

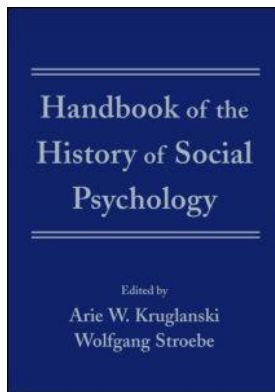
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Part III

Domains of Inquiry

9 A history of affect and emotion research in social psychology

Antony S. R. Manstead

The history of psychological research on affect and emotion¹ has multiple strands. In this chapter I seek to provide a history of ideas, focusing on theory and research that attempted to answer one of two fundamental questions. The first is “What are emotions?” The second is “What are emotions for?” Although some theoretical positions address both questions, for example by explaining what emotions are in terms of the functions they serve, I find that this distinction has heuristic value and it will be used as an organizing principle in this chapter.

The history of social psychological research on affect and emotion closely parallels the history of psychological research on affect and emotion, reflecting the fact that social psychologists have played a key role in research on affect and emotion. This is in itself an interesting phenomenon in the history of psychology: Why, given the multifaceted nature of emotion, involving as it does physiological and cognitive as well as social processes, have *social* psychologists played such a prominent role in theory and research on this phenomenon? The answer lies in the close links between emotion and the core subject-matter of social psychology. As Parrott (2001a, p. 1) put it, “Emotions are themselves social, and the phenomena of social psychology are themselves often emotional.”

The origins of social psychological research on emotion arguably predate the discipline of social psychology. Of course, any field of psychological research can usually trace its origins back to pre-psychological thinking in medicine, philosophy, and religion. In the case of social psychological research on affect and emotion, this link with “prehistory” is especially important. A great deal of modern thinking and research in the social psychology of emotion addresses issues identified by two thinkers: one a biologist, Charles Darwin; the other a student of medicine as well as of philosophy and psychology, William James. So the present account of the history of social psychological work on affect and emotion will start in the 19th century. This is not to deny that still earlier work has been influential. The point is that a good deal of modern research in social psychology is explicitly based on ideas advanced by Darwin and James. In deciding where to begin a historical analysis of social psychological work on affect and emotion, this provides a clear starting-point.

Before looking back to Darwin and James, let us return to the issue of why social psychologists have played a central role

in research on affect and emotion. As noted above, there is a close and two-way relation between social psychology and affective phenomena. Consider first the social nature of emotion. Although there are emotional responses (such as the visceral fear we experience when looking over the edge of a cliff or tall building or the disgust that is evoked by bitter tastes) that are elicited by sensory stimuli that lack any obvious social component, such emotions are the exception. The vast majority of the emotions that we experience in everyday life have a social origin. The origin may be an individual (someone you love), a social group (a political party you despise), a social event (your national soccer team winning a tournament), or a social or cultural artifact (a moving painting or piece of music). These social objects are considerably more likely than nonsocial objects to be the source of our everyday emotions (Scherer, Wallbott, & Summerfield, 1986). If mood states differ from emotions in being less likely to have a clear referent, or object, it is of course less easy to argue that they are social in nature. However, moods have causes, and while some of these may be physiological (e.g., hormonal) in nature, it seems reasonable to argue (as Stumpf, 1899, did) that the object of moods is the general state of the world. To the extent that the world is social, moods can also be said to be social in nature.

Furthermore, many emotions are inherently social, in the sense that they would not be experienced in the absence of others, or they appear to have no function other than to bind us to others. Emotions such as compassion, sympathy, maternal love, affection, and admiration are ones that depend on other people being physically or psychologically present. Fear of rejection, loneliness, embarrassment, guilt, shame, jealousy, and sexual attraction seem to have the primary function of motivating the individual to seek out, develop and protect social relationships. Although moods cannot be said to be inherently social in the same way as many emotions, they can—as we will see below—justifiably be said to have an important influence on social behavior.

It is no surprise, then, that social psychologists have played a prominent role in psychological research on affect and emotion. Social life is replete with cooperation and conflict, and as a consequence is laden with affect. It is hard to begin to understand social life without understanding affect and emotion.

What are emotions?

In this section of the chapter I try to answer the following question. How is it that present-day social psychologists do not share a single view of emotion? Some regard it as a phenomenon deeply rooted in our biology and ancestral past; others see it as a product of culture and learning. Other contrasts are between those who treat emotion as irrational, or as dysfunctional, and those who see it as stemming from rational assessments, or as functional. To understand these different perspectives on emotion, it is instructive to trace their origins in previous thinking. I turn first to the work of Charles Darwin and William James. As we shall see, the themes they addressed are still being pursued by modern researchers.

Charles Darwin

Darwin's ideas about emotion were published in his 1872 book, *The Expression of emotions in man and animals*. The book was published one year after *The descent of man* and sold no fewer than 9,000 copies in the first four months. A second edition, edited by his son Francis and including revisions and new material, was published seven years after Darwin's death and has recently been republished with introduction by Cain and Messenger (Darwin, 1890/2009). A third edition, edited by Paul Ekman, and claiming to include material that Darwin had wanted to incorporate but which was left out of the second edition, was published in 1998.

The central question that Darwin sought to answer in this book was why it is that particular emotions are accompanied by particular facial or other bodily movements. In answering this question, Darwin developed three "principles." The first of these was the *principle of serviceable associated habits*. It is the most important and also the most controversial of Darwin's principles. What he meant by this principle is that there are movements that occur in emotion that once were or still are useful (i.e., of "service") to the organism during emotional episodes. For example, Darwin describes the eye, head, and hand movements that take place during shame. He argues that these serve the function of avoiding observation by others: "The habit, so general with everyone who feels ashamed, of turning away, or lowering his eyes, or restlessly moving them from side to side, probably follows from each glance directed towards those present, bringing home the conviction that he is intently regarded; and he endeavours, by not looking at those present, and especially not at their eyes, momentarily to escape from this painful conviction" (1998, p. 327). When an emotion is experienced, Darwin argues, movements that may originally have served a purpose, such as the concealing function of the shame expression described above, are made by force of habit—even though they may not be of direct use right now: "it seems probable that some actions, which were at first performed consciously, have become through habit and association converted into reflex actions, and are now so firmly fixed and inherited, that they are performed, even when not of the least

use, as often the same causes arise, which originally excited them in us through the volition" (1998, p. 45). This raises the issue of whether movements that in the first instance serve a biological or instrumental function can become associated with an underlying state. This is an issue that I will return to later.

The second principle is the *principle of antithesis*, in which Darwin argued that some emotions elicit expressive movements that contrast with (are the antithesis of) the expressive movements associated with opposing emotional states. Thus a dog with hostile intentions makes itself appear physically large, perhaps because doing so serves to scare its rival. But when it is in an affectionate state, the same animal makes itself appear physically small, by crouching. This, argues Darwin, serves no purpose, either current or past. Instead, the very contrast with the expression of hostility serves to express the contrasting emotional state of the animal. This implies that communication of an internal state is an important aspect of expression. Why otherwise would it be useful to have contrasting forms of expression?

The third principle is the *principle of direct action of the nervous system*, and refers to expressive changes brought about purely by strong excitement of the nervous system. Darwin cites the loss of hair color that can occur as a result of extreme terror or grief and the trembling of muscles during fear, anger and joy as examples of expressive changes that are of no service to the individual. The idea is that the expressive changes are by-products of the activity of the nervous system.

It is worth considering why the "why?" question (why do particular expressive movements occur during particular emotions?) was so important to Darwin. His purpose in studying emotional expression was to show that humans are *not* a separate species. If careful observation of how emotions are expressed in different species reveals a degree of continuity across species, this would be evidence against the view, common in Darwin's time, that humans were created by God, as opposed to being the products of evolution. The "why" question is also relevant to the issue of whether all humans are descended from a common progenitor, as opposed to different races having different progenitors. If expressions can be shown to be universal across races, this would argue for common descent from single progenitor.

Two themes that were central in Darwin's work on emotion have been highly influential in social psychological research on affect and emotion. The first theme is that of the functions served by emotional expressions. Broadly speaking, Darwin invokes two functions, one that is (originally, at least) instrumental in nature (certain movements are useful to the individual who experiences the emotion) and another that is communicative (expressions of emotion have communicative value for other organisms, helping us to understand their intentions). Both types of function can be argued to have adaptive value. The second theme is that of the possible within-species universality of emotional expression. This has implications for emotional communication, for intercultural communication, and for our understanding of the extent to which emotions and

emotional expressions are fixed or malleable. These two themes (the functionality of emotions and emotional expressions; and the universality of emotions and emotional expressions) will return later in this chapter, when we consider more recent work in the social psychological tradition.

William James

William James' (1884) definition of emotion ran counter to what he himself acknowledged to be a conventional view (both lay and scientific) of how emotions arise. As he put it, "Our natural way of thinking . . . is that the mental perception of some fact excites the mental affection called the emotion, and that this latter state of mind gives rise to the bodily expression" (p. 189). He went on, "My thesis on the contrary is that *the bodily changes follow directly the PERCEPTION of the exciting fact, and that our feeling of the same changes as they occur IS the emotion*" (pp. 189–190; emphases in original). Thus the common-sense (or "natural") sequence is perceived stimulus → emotion → bodily response, whereas James argued that a perceived stimulus gives rise to a bodily response that is then perceived by the individual, and that this perceived bodily change is the emotion. A key component of James' argument is his notion that exposure to certain kinds of stimulus leads to bodily changes without cognitive mediation: "Every living creature is in fact a sort of lock, whose wards and springs presuppose special forms of key" (1884, p. 191). Thus some types of stimulus have the capacity to elicit physiological changes automatically, thereby creating the opportunity for James to reverse the normal sequence in which mental events would give rise to bodily changes.

Although some commentators (e.g., Dixon, 2003) have argued that James was not the first to argue for a "feeling" theory of emotion, James' formulation of this view is the one that is best known and best remembered. James' theory of emotion as articulated in his 1884 paper attracted a great deal of criticism. At least some of this criticism stemmed from the fusion of James' theory with the theory that was independently developed by Lange (1885/1922), a Danish physiologist. While James' theory placed a dual emphasis on internal (visceral) and external (motor behavior) changes, Lange's emphasis was on visceral change. The resulting "James–Lange" theory of emotion is one that regards emotion as the perception of visceral change. One of the best-known critics of this position was Cannon (e.g., 1927), who argued (among other things) that visceral changes are too slow and too diffuse to be the sources of emotional experience. Moreover, he argued, the artificial induction of the kind of visceral changes that occur in emotion does not evoke an emotion, as shown in Marañón's (1924) pioneering study. As we will see, Cannon's critique of the James–Lange theory set the stage for one of the best-known social psychological theories of emotion, Schachter's (1964) two-factor theory.

Two themes that are central to James' view of emotion that have had a major impact on present-day thinking in emotion

research are (a) the view that afferent feedback from the body plays a role in emotional experience (even if that role is less central than the one accorded to it by James) and (b) the more general notion that emotions are embodied phenomena. The first of these two themes is echoed in modern research on facial and postural feedback (e.g., Strack, Martin, & Stepper, 1988). The second theme is echoed in work on the role played by bodily feedback in guiding decision-making under uncertainty (Damasio, 1994) and in work on the role of embodiment in the processing of emotional information (e.g., Niedenthal, 2007).

Emotion research in the first half of the 20th century

As we have seen, some key reactions to James' theory of emotion were made in the first half of the 20th century. Aside from these responses to James, a conventional view of emotion research in this period is that it was a "Dark Age" for emotion research, in which the rise and dominance of behaviorism meant that there was little or no scope for studying a phenomenon whose defining attribute is subjective experience. This view has been challenged by Gendron and Barrett (2009), who argue that this represents an oversimplification of what took place in the first half of the 20th century. In the early part of the century theorists such as McDougall, Watson, and Allport developed models of emotion. Later there were contributions from Harlow and Stagner, Duffy, and Young.

Gendron and Barrett (2009) classify these and other theorists as belonging to one of three theoretical traditions, which they term "basic emotion," "appraisal theory," and "psychological constructionist." In the basic emotion approach it is assumed that certain kinds of stimuli automatically evoke certain kinds of emotion, and that for these "basic emotions" there is a biological basis for this stimulus–response connection. In the appraisal theory approach emotions are seen as arising from interpretations (appraisals) of the meaning and significance of events by an individual. In the psychological constructionist approach emotions are seen as compounds of more basic psychological processes that are not specific to emotion.

Drawing on Gendron and Barrett's terminology and analysis, we can see that early 20th-century contributions to emotion theory tended to be of the "basic emotion" variety. A well-known example is McDougall (1908/1923), who held that emotions were instincts, and that each kind of emotion has its basis in a biologically based impulse to perform particular actions. McDougall used two principles to determine whether a given emotion is a "primary" (i.e., basic) emotion: First, the emotion or impulse in question has to be shared with other species; second, the emotion or impulse in question is one that is sometimes seen in exaggerated form in humans (this being evidence of its relative independence of other psychological activity). Using these criteria, McDougall identified fear, disgust, wonder, anger, subjection and elation (negative and positive self-feelings, respectively) and tenderness as primary emotions, each associated with a particular impulse or set of impulses. More complex emotions are composites of these

primary emotions, an example being “scorn,” which McDougall regarded as a composite of anger and disgust. As Gendron and Barrett observe, in many ways McDougall’s thinking on emotion can be seen as an elaboration of Darwin’s ideas. Whereas Darwin regarded expressions of emotion as adaptations that are shared by mammalian species, McDougall argued that the causes of emotion are shared by these species.

