The Relationship Among Expressions, Labels, and Descriptions of Contempt

David Matsumoto
San Francisco State University

Paul Ekman
University of California, San Francisco

This article reports 4 studies that demonstrate that the contempt expression is reliably associated with situations that elicit contempt and that the inability to label the contempt expression reflects a problem with its label or concept and not with the relationship between its expression and emotion. In Study 1, the labeling of contempt in fixed-choice judgment tasks did not occur because of a process of elimination. In Studies 2 and 3, the contempt expression was associated with situations that elicit contempt, but participants did not label the situations in an open-ended response. In Study 3, participants also more reliably labeled the contempt expression with situations rather than with labels and did not generate contempt situations from labels. In Study 4, participants reported using, hearing, and reading about contempt the least among 7 emotions tested.

The existence of basic, universally recognized and expressed emotions has considerable import in psychology. Such expressions serve as a platform from which to study the phylogenetic roots in evolution and to understand the intersection between biological and cultural influences on behavior. They give researchers an important basis to use to understand and improve interpersonal and intercultural communication as well as motivation. They allow one to theorize about emotional development and the interaction between emotion and cognition.

Only a few studies have directly examined expression itself in different cultures (Ekman, 1972; Ekman & Friesen, 1971; Friesen, 1972; Matsumoto & Kupperbusch, 2001; Waxer, 1985). Instead, most studies have shown expressions to observers and asked them to choose from a list of emotion terms the one that best fits the expression. Questions about the possible artifacts involved in such judgment tasks, such as the use of forced-choice judgment tasks and the statistical criterion used to test for agreement in judgment, have been raised (Russell, 1994), and these have been answered (Ekman, 1994). Ekman (1994) drew attention to comparable results obtained with matching expressions to short emotion vignettes and with free-response formats. There now appears to be agreement that some emotions do have an expression that is universal, although how each emotion is represented in language, rules about the management of emotion, attitudes about each emotion, and their social consequences all vary between and within cultures.

One of the issues about which disagreement persists is just how many emotions have a universal facial expression. The original studies on observer's judgments focused primarily on six emotions: anger, fear, disgust, happiness, sadness, and surprise (Ekman, 1994). Although Izard reported evidence for other emotions (Izard, 1971, 1992), his evidence was limited primarily to literate cultures. The only evidence from a preliterate, visually isolated culture was Ekman and Friesen's (Ekman & Friesen, 1971; Ekman, Sorenson, & Friesen, 1969) study in New Guinea of the same six emotions.

Although we speak of anger, disgust, fear, happiness, sadness, and surprise as emotions, they are better considered as linguistic exemplars of emotion "families" rather than as single emotions themselves (Ekman, 1992a, 1992b, 1992c, 1993, 1999). That is, they denote different classes of emotional states that share many of the same characteristics in terms of subjective feelings, appraisal processes, and expression. Yet there may be subtle differences within these classes of families, as is suggested by the work of Shaver and colleagues (Shaver, Murdaya, & Fraley, 2001; Shaver, Schwartz, Kirson, & O'Connor, 1987; Shaver, Wu, & Schwartz, 1992), who have examined the relationships among different emotion terms in different languages. They have found that many emotion words cluster into a small set of supercategories, some of which correspond to the universal expressions Ekman and his colleagues have reported, such as anger, fear, happiness, and surprise. Yet within those supercategories there are categories and subcategories of other emotion words. The anger family, for in-

David Matsumoto, Department of Psychology, San Francisco State University; Paul Ekman, Department of Psychiatry, University of California, San Francisco.

We thank David Rogers for his assistance in running the experiments described; Tiffeny Jimenez, Kathryn Vaughn, and Seung Hee Yoo for their assistance in the general laboratory program; and Seung Hee Yoo, Satoko Hirayama, and Jungwook Choi for their assistance in coding in Study 3.

Correspondence concerning this article should be addressed to David Matsumoto, Department of Psychology, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. E-mail: dm@sfsu.edu

Journal of Personality and Social Psychology, 2004, Vol. 87, No. 4, 529–540
 0022-3514/04/$12.00 DOI: 10.1037/0022-3514.87.4.529

stance, includes *aggravation, irritation, agitation, frustration, rage, fury,* and the like. The sadness family includes *hurt, distress, depression, sorrow, melancholy,* and *disappointment.* Although there are subtle differences among these kinds of specific emotional states within families, they supposedly share the same basic universal expression.

More recently, a seventh expression has been postulated to be universally recognized and thus a member of the exclusive group of basic emotions. This expression is a unilateral lip raise and tightening and has been labeled *contempt* by Ekman and his team of researchers (Ekman & Friesen, 1986; Ekman & Heider, 1988; Matsumoto, 1992; see Figure 1).

The contention that this expression is universally recognized as contempt, however, has come under scrutiny since its report, first in terms of priority in discovery (Izard & Haynes, 1988) and subsequently in terms of its validity (see review below). This article contributes to this literature by addressing questions left open by the existing data, extending researchers' understanding of the expression and emotion of contempt, and reformulating the nature of the debate concerning the contempt expression.

What Do We Know?

To date, 26 studies reported in 15 articles have provided data on the contempt expression (Table 1). Individuals from Estonia, Greece, Hong Kong, Japan, Turkey, the United States, West Germany, Sumatra, Italy, Vietnam, Poland, Hungary, Great Britain (including Scotland), and India judged this expression as contempt (Biehl et al., 1997; Ekman & Friesen, 1986; Ekman & Heider, 1988; Haidt & Keltner, 1999; Matsumoto, 1992; Ricci-Bitti, Brighetti, Garotti, & Boggi-Cavallo, 1989; Rosenberg & Ekman, 1995; Wagner, 2000).

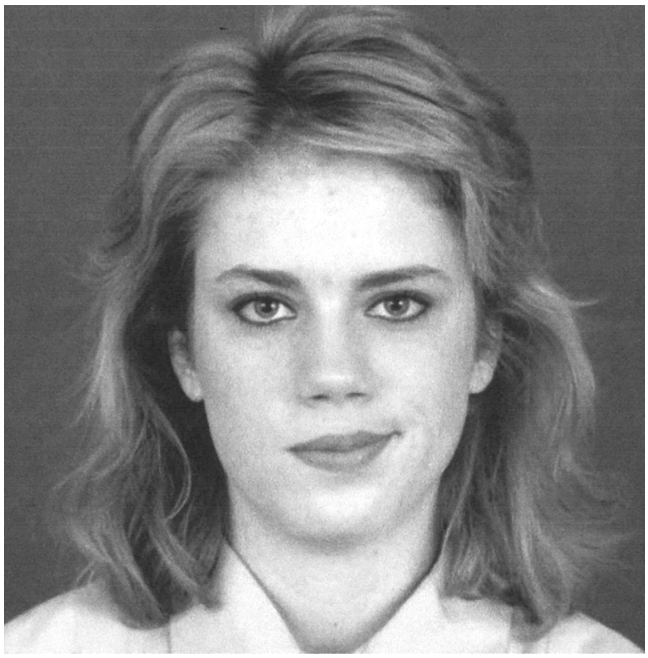

Figure 1. Example of the contempt expression—unilateral lip raise and tighten. Copyright 1985 by David Matsumoto and Paul Ekman.

