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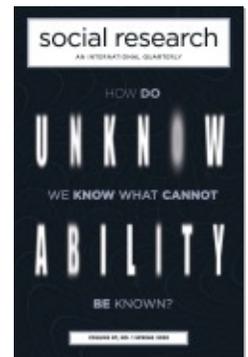
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Ways of Knowing Emotion, and What You Don't Know about Your  
Own Emotions: The Case of Kama Muta

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## Ways of Knowing Emotion, and What You Don't Know about Your Own Emotions: The Case of Kama Muta

### THIRTEEN WAYS OF KNOWING AN EMOTION

We *have* emotions, but in what ways do we know or not know them? Emotions have many facets—I will characterize 13 of them—each of which a person may know or not know. These ways of knowing are dissociable—one may know an emotion in any of these ways without necessarily knowing the emotion in any other given manner. Indeed, it is rare to know even one's own emotion in all of these ways at once. And one never is certain of all these facets in another person's emotions.

Five of these ways of knowing an emotion concern *aspects of the emotion* itself:

- (1) the interpreted perception that evokes the emotion (sometimes called the *appraisal*);
- (2) labels one uses to name it;
- (3) the sensations and signs of the emotion, including gestures and nonverbal utterances;
- (4) its valence (positivity and/or negativity of one kind or another); and

- (5) the motives that the emotion gives rise to (which one may not be aware of or, if aware, not fully able to articulate).

On any occasion, or in general, one may or may not be aware of any one of these aspects of even one's own emotion and in that respect know or not fully know the emotion. For example, if one has sensations or makes gestures, one may attend to and acknowledge them. Or one may not be aware of some or all of one's sensations and gestures, and hence in that particular respect not know the emotion.

There is a temporal dimension to knowing these five aspects of an emotion. One may know or not know any of these aspects of the emotion in the moment as immediate current experiences; as memories; or subjunctively, as plans, hopes, imagined or fictionally represented occurrences. In important respects imagination, memory, and even perception are constructive processes, based on implicit and explicit culturally informed and experientially developed models. So when one's models of an emotion generate a nonveridical construction of an emotional moment, one's knowledge of it is distorted, confabulated, or incomplete.

This leads us to the observation that living in the world can affect a person in six more ways that cognitive psychologists call *memory systems*. Each of these six memory systems is a way of knowing. Two of them are conscious and more or less articulable, hence they are called *declarative* or *explicit memory systems*. The first of the two is episodic mnemonic knowledge of an event or story, such as memory of the first time you kissed someone romantically. The other kind of declarative memory is knowledge of an idea, or having a belief; this is the seventh way of knowing an emotion, consisting of semantic conceptual knowledge, such as, for example, the concept of "falling in love."

Four of the effects of living in the world are not readily accessible to consciousness and not directly or reliably articulable, so they are called *nondeclarative* or *implicit memory systems*. One (the eighth way

of knowing) is perceptual representation of the overall sensory structure or gestalt of something, such that, for example, you recognize an emotion by just one slight sensation. A second implicit kind of memory (the ninth way of knowing) is classical conditioning, such that, for example, hearing a song that you used to dance to with your first love evokes the emotion you felt then. You can also have the habit of doing something or the competence to do it; this (the tenth way of knowing) is procedural memory, also known as *habitus*, *practice*, or *praktognosia*. For example, you may be able to make people feel welcome and cozy—without knowing how you do it, and perhaps without even knowing that you habitually do so. The fourth kind of implicit memory (the eleventh way of knowing) is operant conditioning, which consists of skills or habits that have been shaped by patterns of rewards or punishments that you may not have consciously noticed. Again, you might not even be aware that your behavior was shaped, or notice what you do in consequence. For example, a toddler may have learned to elicit affectionate attention by acting cute, perhaps without consciously realizing how she came to do it. These two explicit and four implicit memory systems are distinct ways of knowing, if by “knowing” we mean ways that we are affected by our lived experiences, and in particular ways that we adapt to function in the worlds we inhabit.

It might appear that the five aspects of emotion consist of mental phenomena that are not comparable to the six memory systems. One might even wonder whether either set could reasonably be described as “ways of knowing.” But I believe the two sets are comparable precisely because they *are* ways of knowing. As I use the concept, “knowing” consists of acts that minds can do with reference to past, present, or possible events in the world. Emotion theorists tend to describe the five aspects of an emotion as occurrent phenomena of the immediate moment, but, as noted above, one can also remember, anticipate, or imagine each aspect. Cognitive scientists describe the six memory systems as effects of the organism’s past on its present knowledge (including dispositions, motives, habits, and capacities).

