

# UCLA

## UCLA Previously Published Works

### Title

The Sudden Devotion Emotion: Kama Muta and the Cultural Practices Whose Function Is to Evoke It

### Permalink

<https://escholarship.org/uc/item/01g0636t>

### Journal

Emotion Review, 11(1)

### ISSN

1754-0739

### Authors

Fiske, Alan Page  
Seibt, Beate  
Schubert, Thomas

### Publication Date

2019

### DOI

10.1177/1754073917723167

Peer reviewed

# The Sudden Devotion Emotion: Kama Muta and the Cultural Practices Whose Function Is to Evoke It

Alan Page Fiske

*Department of Anthropology, University of California, Los Angeles, USA*

Beate Seibt

Thomas Schubert

*Department of Psychology, University of Oslo, Norway*

*CIS-IUL, Instituto Universitário de Lisboa (ISCTE-IUL), Portugal*

## Abstract

When communal sharing relationships (CSRs) suddenly intensify, people experience an emotion that English speakers may label, depending on context, “moved,” “touched,” “heart-warming,” “nostalgia,” “patriotism,” or “rapture” (although sometimes people use each of these terms for other emotions). We call the emotion *kama muta* (Sanskrit, “moved by love”). *Kama muta* evokes adaptive motives to devote and commit to the CSRs that are fundamental to social life. It occurs in diverse contexts and appears to be pervasive across cultures and throughout history, while people experience it with reference to its cultural and contextual meanings. Cultures have evolved diverse practices, institutions, roles, narratives, arts, and artifacts whose core function is to evoke *kama muta*. *Kama muta* mediates much of human sociality.

## Keywords

coevolution, collective effervescence, communal sharing, cultural evolution, love, prosocial motives, relational models, self-transcendent emotions, union

Remember or imagine holding your newborn baby in your arms; welcoming home a loved one who has been in combat for a year; receiving an unexpected, great kindness from someone; watching a tear-jerking animated movie; or suddenly feeling the love of a divinity. What did or would you feel?<sup>1</sup> Is the emotion evoked by each of these events fundamentally the same? What causes it? What is its social relational function? How do psychology and culture combine to afford occasions for experiencing it? What are the myriad practices, institutions, and artifacts that evoke this emotion across history and cultures? Why are these practices, institutions, and artifacts ubiquitous and enduring?

Answering these questions may lead us to a solution to the fundamental question of social science posed by Durkheim (1912/1991): what is the source of social solidarity? Society is composed of groups of people who feel that they are the same,

who support each other—but how do these groups form? What is it that creates or renews the sense of unitary identity, emotional devotion, and moral commitment to society, particularly the mechanical solidarity in which everyone feels that they are essentially equivalent? What motivates the individual to more or less altruistically dedicate herself to the transcendent social units to which she belongs? And what is going on in religious rituals? What is their function, and what does religious ritual have to do with social solidarity?

The most fundamental and universal form of sociality is communal sharing relationships (CSRs; A. P. Fiske, 1991, 1992), in which participants feel that in some distinctive way they are equivalent, belong together, care for and trust each other. How are CSRs created, reinvigorated, and restored? Durkheim (1912/1991) posited that the glue of mechanical solidarity is

“collective effervescence” produced by joint participation in religious rituals. Durkheim did not make a clear distinction between a social relational emotion, affect, mood, motivation, and social relationship—or indicate the precise mechanism that evokes collective effervescence. Here we delineate these distinctions and processes, positing that in many cultural contexts and practices (not just ritual), the sudden intensification of communal sharing evokes an emotion, *kama muta*, that generates a sense of unitary identity, affective devotion, and moral commitment to the CSRs. So in a sense we are explicating how Durkheim’s collective effervescence functions as an emotion.

Writing the first textbook on social psychology 7 years after Durkheim’s treatise on religion, McDougall (1919) offered the germ of a psychosocial answer:

Like the other primary emotions, the tender emotion cannot be described; a person who had not experienced it could no more be made to understand its quality than a totally colour-blind person can be made to understand the experience of colour-sensation. Its impulse is primarily to afford physical protection to the child, especially by throwing the arms about it; and that fundamental impulse persists in spite of the immense extension of the range of application of the impulse and its incorporation in many ideal sentiments . . .

In the human being, just as is the case in some degree with all the instinctive responses, and as we noticed especially in the case of disgust, there takes place a vast extension of the field of application of the maternal instinct. The similarity of various objects to the primary or natively given object, similarities which in many cases can only be operative for a highly developed mind, enables them to evoke tender emotion and its protective impulse directly. (McDougall, 1919, pp. 57–58)

The thesis of this article is that the sudden intensification of CSRs triggers an adaptive psychological disposition to devote and commit to them. A CSR is one of social equivalence, when people feel in some respect one with others, whether in love, solidarity, fusion, union, patriotism, or identity. People experience this abrupt communal sharing (CS) intensification as an emotion that we call *kama muta* (Sanskrit, “moved by love”). We posit that the psychological disposition to *kama muta* is responsible for the prevalence, stability, and cultural salience of many culturally evolved practices, institutions, roles, narratives, arts and artifacts that evoke *kama muta*. Such practices, institutions, roles, narratives, and artifacts are culturally selected by the evolved disposition because evoking this very positive emotional experience motivates people to pay attention to, join in and recruit others to join, remember, and reenact cultural activities that evoke it.

We further theorize that the prevalence of practices, institutions, roles, narratives, arts and artifacts that evoke *kama muta* contributes to the ubiquity of *kama muta* experiences across cultures and history. Conversely, *kama muta* seems to be crucial to creating or invigorating the CSRs underlying a number of important religious practices, political appeals, marketing, literature and media, war and sports, life-cycle transitions, as well as social bonding and identity at every level from the care of infants to ethnic and political allegiance. It also commonly occurs in the course of everyday experiences that are not structured so as to evoke it, such as when people are reunited after a separation, or

someone is unexpectedly or exceptionally kind. Since McDougall identified this “tender emotion” as one of the seven primary emotions in 1919, it has not been studied much.

CSRs are relations in which a dyad or group feels that in some essential respect they are socially equivalent (A. P. Fiske, 1991, 1992). CSRs are characterized by kindness, compassion, feelings of belonging, identification, shared responsibility, and a sense of what is mine is yours. CSRs are not in any way limited to material sharing, but may involve decision making by consensus, collective responsibility for tasks, a common home or homeland, or merely a feeling of being one with people who are in some way the same as oneself. Lovers, close family members, best friends, teammates, soldiers in battle, members of a social movement or an identity group typically organize many aspects of their relations according to CS, though some aspects of their interaction may be structured in other ways, too. In relational models theory, CS is one of the four fundamental structures of social life, the others being authority ranking (legitimate, responsible hierarchy), equality matching (one-to-one balancing among separate but ideally even peers), and market pricing (proportionality). Relational models theory has been experimentally validated, verified by mathematical analysis, applied, extended, and used as a template for interpretation by over 300 scholars in over 300 publications (A. P. Fiske, 2017).

CS is sustained by suckling, feeding, commensalism, cuddling, and otherwise assimilating each other’s bodies (A. P. Fiske, 2004). This affords sentiments of belonging, oneness, and security, along with devotion motivation and moral commitment, all of which tend to be durable and tacit, even taken for granted. But CS often emerges suddenly, so that a new CS relationship (CSR) is instantly established or an existing one is abruptly reinvigorated; these are *kama muta* moments. That is, *kama muta* emotionally mediates the dynamic relational transition in which people quickly *create, renew, and restore* CS. CS is an aspect of social coordination that may be short term, but may also endure; *kama muta* is an emotion that mediates transitions when a CSR suddenly becomes especially propitious.

Our aims in this article include sketching *kama muta* theory and briefly summarizing new experimental and survey evidence about its psychological mechanisms. Drawing on our ethnographic, ethnological, historical, and linguistic research, we further aim to suggest that evoking *kama muta* is a principal, culturally evolved *function* of a great many practices, institutions, roles, narratives, and artifacts. We thus offer a theory of why these cultural elicitors are ubiquitous and enduring (A. P. Fiske, Schubert, & Seibt, in press). And we indicate the parameters that must be culturally specified in order for the universal disposition to *kama muta* to be realized in any particular emotional experience.

