1.1 Kama muta evoked by connecting to humanity

Yaden et al (2016) conceptualize this emotional “overview effect” as a combination of “awe” and “self-transcendental experience.” Regarding self-transcendent experiences, they write:

During these kinds of experiences, people can feel a sense of connection with other individuals, humankind, and even the entirety of existence . . . . Such experiences, though temporary, arouse visceral feelings of compassion and personal connection with others; in the case of the overview effect, that sense of connection may encompass the entirety of Earth and its inhabitants. (Yaden et al 2016:5).

Yaden and colleagues do not address the bodily sensations and physiological signs of self-transcendence, which astronauts may not have widely reported (and which perhaps may be affected by weightlessness or stresses of spaceflight). But the astronauts certainly report intensified devotion and commitment to humankind or the earth as a community – the motivational facet of kama muta is definitely present. It appears that looking at the earth from space consistently evokes extraordinarily intense experiences of kama muta.

A person can feel communion with something other than a specific being or set of beings, and can feel that they belong to a community that is not physically present and whose members they don’t personally know. Even when a person feels solidarity and identification with their clan, university, community, ethnic group, military service, or nation, this is an “imagined community” (the term is Anderson’s 2006) most of whose members the person could not identify by sight or enumerate and has never encountered face to face. Similarly, many people sometimes feel deep feeling of loving unity with deities who have no corporeal existence, being purely psychosociocultural constructions. People are also kama muta with beings they know to be simply made up: fictional characters in narratives, novels, or animated movies.
1.2 Koestler’s kama muta upon reconstructing Euclid’s proof

Imprisoned during the Spanish Civil War and expecting to be shot any night, Arthur Koestler began scratching analytic geometry formulas on the wall of his cell. Then he recreated and wrote on the wall Euclid’s proof that the number of primes is infinite.

Since I had become acquainted with Euclid’s proof at school, it had always filled me with a deep satisfaction that was aesthetic rather than intellectual. Now, as I recalled the method and scratched the symbols on the wall, I felt the same enchantment.

And then, for the first time, I suddenly understood the reason for this enchantment: the scribbled symbols on the wall represented one of the rare cases where a meaningful and comprehensive statement about the infinite is arrived at by precise and finite means. The infinite is a mystical mass shrouded in a haze; and yet it was possible to gain some knowledge of it without losing oneself in treacly ambiguities. The significance of this swept over me like a wave.

. . . . I must have stood there for some minutes, entranced, with a wordless awareness that ‘this is perfect—perfect’; until I noticed some slight mental discomfort nagging at the back of my mind—some trivial circumstance that marred the perfection of the moment. Then I remembered the nature of this irrelevant annoyance: I was, of course, in prison and might be shot. But this was immediately answered by a feeling whose verbal translation would be: ‘So what? is that all? have you got nothing more serious to worry about?’—an answer so spontaneous, fresh and amused as if the intruding annoyance had been the loss of a collar-stud. Then I was floating on my back in a river of peace, under a bridge of silence. It came from nowhere and flowed nowhere. Then there was no river and no I. The I had ceased to exist. . . .

When I say that ‘the I had ceased to exist’, I refer to a concrete experience that is verbally as incommunicable as the feeling aroused by a piano concerto, yet just as real—only much more real. In fact, its primary mark is the sensation that this state is more real than any other one has experienced before. . . .

What distinguishes this type of emotional experience from the emotional enthrancements of music, landscapes or love is that the former has a definite intellectual, or rather noumental, content. It is meaningful, though not in verbal
terms. Verbal transcriptions that come nearest to it are: the unity and interlocking of everything that exists, and inter-dependence like that of gravitational fields or communicating vessels. The 'I' ceases to exist because it has, by a kind of mental osmosis, established communication with, and been dissolved in, the universal pool. This is the process of dissolution and limitless expansion which is sensed as the 'oceanic feeling', as the draining of all tension, the absolute catharsis, the peace that passeth all understanding. (Koestler 1954:351-2)