Although Watson (1919) rejected the value of unobservable constructs such as “instinct,” his definition of emotion emphasizes the observable aspects of instinctive behavior: “An emotion is an hereditary pattern-reaction involving profound changes of the bodily mechanism as a whole, but particularly of the visceral and glandular systems” (1919, p. 165). This notion of “pattern-reaction” is very close to McDougall’s instinctive impulse to behave in a particular way, and implies that the same outward behavior should be seen in the same fixed sequence in the presence of a given emotional stimulus. Watson argued that there are such pattern-reactions for love, anger and fear, and that these would be most evident in infants and small children, before such reactions were subjected to environmental influence. This notion that emotional development is a process by which initially “pure” expressions of emotion are increasingly influenced by environmental factors—the main effect of which is to inhibit the expression of emotion—is a theme evident in much subsequent theorizing.

Allport’s analysis of emotion focused on facial and postural behavior, thereby reinstating the “external” bodily change aspect of James’ theory that had become lost in the amalgamation with Lange’s theory. Internal bodily changes simply differentiate emotions into “pleasant” and “unpleasant” feeling states. Further differentiation is brought about by afferent feedback from the face and body: “afferent impulses from these somatic patterns of response add to the autonomic core of affectivity the characteristic sensory complexes by which one emotion is distinguished from another” (Allport, 1924, p. 92). Allport’s writings on emotion anticipated by several decades later research on facial and postural feedback (e.g., Laird, 1974; Riskind & Gotay, 1982) and on directed facial action (e.g., Ekman, 2007). Another feature of Allport’s work on emotion is that he argued that emotional expressions are functional for the individual now, rather than once having been functional in the lives of our ancestors, as Darwin suggested. Gendron and Barrett (2009) suggest that this functional analysis of facial expression has come to be regarded as “Darwinian,” despite the fact that it differs from Darwin’s argument in important ways.

For reasons that should be clear, Gendron and Barrett (2009) classify McDougall, Watson, and Allport as “basic emotions” theorists. Harlow and Stagner, by contrast, adopted a psychological constructionist approach. In their view emotions are experienced when affective states of valence and arousal are combined with representations of the eliciting stimulus, turning the experience into an intentional one: “If we feel excited without knowing why, we report no emotion, but if we feel excited in a situation calling for attack, we report ‘rage’” (1933, p. 191). They went on: “Descriptively, rage is a state of

unpleasant excitement in a situation calling for attack. If the situation calls for retreat, the emotion is known as fear” (1933, p. 193). Emotions, on this account, are compounds of physiologically rooted feelings of (un)pleasantness and arousal and cognitive interpretations of what is called for by the situation at hand.

Duffy shares with Harlow and Stagner the notion that emotions emerge from the combination of arousal, or activation, with an interpretation of the stimulus situation. Although she is perhaps best known for her assertion that “Emotion has no distinguishing characteristics” (1941, p. 292)—a statement that is sometimes taken to express doubt about the value of the study of emotion—in the same paper she argued that interpretation of the stimulus situation and expectations about how the situation would develop provide a context for the experience of bodily feelings: “Without this characteristic context . . . the individual who experiences visceral changes is likely to be uncertain as to whether or not he is experiencing ‘emotion’” (1941, p. 290).

If Duffy, Harlow, and Stagner represent the psychological constructionist view of emotion, Young is classified by Gendron and Barrett (2009) as an appraisal theorist. This may surprise those who associate Young’s work with the notion that emotion has disorganizing or disrupting effects, but when analyzing the antecedents of emotion Young (1943) argued that “emotions arise from the total psychological situation” (p. 404), and when discussing differences between emotions he argued that “these distinctions are usually drawn in terms of the psychological situation and the individual’s organized response to it” (p. 404). Although it remains unclear how individuals perceive the “total psychological situation,” or how it influences their emotions, these arguments anticipate much of what was subsequently advocated under the rubric of appraisal theory.

Gendron and Barrett’s (2009) point about the “Dark Age” of emotion research is that significant contributions were made to emotion psychology in that era and that there are continuities of thinking between these early-20th-century thinkers and their 19th-century predecessors, on one hand, and their late-20th-century successors, on the other. These continuities are probably more apparent with the benefit of 21st-century hindsight than they were to theorists at the time. One of the reasons that the first half of the 20th century is regarded as the Dark Age of emotion research is that those most closely associated with the renaissance of emotion research in the latter part of the 20th century frequently asserted that psychologists had until then largely neglected the topic of emotion. Although the dominance of behaviorism in academic psychology certainly made it difficult to study the phenomenology of emotion, it is clear from the above that some “Dark Age” psychologists *did* focus on emotion. Although most of their work can best be described as fitting into a “basic emotions” approach to emotion, it is also apparent (with hindsight) that some of this work fits into other theoretical traditions, such as appraisal theory and psychological constructionism.

Emotion research in the second half of the 20th century

The 1960s witnessed major developments in the study of emotion. Under the influence of Silvan Tomkins, Ekman and Izard commenced their separate programs of research on emotion and facial expression. Ekman's program has come to be the most influential example of theory and research in the "basic emotions" tradition. Arnold published her theoretical analysis of the role of appraisal in emotion, stimulating a line of research that developed into the dominant theoretical position in emotion psychology. Schachter and Singer published their experimental study of cognitive and physiological determinants of emotional state, which tested Schachter's two-factor theory of emotion. This is now regarded as one of the key examples of a psychological constructionist approach to emotion. Below I turn to a more detailed discussion of each of these developments.

The "basic emotions" approach

Silvan Tomkins played a key role in the development of this approach. Through his theoretical work (Tomkins, 1962, 1963, 1991, 1992), published over a period of three decades in a four-volume set called *Affect Imagery Consciousness*, and through sheer force of intellect and personality, he influenced two researchers—Paul Ekman and Carroll Izard—who would themselves go on to have a major influence on the field.

Tomkins used the term "affect" to refer to the biological aspects of emotion. He regarded affects as hard-wired and genetically inherited mechanisms, and held that when these mechanisms are triggered they produce a fixed set of biological events, the most important of which is facial expression. Tomkins identified nine affects: enjoyment/joy, interest/excitement, surprise/startle, anger/rage, disgust, "dis smell" (i.e., reaction to bad smell), distress/anguish, fear/terror, and shame/humiliation. Each affect has its own characteristic facial expression and these expressions should—other things being equal—appear in humans of all cultures and races. This is the aspect of Tomkins' work that had a major impact on emotion researchers (but other aspects of his work have been influential in psychiatry and psychotherapy).

As Ekman explained in an interview in January 2004, his meeting with Tomkins was almost accidental:

He and I both submitted a paper to the same journal—mine on body movement; his on the face—at the same time, and the journal editor wrote the both of us and said, "You guys should meet each other." So I went to see him. He was such an exciting person. He was full of ideas and full of insights, and totally ignored by the field of psychology, because he was a theorist. At that time, psychology didn't like theoretical people. But he could also show you a lot of interesting things, and he did some things that were absolutely spectacular.

(Ekman, 2004)

Izard (personal communication) describes his connection with Tomkins in the following way:

I was in the department of psychology at Vanderbilt University in the late 50s when I first started to think about emotions and emotion research. While searching (almost in vain) for empirical papers on emotions I saw an ad in the *American Psychologist* (I think) about Silvan's then 2-volume work on "affect." We started corresponding and soon afterwards I invited him to visit and give some talks. Tomkins thrived on such opportunities (because he had virtually stopped writing) and we had several fruitful visits that culminated in a co-edited volume of invited papers, perhaps the first "modern" book by researchers interested in the topic. At or near the same time, Silvan was visiting Paul Ekman.

Both Izard's (1971, 1972) differential emotions theory and Ekman's (1972) neurocultural theory of emotion owe much to Tomkins' influence.

Izard (1972) described "fundamental emotions" as having "(a) a specific innately determined neural substrate, (b) a characteristic neuromuscular-expressive pattern, and (c) a distinct subjective or phenomenological quality" (p. 2). In its latest version (Izard, 1991), differential emotions theory specifies 11 primary (or "basic") emotions: joy, interest, surprise, anger, sadness, fear, guilt, shyness, shame, disgust, and contempt. Izard's early work (e.g., Izard, 1971) focused on adducing evidence for the distinctiveness and cross-cultural consistency of facial expressions associated with these primary emotions. Izard's later research focused on emotional development. According to differential emotions theory, there is a fundamental coherence between the feeling states and emotional expressions associated with primary emotions during infancy, resulting from the innate links between the neural substrate, the expressive pattern, and the phenomenology. With maturation comes increasing regulation of emotion, and therefore a looser coupling between feeling states and expressive behaviors.

At the heart of Ekman's (1972) neurocultural theory is the notion of a "facial affect program." There is a limited set of such programs, each corresponding to a basic emotion. In the current version of the theory there are seven such emotions: happiness, surprise, sadness, fear, anger, disgust, and contempt. Activation of one of these neural programs triggers both the subjective experience of the emotion in question and patterned physiological and expressive changes. Like Izard, much of Ekman's early research focused on the question of the universality of the facial expressions associated with each of these emotions. This program of research culminated in the well-known Ekman and Friesen (1971) paper in which the authors showed that there was a high degree of agreement in the way that Westerners and members of a preliterate tribe in the highlands of New Guinea labeled still photographs depicting facial expressions of emotion. This finding is generally interpreted as reflecting a species-constant link between emotional experience and facial expression; this link enables observers from widely differing cultural backgrounds to ascribe the same emotional meaning to a given facial expression.

Like Izard, Ekman acknowledged the role played by emotion regulation. To accommodate evidence that members of different cultures show different facial expressions under identical eliciting conditions, Ekman and Friesen (1971; Friesen, 1972) proposed that there are culture-specific “display rules” that modify the relationship between an activated facial affect program and its visible output on the face. As Ekman (1972, p. 216) put it, display rules are “learned habits about controlling the appearance of the face” and they “can and often do intervene between the triggering of the facial muscles by the facial affect program and a visible change of appearance.” The early experimental evidence for the existence and operation of display rules came from a study reported in Friesen’s (1972) PhD dissertation, also described in Ekman’s (1972) chapter. The conventional interpretation of this study’s findings is that Japanese and American college students who viewed a stress-inducing film did not differ in their facial behavior when seeing the film alone but did do so when reviewing the film in the presence of a research assistant from their own culture. In the latter condition American participants displayed more negative affect than did their Japanese counterparts, leading to the conclusion that the Japanese participants masked the negative affect they felt with a “false smile” (Ekman, 1985).

By any standard, the basic emotions approach to studying emotion has been enormously influential. There is today a broad consensus that at least some emotions are expressed in universal ways, particularly in the face, and that this universality reflects the adaptive utility of these facial movements, either for our ancestors or for ourselves. Research on the facial behaviors associated with emotion has been helped by the development of coding schemes for scoring such behavior. Izard (1979; Izard, Huebner, Risser, McGinnes & Dougherty, 1980) developed a system called MAX (Maximally Discriminative Facial Movement Coding System). Ekman and Friesen (1978; Ekman, Friesen & Hager, 2002) developed a system called FACS (Facial Action Coding System). The systems differ in that Izard’s was derived on a theoretical basis; it codes those facial configurations that Izard’s theory predicted should correspond to expressions of primary (and therefore universally recognized) emotions. Ekman and Friesen’s system, by contrast, was developed on an anatomical basis; it codes all facial movements that can in principle be observed. FACS is therefore a more comprehensive system, and perhaps because of this has become a standard tool for measuring facial behavior.

Hand in hand with these methodological tools for studying facial behavior came the development of technologies that greatly assisted their implementation. Video-recording technology supplanted celluloid film; cassette-based video-recording supplanted reel-to-reel recording; digital recorders supplanted analog recorders; and with the arrival of digital recording techniques came the development of comparatively inexpensive video-editing and video-coding software for use with desktop computers. In conjunction with the intellectual interest in studying a facet of emotion that appeared to point to a degree of continuity across species and cultures, these

technological developments undoubtedly helped to stimulate research on facial behavior during emotion.

A further line of evidence in support of the basic emotions view came from research on the link between subjective experience of emotion and facial behavior. An example is the study by Ekman, Friesen, and Ancoli (1980). These investigators used film stimuli to elicit positive and negative emotions in participants whose facial behavior was recorded and later coded using FACS. The findings show that there were significant correlations between FACS codings and self-reported emotion. For example, in the case of the positive film material, the number of times or the length of time that participants showed an upward-turned mouth (in everyday language: a smile; in FACS terms: Action Unit 12) was related to how happy they felt while viewing the film, or predicted which of two pleasant films generated more happiness. Similar findings were reported by Rosenberg and Ekman (1994).

