

Dynamic Facial Expressions Allow Differentiation of Displays Intended to Convey Positive and Hubristic Pride

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Prior research has identified a facial expression for positive pride, but no expression for negative pride, hubris. In the present study, professional actors created expressions intended to convey hubris. In Study 1 ($N = 52$), participants were shown dynamic expressions and attributed confidence, positive valence, and positive personality traits to the positive pride expression, but conceit, neutral valence, and negative personality traits to the hubris expression. In Study 2 ($N = 60$), participants were more likely to attribute *conceit* to a dynamic hubris expression than a static one; no such difference was found for positive pride.

Keywords: pride, hubris, emotion expression, dynamic expression

Pride has a dark side. Although pride is generally a desirable positive state, it has an undesirable negative version—the pride that goeth before the fall. And we have a word for the dark side of pride: *hubris*. People judge whether another is feeling hubris (arrogant, conceited, or stuck up) or a more positive pride (confident or successful), and that evaluation can influence further interactions with others. Judgments made regarding hubris are particularly interesting, because hubris is one of the few emotions in which the expresser experiences a differently valenced emotion (positive) than the observer (negative). (Perhaps only the understudied German emotion of *Schaedenfreude* includes the same observer–expresser difference in experience.) When an observer judges an expresser to be feeling hubris or a more positive pride, that evaluation can influence the valence of the observers' experiences and their further interactions with the expresser.

Previous work examining differences between pride and hubris has shown that participants reliably distinguish between these two concepts. When participants rated the similarity of 190 word pairs (comprised of 20 pride words), cluster analyses showed the words fell into two categories: one category resembled positive pride and included words such as *accomplished*, *confident*, and *triumphant*, and one category resembled hubris and included words such as *arrogant*, *conceited*, and *stuck-up* (Tracy & Robins, 2007a). In addition, when participants considered experiences of pride—either their own or others'—they associated positive pride words

with emotional experiences stemming from internal and controllable successes and hubris words with experiences stemming from internal but uncontrollable successes (Tracy & Prehn, 2012; Tracy & Robins, 2007a). Finally, peer ratings of a participant's use of dominance to gain success were related to that participant's self-reported experiences of hubris-related labels, whereas peer ratings of the use of earned skills to gain success were related to self-reported experiences of positive pride-related labels (Cheng, Tracy, & Henrich, 2010, but see Holbrook, Piazza, & Fessler, 2014, for an alternative interpretation).

Given the many ways people differentiate hubris from positive pride, it is surprising that previous research has suggested they are unable to reliably infer hubris and positive pride from emotional expressions. An expression that people interpret as pride has been identified (Tracy & Robins, 2004), but this expression is associated with positive characteristics of pride, rather than negative ones (Tracy & Prehn, 2012). To find an expression observers agree displays hubris rather than positive pride, Tracy and Robins (2007b) presented participants with 10 versions of their previously published expression of pride (Tracy & Robins, 2004), which varied on head tilt, eye gaze direction, postural expansion, and arm position. Participants were asked to match each expression to one of two groups of words: one group included words such as triumphant, accomplished, and self-confident, and the second group included words such as conceited, arrogant, and haughty. Participants associated expressions with direct eye-gaze and a tilted head as more hubristic, but additional research failed to find an expression participants reliably associated with “pride in a triumphant or victorious sense” versus “pride in a conceited or arrogant sense” (Tracy & Robins, 2007b, p. 796). Therefore, the authors concluded that hubris cannot be differentiated from positive pride on the basis of an expression, rather, observers rely on situational context and their own judgments of other's success to decide whether someone is feeling positive pride or hubris (Cheng, Tracy, & Henrich, 2010; Tracy & Prehn, 2012; Tracy & Robins, 2007a, 2007b, 2007c; Tracy, Shariff, & Cheng, 2010).

An alternative explanation for the failure to find an expression interpreted as hubris is that the expressions presented were static photographs rather than dynamic video clips. Dynamic expressions

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more closely resemble those seen during daily interactions and have been shown to increase the likelihood that participants attribute the expected emotion to an expression (Ambadar, Schooler, & Cohn, 2005; Bould, Morris, & Wink, 2008; Krumhuber, Kappas, & Manstead, 2013; Wehrle, Kaiser, Schmidt, & Scherer, 2000). Early research using static expressions suggested that pride could be conveyed only with a combination of facial and postural cues (Tracy & Robins, 2004, 2007b), but when dynamic expressions were used, pride could be conveyed with a facial expression alone (Nelson & Russell, 2011b), suggesting that valuable information was lost when the display was static. Thus, it is possible that dynamic presentations would increase participants' matching of a hubris-related label with the expression.

