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## **On the deep structure of social affect: Attitudes, emotions, sentiments, and the case of “contempt”**

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**Abstract:** Contempt is typically studied as a uniquely human moral emotion. However, this approach has yielded inconclusive results. We argue this is because the folk affect concept “contempt” has been inaccurately mapped onto basic affect systems. “Contempt” has features that are inconsistent with a basic emotion, especially its protracted duration and frequently cold phenomenology. Yet other features are inconsistent with a basic attitude. Nonetheless, the features of “contempt” functionally cohere. To account for this we revive and reconfigure the sentiment construct using the notion of evolved functional

specialization. We develop the Attitude-Scenario-Emotion (ASE) model of sentiments, in which enduring attitudes represent others' social-relational value and moderate discrete emotions across scenarios. Sentiments are functional networks of attitudes and emotions. Distinct sentiments, including love, respect, like, hate, and fear, track distinct relational affordances, and each is emotionally pluripotent, thereby serving both bookkeeping and commitment functions within relationships. The sentiment contempt is an absence of respect; from cues to another's low efficacy, it represents them as worthless and small, muting compassion, guilt, and shame and potentiating anger, disgust, and mirth. This sentiment is ancient yet implicated in the ratcheting evolution of human ultrasociality. The manifolds of the contempt network, differentially engaged across individuals and populations, explain the features of "contempt", its translatability, and its variable experience – as "hot" or "cold", occurrent or enduring, and anger-like or disgust-like. This rapprochement between psychological anthropology and evolutionary psychology contributes both methodological and empirical insights, with broad implications for understanding the functional and cultural organization of social affect.

**Keywords:** affect, attitudes, bookkeeping, commitment, contempt, emotions, evolution, morality, respect, sentiments

## 59 1. Introduction

60

61 Contempt contributes to many of the challenges confronting a globalizing world, including human rights  
62 abuses such as slavery, human trafficking, and sexual exploitation; intractable ethnic conflicts attended  
63 by displacement and genocide; intolerance of diversity and minority voices; and insoluble political  
64 divisions sustained by disparagement and obstructionism. At a more intimate scale, contempt may be  
65 the best predictor of divorce (Gottman & Levenson, 1992), and it animates both parties during breaches  
66 of community expectations (Rozin, Lowey, Imada & Haidt, 1999). Understanding the causes,  
67 consequences, and cures for contempt is a critical problem with clear applications. Yet, contempt is an  
68 enigma, empirically and theoretically neglected relative to comparable emotional phenomena (Haidt,  
69 2003). What data there are raise more questions than they answer. We seek to fill these lacunae by  
70 challenging the paradigmatic assumptions of modern contempt research, with broad implications for  
71 understanding the functional and cultural organization of affect.

72

### 73 1.1. "A special case"

74

75 The modern contempt literature crystallized around the debate over basic emotions in social  
76 psychology. Ekman and Friesen (1986) famously showed that college students in ten cultures select  
77 translations of "contempt" to label a distinct facial expression, the unilateral lip curl. For many scholars,  
78 this elevated contempt to the pantheon of basic emotions; a complex "contempt" concept was  
79 designated a universal human emotion with evolved design features, including rapid onset and brief  
80 duration (Ekman, 1992). The apparent absence of evidence of the unilateral lip curl in non-human  
81 primates suggested that contempt may even be uniquely human (Ekman & Friesen, *ibid.*).

82

83 Ekman and Friesen's (1986) provocative claims largely defined the focus of subsequent contempt  
84 research. While their study occasioned critiques (Izard & Haynes, 1988; Russell, 1991a,b,c) and replies  
85 thereto (Ekman & Friesen, 1988; Ekman, O'Sullivan & Matsumoto, 1991), the initial contempt-as-  
86 emotion thesis remains ubiquitous. Dominating the relatively small contempt literature (Haidt, 2003),  
87 numerous studies have explored the form and universality of contempt expressions (Alvarado &  
88 Jameson, 1996; Haidt & Keltner, 1999; Matsumoto & Ekman, 2004; Matsumoto, 2005; Rosenberg &  
89 Ekman, 1995; Rozin et al., 1999; Wagner, 2000). Debates in this literature have largely concerned  
90 methodological details, the empirical strength of emotion-expression correspondences, or the specific  
91 assumptions of the basic emotions approach, not contempt's status as an emotion. Studies on the  
92 antecedents and consequences of contempt have likewise assumed that "contempt" refers to a discrete  
93 emotion similar in kind to anger and disgust (e.g., Fischer & Roseman, 2007; Hutcherson & Gross, 2011;  
94 Laham et al., 2010; Rozin et al., 1999). Some authors have questioned whether "contempt" picks out a  
95 psychological primitive. Prinz (2007), for example, argues that contempt is a blend of disgust and anger,  
96 while others (e.g., S. Fiske et al., 2002; Cottrell & Neuberg, 2005) see contempt as superordinate to, or  
97 synonymous with, these other emotions. These studies maintain that contempt is a prototypical  
98 emotion, albeit not a basic one.

99

100 The contempt-as-emotion literature has produced inconclusive, even perplexing, results. Contempt is  
101 not uniquely associated with the unilateral lip curl, but is associated with a range of facial, postural, and  
102 behavioral expressions, including a neutral face (Izard & Haynes, 1988; Wagner, 2000). The relationship  
103 of contempt to anger and disgust remains elusive, and is aptly described as "nebulous" (Hutcherson &  
104 Gross, 2011). In empirical studies, contempt is often explicitly collapsed with other putative emotions  
105 such as disgust and hate (e.g., Cuddy et al., 2007; Mackie et al., 2000), making clean inferences difficult.  
106 Complicating matters, some results suggest that English-speaking participants are confused, or at least

107 in disagreement, as to the meaning of the term “contempt” (Haidt & Keltner, 1999; Matsumoto, 2005).  
108 Other documented properties of contempt are altogether anomalous for an emotion, basic or  
109 otherwise: contempt has a relatively enduring, even indefinite, time course (Fischer & Roseman, 2007;  
110 Hutcherson & Gross, 2011), and it can be phenomenologically “cold”, or distinctly unemotional (Haidt,  
111 2003; Izard, 1977; Miller, 1997). Confronted with such results, Rosenberg and Ekman (1995)  
112 characterized contempt as a “special case” among putative basic emotions, nevertheless maintaining  
113 the underlying contempt-as-emotion thesis.

114

115 Here we develop a novel approach to contempt that challenges the contempt-as-emotion thesis, as well  
116 as existing alternatives, including the contempt-as-attitude approach (Frijda, 1986; Mason, 2003), and  
117 those that would altogether deny the existence of any natural kind *contempt* (e.g., L. Barrett, 2006a).  
118 Each of these approaches has merits, but each leaves some evidence unexplained. Our perspective  
119 integrates them, explaining extant data and opening novel directions for future inquiry. We use  
120 contempt as a case study to develop a broader argument about the evolved architecture of basic affect  
121 systems and the patterning of folk affect concepts.

122

### 123 *1.2. Folk affect concepts and basic affect systems*

124

125 We begin with three premises. First, we distinguish between cultural representations of affective  
126 phenomena and the underlying behavior regulation systems of affect – that is, *folk affect concepts*, such  
127 as emotion terms and ethnopsychological theories, and *basic affect systems*, neurocognitive “survival  
128 circuits” (LeDoux, 2012) with phylogenetic legacies far deeper than human language and symbolic  
129 capacities (Darwin, 1872; Fessler & Gervais, 2010; Panksepp, 1998; Parr et al. 2007). Basic affect systems  
130 are built from “core affect” (Russell, 2003) and other domain-general core systems (L. Barrett, 2013),

131 but they evince higher-level evolved design for solving particular adaptive problems (Nesse, 1990;  
132 Cosmides & Tooby, 2000; Kragel & LaBar, 2013; see also H.C. Barrett, 2012). Folk affect concepts need  
133 not correspond to these discrete functional systems (Scarantino, 2009). Emotion language has many  
134 uses, being performative and political as much as veridical of experience (Besnier, 1990; Lutz & Abu-  
135 Lughod, 1990; Sabini & Silver, 2005), and folk affect concepts can dissociate from basic affect systems;  
136 some cultures lack words for coherent emotional experiences, while some gloss several distinct  
137 experiences with one word (Breugelmans and Poortinga, 2006; Fessler, 2004; Haslam and Bornstein,  
138 1996; Levy, 1973). “Contempt” is a folk affect concept. Much research on contempt is research on the  
139 term “contempt” and its particular meanings and uses for English speakers. This has frequently been  
140 equated with investigating the nature of *contempt*, a putative basic affect system. Recognizing this  
141 slippage and distinguishing these projects is a first step in resolving ambiguity in the contempt literature.  
142 Here, we use quotation marks to indicate folk affect concepts (e.g., “contempt”), and italics for basic  
143 affect systems (e.g., *contempt*); the folk meanings of such terms serve only as intuitive anchors and do  
144 not delimit functional hypotheses about the postulated systems so labeled.

145  
146 Second, a theory of the computational architecture of basic affect systems is needed to explain  
147 individual and population variation in the content of folk affect concepts, including “contempt”.  
148 Although basic affect systems and folk affect concepts dissociate, their relationship is not arbitrary. The  
149 contents of folk affect concepts derive in part from temporal and causal contingencies in embodied  
150 emotional experience (L. Barrett, 2006b; Lyon, 1996; Niedenthal, 2008; Russell, 1991a; White, 2000).  
151 Such experience is patterned by basic affect systems interacting with local threats and opportunities,  
152 mediated by cultural resources for appraisal and affect regulation (Markus & Kitayama, 1994; Mesquita  
153 & Frijda, 1992). While the content of folk affect concepts is fluid with respect to underlying networks of  
154 basic affect systems (Haslam & Bornstein, 1996), that content should vary predictably with the

155 engagement of basic affect systems by social and ecological processes -- for example, by the frequencies  
156 and local meanings of emotion-evoking events. By specifying the underlying networks of basic affect  
157 systems, and considering the social, ecological, and historical contexts in which these systems operate,  
158 one can potentially explain the unique constellations of meanings associated with folk affect concepts  
159 (Lutz & White, 1986), as well as changes and variation in their content across time and space. Unpacking  
160 the network of basic affect systems underlying “contempt” is the central goal of this paper.

161

162 Finally, it is possible to develop constructive hypotheses about the functional architecture of basic affect  
163 systems. While concepts such as “emotion” and “affect” invoke folk affect concepts (Lutz 1988; Russell,  
164 1991a), basic affect systems need not be defined using the everyday content of such concepts (Royzman  
165 et al., 2005; see also Fehr & Russell, 1984). As in adaptationist approaches to the emotions (e.g.,  
166 Cosmides & Tooby, 2000; Nesse & Ellsworth, 2009), evolutionary, functional, and comparative  
167 considerations can guide the stipulation of basic affect systems and provide grounded criteria for  
168 predicting and evaluating their existence (Darwin, 1872; Fessler & Gervais, 2010). Analytic tools include  
169 reverse engineering observed phenomena to determine potential function; task analysis of proposed  
170 functions to predict design features; consideration of ancestral adaptive problems to predict additional  
171 features; cross-species comparison to distinguish conserved and derived features; and ontogenetic and  
172 cross-cultural data on developmental canalization and phenotypic plasticity. Increasingly, the functional  
173 organization of proximate neural systems can also be interrogated. We use these tools synergistically in  
174 inferring the form and functions of *contempt*.

175

176 *1.3. Contempt as a sentiment*

177

178 Taking inspiration from an early and largely forgotten literature in social psychology, we argue that  
179 *contempt* is most profitably understood neither as a discrete emotion, nor as an attitude, but as a  
180 *sentiment*: a functional network of discrete emotions moderated across situations by an attitudinal  
181 representation of another person (McDougall, 1937; Shand, 1920; Stout, 1903; see also Frijda et al.,  
182 1991; Scherer 2005). “Sentiment” once vied with “attitude” to be the “main foundation of all social  
183 psychology” (see Allport, 1935). Sentiments were thought to differ from attitudes in important ways,  
184 being more concrete in their object, more enduring, more consciously accessible, and hierarchically  
185 organized. Most importantly, sentiments were recognized as emotionally pluripotent, moderating a  
186 range of emotions towards their object across situations. The paradigmatic sentiment is *love*, which  
187 “cannot be reduced to a single compound feeling; it must organize a number of different emotional  
188 dispositions capable of evoking in different situations the appropriate behavior” (Shand, 1920:56); that  
189 is, under different scenarios *love* leads to *joy, contentment, compassion, anxiety, sadness, anger, and*  
190 *guilt* (Royzman et al., 2005; Shaver et al., 1996; Storm & Storm, 2005; see also Lutz, 1988). Other  
191 candidate sentiments include *liking, hate, fear*, and, we will argue, *respect*, an absence of which defines  
192 the sentiment *contempt*. Contempt thus constitutes a case study in the deep structure of social affect,  
193 the largely neglected architecture of emotions underlying the regulation of social relationships.

