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The Emotional Underpinnings of Social Status

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Abstract

Emotions influence social status in a number of ways. Here, we adopt an evolutionary approach to examine the ways in which certain distinct emotions function to facilitate navigation of the status hierarchy. We argue that these emotions affect status outcomes through three distinct pathways: their experience, their nonverbal display, and the way their displays are perceived by others. We review evidence for each of these pathways, for several distinct emotions previously examined in the context of status attainment, status communication, or hierarchy navigation; these include certain highly social emotions (i.e., *pride*, *shame*, *envy*, *contempt*, and *admiration*) and more "basic" emotions (i.e., *happiness*, *sadness*, *anger*, *disgust*, and *fear/anxiety*). Together, the reviewed findings offer a number of insights regarding the importance of emotions for status negotiation processes, but considerable work remains, and we hope this review will serve as a foundation for future studies examining these issues from functionalist and evolutionary perspectives.

Keywords: *Status, emotions, evolution, social rank, hierarchy*

Emotions are critically important for navigating the social hierarchy. Emotions motivate people to seek and retain high status, and the nonverbal expressions that are typically displayed as part of an emotional experience communicate important status-related information to others. In this chapter, we examine the ways in which a number of distinct emotions influence status-related behaviors and outcomes.

Throughout this chapter, we use the terms *status* and *rank* interchangeably, to describe one's relative position on the social ladder (i.e., the social hierarchy), regardless of how he or she got there. In all human societies examined thus far, there are individual differences in social rank, such that some individuals have greater opportunities for resource and mate acquisition than others, or receive greater deference than others (Brown, 1991; c.f. Ellis, 1995). This hierarchical social structure results in clear benefits for those at the top of the hierarchy, but those at the bottom also benefit from the hierarchical system, more so than they would from abandoning social living all together (see Alexander, 1974; Williams, 1966). As a result, differences in social rank are a reliably occurring part of human social life.

Three Ways in Which Emotions Influence Social Status

Emotions facilitate individuals' navigation of the social hierarchy in three distinct yet interrelated ways. First, the *experience* of a given emotion (i.e., how the emotion feels subjectively, and its associated cognitive and motivational impact) promotes behaviors oriented toward navigating the hierarchy. Emotions influence status-related behaviors through both informational (i.e., affect-as-information; Schwarz & Clore, 1983, 1988) and motivational means. According to the "affect as information" hypothesis, emotional feelings function, in part, to inform individuals of changes in their environment, and thereby allow them to respond knowingly and flexibly to significant events. At its most fundamental core, affect-as-information

suggests that people use their perceptions of internal states (i.e., their feelings) to figure out what they think about the world around them. In contrast, motivational views suggest that emotions have direct motivational force, urging people to behave in certain ways regardless of what knowledge is gleaned by their feelings. Emotion experiences can affect status-related behaviors both by providing individuals affective information about their relative social worth, and by directly motivating them to behave in ways that improve their rank. For example, feeling positive emotion about the self (i.e., pride) can inform an individual that he or she has high social value, and also directly motivate him or her to behave in ways that promote the maintenance of this high rank (e.g., by persevering at a challenging, status-relevant task; Weidman, Tracy, & Elliot, under review; Williams & DeSteno, 2008).

Second, *nonverbal displays* of emotion influence social status by communicating status-relevant information, such as one's current rank or a shift in rank, to others. This can occur both through status *signals*, which evolved specifically for the purpose of status communication, and through *cues*, which yield status information but evolved to serve some other (typically communicative) function. In other words, what sets signals and cues apart is whether they were designed by natural selection to communicate some information (in the case of a signal), or were designed to serve some other function but information is incidentally communicated as a byproduct of that other function (in the case of a cue). As an example, chewing food is a reliable cue that one is eating, but chewing did not evolve to communicate this information, in the way that an infant's distress cry evolved as a signal to communicate the child's needs (see Smith & Harper, 2003). For human emotion expressions, in most cases the extant empirical evidence does not warrant drawing firm conclusions regarding whether a particular expression that communicates status is a signal or cue, so we largely avoid making this distinction when

discussing the relevant findings, but this is an important area for future research (Shariff & Tracy, 2012). In general, by communicating status information emotion expressions may help individuals avoid costly disputes that can arise when rank levels of the various parties are unknown. Given that those who know they are lower status tend to defer to higher status others, signaling one's knowledge of his or her relative status may allow both parties to quickly know how the social interaction should proceed. Thus, nonverbal displays of status likely allow for less tumultuous social interactions, compared to disagreements that must be settled through aggression or other costlier means.

Third, emotions influence hierarchical relationships when they are *perceived* in others who show status-related emotional displays. By recognizing distinct emotion expressions in others, and automatically interpreting the meaning conveyed by those expressions, perceivers can adjust their behavior in an adaptive manner, by, for example, deferring to a high-status individual (e.g., Tiedens & Fragale, 2003). The processes of displaying and perceiving emotion expressions are closely connected, but we discuss them here as distinct (for the most part), to emphasize the separate benefits accrued to displayers and observers.

Which Emotions Influence Status Attainment and Hierarchy Negotiation?

In this section, we discuss empirical findings on each distinct emotion that is particularly relevant to status, and, for each, examine how that emotion influences status-relevant behaviors and outcomes via its experience, nonverbal display, and perception in others, to the extent that each of these pathways is relevant for the given emotion. We focus on distinct emotions, typically defined as momentary processes that often—though not always—include subjective feelings, physiological changes, cognitive appraisals, and motivated action tendencies or behaviors (see Roseman, 2011; Tracy & Randles, 2011). Many of the emotions discussed here

are particularly relevant to the social domain, given that the most "social" emotions (i.e., emotions critically involved in the regulation of social behavior) tend to be particularly relevant to navigating social relationships in general, and status-based relationships in particular. These socially complex emotions include *pride*, *shame*, *envy*, *contempt,* and *admiration*. However, we also examine several other emotions that are linked to status in important ways, but are typically considered to be more "basic", in that they are shared with non-human animals and emerge early, both ontogenetically and phylogenetically (see Panksepp, 1992). These status-relevant basic emotions are: *happiness*, *sadness*, *anger*, *disgust*, and *fear*.

