* 916–929.

Squire, L. R. (1987). *Memory and brain.* New York: Oxford University Press.

Stangor, C., Sullivan, L. A., & Ford, T. E. (1991). Affective and cognitive determinants of prejudice. *Social Cognition, 9,* 359–391.

Stanton, M. E. (2000). Multiple memory systems, development and conditioning. *Behavioral Brain Research, 110,* 25–37.

Steinberger, P. J. (1993). *The concept of political judgment.* Chicago: University of Chicago Press.

Stiker, G. (1996). Emotions in context: Aristotle's treatment of the passions in the *Rhetoric* and his moral psychology. In A. O. Rorty (Ed.), *Aristotle's Rhetoric* (pp. 286–302). Berkeley: University of California Press.

Storm, C., & Storm, T. (1987). A taxonomic study of the vocabulary of emotions. *Journal of Personality and Social Psychology, 53,* 805–816.

Sullivan, D., & Masters, R. (1988). Happy warriors: Leaders' facial displays, viewers emotions, and political support. *American Journal of Political Science, 32,* 345–368.

Tellegen, A., Watson, D., & Clark, L. A. (1999a). Further support for a hierarchical model of affect. *Psychological Science, 10,* 307–309.

Tellegen, A., Watson, D., & Clark, L. A. (1999b). On the dimensional and hierarchical structure of affect. *Psychological Science, 10,* 297–303.

Tomarken, A. J., Davidson, R. J., Wheeler, R. E., & Doss, R. C. (1992). Individual differences in anterior brain asymmetry and fundamental dimensions of emotion. *Journal of Personality and Social Psychology, 62,* 676–687.

Tooby, J., & Cosmides, L. (1990a). On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality, 58,* 17–67.

Tooby, J., & Cosmides, L. (1990b). The past explains the present: Emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology, 11,* 375–424.

Tranel, D., Damasio, H., & Damasio, A. R. (1995). Double dissociation between overt and covert face recognition. *Journal of Cognitive Neuroscience, 7,* 425–432.

Volkan, V. D., & Itkowitz, N. (1984). *The immortal Ataturk: A psychobiography.* Chicago: University of Chicago Press.

Volkan, V. D., Itkowitz, N., & Dod, A. W. (1997). *Richard Nixon: A psychobiography.* New York: Cambridge University Press.

Watson, D. (1988a). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology, 54,* 1020–1030.

Watson, D. (1988b). The vicissitudes of mood measurement: Effects of varying descriptors, time frames, and response formats on measures of positive and negative affect. *Journal of Personality and Social Psychology, 55,* 128–141.

Watson, D., & Clark, L. A. (1992a). Affects separable and inseparable: On the hierarchical arrangement of the negative affects. *Journal of Personality and Social Psychology, 62,* 489–505.

Watson, D., & Clark, L. A. (1992b). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality, 60,* 441–476.

Watson, D., Clark, L. A., & Tellegen, A. (1984). Cross-cultural convergence in the structure of mood: A Japanese replication and a comparison with U. S. findings. *Journal of Personality and Social Psychology, 47,* 127–144.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063–1070.

Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin, 98,* 219–235.

Watson, D., & Tellegen, A. (1999). Issues in the dimensional structure of affect—effects of descriptors, measurement error, and response formats: Comment on Russell and Carroll (1999). *Psychological Bulletin, 125,* 601–610.

Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology, 76,* 820–838.

White, M. (1987). *Philosophy, the Federalist, and the Constitution.* New York: Oxford University Press.

Williams, B. A. O. (1983). *Moral luck: Philosophical papers, 1973–1980.* Cambridge; Cambridge University Press.

Wilson, G. D., Kumari, V., Gray, J. A., & Corr, P. J. (2000). The role of neuroticism in startle reactions to fearful and disgusting stimuli. *Personality and Individual Differences, 29,* 1077–1082.

Young, I. M. (1990). *Justice and the politics of difference.* Princeton, NJ: Princeton University Press.

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist, 35,* 151–175.

Zajonc, R. B. (1982). On the primacy of affect. *American Psychologist, 39,* 117–123.

Zajonc, R. B. (1998). Emotions. In D. Gilbert, S. Fiske & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., Vol. 1, pp. 591–632). New York: McGraw Hill.

Zimmermann, M. (1989). The nervous system in the context of information theory. In R. F. Schmidt & G. Thews (Eds.), *Human physiology* (2nd ed., pp. 166–173). Berlin: Springler-Verlag.

Zola-Morgan, S. M., Squire, L. R., Alvarez-Royo, P., & Clower, R. P. (1991). Independent of memory functions and emotional behavior: Separate contributions of the hippocampal formation and the amygdala. *Hippocampus, 1,* 207–270.

Zuckerman, M. (1991). *Psychobiology of personality.* Cambridge: Cambridge University Press.