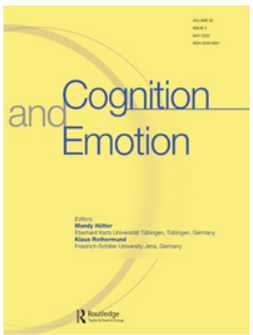

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THEORY SECTION

How emotions, relationships, and culture constitute each other: advances in social functionalist theory

Dacher Keltner[a], Disa Sauter[b], Jessica L. Tracy[c], Everett Wetchler[a] and Alan S. Cowen[a]

[a]Psychology Department, University of California at Berkeley, Berkeley, CA, USA; [b]Department of Psychology, University of Amsterdam, Amsterdam, Netherlands; [c]University of British Columbia, Vancouver, Canada

ABSTRACT

Social Functionalist Theory (SFT) emerged 20 years ago to orient emotion science to the social nature of emotion. Here we expand upon SFT and make the case for how emotions, relationships, and culture constitute one another. First, we posit that emotions enable the individual to meet six "relational needs" within social interactions: security, commitment, status, trust, fairness, and belongingness. Building upon this new theorising, we detail four principles concerning emotional experience, cognition, expression, and the cultural archiving of emotion. We conclude by considering the bidirectional influences between culture, relationships, and emotion, outlining areas of future inquiry.

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Introduction

Emotions lie at the heart of family life, romance, friendship, and work. Emotions animate social movements and inspire political protest. They stir people to create ever-evolving cultural forms like music, visual art, literature, and religion, which themselves become sources of emotion and catalysts of cultural change. Emotions, relationships, and culture constitute one another. The question is: How?

Emotion science can offer only scattered answers to this question. This originates, we suggest, in an *intra*personal bias in the field. The conceptual focus within emotion science has largely centred upon what happens within the individual's mind and body. Most laboratory studies have involved single individuals, alone, rating emotional stimuli with self-report items, recounting emotional experiences, or responding to emotion elicitors (for review, see Lench et al., 2011). This privileging of the individual has caused emotion science to lose sight of what is most true of emotions outside of the lab: they occur in social contexts, are about people, and are so often shared and interdependent.

Sensing this, beginning 25 years ago emotion scientists began offering a social functionalist theory (SFT) of emotions (Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Parkinson, 1996). That first wave of theorising oriented the field to look beyond the individual and consider emotions within dyads, groups, and collectives (e.g. for extensions, see Algoe, 2012; Boiger & Mesquita, 2012; Goldenberg et al., 2016; Kraus et al., 2011; Niedenthal & Brauer, 2012; Sznycer & Cohen, 2021; Van Kleef, 2016). This first wave of SFT, though, lacked precise claims related to the questions that animate this review: what are the bidirectional interactions between individual emotions, relationships, and culture?

To approach these questions, we first offer an enriched account of SFT, detailing how emotions serve six "relational needs." We then translate this thinking to novel claims about emotion-related experience, expression, thought, and the cultural archiving of emotion. We conclude by considering

CONTACT Dacher Keltner keltner@berkeley.edu Psychology Department, University of California at Berkeley, Berkeley, CA, USA

bidirectional relationships between emotion, relationships, and culture, and a future study of emotion through an enriched SFT lens.

Social functionalist theory: an enriched framework

Social Functionalist Theory has deep grounding in sociology, anthropology, cultural psychology, and developmental psychology, all of which sought to embed individual emotions within social interactions and relationships, and more broadly, the cultural forces that shape social life (Mesquita & Frijda, 1992). These traditions told one vast story about the construction of emotion, highlighting how culture and context shape emotions through: (a) the social interactions in which they arise, such as soothing, play, flirtations, and forgiveness; (b) the embodiment of social roles and identities, such as subordinate female in a patriarchal structure or religious leader; and (c) the representation of emotions in cultural forms, like poetry, laws, fairy tales, music, and ceremony (e.g. Averill, 1985; Lutz & White, 1986). Emotions are constructed through cultural and contextual processes.

SFT also arose out of advances in evolutionary theory, which offered a different account of the processes that gave rise to the emotions individuals experience today. Within this framework, humans accomplished almost all survival-related tasks, from the raising of vulnerable offspring to the provision of food, in interdependent, emotionally rich relationships; emotions were critical adaptations in hominid evolution (Hrdy, 1999; Tomasello, 2019; Tooby & Cosmides, 1990). The shift from the gene as the unit of analysis to culture as a dynamic force in human social life brought into focus how evolved emotion tendencies – to recoil at impurity, defer to higher rank individuals, or bond with others in the face of peril – in combination with human capacities for shared representation and symbolic activity, could give rise to forms of culture like rituals, stories, and religion.