Socially Complex Emotions

Pride

Using experienced pride to navigate the social hierarchy. Pride is experienced in response to socially valued successes caused by the self (Tracy & Robins, 2004), and it is the emotion that, more than any other, likely evolved largely for the purpose of enhancing and maintaining social status. There is evidence linking pride to the attainment of high status through all three pathways: experience, display, and perception (see Tracy, Shariff, & Cheng, 2010, for a review).

First, the pride subjective experience motivates individuals to strive for achievements in socially valued domains. Pride feelings are pleasurable and thus reinforcing; there is no other emotion that not only makes individuals feel good, but good about *themselves*. Through socialization, children come to experience pride in response to praise for socially valued achievements, and, eventually, individuals experience pride in response to these accomplishments without needing others' evaluations. The reinforcing properties of pride motivate them to seek future achievements; so, without any need for external evaluations, people strive to develop an

identity that coheres with social norms. Individuals who are successful in this pursuit are, in turn, rewarded with social approval, acceptance, and increased status. Supporting this account, studies have shown that that salespeople who respond to work success with pride tend to work harder and perform better at their jobs (Verbeke et al., 2004), and that feelings of pride directly promote increased persistence, effort, and task performance (Williams & DeSteno, 2008; Herrald & Tomaka, 2002; Pekrun, Elliot, & Maier, 2009). These outcomes likely have downstream consequences for rank attainment, but pride has also been shown to directly influence status-related outcomes; individuals experimentally induced to feel pride behave in a more dominant manner in social situations (Williams & DeSteno, 2009).

However, the link between pride and status is complicated by the fact that pride is not simply one phenomenon. Individuals reliably distinguish between the pride that promotes hard work and achievement motivation and is based on accomplishments and confidence, and a pride that is based on arrogance and egotism, associated with self-aggrandizement and a sense of superiority (Tracy & Robins, 2007a; in press). Given that the former form of pride, which has been labeled "authentic pride" (Tracy & Robins, 2007a) is associated with achievement striving, but the latter form—"hubristic pride"—is not, these findings raise the question of whether both pride facets function to promote high status. Indeed, hubristic pride is linked to a range of anti-social behavioral tendencies and psychopathologies, such as aggression, manipulativeness, and anxiety (Tracy, Cheng, Robins, & Trzesniewksi, 2009). Could this anti-social emotion be functional in social domains?

To address this question, researchers have turned to the theory that humans evolved to seek and attain two distinct forms of high status: *Dominance*, achieved through force, threat, and intimidation (i.e., fear-based status), and *Prestige*, granted on the basis of demonstrated

knowledge, skills, and altruism (i.e., respect-based status; Henrich & Gil-White, 2001). According to this perspective, these two distinct forms of status are attained through divergent behavioral patterns, and were selected for by distinct evolutionary pressures (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Henrich & Gil-White, 2001; see also Cheng & Tracy, Chapter 1, this volume). Building on this account, we have argued that authentic pride evolved to motivate the attainment of prestige, whereas hubristic pride evolved to motivate the attainment of dominance (Cheng, Tracy, & Henrich, 2010; Tracy, Shariff, & Cheng, 2010).

When individuals experience hubristic pride, they evaluate themselves as better in some way than others, and experience a subjective sense of dominance, superiority, and power. Not surprisingly, hubristic pride is positively associated with narcissism—a personality profile that often characterizes individuals who seek power at the expense of others—and has been hypothesized to be the emotion that most strongly drives this personality process (Tracy et al., 2009). Narcissism and hubristic pride are both characterized by a lack of empathy toward others, including less fortunate others, which can even result in prejudice against those who are different (Ashton-James & Tracy, 2012; Watson, Grisham, Trotter, & Biderman, 1984). This extreme self-focus, arrogance, and willingness to ignore others' needs, associated with hubristic pride, may equip its experiencers with the mental preparedness to aggress against and even hurt others in their quest for power. It may be for this reason that researchers have found positive correlations between dispositional hubristic pride and hostility, aggression, and a tendency toward interpersonal conflict (Tracy et al., 2009). These behaviors, in turn, are precisely what allow dominant individuals to retain their power.

In contrast, in order to retain subordinates' respect, prestigious individuals must avoid succumbing to feelings of power and superiority. Competition for prestige would likely favor

individuals who demonstrate knowledge and a willingness to share it but do not arrogate their authority or lash out at subordinates; aggressive interpersonal behaviors would in some sense "raise the price" subordinates must pay to attain the valued knowledge (Cheng et al., 2013). Authentic pride thus may have evolved to facilitate the attainment of prestige by promoting a focus on one's effort and accomplishments (i.e., making internal, unstable, controllable attributions for success; Tracy & Prehn, 2011; Tracy & Robins, 2007a), fostering a sense of humility (Cheng, Weidman, & Tracy, in preparation), and inhibiting aggression and hostility. Studies demonstrating associations between authentic pride and pro-social behavior, empathy, agreeableness, conscientiousness, and moral action (Ashton-James & Tracy, 2012; Hart & Matsuba, 2007; Tracy et al., 2009; Tracy & Robins, 2007a; Verbeke et al., 2004) are consistent with this account. Furthermore, recent findings suggest that authentic pride might promote achievement and consequent status shifts through a more informational means; several samples of participants were found to respond to low feelings of authentic pride, experienced in response to failure, by changing their achievement-oriented behaviors (i.e., working harder), and these behavioral changes had the effect of improving downstream performance outcomes (Weidman, Tracy, & Elliot, under review).