194

195 We theorize three kinds of basic affect systems, defined by their distinct forms and social-relational  
196 functions: *attitudes*, identified as enduring affective valuations that represent relational value; *emotions*,  
197 identified as occurrent affective reactions that mobilize relational behavior; and *sentiments*, identified  
198 as higher-level functional networks of attitudes and emotions that serve critical bookkeeping (Aureli &  
199 Schaffner, 2002; Evers et al., 2014) and commitment (A. Fiske, 2002; Gonzaga et al., 2001; Fessler &  
200 Quintelier, 2013) functions within social relationships. These systems interface through *affect*, a  
201 representational format for information about value (Tooby et al., 2008). Affect is a “feeling”

202 component of emotions and a representational currency of attitudes. Through affect, emotions update  
203 attitudes towards particular people, while attitudes moderate emotions across situations; sentiments  
204 are the attitude-emotion networks that emerge from these interactions. The functional organization of  
205 these systems, engaged by local social and cultural processes, helps explain the variable patterning of  
206 folk affect concepts.

207

208 On our account, “contempt” is a folk affect concept anchored by a sentiment, *contempt*. This sentiment,  
209 like *hate*, is a “syndrome of episodic dispositions” (Royzman et al., 2005:23), the function of which  
210 inheres in linking perceived relationship value to emotion moderation across contexts. *Contempt*  
211 specifically represents another as having low intrinsic relational value as cued by their practical or moral  
212 inefficacy and expendability, and it entails devaluing and diminishing them. *Contempt* moderates diverse  
213 emotions across contexts, potentiating *anger*, *disgust*, and *mirth*, and muting *compassion*, *guilt*, and  
214 *shame*. These emotions implement relational behaviors that are adaptive vis-à-vis someone of low  
215 value, including intolerance, indifference, and exploitation.

216

217 By hypothesis, the breadth and variation in the meaning of “contempt” derives from the manifolds of  
218 this functional network in interaction with individual and cultural differences. Across varying timescales,  
219 from psychology experiments to cultural change, the meaning of “contempt” is fluid with respect to  
220 which aspects of this functional network are salient: the “hot” emotions of *anger* and *disgust*, “cold”  
221 indifference to another’s suffering or victimization, or the enduring core representation of another’s  
222 worthlessness and inferiority. The American English “contempt” concept has likely come to emphasize  
223 emotion dispositions such as anger and disgust at the expense of a hypocognized (Levy, 1984)  
224 representational core as this sentiment has become increasingly morally objectionable in a so-called  
225 “dignity culture” (see Leung & Cohen, 2011).

226 This framework explains the coherence of the various features ascribed to “contempt” in the literature –  
227 it is hot and cold, occurrent and enduring, translatable yet varying, with a range of expressive avenues  
228 across situations. The contempt-as-sentiment approach illustrates how evaluative sentiments invite  
229 spurious study as basic emotions, producing inconsistent results. More generally, our approach revives  
230 the sentiment construct, foregrounding the reciprocal functional relationship of attitudes and emotions  
231 and thereby bridging their mutually isolated literatures. This elucidates the patterning of affect in social  
232 relationships and the grounded pathways traveled by folk affect concepts across cultures and over the  
233 course of sociolinguistic change. Our argument is a rapprochement between evolutionary psychology  
234 and psychological anthropology for the sake of understanding a biologically cultural species.

235

## 236 **2. The features of “contempt”**

237

238 Modern research on contempt generally involves characterizing the folk affect concept of “contempt”  
239 and its nearest translations in other languages. Examining this research, and characterizing the  
240 patterning of the “contempt” concept – including its use by contempt scholars – provides clues to the  
241 underlying architecture of basic affect systems. We adduce from the literature eight features of  
242 “contempt” (see Table 1). These features cannot be fully accounted for by existing theories, motivating  
243 our mapping of “contempt” onto a *sentiment*.

244

### 245 *2.1. Contempt is intentional or about an object*

246

247 Contempt is directed towards a particular object or class thereof (Frijda, 1986). Unlike disgust (e.g.,  
248 Wheatley & Haidt, 2005) and anger (e.g., DeSteno et al., 2004), contempt appears not to be susceptible  
249 to priming or misattribution (e.g., Tapias et al., 2007). Contempt “tags” others (Fessler & Haley, 2003;

250 Hutcherson & Gross, 2011), inhering in representations of them more than in a systemic mode of  
 251 operation in the perceiver.

Eight features of “contempt”	Supporting References
1. Intentional, or about an object	Hutcherson & Gross (2011); Mason (2003)
2. An enduring evaluation of a person, anchored by character attributions	Fischer & Roseman (2007); Hutcherson & Gross (2011)
3. Follows from cues to another’s low relational value, such as norm violations, incompetence, personal transgressions, and out-group position	Rozin et al. (1999); Laham et al. (2010); Hutcherson & Gross (2011); Caprariello et al. (2009); Fischer & Roseman (2007)
4. Entails loss of respect and status diminution	Haidt (2003); Sternberg (2003); Miller (1997); Hutcherson & Gross (2011)
5. Creates “cold” indifference through diminished interest and muted prosocial emotions	Izard (1977); Sternberg (2003); Rozin (1999); Haidt (2003); Debreuil (2010)
6. Associated with “anger” and “disgust,” which are among the proximate causes, concomitants, and outcomes of “contempt”	Alvarado & Jameson (1996); Frijda et al., (1989); Rozin et al., (1999); Shaver et al., (1987); Smith & Ellsworth, (1985); Ekman et al., (1987); Storm & Storm (1987); Fischer & Roseman (2007); Hutcherson & Gross (2011); Laham et al. (2010); Mackie et al. (2000); Marzillier & Davey (2004)
7. Can be expressed in many ways, including non-facial modalities	Alvarado & Jameson (1996); Rozin et al. (1994); Ekman et al. (1987); Wagner (2000); Ekman & Friesen (1986); Matsumoto & Ekman (2004); Izard and Haynes (1988); Darwin (1872); various ethnographic accounts (see pp. 16)
8. Leads to intolerance, exclusion, and relationship dissolution	Fischer & Roseman (2007); Mackie et al. (2000); Gottman & Levenson (2000)

252  
 253 **Table 1.** Eight features of “contempt”, documented or argued for in the literature, that a complete theory of  
 254 “contempt” must explain.

255  
 256 *2.2. Contempt is an enduring evaluation*

257  
 258 Contempt entails a relatively enduring change in feeling toward its object (Sternberg, 2003). Fischer and  
 259 Roseman (2007) found that contempt increased over a period of days, with short-term anger giving way

260 to longer-term contempt. Hutcherson and Gross' (2011) participants explained the undesirability of  
261 being an object of contempt in terms of its duration or difficulty of resolution relative to both anger and  
262 moral disgust. Many investigators (e.g., Mason, 2003) hold that contempt is anchored by enduring  
263 attributions about character traits; Roseman (2001) distinguishes anger and contempt according to their  
264 appraised problem types, where that underlying contempt is intrinsic to the person appraised.

265

### 266 *2.3. Contempt follows from cues to low relational value*

267

268 A number of antecedents have been associated with contempt. These include violations of community  
269 expectations (Laham et al., 2010; Rozin et al., 1999), incompetence (Hutcherson & Gross, 2011),  
270 immorality (S. Fiske et al., 2002), badness of character (Fischer & Roseman, 2007; Smith & Ellsworth,  
271 1985), and out-group or minority status (Brewer, 1999; Izard, 1977; Mackie et al., 2000), especially when  
272 perceived competition, superiority, and in-group strength pertain (Caprariello et al. 2009). These causes  
273 have in common that the targeted actor or group is a low-value or even worthless relationship partner  
274 (Fessler & Haley, 2003). This may follow from their unpredictability, unreliability, inefficacy,  
275 incompetence, impoverishment, incompatibility, or replaceability.

276

### 277 *2.4. Contempt entails loss of respect and status diminution*

278

279 Following from another's cues to low relationship value, contempt emerges as a two-part  
280 representation: respect is lost (Haidt, 2003; Laham et al., 2010), and the other is viewed as beneath  
281 oneself (Miller, 1997; Smith, 2000, Wagner, 2000; Keltner et al., 2006). Whereas respect for an other  
282 follows from efficacy and competence (Wojciszke et al., 2009), contempt follows from their absence  
283 (Hutcherson & Gross, 2011). Whereas respect involves "looking up to" someone (A. Fiske, 1991),

284 contempt involves “looking down on” them (Miller, 1997), even seeing them as less than human  
285 (Sternberg, 2003; Haslam, 2006; Leyens et al., 2007). Contrary to claims that contempt blends anger and  
286 disgust, of the three, only contempt is empirically associated with feelings of superiority (Hutcherson  
287 and Gross, 2011).

288

### 289 *2.5. Contempt creates “cold” indifference*

290

291 Authors frequently refer to contempt and its concomitants as “cold”, a polysemous folk metaphor. One  
292 meaning of “cold” refers to the absence of intense qualia in contempt, in contrast to the “hot”  
293 experience of anger or disgust (Rozin et al., 1999; Haidt, 2003). Another meaning of “cold” refers to the  
294 absence of empathic concern and “warm” prosocial emotions in contempt (Haidt, 2003; Mason, 2003;  
295 Dubreuil, 2010). Participants appear to blend these two facets when reporting relatively cool sensations  
296 associated with contempt (Nummenmaa et al., 2014). Nonetheless, Frijda et al. (1989) found that  
297 “contempt” events are associated with “boiling inwardly” (see also Fischer, 2011); below we explain  
298 how contempt may sometimes involve this experience.

299

### 300 *2.6. Contempt is associated with anger and disgust*

301

302 In studies with various probes and outcome measures, contempt clusters primarily with anger, and  
303 secondarily with disgust (Alvarado & Jameson, 1996, 2002; Frijda et al., 1989; Rozin et al., 1994, 1999;  
304 Shaver et al., 1987; Smith & Ellsworth, 1985), although some researchers report the reverse (Ekman et  
305 al., 1987; Nummenmaa et al., 2014; Storm & Storm, 1987). Many stimuli or situations simultaneously  
306 evoke contempt with anger or disgust (Fischer & Roseman, 2007; Hutcherson & Gross, 2011; Laham et  
307 al., 2010; Mackie et al., 2000; Marzillier & Davey, 2004; Rozin et al., 1999; Tapias et al., 2007), while the

308 display of disgust is among the behaviors associated with contempt (Fischer and Roseman, 2007).  
309 Contempt and disgust are considered together most commonly because both are associated with action  
310 tendencies to exclude or avoid another person (Mackie et al., 2000; S. Fiske et al., 2002). Others have  
311 considered anger, disgust, and contempt together because all three are “other-condemning” and  
312 motivate hostility (Haidt, 2003; Izard, 1977; Sternberg, 2003). Many authors argue that contempt either  
313 is a form of anger or disgust, or is built from them (e.g., S. Fiske et al., 2002; Lazarus, 1991; Ortony et al.,  
314 1988; Prinz, 2007).

315

### 316 *2.7. Contempt has many expressions*

317

318 In studies of facial expressions, the term “contempt” consistently produces low agreement across  
319 subjects (Matsumoto & Ekman, 2004; Russell, 1991b,c; Wagner, 2000). The term has been associated  
320 with the canonical expressions for both “anger” (Alvarado & Jameson, 1996; Rozin et al., 1994) and  
321 “disgust” (Ekman et al., 1987). “Contempt” is also chosen to label a neutral expression in the absence of  
322 a “neutral” label choice (Wagner, 2000). “Contempt” is the predominant label chosen for the unilateral  
323 lip curl (Ekman & Friesen, 1986; Matsumoto & Ekman, 2004), but “anger” and “disgust” are also often  
324 chosen (Haidt & Keltner, 1999; Matsumoto, 2005; Russell, 1991b,c); in free response, this expression is  
325 rarely labeled “contempt” (Alvarado & Jameson, 1996; Ekman & Friesen, 1986; Haidt & Keltner, 1999;  
326 Matsumoto & Ekman, 2004; Russell, 1991c). The unilateral lip curl is linked to the kinds of situations that  
327 elicit contempt (Matsumoto & Ekman, 2004; Rozin et al., 1999), but “contempt” is rarely used to label  
328 these situations in free-response tasks. This is not due to unfamiliarity with the term (Wagner, 2000),  
329 but may be due to uncertainty regarding its meaning (Haidt & Keltner, 1999; Matsumoto, 2005;  
330 Rosenberg & Ekman, 1995).

331

332 Beyond facial expressions, research links contempt with a downward gaze and tilted-back head,  
333 postures associated with dominance displays and assertions of superiority in animals (see Darwin, 1872;  
334 Izard and Haynes, 1988; also Frijda, 1986). In addition to linking contempt to a non-human snarl  
335 reminiscent of the unilateral lip curl, Darwin (1872) foregrounded derisive laughter and turning away as  
336 expressions of contempt associated with the other's insignificance (see also Fischer, 2011; Roseman et  
337 al., 1994).

338

339 In the ethnographic literature, numerous behaviors and expressions that show a lack of respect are  
340 parochially interpreted as indexing contempt, including ignoring someone (e.g., Turnbull, 1962),  
341 throwing sand at someone (e.g., Thomas, 1914), spitting at or near them (e.g., Handy, 1972 ), swearing  
342 at them (e.g., Campbell, 1964), sticking one's tongue or lips out at them (e.g., Pierson, 1967), and  
343 displaying one's buttocks or genitalia to them (e.g., Archer, 1984). In American English, "contempt of  
344 court" refers to disregarding the rules, etiquette, or orders of a court of law (Goldfarb, 1961) – that is,  
345 "contempt" is inferred from disrespectful, irreverent behavior.