Another feature of the basic emotions approach that helped it to flourish was its fit with developments in affective neuroscience. The notion that some emotions are primary or basic because they have adaptive value is a tenet held by many affective neuroscientists, prominent examples being LeDoux (1998) and Panksepp (1998). On this account, emotions have evolved because they help the organism to deal with fundamental challenges, such as finding food and water, mating, raising offspring, and avoiding predation and other natural hazards. They should therefore be easy to elicit using certain classes of stimulus, and be capable of rapid onset without resource- and time-consuming cognitive mediation. These are issues I will return to below.

Despite the undoubted success of the basic emotions tradition, several of its key propositions and findings have attracted critical scrutiny. For example, the extent to which emotions are expressed in the face in ways that are culturally universal has been questioned by some commentators. Fridlund (1994) and Russell (1994) raised questions about the evidence for the consistency of expression recognition across cultures (see also responses to Russell’s critique by Ekman, 1994, and Izard, 1994). In the wake of these critiques a fresh consensus has emerged in which it is generally acknowledged that there is more variation across cultures in the ways that emotions are expressed and recognized than would be anticipated on the basis of Izard’s and Ekman’s original theoretical positions; on the other hand, there is a great deal more consistency across cultures in these matters than would be expected on the basis of chance or on the basis of a theoretical position arguing for a high level of input from culture-specific learning. Recognition of facial expression of emotion is higher when the judges of the facial expressions belong to the same culture as those whose faces are being judged—the so-called ingroup advantage (Elfenbein & Ambady, 2002a, 2002b)—and this has given rise to the view that there may be “dialects” of emotion expression, just as there are linguistic dialects (Elfenbein & Ambady, 2003).

Another critique of the basic emotions argument concerns the evidence for display rules. In particular, Fridlund (1994) has

argued that it is impossible to determine whether individual or group patterns of facial behavior reflect the operation of a display rule unless there is an independent criterion for determining emotional state. In the Friesen (1972) study referred to earlier, for example, it is possible that the Japanese participants who reviewed the negative film in the presence of a Japanese research assistant experienced less negative affect than did the American participants who reviewed the film in the presence of an American research assistant. In other words, to verify that a display rule is responsible for the observed differences in facial behavior, one needs to establish that the emotional state of the two groups of participants is, on average, similar. This condition is rarely met in research on display rules, including recent work (e.g., Matsumoto, Willingham, & Ollide, 2009).

A third line of criticism leveled at the basic emotions research program concerns the evidence for the relationship between subjective emotion and facial behavior. Some researchers have followed in the footsteps of Ekman et al. (1980) by evoking an emotion in controlled conditions, recording the associated facial behavior, and then examining the strength of the relation between subjective emotion and observable behavior. For example, Fernández-Dols, Sánchez, Carrera, and Ruiz-Belda (1997) used film material to elicit negative emotions, scored participants' facial behaviors and had participants rate their subjective emotions. They found that of the 35 participants who reported a basic emotion, only two showed the predicted facial expression, whereas another three showed a prototypical facial expression that Ekman and Friesen would have predicted for a different basic emotion. In a similar vein, Reisenzein, Bördgen, Holtbernd, and Matz (2006) reported a series of eight experiments in which participants were led to experience surprise. Both self-report and behavioral data suggested that these elicitation procedures were successful, yet surprise expressions were seen in a minority of participants (ranging from 4% to 25%), and the "full-blown" expression of raised brows, eye-widening, and jaw drop was never observed.

In addition to studies raising questions about the closeness of the relation between emotion and facial behavior, other studies have shown that at least some kinds of facial behavior vary systematically with how social the situation is, rather than how emotional the person is feeling. Kraut and Johnston (1979) reported an ethologically inspired study in which they observed people in naturalistic settings and monitored the conditions under which these people smiled. In a series of four studies they found that smiling varied not as a function of the valence of the preceding event but rather as a function of how social the immediate setting was. When people interacted with others they smiled more frequently, regardless of the affective quality of what had just happened. Subsequent theorizing by Fridlund (1994) and empirical research gave further impetus to the view that certain "emotional" expressions vary depending on the "sociality" of the situation, rather than (Fridlund, 1991; Fernández-Dols & Ruiz-Belda, 1995) or as well as (Hess, Banse, & Kappas, 1995; Jakobs, Manstead, & Fischer, 1999) the strength of subjective emotion. Virtually all of this research

has focused on smiling, leaving open the possibility that smiles are especially likely to reflect the sociality of the situation, rather than its emotionality. It is also worth noting that sociality effects are more readily found when the interactants are friends rather than strangers. The argument about whether facial displays during emotional episodes are expressive of emotion or communicative about motives has outlived its usefulness. It is highly likely that faces are both expressive of emotion and communicative about motives, and the task of researchers should be to identify the factors that moderate the relations among emotions, motives and faces. In his review of the relevant literature, Parkinson (2005, p. 307) concluded, "It is no longer sufficient to demonstrate that audiences facilitate or inhibit facial movements under loosely specified circumstances. Rather we should focus on the real time development of facial movements in relation to emerging appraisals, emotions, and others' unfolding responses to them."

The appraisal theory approach

The origin of the appraisal theory approach to emotion in psychology is generally traced to the work of Magda Arnold (1960a, 1960b). As others have argued, this approach to emotion can be seen as part of a much longer tradition, one that is often traced back to Aristotle, Aquinas, Brentano, and Husserl, among others (see Reisenzein, 2006; Reisenzein & Schönplflug, 1992; Roseman & Smith, 2001). Indeed, Arnold acknowledged at least some of these historical influences. She wrote of her own approach, "in substance, this analysis goes back to Aristotle and Thomas Aquinas" (Arnold, 1960a, p. 193). Central to this intellectual tradition is the notion that emotions are intentional; that is, they are always directed toward an object. As Arnold put it, "We are afraid of something, we rejoice over something, we love someone, we are angry at something or someone. Emotion seems to have an object just as sense perception does" (Arnold, 1960a, p. 170).

If emotions are directed towards objects, it follows that there must be some cognition of these objects. Reisenzein (2006) describes this facet of Arnold's theory as assuming that there is a factual belief about the emotion object. For example, I cannot feel happy or sad about a certain state of affairs unless I believe that this state of affairs does (or does not) exist. But such a factual belief is not sufficient to evoke an emotion. In addition, the state of affairs has to be evaluated (i.e., *appraised*) as affecting me in some way. In Arnold's terms, "I know it not only objectively, as it is apart from me, but also that I estimate its relation to me, that I appraise it as desirable or undesirable, valuable or harmful for me" (1960a, p. 171). This is the aspect of Arnold's theory that is best known and most influential, and has been carried forward in every succeeding variant of appraisal theory.

It is also worth noting that Arnold proposed that this process of appraisal is often "direct, immediate, intuitive" (1960a, p. 172), thereby undermining one of the most frequent criticisms leveled at appraisal theory, namely that the process of

evaluating an emotion object appears on the surface to require more time and cognitive resources than are sometimes (at least) available in an emotion-eliciting setting. As Reisenzein (2006) has argued, several other facets of Arnold's theory have gone largely unrecognized by subsequent theorists. Perhaps the most important point is that Arnold specified the cognitive preconditions for several emotions. These preconditions are the fore-runners of what later emotion theorists would call appraisal dimensions, and in Arnold's case they consisted of evaluation of the emotion object as good or bad for oneself, the "presence" versus "absence" of the emotion object, and the perceived ease or difficulty of attaining or avoiding the emotion object. The first of these preconditions is the evaluative belief referred to above. The second refers to both spatial and temporal distance from the object, and is analogous to what modern appraisal theorists call "certainty;" one is more likely to be certain that an emotion object that is "here and now" exists, compared with an emotion object that is spatially or temporally distant. The third precondition refers to what would now be called "coping potential;" a positively evaluated state of affairs that can be readily attained should elicit a different emotion than an equally positive state of affairs that one regards as difficult to attain. Different combinations of these three cognitive preconditions result in different emotions, according to Arnold. Fear, for example, arises when a state of affairs is evaluated negatively, as not yet present, and as difficult to cope with. There are clear parallels here between Arnold's proposals and much subsequent theorizing in the appraisal theory approach.

The theorist who was most obviously influenced by Arnold's theory was Richard Lazarus (e.g., 1966, 1991), who went on to be enormously influential in his own right. Lazarus' early career involved work in the tradition of the "new look" in perception, in which it was shown that factors such as moods and values could influence perception (Bruner, 1951). This shift away from a model of the perceiver as a passive recipient of information towards a model in which the perceiver makes an active contribution to the perceptual process is obviously compatible with appraisal theory, in which the individual's response to an emotional event is regarded as dependent on more than the objective properties of the event.

In his 1966 book, Lazarus wrote, "The concept of appraisal has been persuasively presented by Arnold (1960) as the cognitive determinant of emotion. While Arnold utilizes this concept for all emotions including the positively toned, the concept of appraisal is highly appropriate to our narrower concern with the negatively toned emotions of psychological stress" (p. 52). Thus Lazarus' theory is in many ways a development of Arnold's theory, but adapted (especially in its early version) for the negative contexts with which Lazarus was primarily concerned. Reflecting on this early work on stress, Lazarus (2006, p. 36) wrote, "I began to see that stress was an aspect of a larger set of issues that included the emotions. So I subsequently set about transforming the construct of stress to fit the emotions."

Lazarus distinguished between primary and secondary appraisal. Primary appraisal is essentially the same as Arnold's evaluative belief: the assessment of the relevance of a state of affairs for the individual's goals or motives. Only events that are goal-relevant arouse emotions. Goal-relevant events can be appraised as goal-congruent or goal-incongruent. Goal-congruent appraisals are benign-positive and challenge; goal-incongruent appraisals are harm-loss and threat. The distinction between benign-positive and harm-loss appraisals, on one hand, and challenge and threat appraisals, on the other, is that the former pertain to situations in which the outcome is relatively certain, whereas the latter pertain to situations in which the outcome is relatively uncertain. Lazarus' secondary appraisal is essentially the same as what Arnold called coping potential. In secondary appraisal the individual assesses his or her options and resources for dealing with a state of affairs appraised as threatening. The terms "primary" and "secondary" are slightly misleading, because if individuals have had experience of dealing with similar situations in the past, their secondary appraisal of their coping resources and options may precede the primary appraisal of goal-relevance and goal-congruence.

Lazarus' considerable impact on the development of appraisal theory is largely attributable to the program of empirical work he conducted. In a series of early experimental studies, he and his colleagues sought to manipulate the way in which participants appraised events depicted in potentially stressful films. For example, one film depicted a circumcision-like ritual practiced by an Aboriginal Australian tribe. In the study reported by Speisman, Lazarus, Mordkoff, and Davidson (1964), three voiceover soundtracks were added to the originally silent film. One soundtrack (trauma condition) emphasized the painful aspects of the operations performed with flintstones on the boys' genitalia; another soundtrack (denial condition) emphasized the fact that the ritual was an important rite of passage for the boys and was keenly anticipated by them; a third soundtrack (intellectualization condition) invited the viewer to adopt a detached "scientific" perspective. Heart rate and skin conductance measures showed that the denial and (especially) the intellectualization conditions were successful in attenuating autonomic arousal, relative to the control (no soundtrack) condition, whereas the trauma condition increased arousal. Although the results of experiments like this one were effective in showing that appraisal-like manipulations have an impact on measures of emotion, such studies have their limitations. An obvious limitation concerns external validity: To what extent do the results generalize to real-world experiences of emotion?

This type of objection was addressed later in Lazarus' research program, perhaps most effectively in a study conducted with Folkman (Folkman & Lazarus, 1985). The researchers collected data from college students at three stages of an examination: before the exam, after the exam but before the results were known, and after the results were known. Measures of appraisals, emotions, and ways of coping were taken. Prior to taking the exam, whether students appraised it as a threat or as

a challenge was related systematically to the kinds of anticipatory emotions they reported (e.g., hope versus anxiety) as well as the kinds of coping strategy they reported using (e.g., problem-focused coping versus wishful thinking). Another well-known study of the relations between appraisal and emotion was published by Smith and Ellsworth (1985). They asked students to report on real-life experiences of each of 15 emotions, and then to answer questions about how they had appraised the events in which these emotions were experienced. Different patterns of appraisal were found for the 15 emotions; for example, anger and guilt were both associated with low scores on the pleasantness dimension, but anger was associated with high other-responsibility and guilt with high self-responsibility. Studies such as these demonstrated that consistent appraisal–emotion relations could be found in real-life contexts, but are clearly vulnerable to a different kind of criticism, namely that they fail to demonstrate that differences in appraisal cause differences in emotion (rather than the other way round).