Other findings provide more direct support for this account of authentic and hubristic pride as having evolved to promote distinct status-attainment strategies. First, individuals high in trait levels of authentic pride tend to describe themselves as prestigious, whereas those high in trait hubristic pride are more likely to describe themselves as dominant. Second, this pattern was replicated in a study examining hierarchical relationships among individuals on varsity-level athletic teams. Individuals who rated themselves as high in trait authentic pride were viewed by their teammates as prestigious but not dominant, whereas those who rated themselves high in

trait hubristic pride were viewed as dominant but not prestigious (Cheng et al., 2010). That these findings emerged in peer-ratings from teammates points to their ecological validity; varsity teams are real-world groups where status hierarchies play a major role in shaping intragroup behaviors and emotions.

Displaying pride as an indication of status. Pride also enhances status through its cross-culturally recognized nonverbal expression (Tracy & Robins, 2008). This expression informs observers—typically other social group members—of the proud individual's achievement, indicating that he/she deserves higher status. Supporting this account, Tiedens and colleagues (2000) found that individuals who are believed to be experiencing pride are assumed by others to be high status, suggesting an intuitive association between perceptions of pride and status. Furthermore, both children and adults respond to socially valued success—an event that should boost status—by displaying pride, and this behavioral tendency holds across a wide range of cultures and among the congenitally blind, suggesting that displaying pride may be a universal human response to success (Belsky, Domitrovich, & Crnic, 1997; Lewis, Alessandri, & Sullivan, 1992; Tracy & Matsumoto, 2008).

A series of recent studies provide direct evidence for an association between pride displays and status gains (Shariff & Tracy, 2009; Shariff, Tracy, & Markusoff, 2012; Tracy, Shariff, Zhao, & Henrich, 2013). Using several measures of implicit responding, these studies show that the pride expression is rapidly and automatically perceived to communicate high status, and that pride displays are more strongly associated with high status than a range of other positive and negative emotion expressions—including happiness and anger (Shariff & Tracy, 2009). Furthermore, the pride expression communicates high status even when the person showing the expression is otherwise *known* to be low in status—such as when displayed by a

homeless person (Shariff et al., 2012). In fact, in this research a homeless man displaying pride was automatically perceived to be equally high in status as a business man displaying shame, testifying to the strength of these emotional displays.

In addition, this finding, that pride displays send unavoidable messages of high status, generalizes across cultures. Individuals living in a traditional, small-scale society in Fiji were found to respond to the pride expression with the same high-status inferences, despite the fact that Fijian culture strongly prohibits overt status signaling (Tracy et al., 2013). In other words, pride displays are automatically associated with high status in a cultural context that is entirely separated from Western cultural knowledge, and where it is unlikely that a socially constructed, visually obvious display of high status would spontaneously emerge, if it were not part of human nature.

Perceiving others' status through the pride display. Perceiving pride in others is also likely to provide status-related benefits to observers, who can more effectively navigate the hierarchy by showing appropriate deference, knowing whom to emulate, forming productive alliances, and facilitating their own status jockeying. For example, pride displayers may be particularly likely to respond aggressively to status challenges. As a result, perceivers may benefit from recognizing and interacting with such individuals cautiously, to avoid agonistic encounters. More broadly, the knowledge that a pride-displaying individual is high status provides a quick and efficient means of identifying individuals who may be worthy of admiration. Indeed, if the pride displayer achieved a high status feat, perceivers may benefit from closely watching, and perhaps copying his or her actions. Supporting this account, studies have shown that individuals seeking knowledge acquisition tend to copy the judgments and decisions

of those who display pride, more so than those who display other emotion expressions (Martens & Tracy, 2013).

Shame

Using experienced shame to navigate the social hierarchy. Shame arises when individuals experience failure in achievement or social contexts, and attribute their failure to something stable about who they are (that is, to dispositional factors; Tangney & Tracy, 2012; Tracy & Robins, 2004). The experience of shame can lead to feelings of inferiority, or a sense of being valued less than others (Tangney, Miller, Flicker, Barlow, & Hill, 1996; Fessler, 2004; Gilbert, 2003; Brown & Weiner, 1984; Jagacinski & Nicholls, 1984; Dickerson, Gruenewald, & Kemeny, 2004). Shame feelings thus may influence status outcomes by providing affective information to the experiencer that his or her rank has dropped.

Although it may seem potentially maladaptive (i.e., costly) to experience shame—an emotion that lowers self-esteem and can promote anger, resentment, and even addictive behaviors (Randles & Tracy, in press; Tangney, Wagner, Fletcher, & Gramzow, 1992)—these costs must be weighed against the alternative: *not* experiencing shame in typical shame-eliciting situations. In other words, what might be the consequences of a deficit in the capacity to experience shame? Like physical pain, which is aversive but highly adaptive by virtue of promoting injury avoidance, shame experiences may be a kind of alarm system. Although chronic dispositional proneness to shame may be maladaptive, in certain situations momentary shame is likely to be functional, by warning individuals that they are about to suffer a drop in status, and thus should change their behavior (or run away; cf. Nesse, 1991). Shame experiences may be a large part of what motivates transgressors to behave in accordance with social norms (Fessler, 2007). In the same way that pride's pleasurable affective properties reinforce success, a

single episode of shame's displeasurable properties may serve to prevent future failure (Barrett, 1995; Ferguson & Stegge, 1995).