346

#### 347 *2.8. Contempt leads to intolerance, exclusion, and relationship dissolution*

348

349 Contempt is associated with diverse action tendencies; it has been classed among the "appraisal  
350 dominant" emotions, meaning that it can be better predicted from antecedent appraisals than from  
351 consequent action readiness (Frijda et al., 1989). Nonetheless, the motivations and action tendencies  
352 associated with contempt have usually been characterized as rejection and exclusion (Fischer &  
353 Roseman, 2007; Frijda, 1986; Roseman et al., 1994). Retrospectively reported contempt events are  
354 associated with the goals of social exclusion, coercion, derogation, rejection, and verbal attack (Fischer  
355 and Roseman, 2007). A composite of "contempt" and "disgust" partially mediates reported willingness

356 to move away from an out-group, while anger mediates willingness to move against (Mackie et al.,  
 357 2000). More broadly, contempt may serve to reduce interaction with those who cannot contribute to  
 358 the group (Hutcherson & Gross, 2011), leading to mockery, exclusion, and ostracism (Dubreuil, 2010).  
 359 Haidt (2003) argues that “contempt motivates neither attack nor withdrawal” (858), instead pervading  
 360 later interactions, diminishing prosocial emotions and leading to mockery or disregard (see also Miller,  
 361 1997). Consonant with these motivational and behavioral outcomes, an important consequence of  
 362 contempt is relationship dissolution (Fischer & Roseman, 2007). Famously, contempt is one of the “four  
 363 horsemen of the apocalypse” in predicting divorce (Gottman & Levenson, 1992). Finally, contempt is  
 364 implicated in some of the most heinous of human behaviors. Sternberg (2003) suggests that contempt  
 365 plays a role in propaganda campaigns designed to foment hate, and implicates contempt in the  
 366 calculated massacres of Hutus, Jews, and Armenians (see also Izard, 1977).

367

### 368 **3. What “contempt” is not**

369

370 The eight features of the folk affect concept “contempt” demand explanation. Why do they cohere?  
 371 How is it that they show regularities across populations despite frustrating researchers with low  
 372 consensus across participants? Several existing approaches offer explanations to these questions.  
 373 However, none of them explain the full feature set of “contempt” and its translations. As existing  
 374 theories cannot adequately account for these features, we offer a novel explanation below.

375

#### 376 *3.1. “Contempt” is not a basic emotion*

377

378 One explanatory approach, exemplified by Ekman and Friesen (1986), maps the folk affect concept  
 379 “contempt” onto a basic emotion, *contempt*. This is the approach, at least implicitly, of most contempt

380 researchers (e.g., Fischer & Roseman, 2007; Hutcherson & Gross, 2011; Rozin et al., 1999). A related  
381 approach, which does not assume basic emotions, maps “contempt” onto an emergent yet cross-  
382 culturally salient “modal emotion” *sensu* appraisal theorists such as Scherer (2009; see also Colombetti,  
383 2009).

384

385 Although contempt evinces features of a prototypical emotion profile, including elicitors,  
386 phenomenological concomitants, and motivational and expressive outcomes, other features of  
387 contempt do not sit comfortably within a basic emotion or appraisal theory approach: contempt is a  
388 relatively enduring representation rather than a fleeting occurrent response; it shows no evidence of  
389 diffuse systemic effects, as in priming or misattribution; it often involves a marked absence of emotion,  
390 as in “cold” indifference to another’s suffering or threat; and its expressions are diverse across contexts.  
391 Despite important cross-cultural regularities (Ekman & Friesen, 1986; Haidt & Keltner, 1999; Rozin et al.,  
392 1999), agreement on the meaning of “contempt” is also uniquely low for a putative basic emotion  
393 (Rosenberg & Ekman, 1995). “Contempt” does not map cleanly onto a natural kind emotion.

394

### 395 3.2. “Contempt” is not an attitude

396

397 Another approach proposes that “contempt” is an attitude of indifference or rejection towards an  
398 object, person, place, or idea viewed as having low value (Frijda, 1986; Mason, 2003). In standard  
399 frameworks, attitudes are like emotions in that they are intentional, or about particular objects, but  
400 longer lasting – emotions are fleeting responses-in-context, while attitudes are enduring  
401 representations (Clore & Schnall, 2005) that involve little arousal (Russell & Barrett, 1999). The structure  
402 of attitudes is generally thought to include affective representations (e.g., prejudice), cognitive  
403 representations (e.g., stereotypes), and behaviors (e.g., discrimination) (see Breckler, 1984; Eagley &

404 Chaiken, 1993; Rosenberg & Hovland, 1960). These three channels are themselves treated as equally  
405 evaluative and unidimensional – from like to dislike, from good to bad, and from approach to avoidance,  
406 respectively.

407

408 This account could explain why contempt is often devoid of emotional arousal, and how it moderates  
409 relational behavior across time and situations. However, current attitude theory cannot account for the  
410 emotional texture of contempt. The attitude literature is largely isolated from the emotion literature,  
411 and investigates global evaluations lacking the diverse emotional and behavioral outcomes of contempt.  
412 In contrast to the affectively neutral concomitants of indifference, the associations between contempt  
413 and anger and disgust remain opaque on the attitudinal account (Fischer, 2011).

414

### 415 *3.3. “Contempt” is not an untethered construction*

416

417 Yet another approach to “contempt” could be developed that assumes neither discrete basic emotions  
418 nor attitudes. Although they have not been applied to “contempt”, psychological constructionist  
419 theories of emotion offer one option. According to one prominent constructionist theory, the  
420 Conceptual Act Model (L. Barrett, 2006b; Lindquist, 2013; see also Russell, 2003), the features of  
421 “contempt” should hang together only because that natural language term chunks the otherwise  
422 continuous stream of “core affect” – i.e., valence and arousal – into a conceptual schema that integrates  
423 concomitant processes across these and other “core systems”. On this account, there is no unifying  
424 feature of experience that characterizes all cases of contempt; those affective experiences labeled as  
425 tokens of contempt vary widely in their specific features, and individuals and populations vary in their  
426 prototypical “contempt” concepts. This approach could account for variation in the meaning of  
427 “contempt”, while providing scope for the enduring time course of “contempt” tokens.

428

429 In a psychological constructionist approach, a word such as “contempt” is necessary to anchor the  
430 coherence of the features categorized as a single emotion; without this anchor for statistical learning,  
431 there is only the continuous stream of core affect. However, this or comparable words do not appear  
432 necessary for experiencing together the features of “contempt”. In a study of anger, Fridhandler and  
433 Averill (1982) found that unresolved anger towards a formerly valued relationship partner, dispositional  
434 attributions of their shortcomings, and low estimation of the other’s value and character were  
435 associated with having “less need or affection for the offender” and a “cooling of the relationship with  
436 the instigator”. While these results closely parallel those of Fischer and Roseman (2007) for “contempt”,  
437 the word was never used as a prompt. Similarly, the unilateral lip curl is associated with the same kinds  
438 of eliciting situations as “contempt” yet without using that word as a prompt (Matsumoto & Ekman,  
439 2004; Rozin et al., 1999). In addition, as we will detail below, the features of “contempt” cohere as a  
440 dispositional social stance in clinical primary psychopathy, suggesting that their co-occurrence is far  
441 from arbitrary. Finally, a constructionist approach has trouble explaining the translatability of  
442 “contempt” across diverse populations (e.g., Ekman & Friesen, 1986). The features of “contempt”  
443 appear to functionally stick together even without that word acting as conceptual glue.

444

445 The features of “contempt” are not merely a conceptual construction around core affect. They also  
446 approximate neither a basic emotion nor an attitude. Nonetheless, each of these approaches has merit.  
447 The basic emotions approach highlights the motivational and expressive components of contempt. The  
448 attitude approach can account for the object specificity and durability of contempt. And a  
449 constructionist approach is necessary to understand how basic affect systems might manifest as folk  
450 affect concepts. Synthesizing these perspectives, we argue that the features of “contempt” are aspects  
451 of an underlying *sentiment*: a functional network of diverse basic emotions moderated by an attitudinal

452 representation of a person. This network evinces statistical regularities across disparate emotional and  
453 behavioral outcomes anchored by a common attitudinal core. On this account, the major limitation of  
454 the discrete emotions paradigm in the affective sciences is not the assumption of evolved design at a  
455 higher level than “core affect” (*sensu* L. Barrett, 2006a) – it is the under-appreciation of an even higher  
456 level of functional organization across discrete emotions in the service of social relationship regulation.

457

#### 458 **4. Sentiments and the structure of folk affect concepts**

459

##### 460 *4.1. Sentiments*

461

462 A higher level of functional design among emotions was appreciated a century ago by British social  
463 psychologists exploring consistency in individual personalities and values despite variable behavior  
464 across contexts, i.e., “character” (Shand, 1920; Stout, 1903; McDougall, 1933). Shand (1920)  
465 distinguished three levels of character: *instincts*, or simple embodied impulses; *primary emotions*, or  
466 systems of instincts that organize particular behaviors; and *sentiments*, which organize and direct  
467 emotions across situations with respect to particular relational objects. Sentiments were enduring  
468 dispositions to respond emotionally towards their objects in ways consistent with the value of that  
469 object. *Love* and *hate* were prototypical sentiments; they potentiated *happiness*, *anger*, *fear*, and  
470 *sadness* in quite opposite, yet appropriate, situations, to preserve or destroy their objects, respectively.  
471 For Shand, these primary emotions shared the “innate bond” (42) of a sentiment toward a particular  
472 object.

473

474 Despite being hailed as “the main foundation of all social psychology” (McDougall, 1933), the sentiment  
475 construct fell from use (though see Heider, 1958). Sentiments were contrasted with “attitudes” (see,

476 e.g., Cattell, 1940; McDougall, 1937), which, following Allport (1935), were embraced by American social  
477 psychology. The abstractness and generality of the attitude construct likely helped it gain wider use,  
478 especially in experimental studies of impersonal attitudes towards stereotypes, products, and political  
479 positions. Other reasons for the waning of “sentiment” likely included behaviorist opposition to the  
480 “hormic” teleology of sentiments; greater reliance on evolutionary (especially Lamarckian) reasoning by  
481 proponents; and associations with discredited, yet logically distinct, theories of parapsychology and  
482 eugenics (see, e.g., Asprem, 2010).

483

484 Below, we remodel the sentiment construct in line with the modern tenet of evolved functional  
485 specialization (H.C. Barrett & Kurzban, 2006). Doing so resolves debates about both the structure of  
486 social affect and the sources of variation in folk affect concepts, “contempt” included, thereby both  
487 organizing a large body of existing findings and generating discriminant predictions.

488

#### 489 *4.2. The Attitude-Scenario-Emotion (ASE) model of sentiments*

490

491 We propose the Attitude-Scenario-Emotion (ASE) model of sentiments (see Table 2). This model  
492 specifically addresses social affect, emphasizing the adaptive problems of social relationship regulation  
493 (A. Fiske, 2002; Fessler & Haley, 2003). We leave open the potential generality of this model for non-  
494 social affect. The model includes three kinds of basic affect systems distinguished by their forms and  
495 functions: *attitudes*, *emotions*, and *sentiments*.

496

497

498

499

Construct	Functional Features	Operational Indicators	Representative Predictions
<b>Attitudes</b>	Object-specific affective representations	<i>Pragmatic language:</i> “feelings about” or “feelings for” someone <i>Phenomenology:</i> can be “coldly” considered	Relatively difficult to misattribute to other objects or prime towards others No necessary concomitant arousal while introspecting a current attitude
	Enduring representations	<i>Time course:</i> relatively stable	Outlasts the formative event or information
	Track and summarize cues to another’s social-relational value	<i>Structure:</i> orthogonal dimensions track different fitness affordances  <i>Time course:</i> change with new, valid cues to fitness relevance <i>Phenomenology:</i> awareness of valuation, not necessarily of formative cues	Possibility of ambivalence towards someone, with corresponding reaction time decrements Highly informative events can alter previously stable or longstanding attitudes Possibility of confabulated justification
	Moderation of emotion-eliciting appraisals	<i>Structure:</i> attitude + belief about object’s actions/fate = motivational outcome	Indirect effects; emotion elicitation is required to implement action
<b>Emotions</b>	Contingent reactions to specific scenarios	<i>Pragmatic language:</i> “feelings because of” some event <i>Outcomes:</i> identified principally with a motivation apt for addressing scenario	Can be more easily misattributed and primed Behavioral outcome modified by contextual constraints & affordances
	Occurrent	<i>Time course:</i> relatively fleeting	Lasts as long as the eliciting scenario; when latter is prolonged, leads to <i>moods</i>
	Systemic	<i>Structure:</i> coordinated recruitment of relevant systems across the organism <i>Phenomenology:</i> relatively “hot”, includes arousal and action-implementation systems	Identifiable through multivariate pattern classification Cannot be introspected dispassionately except after the fact
<b>Sentiments</b>	A functional affect network of attitudes and emotions  Attitudes moderate emotions; emotions update attitudes  Emotional pluripotence of attitudes	<i>Structure:</i> stable attitudinal core and diverse fleeting emotions across scenarios <i>Phenomenology:</i> conflation of emotions and attitudes due to reciprocal causal and temporal connections <i>Outcomes:</i> diverse motives, behaviors and expressions across scenarios	“Context-dependent universals” of Attitude X Scenario X Emotion interactions Individual and population variation in conceptual emphasis on attitudinal core or emotional antecedents and outcomes Can be inferred in varying social contexts from different emotion expressions

500  
501 **Table 2.** The major features of the Attitude-Scenario-Emotion model of sentiments, including the constructs,  
502 functional features, operational indicators, and sample predictions from the model (see section 6, below).