In general, two different versions of the contempt expression have been tested. By far the more common is the unilateral lip corner raise and tighten depicted in Figure 1 (unilateral Action Units 12 and 14 according to the Facial Action Coding System, Ekman & Friesen, 1978) with head/eyes center, which has been used in 15 studies and judged as contempt consistently (Alvarado & Jameson, 1996; Biehl et al., 1997; Ekman & Friesen, 1986; Ekman & Heider, 1988; Ekman, O'Sullivan, & Matsumoto, 1991; Frijda & Tcherkassof, 1997; Matsumoto, 1992; Ricci-Bitti et al., 1989; Rozin, Lowery, Imada, & Haidt, 1999; Russell, 1991a; Wagner, 2000; Yrizarry, Matsumoto, & Wilson-Cohn, 1998). A second version of this expression is the same but includes a head tilt and/or eyes to the side (Haidt & Keltner, 1999; Rosenberg & Ekman, 1995).

A standard response format used in many studies is the forced-choice judgment task, in which participants are provided with a list of emotion labels and must choose one of them to describe the emotion portrayed in the stimulus. Curiously, agreement levels reached by using this task when judging contempt expressions (head/eyes center) were lower for Americans, British, and western Canadians than they were for people of other cultures (although they were still statistically significant; Biehl et al., 1997; Ekman et al., 1991; Haidt & Keltner, 1999; Russell, 1991a, 1991b; Wagner, 2000). In our research, for example, only 62.5% of U.S. Americans matched the contempt expressions (head/eyes center) to the "contempt" label compared with 76.7%, 79.5%, 87.0%, 81.7%, and 86.3% for Japanese, Sumatrans, Vietnamese, Poles, and Hungarians, respectively (Biehl et al., 1997). The agreement levels for the contempt expression were also significantly lower than were those for other expressions judged by Americans (cf. 84.3%, 81.0%, 79.2%, 97.6%, 91.5%, and 91.8% for judgments of anger, disgust, fear, happiness, sadness, and surprise, respectively).

Wagner (2000; and, previously, Russell, 1994) raised a possible methodological problem involving the use of forced-choice response formats in the judgment of contempt expressions. In his Study 4, two examples of anger, disgust, fear, happiness, sadness, surprise, and neutral expressions were shown to two groups of participants. One group was given the seven emotion labels as response alternatives, the other was given the same seven labels and "none of these." The results were clear: 90.5% of the participants who were provided with a "none" label called the neutral expression "none." When the "none" label was not provided, 70.4% of the participants called the neutral expressions "contempt." Wagner (2000) suggested that high levels of agreement on the unilateral lip corner raise and tighten with head/eyes center version of the contempt expression may have occurred in the past by a process of elimination. (It is not clear, however, how this argument would explain the lower agreement rates typically obtained, because the process of elimination should inflate agreement rates.)

A methodological improvement to judgment studies in recent years that has evolved from concerns such as those expressed by Wagner (2000) is the use of fixed-choice response tasks, in which participants are given "neutral" or "no fit" alternatives. Despite this change, however, studies with native English speakers using fixed-choice judgments have shown that contempt was still not the modal response (Haidt & Keltner, 1999; Russell, 1991a; Wagner, 2000). For instance, the Americans in Haidt and Keltner's (1999) study (head center/eyes side version of contempt) selected "dis-

Table 1
Summary of Studies Examining the Contempt Expression

Citation	Samples (*n*)	Expressions	Judgment tasks	Results
Ekman & Friesen, 1986	Estonia (85), Greece (63), Hong Kong (29), Italy (40), Japan (97), Scotland (42), Turkey (65), United States (40), West Germany (67), West Sumatra (36)	Unilateral lip corner raise and tighten, bilateral lip corner raise and tighten, and bilateral upper lip raise (two each), and six other emotions	Forced choice of seven emotion categories (anger, contempt, disgust, fear, happiness, sadness, or surprise)	Unilateral lip corner raise and tighten was judged by 75% of all observers across all 10 cultures as contempt
Ekman & Heider, 1988, Study 1	West Sumatra (57)	Unilateral lip corner raise and tighten (two from Ekman and Friesen, 1986; eight from Matsumoto and Ekman's, 1988, JACFEE, and six other emotions)	Forced choice of seven emotion categories (anger, contempt, disgust, fear, happiness, sadness, or surprise)	Across the 10 expressions, agreement rates ranged from .70 to .98 (M = .835)
Ekman & Heider, 1988, Study 2	Same as in Study 1	Two unilateral lip corner raise and tightens expressed by West Sumatrans and five other emotions	Forced choice of seven emotion categories (anger, contempt, disgust, fear, happiness, sadness, or surprise)	The percentages of participants selecting contempt for both expressions were 86% and 98%
Ricci-Bitti et al., 1989	Northern Italy (40), Southern Italy (40)	Unilateral lip corner raise and tighten by American expressors, and bilateral expressions posed by Northern and Southern Italians	Forced choice of seven emotion categories (anger, contempt, disgust, fear, happiness, sadness, or surprise)	Overall agreement for all expressions was 38%, which was above chance levels
Russell, 1991a, Study 1	Adults (presumably North Americans; 126)	One unilateral lip corner raise and tighten, one disgust, and one sadness	Scalar ratings of seven emotion categories and forced choice of seven emotion categories	In no condition was contempt the highest mean rating or the modal choice
Russell, 1991a, Study 2	Adults (presumably North American; 42)	One of seven unilateral lip corner raise and tighten, one disgust, and one sadness	Scalar ratings of seven emotion categories and forced choice of seven emotion categories	Highest mean rating was disgust; modal label choice also disgust
Russell, 1991a, Study 3	Adults (presumably North American; 120)	One unilateral lip corner raise and one example of six other emotions	Forced choice of seven emotion categories	When contempt was seen alone, the modal label chosen was disgust; when seen after six other emotions, modal label was contempt
Ekman et al., 1991	United States (42)	12 unilateral lip corner raise and tighten expressions and six other emotions	Forced choice of seven emotion categories	In every instance the modal judgment of the expressions was contempt regardless of what expression preceded it, and the percentage of agreement was comparable for other universal emotions (range = .52 to .76, M = .62)
Russell, 1991b, Study 1	Native English speakers (presumably Canadian; 160)	Eight unilateral lip corner raise and tightens	Free response	The modal response was disgust (.10); only 2% of the sample labeled the expressions contempt
Russell, 1991b, Study 2	Native English speakers (presumably Canadian; 64)	Eight unilateral lip corner raise and tightens	Scalar ratings of six emotions (boredom, disgust, frustration, contempt, scorn, anger)	Contempt ratings significantly higher than anger ratings, no different than frustration, and lower than boredom and disgust
Matsumoto, 1992	Japan (44), Vietnam (32), Poland (75), and Hungary (45)	12 unilateral lip corner raise and tightens used in Ekman and Friesen, 1986, and Ekman and Heider, 1988, and six other emotions	Forced choice of seven emotion categories	For each expression the modal response was contempt, and the percentage of agreement was comparable for other universal emotions
Rosenberg & Ekman, 1995, Study 1	United States (95)	Two unilateral lip corner raise and tightens with head turn and eyes to the side and six other emotions	Three conditions: free response, forced choice of seven stories, or forced choice of seven emotion categories	On free response labels, the judgment agreement rates were not better than chance. For both forced choice judgments, the modal response was contempt and the agreement rates were comparable for other emotions (.75 and .95, respectively)

(*table continues*)

Table 1 (*continued*)