## Introducing a New Concept: *Kama Muta* Theory

We propose a new emotion construct with roots and connections to other emotion constructs, but distinctively characterized. It is correlated with many vernacular lexemes in many languages,

but not equivalent to any. Our construct is based on comparisons of hundreds of ethnographies, historical sources, classic texts, interviews, surveys, participant observation, and experiments involving over 4,000 participants. We posit the existence of an emotion, *kama muta*, defined by the coherence of the following five features:

1. It is evoked by the perception of a sudden intensification of a CSR between the participant and another being (human, animal, deity) or entity (the earth, the cosmos), or by the observation of a sudden intensification of a CSR between third parties (Schubert, Zickfeld, Seibt, & Fiske, 2016; Seibt, Schubert, Zickfeld, & Fiske, 2017; Seibt, Schubert, Zickfeld, Zhu, et al., 2017; Steinnes, 2017; see also Janicke & Oliver, 2015; Kuehnast, Wagner, Wassiliwizky, Jacobsen, & Menninghaus, 2014; Menninghaus, Wagner, Hanich, & Wassiliwizky, 2015). “Intensification” may consist of a rapid temporal increase in the strength of a CS bond; the creation of a new CS bond; or the figure-ground contrast that occurs when memory, anticipation, or imagining of CS springs forth against a background of separation, longing, or loss. The CSR that suddenly intensifies may be initiated by the person who feels *kama muta*, or someone else may act to intensify the relationship with the person who consequently feels *kama muta*. And people often feel *kama muta* when they observe the sudden intensification of CS between other beings—real, fictional, or imagined.
2. It is a positive emotion in five respects (Schubert et al., 2016; Seibt, Schubert, Zickfeld, & Fiske, 2017; Seibt, Schubert, Zickfeld, Zhu, et al., 2017; Steinnes, 2017):
  - People report liking it and rate it as positive.
  - People actively seek it out, and seek to reexperience it.
  - People want to give the experience to others they care about.
  - People want to experience it together with others.
  - In many cultures in appropriate circumstances, the emotion is culturally valued or even prescribed for at least some people, such as *kawaii* for contemporary Japanese women, patriotic sentiment for European men between about 1770 and 1840, the feeling of union with God for worshippers attending Methodist revival meetings in the Great Awakenings, and the feeling of *hal* for Sufis or *saltana* for Egyptians listening to *tarab* music.
3. When it is mild, many people experience few or no sensations, but when it is strongly felt, most (but not all) people usually have some of the following sensations and/or show some of the following signs (Schubert et al., 2016; Seibt, Schubert, Zickfeld, & Fiske, 2017; Seibt, Schubert, Zickfeld, Zhu, et al., 2017; Steinnes, 2017; Zickfeld, 2015; Zickfeld, Schubert, Seibt, & Fiske, 2017; see also Benedek & Kaernbach, 2011; Wassiliwizky, Jacobsen, Heinrich, Schneiderbauer, &

Menninghaus, 2017; Wassiliwizky, Wagner, Jacobsen, & Menninghaus, 2015):

- A pleasantly warm, swelling, heavy, or other pleasant feeling in the center of the chest (“heart”).
- Moist eyes, tears, or weeping.
- Goosebumps, piloerection, chills, or shivers.
- Choked up (lump in throat), with difficulty speaking or a creaky voice.
- Placement of one or both open hands to the chest, palm inwards.
- A deep breath and/or a pause in breathing.
- In some contexts, an utterance such as *awww!* (the sound varies across languages; Buckley, 2016).<sup>2</sup>
- Feelings of buoyancy, lightness, floating, rising (often at the end or afterwards).
- Exhilaration, being energized, feeling refreshed, optimism (often at the end or afterwards).

(Though all common in *kama muta*, experiences of *all* of these sensations *together* are very rare, if they ever all occur together.)<sup>3</sup>

4. Devotion motivation and a sense of moral commitment emerge: people aim to strengthen, repair, and sustain the focal CSR and their other CSRs (Steinnes, 2017; Zickfeld, 2015).
5. In English, depending on the context and depending on with whom the CSR suddenly intensifies, people may label the experience as *being moved*, *touched* (Seibt, Schubert, Zickfeld, & Fiske, 2017), *having a heart-warming* experience, *having a poignant* experience, *feeling tenderness*, *nostalgia*, *ecstasy*, *rapture*, *being touched by the Spirit*. However, people also use each of these lexemes for other emotions, and do not always give *kama muta* the same name, so the labels are by no means definitive. Each language has a different set of lexemes that may typically denote *kama muta*, though languages partition the emotion domain differently, with different degrees of specificity.

*Kama muta* ordinarily lasts no more than a minute or two, but may be experienced again and again during the course of an event, sometimes in rapid succession. Note that the positivity of *kama muta* itself does not mean that the total experience in which it occurs is purely positive; on balance, the **event as a whole** may even be negative, despite the *kama muta* moments in it being very positive (cf. Menninghaus et al., 2015). Indeed, in some circumstances *kama muta* is evoked by a contrast between very positive CS feelings, memories, or imagined futures that suddenly emerge against a background of negative moods or emotions such as the sadness of loss, separation, or longing. For example, at a memorial service, I miss my dead parent, but in this sad mood state, memories or experiences of how much we loved each other suddenly emerge, and at that moment I feel *kama muta*.

Of course, just like any other emotion, *kama muta* can occur simultaneously with other emotions. We know that some of our experimental stimuli evoke *kama muta* together with sadness,

while other stimuli evoke only sadness, and others only kama muta; some videos first evoke sadness or anxiety, and then kama muta (Schubert et al., 2016; Seibt, Schubert, Zickfeld, & Fiske, 2017). We suppose that kama muta may commonly co-occur with awe, especially in religious contexts, though we have not seen this in response to the stimuli we have used in our experiments. It may occur along with surprise (e.g., at someone's unexpected return), or embarrassment (e.g., sometimes when men unwillingly shed tears because of feeling kama muta). And because kama muta is a very positive emotion, people report *joy* and *happiness* along with it, although that does not mean these feelings are distinct emotions in these events (Schubert et al., 2016; Seibt, Schubert, Zickfeld, & Fiske, 2017; Seibt, Schubert, Zickfeld, Zhu, et al., 2017; Steinnes, 2017).

As an ontological entity or scientific construct, “kama muta” is the coherence among these five sets of features: the fact that across cultures, contexts, and events, these sets of features tend to co-occur, as part of one dynamic system. Instances (tokens) of kama muta are events that have many of these sets of features, especially when the features are pronounced. This does not imply that kama muta is a family resemblance category with a fuzzy boundary; we think it is a polythetically defined category with a sharp boundary that we have not yet delineated by valid quantitative weighting of the five sets of features and the contingencies among them. The intensity of kama muta varies from experiences that are barely appreciable, on up to the peak experiences that make life meaningful (Maslow, 1962).

As an epistemological strategy, these sets of features tell us where to look for kama muta, as well as how to recognize it when we see it, and discriminate it from other emotions. Of course, no single one of the five sets of features alone is sufficient to make a valid identification of an instance of kama muta. However, if people perceive a CSR *suddenly* intensifying, we should generally find kama muta (though likely there are moderating contingencies). We should not find kama muta where no CSR suddenly intensifies. If CS suddenly intensifies, we expect to find most of the four additional sets of features, though perhaps not all in every case, since these features may have their own moderators. Moreover, because it is often difficult—especially outside the lab—to know for certain whether or to what extent any given set of features is present, it is all the more important to consider all five.

The validity of the identification of an emotion (or any other construct) depends on the convergence among multiple lines of inference and on the independence of the sources of error and bias in each of the respective lines of inference (for “lines of inference,” read “methods,” broadly defined; see Campbell & Fiske, 1959; D. W. Fiske & Campbell, 1992). The five sets of features that jointly constitute kama muta inherently provide convergent evidence, and whenever possible, each should be assessed in multiple ways. To quantitatively assess these five features in experiments and surveys, we have created and are at the second stage of validating an instrument, the KAMMUS in English, Norwegian, German, Dutch, Spanish, Portuguese, Serbian, Croatian, Polish, Finnish, Hungarian, Hebrew, Japanese, and Mandarin (<https://osf.io/cydaw/>).

A person may feel *first-person* kama muta when she suddenly feels new or intensified CS with an other who has done nothing in particular to actively create or enhance the relationship. For example, a person who sees a very cute sleeping infant may experience first-person kama muta, and a person may also feel kama muta when she nostalgically remembers her first love, or her deceased grandmother. When the second person takes the initiative, doing something intended to create or intensify the CSR with the first person—such as an extraordinary kindness, great generosity, compassionate self-sacrifice for the sake of the person, huge effort to be reunited, or a heart-felt expression of love—the recipient feels *second-person* kama muta. When a person observes familiar others, strangers, actors, or fictional characters suddenly intensifying the CSR between or among them, the observer may feel *third-person* kama muta. For example, literature and other narrative media often evoke third-person kama muta when separated loved ones finally reunite (A. P. Fiske, Schubert, & Seibt, 2017).

Our experiments, diary studies, interviews, and ethnological and historical analyses indicate that first-person, second-person, and third-person kama muta have the same five sets of features (Seibt, Schubert, Zickfeld, & Fiske, 2017). Moreover, all of the five defining features seem to be present regardless of whether the sudden intensification of CSRs is with living people who are physically present, with people communicating through various media, or with people remembering CS. All five are present when people suddenly intensify CS with imagined communities such as a nation, race, or other allegiance; or suddenly intensify CS with deceased people, deities, animals, or fictional characters. They are present when people suddenly feel oneness, union, or dissolution of the self into some entity such as *nature*, *earth*, or *the cosmos*. One can feel kama muta when one dissolves into music, or is in perfect sync in a dance.