503

504 In our model, *attitudes* are enduring yet tentative representations of social-relational value (e.g., Fazio,  
505 2007). Attitudes are set or updated by cues of relational value, then index or proxy that value through  
506 time, moderating behavior regulation systems in light of it. In their form attitudes approximate Internal  
507 Regulatory Variables (IRVs; Tooby et al., 2008): “indices” or “registers...whose function is to store  
508 summary magnitudes...that allow value computation to be integrated into behavior regulation” (253).  
509 Tooby et al. propose that IRVs are ubiquitous across levels of the mind, operating in hierarchical systems  
510 that aggregate and summarize information at higher levels as a function of outputs from lower levels.  
511 Attitudes are IRVs operating at a particularly high, and potentially introspectively salient, level of the  
512 social mind.

513

514 Attitudes solve a key adaptive problem of social relationships: conditioning social behavior on the fitness  
515 affordances – or likely costs and benefits – associated with others. Anyone can approach, offer aid,  
516 inflict harm, or die. But the fitness consequences of such events depend on who is involved – on  
517 whether they are kin, ally, leader, mate, stranger, or enemy, and on the costs and benefits to self that  
518 such categories entail. Fitness affordances are not objective properties, but are relative to a perceiver’s  
519 traits, resources, and current state, requiring subjective representation (see Cottrell et al., 2007; S. Fiske  
520 et al., 2002; Tooby et al., 2008). Moreover, appraised threats and opportunities are often not presently  
521 observable but are grounded in past events that revealed an other’s skills, propensities, and affiliations.  
522 Hence, enduring yet tentative summary representations should commute the past into the present and  
523 subjectively weight the value of others. In the ASE model, attitudes serve this function.

524

525 In the ASE model, attitudinal representations guide action, but emotions implement action. Following  
526 adaptationist and social-functional approaches (e.g., Cosmides & Tooby, 2000; Ekman, 1992; Keltner et

527 al., 2006; Nesse, 1990; Nesse & Ellsworth, 2009), *emotions* are contingent, occurrent, and coordinated  
528 shifts across the cognitive, motivational, and movement systems of an organism, creating a state of  
529 action readiness (Frijda et al., 1989). Each emotion is a mode of operation for the organism, contingent  
530 on a particular appraisal of circumstance. Functionally, each emotion facilitates adaptive behavior vis-à-  
531 vis its eliciting circumstance. In the ASE model, this adaptive behavior regulation occurs primarily in the  
532 present, although one function of emotions may be to update attitudes for the future (Baumeister,  
533 Vohs, & DeWall, 2007; Tooby et al., 2008). We consider canonical *moods* to be emotions temporally  
534 tailored to address protracted threats and opportunities. As with other emotions, their form is systemic  
535 and pervades thought and action (see Clore & Schnall, 2005; Frijda, 1994; Schimmack et al., 2000).

536

537 Among the diverse behavioral functions served by emotions, many regulate behavior within social  
538 relationships (Fessler & Haley, 2003; A. Fiske, 2002; Fischer & Manstead, 2008; Keltner et al., 2006;  
539 Kitayama et al., 2006; Tooby et al., 2008). The specialized relational functions of discrete emotions  
540 include building (*gratitude*) or repairing (*guilt*) cooperative relationships, and acknowledging reduced  
541 status (*shame*) or elevating another's status (*admiration*) in a hierarchy. Some emotions function as  
542 subjective commitment devices (Fessler & Quintelier, 2013) that proxy (A. Fiske, 2002) and  
543 motivationally weight relational value (Fessler & Haley 2003; Frank, 1988; Gonzaga et al., 2001;  
544 Hirshleifer, 1987). By hypothesis, these mechanisms help sustain long-term relationships by  
545 countervailing a host of short-sighted cognitive biases and external temptations and by motivating  
546 relational investment and repair (A. Fiske, 2002). Emotions are not separate from cognition, but  
547 function, in part, through cognition as contingent shifts in trade-offs, time horizons, and sensitivities  
548 (Cosmides & Tooby, 2000).

549

550 In the ASE model, *sentiments* are higher-level functional networks of attitudes and emotions; each  
551 sentiment is an attitude state and the various emotions disposed by that representation. Within  
552 relationships, or towards particular people, the functions of attitudes and emotions are complementary  
553 and intertwined. Attitudes “bookkeep” and represent another’s relational value to self. These  
554 representations adaptively moderate emotions across scenarios involving another’s actions and  
555 fortunes, such as their approach, departure, or death, imbuing such events with self-relevant meaning.  
556 Emotions then implement adaptive behavior. One overarching function of each sentiment – of the  
557 emotional syndrome of each attitude – is to implement commitment to the value of the relationship  
558 represented by that attitude: positive attitudes regulate emotions to build and sustain valuable  
559 relationships, while negative attitudes regulate emotions to minimize the costs of, and maximize the  
560 benefits extracted from, costly relationships. Sentiments are thus the deep structure of social affect, the  
561 largely unstudied networks of attitudes and emotions that pattern affect within social relationships.

562

#### 563 *4.3. The diversity of sentiments and their emotional outcomes*

564

565 Our model of sentiments includes several additional hypotheses. First, we propose that there are  
566 distinct sentiments, subserved by distinct attitude dimensions, that represent the distinct kinds of costs  
567 and benefits afforded by sociality – just as there are distinct emotions for implementing distinct  
568 behavioral tendencies. As with emotions, each sentiment likely has a distinct evolutionary history and  
569 taxonomic distribution (see, e.g., Fessler & Gervais, 2010), as well as partially dissociable neural bases  
570 (e.g., Panksepp, 1998).

571

572 The social world presents many distinct fitness threats and opportunities that cannot be collapsed into a  
573 single summary representation of goodness or badness, liking or disliking (see Bugental, 2000; Kenrick et

574 al., 2010; Kurzban & Leary, 2001; Neuberg & Cottrell, 2008; Rai & Fiske, 2011). Correspondingly, existing  
575 findings indicate that there are likely more attitude dimensions than traditionally assumed. Results  
576 support orthogonal positive and negative attitude dimensions (Cacioppo et al., 1999), distinct  
577 dimensions of “liking” and “respect” for tracking affiliation and efficacy, respectively (S. Fiske et al.,  
578 2007; Wojciszke et al., 2009; see also White, 1980), and possibly four or five different positive forms of  
579 regard (e.g., infatuation, respect, attachment, and liking; Storm & Storm, 2005). Those few emotion  
580 researchers who have addressed attitudes and/or sentiments likewise propose some beyond liking and  
581 disliking, including love, respect, and hate (Frijda, 1994; Lazarus, 1991; Royzman et al., 2005; Scherer,  
582 2005).

583

584 Integrating these deductive and inductive approaches suggests a provisional set of sentiments – social  
585 attitude dimensions, corresponding to distinct social-relational affordances, whose states potentiate  
586 unique constellations of emotions. We highlight the positive dimensions *love*, *liking*, and *respect*, and  
587 the negative dimensions *hate* and *fear*. The positive dimensions correspond to distinct though  
588 potentially correlated positive fitness affordances: fitness dependence on an other (*love*; Shaver et al.,  
589 1996; Roberts, 2005), the receipt of benefits from an other (*like*; S. Fiske et al., 2007; Wojciszke et al.,  
590 2009; Trivers, 1971), and an other’s efficacy (*respect*; S. Fiske et al., *ibid.*; Wojciszke et al., *ibid.*; Henrich  
591 & Gil-White, 2001; Chapais, 2015). The negative dimensions correspond to distinct kinds of threat or  
592 cost imposition: *hate* tracks an other’s ongoing cost imposition, including zero-sum advantages relative  
593 to self (Royzman et al., 2005), while *fear* tracks an other’s willingness and ability to inflict costs under  
594 certain circumstances (Öhman & Mineka, 2001; Evers et al., 2014). A given value on one of these  
595 dimensions has the functional role of indexing a magnitude of that affordance and moderating behavior  
596 regulation systems, including emotions, to manage it. Each of these dimensions can range in value from  
597 nil to high, and each is named for its high value. However, the absence of value on a dimension can be

598 functionally significant, and can be linguistically marked or otherwise psychologically or socially salient.

599 Below we make this case for an absence of *respect*, which we identify with *contempt*. In addition,

600 multiple orthogonal dimensions of attitudes can create composite sentiments. For example, equal

601 amounts of liking and disliking can lead either to indifference (when neither is appreciable) or to

602 ambivalence (when both are appreciable; Cacioppo et al., 1999.).

603

604 A second hypothesis of the ASE model is that each attitude state is emotionally pluripotent, disposing

605 diverse emotions towards its object, thereby constituting a sentiment. Each emotion, in turn, might play

606 a role in numerous sentiments. The functional logic is straightforward: each attitude-by-scenario

607 interaction creates an adaptive problem best addressed by a particular emotion. Such events might

608 include an other's approach, achievement, misfortune, or death, injuring them oneself, their witnessing

609 one's own transgression, and so on. Each of these scenarios has unique fitness implications within a

610 relationship, and each means very different things across relationships depending on how the person

611 involved is valued. For instance, if *love* proxies fitness dependence on an other, as cued, for example, by

612 indispensable coalitionary support, then the death of a loved one should lead to a response that solicits

613 social support to mitigate that potential fitness decrement (e.g., *sadness*; Keller & Nesse, 2006). In

614 contrast, if *hate* proxies an other's ongoing costs to self, as cued, for example, by their monopolization

615 of resources, then the death of a hated one should evoke a positively reinforcing response (e.g.,

616 *schadenfreude*; Hareli & Weiner, 2002; van Dijk et al., 2006). The emotional pluripotency of sentiments

617 explains the lack of direct behavioral correspondence between attitudes and behavior – appraised

618 situations and emotions intervene (see, e.g., Cottrell & Neuberg, 2005; Mackie et al., 2000).

619

620 Though a central feature of the early sentiment construct (e.g., Shand, 1920), emotional pluripotency

621 departs radically from most recent discussions. These assume a one-to-one correspondence between

622 emotions and sentiments, with sentiments being mere latent emotions awaiting reinstatement by the  
 623 sentiment object (e.g., *hate* as latent *anger*; Frijda, 1994; Lazarus, 1991; see also Averill, 1991; Clore &  
 624 Ortony, 2008). Instead, following Royzman et al. (2005), we maintain that each sentiment disposes  
 625 multiple discrete emotions conditioned on the actions and fortunes of the attitude object. A negative  
 626 sentiment such as *hate* can dispose positive emotions such as *joy* at another's suffering, while a positive  
 627 sentiment such as *love* can dispose negative emotions such as *sadness* at another's death -- there is no  
 628 simple one-to-one correspondence that depends on previous association for emotion elicitation.  
 629 Instead, there is an adaptive grammar of emotions within relationships resulting from the dispositions of  
 630 attitudes across social scenarios. Nonetheless, it may be that some sentiments have proprietary  
 631 emotions among their dispositions that function like latent emotions -- for example, an emotion *love*  
 632 disposed by an attitude *love* (Frijda, 1994; Shaver et al., 1996), contributing to the unique structure of  
 633 the sentiment *love*. Similarly, the sentiment *fear* may include a particularly strong association between  
 634 an attitude *fear* and an emotion *fear*. In future work it may therefore be prudent to notate polysemous  
 635 scientific language when referring to a sentiment network (e.g., FEAR<sub>S</sub>, LOVE<sub>S</sub>), or to its component  
 636 attitude (e.g., FEAR<sub>A</sub>, LOVE<sub>A</sub>) or proprietary emotion (e.g., FEAR<sub>E</sub>, LOVE<sub>E</sub>).

637

#### 638 4.4. *The deep structure of folk affect concepts*

639

640 The ASE model is a novel rapprochement between evolutionary psychology and psychological  
 641 anthropology: it maintains that human social affect has an evolved, functionally-specialized architecture,  
 642 while theorizing the pathways through which this architecture finds variable conceptual and cultural  
 643 manifestation. Folk affect concepts are patterned by embodied experience, which is itself patterned by  
 644 the engagement of basic affect systems by local ecological, social, and cultural circumstances. The

645 structure of sentiments – as functional networks of contingent attitudes and emotions – allows many  
646 experientially-grounded sources of variation in folk affect concepts.