Citation	Samples (*n*)	Expressions	Judgment tasks	Results
Rosenberg & Ekman, 1995, Study 2	United States (31)	Two unilateral lip corner raise and tightens with head turn and eyes to the side and six other emotions	Fixed choice of seven stories with no fit option	The percentage of participants selecting the contempt story was high (.94)
Alvarado & Jameson, 1996, Study 1	United States (28)	Three unilateral lip corner raise and tightens and six other emotions and neutrals	Contempt and other emotions presented in triads, and participants asked to select the "most different" expression	Contempt expressions are perceived as its own category, distinct from other emotional expressions
Alvarado & Jameson, 1996, Study 2	United States (229)	Four unilateral lip corner raise and tightens and four disgust expressions	In one condition contempt and disgust expressions were presented in pairs and participants selected the expression showing the most contempt. In a second condition, pairs of emotion terms for contempt and disgust were presented to participants, who selected the term that best described each expression	Contempt is an emotion concept that does not consistently exhibit either lexical or facial expression representation
Alvarado & Jameson, 1996, Study 3	United States (15)	Four unilateral lip corner raise and tightens, four each of anger, disgust, and sad expressions	Same as Study 2 above, but in combination with different emotions	Most participants prefer expressions of anger as an exemplar of the term *contempt*
Biehl et al., 1997	United States (271, of which data from 42 were reported in Ekman, O'Sullivan, and Matsumoto, 1991) and Sumatra (32)	Four unilateral lip corner raise and tightens and six other emotions	Forced choice of seven emotion categories	For each expression the modal response was contempt, and the percentage of agreement was comparable for other universal emotions (range = .46 to .90, *M* = .71)
Frijda & Tcherkassof, 1997	Unspecified	Four unilateral lip corner raise and tightens and six other emotions	Scalar ratings of seven emotion categories	Average agreement is well above chance (.68)
Yrizarry et al., 1998	United States (107) and Japan (110)	Eight unilateral lip corner raise and tightens and six other emotions	Scalar ratings of seven emotion categories	Across all expressions, Americans give disgust the highest mean rating (3.05) (contempt second highest, 2.33), whereas Japanese give contempt highest mean rating (4.32) (disgust second highest, 2.06)
Haidt & Keltner, 1999	United States (40) and Orissa, India (40)	One unilateral lip corner raise and tighten with eyes to the side, 10 other emotions, and three exploratory expressions	Free response and then a fixed choice judgment task with 14 emotion terms and an "other" option	In the fixed choice condition, the modal judgment for Americans was disgust (.55) followed by contempt (.35); for Indians, it was contempt (.63) followed by disgust (.18). In the free response condition, the modal response for Indians was contempt (.61) followed by annoyance (.13); for Americans, it was annoyance (.29) followed by contempt (.19). There were no differences, however, in situational analyses of the free responses between Americans and Indians
Rozin et al., 1999, Study 1	United States (90) and Japan (103) (Study 1)	One unilateral lip tightening and one unilateral lip tightening and upper lip raise, along with anger and disgust expressions	Matching task to descriptions of moral violations	Participants matched the contempt faces to violations of ethics of community, which were conceptually related to the emotion of contempt; they did not, however, match the contempt label with the situations
Rozin et al., 1999, Study 4	United States (20)		Participants asked to produce faces corresponding with various situations describing moral violations	Unilateral and bilateral lip tightening was significantly correlated with descriptions of violations of ethics of community

Table 1 (*continued*)

Citation	Samples (*n*)	Expressions	Judgment tasks	Results
Wagner, 2000, Study 1	Great Britain (85)	Unilateral lip corner raise and tighten, bilateral lip corner raise and tighten, and anger and disgust expressions	Free response, then forced choice of five emotion categories, then definition of contempt	Contempt not judged above chance using free response, but is well above chance on forced choice
Wagner, 2000, Study 2	Great Britain (44)	Four unilateral lip raises and anger, disgust, and neutral expressions	Definition matching task, then free response, then fixed choice with three emotion categories and neutral	Contempt not judged above chance using free response and judged as neutral using fixed choice
Wagner, 2000, Study 3	Great Britain (48)	One unilateral lip raise and six other emotions	A priming task, then free response, then forced choice of seven emotion categories	Contempt not judged above chance using free response, but is well above chance on forced choice
Wagner, 2000, Study 4	Great Britain (91)	Neutral expressions substituted for contempt	Free response and forced choice of seven emotion categories	On free response most subjects choose "none"; on forced choice, most choose contempt

gust" as the modal label using this task. British participants in Wagner's Study 2 (head/eyes center) selected "neutral." That the Indian participants in Haidt and Keltner's study selected "contempt" suggests that the inability to label contempt expressions as "contempt" may be limited to English speakers and that this inability is not affected by a possible process of elimination.

Judgment tasks in which observers rate the presence of multiple emotions using scales also provide participants the option to select "neutral" by giving zero ratings to all emotions. Still, English-speaking participants do not give contempt (head/eyes center) the highest ratings (Russell, 1991a, Studies 1 and 2; Russell, 1991b, Study 2; Yrizarry et al., 1998). That Japanese and Europeans do give these same expressions the highest ratings when judging contempt expressions further suggests that the inability to label these expressions as "contempt" may be limited to English speakers (Frijda & Tcherkassof, 1997; Yrizarry et al., 1998), and it is not an artifact of the specific type of contempt expression used, the judgment task, or a process of elimination.

Native English speakers also do not label the contempt expression as "contempt" in free-response tasks (Haidt & Keltner, 1999; Rosenberg & Ekman, 1995; Russell, 1991b; Wagner, 2000), in which participants can generate any label of their own to describe the stimuli. These tasks are completely free of any effects of process of elimination. Still, the modal response for Americans free labeling the contempt expression (head center/eyes side) in Haidt and Keltner's (1999) study was "annoyance"; for Canadians in Russell's (1991b) study (head/eyes center), it was "disgust." Moreover, the agreement levels in free-response labeling were quite low regardless of what the participants called it, as no other emotion label garnered high percentages. Once again, however, this effect was limited to native English speakers, because the Indian participants in Haidt and Keltner's study did label the unilateral lip raise as "contempt" in free response.

The term *contempt* is not as salient as the terms for the other six emotions for English speakers. When Canadian undergraduates were given 1 min to write down as many emotion words as possible, only 1% included *contempt* (Fehr & Russell, 1984). A study in Britain produced similar results, with only 9% listing *contempt* (Wagner, 2000). When asked to define the word *contempt*, only 21% of the British participants in Wagner's (2000) Study 1 provided a definition matching the three criteria explicated by Wagner: it is interpersonal, involves a feeling of superiority, and views the other person negatively. Even after writing a description of a situation that brings about contempt, only 50% of the English speakers in Wagner's Study 3 (using the head/eyes center version) included *contempt* when they listed emotion words immediately afterward.

The relationship between label accessibility and the expression is different for "contempt" compared with other emotions. English-speaking participants are poor at free-response labeling regardless of how well they define it, even if they are cued with its definition prior to the labeling and even if primed by writing scenarios that elicit it and list it as an emotion (Wagner, 2000). "Surprise" and "disgust" are also relatively inaccessible (Fehr & Russell, 1984; Wagner, 2000), but participants have no problems labeling these expressions. Once again, this may be limited to English, as the Indian participants in Haidt and Keltner's (1999) study using the Oriyan language free labeled the contempt expressions as "contempt."

Regardless of the difficulties in labeling it, the contempt expression (head/eyes center) is distinguished from other emotional expressions in nonlinguistic tasks (Alvarado & Jameson, 1996). However, unlike other expressions, the contempt expression is not associated with a single emotion term and it is not always associated with the "contempt" label, at least in English. This might explain why free-response labeling and fixed-choice judgment tasks might not elicit as high agreement in English. In fact, most participants in Alvarado and Jameson's (1996) Study 3 selected expressions of anger as the best exemplars of the "contempt" label.