This is a retrospective view of these systems. But “memory” systems are not just ways that the past affects an organism. We will see that the five aspects of emotions *and* the six “memory” systems are forms of representation of events—including representations of what is occurring in the moment, and representations of what might occur in the future, or purely be imagined. Thus, all 11 are ways of knowing.

These 11 ways of knowing can be analytically construed as individual, though they are all founded on evolved human capacities and dispositions that operate in conjunction with cultural models and practices. It’s important, then, to recognize a twelfth way of knowing that consists of species-level cognitive adaptations for knowing not just emotions but many other things, such as the system common to many vertebrates that immediately registers the number of events, up to a maximum of four. And finally we have a thirteenth way of knowing, consisting of cultural models, arts, and practices that constitute collective ways of explicit and implicit thinking and evaluating in a community or network. For example, singers, painters, and moviemakers depict emotions—as do scholars like me. Both the twelfth and the thirteenth ways are cumulatively acquired ways of knowing in a population; they are products of the history of the species or the community.

Here I will illustrate these 13 kinds of epistemic mentation by examining the ways of knowing one common emotion, *kama muta*.

## **THE FIVE FACETS OF AN EMOTION AS WAYS OF KNOWING IT**

Let’s begin by looking at the facets of one emotion that has only recently become scientifically well known. Imagine that you are deeply in love, and when you least expect it your partner proposes to you: “I want to be with you forever, share my whole life with you. You are my everything and I want to be yours.” (To vicariously experience the emotion this might evoke, you may wish to stop and watch this commercial: <https://youtu.be/NemtQx0m0Ss>, the story of Sarah and Juan, accessed April 23, 2020.) If your true love thus proposed

marriage, it would doubtless make your mutual love suddenly much more salient, so you would know this experience as the moment when your love was wonderfully realized, as a moment of becoming one—an appraisal of a salient change in the relationship (1). In addition, you would likely know this moment in a somatic sense as a set of *sensations and signs* (3) that might include a feeling of warmth in the center of your chest, putting your hand on your heart, shedding tears, getting choked up, having goose bumps, taking a deep breath, being exhilarated, or even feeling as if you were floating. If you tried to represent to yourself or others how you felt when proposed to (and perhaps at the end of the abovementioned video if you watched it) you might say you felt *moved*, a label that would be a way of knowing your experience as a token of a type, *moving* experiences (2). That is, you would name the emotion. Apart from the label you used, you would also know it as an extremely *positive* experience (4), a high point of your life. And you would further know this moment as a desire to kiss and hug and be with your partner always, to care for and protect him; you would know this emotional moment as a *motivation and any consequent actions* (5).

An emotion may occur without a person noticing all five of these facets, or indeed any of them. Something else that is going on may absorb their entire attention, or they may be so distracted by one facet that they don't pay attention to the others. Moreover, while each of the facets may be momentarily present in short-term working memory, very little of what is in working memory is transferred to any long-term memory system. Especially if the person does not have a readily accessible cultural model (schema) for the emotion, they may never fully encode it in long-term memory. They may never encode it at all, with the result that a few minutes later they do not know that they ever had the experience. Or they may encode it incompletely, in a mnemonic representation that incorporates some facets and leaves out others. For example, people have reported to me noticing or remembering tears without knowing why they were crying; they failed to notice the appraisal of sudden intensification of love. Conversely,

a person may focus all their attention on the sudden salience of the intensified love, not noticing her tears or the warm feeling in the center of her chest. A person may imagine how perfectly joyous the positive feeling would be when they reach a special spot in the forest, without thinking about the motives that will engender, or knowing quite how to label the feeling they anticipate. In such cases, one's knowledge of the emotion is incomplete. Furthermore, to the extent that the cultural folk model of the emotion is not entirely veridical, a person's knowledge of an emotional experience will be incomplete or distorted, or incorporate features that were not actually present in it.