In the 1980s four other influential versions of appraisal theory were published: Roseman (1984), Scherer (1984), Weiner (1985), and Frijda (1986). While sharing many basic assumptions, each approach had its own distinctive features. A distinguishing attribute of Roseman's model is that it attached importance to categorical differences in appraisal. For example, the degree to which an event is appraised as motive-consistent can vary continuously from highly motive-consistent to highly motive-inconsistent. However, the boundary between motive-consistent and motive-inconsistent is not just a point on a continuum in Roseman's model, because it determines whether the resulting emotion is positive or negative. Discrete emotions are products of combinations of categorical appraisal outcomes. (This stands in contrast to Scherer's model, in which appraisal outcomes can vary continuously.) It is the multidimensional combination of these outcomes that corresponds to a particular emotional experience. Categories of emotion are labels used to capture significant ways in which emotional experiences vary. Much of Roseman's subsequent research program has been directed at testing this proposal that combinations of categorical appraisal outcomes yield discrete emotions (e.g., Roseman, Antoniou, & Jose, 1996; Roseman, Spindel, & Jose, 1990).

A distinguishing feature of Scherer's (1984) model is the significance he attaches to the sequence in which appraisal information is gathered. His rationale for proposing a fixed sequence is that some types of appraisal information are simpler in nature and easier to acquire, based as they are on attributes of the stimulus. The novelty and intrinsic pleasantness or unpleasantness of a stimulus are (in that order) the simplest types of appraisal information. Then come assessments of goal conduciveness, coping potential, and compatibility with personal and social norms, again in that order. Much of Scherer's subsequent research program has been directed at testing this proposal concerning the sequence in which appraisal information is acquired (e.g., Grandjean & Scherer, 2008; Scherer, 1999).

A distinguishing feature of Weiner's (1985) theory is the emphasis he gives to causal attribution. This reflects Weiner's longstanding concern with achievement motivation. He argues that in the context of achievement there are three key attributional dimensions: locus, stability, and controllability. A good example of the importance of causal attribution, on this account, is provided by anger and guilt. Whereas both emotions are associated with controllable outcomes, in Weiner's view, anger is directed outward (the causal locus is external) and guilt is directed inward (the causal locus is internal). Weiner's theory has inspired research on a range of phenomena beyond the achievement context, including help-giving (where a key factor shaping sympathetic reactions to another's need for help is the controllability of the need and the other's lack of responsibility for it) and aggression (where a key factor shaping angry reactions to personal harm is the controllability of the harm and the other's responsibility for it). Rudolph, Roesch, Greitemeyer, and Weiner (2004) report a meta-analysis of this work, the results of which are consistent with Weiner's model.

A distinguishing attribute of Frijda's (1986) theory is the importance he attaches to "action readiness," the felt inclination to act (or to refrain from acting) in a particular way that arises from appraisals of emotion-eliciting events. The central role accorded to action readiness in Frijda's theory stems from his functional view of emotion. Emotions are ways of dealing with adaptational problems arising from the individual–environment interaction. States of action readiness are ways of modifying the relation between the individual and the environment. States of action readiness are motivational states, on this account, and are embodied in the marshaling of cognitive and physiological resources to act in particular ways (whether or not the behavior in question is performed). Frijda's own research has provided support for the view that action readiness plays an important role in the emotion process (e.g., Frijda, Kuipers, & ter Schure, 1989; Frijda & Tcherkassof, 1997).

Appraisal theory has come to be the dominant theoretical perspective in emotion research, but it has also come under critical scrutiny. One type of critique concerns the causal relation between appraisal and emotion (see Parkinson, 1997; Parkinson & Manstead, 1992). Lazarus adopted what he himself recognized to be an extreme position on this issue, namely that cognition is both a sufficient and a necessary condition for emotion: "Sufficient means that thoughts are capable of producing emotions; necessary means that emotions cannot occur without some kind of thought" (1991, p. 353). While no theorist would question that thoughts are sufficient conditions for emotion, the notion that thought is a *necessary* condition has come under attack.

Zajonc (1980, 1984) questioned the assumption that affective reactions to a stimulus arise from prior cognitive reactions. Drawing on a range of empirical evidence, including his own research on the mere exposure effect, Zajonc argued that affective responses are independent of and can sometimes precede cognitive responses. Part of the rationale for this position stems from evolutionary considerations: There are presumably

adaptive advantages in having an affective system that can react quickly to impending threat, without “waiting” for a cognitive analysis of the situation (see Öhman & Mineka, 2001). Another aspect of the rationale for the notion of affective primacy concerns ontogeny: It is evident that neonates have the capacity to respond affectively despite the fact that they presumably lack the cognitive skills required to appraise events.

With hindsight it can be seen that what Zajonc meant by “affect” is not the same as what Lazarus and other appraisal theorists mean by “emotion.” Zajonc used the term “preferences” to refer to a class of affective reactions that in his view do not depend on cognitive analysis. In defending appraisal theory from Zajonc’s critique, Lazarus (1984) argued, “In the research Zajonc cites, we do not know whether in expressing a preference (e.g., ‘I like him more’) subjects are expressing an emotion, as indicated by multileveled response criteria, or merely expressing an intellectual choice. If the latter, then preferences must be excluded from the category of the emotions” (p. 125). A consequence of Zajonc’s critique is that appraisal theorists became more specific about what they meant by the term “cognition.” For Zajonc, cognition is postperceptual and involves the processing of information, by which he meant the transformation of sensory information through some sort of “mental work.” For Lazarus, by contrast, an organism’s sensory and perceptual apparatus can ascribe meaning to a stimulus, and thereby furnish it with an appraisal (or “evaluative perception”) of the stimulus’ positive or negative implications for the organism. Appraisal therefore does not depend on conscious, time- and resource-consuming cognitive processing; it can be very rapid and take place outside awareness. A logical extension of this point of view is that appraisal can be an automatic process; indeed, Ekman (2003) has used the term “auto-appraisers” to refer to way in which the evaluative meaning of events is often processed rapidly and effortlessly.

One response to what has come to be known as the “Lazarus–Zajonc debate” comes in the form of a respecification by appraisal theorists of the conditions under which emotions are preceded by appraisals. For example, Leventhal and Scherer (1987) distinguished between three ways in which an emotional stimulus can be processed. At the *sensorimotor* level, the affective response to a stimulus is instinctive, as in a neonate whose face puckers when a bitter solution is placed on the tongue; at the *schematic* level, the individual responds to a stimulus with learned responses that have become automatic, as when the sight of a gun pointing at you immediately evokes fear; at the *conceptual* level the individual reacts to a stimulus with emotional responses that are the product of conscious evaluations of its significance.

Another type of response to the debate is that some appraisal theorists have questioned the degree to which emotions are dependent on prior appraisals of the meaning of events. For example, Frijda (1993) analyzed anger, guilt, and shame experiences and was led to conclude that—even for these emotions that are widely thought to depend on relatively sophisticated appraisals of matters such as responsibility—the evidence

suggests that much of what is held to be *antecedent* to the emotion is in fact informed by and elaborated *during* the emotion. Rather than appraisals and emotions being related to each other in a linear fashion, their relationship can on this account be better conceptualized as reciprocal (see also Berndsen & Manstead, 2007; Lewis, 1996).

A different type of critique leveled at appraisal theory is that it pays insufficient attention to the social context in which an emotion episode unfolds. Parkinson (e.g., 1995, 1996, 1997; Parkinson & Manstead, 1992, 1993) has argued that emotion has its origins in interpersonal dynamics and that its main function is to influence those dynamics. For example, a person strategically expresses an emotion with the intention of eliciting a particular type of response from others (Clark, Pataki, & Carver, 1996). From such a perspective, appraisals play a less central role in the emotion process than they do in classic appraisal theory: “In my view, appraisals represent the message value of emotions, and getting emotional is often a way of conveying this message content to an intended audience—whether this audience is actually present, internalized, or imagined” (Parkinson, 2007, p. 76). Consistent with this view is the notion that appraisals are more open to social influence than many appraisal theorists appear to assume. Manstead and Fischer (2001) have argued that appraisal theory typically fails to acknowledge the ways in which people’s interpretations of emotionally laden events are influenced by the apparent interpretations made by others. Such phenomena are familiar to social psychologists as a result of the pioneering work on bystander intervention in emergency settings conducted by Latané and Darley (1970); a key finding in that research was that when signs of potential emergency occur and multiple bystanders are present, each bystander tends to look at the others for help in interpreting the situation. This is precisely the phenomenon of “social appraisal” described by Manstead and Fischer (2001).

In summary, appraisal theory has flourished in the three decades since 1980. One reason for its success is the intuitive reasonableness of the proposition that emotion is a meaning-based response to external events, and that appraisal is the process of interpreting those events. There can be little doubt that emotions and appraisals are closely connected. More controversial have been the propositions that emotions *always* ensue from cognitive appraisals and that appraisals are evaluative beliefs about events that stem from private analysis of those events.

The psychological constructionist approach

The best-known example of this approach is Stanley Schachter’s (1964) two-factor theory of emotion. Schachter’s theory grew out of his prior work on anxiety and affiliation (Schachter, 1959) in which he found that when anxious, people prefer to be in the company of others who are in the same circumstances. He explained this as reflecting a need to evaluate the appropriateness of feelings of anxiety, a need that could be satisfied

through social comparison. Schachter coupled these findings with the observation that William James' theory could not provide a full account of emotion, for all the reasons identified by Cannon. Schachter nevertheless accepted James' view that physiological change is important to emotion. Where Schachter departed from James' thinking was with respect to the specificity of the physiological changes that accompany emotion.

Drawing on the psychophysiological evidence available at the time, Schachter concluded that the physiological changes that accompany emotion are often quite general in nature, with (for example) increased cardiovascular activity characterizing several different emotions. Rather than physiological changes determining the nature of the emotion that is experienced, Schachter proposed that such changes are a necessary but insufficient condition for the experience of emotion. The other necessary (but also insufficient) condition for emotion was a cognitive explanation for the experienced arousal. If this explanation is emotional in nature, the arousal is labeled and experienced in emotional terms. Thus Schachter argued that the reason why Marañon's (1924) participants did not experience true emotions is that they had a ready-made non-emotional explanation for the arousal they experienced: They knew that they had been injected with adrenaline.

Schachter and Singer (1962) conducted a substantially modified replication of Marañon's study. Participants were injected with epinephrine (a synthetic form of adrenaline) or a placebo, thinking that the injection contained a vitamin called Suproxin. Some of the participants injected with epinephrine were correctly informed about the effects of the injection (these were described as "side-effects" of the vitamin). Others were misinformed or given no information. The critical group of participants for Schachter and Singer were those injected with epinephrine but either misinformed or uninformed about the effects of the injection. These participants should have experienced "unexplained arousal." They would try to account for this arousal in terms of the circumstances in which they found themselves. A third and final manipulation was of these circumstances. Half the participants were exposed to a condition designed to encourage them to explain the arousal as "euphoria." The other half were exposed to a condition designed to encourage them to explain their arousal as "anger." These conditions were created with the help of a confederate whose behaviour was intended to lead participants to interpret their arousal in these emotional terms. The reasoning here is similar in many ways to Manstead and Fischer's (2001) notion of social appraisal: The other person's emotional behavior should lead the individual to interpret the situation in a particular way.

The results of Schachter and Singer's (1962) experiment were for many years regarded as providing good support for two-factor theory. Indeed, *within* the euphoria and anger conditions, there was reasonably compelling support for the two-factor theory prediction that those participants who had a non-emotional explanation for their arousal (because they had been correctly informed about the consequence of the "vitamin" injection) were less affected by the emotional implications of

the confederate's behavior than were their counterparts who were in theory experiencing unexplained arousal. It was not until the publication of an advanced text on attitudes by Zimbardo, Ebbesen, and Maslach (1977) that researchers became more aware of the fact that Schachter and Singer's (1962) experiment did not yield support for the key proposition of two-factor theory, namely that someone experiencing unexplained arousal could be manipulated into quite different emotional states as a function of cognitive circumstances. What Zimbardo and colleagues drew attention to was that the strength and valence of participants' emotional self-reports were quite similar across the euphoria and anger conditions—even for participants who were uninformed or misinformed about the effects of the injection and who should therefore have been particularly "susceptible" to the implications of these different conditions.

A curious feature of two-factor theory is that there have been surprisingly few attempts to test its central proposition. Of the handful of replication attempts, only one (Erdmann & Janke, 1978) has generated support for this central proposition. Two attempted replications (Marshall & Zimbardo, 1979; Maslach, 1979) were published alongside a reply by Schachter and Singer (1979), and rejoinders from the authors (for reviews of the relevant literature, see Manstead & Wagner, 1981, and Reisenzein, 1983). The scarcity of replication attempts can be attributed at least in part to changes over the years in what is regarded as ethically acceptable in research involving human participants. Other factors that are likely to have played a role were the uncritical acceptance of Schachter and Singer's (1962) experiment as providing compelling support for the theory and the absorption of two-factor theory into newly emerging research on attribution processes (Jones & Davis, 1965; Kelley, 1967). The rapidly developing concern with attribution resulted in researchers focusing more closely on the question of whether misattributions for arousal states affected the degree to which people reported affective experiences than on the core issue of whether qualitative aspects of emotion are influenced by the kinds of explanations people make for experienced arousal. Examples of influential early research on the misattribution of arousal are the studies by Nisbett and Schachter (1966), Valins (1967) and Dutton and Aron (1974). This absorption of two-factor theory into mainstream research on social cognition resulted in neglect of what was arguably Schachter's most important insight regarding emotion, namely that emotional events are often ambiguous and that in ambiguous situations we often (consciously or unconsciously) look to others to see what they make of what is happening.