In order to define the emotion of kama muta, we obviously have to make theoretical assumptions about what emotions are, in general. But there is little consensus on this question, as a recent issue of this journal demonstrated (Russell, 2014). Theories of emotions differ widely, some taking a more biological view and arguing that only a few culturally universal emotions exist (Tracy, 2014), and others adopting a constructivist view and arguing that emotions are not natural kinds but instead are entirely arbitrary cultural constructions (Barrett, 2014). Both views have to grapple with the evidence that there is simultaneously coherence and variability across cultures in what emotions are recognized and labeled, as well as in the subcomponents such as emotional appraisal, expression, and physiology.

Our view integrates these two views of emotions. We think emotions in general, and especially social emotions, are best understood as assemblies of evolutionarily prepared mechanisms to react to environmental challenges *together with* culturally transmitted implementations and elaborations of such preparedness (A. P. Fiske, 2000; Jack, 2013). These assemblies lead to states that combine appraisals, physical sensations, and motivations that are typically labeled with feeling terms—although not all languages name the emotion.

At least three other approaches to conceptualize feelings labeled as being moved or touched have been formulated in recent years: The elevation framework by Jon Haidt and colleagues



(Algoe & Haidt, 2009; Haidt, 2000); Deonna and Cova's framing of being moved as emerging from positive core values (Cova & Deonna, 2014); and Menninghaus and colleagues' conceptualization (e.g., Menninghaus et al., 2015). Throughout this article, we report evidence by these authors if it touches upon our hypothesis, but because of space constraints, we only undertake a detailed comparison to the most established framework, namely the one on elevation.

## The Labeling of Kama Muta

Some psychologists, indulging our natural tendency to reify whatever we name, seem to assume that we have to recognize "an emotion" of distinctive quality corresponding to every name used in popular and literary description of emotional experience. (McDougall, 1923, p. 314)

Our explorations find that, while kama muta is not precisely or consistently delineated in any vernacular language that we have looked at, in many languages there are one or more lexemes that approximately denote kama muta. Such "approximately kama muta lexemes" are more or less specific, and are typically used to denote kama muta in a more or less restricted range of circumstances, when CSRs with certain kinds of beings intensify. In English, the closest approximations include *moved*, *touched*, *heart-warming*, *the feels*, *stirring*, *rapture*, *emotional*, *tears of joy*, *thrilled*, *nostalgic*, and *tenderness* in response to *cuteness*—but each of these vernacular lexemes is sometimes used to denote other states. For example, people may say they are *moved* when a movie makes them sad, or when a speech makes them indignantly *moved* to political action.

Furthermore, people often have different names for the same emotion in different contexts (e.g., we believe that many of the experiences that English speakers call *nostalgia* are kama muta), and may have no name for it in some contexts (e.g., when seeing cute kittens, holding one's baby for the first time, or feeling one with *nature*). When an English speaker feels kama muta for his country, he is likely to label his feeling *patriotism*, but his wife would not say she felt *patriotic* when he proposed to her. At some points in history in some sects, English speakers have described kama muta experiences with deities using the words *ecstasy* or *mystical experience*. A Pentecostal worshipper calls her kama muta feeling of Jesus's love *being touched by the Spirit*, or *being raptured*, but would use different terms for kama muta in response to a Pixar movie. Mormons call the religious kama muta experience *burning in the bosom*, but when evoked by fond memories of their grandmother, they call kama muta *nostalgia*.

For these reasons we cannot use any vernacular lexeme to conceptualize or research this emotion; we need a technical term, kama muta (A. P. Fiske et al., in press). Figure 1 schematically depicts the manner in which vernacular lexemes intersect the kama muta emotion—and hence illustrates why we need a technical term, kama muta, for the emotion construct. Hence we cannot validly or reliably identify instances of kama muta **simply** by asking people whether, or to what extent, they are *moved*, *touched*, *feel tender*, or any translations of these terms; we must put such verbal responses together with the best

evidence that can be collected about the other four sets of features that together characterize kama muta.

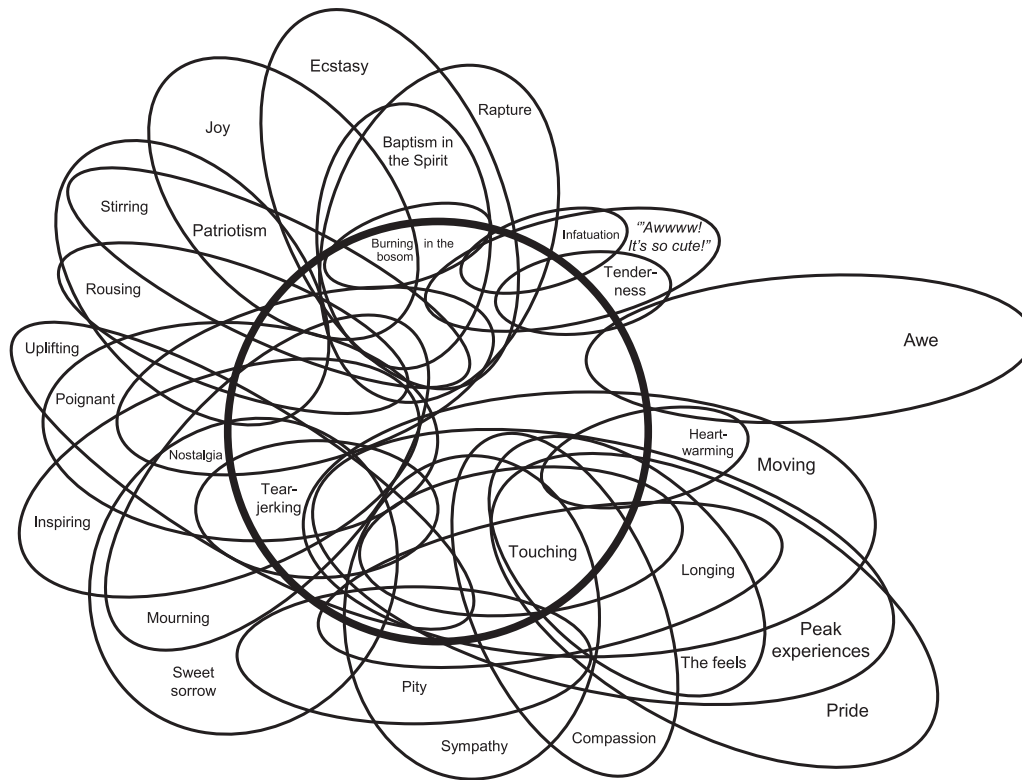
## The Experience of Kama Muta and the Relationships Whose Sudden Intensification Evokes It

Several studies tie the physiological sensations in Feature Set 3 to labels relevant to Feature Set 5 (Benedek & Kaernbach, 2011; Oliver, Hartmann, & Woolley, 2012; Panksepp, 1995; Sloboda, 1991; Strick, de Bruin, de Ruiter, & Jonkers, 2015; Vingerhoets, 2013; Vingerhoets & Bylsma, 2016; Wassiliwizky et al., 2017; Wassiliwizky et al., 2015). Our own work confirms these findings. In one study, we asked different sets of participants each to rate just one of six variables continuously while watching short video clips that were commented on as "moving" or "touching" on social media. Among the rated variables were feelings of "being moved or touched" and physiological responses of crying, goosebumps, and felt warmth in the body. We then cross-correlated the time series resulting from averaging these ratings. Moment-by-moment reports of feeling moved and touched cross-correlated strongly with moments of reported crying, goosebumps, and felt warmth (Schubert et al., 2016; see following lines for more results from this study).

We have shown the same or similar videos and immediately afterwards asked about appraisals, feelings, sensations, and motivations. When we compared the outcome when American and Norwegian samples watched a moving video to watching sad, happy, and frightening videos, we found that the combination of warm feelings in the chest, weeping, and goosebumps was uniquely associated with seeing moving videos (Seibt, Schubert, Zickfeld, & Fiske, 2017). In another study, we compared reactions to such video clips in seven samples in five different cultures (US, Norway, China, Portugal, and Israel). In all samples, ratings of the viewing experience as "moving and touching," or translations of these terms in the respective languages, covaried with tears, a feeling of warmth in the chest, and chills or goosebumps (Seibt, Schubert, Zickfeld, Zhu, et al., 2017).