### **META KNOWLEDGE: THE SCIENTIFIC CONSTRUCT**

While knowing any or all of these five facets of the emotional moment, you would probably not recognize them as facets of the scientific construct called *kama muta*, because this emotion has only recently been theorized and studied in detail (see [www.kamamuta-lab.org/publications](http://www.kamamuta-lab.org/publications)). The scientific construct is one among many collective cultural ways of knowing the emotion, the thirteenth kind of knowing. Though just about everyone experiences this emotion, sometimes intensely, hardly anyone knows that it exists as such; it's not on either folk or scientific lists of emotions. Not knowing the construct, you would not conceptualize the kind of events that cause it: sudden intensifications of communal sharing relationships, which are one of the four fundamental forms of human sociality (Fiske 1991 and 1992). Without knowing the *kama muta* construct, you may not perceive that the same emotion evoked by a marriage proposal is evoked by the sudden salience of other sorts of love and connection, closeness, or belonging, such as when a kitten licks your hand and curls up in your lap (Steinnes et al. 2019). Nor would you appreciate that it was essentially the same as the affect you have when you feel one with your victorious soccer team or with the marchers in a social movement demonstration, at a moment of perceived union with your god, when you hear a poet recite traumas that you yourself have suffered, or when you feel accepted by fellow participants in

an eating-disorders treatment program (Fiske 2020). If you labeled it *moved* you probably would not realize that in other contexts you may label this emotion as *patriotism*, *a heartwarming moment*, *gratitude*, *gay pride*, *team spirit*, *nostalgia*, or *being touched by the spirit*. Nor would you be familiar with the labels people give the emotion in other cultures, or the myriad cultural practices, institutions, roles, arts, and artifacts that evoke *kama muta* in every culture in the world, much less the process of cultural evolution that shapes them (Seibt et al. 2017; Zickfeld et al. 2018; Fiske 2020).

Of course, you would not be aware of the evolved adaptive functions of *kama muta* in terms of biological fitness, its phylogeny, or its ontogeny—much less its neurochemistry and neuroanatomical substrates (which no one knows yet). In contrast, knowing the *kama muta* construct would enable you to connect any one such experience to other *kama muta* experiences you have had and will have in the future, as well as those you encounter in others, in literature and media. We have found that knowing *kama muta* enables us to notice it more often, to appreciate it more deeply and more subtly, and to share it more fully.

People tend to take for granted that a person must know the emotions they themselves feel better than anyone else does, because they know their own mind directly. However, in various senses this is generally not true. Whether or not a person can have an “unconscious” emotion because they repress it, as psychodynamic theorists claim, it is a fact that the reflective, articulable aspect of cognition—what we can consciously know or say—simply does not have access to most neurocognitive processes (Carruthers 2011). You don’t know how you process the typographic shapes on this page into words and syntax so as to understand this text. You don’t know how you retrieve episodes from memory or generate ideas. In particular, we do not have *direct* conscious knowledge of our own emotions. Based on perceptions of the meanings of the culturally constituted situation, together with our bodily states, actions, and words, we make inferences about our own emotions in somewhat the same manner in which

we make inferences about others' emotions. If you perceive someone with tears on her cheeks, stooped over a dog hit by a car, you make an inference about that person's emotion—using your sociocultural knowledge in much the same way whether the person you perceive is a stranger or yourself.

Social, cultural, and linguistic constructionists define “emotion” as, roughly, whatever affective state people construe themselves or others to have. But this definition is too narrow. Certainly the meaning of a social relational event and its psychological consequences are informed by the way people construe it, but it is equally certain that there is much more to emotions than what people intentionally make of them. Most emotion scholars agree that emotions are constituted not just by their labels but also by their particular appraisals, sensations and physiology, valence, and motives or action tendencies, along with biological processes not yet well understood (for an elegant review, see Scherer 2000). Adopting that broader definition of “emotion,” we encounter a surprising aspect of *kama muta*: if you are familiar with the construct you may recognize it in someone else while the person experiencing it does not recognize it—and could not, because he doesn't know the *kama muta* concept. He may not even appreciate that he's experiencing an “emotion” at all. Indeed, he would not be able to appreciate that he's experiencing an *emotion* in a culture and language that do not have any category corresponding to the contemporary English lexeme “emotion” (Wierzbicka 1999 and 2014).