The psychological constructionist approach has recently been given fresh impetus by the emergence of "core affect" theory (Russell, 2003; Russell & Barrett, 1999). In this approach emotion is founded on "core affect," which is a consciously experienced state of pleasure–displeasure and arousal: "At the heart of emotion, mood, and any other emotionally charged event are states experienced as simply feeling good or bad, energized or enervated" (Russell, 2003). This core affect only

transforms into emotion when it is attributed to a cause. Thus core affect in Russell's terms plays a similar role to the role played by unexplained arousal in Schachter's two-factor theory: It is a necessary but insufficient condition for emotion. To turn this core affect into an emotion, it needs at the very least to be linked to a perceived cause, thereby turning it into attributed affect. Thus part of the "psychological construction" involved in producing emotion is the process of causal attribution. However, the resulting psychological state may or may not be a full-blown emotion (for example, it may "only" be a feeling of liking or disliking someone or something). In addition to core and attributed affect, Russell argues that these elements combine with other processes (e.g., categorization) to construct an emotional episode. People draw on existing emotion categories to explain what they observe. "An *emotional episode* is an event that counts as a member of an emotion category, such as that labeled *fear*" (Russell, 2003, p. 151; emphasis in original). Thus "fear" is something constructed from more elementary components, such as core affect, attributed affect, and the emotion category of fear.

Much of Russell's own research has examined what he calls core affect. Some of the most compelling evidence for the concept of core affect comes from developmental research in which it is shown that preschool children's understanding of emotions shifts from broad categories that are similar in structure to core affect to narrower categories that are closer to the differentiations made by adults (e.g., Widen & Russell, 2008). There is also experimental research with adults that is inspired by the core affect model. For example, Lindquist and Barrett (2008) show how adults who underwent an affect induction procedure designed to establish the core affect of negatively valenced high arousal only interpreted events as threatening when they had first been primed with the concept of fear (rather than anger or a neutral prime). Thus the core affect in conjunction with the accessible category of fear led participants to be more risk-averse, which the authors interpret as evidence of fear. These findings are consistent with the view that fear is a mental event that is constructed through the combination of more basic elements of core affect and conceptual knowledge of emotion. Lindquist and Barrett distinguish their theoretical approach from two-factor theory by arguing that core affect is different from undifferentiated autonomic arousal and the psychological construction of core affect as emotion does not arise from social comparison or attribution processes, but from categorization.

To summarize, the psychological constructionist approach to emotion is one that treats emotion as a compound of two or more elements. One element is "primitive," in the sense that it creates a platform for emotion; the other elements are cognitive in character and label or classify the subjective state as an emotional one. After decades of being taken for granted in psychology, two-factor theory has fallen from favor, partly as a result of growing awareness of the lack of empirical support for its central proposition. There is a danger that the distinctively "social" character of two-factor theory will be overlooked as a

result. Core affect theory has gained some momentum but is far from being widely accepted. An interesting implication of the theory, as noted by Russell (2003), is that decomposing emotion into its constituent elements raises the possibility of reconciling seemingly incompatible theories of emotion, the point being that different theories may be addressing different properties of emotion.

Before addressing the question of the functions served by emotions, it is worth reflecting on the rapid pace of change in emotion research in the second half of the 20th century. The "pioneer" emotion theorists of the 1960s (Tomkins, Ekman, Izard; Arnold, Lazarus; Schachter) helped emotion research to achieve a momentum that produced a series of concrete developments. In 1977 the first journal specializing in emotion research, *Motivation and Emotion*, was founded. In 1983 a preconference on emotion was held immediately before the annual meeting of the American Psychological Association (APA) in Anaheim, California. Together with a meeting held in Paris in April 1984, this preconference constituted a significant step in the establishment of the International Society for Research on Emotion (ISRE; www.isre.org), which held its first meeting at Harvard University in June 1985. At the time of writing the society has held 15 meetings in 10 different countries, spanning three continents, and is planning its 16th meeting in an 11th country, Japan. In late 1986 a small group of European researchers established the Consortium for European Research on Emotion (CERE; www.ecsa.ucl.ac.be/cere), an organization that has gone on to hold its own series of general meetings, starting with a meeting in Amsterdam in 2004. In 1987 another specialist journal, *Cognition and Emotion*, was founded, and in 2001 the American Psychological Association established a third specialist journal, *Emotion*. A fourth specialist journal has since been founded, in the shape of the ISRE-sponsored journal, *Emotion Review*, in 2009. Echoing the emotion preconference held in 1983, there is now a regular emotion preconference attached to the annual meetings of the Society for Personality and Social Psychology (SPSP; www.spsp.org/index.html). All in all, there is every reason to believe that emotion research is an aspect of social psychology in particular and psychology more generally that is well established, and served by specialist organizations, scientific meetings, and journals.

What are emotions for?

Having charted the history of three broad lines of thought concerning the nature of emotion, I turn to a history of research on how emotion influences social life. In discussing this research I have deliberately excluded work on the effects of emotion on social cognition, on the grounds that this is discussed elsewhere in this volume. I focus instead on research on the impact of affect and emotion on social behavior. Here the underlying issue is whether emotions can be said to serve functions. With hindsight it is possible to see that after Darwin's early analysis of the functions served by emotions,

the predominant view in psychology in the first half of the 20th century was one in which emotions were regarded as serving *no* useful functions. For example, as noted earlier, Duffy (1941) has often been interpreted as arguing that emotions were simply disruptions of normal psychological functioning. Although one can take issue with such an interpretation, this view fits with a longstanding view in Western philosophy and science that holds that emotions serve no useful functions. Their effects were seen to be chiefly disruptive or disorganizing, working against rational thought. This perspective is bluntly reflected in B. F. Skinner's (1948, p. 92) assertion that "We know that emotions are useless and bad for our peace of mind and blood pressure."

Nesse (1990) argues that a turning-point in thinking about the functionality of emotion came in 1948, when Leeper published a paper in which he argued for the utility of emotions as motivators. With the flowering of emotion research from the 1960s onwards, this view that emotions could be functional (even if they are not always so) was widely adopted. There gradually emerged a broad agreement (if not universal consensus) that emotions can reasonably be viewed as response systems that have been shaped by natural selection because they increase fitness under specific sets of circumstances. A prominent example of this view was published by Plutchik (1980), who argued that there is a small set of genetically determined emotions that are the building blocks of all emotions, and that these emotions are found across species. These emotions have evolved because they help individuals to overcome adaptational problems. The general thesis is that emotions help to prioritize thoughts and behavior in ways that help individuals or groups to deal effectively with their physical and social environments.

A more recent development is that researchers have begun to focus on the *social* functions of emotion. Because these functions are of particular interest to social psychologists, the main focus in the rest of this chapter will be on the impact of emotion on social behavior, and the extent to which this impact can best be understood in social functional terms.

Functional arguments concerning emotion

Keltner and Gross (1999) provided a useful analysis of the concept of "function" in relation to emotions. Drawing on work by Wright (1973) and Cummins (1975), they argued that functions should not be equated with goals, but rather with the consequences of goal-directed action: "Functions are identified in aetiological explanations of the origins and development of the behaviour, trait, or system . . . Functional ascriptions, therefore, refer to the history of a behaviour, trait, or system, as well as its regular consequences that benefit the organism, or . . . the system in which the trait, behaviour, or system is contained" (Keltner & Gross, 1999, p. 469). This means that theorists arguing for a functional analysis of emotion should be able to identify consequences of an emotion that are reliably brought about by the emotion and that are beneficial to the environment and/or the relationship between the individual

and the environment. Moreover, it should be plausible that the nature of the emotion in question was shaped by evolutionary and/or social processes to bring about these beneficial consequences. Anger, for example, is regarded by some theorists as functional in the sense that its expression helps to deter predators, acquire a competitive advantage over sexual rivals, and gain access to food. Other theorists argue that anger is functional because its expression helps to restore justice in social relations; it does so by confronting others who unfairly block the goal attainment of individuals or social groups. On either account it seems plausible that individuals and groups who had or have the capacity to express anger would enjoy an adaptive advantage.

The classic perspective on the functionality of emotion is one that emphasizes the role of emotion in the evolutionary history of the species. On this view, the capacity to experience fear (for example) confers an adaptive advantage on species that have this capacity because it facilitates a repertoire of behaviors, such as fleeing from predators and withdrawal from deadly combat. As Tooby and Cosmides (2008, p. 117) put it:

each emotion evolved to deal with a particular, evolutionarily recurrent situation type . . . Fighting, falling in love, escaping predators, confronting sexual infidelity, experiencing a failure-driven loss in status, responding to the death of a family member, and so on each involved conditions, contingencies, situations, or event types that recurred innumerable times in hominid evolutionary history. Repeated encounters with each kind of situation selected for adaptations that guided information processing, behavior, and the body adaptively through the clusters of conditions, demands, and contingencies characterizing that particular class of situation.

Many prominent emotion theorists in the second half of the 20th century explicitly or implicitly accepted some version of this argument about the evolutionary basis of the functionality of emotion. Ekman (1994), for example, asserted that "Emotions evolved for their adaptive value in dealing with fundamental life tasks" (p. 15). Some version of this view was shared by most of those adopting a "basic emotions" approach to the study of emotion. For example, Izard (1984, p. 18) noted that:

The survival of the individual requires that its systems produce actions (sometimes with great rapidity) that adapt to its environment or ecological niche . . . In early life forms, the function of emotion . . . was to motivate approach and avoidance behaviors that provided nurturance and escape from harm . . . By the time evolutionary processes produced human beings, there were many emotions. Even in young infants we have observed expressive behaviors that signal many different emotions, each having inherently adaptive functions.

Many appraisal theorists also accepted the view that emotions have evolved because of their adaptive value. In Frijda's (1994) approach, for example, emotions are not simply evolved

adaptations to past problems; they continue to serve functions in the here and now: “The function of emotions is to signal events that are relevant to the individual’s concerns, and to motivate behavior to deal with those events” (p. 121). A slightly different take on the functionality of emotion was offered by Scherer (1984), who contrasted the inflexibility of primitive reflexes and fixed action patterns with the relative flexibility afforded by emotion. His point was that emotion “decouples” stimulus and response, and in doing so confers the adaptive advantage of greatly expanding the repertoire of responses available to the individual but at the same time preserving the benefit of speed of response.

Thus emotion theorists of different theoretical persuasions were in broad agreement that emotions evolved because they conferred an adaptive advantage to the individual, and many such theorists argue that emotions serve the same functions now as they did in our ancestral past. They prepare the mind and body to take appropriate action, as in the classic “fight-or-flight” responses that have been linked to anger and fear, respectively. Although there are important differences between theorists with respect to the closeness of the link between emotion and behavior, many functionalist theorists argue that a key adaptational advantage conferred by emotion is that it inclines one to take action that is appropriate to the circumstances. As Frijda (1994, p. 114) put it, “Emotions can roughly be regarded as motivators for the behavior meant to deal with the emotional events. Many emotions have a function in directly dealing with these events. Fear, presumably, motivates actions to protect oneself from the event that caused it, or to prevent the event from actually materializing, or to suppress activity until the event has passed.”

A different perspective on the relation between emotion and action is offered by Baumeister, Vohs, DeWall, and Zhang (2007), who argue that the relation between emotion and behavior is not one of direct causation. Instead, in their view emotion often “pursues” behavior, in the sense that it provides feedback to individuals that then guides *future* behavior by helping them to anticipate how their actions will make them feel. This, they argued, is the function of full-blown emotions. This is not to say that affect (as opposed to emotion) plays no role in directly influencing behavior. Affect, on this account, is the automatized residue of full-blown emotion: “Conscious emotion leaves an affective residue associated with the memory of the situation and behavior that produced the emotion, and when a similar opportunity arises in the future, the affect can be automatically activated (‘lying is bad’) so as to guide behavior” (Baumeister et al., 2007, p. 196). Thus a distinction is drawn between affect, which can directly impact on behavior, and emotion, which influences behavior more indirectly by giving individuals evaluative feedback on the outcomes of their behavior, and helping them to reflect on this behavior and to anticipate the emotional implications of future actions.

Social functions of emotion

The analysis of the emotion–behavior relation offered by Baumeister and colleagues emphasizes the functions served

by emotion at the individual level. However, emotions can also serve functions at the social level. This point was first made systematically by Keltner and Haidt (1999), who examined the ways in which emotion can have beneficial consequences for social systems. They noted that social functional accounts of emotion assume that people have to solve problems of survival by cooperating with others, and that emotions provide a way of coordinating interactions and relationships to deal with these problems. In this sense emotions can be seen as responses that help people to build, maintain, and use social relationships, for the benefit of themselves or the social systems in which they live.