Informed by these veins of theory, whose synthesis we consider later, SFT sought to explain how emotions enable the formation and negotiation of relationships central to human social life and culture. This theoretical focus found inspiration in broader arguments about the functions of emotion (e.g. Keltner & Gross, 1999; Lench, 2018; Niedenthal & Brauer, 2012). Extending Basic Emotion Theory, the focus within SFT has been on the primacy of emotion categories—"awe," "anger," "love," "desire," "pride," "shame" "compassion"– a position supported by recent studies (for review, see Cowen et al., 2021).

These shifts opened the field to new perspectives. Within SFT, emotional experience is relational; the experience of emotions embodies social roles and identities, for example as a new parent, leader of a group, or social outcast (e.g. Gilbert, 1998). Emotion-related cognition, or appraisal tendencies, takes the form of holistic intuitions about social-moral concerns, such as risk, harm, purity, and punishment (e.g. Greene & Young, in press; Haidt, 2003; Keltner & Horberg, 2015; Lerner et al., 2015; Tangney et al., 2007). Emotional expression structures social interactions (e.g. Keltner & Kring, 1998; Van Kleef, 2016). There is more to emotion-related physiology than fight-or-flight amygdala activation and autonomic and neuroendocrine response: central, autonomic, and neuroendocrine patterns support social processes like attachment, compassion, empathy, trust, love, dominance, and the sense of being included or excluded (e.g. Dickerson & Kemeny, 2004; Eisenberger, 2016; Feldman, 2012; Kreibig, 2010; Mehta & Prasad, 2015; Porges, 2003; Zaki & Ochsner, 2012).

This first wave of SFT was largely silent with respect to a critical question: Which relationships do emotions enable? Answers to this question are critical to almost every question about emotion, from how they arise to what functions they serve.

Vital progress is being made in mapping the structure of human relationality. Cross-cultural observation has focused on caregiving interactions between parent and child, status dynamics between individuals, historically shifting bases of romantic pair bonds, and collective processes like religious ceremony, festivals, and organisational culture (Barsade, 2002; Cheng et al., 2010; Fiske, 1991; Shariff & Tracy, 2011; Tracy et al., 2013; Wörmann et al., 2014). Within evolutionary schools of thought, human "hyper-sociality" has been unpacked in terms of specific kinds of relationality, including: the caregiving required by vulnerable offspring, friendships in social networks of non-kin, trading relations, more horizontal social hierarchies, and collective action and identity (Boehm, 1993; Hrdy, 1999; Seyfarth & Cheney, 2012; Sznycer et al., 2016). Emotions, give rise to, maintain, protect, and transform the varieties of human relationality.

In Table 1 we map linkages between six kinds of relationality and over 20 distinct emotions. Our approach is directly inspired by Fiske's Relational

Table 1. Theorised associations between six relational needs, the social challenges they address, and specific emotions.

Way of Relating	Social Challenge	Relational Need	Emotions
Caregiving	Care for vulnerable offspring	Security	Congruent: Love, Sympathy Incongruent: Distress, Anxiety, Sadness
Reproductive	Long term pair bond needed for care of vulnerable offspring	Commitment	Congruent: Romantic Love, Desire Incongruent: Jealousy
Hierarchical	Allocate resources, work, opportunities	Status	Congruent: Pride, Admiration Incongruent: Embarrassment, Envy, Contempt, Shame
Friendship	Reciprocal collaboration within social networks	Trust	Congruent: Amusement, Gratitude, Love Incongruent: Anger, Guilt
Trading	Exchange of resources	Fairness	Congruent: Gratitude Incongruent: Anger
Collective	Coordinate groups for resource sharing, defense, food gathering, and outgroup competition	Belongingness	Congruent: Awe, Triumph, Ecstasy, Rage Incongruent: Shame, Social Fear

Models Theory, which posited four distinct ways of relating: communal sharing, equality matching, market-pricing, and authority ranking (Fiske, 1991). We build on this framework with insights from attachment theory about how the highly vulnerable offspring humans produce gave rise to intensive caregiving and the need for long-term, romantic commitment (Mikulincer & Shaver, 2007). Each of the six ways of relating is oriented toward meeting a social challenge: for example, caregiving provides security to the vulnerable; hierarchies enable humans to allocate resources and work efficiently; friendships enable reciprocal collaboration amongst non kin, enhancing the functioning of groups. In the course of our highly social, hominid evolution, these six ways of relating became the fabric of early human societies. Navigating these ways of relating was essential for individual survival.

Building upon the influential analysis of the "need to belong" (e.g. Baumeister & Leary, 1995), theoretical and empirical advances have made the case for the primacy of six relational needs, which organise Table 1. These include needs for security (Mikulincer & Shaver, 2007), commitment (Gonzaga et al., 2001), trust (De Dreu et al., 1998), status (Anderson et al., 2015), fairness (Addessi et al., 2020), and belonging (Baumeister & Leary, 1995).

