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Assimilative and Contrastive Emotional Reactions to Upward and Downward Social Comparisons

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Henry Fleming, the central character of Stephen Crane's (1952/1895) Civil War novel, *The Red Badge of Courage*, eagerly joins the Union army although he knows little about war. Only much later does he realize how ignorant he is about whether he will run when the fighting starts. This uncertainty about himself sets off a disguised but full-scale search for social comparisons until, through the gut check of battle, he can ". . . watch his legs discover their merits and their faults" (Crane, 1952/1895, p. 21). Much of the classic and current social comparison theory would find support in how Fleming uses social comparisons during the several days portrayed in the novel (Suls & Miller, 1977; Suls & Wills, 1991). Festinger (1954) emphasized the role of uncertainty in motivating a person's interest in social comparisons, and it is Fleming's ignorance about his own capacity for bravery that first prompts him to probe for fears among the other soldiers so as ". . . to measure himself by his comrades" (Crane, 1952/1895, p. 21). Even the seemingly objective test of battle is confounded by social comparisons. In an early battle, Fleming panics and runs, but it is the sight of other soldiers turning tail first that induces his behavior, creating in social comparison terms a form of social validation (Cialdini, 1993) that spurs him to ". . . speed toward the rear in great leaps" (Crane, 1952/1895, p. 47).

Perhaps the novel's most striking use of social comparisons, however, is the degree to which the many swings in Fleming's emotions seem determined by how he compares himself with other soldiers. Although he fears that his running from battle proves he is a coward, Fleming can occasionally find brief emotional comfort in noticing that many others ran, often with even greater zeal. He sees a roadway cluttered with fearful, retreating troops, and these downward comparisons produce pleasure rather than pity (e.g., Wills, 1981). But, just as frequently, upward comparisons intrude, creating unpleasant feelings (e.g., Brickman & Bulman, 1977; Salovey & Rodin, 1984). He sees an advancing group of infantry looking proud

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and resolute, quite the opposite of the retreating soldiers he saw earlier. This depresses him, and, as he watches them pass, he grows envious and wishes he could ". . . exchange lives with one of them" (Crane, 1952/1895, p. 69). Perhaps the key theme of the novel is the shame Fleming feels as he begins to squarely address the fact that so many other soldiers actually have their "red badge of courage," whereas he does not. Take away the social comparisons that impinge on Fleming's awareness and there would be little texture or bite to his emotional experience.

Stephen Crane's literary intuitions in *The Red Badge of Courage* make a powerful case for the range, frequency, and consequences of emotional responses to social comparisons. It seems that at every pivotal turn in the novel, social comparisons play a principal role in Fleming's various emotional states. Yet, how accurately do Crane's literary intuitions reflect people's actual affective responses to social comparisons? The general purpose of the chapter is to attempt to map out a way of examining the many possible emotions that might arise from social comparisons. Using insights taken largely from current theoretical and empirical work on social comparison processes, I will try to isolate the social comparison-based emotions that seem most important and prevalent and suggest the factors that can help explain their distinctive qualities.

GENERAL ANALYTIC STRUCTURE

Social Comparison- versus Social Reflection-Based Emotions

The variety of familiar and more subtle emotions resulting, at least in part, from social comparisons is considerable. Thus, mapping the territory is a complex task (e.g., Heider, 1958; Major, Testa, & Bylsma, 1991; Ortony, Clore, & Collins, 1988; Tesser, 1991). I will constrain my analysis to social comparisons directly relevant to a person's important goals, a criterion often assumed necessary for strong emotions to arise (e.g., Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983; Lazarus, 1991; Ortony et al., 1988). In terms of social comparison theory and research, this means that the comparisons will involve someone *similar* on attributes related to the comparison (e.g., Gastorf & Suls, 1978; Goethals & Darley, 1977; Major et al., 1991; Miller, Turnbull, & McFarland, 1988; Wood, 1989) and on comparison domains important and *relevant* to the self (e.g., Major et al., 1991; Salovey & Rodin, 1984; Tesser, 1991). Similarity on comparison-related attributes and high self-relevance appear to enhance both the likelihood of comparison being made and the resulting impact of the comparison on the self (Lockwood & Kunda, 1997). The impact of the comparison on the self links it most directly to emotions.

Constraining this analysis to social comparisons directly relevant to a person's important goals harmonizes well with Tesser's characterization of explicitly social comparison-based emotions. Tesser's (1991) self-evaluation maintenance model (see Chapter 7, this volume) contrasts emotions resulting from social *comparison* processes with those resulting from social *reflection* processes. According to Tesser's model, comparison processes occur when we are confronted with another person's performance on a domain of high relevance to ourselves, particularly when this person is psychologically close. Tesser's intended meaning of closeness is broad, but it incorporates the sense of similarity on comparison-related attributes noted above. Social reflection processes also occur when the other person is psychologically close. However, unlike social comparison processes, the other person's performance is on a domain of *low* relevance to the self.

Social reflection processes represent an important and innovative broadening of social comparison theory's initial casting by Festinger (1954). There is clear evidence that reflection processes do produce emotions, especially when the other person outperforms the self (Brewer & Weber, 1994; Cialdini, Borden, Thome, Walker, Freeman & Sloan, 1976; Tesser, 1988, 1991). Furthermore, reflection emotions do appear to involve some sort of comparison between the self and another person. However, I will restrict my analysis to emotions following most directly from social comparisons.

Direction of Comparison

One familiar and telling distinction to make among types of social comparison-based emotions is that they can differ based on whether the emotion-eliciting comparison is with someone superior or inferior. In other words, these emotions often result from either upward comparisons (superior other) or downward comparisons (inferior other). Research on affective reactions to social comparisons usually can be classified in terms of whether it focuses on one or more of these two directions of comparison (e.g., Buunk & Gibbons, 1997; Suls & Miller, 1977; Suls & Wills, 1991). Clearly, the direction of social comparison has heuristic value for understanding affective reactions, and my analysis will adopt this distinction, as Figure 1 shows.

Desirability for the Self

Another useful distinction among social comparison-based emotions concerns their desirable or undesirable consequences for the self. Initial research on affective reactions to social comparisons focused on negative affective reactions to upward comparisons and positive affective reactions to downward comparisons. However, more recent research indicates that either direction of comparison can have "its ups and downs" (e.g., Buunk, Collins, Taylor, Van Yperen, & Dakof, 1990). Both upward and downward comparisons can be either desirable or undesirable for the self (Brewer & Weber, 1994; Brown, Novick, Lord, & Richards, 1991; Buunk et al., 1990; Buunk & Ybema, 1997; Collins, 1996; Leach, Webster, Smith, Kelso, Brigham, & Garonzik, 2000; Lockwood & Kunda, 1997; Major et al., 1991; Taylor & Lobel, 1989; Tesser, 1988; Wood & VanderZee, 1997). Thus, upward comparisons can produce a broad range of emotions from those that are pleasant experiences, such as inspiration and admiration (e.g., Brickman & Bulman, 1977; Lockwood & Kunda, 1997) to those that are unpleasant, such as envy and resentment (e.g., Crosby, 1976; Folger, 1987; Salovey & Rodin, 1984; Silver & Sabini, 1978; Sullivan, 1953). Downward comparisons can produce another varied set of emotions, from those that are pleasant, such as pride (e.g., Tesser, 1991) and *schadenfreude* (e.g., Smith et al., 1996) to those that are unpleasant, such as worry and pity (e.g., Wood & VanderZee, 1997). As Fig. 1 also indicates, a large part of my analysis will make use of the 2 x 2 descriptive structure defined by considering both the upward or downward direction of the comparison and the desirable or undesirable implications of the comparison for the self.