Kama muta may appear to be related to Haidt's construct of "elevation," which indeed has been measured with scales including items asking about being "moved" and "touched," and sometimes sensations of warmth in the chest, goosebumps, and chills (Algoe & Haidt, 2009; Haidt, 2003; Thomson & Siegel, 2016). Haidt and colleagues define elevation as an emotion experienced when observing or hearing about "moral beauty" or acts that reveal "humanity's higher or better nature." We believe that when a person observes a dramatic act of compassion, kindness, or sacrifice that indicates intense CS, they experience a specific emotion. Whether we call the resultant emotion "elevation" or "kama muta" is just nomenclature. But we believe that acts of authority ranking, equality matching, or market pricing virtue do not evoke kama muta. Moreover, moral beauty or even virtue is not necessary to kama muta.

Our interviews, participant observation, and experiments show that all five sets of features of kama muta can be evoked by kittens (Steinnes, 2017), by viewing the first ultrasound of



**Figure 1.** Schematic of the denotational fields of some of the English vernacular terms related to kama muta. Bold circle indicates the kama muta construct.

one's baby, participating in Sufi worship, listening to poems that tell of suffering that the listener identifies with, sharing intimate secrets about fears and traumas, gathering for holiday meals, seeing commercials that evoke nostalgic memories, or simply coming home after an absence (A. P. Fiske et al., in press). These events do not involve "moral beauty" or "manifestations of humanity's higher or better nature" unless the definitions of these terms are stretched quite far.

Furthermore, elevation is conceptualized as occurring when one observes or learns about something, implying an observational third-person stance, while kama muta is not restricted to third-person experiences. One can feel kama muta when one merges into a single being in perfect synchrony with other rowers in a boat (Brown, 2013). In 132 Americans' reports of a recent experience of "positive tears," we found that they rated the events they witnessed (or read or saw on screen) as no more moving and touching than events in which they personally participated (Seibt, Schubert, Zickfeld, & Fiske, 2017). For example, they reported being moved when going trick-or-treating with a child, at graduation, when receiving a happy birthday phone call from an ex-husband, and when remembering working closely with friends to lose weight for a wedding. There is certainly a moral facet involved in *some* experiences of kama muta, but we posit that it is limited to the morality of CS: loving-kindness, compassion, and sacrifice for the group or partner (on CS morality vs. the moralities of the other three fundamental relational models, see Rai & Fiske, 2011). Further research will be needed to

determine whether elevation is a specific form of kama muta or a distinct emotion in itself.

### The Function of Kama Muta and Its Biological and Cultural Evolution

Communal sharing is one of the four basic relational models that humans use to coordinate all aspects of social life; it consists of treating the focal aspect of participants in the dyad or group as equivalent (A. P. Fiske, 1991, 1992, 2004). Partners may share an identity, a resource, land, a decision, a task, or a responsibility. Participants feel love, affection, solidarity, and identification with each other; their feeling that they are kin or one kind makes it feel natural to be kind. Going far beyond the kin-based bonds and troops in other species, human CS bonds are uniquely numerous, dynamically flexible, and generatively capable of coordinating any new sort of cooperative endeavor. This enormously enhances inclusive fitness—if and only if the CS is tuned and responsive to the particular affordances and risks of the shifting configurations of **locally and currently** promising CSRs.

This is what kama muta does: with precise temporal and personal discrimination, it motivates instantly updated devotion and commitment to a CSR when something suddenly makes that particular CSR newly promising, or its potential is suddenly renewed (Steinnes, 2017; Zickfeld, 2015).

We hypothesize that the motivation to devote and commit to CS is primarily (but not solely) oriented to the relationship with

the particular partner(s) in first- and second-person kama muta, but more diffuse in third-person kama muta. Since caring, kindness, and connection are core features of communal sharing devotion and commitment (cf. Hollan & Throop, 2011), this raises the question of how the attitude, trait, or emotion of empathy or compassion are related to kama muta. In a meta-analysis of 16 of our studies with 2,918 participants, Zickfeld et al. (2017) found that self-reported trait empathic concern—the disposition to feel compassion when seeing someone in need—correlates ( $r = .35$ ) with self-reports of being moved and touched by our kama muta stimuli and participants' recalled kama muta experiences. Across these 16 studies, trait empathic concern also correlates substantially with self-reports of the characteristic signs of kama muta: warmth (especially in the chest), tears or moist eyes, and goosebumps or chills. This suggests that feeling compassion is a specific form of kama muta in the particular context of perceiving another's need.

Similarly, in two studies, Steinnes (2017) found that emotional responses to images of cute animals (who presumably are vulnerable, in need of care and protection) have all the features of kama muta (sensations, perception of suddenly increased closeness, positivity, desire to share the emotion with others, motivation to care for others, and labels such as “heart-warming,” “moved,” and “touched”). In short, often a person's heart suddenly goes out to another person in need, or to cute and cuddly kittens: the perceiver feels immediate CS care and compassion, evoking first-person kama muta. Steinnes found that cute animals licking or cuddling (perceived as intensifying a CSR) were rated as cuter and evoked more kama muta than the same animals when they were not interacting affectionately. This is third-person kama muta added to first-person cuteness kama muta.

The fact that cuteness, vulnerability, and need evoke kama muta makes sense given our assumption that the phylogenetic source of kama muta is maternal bonding to newborns. The generativity of human kama muta makes it flexibly adaptive. This explains why kama muta occurs in response to babies, kittens, marriage proposals and weddings, rituals of solidarity, religious moments of union with divinities, homecomings and reunions, the kindness of strangers, sentimental narratives and cinema, addiction recovery groups, team spirit moments in war and sports, oratory, marketing, choral singing, making and listening to music, dancing, rowing, and so forth.

We posit that humans have an evolved disposition to attend to indices of sudden intensification of culturally important CSRs, mapping these opportunities onto culturally fruitful forms of devotion and commitment (A. P. Fiske et al., in press). That is, there is a psychological mechanism consisting of a function that maps CS opportunities onto fresh motivation to devote and commit to those newly opportune CSRs. By its very nature, this mapping function is culturally informed. It is socially functional and biologically adaptive only insofar as it takes culturally informed indices of CS intensification as the domain (input) of a function, then maps these intensifications onto a culturally appropriate range of motives to act in the particular ways that are locally effective in enhancing the specific CSRs that are important in the participant's community. (In alternative terminologies, culturally oriented, culturally

informed CS devotion and commitments are the “image” or “output” of the kama muta function.) We posit that this innate kama muta function is evolutionarily adaptive when (and only when) it operates to devote and commit people in the culturally appropriate manner to the particular intensifications of the specific CSRs that enhance inclusive fitness in the particular culture. At the same time, building on this evolved kama muta adaptation, relatively rapid processes of cultural evolution construct many practices that diffuse and endure simply because they evoke this attractive emotion, without thereby promoting the biological fitness of the people who participate.

How can an innate, biologically evolved mechanism do this culturally attuned mapping? People naturally cognize, communicate, constitute, and commit to CSRs in an indexical semiotics in which their bodies represent their social selves (A. P. Fiske, 1991, 2004; A. P. Fiske & Schubert, 2012). This conformation system is called *consustantial assimilation*—the assimilation of bodies to each other. People feel CS:

- When they feel that the essential substances (e.g., blood, genes) of their bodies are the same.
- When they interchange essential substances (e.g., semen, breast milk, ritual food and drink).
- When they feed each other, eat and drink commensally, or share tobacco and other comestibles.
- When they caress, groom, kiss, snuggle affectionately, or sleep alongside each other;
- When they move in rhythmic synchrony (in military drill, rowing, working in time to drums or ditties, in ritual or other dance).
- When they mark or modify their bodies alike (e.g., with ethnic scarification, tattoos, body paint, the same kind of circumcision or excision, or wear *uniforms*).

When these acts of consustantial assimilation are habitual and routinely taken for granted, they continuously express and sustain a CSR—but do not tend to evoke much kama muta. The evolved kama muta function is tuned to respond to extraordinary, remarkable, wonderful, special, or unexpected acts of consustantial assimilation.

By association and inference, the adaptive mechanism can also learn to respond to linguistic or other symbolic cues of sudden CS intensification, though not usually as readily or as strongly as to indexical acts of consustantial assimilation. In either case, through experience, the kama muta function adjusts to tune itself to the particular forms of consustantial assimilation that are strikingly meaningful modes of constituting and committing to the particular CSRs that are salient in a particular culture. Such modes include the bride and groom kissing, feeding each other wedding cake, and dancing; the circumcision or excision of the initiates; touching a holy shrine; or, in a romantic culture of *true love*, intimate sexual union.

As we will show in what follows, our reading of ethnographies, histories, primary source documents, and media, together with our own observations and experiences of contemporary cultures, our interviews, and our focused participant observation suggest that practices that evoke kama muta are ubiquitous (A. P.



Fiske et al., in press). Why? Culture consists of whatever people do, have, know, want, avoid, or experience because they participate in a particular community or network. In particular, let us consider cultural practices, institutions, roles, narratives, arts and artifacts (hereafter, all denoted as “practices”). Practices endure and become widespread only if they attract attention; if people seek to participate in them and find them engaging; if people remember them vividly; if people want to reenact, reproduce, transmit, or communicate them; and if performing and participating in them affords other desirable social relationships.