There is another sense in which a person may not know his own emotion: when his emotion concepts are invalid. An afflicted nineteenth-century person might label her own condition as “hysteria” or, say, “excess of choleric humor,” though medical science now knows that these disease concepts are invalid. Similarly, contemporary emotion concepts chauvinistically based on English vernacular lexemes such as *anger*, *fear*, *sadness*, *disgust*, *happiness*, and *contempt* are likely to be invalid (Fiske 2019). If so, when people understand their own or others' emotions through these parochial concepts, they are

scientifically mistaken—however culturally apt and socially felicitous their discursive deployment of the lexemes. Consider the fact that the use of vernacular lexemes such as *dragon*, *ghoul*, or *ghost* may be felicitous in a given conversation, although they are not natural kinds that exist outside the culture, language, or discourse. That extends to scientific concepts as well: to the extent and in whatever manner the *kama muta* construct ultimately turns out to be erroneous, when we know an emotion as “*kama muta*” we are misunderstanding it. And of course the point extends to folk constructs such as the contemporary standard English lexemes *anger*, *disgust*, *happiness*, or *sadness*; if, as I believe, these lexemes are not valid scientific constructs, then we misunderstand our emotions when we think of them in these terms (Fiske 2019).

All in all, what we see so far is that one may know any of the five aspects of an emotional moment without necessarily knowing any or all of the other aspects, and without knowing a scientifically valid construct of what we experience, remember, intend, imagine, or observe. This brings us back to the issue of what it means to “know” and what other ways there are to know an emotion.

## **THE SIX “MEMORY SYSTEMS” AS WAYS OF KNOWING EMOTIONS**

What emerges from the epistemic analysis of the five aspects of emotions, together with consideration of the *kama muta* scientific construct, is that, whether the emotion event is represented as past, present, future, fictional, or hypothetical, “knowing” consists of a mental capacity to do something with the emotion. The knower is able to make something of it. Interpretive appraisal, somatic response, labeling, feeling good, and devoting and committing are five ways of making something of an event—present, past, or imagined. But these are not the only things the mind can do with an emotional event. One can also reflectively conceptualize it (7), or shape it into an episode or narrative (6). Also, without reflective awareness of what one is doing, one can produce an emotion (10), perceptually recognize its sensory

gestalt (8), be conditioned to feel it (9), or have one's behavior shaped by it or so as to produce it (11). These are what cognitive psychologists call *memory systems* because the cognitive scientists who study them have focused almost entirely on retrospective knowledge, that is, on the ways in which a person's past experience affects the person.

In the cognitive science of memory systems, "memory" means any cognitive consequences of experience, including not only what a person can say about experiences, but also any resulting capacities, motivation, behavior, and affect (Schacter and Tulving 1994; Squire and Knowlton 1995). However, in addition to retrospective knowledge, I believe that the six so-called "memory" systems are also ways of experiential knowing in the moment of the event, as well as ways of imagining, desiring, intending, and planning an emotion. Though there is no inherent ontological barrier to doing so, to my knowledge, this memory systems taxonomy has not been used to analyze knowledge of emotions per se (though for another approach to cognizing emotions somatically, see Niedenthal et al. 2005; Barsalou 2009). So let's see how memory systems are ways of knowing emotions, not only past but also present, future, or imagined.

## **THE TWO EXPLICIT MEMORY SYSTEMS AS WAYS OF KNOWING**

The first "memory" system is that in which you can experience an event, encode it, and later retrieve *episodes* of kama muta. This is the sixth way of knowing. Thus you remember the time your lover proposed marriage: you recall it as a multisensory scene or an event with a narrative structure.

Cognitive scientists focus on events in personal experience, so they sometimes call this "autobiographical memory." But people can also identify and remember events that they have observed or heard about in others' lives, encountered in fictional representations, or simply imagined. Episodic knowledge of kama muta consists of perception and recall of events in which one's own communal sharing (CS) relationship suddenly intensifies, but also events in which

one observes, hears of, imagines, or anticipates suddenly salient CS: think of a wedding, the birth of a baby, moments of special kindness, a sentimental novel or a “chick flick.” When you’re thinking of these, you’ve having episodic memories of them. Similarly, while an event is occurring, a person may perceive what is occurring as an event framed with reference to its location in time and space and perhaps as an instance of some sort of cultural script. That is, one experiences a moment as an episode or story that one is participating in. Equally, one may seek, plan, or imagine an episode in the mind, in art, writing, music, or visual media. Events may be known as brief moments, like a snapshot—often with multisensory impressions—but episodic memories often have a narrative structure.