647

648 The ASE model implies that folk affect concepts can vary in whether they emphasize the distinctness of  
649 discrete emotions experienced across sentiments, or the relational significance of attitude states that  
650 anchor multiple emotions within sentiments. This difference may map onto the contrast in affect  
651 concepts of relatively individualistic and collectivistic cultures (Markus & Kitayama, 1991; White &  
652 Kirkpatrick, 1985), but it needn't be static or absolute. Tran (2015) describes recent changes in  
653 Vietnamese ethnopsychologies in and around Ho Chi Minh City spurred by neoliberal reform policies,  
654 decollectivisation, and rising consumerism. Alongside the traditional folk notion of “sentiment” (*tin*  
655 *cam*), which emphasizes durable feelings *for* others, relational states, and interpersonal obligations,  
656 there is an emerging folk concept of “emotion” (*cam xuc*) that emphasizes discrete and differentiated  
657 internal experiences *because of* exposure to things and people.

658

659 Folk affect concepts may also vary in the prototypical emotions associated with particular attitudes, as a  
660 result of different social scenarios tending to occur within relationships. For example, *love* can lead to a  
661 host of acute emotions, such as *contentment* and *grief*, but which are most salient may vary across  
662 individuals or populations. Lutz (1988) describes the concept of “love” (*fago*) in Ifaluk, a low-lying  
663 Micronesian atoll. In this interdependent community with low relational mobility and high extrinsic  
664 mortality, *love* as dependence most saliently begets compassion, sadness, longing, pity, and other  
665 concomitants of loss, separation, vulnerability, and obligation. In contrast, *love* in populations with high  
666 relational mobility and low extrinsic mortality may lead most saliently to contentment, joy, and other  
667 positive consumatory experiences, as in the canonical English concept of “love”.

668

669 The ASE model also indicates that folk affect concepts may vary in whether varieties of an emotion are  
670 distinguished based on their attitudinal antecedents (e.g., “schadenfreude”), and in whether they are  
671 suffused with particular relational values and expectations. For example, Tran (2015) describes the  
672 distinction in modern Vietnamese between “happiness” (*hạnh phúc*), traditionally linked with the  
673 fulfillment of relational expectations, and “joy” (*niềm vui*), a newer concept expressing satisfaction from  
674 self-motivated choice. Likewise, the concurrence of distinct sentiments within relationships may vary  
675 across populations. Concepts that capture the conjunction of *respect* and *fear* may be alien to those in  
676 putatively meritocratic and egalitarian societies without ascribed hierarchies, but they are salient where  
677 dominance and subordination are valued facets of social life (e.g., Indonesia; Fessler, 2004). Finally,  
678 clusters of related affect terms may correspond to different contextual or behavioral manifestations of  
679 particular sentiments. In the case of *contempt*, such terms might include “scorn”, “disdain”, “sneering”,  
680 “defiance”, “anger”, “disgust”, “derision”, and “haughty” (Darwin, 1872; Izard, 1977).

681

682 The principal implication of the ASE model for folk affect concepts is that variation in such concepts  
683 comes not only from the historical and experiential vagaries of categorization or social construction. To  
684 a significant and verifiable extent, it also results from the manifolds of sentiments. Networks of  
685 contingent attitudes and emotions create many degrees of freedom for differences in the actual  
686 engagement of basic affect systems, and in their conceptual representation across words, individuals,  
687 and populations. Nevertheless, variation in folk affect concepts should be predictably patterned,  
688 following the joints of sentiments as these are differentially engaged by local circumstances and systems  
689 of meaning.

690

## 691 **5. The deep structure of “contempt”**

692

693 The ASE model of sentiments, and its implications for folk affect concepts, can explain the coherence of  
694 the features of “contempt” as well as variation in their manifestations across studies, individuals, and  
695 populations. We begin by fleshing out the basic affect systems of the sentiment *respect*, which largely  
696 define the sentiment *contempt*. We then detail how this sentiment explains the features of “contempt”  
697 and effectively organizes the extant findings in the contempt literature.

698

### 699 5.1. The sentiment respect

700

701 Of the multiple meanings of “respect” (Langdon, 2007), most are consistent with an underlying  
702 sentiment that tracks an other’s practical and moral efficacy in domains relevant to the evaluator (S.  
703 Fiske et al., 2002; Wojciszke et al., 2009). These standards are subjective, defined relative to the  
704 evaluator’s goals, abilities, and social options, but they can stem from shared criteria defining a social  
705 role. Ultimately, respect facilitates forming mutualisms with efficacious individuals (see also McClelland,  
706 2011) by motivating tolerance of, and interest in, their continued functioning, and facilitating prosocial  
707 emotions (e.g., *compassion*, *guilt*, and *shame*) that foster engagement and mitigate harm done to them.  
708 Increasing levels of respect track an other’s relative expertise in relevant cultural domains, which makes  
709 the other an increasingly valuable source of information and positive externalities. While minimal  
710 respect engenders tolerance and interest in an other’s continued functioning, increasing respect  
711 motivates increasing concern, deference, and imitation (Henrich & Gil-White, 2001), as well as  
712 followership and support (Van Vugt, 2006). *Respect* is implicated in many of the social behaviors that  
713 constitute human ultrasociality, including reciprocal relationships (Trivers, 1971), prestige-biased  
714 cultural learning (Henrich & Gil-White, 2001), and followership in the resolution of coordination  
715 problems (King et al., 2009; Price & Van Vugt, 2014). In each case, *respect* plays a role in assortment by  
716 indexing which individuals are competent norm adherents, potential sources of cultural skills, and

717 capable leaders. *Respect* is one proximate mechanism that may implement strategies modeled as  
718 explanations for the evolution of cooperation, including partner selection (e.g., Hruschka & Henrich,  
719 2006) and indirect reciprocity (e.g., Panchanathan & Boyd, 2004).

720

## 721 5.2. *The sentiment contempt*

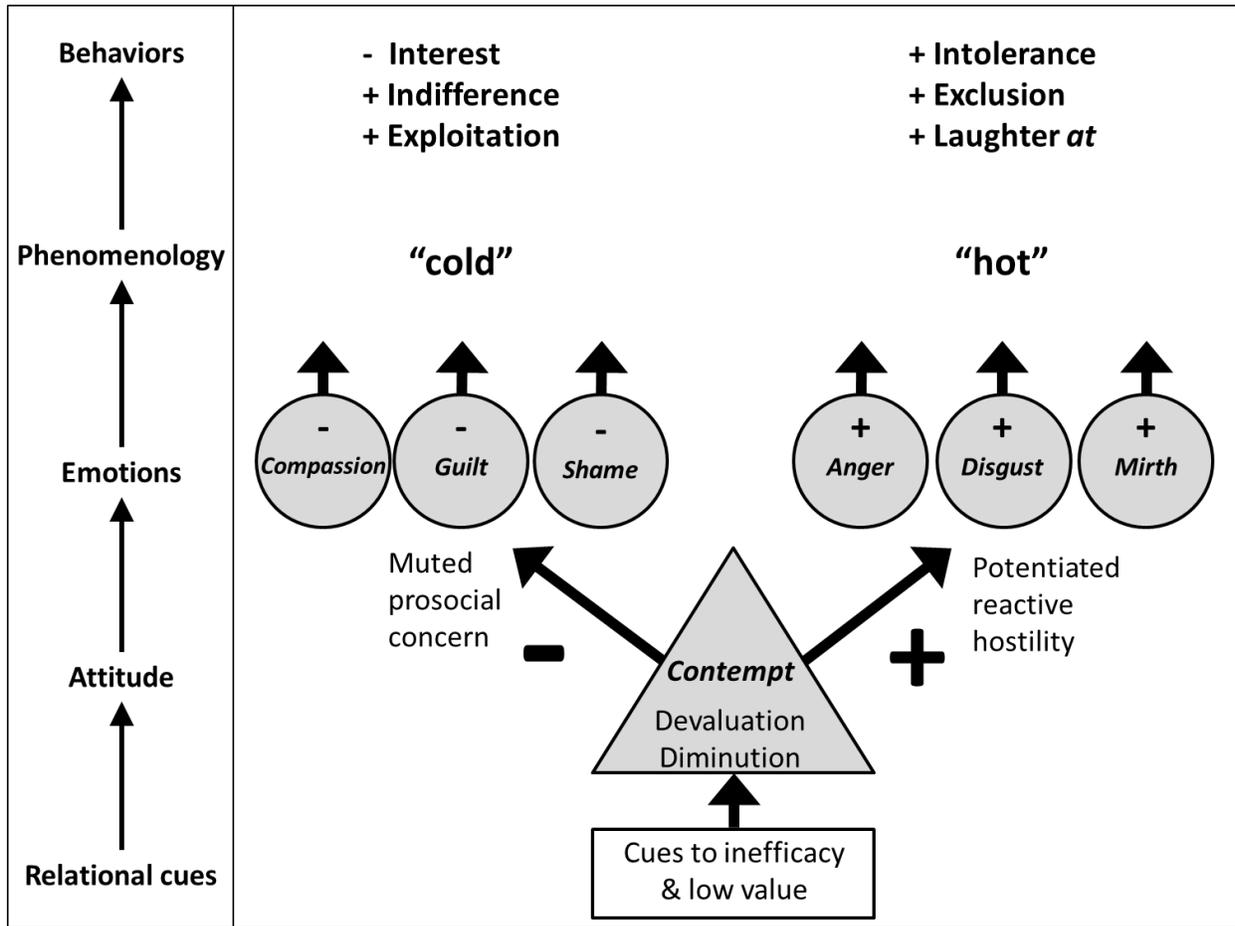
722

723 If *respect* is necessary for many human social behaviors, then an absence of *respect* should be  
724 functionally significant. We identify the absence of *respect* as the sentiment *contempt* (Figure 1). By  
725 hypothesis, the core of *contempt* is an attitude state that represents an other's low intrinsic value to self  
726 due to their inefficacy in adhering to social-relational standards; they have either failed to establish their  
727 worth, or shown themselves unworthy of previous positive valuation. This attitude state is constituted  
728 by a lack of felt *respect* and by the cognitive schema of "looking down on" someone, leading to  
729 indifference, intolerance, and exploitation through emotion moderation. Together, these dispositions  
730 minimize the costs incurred from poor relationship partners and maximize the benefits extracted from  
731 them.

732

733 *Contempt* potentiates two clusters of emotion dispositions. First, the prosocial emotions supported by  
734 *respect* are muted, leading to cold indifference and exploitation, i.e., *contempt* undermines emotions  
735 that implement subjective commitment (Fessler & Quintelier, 2013) to valuable relationships. The target  
736 may be ignored, and, as their welfare is not valuable, empathy and *compassion* are not engaged. There  
737 is no valuable relationship for *guilt* to preserve as a disincentive to exploit the other, nor is there a  
738 relationship for *guilt* to repair following a transgression (Baumeister et al., 1994; Fessler & Haley, 2003);  
739 any benefit taken is a net benefit lacking a countervailing cost. Moreover, the target's approval is not  
740 important and their knowledge of one's own transgressions should not motivate *shame*. Accidents

741 befalling them are not perceived as serious for oneself, as no valuable relationship is thereby  
 742 threatened, potentiating mirth and Duchenne laughter (Gervais & Wilson, 2005).  
 743



744  
 745 **Figure 1.** A schematic representation of the hypothesized sentiment *contempt*. Relational cues to an other’s  
 746 inefficacy and low value establish an attitudinal representation of an other that is an absence of *respect*; they are  
 747 worthless and below oneself. This creates two clusters of emotion dispositions: muted prosocial emotions such as  
 748 *compassion*, *guilt*, and *shame*, and potentiated hostile emotions including *anger*, *disgust*, and *mirth*. These  
 749 emotions create both the “cold” and “hot” aspects of contempt phenomenology, and implement indifference,  
 750 exploitation, intolerance, and exclusion.  
 751

752 Second, the hostile emotions mitigated by *respect* are instead potentiated in *contempt*, leading to  
753 intolerance and exclusion. Any actual or potential cost imposed by the other – including proximity as a  
754 cue to cost imposition – registers as a net cost, disposing *anger* and behaviors that will deter the other  
755 in the future (see, e.g., Sell et al., 2009). The target also presents costs that can be mitigated through the  
756 co-opted avoidance tendencies of *disgust*. These costs include culture contamination – inadvertently  
757 copying the practices that may have earned that person contempt in the first place – and image  
758 infection, or stigma-by-association (e.g., Neuberg et al., 1994).

759

760 *Contempt* can be inferred from expressions and behaviors associated with its various emotion  
761 dispositions, especially as these diverge from civil interaction – being unmoved by another’s joy,  
762 reacting aggressively to a minor transgression, or laughing at another’s misfortune. *Contempt* is  
763 associated with the unilateral lip curl (Ekman & Friesen, 1986), a mild threat display given the proximity  
764 of someone not valued and hence potentially costly (Darwin, 1872; Izard & Haynes, 1988). Not  
765 surprisingly, within an established relationship, these dispositions and expressions initiate relationship  
766 dissolution.