We created a dynamic expression intended to convey hubris, displayed by several actors. As the expressions were posed, we cannot know whether the actors were actually feeling hubris, but our intent is not to determine a universal expression of hubris. Rather, across two studies, we examined whether it is possible for a dynamic expression to convey the concept of hubris to a majority of participants. We also examined whether people differentiate that expression from one intended to convey a more positive pride. In Study 1, participants matched emotion labels (*confident, successful, conceited, stuck-up*) taken from Tracy and Robins's (2007a) 7-item Authentic and Hubristic Pride Scales with dynamic expressions intended to convey positive pride and hubris. Participants also rated the expressions in terms of several traits. In Study 2, participants viewed either dynamic or static versions of the expressions presented in Study 1 to determine whether positive pride and hubris are better differentiated when presented dynamically rather than statically.

Study 1

To determine whether hubris could be conveyed with an expression, and whether it is distinguishable from positive pride, we asked a female actor to create dynamic expressions intended to convey these emotions. We presented participants with brief video clips of these expressions, interspersed with four other emotions. During a first viewing of the six expressions, participants were asked to choose, from a provided list, the one emotion term that best described each expression. During a second viewing, participants rated each expression in terms of the valence, arousal, friendliness, approachability, confidence, power, and threat displayed.

Method

Participants. Fifty-two undergraduate college students (26 male, 26 female) between 18 and 26 years of age ($M = 19.1$ year, $SD = 1.33$) participated. All participants were tested in the United States, were fluent in English, and participated in this research in exchange for class credit. The sample was comprised of 48% White, 10% Asian, 6% African American, 2% Hispanic, and 5% mixed race participants. Twenty-nine percent of participants did not provide demographic information.

Materials. The video clips of positive pride and hubris were interspersed with clips for four other emotions: happiness, surprise, anger, and embarrassment (Nelson & Russell, 2011a, 2011b). All clips were of an approximate standard length (5 s) and

featured a professional female actor who had over 10 years of acting experience in theater and film. For each expression, the actor moved from a neutral to an emotional expression and only her head and neck were visible. Although no sound was presented, the actor was talking and said the same neutral sentence in each video: "I felt this feeling before; it was just a few days ago."

The actor's expression of positive pride included a slightly tilted head and a small smile, which has been shown to reliably convey pride to both adults and children (Nelson & Russell, 2011b, 2012). For hubris, the actress was asked to display an expression that she felt conveyed hubris or conceit. The expression she created included slightly glaring eyes with a direct gaze, pursed but smiling lips, and a side-to-side head wag. Both the positive pride and hubris expressions were coded using the Facial Action Coding System (Ekman & Friesen, 1978). The positive pride expression was found to contain the following action units at the expression apex: 12 + 25 + 26 + 53. The hubris expression was found to contain the following action units: 13, with slight 7, 24, 55, and 56 and 1 + 2 + 4 appearing occasionally. Figure 1 provides an example of the expressions at the apex.

To ensure that the hubris expression conveyed some aspect of the general category of pride, a second group of participants ($N = 40$, 15 male, 18–22 years) were asked to freely label the positive pride and hubris expressions, interspersed with happiness, anger, surprise, and embarrassment. Participants' most common responses for the positive pride expression were: proud (52%), happy (10%), smug (7.5%), and confident (5%). Ten additional responses were idiosyncratic, occurring only once. Participants' most common responses for the hubris expression were: proud (23%), smug (20%), confident (10%), and sassy (10%). Fifteen additional responses were idiosyncratic, occurring only once. Thus, for both positive pride and hubris expressions, the modal response produced by participants was *proud*.

Procedure. The set of expressions was presented twice. During the first viewing, participants categorized the emotion presented. During the second viewing, they rated the presence of several traits in each expression. The expressions were presented in one of four random orders. The order of target face presentation was counterbalanced so that for the first viewing of the clips, half of participants saw the positive pride expression before the hubris expression and half



Figure 1. An example of the positive pride (left) and hubris (right) expressions. See the online article for the color version of this figure.

saw the hubris expression before the positive pride expression. For the second viewing of the clips, the order of target expression presentation was reversed.

Emotion categorization. During the first viewing of the video clips, participants selected the single best term for each emotion presented. Available terms were: *angry, conceited, confident, embarrassed, happy, surprised, stuck-up, successful*, and *none of the above*. In line with prior research (Tracy & Robins, 2007a), we accepted the terms *confident* and *successful* for positive pride and the terms *conceited* and *stuck-up* for hubris. The dependent variable was whether participants matched a target label with the expression shown.