Koestler goes on to describe coming back to ordinary reality, but with a feeling of recharged, energized invigoration. He reports that afterwards he had such experiences two or three times a week, then less often, and once or twice a year after being liberated – but he could never induce in voluntarily. The importance of this experience to Koestler is indicated by his use of a phrase from this passage as the title for the entire three-volume autobiographical series: An Arrow in the Blue. (In Chapter 4 we will illuminate the significance of the fluid essences metaphors.)
1.3 Laski’s description of moments of “transcendental ecstasy”

Evidently unaware of Maslow’s conceptualization (and of the conceptualizations of religious mysticism we will explore in Chapter 12), Marghanita Laski (1961, 1980), an English journalist and novelist, investigated what she called “transcendental ecstasy.” Laski conducted 63 interviews, made notes on English literature, and read 24 secondary historical accounts of mysticism. Combining the three types of sources, she apparently found a total of 112–114 accounts of such events (1961:37, 488). She asked her respondents whether they had had experiences of “transcendental ecstasy,” and if so, asked them to describe it, say what induced it, and, in orders of magnitude, how often they had experienced it. She was explicitly seeking extraordinary, highly value experiences that are rare in a lifetime; she sought to exclude experiences such as making love, listening to music, reading poetry, or seeing a rainbow, yet her respondents in fact reported that the same “triggers” that on very rare occasions evoke transcendental ecstasy also frequently evoke similar but much milder “response experiences” that they found “beneficial and valuable” (Laski 1961:5, 96ff, 190ff, 98, 1980). Laski also sought to discover whether moments of scientific insight and artistic inspiration consisted of transcendental ecstasy, and concluded that they often do. In that respect, her construct is broader than kama muta.

Laski’s analysis is explicitly evaluative, and accordingly she classifies transcendent ecstasy experiences into a scale of progressively “better” stages or categories:

- **Adamic**: joyful ecstasies “characterized by feelings of purification and renewal, of life and the world transformed and of loving-kindness to all” (1961:369). “Adamic” references the idea of Adam before the fall, in harmony with everything; Laski also calls it a state where people are “loved brothers and sisters,” tender and caring about each other, where “normal repulsion is overcome in a flood of love” (1980:24, 25). Laski regards this as an immature and unsophisticated kind of ecstasy that is typical of children from eight to early adolescence, or adults with little education (Laski 1980:17).

- **Knowledge-contact**: a feeling of creative discovery or knowing, often, when more advanced, through contact with some being or entity.

- **Union**: A feeling of complete contact or union with someone or something, with loss of any sense of the distinctiveness of the self.

In her second book, Laski (1980) emphasizes that the most common result of “full” ecstasy, as well as lesser, more ordinary but congruent response experiences, is “falling in love: that is the creation, for the time being, or a new focus of obsessive interest... falling in love with [the] triggers, falling into sexual and non-sexual love with people, and falling in love with results” of intellectual discoveries or creative projects (1980:49). When one falls in love with a trigger such
as a mountain, Paris, Emily Brontë’s poetry, an actor or singer, a cause or social movement, or mathematical elegance, one discovers a lasting focus of value. Thus ecstasy commonly results in motivation to be charitable to the needy—even to people Laski says would otherwise evoke disgust, such as the poor, the aged, the ugly or deformed, and children (1980:79–112).

The most common triggers her interviewees reported and the number of reports among her 63 respondents were (with some respondents reporting more than one)

- Natural scenery, [natural] objects, etc., especially mountains and also water: 48
- [A person’s own act of] creative work [doing art]: 46
- Scientific knowledge: 45
- Sexual love: 31
- Childbirth: 28
- Religion: 26
- Art (including music and poetry): 19
- Exercise, movement (e.g., swimming, flying): 16
- Beauty: 7
- Miscellany: 48

(Laski 1961:26–27)

In her second book, Laski mentions other triggers: “cathedrals and ruins, together with some other objects, events, and ideas which invoke a sense of the past”, and moments with friends or charismatic people (1980:114).