The nature of kama muta is such that when a practice evokes kama muta, it captures people’s attention; people seek it out, attend or participate, and invite others to attend or participate together with them. People remember the practice and want to reenact it. They talk about it, create visual representations of it, and, in contemporary cultures, write about, post, blog, share online, and broadcast it on radio and television. Consequently, people are motivated to craft art, artifacts, representations, activities, and events to evoke kama muta in others; those who succeed in so evoking kama muta in others are much admired and sought out, further motivating people to create such practices. Shaped by these selective forces of the psychological disposition to kama muta, cultural evolution has generated and sustained numerous practices that evoke kama muta. Examples are many aspects of religion and life-cycle rituals, common narrative and media themes, forms of music and art, marketing campaigns and political oratory, memorials and patriotic rituals, tropes of war and sports, and the domestication and keeping of pets (A. P. Fiske et al., in press).

### Cultural Practices, Institutions, Narratives, and Artifacts That Evoke Kama Muta

Where does kama muta occur and what meanings can it have? Most people engage in many CSRs every day. But how often and when do CSRs suddenly intensify? Interviews and diary studies suggest that in contemporary Western cultures, people experience kama muta in a great many domains of life (about three times a week in an unpublished Norwegian diary study with daily recall that we did; Seibt & Schubert, 2017), though strong and memorable kama muta experiences are less frequent. The peak experiences that contribute to meaningful lives are often kama muta moments, according to our interpretation of the literature (Ho, Chen, Hoffman, Guan, & Iversen, 2013; Maslow, 1962, 1970; Wuthnow, 1978).

Kama muta occurs incidentally in everyday life in all kinds of events that are not always culturally structured especially to evoke it. Examples are childbirth and nursing, return of a loved one from war, kindness to strangers and the rescue or care for those in need, friends who are “there for you” when you need them, and courageous loving sacrifice for comrades in war. But one of the most intriguing things about kama muta is how often it is evoked by various practices that appear specifically “designed” to evoke it. That is, there are many cultural practices (e.g., weddings, funerals, winners’ thanking supporters), institutions (e.g., Pentecostal churches, Alcoholics Anonymous), roles

(e.g., blues and country-and-Western singers, Pixar animators, Sufi saints), arts (e.g., icon painting, opera, some kinds of dance, some kinds of cinema), artifacts and architecture (e.g., engagement rings, the Vietnam War Memorial, shrines) whose major functions include evoking kama muta. Kama muta, in turn, motivates devotion and commitment to the CSRs entailed.

The most universal and salient plot lines of Western and world literature, as well as modern “sentimental” literature, consist of narratives in which two people who love each other are separated, struggle to be reunited, and are finally reunited (in “comedy”) or display and declare their undying love (in “tragedy”; A. P. Fiske et al., 2017). In the space remaining we focus on the wide variety of such cultural practices whose primary function—or one of whose major functions—is to evoke kama muta. They shape our emotional lives to a remarkable but barely remarked degree.

We posit that the activation of the innate psychological mechanism that disposes people to feel kama muta, and then the manner in which they act, depend on cultural precedents, prototypes, paragons, paradigms, and precepts. In the terms of complementarity theory, these are the cultural *preos*, while the universal psychological mechanism is a *mod* (A. P. Fiske, 2000). The *preos* for the kama muta *mod* are essential for realizing it in any particular moment because they determine:

1. **When, where, and with whom** CSRs are possible and propitious—the cultural *affordances* for CS.
2. **What particularly indexes** the intensification of each specific kind of CSR—the locally crucial *constitutive signs* of CS.
3. What the intensification of each specific kind of CSR *means*, including the evaluation of the CSR and of its intensification, and their metarelational implications for other social relations—the *significance* of kama muta.
4. Whether and precisely **how particular kinds of people display** kama muta in each specific kind of CSR in particular contexts, together with the meaning of manifesting it—the *performance* of kama muta; for many culturally elaborated display practices there are correspondingly refined esthetics of display.
5. **How others respond** to the performance of kama muta, especially whether and how they join in the same performance or engage in complementary performances—*participation* in others’ kama muta.
6. Once people experience kama muta, **how they devote and commit themselves** to the intensified CSRs—the *promise* of kama muta.

In short, any experience of kama muta is the joint product of a biologically evolved adaptive system, together with that system’s cultural complements that are necessary to give it a particular form. That is, the innate adaptive system is sensitively oriented to, and its realization depends on, cultural parameters specifying how to implement it. In the rest of this article, we illustratively set out the **affordances, constitutive signs, significance, performance, participation, and promise** of kama muta

in a few of the multitude of practices where it seems to be manifested (some others are mentioned in A. P. Fiske et al., in press).

### *Homo Movens*

In all of the practices we describe next, a CSR suddenly intensifies, and people commonly shed tears but report they are happy and/or actively seek the experience and attract others to participate together with them. There is often evidence of other characteristic kama muta sensations and signs. CS devotion sentiments and commitment motives can often be inferred from accounts of social events, but not always discerned with certainty.

If *Homo movens* lives in a Western culture, blogs and informal interviews indicate that an important **affordance** of kama muta is marriage, where the key **constitutive signs** are the marriage proposal, including presentation of an engagement ring, bridal showers, and the wedding with its special clothing, kissing, feeding each other wedding cake, etcetera. Other Western affordances include the parent–child and parent–parent relationships at the moments when a couple finds out they are pregnant, see an ultrasound of their fetus, and give birth. **Participation** in these moments of kama muta would likely include phone calls or Skyping with grandparents. All of these scenes are widely diffused on social media, where they meet a warm reception. In these Western contexts, the **performance** of proposal and wedding kama muta would generally involve tears, and often a deep breath or gasp followed by an *awww*. The immediate **promise** would include hugging, kissing, verbal expressions of love and commitment; longer term **promises** would include commitment motivation, including moral commitment to living together, and to sexual faithfulness.

Although these affordances, constitutive signs, performances, and promises seem entirely natural to most readers of this article, they all depend on Western cultural preos: in most other cultures throughout history there have been no proposals or engagement rings, no ultrasounds, in many cultures no weddings in the Western sense, and no Mother’s Day. Many traditional Africans consider kissing gross. In some cultures, giving a puppy would be a **constitutive sign** for kama muta—but as a tender meal. In many cultures the promise of sexual faithfulness is by no means part of marriage, while in other cultures only the bride is making such a commitment. All of these cultural preos—the paradigms and precepts for these forms of intensification of communal sharing—inform the experience of kama muta in these settings.

People also like to evoke kama muta in their partners in CSRs, inviting them to view or hear a video, performance, or story that evoked kama muta in oneself. This *sharing* of media content is an important contemporary **performance** of kama muta, demonstrating the listener’s emotion and her affection for the recipients. Also, having experienced kama muta from a given situation, people like to repeat it: the **promise** of kama muta from music and other media content is fandom; media stories; “liking” on Facebook, Instagram, and other social media; buying fan articles, creating fan videos, attending concerts, and going to movies. From this comes the enormous contemporary media industry, built to a great extent on evoking kama muta.

In cultures around the world, reunions **afford** kama muta, especially when there have been obstacles or dangers to overcome, or if the CSR has been jeopardized directly. We see this in the many popular YouTube videos of soldiers’ homecomings, and in the recognition reunion theme in ancient and classical Greek literature (such as Odysseus’s homecoming) and the Old Testament (Bosworth, 2015; Gainsford, 2003; Montiglio, 2013). A person’s dedicated and courageous efforts to overcome obstacles in order to return to loved ones are **constitutive signs** of CS intensification. Indeed, a basic plot in Western stories that evoke kama muta is that of voyage and return (Booker, 2004; see A. P. Fiske et al., 2017).

Occasions that require specific kama muta **performances** in certain cultures include a community member’s return, enemies making peace, and in some cases the arrival of a stranger. Such performances involve ritualized mutual weeping among the participants, or weeping on the part of the host women, in certain cultures of Brazil, Venezuela, the Andaman Islands, Australia, and among the Maori of New Zealand (Briggs, 1993; Frazer, 1918; Grima, 1992; Levy, 1973; Radcliffe-Brown, 1922; Salmond, 1974; Tiwary, 1978; Urban, 1988). In some of these cultures, people are required to weep over the other so that their tears fall on them, creating a liquid bond of consubstantial assimilation (Briggs, 1993). In many cultures, women’s tearful performance of kama muta is developed into elaborate, esthetically admired forms of musical weeping, for example to express love for a departing bride, longing for home, or love for someone who has left or died. In some cultures, melodic weeping is wordless, in some cultures interspersed with lexemes, and in some cultures women weep as they sing complete lyrics (e.g., Desjarlais, 1991; Clark-Decès, 2005; Grima, 1992; Tiwary, 1978). In all cases, the weeping often evokes further kama muta in observers, who thereby become **participants** and **performers**. In cultures with a highly developed esthetics of melodic poetic weeping, it is an art form savored for its beauty (e.g., Clark-Decès, 2005; Desjarlais, 1991; Grima, 1992; Tiwary, 1978).

