

Epistemic Emotions: a Natural Kind?

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Abstract: The general aim of this article is to consider whether various affective phenomena – feelings like the feeling of knowing, of familiarity, of certainty, etc., but also phenomena like curiosity, interest, surprise and trust – which have been labelled “epistemic emotions” in fact constitute a unified kind, i.e., the kind of the so-called “epistemic emotions”. Obviously, for an affective phenomenon to belong to the kind of the epistemic emotions, it has to meet two conditions: it has to qualify, first, as an emotion, and, second, as an epistemic one. The paper is structured accordingly. The first part is devoted to the question whether the aforementioned affective phenomena really are emotions, while the second part bears on their hypothetical common epistemicity.

1. *Introduction*

Emotions are affective mental states of a specific sort. They are to be distinguished, on the one hand, from *non-affective* mental states, that is, from mental states that do not call for our ability to undergo felt experiences such as beliefs and judgements.¹ On the other hand, emotions must also be differentiated from *other sorts* of affective mental states, from states like moods, sentiments, and so on. (I say more about these other kinds of affective mental states below.)

Moreover, emotions subdivide into various kinds: the kind constituted by moral emotions, the kind constituted by aesthetic emotions, etc... The present article scrutinizes the alleged unity of one of these kinds: the kind constituted by the so-called “epistemic emotions”.

¹ What is assumed here and throughout the paper is, first, that there exist (at least) three categories of mental states: cognitive states (beliefs, judgments, etc.), conative states (desires, wants, etc.), and affective states. It is also presupposed that emotions belong to the third category. That is to say, a second assumption of the present paper is that emotions are not reducible to beliefs, desires, or complexes of these.

Each of the items on lists 1 and 2² have at one time or another been labelled epistemic emotions by either philosophers or psychologists:³

<i>List 1</i>	<i>List 2</i>
Curiosity	Feeling of knowing
Interest	Feeling of familiarity
Surprise	Feeling of forgetting
Trust	Tip of the tongue feeling
	Feeling of certainty
	Feeling of doubt

To our knowledge, none of the various studies devoted to one or another of these alleged epistemic emotions explicitly discusses the boundaries of this kind of emotion.⁴ And yet, that the elements of these two lists can be conceived as a unified kind does not strike us as obvious. What does the feeling of knowing share with interest? Is there really a common element in surprise and trust?

The general aim of this article is to consider whether the various affective phenomena included in the two lists above actually constitute a unified kind, i.e., the kind of the so-called “epistemic emotions”. Obviously, for an affective phenomenon to belong to such a kind, it has to meet two conditions: it has to qualify, first, as an *emotion*, and, second, as an *epistemic* emotion. The paper is structured accordingly. Section 2 is devoted to the question whether the elements of lists 1 and 2 really are emotions, while section 3 considers their hypothetical common epistemicity.

² Neither of these two lists is meant to be exhaustive. See Dokic (2012) for other epistemic feelings that might be added to list 2. As for list 1, it enumerates four mental phenomena that have explicitly been considered to be epistemic emotions. For a broad ranging discussion of epistemic feelings see Arango-Muñoz & Michaelian’s introduction to the focus section.

³ See Arango-Muñoz (2013), Bain (1865), de Sousa (2008, 2011), Dokic (2012), Jones (1996), Morton (2010), Scheffler (1991). More precisely, the mental phenomena mentioned in list 2 have usually been called “epistemic feelings” rather than “epistemic emotions”. But authors often seem to take “epistemic emotions” and “epistemic feelings” to be synonymous, and no clear-cut conceptual distinction is made between them. One goal of the present paper is precisely to draw such a distinction.

⁴ The greater part of the literature devoted to epistemic emotions consists of particular case studies — i.e., studies of particular epistemic emotions. See, for instance, the literature devoted to curiosity (Loewenstein 1994), the feeling of knowing (Arango-Muñoz 2013, Koriat 2000, Mangan 2000, Ravett Brown 2000), interest (Clément & Dukes 2013, Langsdorf *et al.* 1983, Izard 1972, Silvia 2006), surprise (Lorini & Castelfranchi 2007, Reizenstein 2000), and the feeling of familiarity (Pacherie 2008).