In the final column of Table 1, we offer predictions concerning how emotions are organised around relational needs. Much as humans construe the natural and physical environment in terms of needs for food, water, protection, and temperature regulation, humans construe social interactions in terms of the degree to which relations between the self and others are congruent or incongruent with these relational needs (for precursors, see Frijda, 1988; Lazarus, 1991; Scherer, 2005; Smith & Ellsworth, 1985). Distinct emotions arise out of such "relational appraisals." Feelings of sympathy, for example, arise out of appraisals of another's need for security; feelings of embarrassment follow the appraised loss of status. Once underway, distinct emotions initiate tendencies toward goal-driven cognition and action that meet the momentary relational need. For example, sympathy will orient thought toward ameliorating suffering in context-specific actions; embarrassment will orient cognition to status-relevant concerns and paths to restoring one's esteem in the eyes of others.

Broadly considered in this way, emotions strengthen the individual's relationality, or interconnectedness with others, a strong predictor today of robust health and well-being (Baumeister & Leary, 1995; Lyubomirsky, King, & Diener, 200). Distinct emotions are proximal determinants of the individual's adaptation and flourishing within the complex fabric of human social life.

What is apparent in Table 1 is that there are more prototypical occurrences of the emotion, or "modal emotions," as well as variations flavoured by the specific relationship in which it emerges (Ekman, 1992; Scherer, 2005). For example, love is prominent in caregiving, reproductive, and friendship relations.

Equally noteworthy is the richness of the space of emotion that emerges from our revised SFT – upwards of 20 distinct states (for one review, see Cowen & Keltner, 2021). Guided by SFT, empirical studies have mapped the experience, expression,

and physiology of security- and commitment-related emotions, in particular love, sexual desire, and sympathy (Clark et al., 2019; Edelstein & Chin, 2018; Goetz et al., 2010; Impette & Muise, 2019). Still other studies have characterised status-related emotions such as pride, envy, and embarrassment (Cohen-Charash & Mueller, 2007; Crusius et al., 2020; Dickerson, et al., 2009; Keltner & Buswell, 1997; Sznycer, 2019; Tracy & Matsumoto, 2008; Tracy & Robins, 2008). Empirical studies have more recently turned to distinct profiles of awe, ecstasy, and shame in collective processes like religion, ceremony, music, and dance (Cowen et al., 2020; Sznycer et al., 2016; Stellar et al., 2017; Van Cappellen, 2017).

With this newly articulated SFT framework, we are positioned to now consider what claims about emotion-related experience, thought, expression, and culture.

Principle 1: emotional experience signals ongoing relational needs

The study of emotional experience has long focused on how self-reports of subjective feeling track intrapsychic processes, such as sensations in the body (Garfinkel & Critchley, 2016; Nummenmaa et al., 2014) or configurations of facial muscle movements (Matsumoto et al., 2008). Self-report measures of experience orient the individual's attention to interior phenomenology. What is rarely measured explicitly or modelled is how individual emotional experience is oriented toward other people within ongoing relationships.

We offer a different view: emotional experience is associated with dynamic appraisals of relational needs. This reasoning yields our first principle: emotional experience tracks relational appraisals, providing timely information about the dynamics of ongoing relationships. This assertion has intellectual origins in Lazarus's theorising about core-relational themes (Lazarus, 1991) and specific foci in dimensional and componential accounts of appraisal (the focus on fairness in Smith & Ellsworth, 1985; the focus on justice and power in Scherer, 1984). Here we broaden this thinking, positing that experiences of upwards of 20 emotions track appraisals of security, commitment, status, trust, fairness, and belongingness, serving as barometers of the individual's ever-changing relationality.

Principle one yields a suite of hypotheses concerning emotional experience (for relevant theorising as it applies to emotional development, see Mascolo, 2020). Aligning with expectation, studies have found that sympathy, distress, anxiety, and sadness do indeed covary with the individual's appraisals of their security (e.g. Mikulincer & Shaver, 2007; Shiota et al., 2006). Within studies of intimate relationships, subjective feelings of love track self-reports of commitment (see Gonzaga et al., 2001; Rusbult, 1980). In the literature on self-conscious emotions, pride tracks relational appraisals of rising in status, embarrassment appraisals of occupying a lower status position, and envy when another individual's elevated status is unjustified (Cohen-Charash & Mueller, 2007; Sznycer et al., 2017; Tracy & Robins, 2007; Weidman et al., 2016). Experiences of anger are highly correlated with appraisals of fairness (Barsky et al., 2011).