Valence, arousal, and trait ratings. During the second viewing of the video clips, participants rated, on a 7-point Likert scale, each video clip in terms of valence and arousal (Russell, 1980). For valence, the scale ranged from -3 (*extremely unpleasant*) to $+3$ (*extremely pleasant*); for arousal, the scale ranged from 0 (*extreme sleepiness*) to 6 (*extremely high arousal*). The five trait ratings were reflective of three categories, based on previous research that suggested positive pride and hubris vary in terms of prosocial, aggressive, and dominance behaviors (Cheng, Tracy, & Henrich, 2010; Tracy, Cheng, Robins, & Trzesniewski, 2009). Thus, participants evaluated each video clip in terms of positive (*friendliness, approachability*), negative (*threat*), and dominance (*confidence, power*) traits. Participants first judged whether the trait was present in the display (circling yes or no); if participants judged the trait *not* to be present, a value of 0 was assigned. If participants judged the trait to be present, they selected on a scale, from 1 (*barely*) to 6 (*maximum intensity*), the extent which the trait was displayed.

Results

Repeated-measures analyses of variance (ANOVAs) on participants' emotion categorizations and on trait ratings showed no main effects or interactions related to the gender of the participant ($ps > .08$, $\eta_p^2 < .04$) or order of emotion presentation ($ps > .25$, $\eta_p^2 < .22$). Therefore, these factors were not included in further analyses.

Emotion categorization. Over 96% of participants attributed one of the four pride labels (*confident, conceited, stuck-up, or successful*) to the positive pride and the hubris expressions (see Table 1). However, participants clearly differentiated between hubris and positive pride: 85% of participants selected a hubris

term for the hubris expression, and 56% selected a positive pride term for the positive pride expression.

A one-way repeated-measures ANOVA showed that participants' labeling of the six clips varied with the emotion presented, $F(5, 255) = 12.82$, $p < .001$, $\eta_p^2 = .22$. Bonferroni corrected post hoc analyses indicated that participants were as likely to choose an expected term (*stuck up, conceited*) for the hubris expression as they were for the more commonly used expressions of happiness, anger, and surprise ($ps > .44$). Participants were less likely to choose an expected term (*confident, successful*) for the positive pride expression than for the other emotions presented ($ps < .001$), but a majority of participants chose positive pride terms for this expression ($M = 56\%$) and a t test indicated that this number was significantly greater than chance, $t(51) = 4.86$, $p < .001$. Chance was set at 22%. This number was chosen because there were two possible positive pride terms available on the given list (*confidence and successful*) and there were nine available labels in total. Although participants were less likely to choose the expected term for positive pride than for other expressions presented, they were not selecting positive pride labels randomly.

Valence and arousal. The hubris and positive pride expressions also differed in valence and arousal. Dependent-samples t tests showed that the positive pride expression was rated as more positive, $t(51) = 5.55$, $p < .001$, and of higher arousal, $t(51) = 5.32$, $p < .001$, than the hubris expression (see Figure 2). In addition, both the positive pride and the hubris expressions were rated as lower arousal than the happiness, surprise, and anger expressions, but as higher arousal than the embarrassment expression. Finally, the positive pride expression was rated as moderately positive ($M = 1.6$), whereas the hubris expression—an expression where the poser's experience is positive while the observer's is negative—was rated as neutral ($M = 0.3$).

Trait ratings. The traits attributed to the positive pride and hubris expressions also varied. A one-way repeated-measures ANOVA showed that participants' ratings varied with the emotion presented, $F(5, 255) = 93.82$, $p < .001$, $\eta_p^2 = .65$, and by the trait presented, $F(4, 204) = 88.61$, $p < .001$, $\eta_p^2 = .64$. Of particular interest was the Trait \times Emotion interaction, $F(20, 1020) = 100.01$, $p < .001$, $\eta_p^2 = .66$. To more closely examine the proposed facets of pride, we first compared participants' ratings of the positive pride and hubris expressions (see Figure 3). Bonferroni-corrected post hoc tests showed that the expression of positive pride was rated as more friendly and approachable ($ps < .001$) and

Table 1
Proportion of Terms Attributed to Each Expression for Study 1

Facial expression	Emotion category chosen							Total
	Happy	Angry	Surprised	Embarrassed	Hubris	Positive pride	None	
Happiness	0.87	0.00	0.04	0.00	0.00	0.09	0.00	1.0
Anger	0.00	0.98	0.00	0.00	0.02	0.00	0.00	1.0
Surprise	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.0
Embarrassment	0.00	0.00	0.00	0.88	0.02	0.00	0.10	1.0
Hubris	0.00	0.00	0.00	0.00	0.85	0.12	0.03	1.0
Positive pride	0.02	0.00	0.00	0.00	0.40	0.56	0.02	1.0

Note. Maximum = 1.00. Terms accepted for positive pride were *confident* and *successful*; terms accepted for hubris were *conceited* and *stuck-up*. Expected terms for each expression are given in boldface.