Keltner and Haidt went on to analyze the benefits of emotions to social systems at four levels of analysis: individual, dyadic, group, and cultural. At the individual level, they suggested that these benefits included informing the individual about social events that might call for action (for example, by being the basis for judgments and decisions), and preparing the individual to carry out such action (by focusing attention on relevant stimuli and mobilizing physiological resources). At the dyadic level, the benefits noted by Keltner and Haidt are communicating emotions, intentions, and beliefs to interaction partners (typically through nonverbal behavior), evoking complementary and reciprocal emotions in others (as when expressions of guilt evoke forgiveness), and acting as incentives or deterrents for others’ behaviors (as when smiles and frowns serve to encourage or discourage the behavior of a young child). Benefits at the group level identified by Keltner and Haidt are that emotions (a) help to define group boundaries, for example through the expression of fear or contempt towards nonmembers; (b) help to negotiate status and roles within the group, for example through the expression of deferential emotions towards high-status members; and (c) help group members to resolve group problems, as when shared celebratory behavior helps to strengthen relations among group members at times when group solidarity may be threatened. Finally, Keltner and Haidt noted three benefits at the cultural level. Here emotions can help people to acquire cultural identities (as when disgust is expressed towards those who fail to observe key cultural values); they can also help adults to socialize children into the culture by the use of positive emotions to encourage culturally appropriate behavior and negative emotions to discourage culturally inappropriate behavior; and they can help to sustain cultural ideologies, as when stereotypes about gender differences in emotion help to justify gender differences in status or occupational roles in a culture.

Keltner and Haidt’s analysis of the social functions of emotion was influential not because it reported new research but rather because it integrated existing research findings in a framework that had considerable appeal to social and cultural psychologists. Some commentators (e.g., Parrott, 2001b) sounded a more cautious note by reminding readers that emotional episodes can and do entail some highly *dysfunctional* behaviors. These and related issues are addressed by Fischer and Manstead (2008).

Two classic lines of social psychological research are especially relevant to a social functional analysis of emotion. One focuses on the interpersonal communication of emotion; the other on self-conscious emotions. Work on self-conscious emotions has spilled over into more recent research on intergroup emotion. A further line of work relevant to the social functions of emotion is that on cultural differences in emotion. Below I provide brief histories of significant developments in each of these four lines of research.

Communication of emotion

Experimental studies of emotion communication through nonverbal behavior have a long history in social psychology. Much of the early research used posed expressions of emotion depicted in still photographs; indeed, this was the methodology used in much of the cross-cultural research on facial expression discussed earlier. More directly relevant for our present purposes are studies of the communication of emotion through spontaneous facial behavior, early examples being studies using the slide-viewing paradigm developed by Ross Buck and colleagues (e.g., Buck, Savin, Miller, & Caul, 1972). In this paradigm there are two participants. Participant A views a series of emotionally loaded slides and rates the pleasantness–unpleasantness of his or her emotional reaction to each slide. Participant B is shown a (silent) video image of A’s face while viewing each slide and B has to judge which category of slide A was viewing, and to rate the pleasantness–unpleasantness of A’s emotional reaction to each slide. Thus there are two measures of communication of emotion: a categorization measure, based on correctly identifying the slide category that was viewed by A; and pleasantness, based on the correlation between A’s self-rating and B’s rating of A. Early findings using this paradigm established that receivers could recognize a sender’s emotional reaction to slides above the level that would be expected by chance; and that female dyads achieved higher emotional communication levels than male dyads did. This gender difference could have reflected one or both of two factors: greater female facial expressiveness, or greater female accuracy in decoding others’ faces. Hall (1984) reported a meta-analysis of facial expressiveness in which she found a rather strong tendency for females to be more expressive than males, suggesting that (for Western cultures and for certain emotions, at least—see Hall, Carter, & Horgan, 2000, for a review) greater female expressiveness does play a role in producing the gender difference observed by Buck et al. (1972), among others.

Turning to gender differences in decoding accuracy, there is again rather consistent evidence of female superiority. For example, Rosenthal, Hall, DiMatteo, Rogers, and Archer (1979) reported that females scored higher than males in 80% of 133 US and non-US samples taking the Profile of Nonverbal Sensitivity (PONS) test, a measure of accuracy in decoding emotional cues from the face, voice, and body. In a series

of meta-analyses, Hall (see Hall et al., 2000, for an overview) found a consistent and reliable tendency for females to score higher than males in nonverbal decoding accuracy.

From a social-functional perspective, these gender differences in sending and receiving emotional cues should be associated with gender differences in dyadic relationships; better sending and receiving abilities should benefit women’s relationships. Indeed, there is evidence that women express more intimacy than men do in social interactions (King & Emmons, 1990), that they are more skilled in communicating love to others (Golding, 1990), that they are more confident than men in their own ability to express affection (Blier & Blier-Wilson, 1989), and that they self-disclose more than men so (Dindia & Allen, 1992). Of course, the fact that there appears to be a parallel between gender differences in emotional expressiveness and decoding ability, on one hand, and gender differences in behaviors that are likely to be beneficial to social relationships, on the other, does not mean that the differences in relationship behaviors are due to the differences in emotion communication. Indeed, Alexander and Wood (2000) offered a “social role” account in which differences in the social roles of women and men in Western society call forth the gender differences in emotion communication. To the extent that stereotypes hold that women are more emotionally expressive than men, and to the extent that there are gender differences in societal roles (such as caring for others) that place a premium on emotional expressiveness and sensitivity, women and men’s emotion communication abilities are likely to diverge in the course of sex-role socialization.

A separate but parallel line of research on emotion communication focused on “emotional intelligence.” This construct was first proposed in the scientific literature by Salovey and Mayer (1990). One key element (or “branch”) of emotional intelligence, according to Salovey and Mayer, is “emotional identification, perception and expression.” This includes the ability to express one’s own emotions clearly and the ability to perceive and interpret correctly emotional expressions in others. The construct of emotional intelligence was popularized by Daniel Goleman, who in 1995 published a best-selling book under the title *Emotional Intelligence*. Setting aside the considerable debate that grew up around the conceptualization and measurement of the construct of emotional intelligence, it is worth noting that there is evidence that those scoring higher on a well-known measure of emotional intelligence (the MSCEIT; Mayer, Salovey, Caruso, & Sitarenios, 2003) have been found to have higher quality social interactions with their peers (Lopes et al., 2004; Lopes et al., 2005, Study 1) and to have higher perceived quality of interactions with opposite-sex individuals (Lopes et al., 2005, Study 2). The notion of emotional intelligence incorporates the view that emotions will only be functional to the extent that individuals make appraisals of the situation that are appropriate, and take into account the social implications of their emotions. This helps to address one of the limitations of the notion that emotions serve social functions (Parrott, 2001b).

Self-conscious emotions

Research on self-conscious emotions, such as shame, guilt, and embarrassment, is also consistent with a social-functional perspective. Lewis (1971) published a highly influential analysis of the differences between shame and guilt. Drawing on her clinical experience, Lewis argued that guilty individuals focus on what it is that they have done wrong and how this has harmed others; individuals who are ashamed, by contrast, focus on what the wrongdoing says about them as persons. Lewis argued that guilt, because it focuses on the wrongdoing rather than the self, is likely to lead to actions intended to repair the harm done to others; shame, by contrast, leads to defensive responses, such as hiding or even engaging in hostile behavior towards others. This line of thinking was developed by others, most notably by Tangney (e.g., 1992), who provided empirical support for the view that there are differences in the situational determinants of guilt and shame that are consistent with Lewis' reasoning. Tangney and colleagues (e.g., Tangney, Wagner, Fletcher, & Gramzow, 1992) also examined individual differences in the tendency to experience guilt and shame in relation to wrongdoing, noting that while some individuals are guilt-prone, tending to focus on what it is that they did wrong and how this affected other people, others are shame-prone, tending to focus on what the wrongdoing says about the self and how it exposes this "bad self." In a series of studies, these authors have shown that shame-prone individuals are more likely than their guilt-prone counterparts to score highly on measures of anger and irritation and on measures of indirect expressions of hostility towards others.

Seen from a social-functional perspective, these results suggest that the functions of these two emotions might be different. Although both guilt and shame might serve as deterrents to someone contemplating a misdeed, shame is likely to be elicited in situations where the wrongdoing is more substantial. Because it has a more intense "self-punishment" quality, it is likely that anticipated shame would be a more powerful deterrent than anticipated guilt. A dysfunctional by-product of shame is that it may cause persons who experience shame to act in a hostile manner towards others. As some (e.g., Retzinger, 1987; Scheff, 1987) have noted, this can give rise to a "shame-rage spiral." Guilt, on the other hand, promotes reparation, which has obvious benefits for interpersonal relations. Consistent with this is research reported by Baumeister, Stillwell, and Heatherton (1994, 1995). These researchers asked participants to write about autobiographical events in which they had angered another person and had then experienced guilt or no guilt. Episodes that evoked guilt were ones in which the individual was more likely to have a high regard for the other person, and to see his or her own behavior as selfish. Moreover, the "guilt" accounts were more likely to report changes in behavior that would benefit the relationship, with the guilty person being more likely to have apologized and to have "learned a lesson." This suggests that guilt serves social (relationship enhancing) functions.

Intergroup emotion

The social functionality of guilt is also a theme in research on intergroup emotions, the emotions we experience and express in our roles as members of social groups. Research on intergroup emotion was given a major impetus by the publication of a chapter by Smith (1993). Here he provided a theoretical analysis, which has come to be known as intergroup emotion theory, of prejudice as emotion that explicitly takes account of the extent to which self and target are treated as individuals or as group members. His starting-point was self-categorization theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), which holds that the relative salience of personal and social identity determines whether people see themselves more as individuals or as group members, respectively. A consequence of defining one's identity in terms of a social group is that one will care more about what happens to the group and one will be more motivated to act on the group's behalf. Here lies the significance of SCT for group-based emotion: Self-categorization as a group member should promote the experience of emotions that are driven by appraisals and concerns that are *group*-based. Since 1993 there has been an upsurge of interest in the study of intergroup emotion (see Iyer & Leach, 2008, for a review).

One issue that has proved to be a source of some controversy in intergroup emotion research is the extent to which intergroup guilt is beneficial to the intergroup relationship. This line of research began with a paper by Doosje, Branscombe, Spears, and Manstead (1998). In their first experiment, participants learned that their ingroup had displayed either a high or a low level of bias in these evaluations, and also that their personal level of bias was either high or low. Relatively high levels of collective guilt were found in the condition where the ingroup had acted in a biased way but the individual had not. Thus the critical factor appeared to be whether the ingroup, rather than the individual, had acted in a biased way towards the outgroup. A similar pattern of effects was observed on a measure of the belief that it would be appropriate to compensate the outgroup.

The desire to repair the intergroup relationship by apologizing and/or compensating for ingroup wrongdoing echoes the interpersonal guilt literature. However, in the intergroup domain additional factors are at work that make the relationship between guilt and reparation less straightforward. In the interpersonal domain where guilt is experienced in relation to harm done by the self to a valued other, there is likely to be a greater concern with the other's suffering. In the intergroup domain where guilt is experienced in relation to harm done by the ingroup to an outgroup, there may be less concern with outgroup suffering and more concern with ingroup responsibility. Iyer, Leach, and Crosby (2003) have shown that whether the object of intergroup emotions felt in relation to intergroup inequality is the ingroup or the outgroup makes an important difference to the type of emotion experienced (e.g., guilt versus sympathy) and to action tendencies and intentions associated with the emotions (e.g.,

compensation versus support for affirmative action). One reading of this literature is that intergroup guilt gives rise to as much concern with the discomfort felt by the ingroup as with the suffering experienced by the outgroup (see also Leach, Snider, & Iyer, 2002).

Given the pervasiveness of intergroup conflict and the important roles played by emotion and identity in generating and sustaining such conflict, it seems safe to predict that this relatively new research domain will continue to attract research attention. From a social-functionalist perspective it is evident that emotions that are functional for one group, in terms of enhancing identification with and commitment to the group, may be dysfunctional for intergroup relations. The challenge for societies will be to find an appropriate balance between generating commitment to groups that provide sources of meaning and a sense of belonging, and fostering intergroup trust and respect.

Cultural variation in emotion

Cultures provide individuals and groups with meaning and a sense of belonging by affording them a sense of shared identity. As we saw earlier, there are cultural differences in the recognition of emotions from facial expressions, with a reliable tendency for members of one culture to be better at recognizing emotions when expressed by ingroup members rather than by outgroup members. There are also some cultural differences in the ways that emotional settings are appraised, in the intensity of emotional experience, in the physiological accompaniments of emotion, in efforts to control emotion, and in the consequences of emotion—although (like the cultural differences in recognition of facial expressions) there is also an impressive degree of cross-cultural consistency in the antecedents of emotion and in the ways that emotions are experienced and expressed (Scherer, 1997; Scherer & Wallbott, 1994).

An influential way of making sense of the empirical findings concerning cultural variation in emotion has been in terms of cultural differences in individualism and collectivism (Hofstede, 1980; Triandis, 1972, 1995). This is conceptualized as a dimension: At one end are cultures in which individuals tend to regard themselves and others as independent and autonomous; at the other end are cultures in which individuals see themselves and others as interdependent and belonging to larger groups. Individualistic cultures (broadly speaking: Western and Northern Europe, North America, and Australasia) promote personal agency and autonomy; collectivistic cultures (broadly speaking: Asia, Africa, and Central and South America) attach importance to group goals and interpersonal relations.