A Possible Explanation for the Findings

One possible explanation for the lower agreement rates for native English speakers judging contempt is that people understand which situations are associated with the contempt expression even though they do not have an agreed-on label for such situations or the expressions that occur within those situations. This possibility is supported by five studies reported in three articles so far. First, Haidt and Keltner (1999) asked Indians and Americans to describe situations that elicited the contempt expression (head center/eyes side). Coding of the situations and their appraisals showed that both Americans and Indians agreed that it was asso-

ciated with events involving criticism of or opposition to another person, particularly moral superiority toward someone, and unpleasant or oppositional social contact, fighting, or criticizing. Second, Rosenberg and Ekman (1995) produced one- or two-sentence scenarios depicting an emotion-eliciting event based on dictionaries, emotion theorists' definitions of the emotion words, central themes for each emotion (Ekman & Friesen, 1975), and empirical data (Scherer, 1997a, 1997b). No story contained emotion-related words or gender-referential pronouns. When these stories were used as response alternatives in a fixed-choice judgment task, participants in two studies selected the contempt story for the contempt expression (head tilt/eyes side) at levels significantly greater than chance and comparable to that of other universally recognized emotions, even when a "no fit" response alternative was included. Third, Rozin et al. (1999) asked American and Japanese participants to select a face that corresponded to descriptions of situations of moral violations. Participants in both cultures associated both contempt faces (unilateral lip tightening with and without upper lip raise, head/eyes center) with violations of ethics of community, which were theoretically related to the emotion contempt. Participants, however, did not match the "contempt" label with those same situations. Further, in their Study 4, Rozin et al. asked American participants to produce faces that corresponded to the moral situations, and unilateral (and bilateral) lip tightening was significantly associated with violations of ethics of community.

The best way to address the methodological issue raised by Wagner (2000)—that high levels of agreement in previous judgment studies may have occurred because of a process of elimination—is to show observers contempt, neutral, and a full range of other expressions and have them judged using a full range of response alternatives. By viewing contempt and neutral expressions in combination with multiple examples of other expressions, participants can better distinguish among these expressions. In fact, Wagner's Study 1 included only contempt, anger, and disgust expressions; his Study 2 included only contempt, disgust, anger, and neutral expressions; and his Study 4 did not include a contempt expression. We contend that providing participants with a full range of expressions and response alternatives is a more ecologically valid basis for examining judgments, as people in real life make comparisons of a full range of expressions to neutral or baseline expressions. In fact, this is what Wagner's (2000) Study 3 did (participants viewed expressions of anger, contempt, disgust, fear, happiness, sadness, and surprise), and in contrast to his other studies, this is the only study that he reported in which participants associated the contempt expression with the "contempt" label. (The limitation to that study, however, was that it used a forced-choice judgment task.) We improved on this study in our Study 1 by showing participants a full range of emotions (and neutrals) and using emotion labels in a fixed-choice task, allowing a "neutral" and an "other" response. We hypothesized that participants would select the "contempt" label significantly more often than chance when judging contempt expressions when a full range of other emotions and neutral expressions are shown in addition to contempt and a fixed-choice judgment task is used. Studies 2 and 3 address how well participants associate the contempt expression with situations designed to elicit contempt, using emotion stories as response alternatives.

Study 1

Method

Participants. The participants were 120 university undergraduates at San Francisco State University participating voluntarily (61% women, 39% men, mean age = 24.65, $SD = 5.33$). They were recruited from various psychology classes. Twenty-eight percent reported Caucasian ethnicity, 20% Asian, 11% Hispanic/Latino, and the remainder a variety of ethnicities. Seventy-seven percent were born and raised in the United States. We tested sex differences in judgments in this study and all subsequent studies using chi-squares; the number of significant results was far less than would be expected by chance alone (2.8%). We also tested Caucasian versus Asian ethnicity differences in judgments (because these were the two ethnicities with the largest sample sizes consistently in all studies) in the same manner, and none of the chi-squares were significant. We thus conclude that neither sex nor ethnicity affects the findings reported in this article, and no further mention is made of it.

Materials. Sixty-four facial expressions were used as stimuli. Fifty-six came from Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion (JACFEE; Matsumoto & Ekman, 1988); 8 neutral faces from their stimulus set were also used. The JACFEE consists of eight different people (four Caucasian and four Japanese, two men and two women each) showing expressions of each of seven emotions: anger, contempt, disgust, fear, happiness, sadness, and surprise. Each expression was coded by the Facial Action Coding System (Ekman & Friesen, 1978) to ensure that it included only the facial muscles associated with each of the expressions (reliability = .91, computed by doubling the number of agreed-on action units and dividing by the total number of codes used). The eight contempt expressions all involve the unilateral lip raise and tighten with head and eyes center.

Judgment tasks and procedures. Participants were tested in small groups varying in size from 4 to 10. After providing some basic demographic data, they were shown the expressions one at a time, randomly, for 15 s each. For each expression they were asked to select one word from a list to describe the emotion portrayed in the expression. The list was "anger," "contempt," "disgust," "fear," "happiness," "sadness," "surprise," "neutral," and "other." Thus, this experiment differs from those reported by Wagner (2000) in that we utilized a full range of expressions including neutrals, with multiple examples—men and women, Caucasian and Japanese—of each, and participants were provided with all emotion categories as well as with "neutral" and "other" in the judgment task.

Results and Discussion

The percentage of participants selecting the "contempt" label was computed for each contempt expression (Table 2; for comparison, the percentage selecting "neutral" is also provided in this and subsequent studies; the percentages selecting "contempt" and "neutral" for other expressions are also provided). The "contempt" label was the modal label selected for all contempt expressions. Chi-squares comparing the percentage of participants selecting the "contempt" label as opposed to all other labels (expected frequencies set at one ninth) were highly significant for all eight expressions ($df = 1$, $N = 120$ for all chi-square tests), $\chi^2 = 254.14$, $p < .001$; $\chi^2 = 151.12$, $p < .001$; $\chi^2 = 339.42$, $p < .001$; $\chi^2 = 148.55$, $p < .001$; $\chi^2 = 107.17$, $p < .001$; $\chi^2 = 219.65$, $p < .001$; $\chi^2 = 79.08$, $p < .001$; and $\chi^2 = 266.73$, $p < .001$, respectively, by order of data in Table 2. These same chi-square tests were still significant when the expected frequencies were set at a conservative one quarter probability. These findings provide strong support for the hypothesis that participants can recognize contempt expressions when presented with a full range of expressions and given a full range of response options.

Table 2
Participants Selecting the Emotion Label Contempt (Study 1 and Study 3 Emotion Label Condition) or the Emotion Story Contempt (Studies 2 and 3 Standard and Abstract Story Conditions) for Each of the Contempt Expressions and for All Other Expressions

	Study 1		Study 2		Study 3					
					Standard story condition		Abstract story condition		Emotion label condition	
ID no. and expression	Contempt label	Neutral label	Contempt story	Neutral story	Contempt story	Neutral story	Contempt story	Neutral story	Contempt label	Neutral label
Photograph ID (%)										
KN-1C09	51.8	24.9	73.7	8.4	63.2	8.8	46.7	18.3	40.0	42.5
JH-1C10	42.5	22.7	54.7	13.7	49.1	19.3	59.0	8.2	28.6	35.7
ER-2C11	58.1	13.2	55.8	21.1	47.4	19.3	23.7	27.1	22.9	41.7
WW-1C09	42.2	35.0								
YW-2C04	37.5	9.0								
SC-1C08	49.0	20.3								
PM-1C11	33.8	24.9								
AK2-1C10	52.7	18.3								
R & E 1			69.5	6.3	60.7	8.9	72.1	6.6	48.8	22.0
R & E 2			68.4	8.4	47.4	19.3	62.9	8.1	51.1	20.0
Expression (*M*)										
Contempt	45.9	21.1	64.4	11.6	53.6	15.1	52.9	13.7	38.3	32.4
Neutral expressions	2.1	92.3	1.9	91.6	0.7	88.3	0.3	90.0	2.1	93.4
Anger and disgust	7.7	1.7	9.3	1.1	11.6	1.9	4.9	2.9	11.2	2.1
Fear, happy, sad, and surprise	1.0	2.0	2.7	4.1	4.3	2.3	3.0	3.3	2.3	2.9

Note. ID = identification.