Displaying shame as an indication of status. Studies have shown that shame displays are automatically perceived as communicating low status (Shariff et al., 2012; Shariff & Tracy, 2009). Although perceptions of low status can reduce the displayer's fitness in a number of ways (e.g., Barkow, 1975; Cowlishaw & Dunbar, 1991; Leary, Tambor, Terdal, & Downs, 1995), nonverbal displays of shame may nonetheless provide certain benefits to displayers, by appeasing onlookers after a social transgression (Keltner & Buswell, 1997; cf. Fessler, 2004). Appeasement is essential to the long-term survival of interpersonal relationships, and to the maintenance of one's place within a social group (i.e., avoiding social rejection). Keltner, Young, and Buswell (1997) defined appeasement as "the process by which individuals placate or pacify others in situations of potential or actual conflict" (p. 360). Specifically, when individuals violate social norms, they risk unpleasant reactions from others (e.g., anger, retaliation, ostracism), which can be dangerous (Gilbert, 2007). By signaling to others their recognition and regret regarding unfavorable actions, transgressors' shame displays can effectively minimize the severity of others' negative responses.

Appeasing others is a cost-efficient way of reducing the potential for such unpleasant reactions; though it may cost a rung or two on the social ladder, appeasement is likely to conserve more resources than leaving the social group altogether, or being forced to leave. In part, this is because the time and energy saved by submitting and appeasing rather than risking conflict or social exclusion can be used for other pursuits that can enhance fitness, such as resource and mate acquisition and retention (Gangestad & Simpson, 2000). Furthermore, it is important to keep in mind that the capacity for shame evolved in a time that was considerably

more violent than today (Pinker, 2011) and where ostracism and conflict likely had serious consequences, so while it is perhaps not as critically important to appease in many contemporary cultural contexts, in most of human history displaying shame at the right time may have provided a large survival advantage.

A growing body of research is consistent with this account.[1] First, behaviors associated with the human shame expression have been observed in a number of nonhuman species during situations of submissive appeasement, suggesting that shame displays may have originated as submission displays shown by our nonhuman ancestors. Indeed, appeasement displays in nonhuman primates have received a good deal of research attention (e.g., de Waal, 1989); these behaviors are thought to prevent or reduce aggression in others and help re-establish social ties. In humans, submissive postures characteristic of shame are displayed spontaneously in response to others' expansive, dominant postures (Tiedens & Fragale, 2003). Likewise, shame behaviors such as head tilted downward and slumped posture or narrowed shoulders have been documented in response to failure or loss of a fight in human children as young as 2.5 – 3 years old (Belsky et al., 1997; Lewis, Alessandri, & Sullivan, 1992; Stipek et al., 1992), older children aged 3 – 10 (Ginsburg, 1980; Strayer & Strayer, 1976), high-school students (Weisfeld & Beresford, 1982), and adult Olympic athletes from numerous countries (Tracy & Matsumoto, 2008). One interesting finding that emerged from the last study was that although athletes were found to reliably display shame in response to Olympic defeat, this was the case only if they were from countries outside of North America and Western Europe. This cultural difference – the absence of failure-based shame displays by individuals from the most individualistic and self-expression

[1]Some researchers have posited a similar appeasement function for embarrassment (e.g., Keltner, 1995), but due to relatively less research attention and limited space, we do not review that work here.

valuing nations – suggests that, just as Fijian cultural norms may discourage the expression of pride, other cultural groups may impose strict "display rules" on the appeasing but status-lowering expression of shame. The finding that congenitally blind athletes across cultures – including several from Western nations – did reliably display shame in response to loss at the Paralympics, in this same research, supports this emotion-regulation interpretation, and suggests that shame displays may be an innate behavioral response to failure or social transgression, situations where an appeasing communicative signal would be adaptive.

In sum, the shame expression may have evolved as a functional social signal, to inform onlookers of: (a) a transgressing individual's awareness that social norms have been violated, and (b) his or her respect for those norms. This latter communication likely increases perceptions of trustworthiness; the transgressor is choosing to acknowledge his or her error, rather than hide it, and thus indicating his or her sincere acknowledgment of, and respect for, the transgressed norm. This is an important message to send after a transgression, as those who break a social rule without communicating an admission of norm violation may be perceived as disrespectful of the group's norms, and likely to violate other norms in the future (Gilbert, 2007). Individuals who are perceived as trustworthy will, in contrast, be included in social groups, and will benefit from this membership by acquiring access to shared social and material resources. It may be for this reason that shame displays increase the sexual attractiveness of both the men and women who display them, at least in North American cultural contexts where the low-status message sent by male shame displays is not as problematic for male mate value (Beall & Tracy, under review; Tracy & Beall, 2011).

Perceiving others' status through the shame display. By perceiving shame displays in others, observers learn which group members are relatively lower in status, and can adjust their

behavior accordingly, by deferring less to these individuals or being more assertive and demanding of them. Supporting this account, in a recent study we gave participants the opportunity to divide a shared resource with a partner who, unbeknownst to participants, was a confederate displaying a particular emotion expression. We found that participants allocated less of the resource to confederates who displayed shame compared to neutral expressions, yet judged these decisions to be equally fair (Steckler & Tracy, in prep). This finding suggests that perceivers judge shame displayers as less deserving of a shared resource, given their reported sense that the fairest division was one that left them with the greater share than the shamed partner.

More broadly, by communicating a social interactant's willingness to accept less, shame displays may be critical to the formation of adaptive social bonds. The benefits of cooperation are often multiplicative, not merely the sum of the efforts of those involved, making this a highly adaptive social strategy for each separate individual involved, including those who receive a smaller share (Fessler, 2007; Boesch, 2005). Consequently, there may be numerous survival-related benefits to effectively observing shame in others, using it to infer their level of commitment to the group, and choosing relationship partners on this basis.