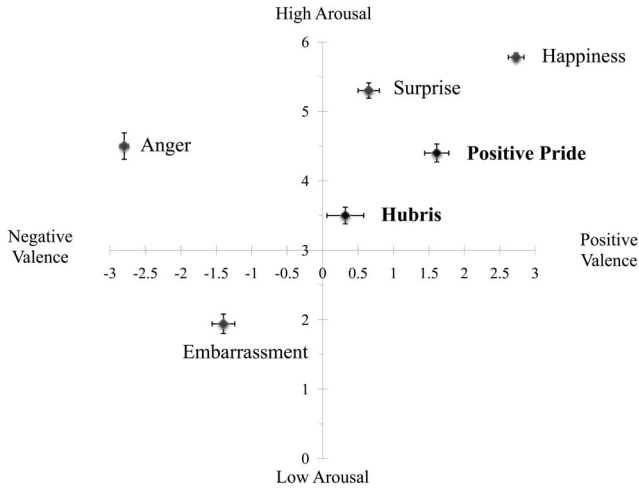


Figure 2. Valence and arousal ratings of six dynamically presented facial expressions of emotion for Study 1. Error bars represent standard errors.

less threatening ($p = .07$) than the hubris expression; participants were more likely to attribute positive traits to the positive pride expression and negative traits to the hubris expression. The positive pride and hubris expressions were rated as displaying similar levels of power and confidence ($ps = 1.0$), however, suggesting that participants did not use dominance traits to differentiate the two expressions.

We next compared participants' ratings of positive pride and hubris with their ratings of happiness and anger, expressions that have been suggested to be similar to expressions of pride in terms of valence or arousal (Tracy & Robins, 2004; Nelson & Russell, 2011b). Happiness and positive pride were rated similarly low in terms of negative traits (threat) whereas happiness and hubris were rated differently for all positive (friendliness and approachability) and negative traits (see Table 2). Anger and hubris were also rated similarly low in terms of positive traits, whereas anger and positive pride were rated differently for all positive and negative traits. These results suggest that participants viewed the traits displayed in the expressions of happiness and positive pride as similar and the traits displayed in the expressions of anger and hubris as similar.

Discussion

This study provides the first evidence that hubris can be conveyed by a dynamic, nonverbal expression and that it can be distinguished from positive pride. Contrary to prior research using static images, in which finding an expression of hubris presented some difficulty, 85% of participants labeled the dynamic hubris expression with a hubristic term, agreement similar to that seen for other, more commonly used expressions such as happiness and anger. Participants also demonstrated differentiation in their ratings of the traits conveyed by the two expressions: More positive traits were attributed to the positive pride expression and more negative traits to the hubris expression.

It is possible that our results differ from those of past research because we presented participants with dynamic expres-

sions of positive pride and hubris. The additional movement and temporal information provided by a dynamic expression may have allowed participants to match a hubristic label with the hubris expression as well as differentiate the expression from that of positive pride.

Study 2

That Study 1 produced an expression that participants agreed displayed hubris may have been due to the dynamic stimuli used, rather than static photographs, which have been used in prior research. To examine this interpretation, we conducted a second study in which half of participants saw static expressions and half saw dynamic expressions. In addition, to ensure that the results from Study 1 were generalizable and not due to the female poser used, we used expressions posed by two new actors—one male and one female. We also included a wider variety of emotional expressions, and accepted only a single term for each of the target emotions: *confident* for positive pride and *conceited* for hubris.

Method

Participants. Sixty participants (26 male, 34 female; $M_{\text{age}} = 35.1$ year, $SD = 13.76$) participated using an online questionnaire. All participants were tested in the United States, were fluent in English, and participated in this research in exchange for a small monetary reward. The sample was comprised of 85% White, 4.5% Asian, 4.5% African American, and 6% Hispanic participants.

Materials. We videotaped two new professional actors with experience in theater and film posing each of nine expressions: happiness, sadness, anger, fear, surprise, disgust, embarrassment, positive pride, and hubris.