2. Are “epistemic emotions” emotions?

The first part of this article aims at identifying the authentic *emotions* in the two lists above. As we will see, most of the aforementioned mental phenomena do not in fact qualify as emotions.

2.1. Some essential features of the emotions

The philosophical literature on the emotions is vast. Numerous opposing conceptions of emotions are available. Emotions have been identified with many things, ranging from complexes of beliefs and desires, to perceptions of values, to sophisticated bodily feelings. Beyond these disagreements, emotions and emotional episodes have collectively⁵ been attributed (at least) five essential features.⁶

Feature 1: felt character

Episodes of emotions are felt. Most of the worries this claim might raise can be dispelled once it is clear that what it means is only that, whenever someone experiences an emotion, he feels something, or that there is something felt every time one undergoes an emotional episode.⁷ This is certainly a commonsensical claim. We would not say of someone who never feels the slightest negative feeling during, for example, an awards ceremony that he actually went through an episode of anger during the ceremony. Of course, there are unconscious emotions in the sense that you can go through an emotional episode without noticing it. But you cannot experience an emotion without feeling it.⁸

Their felt character distinguishes emotions from phenomena that are not actually felt but are rather dispositions to feel, phenomena like character traits, moods and perhaps sentiments.⁹

⁵ These are, to my knowledge, widely accepted features of the emotions, which are individually necessary but not collectively sufficient. Some readers may complain that the list is incomplete. They might, for instance, insist that emotions necessarily help us to achieve fundamental survival-related tasks. This might be true. The reason why I am content with these five features is that they are sufficient to give some order to the category of the epistemic emotions.

⁶ In the following sections, I am very much indebted to Deonna and Teroni (2012) and Roberts (2003).

⁷ Most researchers agree that emotions have a felt character in this weak sense. Where philosophers and psychologists disagree concerns the nature of this feeling: is the feeling a constituent of the emotion? Does it rather consist in a higher-order state directed at this emotion?

⁸ A stronger claim would be to say that whenever someone experiences an emotion of a certain type, he feels something specific to that type of emotion. I do not mean anything like this stronger claim here.

⁹ Love and sadness, for instance, are sentiments, that is, dispositions to feel things. See Deonna and Teroni (2012). “Love” only rarely refers to an actual feeling (the feeling, for instance, that one has when one falls in love). “Love” is more often used to denote a sentiment, that is, an affective disposi-

What makes this point difficult to see is that the names of many emotions are ambiguous between two interpretations: the dispositional and the actual interpretation. Take “sadness”. Saying that Manfred is sad can be interpreted in two ways. According to the dispositional interpretation, it means that Manfred has a certain disposition to feel, that of being sad, which is susceptible to manifest itself in various ways. According to the actual interpretation, “Manfred is sad” means that Manfred currently experiences a certain emotion, the emotion of sadness. Clearly, to experience the emotion of sadness is one way (probably the main way) according to which the disposition consisting in being sad is susceptible to manifest itself. But it is not the only one.¹⁰ When I am sad (in the dispositional sense) I am also disposed to feel melancholy, wistful, etc. One of the most crucial lines of division in the vast realm of the affective mental states is thus that distinguishing actual feelings from dispositions to feel, i.e., from affective dispositions. As I said above, because emotions are felt, they are not affective dispositions.

Feature 2: physiology

Episodes of emotions go along with physiological changes, mainly but not exclusively changes in facial expression. Shame and anger are good examples of this fact. These physiological changes are often felt as well – you feel your cheeks blushing when ashamed, your blood boiling when angry, etc. – but importantly the feeling of an emotional episode is not necessarily exhausted by the feeling of the specific physiological change that goes with it. My feeling angry does not consist exclusively in my feeling my blood boiling even if the latter is certainly part of this feeling.¹¹

Feature 3: valence

Each emotion (or each emotional episode) has either a positive or a negative valence, depending on whether it is felt as pleasant or unpleasant.¹² Happiness, hope, relief, etc. contrast with shame, fear, anger, and the like: the former have positive while the latter have negative valence.

tion to feel various things – jealousy, happiness, etc. As we will see in detail below, love is, in this respect, analogous to interest and trust.