Envy

Using experienced envy to navigate the social hierarchy. When individuals view others as high in competence but low in warmth, they tend to feel envy (Fiske, Cuddy, Xu, & Glick, 2002), a negative emotion experienced in response to another's higher status or costly possessions. Given that envy requires a comparison between the self and another individual, it can be quelled by bringing the envier and envied individuals' relative ranks closer (Smith & Kim, 2007; Hill & Buss, 2008; Parrot & Smith, 1993).This can be accomplished in two ways.

First, the envier can seek to attain items or skills associated with the envied individual's high status for him or herself, allowing the envier to "keep up with the Joneses" (Crusius & Mussweiler, 2012; van de Ven, Zeelenberg, & Pieters, 2011; see also Mcadams, 1992). In this way, envy directly motivates status-seeking behaviors. Second, the envier can seek to reduce the status, resources, or wellbeing of the envied. This can occur through derogation (Salovey & Rodin, 1984), or even behaviors that come at a cost to the envier, such as paying money to ensure that others with more money lose some of theirs, or simply by being uncooperative (Parks, Rumble, & Posey, 2002; Zizzo & Oswald, 2001). These behaviors may partly stem from the envier's perception that the envied individual's advantages are unfair; Smith and colleagues (1994) showed that perceived injustice predicts feelings of hostility in response to an experience of envy (Smith, Parrott, Ozer, & Moniz, 1994). Thus, envy appears to motivate people to change a status quo they do not like or perceive as unjust, either by seeking to increase their own status or reduce the status of another.

To some extent, envy is similar to shame, in that both involve feelings of inferiority. However, while those who feel ashamed tend to accept defeat and engage in behavior withdrawal, those who experience envy are typically unwilling to accept their relatively lower status, and instead seek to improve it. It may be for this reason that people do not like to admit to feeling envy (Smith & Kim, 2007); acknowledgement of envy would mean acknowledgement of an unwanted status differential (Hill & Buss, 2008). This suggests an important contrast between these two low-status emotions: Envy drives competition and behaviors aimed at altering the existing status order, whereas shame involves the acceptance of one's lower status. As far as we are aware, there is no known nonverbal expression of envy, and so no prior research on the status-related effects of expressing envy or perceiving it in others.

Contempt (i.e., Scorn)

Using experienced contempt to navigate the social hierarchy. Contempt, also referred to as scorn, is an emotion that occurs in response to another's failure to uphold his or her duties to the group or to properly respect the social order by, for example, demonstrating disloyalty to a superior (Rozin, Lowery, Imada, & Haidt, 1999). At a broader level, contempt is experienced when individuals perceive others as low in competence and warmth (classic examples of groups perceived this way are the poor and drug addicts; Fiske, Cuddy, & Glick, 2006), or, at least, lower in competence than oneself (Hutcherson & Gross, 2011; Matsumoto & Ekman, 2004). Contempt thus may function to provide affective information to the experiencer that the target of his or her contempt deserves lower status. In this way, contempt may serve an informational function opposite to that of shame.

Displaying contempt as an indication of status. To our knowledge, prior research has not examined whether nonverbal displays of contempt, known to be cross-culturally recognizable (Ekman & Friesen, 1986), influence status judgments or status-related behaviors in either displayers or perceivers. Several researchers have suggested that contempt displays function to signal an intention to acquire higher status (Matsumoto, 2008; see also Keltner & Haidt, 1999), but the only empirical support for this account comes from a study testing whether head tilt upward influenced perceptions of dominance (Mignault & Chaudhuri, 2003). Results demonstrated an effect of this nonverbal behavior on dominance judgments (of the displayer), but this may have been due to the communication of pride, which is more reliably associated with head tilt up than is contempt (Tracy & Robins, 2007b). To address this issue, future studies might examine the status implications of displaying a unilateral lip raise – a unique component of contempt (Ekman & Friesen, 1986) – without the addition of head tilt.

Admiration

Using experienced admiration to navigate the social hierarchy. When individuals perceive others as high in competence and high in warmth, they tend to respond with admiration (Cuddy et al., 2008), an emotion that may motivate them to seek out the admired target. By increasing one's proximity to the admired, the admirer increases his or her likelihood of imitating or learning valuable skills from this competent group member, currying his or her favor, and, ultimately, attaining higher status for him or herself (Sweetman, Spears, Livingstone, & Manstead, 2013; Algoe & Haidt, 2009; Henrich & Gil-White, 2001). Admiration also motivates people toward self-improvement in domains in which the admired target is successful (Algoe & Haidt, 2009), thus serving as a carrot to status attainment.

As far as we are aware, there is no known nonverbal expression of admiration, so no prior research on the status-related effects of expressing admiration or perceiving it in others.

Basic Emotions

Happiness

Using experienced happiness to navigate the social hierarchy. Several studies have examined the relation between experienced happiness and status, but findings are mixed, perhaps in part because of the different ways in which both dimensions have been conceptualized and assessed. Studies that have used socioeconomic status (SES) as a proxy for status have documented only a weak positive relation between SES and happiness (or, subjective well-being; e.g., Diener, Suh, Lucas, & Smith, 1999; see also Myers & Diener, 1995). However, before concluding that the experience of happiness is only slightly relevant to the navigation of status hierarchies, we need to consider three other sources of evidence. First, the desire to attain

happiness may motivate status seeking, under the assumption that increased status will lead to increased happiness, even if this is not entirely the case. Indeed, research suggests that individuals adjust to various life circumstances fairly rapidly, such that even very positive experiences produce a happiness that is fairly short lived (Brickman, Coates, & Janoff-Bulman, 1978). If this is the case, then studies that measure forecasted happiness, rather than experienced happiness, should find a substantial relation with forecasted rank increases. This view is consistent with evolutionary accounts suggesting that humans evolved not to experience happiness as an end point, but rather as a motivational force; people seek happiness, at an ultimate level, because in doing so they are motivated to do things that facilitate their survival and reproduction, such as seeking out status-attainment opportunities (Nesse, 2004; Buss, 2000).