Desirability for the Other

Another aspect of my analysis will concern the desirable or undesirable implications of the comparison for the other person. Social comparison-based emotions are made more complex by the fact that a social comparison involves the fortunes of not only the self but also

another person. The traditional social comparison perspective emphasizes how knowledge of others' opinions and abilities affects self-evaluations and affective reactions to such self-evaluations. Thus, an analysis of affective reactions to social comparison information could be confined narrowly to examining affect-inducing inferences about the self that follow simply from knowing where one stands compared to other people. However, it is also the case that the relative standing of other people represents outcomes for them to which one can respond with emotion. An upward comparison for the self, in a relative sense, represents a positive outcome (advantage or superiority) for the other person, whereas a downward comparison for the self represents a negative outcome (disadvantage or inferiority). Though created by relative

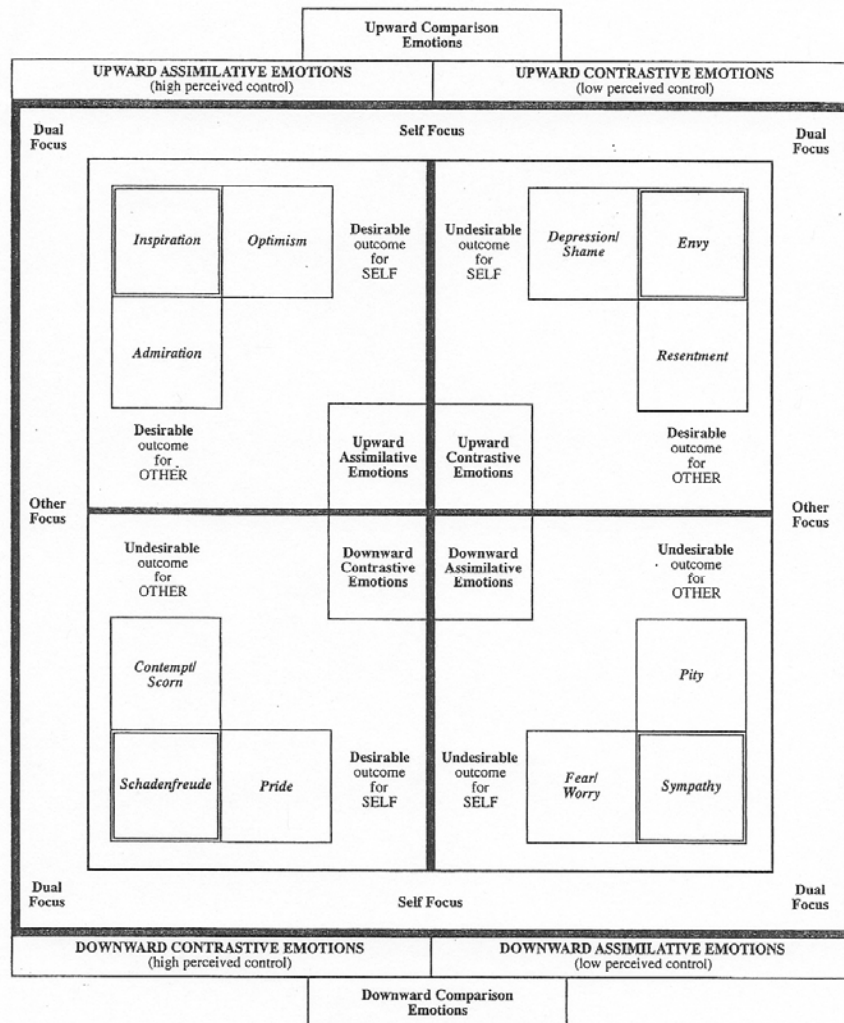


Figure 1. Social comparison-based emotions.

differences, these are outcomes happening to another person about which one can feel positively or negatively.

Affective reactions to the fortunes of others need not involve relativistic considerations, as Heider (1958) and Ortony et al. (1988) point out in their analyses of four basic types of emotional responses to the fortunes of others. These four types entail either pleased or displeased reactions to events assumed to have either desirable or undesirable consequences for another person. For example, according to Ortony et al. (1988), the fact that we like a person could be one reason why a desirable event happening to him or her could make us pleased. Our sense of how deserved the outcome also could be important, deserved outcomes being more pleasing than undeserved ones. Because of our basic value system, we might simply be pleased when "virtue is rewarded . . . and justice prevails" (Ortony et al., 1988, p. 94). The assessment of deservingness might have little or no association with how we compare with the other person. However, Ortony et al. (1988) emphasize that it is more typical for the social comparison context to exert a heavy influence on our reactions to the fortunes of others. Not only will the desirability of another's fortune be determined by whether it is relatively more or less desirable than our own situation, but judgments of liking and deservingness also may have relativistic origins. Especially when the relatively advantaged person is a member of our own social group, there may be a strong tendency to feel resentful over this advantage and to dislike this person because of it, as research on relative deprivation would indicate (e.g., Crosby, 1976; Davis, 1959; Folger, 1987; Runciman, 1966). As Ortony et al. (1988) contend, "People cannot help but evaluate the fortunes of others at least in part with reference to their own situations, this is a perfectly reasonable conclusion" (p. 105).

Again, the task of understanding social comparison-based emotions is complex. Take envy as an example. It is perhaps the prototype of the social comparison-based emotion as it so clearly requires a social comparison for it to take place. We feel envy when the relative good fortune or advantage of another person makes us feel discontent and ill will (e.g., Foster, 1972; Salovey & Rodin, 1984; Silver & Sabini, 1978; Smith, 1991). Why do we feel discontent? It is probably because of the unflattering implications of the comparison for the self in an area that is important to us (e.g., Salovey and Rodin, 1984; Salovey, 1991; Smith, Parrott, Ozer, & Moniz, 1994). But, why do we feel ill will? There may be many reasons (e.g., Montaldi, 1998), but one reason is that the very fact of the advantaged person's superiority can affect our evaluation of him or her. For example, research suggests that invidious comparisons will often create a subjective sense that the envied person's advantage is unfair (Smith et al., 1994), which, in turn, creates feelings of ill will. The key point here is that the sense of injustice seems inspired by the relative advantage enjoyed by the envied person, rather than in response to more objective, absolute criteria.

As Dunning and his colleagues have shown (see Chapter 17, this volume), social judgment is often closely linked to social comparison. Both processes are relational. Dunning distinguishes between social comparison and egocentric comparison. Social comparison involves using information about other people to learn about the self. Egocentric comparison involves using information about the self to make a judgment about others. It is clear that both social comparison and egocentric comparison are ubiquitous phenomena and that they often proceed hand in hand. The situations in which we are motivated to judge ourselves through social comparisons seem to overlap considerably with those situations in which we are motivated to judge others through egocentric comparisons. Thus, an understanding of social comparison-based emotions must take into account the relation basis both for evaluating the self and for evaluating other people.

My analysis will attempt to incorporate both the self- and other-evaluative components of

affective responses to social comparisons. Thus, within the descriptive structure created by considering the direction of the comparison and its desirability for the self, I also include the desirability of the comparison for the other person. In general, an upward comparison will mean desirable implications for the other and a downward comparison will mean undesirable implications for the other, as Fig. 1 suggests.

Focus of Attention

An additional feature to my analysis involves the claim that social comparison-based emotions differ in terms of whether the self or the other person receives the greater focus of attention (Master & Keil, 1987). Emotions typically concern the self in relation to the external world. We feel fear because something in the external world frightens us, and our concern about what will happen to us then creates the emotion. However, as Solomon (1976) argues, it also seems " . . . obvious that the various emotions do not pay equal attention to these 'poles' of subjectivity" (p. 254). Some emotions appear to involve a predominant "outer" focus on the external world. When we feel resentful or angry, for example, we seem largely focused on the other person who is the cause of our anger. Other emotions involve a predominant "inner" focus on the self. In shame, for example, the focus of attention is often on our own inferiority or misconduct. Other people's evaluation of us may provide the impetus for the feeling, but the focus is on the self's inferiority or misconduct. Finally, there may be circumstances in which the focus has more of a dual or "bipolar" quality in which the focus shifts back and forth between the self and the other. Solomon (1976) suggests that love may often fit this class of emotions, as it involves a " . . . certain relationship between oneself and the other" (p. 256).

With social comparison-based emotions, the two "poles" of subjectivity involve the self and another person. On the one hand, these emotions follow from the self-evaluative implications of the comparison. On the other hand, these emotions follow from how we evaluate the other person. As reflected in Fig. 1, I will argue that useful distinctions among social comparison-based emotions can in part be explained by considering the balance of attention given to the self and to the other in a particular emotion-inducing social comparison.

Contrastive versus Assimilative Reactions and Perceived Control

Heider (1958) claimed that social comparisons can often play " . . . role of background or surrounding, which, through the effects of contrast, can serve to enhance *p*'s lot or impair it" (p. 285). He also argued that in other situations assimilation processes explain people's reactions to social comparisons, as when, "the fact that *o* [the other] has *x* makes it seem possible that *p* [the person] can realize it also" (p. 288). This distinction between contrast ["displacement away from the values of contextual stimuli" (Wedell, 1994, p. 1007)] and assimilation ["displacement of judgments toward the contextual standard" (Wedell, 1994, p. 1007)] figures prominently in recent theoretical developments in social comparison theory (e.g., Brewer & Weber, 1994; Buunk & Ybema, 1997; Collins, 1966; Wood & VanderZee, 1997) (see Chapter 9, this volume). I will also adopt this distinction and will try to show that it captures, at least in part, the different processes underlying various social comparison-based emotions. In line with Major and co-workers' (1991) more general model of reactions to social comparisons, I also will argue that perceived control is a key determinant for whether assimilative or contrastive reactions occur.