Like all memory and knowledge, episodic memories are both selective and schematically constructed: in remembering a particular episode, we draw on the features and structures of our experiences of many first-person, observed, fictional, and imagined experiences. Episodic knowledge of *kama muta* (or anything else) is always culturally informed. We expect, perceive, attend to, and mnemonically schematize the experience according to cultural prototypes and precedents, including others’ accounts of similar experiences, such as fairy tales, plays, novels, cinema, and other media that inspire us. Likewise, we can creatively know and hence explicitly construct and present a short story, produce a painting, fabricate a lie, or conceive a plan. In all cases, every time we recount a *kama muta* event we shape our narrative to fit the evocative communicative models that our culture provides. All of this results in an intriguing limit of episodic knowledge: we cannot fully and definitely distinguish between what we have personally experienced firsthand and what we have observed, read about, or imagined. The result is that we can vividly recall an event that we are certain we experienced firsthand, when in fact the actual event was quite different from the memory that we recall—or we just did not actually experience that event in person (Loftus 1975 and 2005; Mitchell and Johnson 2000; Schacter, Chiao, and Mitchell 2003). That is, people sometimes confuse what they have personally

experienced with what they have observed, heard of, imagined, or anticipated.

A major limitation of episodic knowledge is that many things happen in our lives that we totally fail to attend to, or that we merely notice in passing but that quickly fade from short-term perceptual working memory without ever being encoded in long-term episodic memory. People cannot possibly recall most things that happen to them. When we do recall an event, we recall very selectively, so that we know certain features of what happened while other features are irretrievably lost. Perhaps the strongest factor in the selection of episodes to retain in memory is emotion: the more intense and the more negative the emotional experience of an event, the more likely we are to remember it (Kensinger 2009; Levine and Edelman 2009). The extreme case is post-traumatic stress disorder (PTSD), where episodic memories of extremely aversive events uncontrollably intrude, diminishing well-being. But *kama muta* moments, intrinsically positive, are also vividly memorable, often for an entire lifetime—and people like to recount them, or share them via photographs or social media, so others come to know them secondhand, incorporating them in turn among their episodic memories.

In the memory systems taxonomy there is another conscious, explicitly articulable way of knowing something: having a semantic *concept* of it, which memory scientists take to entail the capacity to verbally articulate it. This is the seventh way of knowing: “semantic” memory, in the sense that a person has learned or formulated declarable propositions. In particular, a person may have beliefs, ideas, or theories about emotional experiences. Semantic knowledge transcends specific events; one can think about and discuss concepts without bringing to mind particular episodes. Most semantic knowledge is acquired from one’s culture, including scientific ideas such as *kama muta* theory; this may develop incrementally over many years (Harris, de Rosnay, and Pons 2018; Pons and Harris 2019). Note that in the denotation of a way of knowing as *semantic*, there is no implication that the beliefs are objectively true by any given set of criteria: it

is semantic if it is a belief, or even a conjecture (for example, believing the world is flat, or theorizing that the universe is expanding).

A person may have an episodic memory of an emotion event (or set of events) without necessarily having any abstract reflective conceptualization of it—perhaps you can remember an episode of *nostalgia* without articulately theorizing what *nostalgia* is. Conversely, you may have a conceptualization of *pride* without recalling the moment when you learned that concept, and perhaps without even recalling when you last felt *pride*. You may have definite ideas about *being touched by the spirit* even if it has never happened to you. If you have studied psychological anthropology, you may have learned to conceive of emotions that motivate head-hunting, emotions that motivate self-torture to appeal to spirits, without yourself ever feeling either. In short, neither semantic nor episodic explicit declarative knowledge implies the other and neither is directly translatable into the other.

Whether a person is willing to recognize, acknowledge, recall, or report *kama muta* experiences depends on evaluative aspects of their cultural models of the emotion. For example, one's model of "a soldier" may prescribe that the soldier does not feel *kama muta* when he encounters a vulnerable enemy, or when an enemy is kind to him. In that case, soldiers may be loath to remember such sentiments. Furthermore, episodic mnemonic acknowledgment of *kama muta* experiences could be blocked in a person whose experiences of *kama muta* have been consistently followed by a parent's rejection or a partner's abuse. Affect consciousness, which encompasses both episodic and semantic knowledge of emotion in one's life, is important for mental health and for healing through psychotherapy (Solbakken, Hansen, and Monsen 2011). In particular, it enhances well-being to have affect consciousness of the tenderness-care emotion (in Norwegian, *ömhhet*), which closely corresponds to *kama muta* (Solbakken et al. 2012). Conversely, one might imagine that people with schizoid or avoidant personality disorder, along with those who are highly psychopathic or autistic, may not know *kama muta* because they rarely

or weakly experience it. In any event, one's emotions are important facets of the self, so each of these ways of knowing *kama muta* is a constitutive manner of knowing oneself.