Second, the weak relation between SES and happiness is belied by a stronger correlation between local status (i.e., sociometric status) and happiness. Given that SES captures one's overall status within the broader society, but not one's status within his or her local social group (as people tend to socialize with others who are similar to them in SES), measures of SES may fail to capture the true relation between social rank and subjective wellbeing. In fact, when status is measured at the level of the local group, happiness is more strongly associated with rank; studies show that respect and admiration within one's local group, but not socioeconomic status, predict subjective wellbeing, and manipulations of sociometric status lead to greater increases in subjective well-being (Anderson, Kraus, Galinsky, & Keltner, 2012).

Finally, there is evidence for a causal relation in the opposite direction; subjective experiences of happiness can *promote* status increases. According to Fredrickson's (2001) "broaden and build" theory of positive emotions, happiness informs individuals that they do not need to devote resources to problem solving, so can instead seek out opportunities to broaden

and build their social worlds, including taking advantage of opportunities for status attainment. Supporting this view, a longitudinal study found that subjective well being positively predicted occupational attainment years later (Roberts, Caspi, & Moffitt, 2003). However, experimental studies addressing this issue have produced more mixed findings. Several studies have found that induced positive affect leads individuals to become less interested in solving conflicts competitively, and more interested in collaborations and concession making (Baron, Rea, & Daniels, 1992; Baron, 1990). This behavioral pattern, while consistent with the broaden-and-build social pattern, does not seem ideal for status attainment, but a focus on collaboration might promote the attainment of prestige (Henrich & Gil-White, 2001). In fact, participants in this study who became more likely to concede also set higher performance goals, suggesting a link from happiness to achievement behaviors, which should ultimately promote status.

Displaying and perceiving happiness as an indication of status. Nonverbal displays of happiness can, in certain situations, promote perceptions of high status. Tracy and colleagues (2013) found that both North American college students and Fijians living in a small-scale traditional society judged individuals who displayed happiness to be high in status, though these judgments were weaker when they were made implicitly, suggesting that the association between status judgments and happy displays is not a strongly automatic one. Other studies using Western student samples have found that happy displays are judged as indicating high dominance (Knutson, 1996), and that high status individuals are expected to display happiness more than those low in status (Conway, Di Fazio, & Mayman, 1999; Knutson, 1996). One explanation for these findings, as well as the general view that happy displays evolved to communicate friendliness, receptivity, and lack of threat (Mehu, Grammer, & Dunbar, 2007; Shariff & Tracy, 2011), is that happy displays did not evolve to signal status-related information, but rather came

to communicate high status through cueing—information implied by the more direct communication of positive mood or willingness to befriend.

Sadness/Melancholia/Depression

Using experienced sadness to navigate the social hierarchy. The experience of sadness may allow for effective navigation of the social hierarchy in at least two related ways that *de-motivate* the experiencer. First, sadness can serve as an intrapersonal status attainment brake. In this account, sadness and associated fatigue occur in response to unattainable goals, and provide psychological and physiological encouragement to desist goal pursuit. More specifically, individuals may experience a sad or dejected mood when they struggle to achieve a socially valued goal that is beyond their reach. In such cases, sad mood is functional because it dissuades individuals from wasting resources by continuing to pursue the unattainable. In support of this view, Keller and Nesse (2005) found that participants who had experienced sad mood within the past year were more likely report fatigue—a possibly functional component of sadness, from this perspective—if the sad mood was preceded by goal failure than if it was preceded by other causes, such as loss of a loved one.

Second, sadness may function as an interpersonal yielding strategy. In this account, sadness follows directly from a status loss and works to keep the low-status individual submissive (Price, Sloman, Gardner, Gilbert, & Rhode, 1994; Price & Sloman, 1987). Supporting this view, Fournier (2009) found that adolescents who occupied low ranks in the eyes of their classmates tended to report higher levels of depression. Like the intrapersonal brake account, this view suggests that sadness functions by virtue of being demotivating; correlates such as anhedonia may prevent low-status individuals from seeking out opportunities that would put them within high-status individuals' radars, and also allow for the conservation of energy to

best cope with the reduced opportunities imposed by low status. Supporting this account, McGuire and Raleigh (1985) found a positive association between serotonin—a neurotransmitter strongly negatively associated with depression in humans – and social rank in vervet monkeys, suggesting a possible association between sad mood and status in humans. Furthermore, vervet monkeys given selective serotonin reuptake inhibitors (SSRIs), which increase brain levels of serotonin and are used to treat depression in humans, became more dominant in response, suggesting a possible causal relation between the neurochemistry of sad mood and social rank (Raleigh, McGuire, Brammer, Pollack, & Yuwiler, 1991). Likewise, humans taking serotonin agonists (which increase brain levels of serotonin) have repeatedly shown decreases in quarrelsomeness and increases in affiliation, cooperation, and status (Moskowitz, Pinard, Zuroff, Annable, & Young, 2001; Tse & Bond, 2002; Knutson et al., 1998).