The aforementioned hypotheses concern individual experience. Our framework also points to hypotheses concerning the robust tendency for emotional experience to be shared, or interdependent (Barsade, 2002; Hess & Fischer, 2014; Rimé, 2009). Experiences of emotions routinely spread between dyads, within groups, across sports teams, and even in neighbourhoods (Anderson et al., 2003; Brown & Fredrickson, 2021; Garcia & Rimé, 2019; Totterdell, 2000). People synchronise in peripheral and central nervous system physiology (Konvalinka et al., 2011). Within social contexts, and as emotional events unfold, individuals will often share and negotiate appraisals with others, "social appraisals" that influence emotional experience and recognition (Mumenthaler & Sander, 2012, 2019).

We posit that the strength of these kinds of emotion interdependence will vary according to relational appraisals. The most well-developed extension of this reasoning is the literature on status (e.g. Anderson et al., 2015). People with elevated status tend to be less attentive to others and more independent (Keltner, 2016). As one might expect, people of high status are: less likely to feel what others feel (Anderson et al., 2003); less astute in recognising the emotions of others (Kraus & Keltner, 2009); and to be less inclined to mimic others' behaviour (e.g. Hogeveen et al., 2014). How security, commitment, and trust (for example) moderate the interdependence of emotion in dyads like parent–child bonds, romantic pair bonds, and friendships awaits empirical attention, as do studies of fairness and belongingness. Relational appraisals moderate the deep human tendency toward interdependent emotion.

Principle 2: emotion-specific cognition guides relational action

Central to the science of emotion is the notion that emotional experience serves a signalling function, shaping thought in systematic ways to enable context-specific, goal-driven actions (Lerner et al., 2015; Lerner & Keltner, 2001; Schwarz & Clore, 2003). Fleeting experiences of emotions such as anger, fear, awe, and pride have been found to influence what the individual attends to, what categories of events one readily perceives (Horberg et al., 2009; Niedenthal, 2008), what one remembers from the past (Levine & Pizarro, 2004), and judgments of risk, value, punishment, right, and wrong (Haidt, 2003; Keltner & Horberg, 2015; Lerner et al., 2015). Emotions frame the construction of social reality, privileging certain construals of the social context over others.

These emotion-specific shifts in cognition alter the likelihoods of actions such as soothing, collaboration, derogation, forgiveness, punishment, and sacrifice (Carlsmith et al., 2002; McCullough, 2000; McCullough et al., 2001; Piff et al., 2015). Emotion-specific cognition is for social action — our second principle in this enriched SFT.

Illustrative of this second principle, consider what has been learned about the influences of compassion, or sympathy, upon social cognition and ensuing action (for review, see Goetz et al., 2010). Momentary experiences of sympathy orient attention to vulnerability and need in others and to perceive greater similarity between self and other (Oveis et al., 2010). Feelings of sympathy shift judgment, reducing the blameworthiness of others' actions (Carlsmith et al., 2002), and elevating the rewarding qualities of others' gains (Ocampo et al., 2021). Sympathy-related cognition makes security-enhancing actions such as sacrifice and generosity more likely (Keltner et al., 2014).

To take another example, feelings of pride engender thoughts that give rise to actions that facilitate rises in social status. More specifically, pride can lead to greater generosity in a public-goods game (Dorfman et al., 2014) or to exercising willpower so as to avoid temptation (Hofmann & Fisher, 2012). Feeling pride can lead to dominant behaviours like taking control of a group and – when feeling the more arrogant, hubristic form of pride – derogating weaker others, along with lying or cheating in the service of one's own status enhancement (Mercadante & Tracy, under review).

In keeping with Principle 2, awe orients cognition toward actions that enable belongingness within collectives. Specifically, brief experiences of awe, but not other positive states such as pride or amusement, lead the individual to be less attentive to pure self-interest (Bai et al., 2018), to more readily perceive strengths of other group members (Stellar et al., 2017), to perceive greater overlap in central qualities of the self and members of collectives (Shiota et al., 2007), and to judge the self as embedded in a richer network of social ties (Bai et al., 2018). These awe-related shifts in cognition enable actions required of collectives: sacrifice, the subordination of self-interest, and collaboration (see Piff et al., 2015, for illustrative mediational evidence).

Extending our second principle, we further reason that the influences of specific emotions upon cognition are mediated and moderated by their defining appraisals (Lerner et al., 2015; Lerner & Keltner, 2001). For example, appraisals of belonging *mediate* the influences of awe upon cooperative intent, humility, and sense of being embedded in a social network (e.g. Bai et al., 2018; Stellar et al., 2018). Relational appraisals *moderate* the influences of specific emotions upon cognition (on disgust, see Horberg et al., 2009; for anger, see DeSteno et al., 2000; for fear, see Lerner & Keltner, 2001). Given this reasoning, we would expect domain-specific influences of emotion upon cognition to be moderated by relational appraisals: security-related states like distress and sadness will shift attention and perception to actions and events related to security, whereas status-related emotions like pride, embarrassment, or envy, will orient attention to the status relevance of cues, events, and actions. Emotions influence cognition through relational appraisals.