## THE FOUR IMPLICIT MEMORY SYSTEMS AS WAYS OF KNOWING

Episodic and semantic knowledge are grouped together as the two forms of *explicit* or *declarative* knowledge because to a considerable degree they are communicatively articulable; you can use language to explicitly tell me about your concepts or events—though some conscious experiences may be hard to verbalize adequately. There are also four *implicit memory systems*, consisting of ways that one may be affected by experience without necessarily being aware of the effects or able to articulate them. The first implicit form of knowing is *perceptual representation* of the sensory structure of some aspect of the emotional moment; for example, the melody of a love song. This is the eighth way of knowing an emotion. Most of the research on perceptual representation is on visual systems, but there are auditory, kinesthetic (proprioceptive), and presumably various forms of tactile and perhaps even taste, smell, and interoceptive long-term memory representation systems. Perceptual knowledge consists of representations of the sensory configuration, the gestalt. The morning after returning from a long trip, waking up to see your partner's ear, you picture his whole face, perhaps feeling *kama muta* from knowing that he's beside you. Walking with your partner in the garden later, you see him reach into his pocket and pull out a small, felt-covered rectangular object and kneel in front of you. Your perceptual representation system immediately fills in the rest before he says anything.

Many emotion researchers formerly believed that people have definite, distinct, innate visual-representation knowledge of the facial expressions of “basic” emotions, but advances in research methods and better studies show that this is not the case (Fernández-Dols and Russell 2017). However, people do have culturally informed perceptual representations of the facial expressions (Fridlund 2017), acts,

and gestures that mark the intensification of each kind of communal sharing (CS) relationship in their culture; for example, to bless or welcome someone by kissing in some cultures, sniffing each other's breath in others, spitting on them in others (Godbey 1914). This perceptual knowledge of such things includes representations of the feel of kisses, sniffs, and spit, along with the aural representations used to recognize the phonemes of the language. These perceptual representation systems enable people to recognize what is happening (Fiske 2004).

Perceptual representation is distinct from another implicit kind of knowing, *classical conditioning*. This is the ninth way of knowing. If your former partner wore a distinctive cologne, years later a whiff of it may evoke kama muta. Even if you don't consciously notice the scent or consciously recall specific moments of smelling it, your emotional response reveals that you unconsciously "know" the scent, in the sense that you have a conditioned response to it. Likewise, for a Muslim who has heard the call to prayer five times a day before joining others in worship that frequently evokes kama muta, simply hearing the call to prayer may itself evoke a conditioned kama muta response.

In some cultures, in some contexts, for some culturally defined kinds of persons, kama muta experiences may be associated with other emotions such as shame and guilt. For example, if a boy is mocked for showing kama muta at cute animals or "chick flicks," when he grows up he may find he has become conditioned to feel shame when he feels kama muta: he "knows" kama muta as shameful.

The third form of nondeclarative knowledge of kama muta is the *procedural competence* to evoke it (for an early influential recognition of procedural knowledge, see Ryle 1945–46). This is the tenth way of knowing kama muta. Procedural knowledge is not just special skills; it also includes ordinary habits and practices (Mauss 1934; Bourdieu 1977). Modern kama muta examples of procedural knowledge include crying when winning an Academy Award; kissing on the cheek(s) or mouth when reunited with a loved one; and cultural hos-

pitality practices, such as, in a traditional East African pastoral culture, kindly inviting your age-mate to sleep with your wife if the two wish to do so. Many poets, songwriters, novelists, screenwriters and directors, religious and political leaders, and marketing personnel are proficient at evoking *kama muta*—without conceptually knowing what it is they are evoking or being able to articulate how they do it. For centuries, storytellers and writers around the world have manifested the procedural knowledge to evoke *kama muta* through a universally evocative plot (Fiske, Schubert, and Seibt 2017b).