Dynamic video clips. The video clips were of an approximate standard length (5 s). For each expression, the actor moved from a neutral to an emotional expression, and only the head and neck were visible. The actors did not speak. The target

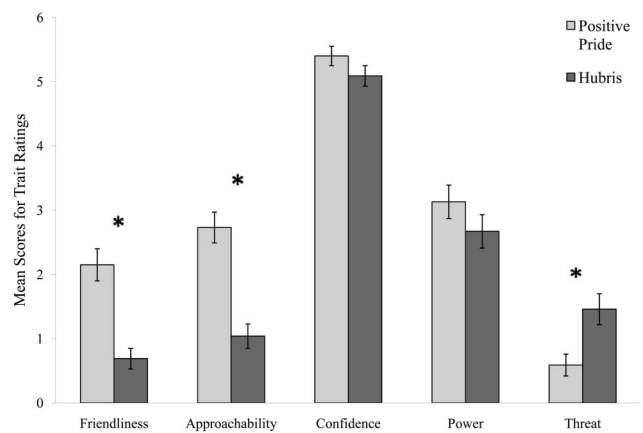


Figure 3. Trait ratings of two dynamic expressions in Study 1. Maximum = 6.0. Error bars represent standard errors. * Significant differences between expressions intending to convey positive pride and hubris for a particular trait.

Table 2
Mean Ratings for Each Trait by Each Expression Presented for Study 1

Facial expression	Friendliness	Approachability	Confidence	Power	Threat
Happiness	5.25 _a	5.10 _a	4.56 _a	2.02 _c	.04 _b
Positive pride	2.15 _c	2.73 _{g,c}	5.40 _{a,d}	3.13 _{g,h}	.59 _b
Hubris	.69 _f	1.04 _{a,f}	5.09 _{a,d}	2.67 _h	1.46 _f
Anger	.02 _{d,f}	.17 _{a,d}	2.06 _c	2.34 _{c,h}	3.65 _e
Surprise	3.11 _e	3.57 _e	1.69 _d	.04 _b	.01 _b
Embarrassment	1.34 _h	1.86 _h	.02 _b	.10 _{b,c}	.04 _b

Note. Maximum = 6.00. Bonferroni post hoc tests ($\alpha = .05$) were calculated on the means. Means in the same row that do not share a subscript differ at $p < .009$. Means in the same column that do not share a subscript differ at $p < .001$.

expressions of hubris and positive pride were modeled after those used in Study 1 and included the same action units as the expressions used in Study 1. For the positive pride expression, the male and female posers' expressions were found to contain the following action units at the expression apex. The positive pride expression was found to contain the following action units at the expression apex: 12 + 25 + 26 + 53. For the hubris expression, the male and female posers' expressions were found to contain the following action units at the apex: 13, with slight 7, 24, 55, and 56 and 1 + 2 + 4 appearing occasionally. All other expressions were modeled after expressions published in previous literature (Tracy, Robins, & Schriber, 2009).

Static photographs. The photographs were created by taking the frame of the apex of the actor's facial expression from the audiovisual clip. The apex was defined as the frame before the actors began to relax their face and cease expressing.

Procedure. Participants viewed 18 expressions, half of which were posed by the male poser and half by the female poser. In a between-subjects design, half of participants viewed the expressions as dynamic video clips and half viewed them as static photographs. Expressions were presented in one of four random orders. The order of poser presentation was counterbalanced, as was the order of target expression presentation: Half of participants saw the positive pride expression before the hubris expression and half saw the hubris expression before the positive pride expression. Participants were asked to select the single best term for each expression presented. Available terms were: *angry*, *conceited*, *confident*, *disgusted*, *embarrassed*, *happy*, *sad*, *scared*, *surprised*, and *none of the above*. The dependent variable was whether participants matched the target label with the expression shown.

Results

When data were collapsed across static and dynamic presentations, a majority of participants attributed one of the pride labels (*conceited*, *confident*) to the positive pride (80% of responses) and the hubris expressions (62% of responses). Participants also differentiated between the expressions intended to convey hubris and positive pride: 53% of participants attributed *conceited* to the hubris expression and 65% attributed *confident* to the positive pride expression. Dependent-samples *t* tests showed that participants' attributions of the expected label did not differ significantly across the two poser's expressions of

positive pride and hubris. We therefore averaged participants' emotion attributions across posers.

A 2 (static vs. dynamic presentations) \times 9 (emotion) \times 2 (gender of participant) repeated-measures ANOVA found a main effect of participants' gender. Female participants were more likely to attribute the expected emotion to expressions than male participants were, but gender did not interact with any other variables ($ps > .10$). In addition, dependent-samples *t* tests showed that participants selected the target label similarly for each poser's expressions of positive pride, $t(59) = 1.73$, $p = .09$, $d = .28$, and hubris, $t(59) = 1.23$, $p = .22$, $d = .20$.

Participants' labeling of the expressions varied with the stimulus presentation, $F(1, 56) = 5.62$, $p = .02$, $\eta_p^2 = .09$. Bonferroni-corrected post hoc analyses indicated that participants were more likely to attribute the expected emotion when the expressions were presented as dynamic video clips than as static photographs ($p = .008$).