In addition to her interviews, Laski analyzed letters written to the BBC in response to a 1957 radio broadcast of a recording of a childbirth; many women’s letters described ecstatic experiences related to childbirth (Laski 1961:139–144). Apparently the women’s experience of ecstasy often occurred some time after the actual moment of birth. Women often reported that only one of their deliveries resulted in an ecstatic experience. Laski asserts that the lasting effect of ecstasy at the birth of one’s child is devotion to the child, but she doesn’t provide evidence for that assertion (1980:138).

With regard to sensations, Laski (1961:77,91) found that the most often mentioned have to do with the heart; breathing; and “tinglings and flashes and stabs and shocks,” “shivers,” or “electric sensations.” Reports describe the heart as becoming “warmer, softer, larger, higher, and finally releasing a flow of liquid” (1961:78). Reports also often suggest “a deep breath before the ecstasy, a holding of the breath up to the point of climax, and a need to take deep breaths afterwards” (p. 79). Without giving frequencies, Laski notes that “A common claim is that after
these experiences the ecstatic finds himself in tears” (1961:85–86). Around 7% of the interviewees, 6% of the literary sources, and 4% of the religious histories reported a quasi-physical feeling up being “up,” soaring or flying (1961:35, 67–68). It is also notable that 7 to 9% of the reports from all three sources reported some noetic feeling: they had the sense of new and certain knowledge, although not always clarity about the exact substance of that knowledge.

Laski did not ask how long the experiences lasted, but in all types of sources she found that people often specified that their experience of transcendent ecstasy was extremely brief, from a moment to a very few minutes (1961:57–66), which accords with Claparède (1930), as well as our kama muta theory and the evidence we have from all of our sources. Laski notes that afterwards there may be an hour or so of “afterglow,” and found that ecstasy “gives rise to feelings of vitality and well-being” (1961:86), which is consistent with our informants sometimes reporting feeling exhilarated. However, Laski is inconsistent about this, sometimes (e.g., 1961:370, 1980:19–20) indicating that union ecstasies may last much longer than a moment, even for several days, and arguing that utopians communities and religions often strive to make union ecstasies last a lifetime.

Among her respondents, half reported having experiences of transcendent ecstasy in the range of “units” and 38% in the “tens” of times in their lives, and 12% in the “hundreds” or constantly (1961:43; these were the alternatives she presented as prompts for them to choose among).

Beyond noting that the things that trigger transcendent ecstasy are valued and often set apart from ordinary things, Laski ruefully concludes, “I have not been able to discover what constitute sufficient pre-conditions for ecstatic experiences, or what qualities in triggers are efficacious in inducing these experiences” (1961:370). “So little is known about triggers as a group, so little has been asked about them, that it is too soon to speculate seriously about what, if anything, triggers to ecstatic experiences have in common” (1980:116). In Chapter 4 we will offer a simple theory of what triggers this emotion.
1.4 Bain’s 1859 description of “the tender emotion”

Around 335 BCE Aristotle wrote about how kama muta is evoked in narrative and theatre by recognition reunions, but we do not know of any general treatment of kama muta until the dawn of psychology. Among the first psychologists to conceptualize phenomena related to kama muta, William McDougal (1919) and Édouard Claparède (1930) stand out for the sensitivity of their descriptions, as we noted. The most comprehensive early account that we have located is Alexander Bain’s (1859) chapter on the “tender emotion” in his book, *The Emotions and the Will*. Bain was a Scottish philosopher who helped to launch scientific psychology. While he was not entirely clear in his conceptualization of the cause(s) of tender emotions, he lists quite a number of elicitors, mentioning to begin with that “both sentient beings and inanimate things may kindle the emotion,” but especially “soft touches, gentle sounds, slow movements, temperate warmth, mild sunshine” (Bain 1859:94). He observed that all these sensations incline to love and tender affection” (p. 95). The tender emotion can also be evoked by intense pleasures, such as great joy, and he wrote that, “Profuse affection, and large benevolence, usually make part of any great rejoicing” (p. 95). But paradoxically, the tender emotion can also follow and assuage pain, particularly “pains involving the affections, such as domestic calamity,” consoling the suffer (p. 96). And “one of the notes in the instinctive utterance of grief is also an instinctive cause of tender feeling” (p. 96), as are tears and the pathetic, which are among the means by which “the state of tender emotion in one human being is instantly awakened in another” (p. 97). More generally, “whatever readily suggests to the mind a predicament of extreme weakness is liable to induce this emotion. The helplessness of infancy, of age, and of the sick bed, invariably stimulates it,” as does fragility, or any kind of misery (p. 98). Mothers are especially disposed to tender feelings toward their infants, but so are fathers.