The findings from this study suggest that Wagner's (2000) failure to obtain recognition of contempt expressions was because he did not also show a wide range of expressions. We believe our findings should be given weight because our observers were not only given a "neutral" option but also an "other" option as well, thereby allowing them an additional choice to selecting the "contempt" label. Our review of previous studies supports our proposal that participants recognize contempt expressions accurately when judged within a wide range of other emotional expressions. Table 1 shows there were 15 studies that involved judgments of contempt expressions with English-speaking observers. Including the current Study 1 would bring that up to 16 such studies. Of those 16 studies, 10 involved the presentation of contempt along with at least six other emotions. Of those 10 studies, 8 reported evidence that the contempt expressions were accurately recognized (our Study 1; Biehl et al., 1997; Ekman & Friesen, 1986; Ekman et al., 1991; Rosenberg & Ekman, 1995, Studies 1 and 2; Russell, 1991a, Study 3; Wagner, 2000, Study 3). Two of these studies included a fixed-choice judgment task that included the choice of "none of the above" and/or "other" (our Study 1; Rosenberg & Ekman, 1995, Study 2), which argue against a process of elimination. Of the 6 studies that presented contempt with less than a full range of emotions—by itself or with one to three other emotions—5 reported that contempt was not recognized above chance levels (Russell, 1991a, Studies 1 and 2; Russell, 1991b, Studies 1 and 2; Wagner, 2000, Study 2).

Of the studies cited above, one directly compared the effect of the presentation of a full range of emotions on judgments of contempt (although it was still limited by the fact that it used a forced-choice paradigm; Russell, 1991a, Study 3). In this study, participants saw the contempt expression either alone or along with six other emotions, using the same judgment task. When they saw the contempt expression alone, they selected the "disgust" label to describe it. When they saw the contempt expression along with the six others, however, the modal label selected was "contempt."

Still, even though participants judge contempt at above-chance levels, the absolute level of accuracy is low relative to the other universal emotions. In fact, only an average of 45.9% of the participants selected the "contempt" label to describe the contempt expressions in Study 1 (which is better, but not by a large amount, to the 37.5% reported in Wagner, 2000). As suggested above, the use of stories that describe emotion situations instead of single labels may result in improved recognition rates if participants are able to associate the contempt expression with situations that bring forth the emotion of contempt.

Study 2, therefore, had two purposes. First, it further substantiated and extended the findings of Rosenberg and Ekman (1995) and Haidt and Keltner (1999) that the contempt expression is associated with a particular situational description even when neutral expressions are included in the set being viewed. Because this was not done in their studies, one could argue that their findings occurred because participants used a process of elimination, a possibility that is mitigated in this study by our having included neutral faces and stories.

Second, Study 2 also extended previous research by asking participants to label the emotion stories using a free-response format. This allowed us to examine whether poor free-response rates previously found for contempt faces extended also to the situations in which contempt is presumed to occur. If participants are able to free label the contempt stories as "contempt," then we know that the poor performance in free-response labeling of faces

was limited to faces. If, however, participants were also poor at free labeling the contempt stories, that would suggest that poor labeling is a characteristic of the label "contempt" and not necessarily a problem of recognition of its expression.

Study 2

Two hypotheses were tested: (a) participants associate the contempt expression with scenarios that bring forth contempt and (b) participants label scenarios that bring forth contempt as "contempt" in a free-response format.

Method

Participants. The participants were 95 university undergraduates enrolled in a large general education course at San Francisco State University who participated voluntarily (69 women, 26 men, mean age = 23.45 years, *SD* = 5.52 years). Their self-reported ethnicities were as follow: Asian: 34.7%, Caucasian: 26.3%, multiethnic: 12.6%, Hispanic/Latino: 8.4%, African American: 4.2%, Middle Eastern: 3.2%, and Indian: 1.1%; the remainder declined to report.

Materials. The stimuli included 36 faces, including 5 each depicting anger, contempt, disgust, fear, happiness, sadness, and neutral expressions and one depicting surprise. All except two contempt expressions came from Matsumoto and Ekman's JACFEE and its corresponding neutral expression set (Matsumoto & Ekman, 1988). The two contempt expressions that did not come from the JACFEE came from Rosenberg and Ekman's (1995) study in which the unilateral lip raise and tightening appear together with a slight head raise and eyes looking to the side or looking downward from an upward-tilted head position.

Judgment tasks and procedures. Participants were tested in a single large lecture hall. They were introduced to the experiment and signed consent forms and completed a demographic questionnaire. They were given these specific instructions:

> Your task in this experiment is to look at the facial expression shown in each slide and make a judgment about how the person in the slide feels. Listed below are several stories about events that can lead to certain emotions. Pick the story below that would be most likely to produce the expression shown in each slide, if the person on the slide was the person described in the story.

The response alternatives provided to the participants were the seven one- or two-sentence emotion stories used in Rosenberg and Ekman (1995) and a neutral story. The contempt story read as follows:

> The person hears an acquaintance bragging about accomplishing something for which the acquaintance was not responsible.

They read the stories, which were listed on a single sheet in random order, and the experimenter then asked if they had any questions about the stories; there were none. The expressions were then presented on a large screen in front of the class. One of each of the eight emotions was shown randomly in the first eight positions to ensure that participants saw a range of expressions initially; the remaining expressions were presented randomly thereafter. Each expression was shown for 10 s, and participants were asked to select the single story that best corresponded to the expression presented. Participants were asked not to discuss their responses with each other. After all expressions were viewed, the participants were asked to label each of the eight stories with a single word that they thought the person in the story would feel.

Results and Discussion

We computed the percentage of participants selecting the contempt story for each contempt expression (Table 2). For all five contempt expressions the modal response was the contempt story. Chi-square tests comparing the percentage of participants selecting the "contempt" label as opposed to all other labels were highly significant for all five expressions ($df = 1$, $N = 95$ for all chi-square tests): $\chi^2 = 376.80$, $p < .001$; $\chi^2 = 182.76$, $p < .001$; $\chi^2 = 192.10$, $p < .001$; $\chi^2 = 327.93$, $p < .001$; and $\chi^2 = 315.69$, $p < .001$, respectively, according to the order of data in Table 2. These same chi-square tests were still significant when the expected frequencies were set at a conservative one quarter probability. These findings provided strong evidence in support of Hypothesis 1.

To test the hypothesis that scenarios that elicit contempt are labeled as such in free response, we examined the emotion words that participants used to label each of the stories (detailed tables are available from David Matsumoto). A wide range of responses was obtained for all stories: 14, 39, 17, 14, 9, 6, 25, and 33 unique words each for anger, contempt, disgust, fear, happy, sad, surprise, and neutral stories, respectively. We then consolidated these terms using the following criteria. For anger, happiness, sadness, and fear, we used the word lists compiled by Shaver et al. (1987), who asked American participants to sort emotion words and then computed a cluster analysis on the words to classify all the terms into subcategories, categories, and supercategories. All terms were classified into the supercategories of anger, happiness, sadness, and fear. We similarly classified each of the terms we obtained into these four supercategories, with the only exception being that *disgust* and *contempt* were not classified as anger (they were subcategories of anger in Shaver et al.'s findings). For contempt, disgust, surprise, and neutral, we provided the list of words to 10 research assistants who we asked to judge whether each word matched these category exemplar words. We considered those words selected by 7 of 10 coders to match the category exemplar.