767

768 There is convergent empirical support for this model of *contempt*. Mounting evidence indicates that  
769 empathy and concern are moderated by social closeness and relationship value (e.g., Cikara & Fiske,  
770 2011; Hein et al., 2010). These effects are both direct and mediated by reduced motivation to  
771 perspective-take (Batson et al., 2007) and affiliate (van Kleef et al., 2008). There is also evidence that  
772 increasing someone’s power (Lammers & Stapel, 2011) or social capital (Waytz & Epley, 2011) increases  
773 their indifference and dehumanization towards distant others, consistent with *contempt*. The down-  
774 regulation of concern by those high in relative efficacy is evident in increased rule breaking, exploitation,  
775 and cheating by wealthier individuals (Piff et al., 2012). Likewise, increased physical formidability

776 enhances anger reactivity (Sell et al., 2009). The coincidence of in-group love and out-group indifference  
777 (Brewer, 1999) is explicable as outgroup *contempt* abetted by in-group interdependence and solidarity.

778

779 *Contempt* is plausibly the default social sentiment in psychopathy. Clinical psychopaths are  
780 characterized by a constellation of anti-social traits and behaviors, including “cold” affect, arrogance,  
781 interpersonal manipulation, impulsivity, irresponsibility, and both reactive (anger-based) and  
782 instrumental aggression (Blair et al., 2005; Hare, 1996; though see Reidy et al., 2011). Psychopaths thus  
783 appear *contemptuous* in all of their interactions: arrogant, without guilt, empathy, shame, or social  
784 sadness; exploitative, reactively intolerant, and blaming others – all adaptive dispositions vis-à-vis  
785 someone held in *contempt*. Supporting this, clinical psychopaths are capable of empathy but are usually  
786 unmotivated to empathize (Meffert et al. 2013), while subclinical psychopathic traits predict the  
787 conditioning of concern and relational investment on another’s manifest relational value (Arbuckle &  
788 Cunningham, 2012; Gervais et al., 2013; Molenberghs et al., 2014).

789

790 Lending discriminant value to our approach, *contempt* differs markedly from *hate*, though they are often  
791 conflated (e.g., Cuddy et al., 2007). Described as “inverse caring” (Royzman et al., 2005), *hate* represents  
792 an other as actively competitive or threatening, and motivates harming an other and delighting in their  
793 misfortune. In contrast, *contempt* is not the inverse of caring, but merely its absence – it disposes  
794 instrumental exploitation and reactive aggression towards a devalued other, but does not intrinsically  
795 motivate harming or annihilating them. A wide variety of harmful acts are motivated not by intrinsic  
796 motives to harm the other, but as a means to other ends. This implicates *contempt* instead of *hate* in  
797 many so-called “hate crimes” and “cold-blooded killings,” as *contempt* makes the contemned vulnerable  
798 to use by the contemnor in satisfying extrinsic goals, including rape, theft, and attempts to signal  
799 formidability or in-group commitment.

800

801 *5.3. The evolution and phylogeny of contempt*

802

803 How might *contempt*, as the absence of *respect*, have evolved? To start with, *respect* must be a derived  
804 capacity within a species' neurocognitive repertoire. Species lacking this capacity – plausibly the  
805 prevailing pattern in the animal kingdom, especially among non-social animals – merely evince  
806 *pseudocontempt* in their intolerance and indifference to conspecifics. Among social species capable of  
807 differentiated relationships involving interest, tolerance, coordination, and reciprocity among non-kin  
808 (including “friendships”), we might expect that *respect* evolved to facilitate the establishment and  
809 maintenance of valuable relationships with efficacious others. In such species, *respect* could be gained  
810 or lost, making *contempt* relationally significant.

811

812 The ancestral form of respect (*protorespect*) may have been directed up dominance hierarchies towards  
813 especially efficacious conspecifics, motivating interest and investment in exchange for the benefits  
814 uniquely available from those of high rank (Chapais, 2015). This system – involving “looking up to”  
815 another – may have co-opted a physical size schema with even deeper phylogenetic roots in force-based  
816 agonistic interactions (A. Fiske, 1991; Holbrook et al., 2015), just as the emotion systems *protopride* and  
817 *protoshame* were coopted from dominance hierarchies for use in prestige hierarchies (Fessler, 1999;  
818 2004). The cognitive side of *contempt* – “looking down on” another – likewise finds a plausible  
819 homologue in dominance hierarchies (Darwin, 1872; Frijda, 1986; Izard & Haynes, 1988), especially  
820 towards lower-ranking conspecifics that cannot deliver benefits upwards and fail to earn *respect*.  
821 Dominant individuals in many species act contemptuous towards replaceable and low-ranking  
822 conspecifics – indifferent, intolerant, even exploitative – while showing *respect*-like tolerance and  
823 cooperation in more valuable relationships (e.g., Smuts & Watanabe, 1990; see Chapais, *ibid.*). To the

824 extent that high rank is contingent on the support of subordinates, mutual respect may change the  
825 quality of dominance interactions and hierarchies (Boehm, 1999; Chapais, *ibid.*). The interaction of  
826 positive yet asymmetrical levels of respect could sustain a legitimate status hierarchy, involving upwards  
827 support, deference, followership, and propitiation, and downwards *noblesse oblige* and pastoral  
828 responsibility, approximating the Authority Ranking (AR) relational model (Fiske, 1991).

829

830 Beyond a capacity for conditional *respect*, in a few species we might expect further derived mechanisms  
831 that facilitate social tolerance and the discovery of mutualisms on a larger or faster scale. Two possible  
832 mechanisms are an elevated baseline level of *respect* towards conspecifics, and prepared, one-shot cue-  
833 based learning. Such mechanisms are plausibly found in humans, owing to the co-evolution of risk-  
834 pooling, obligate cultural learning, expanding social networks, and ratcheting interdependence (e.g., Hill  
835 et al., 2011; Tomasello et al., 2012). *Contempt* can be implicated in facilitating the evolution of human  
836 ultrasociality once prestige and community expectations gained a foothold in our lineage. *Contempt*  
837 implements low-cost or indirect punishment, such as exclusion from cooperative ventures, potentiating  
838 social selection (Boehm, 2012; Nesse, 2007). Specifically, *contempt* as relative devaluation should have  
839 selected for strategies for its avoidance – including adherence to norms for the sake of predictability in  
840 joint enterprise (Fessler, 1999, 2007), social niche differentiation and the cultivation of worth to others  
841 (Sugiyama & Sugiyama, 2003; Tooby & Cosmides, 1996), and socio-cultural competence culminating in  
842 leadership and prestige (Henrich & Gil-White, 2001; Price & Van Vugt, 2014; Chapais, 2015). Efficacy in  
843 adhering to community moral expectations could likewise engender *respect* and mitigate contempt (see  
844 Rozin et al. 1999). It may be the significance of *lost* respect, especially for moral failings, that makes  
845 *contempt* particularly salient in human social life; that is, *contempt* may be a uniquely human moral  
846 sentiment, but only insofar as humans are unique in their moral expectations. One upshot of this  
847 phylogenetic history may be a kludgy solution to relational tracking that evinces phylogenetic legacies

848 in its proximate instantiation (Fessler & Gervais, 2010), including bleeding across the bases for  
 849 *contempt*, as illustrated by metaphors of possessing “weak” moral fiber, engaging in “low” actions  
 850 (Lakoff, 1995), or having a “small” intellect.

851

#### 852 5.4. The deep structure of “contempt”

853

854 The ASE model of the sentiment *contempt* lays the groundwork for understanding the features of the  
 855 folk affect concept “contempt” (see Table 1). “Contempt” is parsimoniously explained as a conceptual  
 856 schema patterned by *contempt* as we have characterized it; it is anchored by a relatively stable attitude  
 857 state and incorporates, to variable degrees, the cues, emotions, experiences, and behaviors causally  
 858 linked with that attitude. In other words, the folk affect concept “contempt” is a conceptual and cultural  
 859 construction built on and by the functional structure of the sentiment *contempt*.

860

861 “Contempt” is (1) object-focused and (2) enduring. These are basic features of attitudes as enduring  
 862 representations of the value of particular people or objects. “Contempt” specifically results from (3)  
 863 cues of another’s physical, cultural, or moral inefficacy, and entails (4) loss of respect and status  
 864 diminution. These features are key aspects of the function of *contempt* as a representation of another’s  
 865 low relational value to the perceiver. This attitude is facilitated by attributions that the other is unable  
 866 to change, hence the salience of character attributions as beliefs that support “contempt”. The  
 867 phylogenetic analysis of *contempt* suggests a source domain for the representational feature of “looking  
 868 down on” someone.

869

870 “Contempt” is associated with (5) “cold” indifference. This conceptual metaphor follows from the role of  
 871 *contempt* in reducing the “warm” feelings associated with friendship, respect, and committed

872 relationships (Kövecses, 2003); *contempt* undermines emotional engagement and compassion, thus  
873 potentiating “cold-blooded” treatment. In other situations, “contempt” is associated with (6) *anger* and  
874 *disgust*. This is the second, “hot” constellation of emotions potentiated by *contempt*. Experienced as  
875 “boiling inward” in Frijda et al.’s (1989) study, these emotions mitigate costs incurred from low-value  
876 partners. Anger and disgust may be also involved in the establishment of *contempt*. Anger gives rise to  
877 *contempt* when intrinsic attributions and low control attend relational transgressions (Fischer &  
878 Roseman, 2007; see also Fridhandler & Averill, 1982). Disgust and contempt co-occur when the same  
879 information that cues low value also cues a threat that can be addressed through avoidance.

880

881 That *contempt* moderates diverse emotions and behaviors explains why (7) “contempt” can be  
882 expressed in so many ways – a mild threat signaling “stay away” (e.g., Ekman & Friesen, 1986); largeness  
883 or a downward glance signaling “I’m better than you” (e.g., Izard & Haynes, 1988); disappointment  
884 signaling “you’re not good enough for me” (e.g., Russell, 1991c); anger (e.g., Alvarado & Jameson, 1996),  
885 disgust (e.g., Ekman et al., 1987), indifference (e.g., Wagner, 2000), and laughter (e.g., Miller, 1997) as  
886 emotion dispositions that index *contempt* in context; and also ridicule, disrespect, vulgarity, and a lack  
887 of shameful modesty in the other’s presence, which index lack of regard for them. Finally, the outcomes  
888 associated with “contempt” – (8) intolerance, exclusion, exploitation, and relationship dissolution –  
889 follow from the emotional dispositions created by *contempt*, which function to minimize the costs  
890 incurred, and maximize the benefits extracted, from low-value individuals.

891

892 The ASE model of *contempt* thus organizes the existing contempt literature and makes sense of the  
893 eight features that cohere in the “contempt” concept. This includes the findings for which contempt has  
894 been labeled a “special case”, most notably individual variation in the meaning of “contempt”, diverse  
895 expressions, both “hot” and “cold” phenomenology, and “nebulous” association with anger and disgust.

896 In addition to shedding light on existing data, the ASE model generates predictions about how the  
897 “contempt” concept should be patterned across studies, individuals, cultures, and social ecologies. In  
898 the next section we flesh out these predictions and future directions, after which we develop more  
899 general implications of the ASE model for studies of basic affect systems and folk affect concepts. In  
900 evaluating the utility of the ASE model, we stress that it makes predictions about the structure and  
901 variation of folk affect concepts where few if any other theories do. Folk affect concepts are the most  
902 directly observable affective phenomena and the most experience-near for participants, lending added  
903 value to any theory that can explain and predict their form.

904

## 905 **6. Predictions and Future Directions**

906

### 907 *6.1. Predicting variation in contempt and “contempt”*

908

909 In addition to explaining the coherence of the features of the “contempt” concept, the ASE model of the  
910 sentiment *contempt* hypothesizes many dimensions along which the meaning of “contempt” can vary or  
911 change over time. This multifaceted architecture explains the lack of consensus on the meaning of  
912 “contempt” (Rosenberg & Ekman, 1995; Matsumoto, 2005), while generating predictions and insights  
913 into variation and change in “contempt” and related folk concepts.

914

915 In the ASE model, attitudes and emotions are tightly linked causally as well as temporally. Owing to this  
916 functional dependency and close association in experience, attitudes and emotions should be readily  
917 conflated in folk affect concepts (Frijda et al., 1991). Nonetheless, it should be possible to probe  
918 sentiments for their distinct functional components. For example, at the synchronic level of psychology  
919 experiments, the meaning of “contempt” should be fluid as different frames or primes make salient

920 different aspects of the underlying sentiment – not only the “hot” or “cold” emotion constellations of  
921 *contempt*, but also whether it resembles an emotion or an attitude. Asking about “a time” one felt  
922 contempt should foreground the occurrent emotionality of contempt establishment or situational  
923 reactivity. In contrast, asking about a person towards whom one feels contempt should foreground the  
924 enduring evaluation of the relationship and its cold consideration. More broadly, a productive line of  
925 research might explore the malleability of affect concepts, and whether apparent individual or cultural  
926 differences in affect concepts can be erased or reversed through the foregrounding of different aspects  
927 of relational experience grounded in emotions or attitudes.