Humans are the paramount stimuli evoking the tender emotions, but animals also evoke it. Gratitude toward a benefactor evokes it, and “The mere spectacle or recital of acts of signal generosity rouses a gush of tender feeling. Good offices rendered by an enemy, or an injured party [someone who has been offended or wronged], are calculated to melt even the looker-on. The remission of all the looked-for evil, with the addition of positive good, operates almost like a shock, and stimulates a flood of emotion.” (pp. 114–115). Certain cadences in melody and song can also evoke the tender emotion, Bain observes, particularly plaintive strains. So can poetry, painting, and sculpture: “The artist has so far cultivated the instrumentality by whose means the feeling is aroused, that his creations are a great addition to what we may term its real or natural objects” (p. 117). Finally, it is a component of the religious feeling of veneration: “The paternal and benign aspect of Deity prompts a tender sentiment” (p. 122).

Bain wrote that the region of the body that is most involved is “the breast, neck, mouth, and the hand. . . in conjunction with the movements of the upper members” (Bain 1859:96). Tender
feelings cause tears to flow, and “there is a singular effect operated upon the back part of the throat” or pharynx (p. 98). The vocal chords are tightened, raising the pitch of the voice.

“That the feeling has the property of being pleasurable must be maintained not only in spite of the contrary appearance of the employment of it under pain, but in virtue of that very employment. Taking it in all its developments this feeling makes a considerable fraction of the sum total of human happiness. . . . The pleasure derivable from the state is not only abundant in quantity, but also, on occasions, or great acuteness or intensity” (pp. 99, 100). The emotion can be repeatedly elicited “without painful satiety,” and “the vibration from each stimulus is able to persist long after the stroke. Were this source of sentiment withdrawn from human life the whole manner of our existence would be totally revolutionized” (p. 100). “In other words, the state can be maintained in considerable force as a recollection, anticipation, or imagination, by which the happiness value of it is correspondingly increased” (pp. 100–101). In addition to recall of the emotion re-evoking it, “The memory and imagination of objects of affection induce the state of feeling” (p. 101). The tender emotion is the core of heterosexual relationships, when sensual attraction ceases and partners come to dislike each other: “Of the attracting bonds, the most constant and enduring is the element of tender emotion” (p. 112). But tender feelings are also the basis for much broader action: “The impulses to Benevolence in general, and the satisfaction derivable therefrom, have their principal root in the tender sentiment. Compassion, protection, kindness, philanthropic tendencies at large, are the outflowings of what is termed the Heart, which is only another word for the aspect of human nature that we are now considering” (p. 112). “The manifestation of the tender sentiment is estimated by the enlargement of the views of the individual, which determines whether the sphere of his regards is a narrow circle or a wide one—the family, the country, or the world” (p. 113). The tender emotion is a powerful source of morality, promoting harmony and social support.

Tender emotions evoke sympathetic identification in which the other’s happiness becomes one’s own: “The life of affection is vicarious; enjoyment is sought in gratifying the wishes and identifying oneself with the interests of a second individuality. Here, too, the case of the mother stands distinguished” (Bain 1859:107). We have found in our own research that kama muta is associated with but distinct from empathic concern for suffering; likewise, Bain writes, “Tenderness prepares for sympathy, and sympathy causes, or implies, a certain degree of affectionate warmth, but the two phenomena are far from being identical” (p. 108).

Bain did not have an especially clear idea of the cause of tender emotions, but his description of its phenomenology is impressive. More than 150 years later, our research corroborates most of this descriptions.