To summarize, my aim in this chapter is to differentiate social comparison-based emotions using a number of distinctions. I will argue that each emotion can be categorized in terms

of whether it results from an upward or a downward comparison, whether it produces a positive or negative experience for the self and whether it produces a positive or negative experience for the other. I also will suggest that each emotion involves a characteristic focus of attention—either on the self, the other, or a dual focus on the self and the other. In addition, I will claim that each emotion can be broadly characterized as having either an assimilative or contrastive nature, largely following from perceptions of control. Overall, four general types of social comparison-based emotions emerge from this analysis, based on whether the comparison is upward or downward and whether it is assimilative or contrastive in nature. Finally, after describing each general type of emotion and suggesting possible subtypes within each general category, the remainder of the chapter will consider a number of implications of this analysis.

UPWARD COMPARISON EMOTIONS

Upward Contrastive Emotions

As the youth looked at them the black weight of his woe returned to him. He felt that he was regarding a procession of chosen beings. The separation was as great to him as if they had marched with weapons of flame and banners of sunlight. He could never be like them. He could have wept in his longings. (Crane, 1952/1895, p. 68)

In the hours following his running from battle, Fleming tries to deny the enormity of his behavior, but the recurring sight of other soldiers who acted bravely makes this painfully difficult. His reactions share a number of features often found in negative emotional reactions to upward social comparisons. Possibly the defining feature of such comparisons is that they seem linked to *contrastive* judgmental processes (e.g., Brewer & Weber, 1994; Collins, 1996; Heider, 1958). The comparison puts in high relief what one lacks, and the result is impairment. If the domain of comparison is important and the advantaged person is similar on comparison-related attributes, an unpleasant jolt of feeling is likely to follow (e.g., Brickman & Bulman, 1977; Major et al, 1991; Salovey & Rodin, 1984; Tesser, Millar, & Moore, 1988; Wheeler & Miyake, 1992; Wills, 1981).

Why would another person's advantage necessarily bring about a contrastive judgment? As noted earlier, a key explanation appears linked to beliefs about whether the discrepancy is changeable (Aspinwall, 1997; Buunk & Ybema 1997; Collins, 1996; Lockwood & Kunda, 1997; Major et al, 1991; Weiner, 1986; Wood & VanderZee, 1997). Discrepancies that seem unchangeable bring about contrastive reactions. Fleming feels miserable when observing the other soldiers because he believes that "he could never be like them" (Crane, 1952/1895, p. 68). Social comparison researchers have found various ways to convey or demonstrate this point. Major and colleagues, in a theoretical analysis of behavioral, cognitive, and affective reactions to social comparison (Major et al., 1991) and in an empirical demonstration (Testa & Major, 1988), note how *perceived control* . . . alters the meaning and significance of these discrepancies and the comparer's responses to them" (Major et al., 1991, p. 246). Negative affective reactions result when people believe they are unable to close the gap between themselves and the advantaged person.

Research on counterfactual thinking also suggests the importance of perceived control in people's reactions to upward comparisons (see Chapter 18, this volume). An upward comparison, especially with someone who shares comparison-related attributes, should easily create an imagined, better alternative to one's current situation. Typically, negative affect should

result from the contrastive nature of this personified, counterfactual (Folger, 1987; Markman, Gavanski, Sherman, & McMullen, 1993; Roese & Olson, 1995). Negative affect should be especially likely, however, if the counterfactual creates little sense that the discrepancy can be undone (Folger, 1987; McMullen & Markman, 1994; McMullen, Markman, & Gavanski, 1995). McMullen et al. (1995) report three studies, for example, in which upward counterfactuals tended to produce contrast effects. Negative affect resulting from these contrast effects was reduced, however, when participants had a sense of perceived control. McMullen et al. (1995) conclude that *without* an enhanced sense of control, people will " ... experience the full brunt of the negative affect associated with considering how things could have been better" (p. 157).

TYPES OF UPWARD CONTRASTIVE EMOTIONS

Most research on negative affective reactions to upward comparisons has not differentiated among types of negative emotions, at least not in a systematic way. It has only been a recent theme to suggest that such reactions can be either positive or negative (e.g., Buunk et al., 1990; Taylor & Lobel, 1989). However, separate traditions of research show that useful distinctions can be made. Research in relative deprivation focuses on upward social comparisons producing resentment (e.g., Crosby, 1976; Folger, 1987). Another tradition of research links social comparison with depressive affect (e.g., Ahrens & Alloy, 1997; Gilbert, 1992; Swallow & Kuiper, 1992). Still another tradition examines envy (e.g., Salovey & Rodin, 1984; Silver & Sabini, 1978; Smith et al., 1994). Resentment refers to angry feelings resulting from the perception that another's advantage is unfair. Depressive feelings are more likely to result when another's advantages creates a sense of inferiority. Envy, as already noted, is the combination of both discontent and hostility resulting from another person's advantage. Clearly, these are different emotions, despite the overlapping contrastive character that they appear to share. How can one understand the distinctiveness of these emotions?

Self-Focus: Depressive Feelings and Shame

Depressive Feelings. I claimed earlier that social comparison-based emotions might differ in the balance of attention given to the self and to the other. Certain upward contrastive comparisons seem to point toward the self as anchoring the contrast. The other person's superiority stimulates the emotional reaction, but it is the comparison's conspicuous implications for the self that dominate one's thoughts and stir one's feelings. Fleming's reaction to the many soldiers who acted bravely is a good example. His woeful feelings are initiated by comparing himself with these soldiers, but the upshot of these comparisons causes him to dwell on the depressing possibility that he is a coward.

An upward contrastive comparison carries potentially huge evaluative and attributional weight. Not only can it create a sense of inferiority, but it also can localize the cause of inferiority within the self. A contrastive social comparison is a form of low consensus information, which implies an internal attribution for one's disadvantage (e.g., Kelley, 1967, 1972). Self-caused inferiority, especially if it seems stable and irrevocable, is a reliable prescription for lowered self-esteem and associated unpleasant, depressive feelings (e.g., Abramson, Seligman, & Teasdale, 1978; Beck, 1967; Gilbert, 1992; Smith et al., 1994; Weiner, 1986). It may be the internal causal attribution of inferiority that helps bring about the

perceptions of low personal control so characteristic of upward contrastive comparisons. Furthermore, internal causal attributions may make it more likely that the focal point of the comparison will be on the self rather than on the other.

A number of recent models of depression emphasize the role of self-focus in creating and maintaining depressive responses to stressful events (e.g., Pyszczynski & Greenberg, 1987; Wood, Saltzberg, Neale, Stone, & Rachmiel, 1990). Depressive feelings have been found to be correlated with self-focus in both clinical and nonclinical samples (Ingram, Lumry, Cruet, & Seiber, 1987; Ingram & Smith, 1984; Smith & Greenberg, 1981; Smith, Ingram, & Roth, 1985). Inducing an external focus in depressed people appears to reduce their depressive affect (Nix, Watson, Pyszczynski, & Greenberg, 1995) and attenuates their pessimistic views (Pyszczynski, Holt, & Greenberg, 1987). Chronically self-focused people appear to react with more negative affect and dysfunctional negative thoughts in response to failure feedback compared to non-self-focused people (Ingram, Johnson, Bernet, & Dombeck, 1992). Furthermore, self-focus appears to be associated with a style of coping with stress that perpetuates depressive feelings (Wood et al., 1990). Whereas nondepressed people will try to escape self focus after failure (e.g., Gibbons & Wicklund, 1976; Gibbons, 1990), depressed people often seem unable to break free from a chronic self-focusing style (Pyszczynski & Greenberg, 1986, 1987).

There also is evidence from research on asymmetries in self-other judgments that a focus of attention on the self might amplify contrast effects (e.g., Holyoak & Gordon, 1983; Srull & Gaelick, 1983). In Holyoak and Gordon's (1983) research, participants were asked to compare themselves to another person, under conditions in which either the participant or the other person was the focus of the comparison. When the participant was the focus (e.g., "How similar are you to your friend in shyness?"), contrast effects were greater (they perceived themselves as less similar) than when the other person was the focus ("How similar is your friend to you in shyness?"). Presumably, contrastive affective reactions to another person's advantage should also be enhanced by a focus on the self.