¹⁰ Affective dispositions (like love and sadness) that are susceptible to manifest themselves in various ways are called “multi-track” by Deonna & Teroni (2012).

¹¹ The thesis that emotions go together with physiological changes is generally associated with the name of William James (1884). See, e.g., Damasio (2000) and Prinz (2004) for contemporary developments of this view.

¹² One (not unproblematic) way of capturing the valence of emotions is in terms of hedonic tone. More precisely, the idea is the following: the feeling accompanying negative emotions is unpleasant while the feeling accompanying positive emotions is pleasant.

Feature 4: twofold intentionality

Emotions (in contrast to other affective phenomena, like, for instance, moods) are intentional mental states in the sense that emotions, like beliefs and desires, are directed *at objects*. What is specific to emotions is that they are directed at *two* distinct objects: a particular object and an evaluative property. Not only are episodes of fear, shame, pride, etc., directed at particular objects (e.g., Jeanne is afraid of *a dog*, Paul is ashamed of *his lie*, Henri is proud of *his action*), whenever one experiences a certain emotion, the object of this emotion is, moreover, presented with a certain *evaluative property*. When Jeanne is afraid of a dog, the dog is presented to her as *dangerous*, when Paul is ashamed of his action, his action is presented to him as *shameful*, when Henri is proud of his action, his action is presented to him as *prideful*.¹³

Evaluative properties are properties like being elegant, beautiful, fruitful, beneficial, disgusting, unjust, promising, unacceptable, ugly, annoying, etc. What makes the exemplification of an evaluative property something specific is the following: for a thing to exemplify an evaluative property is for it to be good or bad in some respect. Evaluative properties are thus to be contrasted with properties like being blue, square, long, small, dense, etc., which do not imply anything as regards to the goodness or the badness of the things which exemplify them.¹⁴

I have said that whenever one experiences a certain emotion, the object of this emotion is presented along with a certain evaluative property. This means that whenever someone experiences a certain emotion, the object of this emotion is presented to him as being good or bad in some respect. More concretely, when Peter is ashamed of his lie, a particular object, i.e., his lie, is presented to him as shameful (bad with respect to morality). When I am afraid of leaving my children with the young babysitter, this situation (my children being alone with the young babysitter) is presented to me as dangerous. When Gloria is proud of her action, her action is presented to her as worthy of pride. Shamefulness, dangerousness and worthiness of pride are all evaluative properties.

The claim that whenever I experience an emotion about something – e.g., whenever I am ashamed about my behaviour – the object of this emotion is presented to me as exemplifying a certain evaluative property – e.g., my behaviour is presented to me as shameful – has led to a distinction between two

¹³ This paper takes for granted the view that emotions are characterized by this specific form of intentionality. This should not be problematic since the view in question is very broadly accepted in the philosophical literature, see, e.g., Deonna & Teroni (2012), de Sousa (1987), Mulligan (2009), Roberts (2003), Tappolet (2000).

¹⁴ See Thomson (2008).

intentional objects for the emotions:¹⁵ the particular object of the emotion (Peter's lie, my children's situation, Gloria's action) and the formal object (the shameful, dangerousness, worthiness of pride). Whenever a subject experiences an emotion, his emotion is about a particular object but this particular object is also presented to him as exemplifying an evaluative property (the formal object of this emotion).

Feature 5: two main standards of evaluation

Episodes of emotions may be evaluated according to various standards. First, episodes of emotions are either correct or incorrect. The correctness of each emotional episode depends on whether its formal object is actually exemplified. More concretely, when Charlotte is afraid of James's dog, James's dog is presented to her as being dangerous and Charlotte's fear is correct if James's dog really is dangerous. When Peter is ashamed of his behaviour, his shame is correct if his action really is shameful.

Note that the fact that emotions are either correct or incorrect follows from their being mental states characterized by a specific form of intentionality. It follows from the fact that whenever one experiences an emotion, one is *present-ed* with something as being the case (feature 4 above). Emotions, like beliefs, *present* things and are thus capable of being correct or incorrect (depending on whether what they present is really the case or not).