The results were clear. There was high agreement that the words generated for the anger (89.4%), disgust (73.4%), fear (92.7%), happiness (94.9%), sadness (93.6%), surprise (53.2%), and neutral (55.6%) stories corresponded to those same intended emotions. For contempt, however, the modal response was *annoyed* (20.2%), followed by *upset* (9.6%), *disappointed* (9.6%), *irritated* (8.5%), and *disgust* (6.5%). All words that were categorized as related to contempt only accounted for 13.1% of the terms used. Because there was no consensus on exactly what label to call the contempt story, Hypothesis 2 was rejected.

Participants agree that the contempt expressions are associated with scenarios that incorporate the features described by Wagner (2000) and others as specific to contempt. This is commensurate with our proposal that despite the inability to access the "contempt" label participants can reliably associate the situations that bring about the emotion of contempt with its expression. We contend that this association is reflective of a valid link between emotion and expression.

Also participants did not agree on what single word to use to label the situation in which contempt occurs. This suggests that label inaccessibility is not limited to the judgment of faces but is associated with situations that bring forth contempt. That this effect was not found for the other emotion labels suggests that this defect is specific to the "contempt" label.

Because some features of the methodology used in Study 2 are new, it was important to replicate its results in Study 3. We extended Study 2 by (a) using a different contempt story and (b)

including a third condition in which a fixed-choice judgment of emotion labels was used to compare directly results obtained by emotion labels versus emotion stories. In that third condition, we also asked participants to produce emotion stories that used the emotion label "contempt" as an anchor.

Study 3

Three hypotheses were tested: (a) participants associate the contempt expression with scenarios that bring forth contempt better than they label it with a single emotion label in a fixed-choice format, even when participants using fixed choice are primed with the contempt concept; (b) participants do not label scenarios that include all the features presumed to be relevant to the occurrence of contempt as "contempt" in a free-response format; and (c) participants asked to produce an emotion-eliciting story that fits the "contempt" label do not produce stories that meet criteria for contempt.

Method

Participants. One hundred eighty-six university undergraduates participated voluntarily in this study (112 women, 74 men, mean age = 22.54 years, *SD* = 4.95 years). Their self-reported ethnicities were as follow: Asian: 44.1%, Caucasian: 21.0%, multiethnic: 13.4%, Hispanic/Latino: 9.7%, African American: 3.8%, Middle Eastern: 2.7%, Indian: 1.1%, and the remainder declined to report. Eighty-five percent of the participants were born and raised in the United States. Excluding non-U.S. born and raised individuals did not alter the findings reported below; thus, all participants are included in the analyses reported.

Materials, judgment tasks, and procedures. All participants participated in a single experimental session in a large lecture room. The expressions shown in Study 2 were used, in the same order. The three judgment tasks were randomly assigned to the participants. In the standard story condition participants used Study 2 stories. The abstract story condition differed in only one respect: The contempt story did not describe a specific situation but instead was an abstract description of Wagner's (2000) three-component definition of contempt: The person feels superior over another person, who has acted in a negative way.

In the emotion label condition, participants used seven emotion labels ("anger," "contempt," "disgust," "fear," "happiness," "sadness," and "surprise") and options for "neutral," "none of these," and "other" (thus providing participants with three alternatives to "contempt"). Prior to the judgment task, participants in this condition were primed to the contempt and fear concepts by a definition-matching task in which they had to match each of these words to its correct definition given seven alternatives. Dictionary definitions of the seven emotion categories were the response choices.

At the end of the judgment task, participants in the standard and abstract story conditions were asked to provide a single emotion term that best described what someone in the story would feel. Participants in the emotion label condition were asked to write a brief scenario that would bring about each emotion.

Results and Discussion

Participants in the emotion label condition were primed as intended, with 70.2% of the participants matching the "contempt" definition to the word *contempt* (14.0% selected the "anger" definition). For "fear," 96.4% of the participants selected the *fear* definition. Chi-square tests comparing the percentage of participants selecting the contempt story as opposed to all other stories were highly significant for all five expressions in the standard story condition ($df = 1$, $N = 62$ for all chi-square tests): $\chi^2 = 170.32$, $p < .001$; $\chi^2 = 90.59$, $p < .001$; $\chi^2 = 82.67$, $p < .001$; $\chi^2 = 154.37$, $p < .001$; and $\chi^2 = 82.67$, $p < .001$, respectively, by order of data in Table 2. These findings replicate those of Study 2. The same was true for all five expressions in the abstract story condition ($df = 1$, $N = 62$ for all chi-square tests): $\chi^2 = 79.51$, $p < .001$; $\chi^2 = 143.96$, $p < .001$; $\chi^2 = 9.95$, $p < .01$; $\chi^2 = 233.50$, $p < .001$; and $\chi^2 = 168.37$, $p < .001$. All except one (for photograph ER-2C11) of these same chi-square tests were still significant when the expected frequencies were set at a conservative one quarter probability. These findings extended the findings of Study 2 to the use of abstract descriptions of contempt scenarios.

For good measure, we also computed chi-squares on the percentage of participants selecting the "contempt" label in the emotion label condition. All chi-square tests were significant ($df = 1$, $N = 62$ for all chi-square tests): $\chi^2 = 52.39$, $p < .001$; $\chi^2 = 19.20$, $p < .001$; $\chi^2 = 8.72$, $p < .01$; $\chi^2 = 89.17$, $p < .001$; $\chi^2 = 100.38$, $p < .001$, respectively. (All chi-squares were also significant when recomputed using only the 70.2% of the participants who were primed as intended.) These findings replicated those of Study 1.

To test Hypothesis 1, the percentage of participants selecting the contempt stories in the combined standard and abstract story conditions was compared to that selecting the "contempt" label in the emotion label condition for all five expressions. Four of the five differences were statistically significant ($df = 1$, $N = 186$ for all chi-square testes): $\chi^2 = 4.38$, $p < .05$; $\chi^2 = 14.58$, $p < .001$; $\chi^2 = 5.09$, $p < .05$; and $\chi^2 = 5.00$, $p < .05$, for the first four photographs listed in Table 2, respectively, supporting Hypothesis 1 (Table 2). Only the second contempt expression from Rosenberg and Ekman (1995) did not produce a significant difference. These findings provided support for Hypothesis 1.

Once again, we have shown that participants agree about which expression fits the contempt scenario and do so even when that scenario is very abstract. Participants also select the "contempt" label to label those expressions when a full range of expressions is shown and a full range of response alternatives is available. We have also shown in a direct comparison that participants can associate the contempt expression to contempt stories significantly better than they can associate the contempt expressions to the "contempt" label.

We examined the emotion words generated to each of the stories by participants in the standard and abstract story conditions (detailed tables available from David Matsumoto). We used the same coding scheme as in Study 3. Once again, despite considerable agreement across participants in their labeling of the anger (89.0%), disgust (73.3%), fear (86.4%), happiness (92.7%), sadness (95.7%), surprise (49.5%), and neutral (77.8%) stories, there was considerable disagreement on the free-response labeling of the contempt stories. The modal response was *pride* (9.6%), followed by *annoyed* (7.7%), *smug* (7.6%), *cocky* (3.8%), and *upset* (3.8%). All words that were categorized as related to contempt only accounted for 21.3% of the terms used. Thus there was no consensus for the labeling of the contempt story, providing support for Hypothesis 2.