Today most people have some procedural ability to reproduce the cultural practices of staging a *kama muta*–evoking proposal, wedding, surprise party, homecoming, or special gift-giving—a skill they may have refined by participating in such events in person or viewing YouTube videos of especially effective stagings. But being able to evoke or perform *kama muta* is rarely based on well-articulated semantic conceptualization of what causes *kama muta* or even what one is trying to evoke. My colleagues and I have found that many writers “know it when they see it,” but can’t explain how they do it. Conversely, I, for example, have a thorough semantic knowledge of the *kama muta* concept but lack the procedural competence to write a story or perform a scene that evokes it.

Alongside capacities to evoke emotions in others, an important kind of procedural competence consists of skills and practices for regulating one’s own potentially noxious emotions and for fostering one’s “positive” emotions. This practical capacity for emotion regulation has substantial benefits for mental health and social functioning (Koole 2009; Sheppes, Suri, and Gross 2015).

In certain respects, this way of knowing resembles the sixth memory system that cognitive scientists distinguish, which consists of the shaping of one’s behavior by the rewards it evokes. Imagine a singer on the concert stage, tuned in to the responses of her audience. When she evokes *kama muta* in the audience she feels *kama muta*, and she probably feels other rewarding emotions as well. The more *kama muta* and adoration she perceives in the faces in her audi-

ence, in their raised arms and swaying bodies, or in the applause and shouts, the more rewarding it is to sing for them. Her singing naturally varies, and without reflecting on it, over time she is likely to do more of whatever evokes perceptible kama muta in her audiences, and less of what does not. This is *operant conditioning*, the eleventh way of knowing kama muta. The singer may not be aware of how she is changing the way she sings, or even aware that she is changing. The selection and shaping of behavior also occurs at the cultural level; singers who evoke kama muta are more likely to get bookings, attract bigger audiences, sell more songs, and be more frequently and attentively imitated by other singers. This is cultural evolution of artistic practices, in which the psychological features of kama muta are the niche that selects for evocative practices (Fiske 2020).

I have two big dogs that I used to bring to a café where I sat outside and wrote. One of the dogs, Dash, learned to get a lot of attention and affectionate patting by placing himself smack in the middle of the sidewalk, sitting and looking hopefully at passersby. When he heard “Oh, what a cute dog! May I pat him?” from someone whose kama muta he evoked, he would come and lean against the person’s leg, get his head stroked, and then lie down at their feet. Then he would roll over onto his back, looking sweetly up at the speaker. The more kama muta he evoked, the more patting and cooing he elicited. He became very proficient at it—as many dogs do. (Dash thus made me realize that cuteness evokes kama muta, which controlled studies later confirmed [Steinnes et al. 2019]). Canine proclivities to be conditioned in this way presumably affect the evolution of dogs: without necessarily being fully aware of just what they are doing, breeders of dogs to be sold as companions may be more likely to selectively breed dogs that are prone to be operantly conditioned to evoke kama muta (e.g., Kaminski et al. 2019).

So these are 11 ways of knowing, each of them partial, each of them dissociable from each of the others. This dissociability raises many other issues, including a methodological one. By far the most widely used method of measurement in psychology is self-report. If

there are many ways of knowing one's emotions, if none of these are equivalent, and if a person may lack any of these kinds of knowledge or be mistaken about any of them, then the design and interpretation of self-report measures of emotion must take those possibilities into account. A particularly egregious epistemological error is to rely on participants' ratings of vernacular labels for their emotions (Fiske 2019). If a person may know an emotion in any or all the 10 other ways without necessarily having any declarative conceptual representation of it, or without a valid concept of it, then self-report fails.

### **WAYS OF KNOWING TOGETHER: INNATE AND CULTURAL**

The 11 ways of knowing we have considered thus far are, analytically, more or less individual ways of knowing. But this brings us to a completely implicit kind of knowing that memory scientists ignore because it is not a result of experience during an individual lifetime: *innate cognitive adaptations*. This is the twelfth way of knowing an emotion. A cognitive adaptation consists of evolutionarily selected knowledge compiled over many generations (Barkow, Cosmides, and Tooby 1995). For example, human minds have evolved innate knowledge of the social equivalence relation that we use to construct culturally informed communal sharing relationships (Fiske 1991; 1992; 2004). The innate psychological mechanism of *kama muta*, called the *kama muta* "psype," has evolved to be tuned to attend to and respond in a culturally sensitive manner to any sudden intensification of culturally implemented communal sharing relationships (Fiske, Schubert, and Seibt 2017a; Fiske 2020). In this respect, just as the mammalian appetite for sugars represents innate knowledge of the caloric value of fruits, the human *kama muta* psype represents innate knowledge of the fitness benefits of auspicious opportunities for devoting and committing to beneficial communal sharing relationships.