Principle 3: emotion-related behaviour structures social interactions

Thus far we have posited that emotional experience and cognition signal the dynamics of ongoing relational needs, guiding specific actions to meet those needs. In Principle 3, we posit that emotions structure dyadic, group-based, and collective interactions. This thesis is in keeping with ethologist Eibl-Eibesfeldt's notion that emotions are a grammar of social life (Eibl-Eibesfeldt, 1989), as well as early predecessors to SFT, that emotions entrain individuals in dyadic and collective interactions (Abu-Lughod, 1990; Lutz & White, 1986). Within these rich, more qualitative

accounts, emotions structure social interactions, such as skin-to-skin contact between caregiver and child, play, flirtations, status moves, gossip, forgiveness and punishment, and collective greetings, rituals, and dance.

A first wave of empirical study guided by SFT has led to considerable progress in mapping how individual emotions structure social interactions (e.g. Keltner & Kring, 1998; Scarantino, 2017; Van Kleef, 2016). Much as individuals readily feel what others feel, and share and converge in emotional experience, the same is true with respect to emotion-related behaviour. Emotional expressions evoke *mimetic responses* in others (Zaki & Ochsner, 2012). Such mimetic emotional behaviour has been observed in studies of laughter, smiling, the blush, distress, crying, emotional responses to music, contagious emotion within sports teams and work units, and collective feeling in ritual (Barsade, 2002; see Hess & Fischer, 2014, for review).

Emotional expressions also evoke *complementary responses*, orienting observers to meet others' relational needs (e.g. Keltner & Kring, 1998). For example, through distress vocalizations infants evoke activation in the periaqueductal gray of caregivers, a region of the midbrain that initiates caregiving behaviour (Parsons et al., 2014). Expressions of embarrassment evoke in observers feelings of liking, amusement, and even forgiveness, stirring status-restoring actions directed toward the embarrassed individual (e.g. Feinberg et al., 2012). Experiences of envy lead individuals to reduce the status of the person triggering envy (Cohen-Charash & Mueller, 2007).

These mimetic and complementary emotional processes entrain individuals within emotionally rich interactions, which can be modelled thanks to statistical advances (Griffin & Gonzalez, 1995). In Table 2 we outline what has been learned about emotion-based, dyadic and collective interactions central to the six kinds of human relationality. Considerable progress has been made in mapping these interactions within caregiving relations (Sears & Sears, 2001), reproductive relations (Eastwick et al., 2007), friendships (Algoe et al., 2008), status hierarchies (Keltner et al., 1998), trade-based interactions, in particular those modelled with economic games (Keltner et al., 2014; Rand & Nowak, 2013), and collective processes in music, dance, and ritual (e.g. Konvalinka et al., 2011; Tarr et al., 2015).

As examples, relevant studies have documented how the pattern of soothing interactions, of distress-sympathy contingencies between caregiver and infant, shape appraisals of security (Sears & Sears, 2001); reciprocal expressions of gratitude give rise to appraised trust vital to enduring friendships (Algoe et al., 2008); and shared awe in the context of a religious ceremony gives rise to a sense of collective belonging (Van Cappellen, 2017).

Table 2. How Individual Emotions Construct Emotionally Rich Interactions.

Relation	Need	Individual emotions within dyads, groups	Social interaction
Caregiving	Security	Vulnerable Person's Distress -> Caregiver's Sympathy and Empathic Love	Soothing, skin-to-skin affection
Reproductive	Commitment	Empathic desire, Empathic love	Flirtation, Courtship, Wedding Ceremonies
Hierarchical	Status	Subordinate's Admiration -> Leader's Pride, Group member's Contempt -> Group member's Shame	Deference Gossip, Derogation, Teasing
Friendship	Trust	Empathic amusement	Joking, banter, play
Exchange	Fairness	Empathic anger	Protest
Collective	Belonging	Contagious awe, Contagious ecstasy	Religious Ceremony, Spectator sports, Dance

It is within these emotionally rich interactions, we speculate, that individuals develop culturally rich ideas about their selves in relation to others (e.g. Mascolo, 2020). In keeping with this thinking, empirical studies of romantic partnerships find that appraisals of commitment arise out of exchanges of mimetic desire between potential partners (Eastwick et al., 2007), and are sustained in expressions of gratitude (Gordon et al., 2012) and expressions of romantic love (Gonzaga et al., 2001). Within friendships and work relations, appraisals of trust arise out of empathic emotion (Anderson et al., 2003), shared laughter (Kurtz & Algoe, 2017), and expressions of gratitude (Algoe et al., 2008). One intriguing area of inquiry is the individual's sense of belonging to collectives, such as religions, political movements, or cultural groups. Recent studies of emotionally rich collective rituals, such as pilgrimages and sporting events, find that the individual's sense of belonging

is boosted in experiences of awe and ecstasy (Cottingham, 2012; Konvalinka et al., 2011). The relational self emerges out of emotionally rich interactions.