In Papua New Guinea, when Kaluli (Bosavi) hear the beautiful calls of the visually elusive fruit doves and other birds of the rainforest canopy, they interpret the bird calls as the cries of their children who have died and whose bird spirits still plead for food (Feld, 1990). Feeding is the focal Kaluli constitutive sign of CS caring, compassion, and kinship (Schieffelin, 1976). So these calls apparently evoke kama muta. Furthermore, when they feel kama muta, Kaluli women sing melodic four-pitch “choked-up and breathy” weeping laments which are also said to sound like the calls of the fruit doves (Feld, 1990). In addition, Kaluli men have an elaborate esthetics of kama muta. From time to time, a group of men compose songs and construct elaborate feather costumes, and then go together to the men’s house of another village for a *gisaro* performance (Feld, 1990; Schieffelin, 1976). When the visitors’ songs evoke mnemonic kama muta in one of the host men in the audience, the affected listener, first sad, then enraged at the singer for making him feel the loss of his loved one, grabs a torch and burns the dancer, often seriously. The crying burner may then hug the singer before going outside to cry some more. The dancer keeps singing, to be burned again by other men whom he subsequently moves to tears of nostalgic love. Eventually another singer

replaces him, trying in his turn to evoke the same nostalgic kama muta—and get burned for it. The entire **performance** with its strong emotions and painful injuries **promises** to reinforce intervillage CS ties.

In ancient Greece, the Homeric heroes were portrayed as unabashedly expressing an “appetite” for nostalgic weeping. They would declare the desire to weep, for example, over their memories of warrior comradeship at Troy, and weep together until their appetite was satisfied (e.g., Homer, 2011a, 4:102, 24:507–514; Homer, 2011b, 4:194, 4:102–103, 15:398–401, 16:213–219). Such comradeship was a **performance** that **signified** continued loyal solidarity among the warriors. Likewise, in many contemporary cultures, an appetite for kama muta crying **signifies** women’s sensitivity and warmth. Young women in contemporary California, as well as young women and men in Japan, sometimes explicitly plan occasions for mutually supportive crying over stress at work or school, or family and relationship issues; this evokes kama muta (McGrath, 2015; Shimbun, 2013; St. Michel, 2015). Another positive **significance** of weeping performance of kama muta existed in late 17th- and early 18th-century Europe, where men *performed* their cultured sophistication by weeping at affording theater, or weepingly performed their patriotic devotion at political events such as the signing of the new constitution after the French revolution (Vincent-Buffault, 1986, pp. 79–89).

While the sudden intensification of CS is most often a temporal dynamic, kama muta is also **afforded** by the sharp contrast of acutely foregrounded CS against a background of loneliness, longing, or loss. Then sudden memories, tokens, communications, or hopeful thoughts of the beloved may suddenly emerge in the foreground of attention, affording kama muta (as in the Kaluli *gisaro* and Homeric heroes weeping). Many practices and artifacts have culturally evolved to **afford** this figure-ground contrast kama muta: blues and country-and-western songs; sentimental literature and tear-jerking movies; grave markers and ancestor altars; memorial days and ceremonies; monuments to the dead and wounded in war, disaster, and genocide.

## World Religions: Sudden Union With a Divinity

Homo movens in each culture learns to respond appropriately to the specific local **constitutive signs** of CS and its intensification. This is most remarkable in religion. Learning to be religious in some traditions consists most essentially of learning to appropriately **perform** kama muta when there are propitious **constitutive signs** of **affordance** for CS intensification with an appropriate immaterial being. Integrated into the development of procedural competencies to perform kama muta is the emotive proclivity to *experience* kama muta *by performing it*. This is evident in strands of all of the world religions:

- A Pentecostal or charismatic Homo movens learns to feel and **perform** “baptized by the Spirit” or “slain in the Spirit” when they “feel the love” of Jesus, and then weep, get chills, place a hand on their heart, feel choked

up, perhaps move ecstatically and, in some variants of this, finally collapse into torpor (Griffith, 1998; Luhmann, 2012; Schmidt, 2001).

- A Catholic taking communion on a special occasion, a Marian pilgrim arriving at Lourdes, or a haji arriving at the Ka’ba learns to feel and **perform** weeping and getting goosebumps (Calasso, 2000; Mitchell, 1997, p. 90; Notermans, 2008).
- A Sufi Muslim learns to chant and sway or swirl until they attain a state of *hal* with Allah, which they may perform with goosebumps, ecstatic movements, and sometimes culminating with collapse into torpor (Frishkopf, 2001; Nasr, 1972/1980).
- By reading or hearing recitations of the *Upanishads* while observing and imitating other listeners, a Krishna worshipper learns to get goosebumps and perhaps weep in devotion, or at least to identify with the loving goosebumps of the cow-herd girls whose erotic *bhakti* attachment to Krishna is the prototype for Krishna worship (Hardy, 1983; Schweig, 2005).
- A devoted Buddhist reads that the final stage of a *bodhisattva*’s path to *moksha* (enlightenment and cessation of perpetual rebirth) is indexed by his goosebumps and tears on hearing a *Mahāyāna* sutra (aphorism of the Buddha; Buswell & Lopez, 2013).
- The *Jātaka* stories of the past lives of the Buddha likewise tell that, encountering the perfect self-sacrificing compassion of the Buddha, humans and even the earth itself broke out in goosebumps of kama muta (Dharmarama & Bareau, 1963; Khoroché, 1989, pp. 58–59). Likewise, contemporary women Buddhists in the Ciji movement are known for their weeping **performances** of kama muta (Huang, 2003).

Kama muta theory posits that these and many other core religious experiences of kama muta are produced by practices that were culturally selected precisely because they strongly afford kama muta, and hence they are “contagious” (Sperber, 1985) and endemic. Perhaps **affording** kama muta and attracting **participation** in it is an important factor in the endurance and wide diffusion of the world religions.

In constructing his sociology, Emile Durkheim (1912/1991) assiduously eschewed psychology—so far as possible. But he posited that the fundamental social bonds that constitute society arise in ritual experiences in religious gatherings that generate “collective effervescence”—which sounds to us a lot like kama muta. Like collective effervescence, kama muta is evoked by many religious rituals; it motivates sentiments of devotion to CSRs and creates moral commitment to core social groups. Among many anthropologists who used Durkheim’s framework for ethnographic analysis, Victor Turner’s work (Turner, 1969) is particularly relevant here. Turner studied rituals among the Ndembu (of what is now Zambia), finding that some rituals did indeed create a state that Turner famously called “communitas.” He defined communitas as the suspension and antithesis of “structure,” by which he mainly meant legitimate hierarchy. Like



Durkheim, Turner eschewed psychology, and so, like Durkheim, Turner was never clear about whether what he described as *communitas* is a relational state corresponding to what we call communal sharing (see the discussion in A. P. Fiske, 1991), or whether *communitas* is a momentary emotion.

In sum, *kama muta* theory posits that when people perceive the sudden intensification of any sort of CSR they are likely to experience an emotion that generates CS devotion and commitment motives. They may feel warmth in the chest, tears, goosebumps, buoyancy, elation, or certain other sensations. They may place their palm(s) on their chest or say something like *aww!* They may label the emotion, especially with passive verbs meaning “moved,” “stirred,” “touched,” or “touches my heart.” The universal psychosocial mechanism of *kama muta* is closely attuned to culture and context so that it responds to culturally shaped indices of intensification of culturally propitious CSRs. And its cultural tuning orients the consequent motives so that people aim to sustain the CSR in a locally appropriate manner. This means that to understand the social relational psychology of *kama muta*, we need to characterize the full domain of culturally diverse CSR intensifications to which it responds, together with the full range of culturally apt devotion and commitment motives that it generates. To understand the mapping of these inputs onto these outputs, we need to collate data about a great variety of CS intensifications in many truly diverse cultures.