Shame. As noted earlier, perhaps the key theme of Crane's novel is the shame that Fleming feels as he contrasts his own cowardly behavior with the bravery of other soldiers. Fleming is lucky that this early behavior went unnoticed, but his shame is so strong that when he later walks amid the other wounded soldiers, he flushes and feels that "his shame could be viewed" (Crane, 1952/1895, p. 59). Shame is another emotion associated with a focus on the self that also can result from an upward contrastive social comparison (e.g., Gilbert, 1992; Lewis, 1971; Solomon, 1976). The research literature on shame highlights a number of possible features of the emotion, but there is general agreement that shame results from the diminishment of the self (e.g., Lewis, 1971; Niedenthal, Tangney, & Gavinski, 1994; Tangney, 1998), often in the imagined or actual eyes of others whose opinions matter (e.g., Ausubel, 1955; Gibbons, 1990; Higgins, 1987; Smith, Webster, & Parrott, 2000). The typical counterfactual bringing about shame is, "If only I were not a certain kind of person" (Niedenthal et al., 1994), consistent with the irrevocable character of an upward contrastive emotion. Shame also appears more likely if the self can be blamed for this diminishment (e.g., Lazarus, 1991; Ortony et al., 1988; Weiner, 1986).

Shame is clearly an underresearched emotion in the social comparison literature and deserves much more attention (e.g., Gilbert, 1998). It arises not only when a person's nonmoral attributes suggest inferiority, such as in the case of an uncontrollable stigma (e.g., Goffman, 1963; Smith et al., 2000), but also when a person's actions fall short of norms of moral

behavior (e.g., Lewis, 1971; Smith et al., 2000; Tangney, 1998). Thus, it can surface in a broad range of circumstances in which social comparisons play an important role. If a person feels shame, it is a likely sign that a self-relevant social comparison is at work.

The connection between shame and the public exposure of inferiority suggests that publicity also may play an important general role in social comparison processes. For example, there is clear evidence in studies using the rank order paradigm that public comparisons have strong effects on comparison choices (Smith & Insko, 1987; Wilson & Benner, 1971). Typically, participants who believe they have scored in the middle rank on an ability test will be most interested in learning how the top-ranked scorer has done (e.g., Wheeler et al., 1969). This choice appears most informative about the meaning of their own score. However, as was particularly evident in the study by Smith and Insko (1987), participants expressed much less interest in learning this score, if doing so required that they actually meet with this top performer to compare scores. Public comparison can bring with it a variety of unpleasant consequences (see also Brickman & Bulman, 1977), and the painful emotion of shame is the common marker of these consequences.

Other Focus: Resentment

Other upward contrastive emotions seem to point to the other as anchoring the contrast. In these situations, the fact of the other's advantage or superiority is the focal point, and resentment, rather than depressive feelings or shame, may be the more likely emotion to result (Solomon, 1976). Resentment occurs when another person's relative advantage or superiority is perceived as undeserved or unjustified (e.g., Folger, 1987; Ortony et al., 1988; Weiner, 1986). The hub of emotion will center around the fact that this other person does not deserve his or her advantage. As Folger (1987) notes, "... resentment is an emotion with an outwardly directed target, an implicit accusation of wrongdoing" (p. 204). The contrastive nature of resentment is suggested by findings indicating that the emotion is associated with a reduced sense of control. Resentment is most likely to occur if the prospects for obtaining an outcome, unfairly enjoyed by another person, seem remote (Folger, Rosenfield, Rheume, & Martin, 1983b; Folger, Rosenfield, & Rheume, 1983a; Folger, Rosenfield, & Robinson, 1983c; Folger, 1987).

A focus on the other person's undeserved advantage has a number of associated features. Whereas the cause of the discrepancy may seem internal in the case of self-focus, it may seem less so in the case of other-focus. It is more the other person's unjust actions and unfair advantages that cause, and are to blame, for one's inferior status rather than one's personal qualities. Also, an external focus should decrease the chances of depressive reactions (e.g., Abramson et al., 1978; Beck, 1967). As noted earlier, one of the reasons that a self-focused style following failure is associated with depression is that this style may prevent the normal coping response of shifting to an external focus (Pyszczynski & Greenberg, 1986, 1987). The perception of unfair advantage may be an especially effective inducement away from self focus as attention shifts to the reason for one's resentment, the other's enjoying unfair advantage. Resentment, when it is based on a flagrant injustice, becomes indignation and would involve even less of a self-focus. As Solomon (1976) argues, indignation "... presents itself as a matter of selfless principle; 'it is not for myself that I am concerned, but rather because of the *principle* of the matter' " (p. 255). Thus, hostility and resentment result rather than depressive feelings and shame.

A focus on the other person also means that the degree to which one likes or dislikes this person now becomes an important factor in determining the precise quality of one's emotions

(Heider, 1958; Ortony et al., 1988). When the focus is on the self, the likeable or dislikeable attributes of the advantaged person may have little effect on one's feelings of inferiority. However, as Ortony et al. (1988) argue, emotions resulting from the fortune of others will be affected by the degree to which the other person is liked. Resentment will probably be mitigated if we like the advantaged person but will be aggravated if we dislike this person. It is harder to resent intensely the advantaged person when the person is modest and unassuming. Arrogance in the unfairly advantaged person can enrage, as research on aggressive responses to various forms of insult indicates (Baron & Richardson, 1994).

Fleming's resentment is usually directed at the high-ranked but incompetent officers who "perch tranquilly" in positions that allow them to avoid the dangers confronting the regular soldiers (Crane, 1952/1895). But he is powerless to change the situation, and this makes him furious. Fleming clearly resents their advantaged position because he believes them unworthy of this advantage and because he realizes that he can do nothing to prevent them from sending him into some foolish battle.

Dual Focus: Envy

Is there an emotion that fits a dual focus on both what the self lacks and what the other possesses? Envy is a possibility. Its experience can be understood as a combination of both a focus on one's own disadvantage and on the other person's advantage. The focus on one's disadvantage brings about a sense of inferiority (Smith et al., 1994), thus producing depressive feelings. The focus on the other's advantage brings about a sense that the advantage is undeserved, thus producing resentment (Smith et al., 1994).

In envy, there may be an inherent shifting back and forth between self and other focus. For one thing, it may be less clear-cut that the other person's advantage is actually undeserved. Heider (1958) claimed that envy arises in part from an "ought" force that requires that people should have equality in outcomes, especially if they appear similar in most other respects. However, the typical advantages enjoyed by the envied person do not violate obvious, societal standards of justice. In fact, certain societal norms require that we "smile at the fortune of another" (Heider, 1958, p. 289) rather than envy the good fortune. Thus, envy-based resentment enjoys only subjective validity and rarely holds up to public scrutiny. If it met more severe, objective standards of injustice, then, the emotion would be resentment proper rather than envy (Smith et al., 1994). Thus, in envy, there are usually insufficient grounds for a heavy focus on the undeserved advantage of the other person. One must at least dwell as often on the fact of one's inferiority, created and highlighted by the other person's advantage.

Envy is a complex emotion (Parrott, 1991). Its dual focus may bring with it the array of possible feelings normally associated with either self or other focus in addition to feelings that might arise from shifting back and forth between self and other focus. Thus, it is not surprising to see some authors note the connections between envy and shame (e.g., Berke, 1988; Gilbert, 1992). There is shame inherent in inferiority and there is shame inherent in feeling hostile toward another person simply because of his or her advantage. Because of its shameful nature, envy is often a private and hidden emotion. Envy-produced hostility manifests itself in indirect ways, such as derogation of the envied person to a third party (Salovey & Rodin, 1984; Silver & Sabini, 1978). Because it involves a focus on the other, envy is also affected by whether the other person is liked or disliked. Although envy may motivate one to find reasons to dislike the advantaged person (to justify ill will), it is probably true that it is more difficult to envy someone we like than someone we dislike.

Upward Assimilative Emotions

The tall soldier, for one, gave him some assurance. This man's serene unconcern dealt him a measure of confidence, for he had known him since childhood, and from his intimate knowledge he did not see how he could be capable of anything that was beyond him. (Crane, 1952/1895, p. 21)

Although most of the initial upward comparisons that Fleming makes lead to unpleasant emotions, not all of them do. When he sees the calmness of this childhood friend, this actually makes him feel greater confidence in himself. This kind of comparison seems linked to assimilative rather than contrastive judgmental processes in which, as noted earlier, there is displacement of judgments toward a contextual standard. The apparent difference between the self and the other person, far from suggesting separation as in the case of contrastive reactions, generates a sense of similarity or newfound self-enhancement (Buunk & Ybema, 1997; Collins, 1996; Lockwood & Kunda, 1997; Wood & VanderZee, 1997). Because the comparison is in a domain important to the self, pleasant feelings result.