Displaying sadness as an indication of status. Sadness displays are shown following the potential for loss in status-relevant domains (Tiedens, 2001) and domains less closely linked to status, such as the loss of a loved one (Gross, Fredrickson, & Levenson, 1994). Individuals who display sadness are perceived as low in dominance (Knutson, 1996), and individuals known to be low status are expected to display sadness in negative situations (Tiedens, Ellsworth, & Mesquita, 2000). However, it is unclear whether sadness displays are signals of status loss or cue low status for culture-specific reasons, such as gender norms about the appropriateness of certain displays. For example, one study found that male displays of negative emotions (including sadness) led to reduced status for the displayers; according to the study's authors, this finding was due to the normative belief that men should not display sadness (Anderson, John, Keltner, & Kring, 2001). However, others argue that sadness displays in fact signal low threat (see Gilbert, 2006, for a review), in which case the low-status judgments of sad men may result from

something intrinsic to the expression, relevant to its evolved function. Given that shame displays are more likely to be low-status signals (see above; also see Martens et al., 2012), it seems more probable that any status information communicated by sadness results from other messages more inherent to the emotion.

Perceiving others' status through their sadness displays. It is not entirely clear how observers use the status-related information garnered from others' sadness displays, but one possibility is that they acquire the knowledge that these individuals need not be considered serious status competitors, at least while they are displaying (and thus presumably experiencing) sadness. Depending on the observer's relationship with the displayer, the display may also indicate an opportunity to help the individual, and thereby strengthen the interpersonal relationship. This could have downstream status-relevant consequences, such as allowing individuals to forge alliances that benefit future status conquests. Alternatively, the message that the displayer is in a weakened or needy position may allow opportunistic perceivers to aggressively take advantage of the displayer's current low status.

Anger

Using experienced anger to navigate the social hierarchy. Lazarus (1991) saw "[t]he basic motive to preserve or enhance self-esteem against assault" (p. 222) as a crucial component leading to the experience of anger. Others view anger as a response to a violation of justice or fairness (Rozin et al., 1999). Drawing on both these accounts, anger may function, in part, to inform individuals that their current social ranking is unjust and should be changed or fought (see Tyler, 1994).

Unfair treatment—for example, being given a disproportionally small amount of a shared resource—can be a sign that one is being subordinated. By feeling anger in response, individuals

become motivated to punish the individual subjecting them to unfairness, or otherwise indicate that they do not accept the suggested status quo. This effect has been observed in experiments using the Ultimatum Game, where a Proposer must divide a shared pool of money with a Responder, but the Responder must accept the offer in order for either participant to acquire any money. Responders who are offered low amounts report feeling anger, and respond by rejecting these unfair offers, even though this means punishing themselves (as well as the Proposer) by forgoing money they would otherwise receive (Sanfey, Rilling, Aaronson, Nystrom, & Cohen, 2003; Pillutla & Murnighan, 1996). Although this may seem like a maladaptive response, this tactic can ultimately deter being taken advantage of or subordinated in future exchanges (e.g., Yamagishi et al., 2012; but see Henrich et al., 2001 for cross-cultural variation in Ultimatum Game rejection behavior). This view of anger and status can be understood from the 'recalibration theory of anger' (Sell, 2011). From this perspective, anger functions to resolve conflicts of interest to the benefit of the experiencer by motivating behaviors, such as aggression, that cause others to 'recalibrate' and treat the angry individual better (e.g., giving into the angry individual's demands). Critically, those in a better position to inflict costs or withhold benefits should be more prone to using this strategy for their benefit. Supporting this account, Sell and colleagues found that physically stronger men (who are more capable of inflicting harm when angry) are more likely to experience anger, and report greater success at resolving social conflicts in their favor (Sell, Tooby, & Cosmides, 2009).

Displaying and perceiving anger as an indication of status. Nonverbal displays of anger have been found to communicate high status (Tiedens, 2001). Specifically, individuals who display anger are perceived as more deserving of status than those who display certain other emotions, such as sadness; however, anger displays are not as strongly associated with high

status as are pride displays (Shariff & Tracy, 2009). Similarly, verbal displays of anger can be an effective negotiation tactic (Sinaceur & Tiedens, 2006). Communicating one's anger to others, verbally or nonverbally, may influence status for several reasons. Tiedens (2001) found that status conferral was mediated by perceptions of competence, suggesting that anger displays influence judgments of status-relevant traits. In addition, Sinaceur and Tiedens (2006) found that, in the context of a negotiation, anger displayers were perceived as tougher and thus less likely to budge. However, there is some evidence that the lowered brow component of the anger expression conveys dominance in Western cultures but not in several non-Western populations (Keating et al., 1981; Keating, Mazur, & Segall, 1977). If this is the case, anger may be particularly relevant to status perceptions in the Western part of the world, where perceivers judge anger displayers as high in status and competence (Tiedens, 2001). These judgments likely benefit both displayers and perceivers, the latter of whom quickly learn which interaction partners are likely to engage in costly conflicts to assert or maintain their status.

Disgust

Using experienced disgust to navigate the social hierarchy. Disgust likely originated to dissuade individuals from ingesting poisonous or noxious substances, but later became co-opted as an emotional response to social events that are perceived to be metaphorically nauseating (Chapman, Kim, Susskind, & Anderson, 2009; Rozin & Fallon, 1987). Supporting this account, Chapman and colleagues (2009) found that facial muscles associated with disgust were activated in response to the taste of bitterness, pictures of feces, and unfair offers in the Ultimatum Game. Disgust thus may function similarly to anger in the domain of status hierarchies, by dissuading individuals from assenting to a suggested status quo or providing information that tracks unfairness.