It has been argued that these differences in value systems carry implications for notions of self and agency in these different cultures (Markus & Kitayama, 1991), such that members of individualistic cultures tend to have independent self-construals, regarding themselves and others as autonomous beings with a high degree of control over their environment; whereas members of collectivistic cultures tend to have

interdependent self-construals, defining themselves and others primarily in terms of roles and relationships, obligations and responsibilities. In a highly influential paper, Markus and Kitayama (1991) argued that these differences have important implications for the ways in which emotion is experienced and expressed in the two types of culture. For example, emotions linked to individual goal pursuit, such as pride, are more likely to be experienced and expressed in cultures that promote independent self-construals; whereas emotions linked to failure to achieve group goals or to live up to group values, such as shame, are more likely to be experienced and expressed in cultures that promote interdependent self-construals.

Much subsequent research on cultural differences in emotion has focused on the comparison between “Asian” and “European-American” models of emotion (e.g., Bagozzi, Wong, & Yi, 1999; Kitayama, Markus, & Kurokawa, 2000; Mesquita & Karasawa, 2002). One way to characterize the differences between these two cultural models is that in collectivist Asian cultures, the emotions that are consistent with dominant cultural beliefs and values are “socially engaging” emotions, emotions that foster interpersonal harmony and respect; whereas in individualist European-American cultures, the emotions that are consistent with dominant cultural beliefs and values are “socially disengaging” emotions, emotions that foster individual autonomy and achievement (Kitayama, Markus, & Matsumoto, 1995). To the extent that emotions help to promote and sustain core beliefs and values in a culture, they can be seen as serving social functions.

Coda

The history of research on affect and emotion in social psychology has multiple strands. It is not easy to do justice to such a complex and multidimensional history, even in a chapter of this length. Winston Churchill notwithstanding, history is more than “one bloody thing after another.” I have tried to provide a history of those ideas about emotion that command support within social psychology. Those ideas can be summarized as views of emotion that emphasize its biological basis, its basis in cognitive appraisal, and its basis in psychological construction; they can be regarded as ways of answering William James’ (1884) question: What is an emotion? Other themes that have attracted considerable attention in social psychology are the impact of affect and emotion on social behavior and the social functions served by emotions; they can be regarded as ways of answering the question: What are emotions for? The multidimensional nature of emotion makes it highly unlikely that any single perspective on emotion is “correct.” Each of the ideas discussed in this chapter has attracted attention and commanded support for the simple reason that it reflects one facet of the role played by affect and emotion in social life and/or the role of social life in affect and emotion. The challenge for the future will be to integrate these theoretical approaches into a comprehensive framework that specifies the conditions under which one approach provides a more plausible account than another. At this juncture in the

history of research on affect and emotion it seems likely that the distinction between affect and emotion will become a significant theme in social psychological research, with “affects” being rapid in onset, biologically based, minimally dependent on cognition, consistent across cultural settings, and having a direct influence on social behaviors; emotions, by contrast, depend on a degree of cognitive elaboration and are therefore more susceptible to cultural influences, serving social and cultural functions rather than purely biological ones, and exerting an influence on behavior through their impact on goal setting and intention formation.

Note

1. *Affect* and *emotion* are terms that are sometimes used interchangeably in psychology. Here *affect* will be used to denote valenced feeling states that have no clear object; *emotion* will be used to refer to multicomponential states that incorporate feeling and that have an object.

References

- Alexander, M. G., & Wood, W. (2000). Women, men, and positive emotions: A social role interpretation. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 189–210). Cambridge, UK: Cambridge University Press.
- Allport, F. H. (1924). *Social psychology*. New York, NY: Houghton Mifflin.
- Arnold, M. B. (1960a). *Emotion and personality: Vol. 1, Psychological aspects*. New York, NY: Columbia University Press.
- Arnold, M. B. (1960b). *Emotion and personality: Vol. 2, Physiological aspects*. New York, NY: Columbia University Press.
- Bagozzi, R. P., Wong, K. S., & Yi, Y. (1999). The role of culture and gender in the relationship between positive and negative affect. *Cognition and Emotion, 13*, 641–672.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin, 115*, 243–267.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and Applied Social Psychology, 17*, 173–198.
- Baumeister, R. F., Vohs, K. D., DeWall, C. N., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review, 11*, 167–203.
- Berndsen, M., & Manstead, A. S. R. (2007). On the relationship between responsibility and guilt: Antecedent appraisal or elaborated appraisal? *European Journal of Social Psychology, 37*, 774–792.
- Blier, M. J., & Blier-Wilson, L. A. (1989). Gender differences in self-rated emotional expressiveness. *Sex Roles, 21*, 287–295.
- Bruner, J. S. (1951). Personality dynamics and the process of perceiving. In R. R. Blake & G. V. Ramsey (Eds.), *Perception: An approach to personality* (pp. 121–147). New York, NY: Ronald.
- Buck, R., Savin, V., Miller, R. E., and Caul, W. F. (1972). Nonverbal communication of affect in humans. *Journal of Personality and Social Psychology, 23*, 362–371.
- Cannon, W. B. (1927). The James–Lange theory of emotions: A critical examination and an alternative theory. *American Journal of Psychology, 39*, 106–124.

- Clark, M. S., Pataki, S. P., & Carver, V. H. (1996). Some thoughts and findings on self presentation of emotions in relationships. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 247–274). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cummins, R. (1975). Functional analysis. *Journal of Philosophy, 72*, 741–764.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: Putnam.
- Darwin, C. (1998). *The expression of the emotions in man and animals* (3rd ed.). Oxford, UK: Oxford University Press. (First edition published in 1872 by John Murray.)
- Darwin, C. (2009). *The expression of the emotions in man and animals* (2nd ed.). Oxford, UK: Oxford University Press (reprint of second edition, first published in 1890 by John Murray).
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin, 112*, 106–124.
- Dixon, T. (2003). *From passions to emotions: The creation of a secular psychological category*. Cambridge, UK: Cambridge University Press.
- Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilty by association: When one's group has a negative history. *Journal of Personality and Social Psychology, 75*, 872–886.
- Duffy, E. (1941). An explanation of “emotional” phenomena without use of the concept “emotion”. *The General Journal of Psychology, 25*, 283–293.
- Dutton, D. G., & Aron, A. P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of Personality and Social Psychology, 30*, 510–517.
- Ekman, P. (1972). Universals and cultural differences in facial expression of emotions. In J. K. Cole (Ed.), *Nebraska symposium on motivation, 1971* (pp. 207–283). Lincoln, NE: University of Nebraska Press.
- Ekman, P. (1985). *Telling lies: Clues to deceit in the marketplace, marriage, and politics*. New York, NY: Norton.
- Ekman, P. (1994). All emotions are basic. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 15–19). New York, NY: Oxford University Press.
- Ekman, P. (2003). *Emotions revealed*. London, UK: Weidenfeld & Nicolson.
- Ekman, P. (2004). Face to face: The science of reading faces (Conversation with Paul Ekman). Retrieved from <http://globetrotter.berkeley.edu> on January 28, 2010.
- Ekman, P. (2007). Directed facial action: Emotional responses without appraisal. In J. A. Coan & J. J. B. Allen (Eds.), *Handbook of emotion elicitation and assessment* (pp. 47–53). New York, NY: Oxford University Press.
- Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology, 17*, 124–129.
- Ekman, P., & Friesen, W. V. (1978). *The Facial Action Coding System*. Palo Alto, CA: Consulting Psychologists Press.
- Ekman, P., Friesen, W. V., & Ancoli, S. (1980). Facial signs of emotional experience. *Journal of Personality and Social Psychology, 39*, 1125–1134.
- Ekman, P., Friesen, W. V., & Hager, J. C. (2002). *The Facial Action Coding System: The Manual*. Salt Lake City, UT: A Human Face.

- Elfenbein, H. A., & Ambady, N. (2002a). On the universality and cultural specificity of emotion recognition: A meta-analysis. *Psychological Bulletin*, *128*, 205–235.
- Elfenbein, H. A., & Ambady, N. (2002b). Is there an ingroup advantage in emotion recognition? *Psychological Bulletin*, *128*, 243–249.
- Elfenbein, H. A., & Ambady, N. (2003). Universals and cultural differences in recognizing emotions. *Current Directions in Psychological Science*, *12*, 159–164.
- Erdmann, G., & Janke, W. (1978). Interaction between physiological and cognitive determinants of emotions: Experimental studies on Schachter's theory of emotions. *Biological Psychology*, *6*, 61–67.
- Fernández-Dols, J. M., & Ruiz-Belda, M. A. (1995). Are smiles a sign of happiness? Gold medal winners at the Olympic Games. *Journal of Personality and Social Psychology*, *69*, 1113–1119.
- Fernández-Dols, J. M., Sánchez, F., Carrera, P. and Ruiz-Belda, M. A. (1997). Are spontaneous expressions and emotions linked? An experimental test of coherence. *Journal of Nonverbal Behavior*, *21*, 163–177.
- Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. In M. Lewis, J. Haviland, & L. Feldman Barrett (Eds.), *Handbook of emotion* (3rd ed., pp. 456–468). New York, NY: Guilford Press.
- Folkman, S., and Lazarus, R. S., (1985). If it changes it must be a process: Study of emotions and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, *48*, 150–170.
- Fridlund, A. J. (1991). Sociality of solitary smiling: Potentiation by an implicit audience. *Journal of Personality and Social Psychology*, *60*, 229–240.
- Fridlund, A. J. (1994). *Human facial expression: An evolutionary view*. San Diego, CA: Academic Press.
- Friesen, W. V. (1972). *Cultural differences in facial expressions in a social situation: An experimental test of the concept of display rules*. Unpublished doctoral dissertation, University of California, San Francisco.
- Frijda, N. H. (1986). *The emotions*. Cambridge, UK: Cambridge University Press.
- Frijda, N. H. (1993). The place of appraisal in emotion. *Cognition and Emotion*, *7*, 357–387.
- Frijda, N. H. (1994). Emotions are functional, most of the time. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 112–122). New York, NY: Oxford University Press.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, *57*, 212–228.
- Frijda, N. H., & Tcherkassof, A. (1997). Facial expressions as modes of action readiness. In J. A. Russell & J. M. Fernández-Dols (Eds.), *The psychology of facial expression* (pp. 78–102). Cambridge, UK: Cambridge University Press.
- Gendron, M., & Barrett, L. F. (2009). Reconstructing the past: A century of ideas about emotion in psychology. *Emotion Review*, *1*, 316–339.
- Golding, J. M. (1990). Division of household labor, strain, and depressive symptoms among Mexican American and non-Hispanic Whites. *Psychology of Women Quarterly*, *14*, 103–117.
- Grandjean, D., & Scherer, K. R. (2008). Unpacking the cognitive architecture of emotion processes. *Emotion*, *8*, 341–351.
- Hall, J. A. (1984). *Nonverbal sex differences: Communication accuracy and expressive style*. Baltimore, MD: Johns Hopkins University Press.
- Hall, J. A., Carter, J. D., & Horgan, T. G. (2000). Gender differences in the nonverbal communication of emotion. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 97–117). Cambridge, UK: Cambridge University Press.
- Harlow, H. F., & Stagner, R. (1933). Psychology of feelings and emotions: II. Theory of emotions. *Psychological Review*, *40*, 184–195.
- Hess, U., Banse, R., & Kappas, A. (1995). The intensity of facial expression is determined by underlying affective state and social situation. *Journal of Personality and Social Psychology*, *69*, 280–288.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Newbury Park, CA: Sage.
- Iyer, A., & Leach, C. W. (2008). Emotion in inter-group relations. *European Review of Social Psychology*, *19*, 86–125.
- Iyer, A., Leach, C. W., & Crosby, F. J. (2003). White guilt and racial compensation: The benefits and limits of self-focus. *Personality and Social Psychology Bulletin*, *29*, 117–129.
- Izard, C. E. (1971). *The face of emotion*. New York, NY: Appleton-Century-Crofts.
- Izard, C. E. (1972). *Patterns of emotions*. New York, NY: Academic Press.
- Izard, C. E. (1979). *The maximally discriminative facial movement coding system (MAX)*. Newark, DE: University of Delaware Office of Instructional Technology.
- Izard, C. E. (1984). Emotion–cognition relationships and human development. In C. E. Izard, J. Kagan, & R. B. Zajonc (Eds.), *Emotions, cognition, and behavior* (pp. 17–37). New York, NY: Cambridge University Press.
- Izard, C. E. (1991). *The psychology of emotions*. New York, NY: Plenum Press.
- Izard, C. E. (1994). Innate and universal facial expressions: Evidence from developmental and cross-cultural research. *Psychological Bulletin*, *115*, 288–299.
- Izard, C. E., Huebner, R. R., Risser, D., McGinnes, G. C., & Dougherty, L. M. (1980). The young infant's ability to produce discrete emotion expressions. *Developmental Psychology*, *16*, 132–140.
- Jakobs, E., Manstead, A. S. R., & Fischer, A. H. (1999). Social motives and subjective feelings as determinants of facial displays: The case of smiling. *Personality and Social Psychology Bulletin*, *25*, 424–435.
- James, W. (1884). What is an emotion? *Mind*, *19*, 188–205.
- Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 219–266). New York, NY: Academic Press.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15, pp. 192–238). Lincoln, NE: University of Nebraska Press.
- Keltner, D., & Gross, J. J. (1999). Functional accounts of emotion. *Cognition and Emotion*, *13*, 467–480.
- Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition and Emotion*, *13*, 505–521.
- King, L. A., & Emmons, R. A. (1990). Ambivalence over expressing emotion: Physical and psychological correlates. *Journal of Personality and Social Psychology*, *58*, 864–877.
- Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion*, *14*, 93–124.