How can another's advantage bring about assimilative reactions? In some cases, the perception of similarity in other respects may simply redefine the discrepancy as not representing a discrepancy in the first place (e.g., Collins, 1996; Wheeler, 1966). In effect, the comparison person serves as a proxy (Wheeler, Martin, & Suls, 1997), informing us that we can and will perform similarly. Fleming feels assured when noticing the tall soldier's greater confidence because he believes, based on knowing the soldier since childhood, that they were at least equally capable in many other respects. In other cases, this perception of similarity indicates that the prospects for eliminating the discrepancy are good (e.g., Aspinwall, 1997; Brickman & Bulman, 1977; Buunk & Ybema 1997; Collins, 1996; Lockwood & Kunda, 1997; Major et al., 1991; Meichenbaum, 1971; Seta, 1982; Testa & Major, 1990; Weiner, 1986; Wood & VanderZee, 1997). As with contrastive reactions, perceived control seems important, although perceived control tends to be high rather than low in the case of assimilative reactions. Upward comparisons coupled with high perceived control "... increase self-efficacy and inspire and motivate performance rather than induce helplessness or anger" (Major et al., 1991, p. 247).

TYPES OF UPWARD ASSIMILATIVE EMOTIONS

Research on assimilative affective reactions to upward comparisons is less extensive (e.g., Brickman & Bulman, 1977, experiment 3) than on contrastive affective reactions (e.g., Morse & Gergen, 1970; Salovey & Rodin, 1984; Smith et al., 1996). What this research has shown is that positive emotions of any kind can occur rather than showing that there may be useful distinctions to be made among types of positive emotions (e.g., Buunk et al., 1990). However, as with upward contrastive emotions, self or other focus may help suggest some possibilities.

Self-Focus: Optimistic Feelings

In certain situations, the advantage of the other person may bring about a predominant focus on the positive implications for the self. The comparison person establishes the attractive possible outcome, but once this possible outcome seems within reach, it is this prospect rather than its existing attainment by the other person, that is the focus and that generates pleasant, optimistic feelings (Ortony et al., 1988). This seems to be the case with Fleming when he

examines the tall soldier (Crane, 1952/1895). The comparison he makes with this soldier serves to inform him about his own capacity to cope with battle, and it is this gain in self-knowledge that makes him feel good. One key to the creation of optimistic feelings is that the target person shares similarities on comparison-related attributes other than the comparison dimension itself (Brickman & Bulman, 1977, experiment 3). This similarity allows for the easy construal that the apparent advantage actually represents something possible for the self. If the domain of comparison is important, then it is quite natural for the upward redefining of the self to create pleasant, optimistic feelings (Collins, 1996). The future self is now full of newfound *and* well-founded possibilities (Markus & Nurius, 1986).

The study by Brickman and Bulman (1977, experiment 3) just cited is good evidence for the possibility of optimistic feelings in response to upward comparisons. Participants examined files on past students from their university. Aspects of these files were manipulated to describe a former student who was either from a similar or dissimilar background to the participant and who was either of the same (recent graduate) or previous (graduated "years ago") generation. For participants sharing a similar background to the person described in the file, successful achievements by this person produced greater personal satisfaction when this person was from a previous generation than from the same generation. Assimilation effects presumably occurred when achievements were made by someone of a previous generation because participants could expect similar success for themselves in due course.

Some of the research on the social comparisons made by cancer patients also is supportive (Taylor & Lobel, 1989; Wood & VanderZee, 1997), especially with regard to comparisons based on the important dimension of survival. If people suffering from cancer learn that another person (similar to them in ways that seem relevant to health) has overcome this disease, then this knowledge leads to positive rather than negative reactions.

Other Focus: Admiration

Are there also situations in which the predominant focus of the upward assimilative comparison is on the other person? What kind of emotion would result? Admiration is a good candidate. Admiration occurs when another person arouses a sense of wonder, delight, and pleased approval (*Websters New World Dictionary*, 1982). It is perhaps the prototype of what Ortony et al. (1988) call the *appreciation* emotions, in which one reacts with ". . . approval for some praiseworthy action, the more praiseworthy, the more intense" (p. 145). We feel admiration when someone does something praiseworthy, especially when it is out of the ordinary (thus, an upward comparison). Unlike in the case of resentment, where the advantage seems undeserved, with admiration the advantage seems quite deserved. Also, in contrast to resentment, the other person is probably likeable rather than dislikeable (Ortony et al., 1988), in part because of his or her praiseworthy actions. Extraordinary and praiseworthy actions, performed by a likeable person, attract our positive attention and focus, and this creates admiration.

If a person's actions are so extraordinary, it might seem that this would reduce the sense that the comparer shares a basic similarity to this person; thus, reducing the impact and relevance of the comparison (Festinger, 1954; Mettee & Smith, 1977). This might be especially true if these actions seemed dispositionally caused. However, if the typical source of admiration is an action that one person could hope to emulate, then there should be some sense of similarity preserved.

A study by Lockwood and Kunda (1997, experiment 2) is consistent with these conclusions. In this study, first or fourth year undergraduates read a newspaper article about an

outstanding graduating student. This student not only was very bright but also was involved in numerous volunteer activities. Paralleling the Brickman and Bulman (1977) study just noted, only first-year students found reading this article to enhance their own self-evaluations. But, more to the point, first-year students, when asked to focus on characteristics of the graduating student, also rated him or her more positively than the fourth-year students. Presumably, because first-year students could assume that they had enough time to replicate both the achievements and actions of good will displayed by the graduating student, they may have both raised their own self-evaluations and felt more positively toward this student as well.

Dual Focus: Inspiration

What affective reaction might occur when an upward assimilative comparison creates a dual focus on both the positive implications for the self and the admirable attributes of the other person? Perhaps inspiration matches such a case. Feelings of inspiration, like optimism, imply enhanced expectations for the future and a positive redefining of one's capabilities, created by another person's superior example (e.g., Berger, 1977; Meichenbaum, 1971). However, unlike optimism, they also seem to require that the advantaged person be expressly admired. The praiseworthy actions of the advantaged person suggest a particular road map for how one can model a similar advantage (e.g., Lockwood & Kunda, 1997). Optimism can result from the knowledge that a certain positive outcome can occur, discovered because someone similar in other respects enjoys this outcome. Inspiration suggests that the impressive actions of another person can provide the model for achieving this outcome.

Some of the research on social comparisons among cancer patients may reflect inspiration (Wood & VanderZee, 1997). As noted earlier, as long as an upward comparison suggests positive expectations for the future progress of the disease (because of similarity in relevant attributes), a cancer patient can feel optimistic about his or her own prospects. Inspiration should occur if the other person's praiseworthy coping actions seem to help explain why the disease has taken a healthy course, thus providing a guide for one's own coping efforts.

The study by Lockwood and Kunda (1997) also provides especially good evidence for inspiration. In addition to rating the graduating student described in the newspaper article and providing self-evaluations, participants also responded to open-ended questions about why the student may have been a relevant person for comparison. These responses, in a sense, required that participants think directly how the student, as a comparison other, was relevant to their own goals, thus encouraging a dual focus. These responses were coded for the presence of inspiration, denigration of the comparison process, and similarity to the student on dimensions other than the intended career goal. A remarkable 82% of the first-year participants described themselves as inspired and excited by the comparison (e.g., "I almost want to work superhard so that I can get that award she got ... I just decided that I will go to the ... meeting tomorrow now because it is probably a good idea to get involved like Jennifer did") compared to 6% of the fourth-year participants. Also, only 6% of the first-year participants denigrated the comparison process (e.g., "you can't compare 'success' between any two people on the planet because we are all different and successful in our own right") compared to 50% of the fourth-year participants. Finally, 53% of the first-year participants noted similarities they shared with the student (e.g., "She seems very similar to me " She also participates in activities other than academic related like myself. Similarly, I like to help those in need") compared to only 19% of the fourth-year participants. Lockwood and Kunda suggest that the first-year participants, unlike fourth-year participants, could expect to attain the accomplishment of the graduating

student by the time they themselves graduated. Therefore, similarities between this student and themselves were highlighted, and the comparison process was embraced as means of inspiring them to follow this person's lead.