928

929 The ASE model also suggests that the same sentiment may manifest differently in different relationships  
930 if the targets share a core fitness affordance (e.g., inefficacy for *contempt*) but differ in other  
931 affordances or social contexts. For example, within individuals but across their relationships, “contempt”  
932 likely takes different forms. If one person held in contempt is frequently encountered, and is thought to  
933 impinge on the contemnor, contempt will be suffused with the “hot” constellation of *anger* and *disgust*  
934 dispositions. In contrast, a condemned person whom is rarely encountered may be coldly considered.  
935 *Contempt* may also co-occur with other attitudes. If someone low in efficacy is nonetheless a source of  
936 fitness benefits (e.g., via relatedness), *contempt* may co-occur with *love*, buttressing pro-social emotions  
937 and creating experienced “pity”. In contrast, if someone of low moral efficacy evinces cues to cost  
938 imposition and competition, they may also be *hated*, amplifying *anger* and adding resentment and  
939 spiteful motives to experienced contempt. On its own, *contempt* should not potentiate schadenfreude-  
940 like pleasure at another’s misfortune (see, e.g., Cikara & Fiske, 2012), but instead indifference, or  
941 Duchenne laughter only if their misfortune satisfies the incongruity condition of humor (Gervais &  
942 Wilson, 2005) (see Fig. 1).

943

944 While *contempt* is distinct from *hate*, it should insidiously facilitate *hate* by generating credulity toward  
945 portrayals of the other as threatening, even evil (Sternberg, 2003). The cost/benefit ratio of believing  
946 vilifying information about an other hinges on the value of the other as a potential relationship partner.  
947 If, as in *contempt*, the other is presently represented as worthless, then the costs of erroneously  
948 believing new false denigrating information are low, as no benefits are forsaken; conversely, the costs of  
949 erroneously rejecting true derogatory information will be high, as threats to the self are overlooked.  
950 When uncertainty attends decision-making, evolved systems should be biased toward the less-costly  
951 error (Haselton & Nettle, 2006). Hence, *contempt* should enhance credulity toward vilifying information.  
952 Writ large, *contempt* creates an attractor (Sperber, 1996) for vilifying information, and is implicated in  
953 the success of propaganda campaigns and “witch hunts”, especially those directed at contemned  
954 statuses, minorities, or outsiders.

955

956 Because sentiments subjectively represent the fitness affordances of others, they should be calibrated  
957 to individual differences in variables that influence one’s own relative value and the value of social  
958 relationships more generally. Individual differences in sentiment profiles – differences in emotion  
959 dispositions created by differences in attitude baselines – may be an important yet overlooked source of  
960 so-called trait emotions and personality differences. This implies that, across individuals, there should be  
961 differences in proneness to *respect* and *contempt* that influence the varieties of “contempt”  
962 experienced. Clinical psychopathy may be an extreme case of obligate *contempt* across relationships.  
963 More usually, these differences will be a function of one’s own perceived efficacy and value relative to  
964 others. For example, high resource-holding power should circumscribe the number of others deemed  
965 valuable, making one “contemptuous”. High resource-holding power in a steep, unstable social ecology  
966 should sensitize one to threats to resources from others, making “contempt” relatively “hot”. In  
967 contrast, a stable dominance hierarchy insulates those at the top from such threats, while making them

968 enduring sources of costs for those on lower rungs; in the thermodynamics of rigid hierarchies, “cold”  
 969 contempt should sink, while “hot” contempt rises.

970

971 Within populations, folk affect concepts should be fluid over time, influenced by changes in the lived  
 972 costs and benefits of social relationships, as well as shifting normative discourses pertaining to self,  
 973 society, and morality. The turn towards “emotion” in urban Vietnamese ethnopsychologies (Tran, 2015),  
 974 discussed earlier, indexes the increasing salience of discrete *emotions* per se, a shift apparently driven  
 975 by urbanization, market integration, and individualization. Historical shifts may also occur with respect  
 976 to particular sentiments. For example, the predominant meaning of “contempt” and its nearest  
 977 translations may be fluid over historical time. We suggest that one reason for the common conflation of  
 978 “contempt” with “anger”, “disgust”, and “hate” is that successive civil rights movements in America  
 979 have undercut the public legitimacy of *contempt*. Many such movements are responses to *contempt* and  
 980 hinge on counter-claims to dignity and *respect* – from the “unalienable rights” listed in the Declaration  
 981 of Independence, to the Declaration of Sentiments at Seneca Falls that “all men *and women* are created  
 982 equal” (Stanton, 1848/2007; emphasis added), to the more recent affirmation that #BlackLivesMatter. In  
 983 the moral discourse of a “dignity” culture (Leung & Cohen, 2011), all people have, and ought to be  
 984 treated as though they have, inviolable rights and worth. This prescribes *respect* and renders  
 985 illegitimate, even contemptible, looking down on or treating as worthless many historically contemned  
 986 statuses – a pattern that potentially explains the more than five-fold decrease over the last two  
 987 centuries in the proportion of words in English-language books that are ‘contempt’ (Google Ngram:  
 988 Michel et al., 2010). In this context, only those universally viewed as morally depraved – such as Nazis,  
 989 pedophiles, or, within political parties, the other political party – remain legitimately and publicly  
 990 contemptible. This normative stance conflates in discourse and experience *contempt* and *hate* and their  
 991 conjoint emotional outcomes *anger* and *disgust*. It may even “unmark” many cases of cold contempt,

992 making them even more insidious, for instance in implicit racial biases. If this account is correct,  
993 differences in the texture of “contempt” should be evident in comparisons of the corpuses of early and  
994 recent American English, older and younger Americans, and American and British English speakers,  
995 wherein modern American contempt should be relatively “hot” and bound up with *anger*, *disgust*, and  
996 *hate*. Generally, any transition from an autocracy to a democracy should be accompanied by a shift in  
997 the content of the nearest cultural model of *contempt* away from the cold, matter-of-fact  
998 representation of inferiority, towards hot emotional reactions to the trampling of rights and dignity.

999

1000 Across populations, folk affect concepts should also vary in systematic ways. For example, the nearest  
1001 translations of “contempt” will vary in content as a function of differences in social organization and the  
1002 frequencies of particular relational events, in addition to local moral discourses. In contrast to the “hot”  
1003 contempt of dignity cultures (see above), “contempt” will take on cold tones of disappointment and  
1004 indifference in contexts where failings or essentialized differences are common grounds for devaluation.  
1005 This includes honor cultures, in which respect has to be earned, and *contempt* plays a legitimate role in  
1006 everyday social life (e.g., Abu-Lughod, 1986). In populations with low relational mobility and high  
1007 interdependence – for example, some “face” cultures (e.g., Doi, 1973) – contempt will be infused with  
1008 pity from the parallel engagement of *love* by that interdependence. In autocratic stratified settings,  
1009 “contempt” should involve cold instrumentality directed downwards, and hot indignation and  
1010 resentment directed upwards. “Reverence” as the conjunction of *love* and *respect* may be more  
1011 common in social structures with freely-conferred status differences, while such societies may lack  
1012 terms, common elsewhere, for the composite sentiments of *respect* and *fear*. Specific variables of  
1013 interest that might influence the manifestation of *contempt* and other sentiments include the structure,  
1014 size, and fluidity of social networks, levels of risk pooling and collective action, rates of within- and  
1015 between-group violence, and the presence of interaction rituals that cue different relational affordances

1016 – in short, any variable that influences the perceived costs and benefits of social relationships. As with  
1017 individual differences, we would implicate culturally variable sentiment profiles as a source of genuine  
1018 cultural differences in emotional proclivities and social behavior. Nonetheless, there should be deep  
1019 similarities across populations in the contingencies that obtain between particular valuations of  
1020 relationships and the emotional concomitants of those relationships in particular appraised scenarios –  
1021 that is, “context-dependent universals” (Chapais 2014) in attitude-scenario-emotion linkages.

1022

### 1023 *6.2. General ASE predictions and future directions*

1024

1025 The preceding predictions about folk affect concepts hinge on the underlying structure of basic affect  
1026 systems as characterized in the ASE model of sentiments, especially our model of *contempt*, which  
1027 exemplifies the structure of sentiments and the consequences of this structure for folk affect concepts.  
1028 Of course, our predictions about variation in concepts of “contempt” could be wrong without imperiling  
1029 the underlying model of *contempt*, if, for example, our assumptions about the relationship of basic  
1030 affect systems and folk affect concepts are mistaken. Likewise, our specific model of *contempt* could be  
1031 wrong without imperiling the more general ASE model of sentiments; *contempt* may not be an absence  
1032 of *respect*, or it may not be a sentiment at all. For these reasons, it is worth sketching more general  
1033 empirical contributions of the ASE model as well as metatheoretical virtues of this approach.

1034

1035 The ASE model distinguishes attitudes and emotions by their computational form and function. In so  
1036 doing, it pioneers an explicit evolutionary psychological approach to attitudes to complement that which  
1037 exists for emotions (e.g., Tooby & Cosmides, 1990; Nesse, 1990). The venerable attitude literature has  
1038 continually reconsidered the nature of its own constructs and redefined “attitude” across the years  
1039 (Allport, 1935; Eagly & Chaiken, 1993; see Gawronski, 2007). Emphasizing form-function fit, functional

1040 specialization, and the adaptive problems of personal social relationships, the ASE model extends this  
1041 tradition in the direction of consilient social theory.  
1042  
1043 Empirically, there are a number of operational indicators that may be used to distinguish attitudes and  
1044 emotions (summarized in Table 2, column 3). For example, in natural language use, the object-specificity  
1045 of attitudes should manifest in statements regarding “feelings about” someone, while the more diffuse  
1046 and systemic operation of emotions should manifest in statements regarding “feelings because of” some  
1047 event. Phenomenologically, it should be possible to introspect present attitudes coldly and  
1048 dispassionately, while emotions remain relatively “hot” during their operation. As enduring  
1049 representations, attitudes should have a relatively stable time course updated only by new object-  
1050 relevant information, while the course of emotions should be relatively fleeting, lasting only as long as  
1051 the eliciting scenario (however protracted). Structurally, attitudes are principally evaluations of  
1052 someone and require only that object (real or imagined) for their activation. In contrast, the structure of  
1053 emotions is that of systemic mobilization without necessarily a clear object, but instead patterned  
1054 changes across the organism (Kragel & LaBar, 2013). No single heuristic is likely to clearly distinguish  
1055 emotions and attitudes in all cases; their casual and temporal dependencies, which mask their  
1056 distinction in folk affect concepts, will likewise complicate scientific attempts to empirically disentangle  
1057 them (see also Frijda et al., 1991). For example, this may explain why “hate” and “anger” are not  
1058 reported to vary in their duration (Royzman et al., 2005) – if *hate* requires *anger* (among other  
1059 emotions) to mobilize action, and if *anger* can follow recurrently from *hate*, then their conceptual  
1060 representations may well overlap. Distinguishing attitudes and emotions in such folk affect concepts will  
1061 require carefully crafted probes that assess the statistical clustering of multiple functional features  
1062 across measures, including self-reports, physiology, neural signatures, and behavior.  
1063

1064 The ASE model invites a host of novel questions about the psychological and functional interactions of  
1065 emotions and attitudes. The attitude and emotion literatures have remained largely isolated for a half  
1066 century; little research has explored how attitudes articulate with the appraisal processes theorized in  
1067 the emotion literature, or how and when emotions influence attitudes (though see, e.g., Cunningham et  
1068 al., 2007; Clore & Ortony, 2008). Considering how attitudes articulate with emotion-eliciting appraisals  
1069 can inform relational models of appraisal, which attempt to specify the information that influences  
1070 appraisal processes (see Smith & Kirby, 2009). For example, the valence or intrinsic pleasantness of a  
1071 stimulus (see Scherer, 1999), important in the front end of appraisal, potentially cleaves closely to the  
1072 evaluative representations of attitudes. Attitudes may play a direct role in appraisal by coordinating  
1073 goals or more proximate motives vis-à-vis attitude objects (Shand, 1920; Frijda, 1994). Attitudes may  
1074 also influence attention and perspective-taking, mediating, for example, empathic concern (Batson et  
1075 al., 2007). Likewise, attitudes may influence ascriptions of causal locus, including ascriptions of intent for  
1076 behaviors with positive versus negative outcomes (e.g., Peets et al., 2008). Reciprocally, emotions may  
1077 update attitudes. This idea is central to the latent-emotion approaches to attitudes and sentiments (see  
1078 also Baumeister et al., 2007), but conceptualizing attitudes as Internal Regulatory Variables, each  
1079 updated by diverse emotions, greatly expands this underexplored area (see Tooby et al., 2008).

