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# Further Thoughts on the Evolution of Pride's Two Facets: A Response to Clark

Azim F. Shariff
Jessica L. Tracy
Joey T. Cheng
Joseph Henrich
*Department of Psychology, University of British Columbia, Canada*

## Abstract

In Clark's thoughtful analysis of the evolution of the two facets of pride, he suggests that the concurrent existence of hubristic and authentic pride in humans represents a "persistence problem," wherein the vestigial trait (hubristic pride) continues to exist alongside the derived trait (authentic pride). In our view, evidence for the two facets does not pose a persistence problem; rather, hubristic and authentic pride both likely evolved as higher-order cognitive emotions that solve uniquely human—but distinct—evolutionary problems. Instead of being conceptualized as serial homologues, with one the vestigial form of the other, we argue that hubristic and authentic pride are both derived homologues of a vestigial proto-pride emotion that existed in our shared ancestry with other primates.

**Keywords**
emotion, ethology, evolution, pride

In our target article (Tracy, Shariff, & Cheng, 2010), we followed Tinbergen's (1963) call for researchers to examine evolved mental faculties at both the level of function (i.e., the adaptationist approach) and phylogenic history (i.e., the ethological approach). Given the available evidence, however, our functionalist treatment of pride was considerably more substantive than our discussion of its phylogeny. We thus appreciate Clark's (2010) emphasis on the phylogeny of pride, as well as this opportunity to expand on both our own and Clark's suggestions about the emergence of hubristic and authentic pride in our species' evolutionary history.

We have argued, in our target article and elsewhere (e.g., Cheng, Tracy, & Henrich, 2010; Tracy & Matsumoto, 2008; Tracy, Shariff, Zhao, & Henrich, 2010), that human pride—in both its hubristic and authentic forms—is derived from the cognitive processes, emotions, and behaviors associated with dominance-seeking in our evolutionary ancestors. However, the numerous social and psychological changes accompanying the dramatic expansion in cognitive abilities that emerged in our lineage over the last several million years have resulted in a human pride that is markedly different from any proto-pride emotion we might identify in our shared ancestors with other primates. The rise of elaborate cultural systems with norms for behavioral regulation, reputation, and self-presentation, coupled with vastly expanded capacities for abstract self-representation and self-evaluation (Markus & Kitayama, 1991; Sedikides, Skowronski, & Dunbar, 2006), have likely made both pride facets considerably more complex in humans. Therefore, we do not believe, as Clark suggests, that hubristic pride *is* the ancestral form of pride, from which authentic pride emerged—though hubristic pride may be more similar than authentic pride to the ancestral proto-pride. Instead, hubristic pride, like authentic pride, is a cognitively complex self-conscious emotion that has undergone significant changes from the dominance-based proto-pride emotion that was part of our common ape ancestry.

Consider Sterelny and Griffiths' (1999; Griffiths, 2007) "grain problem." These authors argue that an evolutionary niche can be carved up into an infinite number of evolutionary problems. For example, they compare the singular "coarse-grained" fear response of some animals to the more "fine-grained" differential responses others have to aerial predators on the one hand, and to terrestrial predators on the other. The recurrent problem of predatory danger is carved up differently for different species—and elicits different evolved solutions—depending on the resolution, or "grain-size," at which the problem is viewed.

Similarly, in human evolution, as social organization became more complex, hominids seem to have acquired an ability to view status hierarchies at a higher level of resolution, wherein the recurrent evolutionary problem of navigating these hierarchies could be viewed as two separate problems—navigating a hierarchy based

*Corresponding author*: Azim F. Shariff, Department of Psychology, University of British Columbia, 2136 West Mall, Vancouver, B.C. V6T 1Z4, Canada. *Email*: azim@psych.ubc.ca

on dominance, and navigating a hierarchy based on prestige (Henrich & Gil-White, 2001). We argue that hubristic pride systems emerged as a response to dominance hierarchies, while authentic pride systems emerged as a response to prestige hierarchies. Although dominance, unlike prestige, also existed in our nonhuman primate ancestors, this does not mean that either the evolutionary problem or psychological response were identical to those for humans. Some nonhuman primates—especially those with an evidenced capacity for a least minimal self-awareness (e.g., mirror self-recognition; Gallup, 1970; Parker, 1994; Patterson & Cohn, 1994; Suarez & Gallup, 1981)—likely experience a proto-pride-like emotion.[1] However, human hubristic pride is not a simple subjective or cognitive sense of relative superiority or power, as it may be in other primate dominants. Humans have a complex self, which dramatically changes the nature of self-conscious emotions such as pride.

A complex self, as conceived by self theorists since James (1890), involves a self-reflective interaction between an ongoing self-awareness (the "I" self) and the capacity for complex self-representations (the "me" self). The resulting self-evaluative process—through which individuals evaluate how their current behavior compares to past behavior, and whether they are approaching an ideal future self, or identity goal—makes self-conscious emotions notably distinct from more "basic" emotions that do not require such high-level self-evaluations (Tracy & Robins, 2004). Among other developments, these self-evaluations are made possible by culturally transmitted scripts about what constitutes a "good person," which give individuals culturally-variable social ideals toward which to strive and against which to compare themselves. When a human experiences hubristic pride, then, she is not simply judging herself to be physically larger or more powerful than an adversary, she is thinking about past selves, social selves, ideal future selves, others' perceptions of herself, and how her current behaviors reflect on all of these selves. As a result, hubristic pride, like authentic pride, is a complex emotional experience which includes traces of its vestigial origins (e.g., aspects of the associated nonverbal display), but also, in all likelihood, relies on uniquely human cognitive processes, selected by evolutionary forces to meet uniquely human social challenges. Thus, rather than a vestigial trait and a derived trait that persist alongside each other (i.e., serial homologues), we view both hubristic and authentic pride as derived traits—made *of* the pride experienced by our prehuman ancestors, but evolved to be substantially different. Consequently, we disagree with Clark's proposition that there is a persistence problem.

In sum, though we agree with much of Clark's broader discussion of the ethology of pride (e.g., Clark, 2009), our diverging accounts of hubristic pride suggest two hypotheses: (a) hubristic pride is homologous to the dominance emotion experienced by other primates, and persistent in humans with its derived homology of authentic pride; or (b) hubristic pride is a complex self-conscious emotion derived, with modification, from the prehuman dominance emotion. As discussed previously (Shariff, Tracy, & Cheng, 2010), such competing hypotheses are best addressed empirically—with particular focus, in this case, on the psychological and biological mechanisms underlying hubristic pride in humans, and dominance in our primate cousins.

## Note

1 Indeed, there is anecdotal evidence for pride-like displays in several species of Great Ape (e.g., Hayes, 1951; de Waal, 1989).

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