Principle 4: culture archives emotion through representation, symbol, and ritual

Emotions, Principle 4 posits, constitute culture; they are "building blocks" out of which, over thousands of generations, members of culture have constructed, experienced, and negotiated cultural beliefs and practices (e.g. for a recent theoretical treatment, see Taves, 2020). Advances in the study of cultural evolution reveal how. Within this school of thought, culture can be thought of as an ever-evolving repository of shared knowledge, experience, and practice (Boyd & Richerson, 1995; Henrich, 2017; Henrich et al., 2016). Culture functions as an accessible and shared intelligence, quickly activated to enable individuals to adapt to the challenges and opportunities in the natural, human-designed, and social environment. For example, central to the culture of hundreds of Indigenous societies is "Traditional Ecological Knowledge"—found in beliefs, legends, ethical principles, self-representations, and myths—a repository of knowledge of how humans interact in the most mutually beneficial ways with local ecosystems (Pierotti & Wildcat, 2000).

Building upon this theorising, we reason that a subset of a culture's beliefs and practices are a repository of knowledge about emotion-related experience, thought, and expression, enabling individuals to become sophisticated practitioners of culture-specific emotions (e.g. for relevant argument about emotion in fiction, see Oatley, 2016). With different forms of *representation*, people describe emotions and emotionally rich interactions in words, metaphors, stories, legends, and myths (Pagel, 2012). People create stories involving spiritual entities and supernatural forces to represent extraordinary experiences of awe, ecstatic love, and terror (e.g. Taves, 2020). Parenting books archive culturally-specific approaches to sympathetic and loving caring for offspring. With visual techniques in paintings, figurines, and carvings beginning tens of thousands of years ago, people represented emotionally rich interactions like childbirth, sexual relations, power dynamics (e.g. enslavement), and combat (Dutton, 2009). Perhaps earlier, people began to dramatise the bodily expressions of emotion in singing, chanting, dance, dramatic performance, and instrumental music (Dissanayake, 2000). These cultural representations serve as efficient, memorable ways of eliciting shared experiences of specific emotions, inducting individuals into the emotional patterns of a culture.

Through *ritualisation*, people transformed simple, emotion-related behaviours into collectively performed acts with shared significance. Awe-related bowing, arms thrust into the air, and touching "the sacred" have been ritualised into elements of religious ceremony (e.g. Van Cappellen, 2017). Vocalizations of awe and sympathy have been ritualised into forms of sacred chanting found around the world (Beck Guy, 2006). Early greeting rituals involved the open-handed gestures and tactile contact that express security-enhancing love (e.g. Eibl-Eibesfeldt, 1989). Exaggerated threat displays in the face and body have given rise to dramatic portrayals of emotion in masks, sculptures, and dance.

A hypothesis that follows from Principle 4, that culture archives emotion, is that the structure of cultural belief systems – for example laws, legends, fairy tales, or beliefs about the Divine – will share a core emotional similarity (e.g. Langer, 1953). In extensions of this hypothesis, analyses of folk songs, lullabies, and cultural musical traditions from around the world are finding universals in the emotions expressed (Cowen & Keltner, 2020; Mehr et al., 2019; Scherer et al., 2013). One analysis of the ancient arts from Mesoamerica that predate contact with Western Europeans found eight emotions expressed in figures and sculptures that Western Europeans today could readily identify (Cowen et al., 2019). The rich tradition of Hindu dance expressed in the Natyasastra, over 2000 years old, contains detailed descriptions of how to perform upwards of 15 emotions in body movements in dance that very much resemble the multimodal expression of emotion (e.g. Keltner et al., 2019), and have been found to be recognised by people from non-Hindu cultures unfamiliar with the tradition (Hejmadi et al., 2000).

Cultural practices, beliefs, arts, and narratives allow members of a culture to experience and develop a shared understanding of emotions together, and form, maintain, and negotiate relationships so central to culture. Through such emotional enculturation, individuals learn how to engage in vital interactions, such as negotiating status hierarchies (Keltner & Kring, 1998) or tending to a new child, and embody their roles and identities within a culture's pattern of relationships.

How emotions, relationships and culture constitute each other: a SFT synthesis and empirical prospects

In our revised SFT framework, emotions enable the individual to form, maintain, and negotiate strong relationships within dynamic social interactions: signalling in felt experience progress toward meeting relational needs; orienting thought toward relational action; and structuring dynamic social interactions through expressive behaviour. Culture archives these emotion-related processes in ever-changing representations, symbols, and rituals, enabling individuals to experience emotions conducive to strong dyads and collectives.