Besides being correct or incorrect, emotions can also be assessed with regard to their justification. There are justified and unjustified emotions. To better see that these two ways (correctness vs. justification) of assessing emotions are independent, consider the following example:

Ben, an eight year-old boy, is expecting the visit of his uncle Jimmy. Unfortunately for Ben, Jimmy decided to bring Stella, his basset, with him. At the sight of Stella, Ben is seized by an overwhelming fear. His parents have taught Ben all his life that dogs should never be approached no matter how harmless they look. They have also told Ben dreadful stories in which young boys have been fatally injured by apparently friendly dogs.

How should we assess Ben's fear? It is incorrect, since Jimmy's dog is not dangerous. At the same time, Ben's fear seems justified. Presumably, it is justified for an eight year-old boy to be scared of dogs when he has had the education that Ben has had. Roughly, the justification of an emotion depends – as in the case of beliefs – on whether the subject has good reasons for having such or such emotion. And Ben, given his age, and given the education he has received, has good reason to be scared of his uncle's dog.

¹⁵ The initial distinction between the particular, or material, objects and the formal objects of emotions goes back to Kenny (1963).

Not only emotions (and beliefs), but also desires are, according to certain theories,¹⁶ susceptible of assessment in terms of their correctness. More precisely, if to desire something implies that the thing in question is presented or perceived as good, desires are perfectly analogous to emotions as far as their standard of correctness is concerned. According to this view, Charlotte's desiring that James keeps his dog on a lead implies that she is presented with this situation as being good (for her safety, perhaps), and Charlotte's desire is correct if James keeping his dog on lead really is a good thing (in this regard).

Moreover not only emotions (and beliefs) but also desires seem capable of being justified or unjustified. Justified desires would be desires that a person has good reasons to have (given what they believe and want beside this).

Nevertheless, there is (at least) one standard of evaluation that applies to desires but not to emotions. Desires can be satisfied or unsatisfied. Emotions (and beliefs) cannot. In contrast to particular desires, it does not make sense to say that such and such particular emotion is satisfied.

To recap, desires are capable of being assessed in terms of their correctness, their justification, and their satisfaction, while only the two former standards of evaluation are relevant as far as emotions are concerned.

2.2. Sorting out the genuine emotions

In the following sections (2.2 to 2.2.5), I make use of this short presentation of some of the essential features of the emotions in order to assess whether the so-called "epistemic emotions" mentioned in the two lists above do not in fact qualify as such.

2.2.1. Epistemic feelings

The clearest upshot of this strategy is the following: none of the phenomena enumerated in list 2 are genuine emotions. The reason why this is so is quite simple: neither the feeling of knowledge, nor the feeling of forgetting, nor any of the remaining feelings listed there implies that the subject is presented with an evaluative property. None of the phenomena enumerated in list 2 are characterized by feature 4. Whenever you feel that you know, that you forget, etc., your experience is directed at something, probably one of your own mental states. But that your mental state exemplifies an evaluative property is definitely not a part of these experiences. When you feel, e.g., that you know, you

¹⁶ See, for instance, Oddie (2005). Thanks to Olivier Massin for having helped me to see this point.

are presented with something (you knowing something) but this thing is not also presented to you as exemplifying an evaluative property.

This does not make the feelings enumerated in list 2 any less worthy of attention. These feelings seem to have in common that they are directed at cognitive mental states – the state of knowing, of remembering, of believing with a high or low level of confidence, etc. – and this is sufficient to make them a specific kind of feeling, which deserves to be studied for its own sake. The very modest goal of this section is, however, to insist that the noetic feelings (as they are sometimes called)¹⁷ should no longer be considered to be emotions, since they do not share one of the essential features of emotions.

As for list 1, whether or not each of the elements of the list (curiosity, interest, surprise, trust) belongs to the category of the emotions requires individual consideration. This is what I set out to do below. Let me make clear here that the following sections (2.2.2 to 2.2.5) do not in the least pretend to settle the nature of each of the phenomena included in list 1. Their purpose is mainly to cast light on what seems to be the relevant characteristics of each of them as far as their standing as a genuine emotion is concerned.