DOWNWARD COMPARISON EMOTIONS

Downward Contrastive Emotions

His friend at his side seemed suffering great shame. As he contemplated him, the youth felt his heart grow more strong and stout. He had never been compelled to blush in such a manner for his acts; he was an individual of extraordinary virtues. (Crane, 1952/1895, p. 92)

Fortunately for Fleming, no survivors detected his early cowardice. Later, he does act bravely, which allows him to slowly rebuild a good feeling about himself. He also compares himself to others whose shameful actions did *not* escape public notice. Typically, these comparisons provide easy opportunities for self-enhancement and bring him pleasure. This type of comparison seems to have a contrastive character, but downward rather than upward in direction (e.g., Gibbons & Gerrard, 1991; Wills, 1981). In such cases, the disadvantage of another person creates a background that highlights one's own advantage rather than disadvantage (Heider, 1958) or reveals superiority previously unnoticed. The result is pleasing.

As with other comparison-based emotions, the perception of control over the discrepancy appears to be a key predictor of contrastive reactions. However, unlike with upward comparisons of a contrastive tenor, one feels a high rather than low sense of control. Whereas with upward contrastive comparisons one's inferiority seems a stable unalterable state, with downward contrastive comparisons one's superiority seems a stable and controllable state (Major et al., 1991). In the example above, Fleming could look back on his own behavior and see no instances of the childish panic and blushing like that displayed by his friend. Fleming believed that he had never, would never, behave quite in this way, and so the difference between himself and his friend seemed ironclad, thus building a more positive and pleasing sense of himself.

TYPES OF DOWNWARD CONTRASTIVE EMOTIONS

Useful distinctions also can be made among types of downward contrastive emotions, although research on these distinctions is particularly sparse (Ortony et al., 1988; Wills, 1991). As with upward comparison emotions, social comparison researchers examining specific types of emotions have focused more on demonstrating either generally positive or negative reactions than on distinguishing types of emotions within each general category. Thinking in terms of self and other focus may suggest possibilities here as well.

Self-Focus: Pride

Some downward contrastive comparisons may involve the self as the focal point of the comparison. The other person's disadvantage induces the comparison, but the direct implications for the self receive one's main attention. This may be especially likely to occur if a positive internal characteristic seems to cause the discrepancy. In terms of self-evaluation and causal inferences, the processes may be similar to upward contrastive comparisons, except that

the conclusions are positive rather than negative for the self. Pride is perhaps the best emotion term to characterize the pleasant feelings that result (Major et al., 1991; Tesser, 1991; Weiner, 1986). Fleming's reaction to his shame-ridden friend appears to be of this type. This downward comparison allows Fleming his first bit of reclaiming of the positive identity that had been threatened by his cowardly behavior the previous day. Indeed, immediately after this incident he imagines the now-reasonable prospect of his returning home a hero to boast about his experience.

The role of publicity in social comparison-based emotions was noted earlier. Shame was an obvious example. Publicity also may play an important role in social comparison-based pride. Just as our inferior, blameworthy attributes create less shame if they are kept private, our superior praiseworthy attributes create greater pride if they are made public (Webster, Weeter, & Smith, 2000). Near the end of the novel, Fleming's bravery arouses in him his deepest feelings of pride. These feelings are especially intense because his bravery is witnessed by many others. When the fighting is over, he reflects on his public deeds in his mind's eye and finds deep satisfaction in studying these "guilted images of memory."

Other Focus: Contempt-Scorn

The further removed Fleming is from his early cowardice, the more his confidence is renewed. One way he achieves this is to distance himself from other soldiers who seemed weak and timid compared to himself (e.g., Gibbons & Gerrard, 1991). He allows his thoughts to dwell on how others had also run with particular terror. Whereas he had escaped the earlier battle with his dignity intact, these other soldiers were weak men who only deserved his "scorn." In these cases, Fleming's reactions are clearly contrastive in nature. And, the implications for his own self-evaluation are usually part of his thinking. But, the source of his emotional reactions seems to be the perceived inferiority of other people. Emotions that we label contempt and scorn fit this situation.

Contempt and scorn involve feelings toward someone whom one considers low, worthless, or beneath notice (*Websters New World Dictionary*, 1982). Ortony et al. (1988) characterize these types of emotions as *reproach* emotions in which one disapproves of someone else's blameworthy action. Contempt and scorn do not require a social comparison. One could reproach another person simply because he or she has violated a basic social norm without regard to how this person's behavior compares to one's own behavior (Ortony et al., 1988). However, there often seems a clear sense in which these emotions follow a perception that another person is inferior to the self in some important way. Furthermore, this person's inferiority seems deserved because of his or her blameworthy actions. As with other emotions resulting from a focus on the other, liking and disliking also seem important in contempt and scorn, as it is much easier to feel this way for people we dislike (Heider, 1958; Ortony et al., 1988). And, contemptible actions probably breed disliking in turn.

It is even possible to feel contempt for people who are our superior in certain important ways, if they are "contemptible" people. The perception of such moral inferiority may become a means of coping with this superiority (Montaldi, 1998), as research and theory on active downward comparisons might suggest (e.g., Gibbons & Gerrard, 1991; Wills, 1981). Active downward comparisons involve a more purposeful and selective focus on the real or imagined inferior attributes of another person. Possibly, such perceptions are especially effective for coping with another's superiority because they shift the focus away from one's own inferiority. Instead, the apparent moral inferiority of this person holds center stage. Also, like Fleming, people are capable of getting considerable pleasure out of heaping scorn on

others, perhaps most readily when their self-esteem could do with a boost (Gibbons & Gerrard, 1991; Wills, 1981).

Dual Focus: *Schadenfreude*

Is there a downward contrastive emotion following from a dual focus? The pleasure resulting from recognizing one's superiority may sometimes come evenly blended with the contempt derived from noticing the blameworthy inferiority of the other person. Emotion terms are scarce for this type of situation (Ortony et al., 1988), but one possibility is *schadenfreude*, pleasure at the misfortunes of others (Brigham, Kelso, Jackson, & Smith, 1997; Heider, 1958; Smith et al., 1996). In the case of pride, the other person's disadvantage establishes one's superiority, but there is little sense that one is pleased by the other person's disadvantage per se. With contempt, one may receive a benefit to the self from noticing the other's contemptible actions, but this benefit is not the salient feature of the emotion. *Schadenfreude*, however, seems to involve both features. The self-enhancing aspect of the downward comparison provides the pleasure (Brigham et al., 1997), and the apparently contemptible aspects of the person may produce the malicious edge that also seems part of the emotion. *Schadenfreude* is clearly part of Fleming's repertoire of emotions. As mentioned earlier, he felt pleasure rather than pity when he witnessed a group of fearful, retreating soldiers. Part of this pleasure had a scornful flavor. As they passed, he noted to himself that they reassembled "soft, ungainly animals" (Crane, 1952/1895, p. 68). Another part of his pleasure followed from self enhancement, as the sight of these soldiers let him conclude that "perhaps, he was not so bad after all" (Crane, 1952/1895, p. 68).

Downward Assimilative Emotions

The battle reflection that shone for an instant in the faces on the mad current made the youth feel that forceful hands from heaven would not have been able to have held him in place if he could have got intelligent control of his legs. (Crane, 1952/1895, p. 39)

When Fleming sees the fearful retreating troops *after* his own cowardly actions, he feels *schadenfreude*. However, much earlier in the novel, *before* he has experienced battle, he is fraught with uncertainty about whether he will run, and so he has a very different reaction to a similar sight. He sees the chaotic stampede of retreating soldiers, and this makes him worry about how he will react. He fears that "composite monster" of battle will cause him to " ... run better than the best of them" (Crane, 1952/1895, p. 39), as indeed it does. Untested as he was and seeing no obvious differences between these men and himself, Fleming found it difficult to conclude that he would react much differently. This type of reaction can be described as generally *assimilative*, but, unlike its upward counterpart, the implications are *negative* rather than *positive* for the self. As Heider (1958) phrases it, ". . . with the reality of *o's* [the other's] lot the possibility of *p's* [the person's] is given . . . *a's* misfortune brings the possibility to *p's* mind that he [or she] also might suffer" (p. 288). The comparison between the self and the other, rather than suggesting contrast, creates a sense of impending similarity in fate (e.g., Aspinwall, 1997; Brickman & Bulman, 1977; Brown & Inouye, 1978; Buunk & Ybema, 1997; Collins, 1996; Gibbons & Gerrard, 1991; Wood & VanderZee, 1997).