- Kitayama, S., Markus, H. R., & Matsumoto, H. (1995). A cultural perspective on self-conscious emotions. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 439–464). New York, NY: Guilford Press.
- Kraut, R. E., & Johnston, R. E. (1979). Social and emotional messages of smiling: An ethological approach. *Journal of Personality and Social Psychology, 37*, 1539–1553.
- Laird, J. D. (1974). Self-attribution of emotion: The effects of expressive behavior on the quality of emotional experience. *Journal of Personality and Social Psychology, 29*, 475–486.
- Lange, C. G. (1922). The emotions: A psychophysiological study (I. A. Haupt, Trans.). In K. Dunlap (Ed.), *The emotions* (pp. 33–90). Baltimore, MD: Williams and Wilkins. (Original work published in 1885.)
- Latané, B., & Darley, J. (1970). *The unresponsive bystander: Why doesn't he help?* New York, NY: Appleton-Century-Crofts.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.
- Lazarus, R. S. (1984). On the primacy of cognition. *American Psychologist, 39*, 124–129.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.
- Lazarus, R. S. (2006). *Stress and emotion: A new synthesis*. New York, NY: Springer.
- Leach, C. W., Snider, N., & Iyer, A. (2002). “Poisoning the consciences of the fortunate”: The experience of relative advantage and support for social equality. In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, integration* (pp. 136–163). New York, NY: Cambridge University Press.
- LeDoux, J. E. (1998). Fear and the brain: Where have we been and where are we going? *Biological Psychiatry, 44*, 1129–1238.
- Leeper, R. W. (1948). A motivational theory of emotion to replace “emotion as a disorganized response”. *Psychological Review, 55*, 5–21.
- Leventhal, H., & Scherer, K. (1987). The relationship of emotion to cognition: A functional approach to a semantic controversy. *Cognition and Emotion, 1*, 3–28.
- Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York, NY: International Universities Press.
- Lewis, M. D. (1996). Self-organising cognitive appraisals. *Cognition and Emotion, 10*, 1–25.
- Lindquist, K., & Barrett, L. F. (2008). Constructing emotion: The experience of fear as a conceptual act. *Psychological Science, 19*, 898–903.
- Lopes, P. N., Brackett, M. A., Nezlek, J. B., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin, 30*, 1018–1034.
- Lopes, P. N., Salovey, P., Côté, S., & Beers, M. (2005). Emotion regulation ability and the quality of social interaction. *Emotion, 5*, 113–118.
- Manstead, A. S. R., & Fischer, A. H. (2001). Social appraisal: The social world as object of and influence on appraisal processes. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, research, application* (pp. 221–232). New York, NY: Oxford University Press.
- Manstead, A. S. R., & Wagner, H. L. (1981). Arousal, cognition and emotion: An appraisal of two-factor theory. *Current Psychological Reviews, 1*, 35–54.
- Marañón, G. (1924). Contribution à l'étude de l'action emotive de l'adrénaline [Contribution to the study of the emotive action of adrenalin]. *Revue Française de l'Endocrinologie, 2*, 301–325.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*, 224–253.
- Marshall, G. D., & Zimbardo, P. G. (1979). Affective consequences of inadequately explained physiological arousal. *Journal of Personality and Social Psychology, 37*, 970–988.
- Maslach, C. (1979). Negative emotional biasing of unexplained arousal. *Journal of Personality and Social Psychology, 37*, 953–969.
- Matsumoto, D., Willingham, B., & Ovide, A. (2009). Sequential dynamics of culturally moderated facial expressions of emotion. *Psychological Science, 20*, 1269–1274.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*, 97–105.
- McDougall, W. (1923). *An outline of psychology*. London: Methuen. (Original work published 1908.)
- Mesquita, B., & Karasawa, M. (2002). Different emotional lives. *Cognition and Emotion, 16*, 127–141.
- Nesse, R. M. (1990). Evolutionary explanations of emotions. *Human Nature, 1*, 261–289.
- Niedenthal, P. M. (2007). Embodying emotion. *Science, 316*, 1002–1005.
- Nisbett, R. E., & Schachter, S. (1966). Cognitive manipulation of pain. *Journal of Experimental Social Psychology, 2*, 227–236.
- Öhman, A., & Mineka, S. (2001). Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning. *Psychological Review, 108*, 483–522.
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York, NY: Oxford University Press.
- Parkinson, B. (1995). *Ideas and realities of emotion*. London: Routledge.
- Parkinson, B. (1996). Emotions are social. *British Journal of Psychology, 87*, 663–683.
- Parkinson, B. (1997). Untangling the appraisal–emotion connection. *Personality and Social Psychology Review, 1*, 62–79.
- Parkinson, B. (2005). Do facial movements express emotions or communicate motives? *Personality and Social Psychology Review, 9*, 278–311.
- Parkinson, B., & Manstead, A. S. R. (1992). Appraisal as a cause of emotion. In M. S. Clark (Ed.), *Emotion and social behavior (Review of personality and social psychology, Vol. 13, pp. 122–149)*. Newbury Park, CA: Sage.
- Parkinson, B., & Manstead, A. S. R. (1993). Making sense of emotion in stories and social life. *Cognition and Emotion, 7*, 295–323.
- Parrott, W. G. (2001a). Emotions in social psychology: Volume overview. In W. G. Parrott (Ed.), *Emotions in social psychology* (pp. 1–19). Philadelphia, PA: Psychology Press.
- Parrott, W. G. (2001b). Implications of dysfunctional emotions for understanding how emotions function. *Review of General Psychology, 5*, 180–186.
- Plutchik, R. (1980). *Emotion: A psychoevolutionary synthesis*. New York, NY: Harper & Row.
- Reisenzein, R. (1983). The Schachter theory of emotion: Two decades later. *Psychological Bulletin, 94*, 239–264.
- Reisenzein, R. (2006). Arnold's theory of emotion in historical perspective. *Cognition and Emotion, 20*, 920–951.

- Reisenzein, R., Bördgen, S., Holtbernd, T., & Matz, D. (2006). Evidence for strong dissociation between emotion and facial displays: The case of surprise. *Journal of Personality and Social Psychology, 91*, 295–315.
- Reisenzein, R., & Schönplflug, W. (1992). Stumpf's cognitive-evaluative theory of emotion. *American Psychologist, 47*, 34–45.
- Retzinger, S. R. (1987). Resentment and laughter: Video studies of the shame–rage spiral. In H. B. Lewis (Ed.), *The role of shame in symptom formation* (pp. 151–181). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Riskind, J. H., & Gotay, C. C. (1982). Physical posture: Could it have regulatory or feedback effects on motivation and emotion? *Motivation and Emotion, 6*, 273–298.
- Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In P. Shaver (Ed.), *Emotions, relationships, and health (Review of personality and social psychology, Vol. 5, pp. 11–36)*. Beverly Hills, CA: Sage.
- 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.
- Roseman, I. J., & Smith, C. A. (2001). Appraisal theory: Overview, assumptions, varieties, controversies. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 3–19). Oxford, UK: Oxford University Press.
- Roseman, I. J., Spindel, M. S., & Jose, P. E. (1990). Appraisals of emotion-eliciting events: Testing a theory of discrete emotions. *Journal of Personality and Social Psychology, 59*, 899–915.
- Rosenberg, E. L., & Ekman, P. (1994). Coherence between expressive and experiential systems in emotion. *Cognition and Emotion, 8*, 201–229.
- Rosenthal, R., Hall, J. A., DiMatteo, M. R., Rogers, P. L., & Archer, D. (1979). *Sensitivity to nonverbal communication: The PONS test*. Baltimore, MD: Johns Hopkins University Press.
- Rudolph, U., Roesch, S. C., Greitemeyer, T., & Weiner, B. (2004). A meta-analytic review of help giving and aggression from an attributional perspective: Contributions to a general theory of motivation. *Cognition and Emotion, 18*, 815–848.
- Russell, J. A. (1994). Is there universal recognition of emotion from facial expressions? A review of the cross-cultural studies. *Psychological Bulletin, 115*, 102–141.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review, 110*, 145–172.
- 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.
- Salovey, P. & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185–211.
- Schachter, S. (1959). *The psychology of affiliation*. Stanford, CA: Stanford University Press.
- Schachter, S. (1964). The interaction of cognitive and physiological determinants of emotional state. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 1, pp. 48–81). New York, NY: Academic Press.
- Schachter, S., & Singer, J. E. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review, 69*, 379–399.
- Schachter, S., & Singer, J. E. (1979). Comments on the Maslach and Marshall-Zimbardo experiments. *Journal of Personality and Social Psychology, 37*, 989–995.
- Scheff, T. J. (1987). The shame–rage spiral: A case study of an interminable quarrel. In H. B. Lewis (Ed.), *The role of shame in symptom formation* (pp. 109–149). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Scherer, K. R. (1984). Emotion as a multicomponent process: A model and some cross-cultural data. In P. R. Shaver (Ed.), *Emotions, relationships, and health (Review of personality and social psychology, Vol. 5, pp. 37–63)*. Beverly Hills, CA: Sage.
- Scherer, K. R. (1997). Profiles of emotion-antecedent appraisal: Testing theoretical predictions across cultures. *Cognition and Emotion, 11*, 113–150.
- Scherer, K. R. (1999). On the sequential nature of appraisal processes: Indirect evidence from a recognition task. *Cognition and Emotion, 13*(6), 763–793.
- Scherer, K. R., & Wallbott, H. G. (1994). Evidence for universality and cultural variation of differential emotion response patterning. *Journal of Personality and Social Psychology, 66*, 310–328.
- Scherer, K. R., Wallbott, H. G., & Summerfield, A. B. (1986). *Experiencing emotion: A cross-cultural study*. Cambridge, UK: Cambridge University Press.
- Skinner, B. F. (1948). *Walden two*. Englewood Cliffs, NJ: Prentice Hall.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology, 48*, 813–838.
- Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.
- Speisman, J. C., Lazarus, R. S., Mordkoff, A., & Davison, L. (1964). Experimental reduction of stress based on ego-defense theory. *Journal of Abnormal and Social Psychology, 68*, 367–380.
- Strack, F., Martin, L. L., & Stepper, S. (1988). Inhibiting and facilitating conditions of the human smile: A nonobtrusive test of the facial feedback hypothesis. *Journal of Personality and Social Psychology, 45*, 768–777.
- Stumpf, C. (1899). Über den Begriff der Gemüthsbewegung [On the concept of emotion]. *Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 21*, 47–99.
- Tangney, J. P. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin, 18*, 199–206.
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger. *Journal of Personality and Social Psychology, 62*, 669–675.
- Tomkins, S. S. (1962). *Affect imagery consciousness: Vol. 1. The positive affects*. New York, NY: Springer.
- Tomkins, S. S. (1963). *Affect imagery consciousness: Vol. 2. The negative affects*. New York, NY: Springer.
- Tomkins, S. S. (1991). *Affect, imagery, consciousness: Vol. 3. The negative affects, anger and fear*. New York, NY: Springer.
- Tomkins, S. S. (1992). *Affect, imagery, consciousness: Vol. 4. Cognition: Duplication and transformation of information*. New York, NY: Springer.
- Tooby, J., & Cosmides, L. (2008). The evolutionary psychology of the emotions and their relationship to internal regulatory variables. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of Emotions* (3rd edn., pp. 114–137.) New York, NY: Guilford Press.

- Triandis, H. C. (1972). *The analysis of subjective culture*. New York, NY: Wiley.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.
- Valins, S. (1967). Cognitive effects of false heart-rate feedback. *Journal of Personality and Social Psychology, 4*, 400–408.
- Watson, J. B. (1919). A schematic outline of the emotions. *Psychological Review, 26*, 165–196.
- Weiner, B. (1985). An attributional theory of achievement-related emotion and motivation. *Psychological Review, 29*, 548–573.
- Widen, S. C., & Russell, J. A. (2008). Children acquire emotion categories gradually. *Cognitive Development, 23*, 291–312.
- Wright, L. (1973). Functions. *Philosophical Review, 82*, 139–168.
- Young, P. T. (1943). *Emotion in man and animal: Its nature and relation to attitude and motive*. New York, NY: Wiley.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist, 35*, 151–175.
- Zajonc, R. B. (1984). On the primacy of affect. *American Psychologist, 39*, 124–129.
- Zimbardo, P. G., Ebbesen, E. B., & Maslach, C. (1977). *Influencing attitudes and changing behavior: An introduction to method, theory, and applications of social control and personal power* (2nd ed.). Reading, MA: Addison-Wesley.