2.2.2. Curiosity

Like emotions, curiosity is an intentional phenomenon. Curiosity is directed at objects. I am curious to know whether my brother appreciated his trip to Greece. I am curious about the winner of the last election. Moreover, curiosity embodies many of the other essential features of the emotions listed above: it is felt (even if “curiosity” can also be interpreted as referring to a disposition to feel¹⁸), it would not be surprising that it goes together with physiological changes and it has positive valence. But is curiosity an emotion?¹⁹ I see two reasons to think that this is *not* the case.

The first reason relies on the emotions’ specific form of intentionality (feature 4). We have seen that whenever one experiences an emotion, a particular object is presented as exemplifying a certain evaluative property, which is the formal object of this emotion. Whenever one experiences shame with respect to an object, this object is presented as shameful.

The analogous reasoning with respect to curiosity would be the following: whenever one experiences curiosity, a particular object (a particular question or

¹⁷ See Dokic (2012).

¹⁸ “Curiosity” is ambiguous. It also refers to an affective disposition, more precisely, a character trait.

¹⁹ To my knowledge, only Morton (2010) take curiosity to be an epistemic emotion. De Sousa (2008) and Brady (2009) regard it as an epistemic feeling, but curiosity is most often considered to be a desire in the philosophical literature. See note 20 below.

topic) is presented as exemplifying the corresponding evaluative property, i.e., worthiness of curiosity or interest. But is this really what typically happens when one undergoes curiosity? It does not seem so. When one experiences curiosity what typically happens is that one desires to know, understand, or believe true things²⁰ about what one, *beside this*, takes to be curious or interesting. To be presented with something as curious or interesting is probably a necessary condition (or a necessary part) of our experiencing curiosity. But to feel curiosity about a topic does not typically consist in being presented with an object as curious or interesting. When one feels curious, what typically happens is that one desires to know, believe true things, etc. about what one is *already* presented as being worthy of curiosity.

To express the same idea slightly differently, the first reason why I think curiosity does not qualify as an emotion can be summarized along the following lines:

1. If curiosity were an emotion, to experience curiosity would consist, as for all genuinely emotional experiences (see feature 4), in being presented with an object (a topic, a question) exemplifying the corresponding evaluative property (i.e., worthiness of curiosity or interest);
2. Consider what happens when you experience curiosity about something and compare this to what happens when you experience a genuine emotional episode, e.g., an episode of shame.
3. When you experience an episode of shame, something is presented to you as shameful, and experiencing shame consists in being presented with something in this way.
4. When you experience curiosity about, let us say, a topic, this topic might be presented to you as worthy of your curiosity, but to experience curiosity does not principally consist in that. More generally, being curious about something does not consist in being presented with something as being such or such. The prevailing element of an experience of curiosity is the (conscious) desire to know, believe true things, etc. about something;
5. Conclusion: to experience curiosity is not like experiencing a genuine emotion, for instance shame.

²⁰ Philosophers disagree on whether to be curious is to desire knowledge, true beliefs, or even something else. See Whitecomb (2010) for an overview of this debate.

If the previous reasoning does not convince you, here is a second (and stronger) reason not to class curiosity in the category of the emotions: curiosity can be satisfied or unsatisfied. The exact conditions under which curiosity is satisfied are subject to a debate in which I do not need to take a stand here. The important thing to recall is simply that emotions are not mental states that are susceptible of being satisfied or unsatisfied but that desires are. This clearly gives us reason to consider curiosity as a specific form of desire rather than an emotion. This is, moreover, the prevailing view in the philosophical literature.²¹

2.2.3. Interest

Suppose Cecile's main interest since she was ten has been baroque music. While she passionately listens to Boccherini's *Stabat Mater* and has her attention focussed on the soprano's voice, she goes through various emotional experiences. None of these is an episode of interest. Of course, this does not mean that Cecile's interest in baroque music is interrupted during the time she listens to Boccherini. The term "interest" is ambiguous between two meanings in the way the names of many emotions are. When we say: "Cecile's interest is baroque music" what we mean is that Cecile has a certain affective disposition, consisting in being interested in baroque music. It is this disposition to feel that Cecile does not loose while she fervently listens to Boccherini.