Three assistants blind to the hypotheses of the study coded the emotion stories generated by participants in the emotion label condition according to whether each story met each of the three criteria for contempt outlined by Wagner (2000). They first inde-

pendently coded each response for the presence or absence of each criterion, then together arrived at a consensus concerning each code. If a disagreement still remained after an attempt at calibration, each individual's code was included so as to be as liberal as possible in coding for the presence of each criterion. Only 36% of the sample provided responses that met all three criteria (36% met two criteria; 7% met one criterion, and 17% met none of the criteria), thus supporting Hypothesis 3.

Participants associated the contempt expressions with scenarios in which contempt is aroused even though they did not agree on its label in free response. Moreover, participants associated the contempt expression with contempt scenarios better than they did with the "contempt" label in fixed-choice format. This comparison in this study is optimal because the differences cannot be accounted for by differences in samples or any other extraneous variables, as all participants participated in the same experimental session, the only difference between them being the judgment task. Additionally, this pattern of findings was not observed for any of the other expressions, including neutrals (average percentage of participants selecting the neutral stories or labels in all three conditions to neutral expressions is 88.3, 90.0, and 93.4, respectively), suggesting that the association between the contempt expression and its label is different than that for the other expressions.

These findings suggest that the inability to label "contempt" is not limited to faces but is a characteristic of the concept of contempt. Moreover, that participants did not generate contempt stories meeting the three criteria of contempt is commensurate with Wagner's (2000) findings and suggests that the inability to produce "contempt" labels to contempt situations is reciprocal to an inability to produce situations to labels.

To further investigate how people understand the "contempt" label, in Study 4, we examined individual subjective perceptions about familiarity with this term. We hypothesized that, despite the fact that the term *contempt* may be used more frequently than the term *disgust* in written English (Wagner, 2000), people would report less familiarity with the term in their own usage or in hearing or reading about it.

Study 4

Method

Participants. The participants were 52 university undergraduates participating voluntarily (31 men, 21 women, mean age = 25.04 years, SD = 4.69 years). Self-reported ethnicities were as follows: 30.7% Caucasian, 7.7% African American, 28.8% Asian, 19.1% Hispanic/Latino, and 13.7% various other ethnicities. Seventy-nine percent were born and raised in the United States.

Materials and procedures. Participants were approached at the end of a class and recruited for the study. Participants were first asked to do a matching exercise like that in Study 3 in which they matched each of the words *contempt* and *disgust* to its correct definition given seven alternatives. Dictionary definitions of the seven emotion categories were the response choices. This task was done first to ensure that the participants were primed to the definition of *contempt* before the next task asked of them. Next, the participants were asked to rank seven emotions (anger, contempt, disgust, fear, happiness, sadness, and surprise), first in terms of how often they use each and second in terms of how often they hear or read about each.

Results and Discussion

Participants were primed as intended, with 61.5% and 82.7% of the participants selecting the correct definitions of *contempt* and *disgust*, respectively. The mean ranks for each word were computed separately for the two ratings. In terms of usage, happiness (2.38) was rated most frequent, followed by sadness (3.46), anger (4.38), fear (4.67), surprise (4.81), disgust (5.73), and contempt (6.17). Contempt was placed in the seventh position by 65.4% of the sample (by 70.6% of those primed as intended with the *contempt* definition). These rank orders were statistically different overall, $F(6, 306) = 35.82$, $p < .001$, $\eta^2 = .41$. We then tested pairs of adjacent means using paired sample t tests and obtained the following results: happiness > sadness > anger = fear = surprise > disgust > contempt (all differences significant).

In terms of hearing and reading, happiness was again rated most frequent (3.51), followed by anger (3.67), sadness (3.80), fear (4.33), surprise (5.57), disgust (5.63), and contempt (5.88). Contempt was placed in the seventh position by 50% of the sample (by 52.9% of those primed as intended with the *contempt* definition). These rank orders were statistically different overall, $F(6, 306) = 18.59$, $p < .001$, $\eta^2 = .27$. Tests of pairs of adjacent means produced the following specific differences: Happiness = anger = sadness > fear > surprise = disgust = contempt (all differences significant). Both sets of findings did not differ when only those participants who correctly matched the "contempt" label to the *contempt* definition were used. Moreover Spearman's rank correlation between the means of the two sets of ranks was .89, $p < .01$. Cumulatively, these findings demonstrate that individuals perceive less usage of the label "contempt" by themselves and by others. (Actual usage rates, of course, may differ from these reported estimates.)

General Discussion

Previous debate concerning the contempt expression has focused on whether it is universally recognized as a signal of the emotion of contempt. On one hand, a number of studies have shown that the contempt expression is judged as contempt by different cultures around the world (Biehl et al., 1997; Ekman & Friesen, 1986; Ekman & Heider, 1988; Haidt & Keltner, 1999; Matsumoto, 1992; Ricci-Bitti et al., 1989; Rosenberg & Ekman, 1995; Wagner, 2000). On the other hand, studies involving free-response labeling of the expression with native English speakers (Haidt & Keltner, 1999; Rosenberg & Ekman, 1995; Russell, 1991b; Wagner, 2000) and some studies involving forced and fixed choice of emotion categories with English speakers (Haidt & Keltner, 1999; Russell, 1991a; Wagner, 2000) have shown that the contempt expression is not reliably recognized as contempt, providing fuel for the speculation that the contempt expression is not a signal of contempt.

We contend that the most important issue concerning the contempt expression, or *any* emotional expression, is whether it is reliably associated with the actual situations that bring forth the emotion it signals (Ekman, 1993). The data from Studies 2 and 3, along with those of five previous studies reported in three articles (Haidt & Keltner, 1999; Rosenberg & Ekman, 1995; Rozin et al., 1999), provide fairly conclusive evidence that this is the case. In the present studies, participants associated five different contempt

expressions with two different stories designed to elicit contempt in two different studies. These studies were methodological improvements over Rosenberg and Ekman's (1995) and Wagner's (2000) in that we included contempt, neutral, and a full range of other expressions as well as response alternatives.

"Contempt" appears to be a different type of emotion label in English than the English terms for the other universally recognized emotions. Individuals have difficulty free labeling contempt expressions as "contempt," whereas that is not the case with the other emotions (Haidt & Keltner, 1999; Rosenberg & Ekman, 1995; Russell, 1991b; Wagner, 2000). People also have difficulty free labeling contempt-eliciting situations as "contempt" (Studies 2 and 3) and in producing verbal descriptions of situations associated with the "contempt" label (Study 3); this does not happen with the other emotions. The "contempt" label is relatively inaccessible (Fehr & Russell, 1984; Wagner, 2000) and is perceived by individuals to be relatively infrequently used (Study 4), and people do not use the concept to label expressions even after being primed for it (Wagner, 2000; Study 3).

We contend that instead of arguing about whether contempt expressions are universally recognized as signals of contempt, researchers should now draw their attention to investigating how and why the "contempt" label is different from the other emotion labels. Why is it that participants reliably associate the expression with situations that bring forth contempt but cannot label either the signal or the situation as they can with other emotions? Why is it that even though other emotions are perceived to be used relatively infrequently (e.g., disgust), participants can freely use those labels in free-response labeling for their signals, but cannot do so for contempt? The fact that participants in non-English cultures can label the contempt expression as "contempt" suggests that this problem is specific to the English language.