### Acknowledgements

We are grateful to Andrew Beatty, Jonathan Haidt, Richard A. Shweder, Kamilla Knutsen Steinnes, and Janis H. Zickfeld for their perceptive, cogent, and constructive comments on earlier versions of this manuscript. Their comments enabled us to improve it considerably. Many of the ideas in this manuscript were developed and refined in fruitful discussions with Janis H. Zickfeld, Johanna Katarina Blomster, Kamilla Knutsen Steinnes, as well as audiences and fellow speakers at several conferences, symposia, and colloquia.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Notes

- 1 You may want to enjoy *feeling* the emotion that this article conceptualizes before you read about it; to experience it now, go to <http://kamamutalab.org/about/experience-kama-muta/> and watch some of the videos. Then, if you want to see how we conceptualize what you have likely just felt, come back here.
- 2 Although *aww* (phonologically /ɔ:/, /ɑ:/; typically drawn out for emphasis, sometimes high pitched) is used in English, German, and Norwegian, presumably the phonology of such an introjection differs across languages. For example, Goddard (2014, p. 61) observes that “many Australian Aboriginal languages have high-frequency interjections connected with compassion and ‘fellow feeling,’ like Yankunytjatjara *Ngaltutjara!* or Warlpiri *Wiyarrpa!* (roughly) ‘poor thing!’” All over Africa and the Middle East, when women ululate together it seems that they are experiencing *kama muta*.
- 3 The neurochemical mediators of *kama muta* remain a mystery to us, although they are likely to involve interlocking cascades of oxytocin,

vasopressin, dopamine, and, in particular,  $\mu$ -opioids (Ellingsen, Leknes, Løseth, Wessberg, & Olausson, 2016). When Silvers and Haidt (2008) showed an elevation- and *kama muta*-evoking video from the Oprah Winfrey Show, in comparison with a humorous video, lactating women were more likely to report crying and goosebumps, and to leak milk; this suggests increased levels of peripheral prolactin and perhaps oxytocin. However, these results (in a small sample) do not necessarily indicate higher cerebral levels of either hormone, and do not necessarily generalize to nonlactating women or males.

### References

- Algoe, S. B., & Haidt, J. (2009). Witnessing excellence in action: The “other-praising” emotions of elevation, gratitude, and admiration. *The Journal of Positive Psychology, 4*(2), 105–127. doi:10.1080/17439760802650519
- Barrett, L. F. (2014). The conceptual act theory: A précis. *Emotion Review, 6*, 292–297.
- Benedek, M., & Kaernbach, C. (2011). Physiological correlates and emotional specificity of human piloerection. *Biological Psychology, 86*(3), 320–329. doi:10.1016/j.biopsycho.2010.12.012
- Booker, C. (2004). *The seven basic plots: Why we tell stories*. London, UK: Continuum.
- Bosworth, D. A. (2015). Weeping in recognition scenes in Genesis and the Odyssey. *The Catholic Biblical Quarterly, 77*, 629–639.
- Briggs, C. L. (1993). Personal sentiments and polyphonic voices in Warao women’s ritual wailing: Music and poetics in a critical and collective discourse. *American Anthropologist, 95*, 929–957.
- Brown, D. J. (2013). *The boys in the boat: Nine Americans and their epic quest for gold at the 1936 Berlin Olympics*. New York, NY: Penguin.
- Buckley, R. C. (2016). Aww: The emotion of perceiving cuteness. *Frontiers in Psychology, 7*, 1740. doi:10.3389/fpsyg.2016.01740
- Buswell, R. E., Jr., & Lopez, D. S., Jr. (2013). *The Princeton dictionary of Buddhism*. Princeton, NJ: Princeton University Press.
- Calasso, G. (2000). Les sourires et les larmes: Observations en marge de quelques textes hagiographiques Musulman [The smiles of tears: Marginal observations on some Muslim hagiographic texts]. *Al-Qantara: Revista de Estudios Árabes, 21*, 445–456.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81–105.
- Clark-Decès, I. (2005). *No one cries for the dead: Tamil dirges, rowdy songs, and graveyard petitions*. Berkeley: University of California Press.
- Cova, F., & Deonna, J. A. (2014). Being moved. *Philosophical Studies, 169*, 447–466.
- Desjarlais, R. R. (1991). Poetic transformations of Yolmo “sadness.” *Culture, Medicine and Psychiatry, 15*, 387–420.
- Dhammarama, P. S., & Bareau, A. (1963). X. Les récits canoniques du Cariyāpitaka et les Jātaka pāli. Traduction du Cariyāpitaka. *Bulletin de l'École Française d'Extrême-Orient, 51*(2), 321–390. doi:10.3406/befeo.1963.2085
- Durkheim, É. (1991). *Les formes élémentaires de la vie religieuse: le système totémique en Australie*. Paris: Le Livre de Poche. (Original work published 1912)
- Ellingsen, D.-M., Leknes, S., Løseth, G., Wessberg, J., & Olausson, H. (2016). The neurobiology shaping affective touch: Expectation, motivation, and meaning in the multisensory context. *Frontiers in Psychology, 6*. doi:10.3389/fpsyg.2015.01986
- Feld, S. (1990). *Sound and sentiment: Birds, weeping, poetics, and song in Kaluli expression*. Philadelphia: University of Pennsylvania Press.
- Fiske, A. P. (1991). *Structures of social life: The four elementary forms of human relations*. New York, NY: Free Press.
- Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review, 99*, 689–723.