Participants' labeling of the expressions also varied with the emotion presented, $F(8, 448) = 19.45$, $p < .001$, $\eta_p^2 = .26$. For expressions intending to convey positive pride, participants' likelihood of choosing the expected term did not differ from that of anger and surprise ($ps > .56$), but was lower than that of happiness, sadness, surprise, and disgust ($ps < .001$). For expressions intending to convey hubris, participants' likelihood of choosing the expected term was less than that for the other emotions presented ($ps < .001$), with the exception of embarrassment ($p = .57$). However, a majority of participants chose the hubris term for this expression ($M = 53\%$) and a *t* test indicated that this number was significantly greater than chance, $t(59) = 8.63$, $p < .001$. Chance was set at 10%. This number was chosen because there was one hubris term available on the given list (*conceited*) and there were 10 available labels in total. These findings indicate that although participants chose the expected term less than for other expressions presented, they were not selecting hubris labels randomly.

Of particular interest to our predictions, for some expressions, participants' likelihood of attributing the expected term varied with the stimulus presentation, $F(8, 448) = 8.33$, $p < .001$, $\eta_p^2 = .13$ (see Table 3). For expressions intended to convey positive pride, no difference between dynamic and static presentations was found ($Ms = 60\%$, 70% , respectively). However, for expressions intended to convey hubris, participants were more likely to attribute the expected label when the expression was presented dynamically than statically ($Ms =$

Table 3
Proportion of Terms Attributed to Each Emotion for Study 2

Facial expression	Emotion category chosen										Total
	Happy	Sad	Angry	Scared	Surprised	Disgusted	Embarrassed	Positive pride	Hubris	None	
Happiness											
Static	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	1.00
Dynamic	0.88	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.02	0.05	1.00
Sadness											
Static	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.00
Dynamic	0.00	0.97	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	1.00
Anger											
Static	0.00	0.05	0.75	0.00	0.00	0.07	0.02	0.00	0.05	0.07	1.00
Dynamic	0.02	0.02	0.78	0.00	0.02	0.03	0.00	0.00	0.02	0.12	1.00
Fear											
Static	0.00	0.00	0.00	0.70	0.23	0.03	0.03	0.00	0.00	0.00	1.00
Dynamic	0.02	0.02	0.00	0.78	0.10	0.07	0.02	0.00	0.00	0.00	1.00
Surprise											
Static	0.00	0.00	0.00	0.15	0.85	0.00	0.00	0.00	0.00	0.00	1.00
Dynamic	0.00	0.00	0.00	0.10	0.87	0.02	0.02	0.00	0.00	0.00	1.00
Disgust											
Static	0.00	0.00	0.10	0.02	0.00	0.85	0.00	0.00	0.02	0.02	1.00
Dynamic	0.00	0.00	0.05	0.00	0.00	0.92	0.02	0.00	0.00	0.02	1.00
Embarrassment											
Static	0.05	0.00	0.00	0.00	0.02	0.00	0.38	0.07	0.37	0.12	1.00
Dynamic	0.00	0.00	0.00	0.02	0.00	0.00	0.83	0.00	0.05	0.10	1.00
Positive pride											
Static	0.15	0.00	0.00	0.00	0.00	0.00	0.02	0.70	0.13	0.00	1.00
Dynamic	0.10	0.00	0.00	0.00	0.00	0.02	0.03	0.60	0.17	0.08	1.00
Hubris											
Static	0.32	0.02	0.00	0.00	0.00	0.00	0.18	0.07	0.32	0.10	1.00
Dynamic	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.12	0.75	0.08	1.00

Note. Maximum = 1.00. The term accepted for positive pride was *confident*; the term accepted for hubris was *conceited*. Expected term for each expression is given in boldface.

75%, 32%, respectively) ($p = .001$). In addition, no differences between dynamic and static presentations were found for expressions of happiness, sadness, anger, fear, surprise, and disgust, whereas for embarrassment, participants were more likely to attribute the expected label when expressions were presented dynamically ($p = .001$).

Discussion

These data show an advantage for dynamic presentations of the expression intended to convey hubris, but no such advantage was found for expressions intended to convey positive pride. These data provide a possible explanation for the discrepancy between our results in Study 1 and those of prior research, in which participants did not differentiate between static photographs intended to convey positive pride and hubris (Tracy & Robins, 2007b).

General Discussion

In daily life, the positive and negative sides of pride may cause a wide variety of expressions, but here we have shown that observers reliably infer positive pride and hubris from two distinct expressions. These findings are in contrast to previous research and represent a significant advance in our understanding of the ways pride can be conveyed. In two studies, a majority of participants matched expressions intended to convey positive pride and

hubris, posed by three different posers, with the expected terms. It is possible that more expressions will be found. In particular, expressions that show even more positivity or more or less arousal may elicit further differentiation of positive pride and hubris, and may point to a different manner of dividing up the category of pride altogether.