Disgust is also similar to contempt, in that it is experienced toward individuals who are low in competence and warmth (Fiske et al., 2006), and can motivate avoidance of those individuals, who are typically low on the social ladder (e.g., the homeless). From a strategic vantage, there is little to gain from interacting with individuals at the very bottom of the hierarchy, so disgust may allow individuals to save social resources needed for more valuable status-relevant interactions.

Displaying and perceiving disgust as an indication of status. Given that disgust is experienced toward those who are perceived to be lower in status, it is not surprising that those who display disgust are perceived as high in status (Knutson, 1996). Like anger, though, disgust displays are not as strongly associated with high status as are pride displays (Shariff & Tracy, 2009). Like happy displays, any status-relevant communication function of disgust likely occurs as a result of cueing rather than signaling—disgust displays presumably evolved to communicate other pertinent social information (typically about the target of the disgust), and may be perceived to indicate the displayer's relatively higher status as a byproduct of that other information.

Fear and Anxiety

Using experienced fear and anxiety to navigate the social hierarchy. Fear and anxiety are considered together here as they likely play similar roles in status navigation, given that fear is typically considered a more intense or shorter-lived version of anxiety (but, see Perkins, Inchley-Mort, Pickering, Corr, & Burgess, 2012). The experience of fear or anxiety may promote monitoring of social situations in which the threat of a status loss or social exclusion is possible (Marks & Nesse, 1994). In support of this view, lower rank individuals tend, on average, to be more fearful (Plutchik & Landau, 1973). The experience of fear may function to prevent these

individuals from transgressing in social situations where mistakes would be costly. Low-status individuals are relatively devalued by other group members, so their social transgressions are likely to be more costly—as they are more likely to result in expulsion. By chronically experiencing fear, or being more prone to experience fear in complicated social situations, individuals low in status may be particularly motivated to behave cautiously in situations that could result in punishment.

Displaying and perceiving fear/anxiety as an indication of status. Displaying fear as a signal of one's relatively lower status is common among some non-human animals (e.g., Bauman, Toscano, Mason, Lavenex, & Amaral, 2006). Fear displays may also serve this communicative function in humans, at least in social hierarchies based on dominance, where there is a frequent threat of violence and intimidation by high status individuals. Indeed, a validated measure of perceived dominance includes items such as, "I'm afraid of him/her" (Cheng et al., 2010). By displaying fear in the presence of dominant group members, individuals may effectively communicate their relatively lower dominance, and willingness to defer (Knutson, 1996). As is the case for other nonverbal displays of low status, these cues can spare both parties from potentially costly conflicts.

Limitations of the Reviewed Research and Remaining Questions

Are the Status-Related Functions of Emotions Universal?

Many of the studies reviewed here were based on samples typical of psychological research: undergraduate students from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies (Henrich, Heine, & Norenzayan, 2010). As a result, in many cases we cannot know whether the link between these emotions and status generalizes across cultures, as would be expected of an evolved process. Future cross-cultural studies are needed to address this issue,

and to provide insights into how cultural and learning processes influence associations between emotions and status.

It is important to note, in this context, that evidence of cross-cultural variation is not necessarily evidence of an absence of universality, though it can be suggestive. Culture builds upon and modifies naturally selected tendencies, and can thus mask an underlying universal behavior or association (see Tooby & Cosmides, 1990). For example, Tracy and Matsumoto (2008) found that sighted North Americans tend not to display shame after losing a judo match, yet congenitally blind athletes, who have never seen a shame expression, tend to do so, suggesting that the shame response to failure is unlikely to be learned (at least not through processes of visual modeling). Together, these two findings point to the conclusion that North Americans suppress the display or experience of shame, at least in the highly public situation of loss at the Olympic Games. It would be incorrect to infer from these results that North Americans do not display shame in response to failure (particularly given evidence that young children in North America do; Lewis et al., 1992). For this reason, an ideal approach is to combine cross-cultural methods with other approaches, such as studying populations who are unlikely to have learned the association of interest or cultural rules about this relation, such as infants. Studies using this approach have, in fact, demonstrated that very young infants can mentally represent and "understand" social dominance, suggesting early origins of the perception of status-related concepts (Mascaro & Csibra, 2013; Thomsen, Frankenhuis, Ingold-Smith, & Carey, 2011), and opening the door for future research examining the origins of the associations between emotions and status.

Status and Emotion Among Non-Strangers and With Repeated Interactions

Another limitation of much of the research examining the impact of emotion displays on status perceptions is a tendency to rely on unknown emotion displayers (i.e., photos of unfamiliar targets; e.g., Shariff & Tracy, 2009). Most real-world status-relevant interactions occur between co-workers, friends, family members, or acquaintances, raising questions about the extent to which the prior findings generalize to the real world. In real-world relationships, individuals typically have a pre-existing sense of each other's relative rank, independent of the information conveyed by an emotion display. Studies are thus needed to examine the relevance of emotion expressions on hierarchy in more ecologically valid contexts. Studies that examine the emotional underpinnings of real-world hierarchies, such as members of a university athletic team (e.g., Cheng et al., 2010; see also Tiedens, 2001) have taken important steps in this direction, but more work is needed, particularly on the impact of emotion expressions within longer-term relationships. Studies are also needed to examine interrelations among the three major ways in which emotion influences status (i.e., experience, display, perception). How, for example, does one person's display influence another's perception and subsequent experience?

Conclusion

A great deal of progress has been made in understanding the nuanced ways in which major facets of emotions – their experience, nonverbal display, and perception in others – are involved in navigating social hierarchies. Together, the reviewed research suggests that a rich layer of emotions underlie an ever-changing social asymmetry. Though these findings provide numerous insights about the importance of emotion for navigating the status hierarchy, much remains to be explored. We hope this review can serve as a foundation for future research examining these issues from functionalist and evolutionary perspectives.

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