That participants can not label either the faces or the situations that brought forth contempt suggests that there is a fundamental difference between the "contempt" label and other labels, not that the contempt expression is not a signal of the emotion of contempt. Exploring the nature of these differences may lead us to different ways of understanding how universally recognized emotions may be labeled within a language community. For instance, contempt may be cognitively organized differently than the other universally recognized emotions—with different language-experience relationships, and this difference may mediate the findings obtained to date. Exploration of other aspects of the contempt concept, such as synonyms, associations, metaphors, and so forth may be useful. Differences in contempt's developmental emergence as an emotion and as a signal may give us clues as to why judgment difficulties of not only faces but also of situations occur with the label "contempt" but not with the other emotion labels. Examinations of contempt-related situations and expressions in nonhuman primates may give us cues to its evolutionary significance and possible biological substrates versus culture-constant learning. Studies of linguistic families of contempt in different languages may give us clues as to why native English speakers have difficulty in recognizing contempt relative to other cultures.

Future researchers need also to examine what influence, if any, the fact that *contempt* sounds like *content*; six of the eight letters in *contempt* are in *content*, and six of the seven letters in *content* are in *contempt*. When talking about *contempt*, we often need to distinguish it from *content*, and no other emotion term is as phonetically similar to a very different affective state. Obtaining answers to these questions is probably more fruitful at this stage than continuing to rehash the question of whether contempt expressions signal the emotion of contempt.

References

Alvarado, N., & Jameson, K. (1996). New findings on the contempt expression. *Cognition & Emotion, 10*, 379–407.

Biehl, M., Matsumoto, D., Ekman, P., Hearn, V., Heider, K., Kudoh, T., & Ton, V. (1997). Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion (JACFEE): Reliability data and cross-national differences. *Journal of Nonverbal Behavior, 21*, 3–21.

Ekman, P. (1972). Universal and cultural differences in facial expression of emotion. In J. R. Cole (Ed.), *Nebraska Symposium on Motivation, 1971* (pp. 207–283). Lincoln: Nebraska University Press.

Ekman, P. (1992a). Are there basic emotions? *Psychological Review, 99*, 550–553.

Ekman, P. (1992b). An argument for basic emotions. *Cognition & Emotion, 6*(3–4), 169–200.

Ekman, P. (1992c). Facial expressions of emotion: New findings, new questions. *Psychological Science, 3*, 34–38.

Ekman, P. (1993). Facial expression and emotion. *American Psychologist, 48*, 384–392.

Ekman, P. (1994). Strong evidence for universals in facial expressions: A reply to Russell's mistaken critique. *Psychological Bulletin, 115*, 268–287.

Ekman, P. (1999). Basic emotions. In T. Dalgleish & M. Power (Eds.), *The handbook of cognition and emotion* (pp. 45–60). Sussex, United Kingdom: Wiley.

Ekman, P., & Friesen, W. (1971). Constants across culture in the face and emotion. *Journal of Personality and Social Psychology, 17*, 124–129.

Ekman, P., & Friesen, W. V. (1975). *Unmasking the face: A guide to recognizing emotions from facial clues*. Englewood Cliffs, NJ: Prentice-Hall.

Ekman, P., & Friesen, W. V. (1978). *Facial action coding system: Investigator's guide*. Palo Alto, CA: Consulting Psychologists Press.

Ekman, P., & Friesen, W. V. (1986). A new pan-cultural facial expression of emotion. *Motivation & Emotion, 10*, 159–168.

Ekman, P., & Heider, K. G. (1988). The universality of a contempt expression: A replication. *Motivation & Emotion, 12*, 303–308.

Ekman, P., O'Sullivan, M., & Matsumoto, D. (1991). Confusions about context in the judgment of facial expression: A reply to "the contempt expression and the relativity thesis." *Motivation & Emotion, 15*, 169–176.

Ekman, P., Sorenson, E. R., & Friesen, W. V. (1969, April 4). Pancultural elements in facial displays of emotion. *Science, 164*, 86–88.

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General, 113*, 464–486.

Friesen, W. V. (1972). *Cultural differences in facial expressions in a social situation: An experimental test of the concept of display rules.* Unpublished doctoral dissertation, University of California, San Francisco.

Frijda, N. H., & Tcherkassof, A. (1997). Facial expressions as modes of action readiness. In J. A. Russell & J. M. Fernandez-Dols (Eds.), *The psychology of facial expression* (pp. 78–102). New York: Cambridge University Press.

Haidt, J., & Keltner, D. (1999). Culture and facial expression: Open-ended methods find more expressions and a gradient of recognition. *Cognition & Emotion, 13*, 225–266.

Izard, C. E. (1971). *The face of emotion*. East Norwalk, CT: Appleton-Century-Crofts.

Izard, C. E. (1992). Basic emotions, relations among emotions, and emotion–cognition relations. *Psychological Review, 99*, 561–565.

Izard, C. E., & Haynes, O. M. (1988). On the form and universality of the contempt expression: A challenge to Ekman and Friesen's claim of discovery. *Motivation & Emotion, 12*, 1–16.

Matsumoto, D. (1992). More evidence for the universality of a contempt expression. *Motivation & Emotion, 16*, 363–368.

Matsumoto, D., & Ekman, P. (1988). *Japanese and Caucasian Facial Expressions of Emotion and Neutral Faces (JACFEE and JACNeuF).* (Available from Human Interaction Laboratory, University of California, San Francisco, 401 Parnassus Avenue, San Francisco, CA, 94143)

Matsumoto, D., & Kupperbusch, C. (2001). Idiocentric and allocentric differences in emotional expression and experience. *Asian Journal of Social Psychology, 4*, 113–131.

Ricci-Bitti, P. E., Brighetti, G., Garotti, P. L., & Boggi-Cavallo, P. (1989). Is contempt expressed by pancultural facial movements? In J. P. Forgas & J. M. Innes (Eds.), *Recent advances in social psychology: An international perspective* (pp. 329–339). Amsterdam, the Netherlands: Elsevier.

Rosenberg, E. L., & Ekman, P. (1995). Conceptual and methodological issues in the judgment of facial expressions of emotion. *Motivation & Emotion, 19*, 111–138.

Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology, 75*, 574–585.

Russell, J. A. (1991a). The contempt expression and the universality thesis. *Motivation & Emotion, 15*, 149–168.

Russell, J. A. (1991b). Negative results on a reported facial expression of contempt. *Motivation & Emotion, 15*, 281–291.

Russell, J. A. (1994). Is there universal recognition of emotion from facial expression? A review of cross-cultural studies. *Psychological Bulletin, 115*, 102–141.

Scherer, K. (1997a). Profiles of emotion-antecedent appraisal: Testing theoretical predictions across cultures. *Cognition & Emotion, 11*, 113–150.

Scherer, K. (1997b). The role of culture in emotion-antecedent appraisal. *Journal of Personality & Social Psychology, 73*, 902–922.

Shaver, P., Murdaya, U., & Fraley, R. C. (2001). The structure of the Indonesian emotion lexicon. *Asian Journal of Social Psychology, 4*, 201–224.

Shaver, P., Schwartz, J. C., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology, 52*, 1061–1086.

Shaver, P. R., Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation. In M. S. Clark (Ed.), *Emotion: Review of personality and social psychology* (Vol. 13, pp. 175–212). Thousand Oaks, CA: Sage.

Wagner, H. L. (2000). The accessibility of the term "contempt" and the meaning of the unilateral lip curl. *Cognition & Emotion, 14*, 689–710.

Waxer, P. H. (1985). Video ethology: Television as a data base for cross-cultural studies in nonverbal displays. *Journal of Nonverbal Behavior, 9*, 111–120.

Yrizarry, N., Matsumoto, D., & Wilson-Cohn, C. (1998). American–Japanese differences in multi-scalar intensity ratings of universal facial expressions of emotion. *Motivation & Emotion, 22*, 315–327.

Received February 7, 2003
Revision received May 17, 2004
Accepted May 27, 2004 ■