Every emotional episode is shaped by two kinds of processes long of interest to the field – the evolutionary and the cultural. In important ways, our focus here has been on the evolutionary: emotion-related expression, experience, and thought, shaped in the course of hominid evolution, constitute the relationships so vital to survival, and are archived in cultural forms that enable the shared experience and understanding of emotion central to strong collectives and group survival. At the same time, culture shapes emotion in profound ways, in the beliefs, practices, rituals, ceremonies, and institutions that shape the contexts, appraisals, and forms of conceptualisation that imbue emotion with culturally-specific meaning. What is new for these two longstanding theoretical traditions in the perspective we have developed here is the focus on relationships.

To bring into focus the novelty of this theorising, in Figure 1 we portray how emotions, relationships, and culture constitute one another in bidirectional ways (e.g. Kitayama & Yu, 2020). Every emotional episode, we suggest, can be studied in terms of such bidirectional processes. A person's experience of awe at a religious ceremony, for example, gives rise to dyadic and collective processes – a sense of community and shared recognition of the Divine, for example – that bring those individuals a sense of belonging and in emergent and subtle ways shape the cultural evolution of religion. At the same time, that individual's experience of awe is profoundly shaped by culture, and its historically constructed beliefs about the Divine, for example, and practices and rituals related to the sacred, and stories about spiritual and supernatural forces (Hollenbeck, 1996). This analysis, we suggest, is not restricted to awe, but extends to all emotions we have considered here in how they play out in human social life, in the feelings of sympathy for those who suffer, or the love felt between two potential partners, or the feelings of embarrassment within hierarchical contexts at work. Culture, relationships, and emotion are continually constituting one another in dynamic and bi-directional fashion.

This analysis highlights four areas of empirical opportunity for the study of emotion. A first concerns *the influence of relational appraisals upon emotion*. We have pointed to a host of predictions concerning how relational needs are proximal causes of emotion-related experience, expression, physiology, and thought. Germane but scanty empirical evidence has documented that the relational context—whether it is one of caregiving or status, for example—influences emotion (e.g. Clark et al., 2017). An individual's emotion will shift dramatically if one appraises the present interaction as one of security (Mikulincer & Shaver, 2007), is in a low versus high status position (e.g. Kraus et al., 2011), is with friends as opposed to strangers (e.g. Smoski & Bachorowski, 2003), or feels a sense of belonging or rejection from a salient social collective (Eisenberger, 2016). Much more empirical work on the relational shaping of emotion is needed. To take one critical example, few if any studies have ascertained the specificity of associations between relational appraisals and emotion —e.g. do experiences of gratitude track appraisals of trust but not security? Do experiences of embarrassment track shifts in status more so than belongingness?

A second line of inquiry suggested by Figure 1 is that *emotions constitute ways of relating*. Earlier we highlighted how a rich array of emotions structure caregiving relations, friendships, status dynamics, and forms of belonging. Select studies lend credence to this view. Experiences of desire, for example, enable the establishment of romantic commitment (Gonzaga et al., 2001). Anger leads to patterns of protest and confrontation that redress injustice (van Zomeren et al., 2008; Wlodarczyk et al., 2017). Again, many questions remain about how emotion-related processes construct relationships. How do expressions of love contribute to the commitment felt in long term romantic bonds at different stages of a relationship? How do feelings of ecstasy or awe give rise to an individual's sense of collective identity and belonging?

A third question concerns how *culture shapes emotion through specific patterns of relating*. This, we suggest, works in much the same way that culture influences emotion through self construals and