In addition, we have provided evidence that participants are more likely to match the expected term with expressions intending to convey hubris when they are presented as dynamic video clips, rather than as static photographs. However, no such advantage for dynamic presentations was found for expressions intending to convey positive pride. These data may explain differences between our findings and those of previous research. In addition, these data add to literature suggesting that, for some expressions, dynamic presentations increase participants' likelihood of attributing the expected emotion term (Bould, Morris, & Wink, 2008; Krumhuber, Kappas, & Manstead, 2013).

These findings also add to a growing body of evidence indicating that positive pride can be conveyed with a facial expression alone and does not require the presence of a postural expression (Nelson & Russell, 2011b, 2012).

That this study produced an expression that participants agreed displayed hubris may have been due to the process employed in creating the expression: The actors were encouraged to create their own, dynamic expression, one that they intuitively felt conveyed hubris realistically. This promising

method may have encouraged the actors to create particularly convincing expressions of hubris, ones that employed more information than could be captured in static images and, therefore, provided information participants could use to differentiate it from an expression intended to convey positive pride. Future studies could use this same method with expressions of positive pride to determine whether the expressions people spontaneously generated are the same as those that have been hypothesized as conveying positive pride in previous research (e.g., Tracy & Robins, 2004).

A review of recent literature concerning positive pride and hubris has highlighted a disagreement as to the nature of these two categories. Some have suggested that positive pride and hubris constitute different emotion categories (Cheng, Tracy, & Henrich, 2010; Clark, 2010; Tracy & Prehn, 2012; Tracy & Robins, 2007a, 2007b; Tracy, Shariff, & Cheng, 2010), whereas others have suggested that these must be the same emotion category (differentiated linguistically, rather than empirically), if only because distinguishable expressions had yet to be found (Williams & DeSteno, 2010). Although we present evidence here that expressions of positive pride and hubris can be differentiated, this does not justify the conclusion that they are two separate emotion categories. First, participants seem to consider these expressions to be stemming from the same, omnibus category: when participants labeled one of the pride-related expressions with a word that was not the expected term, they were most likely to select one of the other pride-related words provided, suggesting they saw the two expressions as similar. Our findings with free-labeling echo this idea, showing that the modal response for both expressions was *pride*; participants do not distinguish between positive pride and hubris spontaneously. The forced-choice procedure can influence participants' responses (Russell, 1994) and it is possible that participants distinguished between positive pride and hubris primarily because they were encouraged to do so by the labels provided. Second, participants have attributed pride to a wide range of expressions (Arimitsu, 2011; Nelson & Russell, 2011b, 2012; Tamietto, Adenzato, Geminiani, & de Gelder, 2007; Tracy & Robins, 2007b) and we find it unlikely that each of these expressions is indicative of a new and separate facet of pride. Indeed, it is possible that unique expressions could be found for contentment, excitement, and awe, although most people would consider these variations of happiness. Therefore, the existence of a facial expression associated with hubris is not sufficient to justify the delineation of a separate emotion category. Finally, previous research has shown cultural differences in both the words and the expressions associated with pride. In comparing Russian and Western concepts of positive pride and hubris, Gladkova (2010) found cultural variations in the meanings of words associated with each concept. In addition, Tracy, Shariff, Zhao, and Henrich (2013) have shown that Fijian participants view expressions of pride and happiness as similarly high status, in contrast to Western participants. These studies suggest that the categorical distinctions found in Western research do not apply to all cultures. Ultimately, we believe that the most parsimonious explanation is this: The expressions of positive pride and hubris are simply two of many possible variations within the overall category of pride and convey, among other things, valence, arousal, threat, dominance, and friendliness.

Pride can be subdivided into any number of categories, and, on the basis of a myriad of qualities, expression configuration is just one of these qualities.