- Fiske, A. P. (2000). Complementarity theory: Why human social capacities evolved to require cultural complements. *Personality and Social Psychology Review*, 4, 76–94.
- Fiske, A. P. (2004). Four modes of constituting relationships: Substantial assimilation; space, magnitude, time and force; concrete procedures; abstract symbolism. In N. Haslam (Ed.), *Relational models theory: A contemporary overview* (pp. 61–146). Mahwah, NJ: Erlbaum.
- Fiske, A. P. (2017). *Relational models bibliography*. Retrieved from [http://www.sscnet.ucla.edu/anthro/faculty/fiske/RM\\_PDFs/RM\\_bibliography.htm](http://www.sscnet.ucla.edu/anthro/faculty/fiske/RM_PDFs/RM_bibliography.htm)
- Fiske, A. P., & Schubert, L. (2012). How to relate to people: The extraterrestrial's guide to Homo sapiens. In O. Gillath, G. Adams & A. D. Kunkel (Eds.), *Relationship science: Integrating evolutionary, neuroscience, and sociocultural approaches* (pp. 169–195). Washington, DC: American Psychological Association.
- Fiske, A. P., Schubert, T. W., & Seibt, B. (2017). The best loved story of all time: Overcoming all obstacles to be reunited, evoking kama muta. *Evolutionary Studies in Imaginative Culture*, 1(1), 67–70.
- Fiske, A. P., Schubert, T. W., & Seibt, B. (in press). “Kama muta” or “being moved by love”: A bootstrapping approach to the ontology and epistemology of an emotion. In J. Cassaniti & U. Menon (Eds.), *Universalism without uniformity: Explorations in mind and culture*. Chicago, IL: University of Chicago Press.
- Fiske, D. W., & Campbell, D. T. (1992). Citations do not solve problems. *Psychological Bulletin*, 112(3), 393–395.
- Frazer, J. G. (1918). *Folk-lore in the Old Testament: Studies in comparative religion legend and law*. London, UK: Macmillan.
- Frishkopf, M. (2001). Tarab in the mystic Sufi chant of Egypt. In S. Zuhur (Ed.), *Colors of enchantment: Visual and performing arts of the Middle East* (pp. 233–269). Cairo, Egypt: American University in Cairo Press.
- Gainsford, P. (2003). Formal analysis of recognition scenes in the “Odyssey.” *The Journal of Hellenic Studies*, 123, 41–59.
- Goddard, C. (2014). Interjections and emotion (with special reference to “surprise” and “disgust”). *Emotion Review*, 6, 53–63. doi:10.1177/1754073913491843
- Griffith, R. M. (1998). “Joy unspeakable and full of glory”: The vocabulary of pious emotion in the narratives of Pentecostal women, 1910–1945. In P. N. Stearns & J. Lewis (Eds.), *An emotional history of the United States* (pp. 281–240). New York, NY: New York University Press.
- Grima, B. (1992). *The performance of emotion among Paxtun women: “The misfortunes which have befallen me.”* Austin: University of Texas Press.
- Haidt, J. (2000). The positive emotion of elevation. *Prevention and Treatment*, 3. doi:10.1037/1522-3736.3.1.33c
- Haidt, J. (2003). Elevation and the positive psychology of morality. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 275–289). Washington, DC: American Psychological Association.
- Hardy, F. (1983). *Viraha-Bhakti: The early history of Kṛṣṇa devotion in South India*. Oxford, UK: Oxford University Press.
- Ho, M. Y., Chen, S. X., Hoffman, E., Guan, Y., & Iversen, V. (2013). Cross-cultural comparisons of adults’ childhood recollections: How are peak-experiences described in China and Portugal? *Journal of Happiness Studies*, 14, 185–197. doi:10.1007/s10902-012-9323-9
- Hollan, D., & Throop, J. (Eds.). (2011). *The anthropology of empathy: Experiencing the lives of others in Pacific societies*. Oxford, UK: Berghahn.
- Homer. (2011a). *The Iliad of Homer* (R. Lattimore, Trans.). Chicago, IL: University of Chicago Press.
- Homer. (2011b). *The Odyssey of Homer* (R. Lattimore, Trans.). New York, NY: Harper Collins.
- Huang, C. J. (2003). Weeping in a Taiwanese Buddhist charismatic movement. *Ethnology*, 42, 73–86.
- Jack, R. E. (2013). Culture and facial expressions of emotion. *Visual Cognition*, 21, 1248–1286.
- Janicke, S. H., & Oliver, M. B. (2015). The relationship between elevation, connectedness, and compassionate love in meaningful films. *Psychology of Popular Media Culture*. doi:10.1037/ppm0000105
- Khoroché, P. (1989). *Once the Buddha was a monkey: Ārya Śūrya’s Jātakamālā*. Chicago, IL: University of Chicago Press.
- Kuehnast, M., Wagner, V., Wassiliwizky, E., Jacobsen, T., & Menninghaus, W. (2014). Being moved: Linguistic representation and conceptual structure. *Frontiers in Psychology*, 5, 1242. doi:10.3389/fpsyg.2014.01242
- Levy, R. I. (1973). *Tahitians: Mind and experience in the Society Islands*. Chicago, IL: University of Chicago Press.
- Luhmann, T. M. (2012). *When God talks back: Understanding the American evangelical relationship with God*. New York, NY: Knopf.
- Maslow, A. (1962). *Toward a psychology of being*. Princeton, NJ: Van Nostrand.
- Maslow, A. (1970). *Religions, values, and peak-experiences*. New York, NY: Viking.
- McDougall, W. (1919). *An introduction to social psychology* (14th ed.). London, UK: Methuen.
- McDougall, W. (1923). *Outline of psychology*. New York, NY: Charles Scribner’s Sons.
- McGrath, A. (2015). *Cry dates: Strengthening bonds and evoking kama muta*. Unpublished undergraduate research paper, Department of Anthropology, University of California, Los Angeles, Los Angeles, CA.
- Menninghaus, W., Wagner, V., Hanich, J., & Wassiliwizky, E. (2015). Towards a psychological construct of being moved. *PLoS One*, 10, 1–33. doi:10.1371/journal.pone.0128451
- Mitchell, J. P. (1997). A moment with Christ: The importance of feelings in the analysis of belief. *The Journal of the Royal Anthropological Institute*, 3, 79–94.
- Montiglio, S. (2013). *Love and providence: Recognition in the ancient novel*. Oxford, UK: Oxford University Press.
- Nasr, S. H. (1980). *Living Sufism*. London, UK: George Allen & Unwin. (Original work published 1972)
- Notermans, C. (2008). Local and global icons of Mary: An ethnographic study of a powerful symbol. *Anthropos*, 103, 471–481.
- Oliver, M. B., Hartmann, T., & Woolley, J. K. (2012). Elevation in response to entertainment portrayals of moral virtue. *Human Communication Research*, 38(3), 360–378. doi:10.1111/j.1468-2958.2012.01427.x
- Panksepp, J. (1995). The emotional sources of “chills” induced by music. *Music Perception*, 13, 171–207.
- Radcliffe-Brown, A. R. (1922). *The Andaman Islanders: A study in social anthropology*. Cambridge, UK: Cambridge University Press.
- Rai, T., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review*, 118, 57–75. doi:10.1037/a0021867
- Russell, J. A. (2014). Four perspectives on the psychology of emotion: An introduction. *Emotion Review*, 6, 291. doi:10.1177/1754073914534558
- Salmond, A. (1974). Rituals of encounter among the Maori: Sociolinguistic study of a scene. In R. Bauman & J. Sherzer (Eds.), *Explorations in the ethnography of speaking* (pp. 192–212). Cambridge, UK: Cambridge University Press.
- Schieffelin, E. L. (1976). *The sorrow of the lonely and the burning of the dancers*. New York, NY: St. Martin’s Press.
- Schmidt, L. E. (2001). *Holy fairs: Scotland and the making of American revivalism* (2nd ed.). Grand Rapids, MI: Eerdmans.
- Schubert, T. W., Zickfeld, J., Seibt, B., & Fiske, A. P. (2016). Moment-to-moment changes in feeling moved match changes in closeness, tears, goosebumps, and warmth: Time series analyses. *Cognition and Emotion*. Advance online publication. doi:10.1080/02699931.2016.1268998
- Schweig, G. M. (2005). *Dance of divine love: The Rāsa Līlā of Krishna from the Bhāgavata Purāṇa, India’s classical sacred love story*. Princeton, NJ: Princeton University Press.
- Seibt, B., & Schubert, T. W. (2017). *A diary study of Norwegian kama muta experiences*. Unpublished data.
- Seibt, B., Schubert, T. W., Zickfeld, J. H., & Fiske, A. P. (2017). Kama muta: A social relations model of being moved. *Emotion*. Advance online publication. doi:10.1037/emo0000271

- Seibt, B., Schubert, T. W., Zickfeld, J. H., Zhu, L., Arriaga, P., Simão, C., . . . Fiske, A. P. (2017). *Kama muta: Similar emotional responses to touching videos across the US, Norway, China, Israel, and Portugal*. Manuscript submitted for publication.
- Shimbun, C. (2013, June 22). Participants ease stress levels at crying events. *Japan Times*. Retrieved from [http://www.japantimes.co.jp/news/2013/06/22/national/participants-ease-stress-levels-at-crying-events/#article\\_history](http://www.japantimes.co.jp/news/2013/06/22/national/participants-ease-stress-levels-at-crying-events/#article_history)
- Silvers, J., & Haidt, J. (2008). Moral elevation can induce lactation. *Emotion, 8*, 291–295.
- Sloboda, J. A. (1991). Music structure and emotional response: Some empirical findings. *Psychology of Music, 19*, 110–120.
- Sperber, D. (1985). Anthropology and psychology: Towards an epidemiology of representations. *Man (New Series), 20*, 73–89.
- Steinnes, K. K. (2017). *Too cute for words: Cuteness evokes the kama muta emotion and motivates communal sharing* (Unpublished master's thesis). University of Oslo, Oslo, Norway.
- St. Michel, P. (2015, May). Crying it out in Japan: Tokyo gets into communal bawling. *The Atlantic*. Retrieved from <http://www.theatlantic.com/magazine/archive/2015/05/crying-it-out-in-japan/389528/>
- Strick, M., de Bruin, H. L., de Ruiter, L. C., & Jonkers, W. (2015). Striking the right chord: Moving music increases psychological transportation and behavioral intentions. *Journal of Experimental Psychology: Applied, 21*(1), 57–72.
- Thomson, A. L., & Siegel, J. T. (2016). Elevation: A review of scholarship on a moral and other-praising emotion. *The Journal of Positive Psychology*. doi:10.1080/17439760.2016.1269184
- Tiwary, K. M. (1978). Tuneful weeping: A mode of communication. *Frontiers: A Journal of Women Studies, 3*(3), 24–27.
- Tracy, J. L. (2014). An evolutionary approach to understanding distinct emotions. *Emotion Review, 6*, 308–312.
- Turner, V. W. (1969). *The ritual process: Structure and anti-structure*. London, UK: Routledge & Kegan Paul.
- Urban, G. (1988). Ritual wailing in Amerindian Brazil. *American Anthropologist, 90*, 385–400.
- Vincent-Buffault, A. (1986). *The history of tears: Sensibility and sentimentality in France*. London, UK: Macmillan.
- Vingerhoets, A. J. J. M. (2013). *Why only humans weep: Unraveling the mysteries of tears*. Oxford, UK: Oxford University Press.
- Vingerhoets, A. J. J. M., & Bylsma, L. M. (2016). The riddle of human emotional crying: A challenge for emotion researchers. *Emotion Review, 8*, 207–217. doi:10.1177/1754073915586226
- Wassiliwizky, E., Jacobsen, T., Heinrich, J., Schneiderbauer, M., & Menninghaus, W. (2017). Tears falling on goosebumps: Co-occurrence of emotional lacrimation and emotional piloerection indicates a psychophysiological climax in emotional arousal. *Frontiers in Psychology, 8*, 41. doi:10.3389/fpsyg.2017.00041
- Wassiliwizky, E., Wagner, V., Jacobsen, T., & Menninghaus, W. (2015). Art-elicited chills indicate states of being moved. *Psychology of Aesthetics, Creativity, and the Arts, 9*, 405–416.
- Wuthnow, R. (1978). Peak experiences: Some empirical tests. *Journal of Humanistic Psychology, 18*(3), 59–75.
- Zickfeld, J. H. (2015). *Heartwarming closeness: Being moved induces communal sharing and increases feelings of warmth* (Unpublished master's thesis). University of Oslo, Oslo, Norway.
- Zickfeld, J. H., Schubert, T. W., Seibt, B., & Fiske, A. P. (2017). Empathic concern is part of a more general communal emotion. *Frontiers in Psychology, 8*(723). doi:10.3389/fpsyg.2017.00723