Once again, expectations about whether one will become like the disadvantaged person, based on one's sense of control, appear especially important in understanding such assimilative reactions. Whereas downward comparisons produce contrast effects when perceived

control is high, when perceived control is low the uninviting possibilities produce assimilative effects (e.g., Major et al., 1991; Wood & VanderZee, 1997).

TYPES OF DOWNWARD ASSIMILATIVE EMOTIONS

What useful distinctions can be made among types of downward assimilative emotions? Little theory and research have examined this question. Until recently, the major focus of research on downward comparisons has been on their beneficial contrastive effects. As noted above, the more recent research has involved demonstrating that the effects can be generally either positive or negative. Examining the implications of self versus other focus may suggest possibilities here as well.

Self-Focus: Worry and Fear

Fleming's realization that he probably will run when confronted by battle (made evident by seeing the other fearful soldiers) is an example of a downward assimilative comparison, in which the focus of the comparison seems to be on the negative implications for the self. In such cases, the other person establishes the negative possible outcome, but it is the prospect of a similar outcome for the self, rather than its unfortunate attainment by the other person, that anchors one's thoughts and generates negative feelings. What labels do we have for such feelings? They seem to fit the category of fear or anxiety emotions in which one is upset about the prospect of an undesirable event (Lazarus, 1991; Ortony et al., 1988). Certainly such emotions fit the examples emerging from the research on downward comparisons made by cancer patients (Taylor & Lobel, 1989), in particular those that involve the domain of actual physical condition as opposed to coping behavior (Wood & VanderZee, 1997).

The fear and worry resulting from a downward assimilative comparison may have uniquely powerful qualities. Linking the negative outcome to a specific person, especially someone similar in other key respects, brings the negative prospects close to home. When Fleming first joined the army, he felt superior to his school friends who had to remain at home. But, this view of things dissipated soon enough when he found himself near the battle lines and he sees his first dead soldier. At this sight he assumed ". . . the demeanor of one who knows he is doomed" (Crane, 1952/1895, p. 32). People are often unrealistically optimistic in assessing their relative risk for various negative outcomes (e.g., Weinstein, 1980). However, learning that someone very similar to ourselves has suffered a negative outcome may effectively shake us free from excessive forms of biased thinking. For example, in a series of studies by Alicke, Klotz, Breitenbecher, Yurak, and Vredenburg (1995), unrealistic optimism was systematically reduced as the target of comparison became more individuated; that is, when participants compared themselves with an actual person rather than the "average person." This reduction was most successful when participants had personal contact with this person.

Other Focus: Pity

What emotion might follow from a downward assimilative comparison focusing more on the other person? Pity seems a good candidate here. When we feel pity, we feel sorrow for another's suffering or misfortune (e.g., Lazarus, 1991; Ortony et al., 1988; Weiner, 1986). Pity is especially intense if the suffering is unusual (Ortony et al., 1988), if the person appears undeserving of his or her misfortune (Ortony et al., 1988; Weiner, 1986), if we have reason to

like the person (Ortony et al., 1988), and if the cause of the other person's misfortune appears uncontrollable (Weiner, Graham, & Chandler, 1982). In the case of social comparison-based pity, the same factors that intensify pity in general also might serve to keep the focus of the comparisons on the suffering person rather on the implications of this suffering for one's own future outcomes. Although one's general reaction is assimilative in nature, and thus one feels a downward pull of similarity with the other on the dimension of comparison, the extraordinary nature of this undeserved suffering (in a person who is liked) may tighten a focus on this suffering.

Further contributing to a focus on the other person in social comparison-based pity is that this person is suffering in a *relative* sense. Research on altruism is instructive on this point. Thompson, Cowan, and Rosenhan (1980) induced either egocentric sadness (self-focused) or empathic sadness (other focused) in participants who were then placed in a position to act altruistically toward another person. Empathic sadness produced much more altruism than egocentric sadness. Noting these earlier findings, Rosenhan, Salovey, and Hargis (1981) suggest that the decision to help another person often involves a "tacit" social comparison in which a person assesses whether his or her plight is greater or less than that of the other person. Determining that the other person's situation is worse than one's own leads to thoughts focused on this person's situation. This direction of attention makes helping more likely.

Dual Focus: Sympathy

What type of emotion might result from a downward assimilative comparison having a dual focus? The feeling would need to incorporate both the worry and fear over one's future outcomes plus a pity for the current disadvantaged condition of the other person. Perhaps sympathy fits best. Although sympathy is often used synonymously with pity (Lazarus, 1991; Ortony et al., 1988), there also is a sense in which it is different from pity. Whereas definitions of pity clearly focus on the concern and sorrow over another person's situation, definitions of sympathy emphasize the kinship in feeling that enables a person to share in the misfortune of another person (*Webster's New World Dictionary*, 1982). In other words, in contrast to pity, sympathy involves a clearer sense of similarity between the self and the other person. With sympathy, the sense of potential similarity in outcomes is evident and at the same time one feels concerned over the misfortune currently being experienced by the other person. As part of sympathy involves a focus on the other person, deservingness and liking will play an important role in determining the precise nature of the feeling (e.g., Brigham et al, 1997; Heider, 1958; Ortony et al., 1988; Weiner, 1986). For example, in the study by Brigham et al. (1997), sympathy toward the person experiencing the misfortune was measured in addition to *schadenfreude*. Participants' sympathy was positively correlated with their perceptions that the misfortune was undeserved.

REVIEW OF THE MAIN CONCEPTUAL THEMES

Assimilation, Contrast, and Perceived Control

Guided by classic and more recent empirical work on social comparisons, my analysis began with the assumption that emotional reactions to social comparisons come in at least four general forms resulting from upward or downward comparisons that can be either a pleasant or an unpleasant experience. I have tried to make the further point that emotional reactions to

social comparison can be either assimilative or contrastive in nature. Predicting these two different reactions may come down to whether the comparer can expect to have control over the discrepancy, either closing the gap in the case of upward comparisons or maintaining it in the case of downward comparisons. This theme emerges graphically in Fig. 1 in the form of diagonals: The assimilative diagonal runs from inspiration across and down to sympathy, while the contrastive diagonal runs from *schadenfreude* up and across to envy.

Focus of Attention in the Context of Relativistic Judgments

Another main theme of this analysis is that these emotions may tend to differ in terms of focus, either on the self, the other, or a dual focus. This is a tricky claim to make because, to the extent that each of these emotions can be social comparison-inspired, the focus will always be a matter of proportion; without a degree of dual focus, they would lack relativistic roots. However, one advantage of making this claim is that it suggests interesting complexities in these emotions. On the one hand, a social comparison-based emotion results from the implications of the comparison for the self. Does this other person's bravery mean that I am a coward? Yes, I ran in battle, but look at these others that did the same or worse. Perhaps, I am not so bad. Social comparison theory is, first and foremost, a theory of self-evaluation, and part of the reason why social comparisons create emotions is that they can contribute so heavily to self evaluations. On the other hand, social comparison-based emotions also are about the "fortunes of others." Thus, to this extent, they involve reactions to a positive or negative event happening to another person. As noted earlier, our reactions to the comparison are affected by how much we like the other person and how much we perceive the comparison difference to be deserved. Thus, a particular social comparison-based emotion, depending on the focus of the comparison and the proportion of focus, can produce a mixture of feelings linked to a complex set of contributing factors. Of course, the dual focus roots of social comparison-based emotions also show that the basic perception of whether an event is positive or negative, or either the self or the other, will always be relativistic in nature.

ADDITIONAL THEMES

Outcome Interdependence

The fact that a social comparison can affect a person's self-evaluation and emotional state establishes an interdependence of outcomes between the self and the other person. Contrastive reactions to social comparisons involve *noncorrespondent* outcomes between the self and the other person (Kelley & Thibaut, 1978). What this means is that what is good for the other person has negative implication for the self. In Fig. 1, this is represented by the contrastive diagonal. These reactions can also be described as "ill will emotions" in which "... the desirability of the event for the self is not congruent with the desirability of the event for the other" (Ortony et al., 1988, p. 92). In Heider's (1958) terms, these represent *discordant* reactions.

The notion of noncorrespondence is a particularly useful one because it highlights the fact that tangible outcomes emerging from social comparisons often play a major role in determining reactions. Regardless of liking and deservingness, for example, if another person's gain directly leads to our own disadvantage, then displeasure is a natural response. And if

another person's disadvantage directly leads to our own advantage, pleasure is a natural response. As many scholars have pointed out, competitive, zero-sum situations are ideal breeding grounds for various feelings of ill will (e.g., Elster, 1989; Foster, 1972; Russell, 1930; Schoeck, 1969). When there is competition for limited, important resources, another person's success is usually at one's own expense. In general, the vicissitudes in one person's fortunes will have immediate incongruent effects on the fortunes of another person, bringing about the contrastive feelings of pride, scorn, and *schadenfreude* or depression, resentment, and envy, depending who has gained or lost the advantage.