1080

1081 Two additional hypotheses of the ASE are 1) the existence of diverse orthogonal dimensions of  
1082 interpersonal attitudes, and 2) the emotional pluripotency of attitude states. Together these features  
1083 motivate the characterization of sentiments as higher-order attitude-emotion networks, and constitute  
1084 key criteria for distinguishing sentiments from stand-alone attitudes or emotions. Sentiments should  
1085 have some of the functional attributes of attitudes described above – including intentionality and  
1086 durability – but will “feel” respectively like attitudes or emotions depending on circumstances. One  
1087 signature of sentiments will be the tendency of people to infer them from diverse emotional

1088 expressions. For example, *love* may be indexed by *joy*, *anger*, *fear*, or *sadness* in different contexts. This  
1089 is readily testable in a modified emotion recognition paradigm with social-relational framings. Rather  
1090 than asking which emotion a pictured person feels, researchers might ask how the pictured person feels  
1091 *about* another person given their expression at that person's fate or action – a smile at that person  
1092 winning the lottery or dying, for example. A similar paradigm, measuring emotional reactions to  
1093 scenarios with a manipulation of target identities, could be used to characterize the precise emotional  
1094 grammar for different values of each putative attitude across events. Distinct attitudes should produce  
1095 divergent emotional outcomes under at least some circumstances – such as *envy* or schadenfreude-like  
1096 *joy* following from *hate* but not *contempt*, or approach-induced anxiety that scales with *respect* but not  
1097 *love*. Under our reconceptualization of interpersonal attitudes, it is unclear that any will be simple  
1098 attitudes with only one emotional disposition. We have focused on *respect* and *contempt* as the anchors  
1099 of one among many attitude dimensions, merely sketching a larger set of dimensions, and general  
1100 functional links among cued affordances, attitudinal representations, and emotional dispositions. In  
1101 doing so, we sought a middle ground between parsimony and functional specialization. Much more  
1102 research will be necessary to catalogue and characterize the pantheon of sentiments, in particular in  
1103 personal relationships. Most work on the dimensionality of attitudes has focused on stereotypes and  
1104 impersonal judgments, arguably a distinct domain with its own adaptive problems and functional  
1105 structure (see Fiske & Fiske, 2007 for discussion).

1106

1107 One fruitful line of research into the diversity of attitude dimensions might investigate their interactions  
1108 and conjoint emotional outcomes within relationships. Because individuals are multifaceted, different  
1109 features of an other may be represented via different attitudes, and these may conflict. For example, an  
1110 actor may both *love* a close kinsperson and hold the other in *contempt* for the latter's divergent politics,  
1111 a conflict that can produce "pity" due to the conjunction of (perceived) superiority and affection

1112 (Fessler, 1999) – a quite different prediction from that which limits the objects of contempt to the  
1113 “lowest of the low” (i.e. Cuddy et al., 2007). Children may be a common object of such affectionate  
1114 contempt across populations. While this may seem counterintuitive given the Western folk affect  
1115 concept of “contempt”, consider that, by the same logic, *hate* and *respect* can likewise intersect, as, for  
1116 example, in the sentiments of a military leader toward a skilled and formidable foe. Some intersections  
1117 of attitude dimensions may be common, while others are unlikely or even incommensurate, owing to  
1118 the clustering of relational affordances in the world. What terms are there in the world’s affect lexicons  
1119 for mixed-attitude relationships? If more than hyperbole, a “love/hate relationship” would illustrate the  
1120 upper boundary of information summarization in the social mind, providing evidence of ambivalence at  
1121 the coexistence of competing relational affordances, such as dependence and exploitation.

1122 Interpersonal ambivalence may be an important signature of the multi-dimensionality of attitudes  
1123 (Cacioppo et al., 1999). It also distinguishes the ASE from the theory that there is a single streamlined  
1124 summary variable regulating self-other tradeoffs (i.e., the Welfare Tradeoff Ratio; Tooby et al., 2008).  
1125 Studies of reaction times in social decision making could quantify the magnitude of ambivalence from  
1126 different combinations of attitude states, while priming studies that foreground different facets of  
1127 targets should be able to increase or reduce such ambivalence experimentally.

1128

1129 The ASE model links to and extends a growing literature in primatology on cost/benefit bookkeeping  
1130 within social relationships (*sensu* Silk, 2003). Researchers studying social bonds, reciprocity, and  
1131 assortment in non-human primates have proposed that emotions are the proximate mechanisms that  
1132 track relational costs and benefits, adaptively regulating social behavior without explicit cognitive  
1133 account keeping (e.g., Aureli & Schaffner, 2002; Evers et al., 2014; Schino & Aureli, 2009). The ASE  
1134 model clarifies the functional systems in question, distinguishing the complementary forms and  
1135 functions of bookkeeping attitudes and commitment emotions in networks of sentiment. Highlighting a

1136 deep but previously unappreciated connection between bookkeeping and commitment, the ASE model  
1137 grounds the commitment functions of emotions, including social engagement versus disengagement  
1138 (Kitayama et al., 2006), or affiliation versus distancing (Fischer & Manstead, 2008), in antecedent  
1139 bookkeeping indices of relational value. In so doing, the ASE model provides a novel lens for  
1140 investigating the neurobiological bases of social relationship regulation.

1141

1142 The functional features of sentiments map closely onto the functional properties of some  
1143 neuroendocrine systems, facilitating contingent behavior across social-relational contexts (Trumble,  
1144 Jaeggi, & Gurven 2015). The ASE model creates a framework for testing how particular hormones and  
1145 neural networks represent relationship value, update such representations, or implement behavior  
1146 conditionally on such representations. For example, the proposed functions of the neuropeptide  
1147 oxytocin range across these processes, including social memory, social bonding, and modulated  
1148 tolerance, trust, and parochialism (Insel, 1992; Kosfeld et al., 2005; De Dreu et al., 2011). However, a  
1149 careful examination of the evidence in light of the ASE model suggests that the functions of oxytocin are  
1150 not the attitudinal encoding of value itself, but are specifically *emotion*-like, implementing a mode of  
1151 behavior conditional on an existing representation of value (e.g., Crockford et al., 2013), or updating  
1152 that representation given new cues to relationship value (e.g., Wittig et al., 2014). Evidence that  
1153 oxytocin tracks relationship quality (e.g., Holt-Lunstad et al., 2014) should not be taken as evidence that  
1154 oxytocin is in some sense *the* bond or attitude. Instead, we suggest it is moderated by a separate index  
1155 of relationship value – an *attitude* – and implements adaptive behavior (e.g., tolerance, trust,  
1156 investment) within a relationship thus indexed. The effects of exogenous oxytocin do appear contingent  
1157 on other evaluative representations, such as those tied to group membership (De Dreu, 2012; though  
1158 see Leng & Ludwig, 2015), suggesting that simply boosting oxytocin does not get one a bonded  
1159 relationship; changes to the representation of the relationship, or the attitude, may be necessary.

1160

1161 What neural systems, then, encode relationship value and moderate the release of, and the effects of,  
1162 oxytocin and other neurotransmitters? Insight into social-relational valuation may be gained from  
1163 pathologies thereof, as in psychopathy or Frontotemporal Dementia. Though typically conceptualized as  
1164 pathologies of emotion, we reconceptualize these as *sentiment* disorders in which atypical attitudinal  
1165 representations disrupt downstream social emotions. Previous work on these conditions can thus be  
1166 interpreted as nominating candidate neural networks for encoding social valuation (or *attitudes*),  
1167 including the basolateral nucleus of the amygdala, orbitofrontal cortex, anterior cingulate, anterior  
1168 insula, and superior temporal pole (see Anderson & Kiehl, 2012; Filippi et al., 2013; Yoder et al., 2015).  
1169 These areas are key components of the “salience network” (Seeley et al., 2007) regulating the  
1170 motivational import of social information, in line with a proposed function of attitudes. How these areas  
1171 relate to the regulation of neurohormones – their release and effects, for example – is a key outstanding  
1172 question for the neural implementation of sentiments. The construct of sentiment disorders can also  
1173 challenge received wisdom. For example, rather than an empathy deficit disrupting the development of  
1174 attachment in psychopathy (Blair et al., 1997), an inability to value others may be primary in  
1175 psychopathy and underlay psychopaths’ diminished empathy and resistance to socialization.

1176

1177 We have characterized sentiments as systems of endogenous affect that regulate social-relational  
1178 behavior. This is not to say that the engagement of these systems within any given relationship is the  
1179 only determinant of behavior within that relationship. Strong norms backed by punishment, or  
1180 obligations and expectations linked to reputation, can channel and constrain social behavior, motivating  
1181 generosity, or disincentivising exploitation, even in the absence of compassion or respect. At the same  
1182 time, the existence of norms such as “hate the sin, not the sinner” suggests that communities often  
1183 need norms to countervail the endogenous tendencies of social attitudes (Wilson, 2002). Despite

1184 extensive research on the individual and societal determinants of relational dynamics, the nature of the  
1185 psychological interactions between these influences on social behavior remains under-researched. What  
1186 work there is suggests significant cultural variation in the relative weight of relational attitudes and  
1187 internalized role expectations in determining social behavior. For instance, among Indian participants,  
1188 an internalized sense of duty can abet prosociality even within relationships that are devoid of warmth,  
1189 thus establishing two pathways to “intrinsically” motivated prosocial behavior (Miller & Bersoff, 1998;  
1190 Miller et al., 2011). However, the interaction of sentiments and internalized norms is likely more  
1191 intertwined than such cases suggest; internalization itself may be mediated by sentiments towards  
1192 community members generally, or towards authority figures (including supernatural agents) in  
1193 particular. Theorized as a psychological commitment device evolved to enhance norm conformity and  
1194 the social benefits thereof (Fessler, 2007), the internalization of norms should hinge on the perceived  
1195 fitness affordances of the holders of normative expectations. This is because the fitness benefits of  
1196 internalization apply only vis-à-vis those whose judgments are valuable as means to social, cultural, and  
1197 material resources. In other words, the costs of *not* internalizing norms follow from the negative  
1198 judgments of valuable allies or authorities. This implies that, over and above cultural variation in  
1199 normative expectations, individual and cultural differences in the internalization of norms may reflect  
1200 variation in *respect* for authority, or *love* for other group members, producing differences in the  
1201 commitment emotions regulated by these attitudes. This, in turn, predicts variation in the success of the  
1202 social control of sentiments; *love* or *respect* for authorities or other critical third parties may be  
1203 necessary to curb the enactment of *contempt* or *hate* in other social contexts within the group, and to  
1204 direct such antisocial sentiments towards rival out-groups. Dramatic changes in an individual’s  
1205 circumstances vis-à-vis a group, with corresponding changes in the relational value of group members,  
1206 may alter the degree to which norms are internalized as a function of changes in sentiments: a sudden  
1207 rise in an actor’s coercive power may lead to a decline in their *respect* for authority and the motivational

1208 import of previously motivating norms, while defeat and assimilation by an outside group may lead to  
1209 the abandonment of prior norms in favor of those of the new group on which one becomes dependent  
1210 (cf. Cantor & Price, 2007).

1211

## 1212 **7. Summary & Conclusion**

1213

1214 Employing an adaptationist approach to the mind while taking transmitted culture seriously, we have  
1215 sought to clarify the form and functions of contempt, a phenomenon that has resisted simple  
1216 explanation. Decomposing the folk affect concept “contempt” into its eight component features reveals  
1217 characteristics that cannot be fully accounted for by models that depict contempt as a basic emotion or  
1218 by those that seek to explain it as an attitude. Rather, the features of “contempt” functionally cohere  
1219 and map onto the basic affect systems of a *sentiment* – a network of basic emotions moderated by an  
1220 attitudinal representation of social-relational value. The Attitude-Scenario-Emotion (ASE) model of  
1221 sentiments details this construct, including the diversity of functionally-specialized attitude dimensions,  
1222 and the emotional pluripotency of each attitude state. The sentiment *contempt* represents an other as  
1223 worthless and below oneself, and potentiates both indifference to an other’s concerns and intolerance  
1224 of their presence and any costs associated with them. The features of the folk affect concept  
1225 “contempt” are the variably-experienced manifolds of this functional network – which may be more or  
1226 less “cold”, more or less enduring, and experienced in conjunction with other sentiments such as *love* or  
1227 *hate*. Though not simple, our explanation of contempt is parsimonious, explaining all the features of the  
1228 folk affect concept “contempt” with reference to one high-level basic affect system, *contempt*.

1229

1230 This approach suggests a number of methodological and empirical insights, illuminating how “contempt”  
1231 can be probed to reveal different features of the underlying sentiment, and shedding light on both when

1232 variation in “contempt” is to be expected and how corresponding folk affect concepts compare across  
1233 social and temporal scales. More generally, the ASE model of sentiments has many virtues.  
1234 Characterizing emotions and attitudes in complementary functional terms should facilitate engagement  
1235 between emotion researchers and attitude researchers, connecting these mutually-isolated literatures.  
1236 While the ASE model focuses on the role of attitudes in moderating emotions, it leaves room for the  
1237 dynamic feedback of emotions on attitudes (see, e.g., Tooby et al., 2008). The computational-functional  
1238 ASE model can be grounded in comparative neuroscience and can help clarify our understanding of the  
1239 representational and motivational functions of different neural systems, including neuropeptides, the  
1240 “salience network”, and the etiologies of emotion-related disorders. The model links psychological  
1241 research to the comparative literature in primatology, fleshing out candidate proximate mechanisms for  
1242 models of social evolution, and foregrounding enduring social relationships – the ancestral cornerstone  
1243 of human adaptation – in the evolution and functions of social affect. By jointly considering evolved  
1244 psychological architecture, the content of emotion lexicons, and genuine cultural differences in  
1245 attitudes, emotions, and social behavior, this synthetic approach unifies the insights of evolutionary  
1246 psychology, psychological anthropology, and cultural psychology – a necessary consilience if we are to  
1247 understand humans as a biologically cultural species.  
1248

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