It goes without saying that the innate knowledge comprising the *kama muta* psype consists of neural, hormonal, and ontogenetic processes that are mostly opaque to direct reflective consciousness: without scientific education, we neither know that we have such an

adaptation, nor know how it functions (see Carruthers 2010). Innate knowledge is the ultimate foundation of all other kinds of knowledge insofar as human neurocognitive systems underlie all mental processes—though no form or instance of knowledge is simply reducible to its evolutionary substrates.

Likewise, as I have repeatedly indicated, all forms of knowing are culturally informed in various ways to varying degrees. Indeed, it makes sense to construe *cultural models and practices* as a thirteenth mode of knowing emotions, crosscutting all the others. Every culture provides explicit conceptual models of persons, selves, minds, and affects—models that infuse each person’s understanding of their own and others’ experiences (Holland and Quinn 1987; Fiske et al. 1998). Metaphors comprise an important type of cultural model (Lakoff and Johnson 1980), as Lakoff (1987, 380–409) illustrates with late nineteenth century North American standard English metaphors for *anger* as heat, fire, and so forth. Every culture also provides roles, institutions, arts, and artifacts that evoke *kama muta* and give it meaning. For example, *kama muta* may be performed and evoked in laments by expert mourners, by ululating, by singing a country and western song or an aria, or by certain kinds of preaching and oratory. Through our cultures we also know how to appropriately devote and commit ourselves to communal sharing relationships: by texting a heart emoji, bringing flowers, or giving a tender puppy to eat. Practices, institutions, roles, artifacts, and art that have culturally evolved because they evoke an emotion have been termed drivers of the emotion (Fiske 2020). Culturally generated knowledge is an aspect of all our ways of knowing.

To know *kama muta* as a characteristic of our cultural species we must know the full range and contexts of events that intensify all the sorts of propitiousness of all the implementations of communal sharing relationships that the psype responds to (for a wide but by no means comprehensive selection, see Fiske 2020). And we still don’t know *kama muta* until we know the full range of the output of the psype: the varied forms of devotion and commitment to communal

sharing relationships that are culturally apt in particular times and places. In short, even to know any instance of any of the individual ways of knowing kama muta, we must know kama muta in diverse cultures across the species as a whole.

### **THIRTEEN WAYS OF KNOWING KAMA MUTA**

In sum, each experience, memory, or imagination of kama muta is comprised of one or more of several distinct ways of knowing. Knowing a kama muta experience in any one of these ways does not imply knowing it in any of the others. They are not interchangeable—any one way of knowing a kama muta experience isn't immediately or fully translatable into other ways of knowing it. Yet they are typically comingled, and complementary, and often dynamically affect each other. Typically we know a kama muta experience in several of these ways, but not necessarily all of them, and some of the ways of knowing it may not be integrated with some of the others.

This essay offers a special kind of declarative semantic conceptualization: scientific meta-knowledge of ways of knowing. Obviously one may experience kama muta without this meta-knowledge, but knowing it affects all the other ways of knowing it. It goes without saying that all my claims about knowledge in this article are provisional, and some are contentious in certain respects. Of course we cannot possibly know all the future ways of knowing that will be devised, so we can't know just how our current knowledge will be superseded, and what, if anything, is ultimately unknowable. We can simply have faith that future scientific theories and methods will transcend what we know now. There is no reason to believe that we are anywhere near any intrinsic limit to the knowability of emotions—or that there is any limit to what can be known.

Meanwhile, we can keep in mind the 13 facets of what we may or may not know about our emotions:

### The (Five) Emotion Components

Appraisal

Sensations

Valence

Labels

Motivation

### The (Six) Memory Systems

Semantic/conceptual

Episodic

Sensory structure

Classical conditioning

Operant conditioning

Procedural capacities and habits

### Population Level

Innate evolved cognitive-affective-motivational adaptations.

Cultural folk models, practices, arts, narratives, and concepts.

So now you know.

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