Whereas the contrastive diagonal tends to involve noncorrespondent outcomes, the assimilative diagonal tends to involve *correspondent* outcomes (Kelley & Thibaut, 1978), meaning that what is good for the other person will translate into something pleasant for the self, and what is bad for the other person is unpleasant for the self. Goodwill emotions, rather than ill will emotions, usually result (Ortony et al., 1988). In Heider's (1958) terms, these represent *concordant* reactions. Variations in either person's outcomes will have immediate congruent effect on the other person, bringing about the assimilative feelings of admiration, optimism, and inspiration or fear, pity, and sympathy, depending on whether the outcomes are good or bad.

Connections among Emotions

To a degree, the laying out of the four general types of emotions following from social comparison may create the impression that these emotions are unconnected, operating separately from one another. This is far from the case. For example, one emotion may set the stage for another. My collaborators and I have done a series of studies examining the link between envy and *schadenfreude* (Brigham et al., 1997; Smith et al., 1996). At first glance, these emotions may seem quite independent from each other. For one thing, envy results from a painful upward comparison, while *schadenfreude* results from a pleasurable downward comparison. However, they are both contrastive in kind (as well as noncorrespondent and discordant). The pain of envy is caused by another person's good fortune and the pleasure of *schadenfreude* is caused by another's bad fortune. The positive outcomes for one person seem to actually lead to negative outcomes for the other (with envy) and vice versa (with *schadenfreude*).

In these studies we reasoned that the conditions associated with envy would create circumstances ripe for *schadenfreude*, if a misfortune allows the envy-producing upward comparison to be transformed into a downward comparison. First of all, as noted earlier, a facet of envy often includes a sense that the envied person is undeserving of his or her advantage. And so, if this person subsequently suffers a misfortune, it may be natural to feel pleased. At least in a subjective sense, things are now how they "ought" to be (Heider, 1958). Envy also involves hostility and dislike aimed at the advantaged person, and thus a misfortune befalling the envied person appeases this antipathy as well. Finally, there are at least two senses in which the misfortune might benefit the person feeling envy. In competitive situations, this misfortune might lead to this person's direct gain, which should be pleasing to some degree. Also, the misfortune may go far in eliminating the basis for the invidious comparison. In fact, if the misfortune is of sufficient magnitude, the unpleasant feelings derived from a contrastive and seemingly irrevocable upward comparison can be transformed into the pleasing feelings derived from a contrastive downward comparison. The pleasure of release from invidious feelings also is all the more robust because it is compatible with the sense that the misfortune befalls a dislikeable person who now appears to be getting what he or she deserves.

In the first study (Smith et al., 1996), participants watched a videotaped interview of another student who was applying for medical school. Envy was manipulated by having this student appear either average or superior in terms of academic achievements and social life. At the end of the interview, an epilogue informed participants that the student had to delay plans for medical school because of an infraction he had committed. This misfortune suffered by the superior student created greater *schadenfreude* than when it was suffered by the average student. Furthermore, this effect was largely mediated by envious feelings measured before the misfortune. A second study (Brigham et al., 1997) replicated this effect and generalized it to situations in which the misfortune was undeserved. Even when the person suffering the misfortune played no role in this outcome, as long as participants envied this person, they tended to feel happy as a result.

THE SIGNIFICANCE OF SOCIAL COMPARISON-BASED EMOTIONS

An Evolutionary Perspective

One way of making a case for the importance of social comparison-based emotions is to suggest their role in human evolution (Buunk & Ybema, 1997; Gilbert, 1992). Festinger (1954) linked social comparison processes with adaptive behaviors, but his emphasis was not on emotions but on accurate self-assessment. Gilbert (1992) has made a particularly strong case for the evolutionary underpinnings of our capacities to compare ourselves with others and also has discussed the various emotions that often result from these comparisons. It appears that one of our basic motivations is desire for social status and prestige, if only because this leads to prevailing in the realm of sexual selection. Social success in the pursuit of important resources translates into reproductive success (Barash, 1977; Gilbert, 1992; Krebs, Davies, & Parr, 1993). One key to operating in an environment where there is competition for dominance is that one must be able to recognize where one stands. The ability to recognize the true features of a social hierarchy and act accordingly (either submissively or dominantly) is highly adaptive, which appears to be why one sees this ability in many animal species as well as human beings. The ability to make reasonably accurate social comparison must be at the core of the ability, and thus it is likely to be " ... phylogenetically very old, biologically powerful" (Gilbert, Price, & Allan, 1995, p. 149). Indeed, the capacity to make such comparisons may have gone hand in hand with the development of sense of self. With humans, the consequences of where one falls in the social hierarchy (given one's relative share of important reproduction-enhancing resources) appear to contribute powerfully to self-esteem. Social comparison-based emotions are possibly the clearest markers for how well or poorly we believe we rank on attributes that matter in important social hierarchies.

Rousseau on Social Comparison-Based Emotions

A particularly interesting perspective on social comparison-based emotions that in some way presaged evolutionary ideas was outlined by Rousseau (1754/1754) in his classic work, *A Discourse on Inequality*. Rousseau notes that the most important differences among people are artificial. This is because they are based on societal processes that exaggerate the effects of natural inequalities, such as difference in intelligence and strength. If we were to live in solitary state, these natural inequalities would be of no consequence, as long as we were strong and savvy enough to find food and shelter. Rousseau argues that over the course of human

history, we have increased our interactions with other people, and as a result social comparisons begin to dominate our perceptions and emotions:

People become accustomed to judging different objects and to making comparisons; gradually they acquire ideas of merit and of beauty, which in turn produce feelings of preference ... Each began to look at the others and to want to be looked at himself; and public esteem came to be prized. He who sang or danced the best; he who was the most handsome, the strongest, the most adroit or the most eloquent became the most highly regarded, and this was the first step toward inequality and at the same time toward vice. From those first preferences there arose, on the one side vanity and scorn, on the other shame and envy, and the fermentation produced by these new leavens finally produced compounds fatal to happiness and innocence. (p. 114)

Rousseau also claims that our sense of self shifted with the progression as well. Whereas in the "state of nature" people possessed a self-love simply flowing from finding sustenance, shelter, and avoiding physical injury, people in the society of others developed *amour propre*, a kind of self-pride born of a developing desire to be superior to others and be admired by them. Rousseau tries to claim that human beings, by nature, are free from relativistic concerns. It is only when we started living in groups that these relativistic concerns, and the emotions resulting from them, began emerging. Current thinking would emphasize the way in which our proclivities have always evolved in a social, group context. If this is true, then we have always evolved as organisms that acknowledge and adapt to the relativistic and emotion-inducing facts of everyday life.

CONCLUSION

The developing theory and empirical evidence suggest that social comparison-based emotions are wide-ranging, consequential, and frequent. Yet, it is also the case that my analysis has focused only on what I considered to be the most obvious cases of social comparison-based emotions. Not only may other candidate emotions fit better, but, within each category of emotion, a finer-grained analysis could have been conducted. For example, one largely unexplored type of emotion arises when one's superiority is perceived as threatening to others (e.g., Brigham, 1996; Brickman & Bulman, 1977; Exline & Lobel, 1999; Foster, 1972). Fear of envy, as this emotion is sometimes labeled (Brigham, 1996), has been the basis for an extensive, anthropological analysis of human behavior (Foster, 1972), but has received little attention in social psychology. In fact, fear of envy is just one of a variety of interesting emotions that can result from recognizing one's relative advantage and thinking about how this advantage is being received (Leach, Iyer, & Snider, in press). These and other social comparison-based emotions represent uncharted, fertile territory for future social psychological research.

My analysis has relied heavily on Stephen Crane's novel to augment the existing theoretical and empirical research on social and comparison-based emotions. It seems fitting to conclude with a few additional facts about the novel. *The Red Badge of Courage* was published before Crane reached the age of 25. Although Crane had no experience in war, what was most remarkable about the novel was that it struck readers as being so true to what war must be like. Just as the photography of Mathew Brady had documented the external realities of the Civil War, it seemed to convey in an original way the psychological realities of war. His insights into human nature appear no less accurate for the contemporary reader. Certainly, when it comes to a subtle understanding of how our emotions are affected by social comparisons, the developing scientific evidence shows that Crane was right on the mark.

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