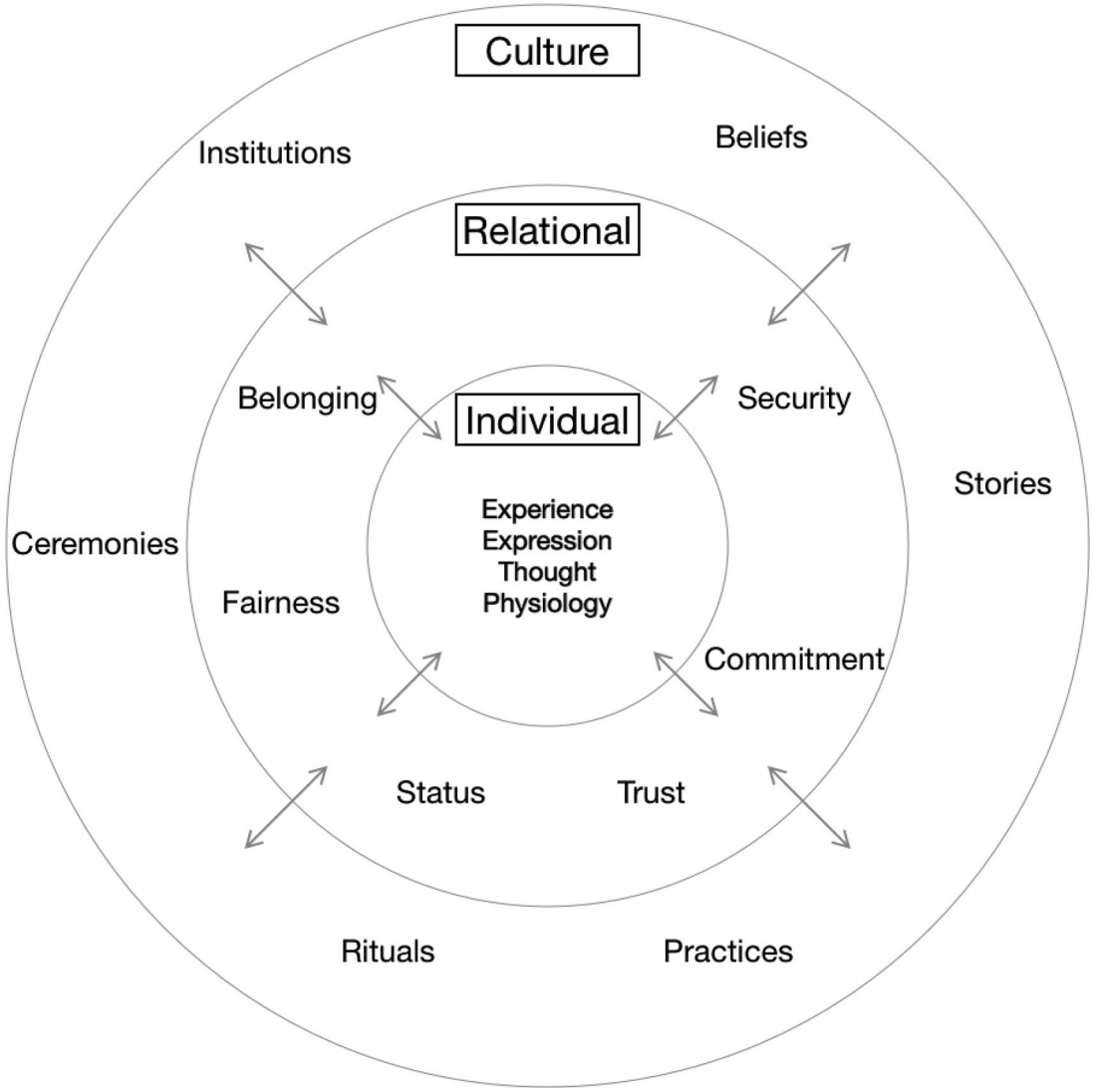

Figure 1. Interrelations among emotions, relationships, and culture.

values (e.g. Kitayama et al., 2004). Central to this argument is that cultures vary in patterns of relational appraisals, a notion that has only recently begun to attract attention in emotion science (Boiger et al., 2014). Most directly, it will be fruitful to examine whether cultural variations in relating – for example in terms of status or collective belonging – predict cultural variations in emotion – in our example, feelings of admiration or the prominence of collective emotions like awe.

Another compelling area of inquiry is to explore how culture-specific beliefs, rituals, institutions, and practices influence emotion. How might marital institutions or the availability of childcare shape appraisals of security and caregivers' and children's levels of sympathy, love, and anxiety? (Coontz, 2006). How is it that a culture's construction of status shapes the frequency and intensity of embarrassment or shame (Boiger et al., 2014)? How might endemic appraisals of economic unfairness give rise to culture-specific experiences and expressions of anger (e.g. Wilkinson & Pickett, 2020)? How might the prevalence of cultural ceremonies that cultivate belongingness shape the individual's representation and experience of awe (for analysis of mystical awe, see Hollenbeck, 1996)? Methodological advances –

for example in big data and historical analysis – and the emergent interest in different specific forms of culture – in stories, practices, rituals, ceremonies – will prove vital to an understanding of how culture shapes emotion through its patterns of relating.

Finally, our perspective suggests that *evolved tendencies toward emotion give rise to cultural forms*. In making the case for this claim, earlier we considered how expressive behaviour – vocalizations, body movements, facial expressions – is transformed into rituals. The idea that evolved emotion tendencies are building blocks of cultural forms finds additional support in recent empirical advances: human vocalizations of emotion structure the forms of music (Juslin & Laukka, 2003; Scherer, 1986); laws dealing with perpetrators of harm represent and ritualise the evolved inclination to shame transgressors (e.g. Sznycer & Patrick, 2020); bodily expressions of emotion determine the symbolic meaning of dance (Hejmadi et al., 2000); religious texts, rituals, and ceremonies represent and ritualise evolved tendencies toward compassion, shame, and awe (Van Cappellen, 2017). How culture archives this rich grammar of social living – the emotions – will yield exciting new areas of inquiry.

Emotion, relationships, and culture constitute one another in always evolving ways that are only just now the focus of scientific study.

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