References

- Ambadar, Z., Schooler, J. W., & Cohn, J. F. (2005). Deciphering the enigmatic face: The importance of facial dynamics in interpreting subtle facial expressions. *Psychological Science, 16*, 403–410. doi:10.1111/j.0956-7976.2005.01548.x
- Arimitsu, K. (2011, January). *Nonverbal expressions of pride, shame and embarrassment in Japan*. Poster presented at the 13th Annual Meeting of the Society for Personality and Social Psychology, San Antonio, TX.
- Bould, E., Morris, N., & Wink, B. (2008). Recognising subtle emotional expressions: The role of facial movements. *Cognition and Emotion, 22*, 1569–1587. doi:10.1080/02699930801921156
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior, 31*, 334–347. doi:10.1016/j.evolhumbehav.2010.02.004
- Clark, J. A. (2010). Hubristic and authentic pride as serial homologues: The same but different. *Emotion Review, 2*, 397–398. doi:10.1177/1754073910374663
- Ekman, P., & Friesen, W. V. (1978). *Facial action coding systems*. Palo Alto, CA: Consulting Psychologists Press.
- Gladkova, A. (2010). A linguist's view of "pride". *Emotion Review, 2*, 178–179. doi:10.1177/1754073909355014
- Holbrook, C., Piazza, J., & Fessler, D. M. T. (2014). Conceptual and empirical challenges to the "authentic" versus "hubristic" model of pride. *Emotion, 14*, 17–32. doi:10.1037/a0031711
- Krumhuber, E. G., Kappas, A., & Manstead, A. S. R. (2013). Effects of dynamic aspects of facial expressions: A review. *Emotion Review, 5*, 41–46. doi:10.1177/1754073912451349
- Nelson, N. L., & Russell, J. A. (2011a). Preschoolers' use of dynamic facial, bodily, and vocal cues to emotion. *Journal of Experimental Child Psychology, 110*, 52–61. doi:10.1016/j.jecp.2011.03.014
- Nelson, N. L., & Russell, J. A. (2011b). When dynamic, the head and face alone can express pride. *Emotion, 11*, 990–993. doi:10.1037/a0022576
- Nelson, N. L., & Russell, J. A. (2012). Children's understanding of nonverbal expressions of pride. *Journal of Experimental Child Psychology, 111*, 379–385. doi:10.1016/j.jecp.2011.09.004
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39*, 1161–1178. doi:10.1037/h0077714
- Russell, J. A. (1994). Is there universal recognition of emotion from facial expression?: A review of the cross-cultural studies. *Psychological Bulletin, 115*, 102–141.
- Tamietto, M., Adenzato, M., Geminiani, G., & de Gelder, B. (2007). Fast recognition of social emotions takes the whole brain: Interhemispheric cooperation in the absence of cerebral asymmetry. *Neuropsychologia, 45*, 836–843. doi:10.1016/j.neuropsychologia.2006.08.012
- Tracy, J. L., Cheng, J. T., Robins, R. W., & Trzesniewski, K. (2009). Authentic and hubristic pride: The affective core of self-esteem and narcissism. *Self and Identity, 8*, 196–213. doi:10.1080/15298860802505053
- Tracy, J. L., & Prehn, C. (2012). Arrogant or self-confident? The use of contextual knowledge to differentiate hubristic and authentic pride from a single nonverbal expression. *Cognition and Emotion, 26*, 14–24. doi:10.1080/02699931.2011.561298
- Tracy, J. L., & Robins, R. W. (2004). Show your pride: Evidence for a discrete emotion expression. *Psychological Science, 15*, 194–197. doi:10.1111/j.0956-7976.2004.01503008.x
- Tracy, J. L., & Robins, R. W. (2007a). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology, 92*, 506–525. doi:10.1037/0022-3514.92.3.506

- Tracy, J. L., & Robins, R. W. (2007b). The prototypical pride expression: Development of a nonverbal behavioral coding system. *Emotion, 7*, 789–801. doi:10.1037/1528-3542.7.4.789
- Tracy, J. L., & Robins, R. W. (2007c). Emerging insights into the nature and function of pride. *Current Directions in Psychological Science, 16*, 147–150. doi:10.1111/j.1467-8721.2007.00493.x
- Tracy, J. L., Robins, R. W., & Schriber, R. A. (2009). Development of a FACS-verified set of basic and self-conscious emotion expressions. *Emotion, 9*, 554–559. doi:10.1037/a0015766
- Tracy, J. L., Shariff, A. F., & Cheng, J. T. (2010). A naturalist's view of pride. *Emotion Review, 2*, 163–177. doi:10.1177/1754073909354627
- Tracy, J. L., Shariff, A. F., Zhao, W., & Henrich, J. (2013). Cross-cultural evidence that the nonverbal expression of pride is an automatic status signal. *Journal of Experimental Psychology: General, 142*, 163–180. doi:10.1037/a0028412
- Wehrle, T., Kaiser, S., Schmidt, S., & Scherer, K. R. (2000). Studying the dynamics of emotional expression using synthesized facial muscle movements. *Journal of Personality and Social Psychology, 78*, 105–119. doi:10.1037/0022-3514.78.1.105
- Williams, L. A., & DeSteno, D. (2010). Pride in parsimony. *Emotion Review, 2*, 180–181. doi:10.1177/1754073909355015

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