Now, the affective disposition of interest can probably manifest itself in various ways and sometimes (even if perhaps rarely), this manifestation is a genuine emotion of interest. Suppose for instance that, on her way to a conference dedicated to the early baroque, Cecile meets her aunt Claudia and that she explains to her aunt where she is going. Surprised, Claudia cannot contain herself and asks Cecile what her real reason is for attending such a conference early on a Saturday morning. While Cecile answers her aunt by mentioning her early interest in baroque music, she simultaneously experiences a sort of pleasant feeling or positive excitement. A plausible way of describing what is happening then is to suggest that Cecile feels her interest in baroque music.

If this description is true, there is no reason to refuse Cecile's feeling at this moment the status of a genuine emotional experience. It is positively valenced, and probably accompanied by some changes in facial expression.²² It also seems directed at two distinct objects in the way emotions are. At the moment Cecile

²¹ See Kvanvig (2003), Foley (1987), Whitecomb (2010), Williamson (2000).

²² See Izard *et al.* (1995).

feels her interest, baroque music is presented to her as exemplifying an evaluative property, namely, the property of being interesting. Finally, her interest is susceptible to be correct/incorrect (depending on whether baroque music is interesting or not) and justified/unjustified (depending on whether Cecile has good reason to view baroque music as interesting).

However, Cecile's interest cannot strictly speaking be satisfied or unsatisfied. This is what clearly distinguishes interest from curiosity. Interest and curiosity are certainly closely related. More precisely, a plausible claim is that one of the main manifestations of the disposition of interest is the desire to know, i.e., curiosity.

To recap, "interest" refers primarily to an affective disposition: the affective disposition consisting in being interested in something. This affective disposition can manifest itself in various ways. Occasionally, my being interested in something possibly manifests itself in my actually feeling interest for that thing. Nothing clearly precludes considering this feeling of interest as a genuine emotional experience. If this is so, "interest" is also susceptible (even if more rarely) to refer to an emotion, to the emotion one experiences when one is presented with something (a topic, an object, a situation) as exemplifying the evaluative property consisting in being interesting.²³

2.2.4. Surprise

Surprise is another contentious candidate for the title of genuine emotion. On the one hand, many emotion specialists mention "surprise" in their catalogue of basic emotions.²⁴ Surprise, indeed, seems to embody many of the necessary features listed above. The main problem with surprise is feature 3: surprise is not clearly positively or negatively valenced. Surprise is not always pleasant or unpleasant.²⁵

One way²⁶ of trying to solve this problem consists in making clear that what the claim that every emotion is positively or negatively valenced means is that

²³ Izard (1992) and Fredrickson (1998) take interest to be an emotion. In contrast, interest is a simple state, not an affective state, according to Ortony & Turner (1990). For an overview of the literature on interest, see Silvia (2006).

²⁴ Interestingly, "surprise" is not ambiguous between a dispositional and an actual interpretation, as "curiosity", "interest", and (as we will see below) "trust" are.

²⁵ See Ortony and Turner (1990), pp. 316-317.

²⁶ Another solution would be to give up the model, which I have been assuming so far, of valence in terms of hedonic tones (pleasantness and unpleasantness) and to adopt another model which would fit surprise better. There are many models, and considering each of them would take me too far afield. At first sight, however, my impression is that none of these other ways of capturing the valence of the emotions does a better job with respect to the particular case of surprise.

every particular experience of an emotion is positively or negatively valenced. Positive/negative valence is not attached to emotion-types but to particular episodes or tokens of emotion-types.²⁷

The problem with this solution is that there seem to be particular episodes of surprise that are neither pleasant nor unpleasant, that is, which are neutral as regards to their hedonic tone. Even if I have no clear reply to this objection yet, let me say a few words about the form that such an answer might take. A way out is naturally to reject the allegation according to which episodes of surprise are not always either positively or negatively valenced, viz., the claim according to which there is no neutral surprise. What I would like to show now is that the tendency to think that there are neutral episodes of surprise might derive from the tendency to reduce surprise to a purely cognitive phenomenon.

Roughly, the experience of surprise has often been considered to consist in a reaction, by a subject, to a realized mismatch between this subject's expectations and what he takes to happen in the world.²⁸ Let me call this conception of surprise "the purely cognitive model". Now, such a mismatch between the subject's expectations and what he believes to happen can, indeed, be pleasantly, unpleasantly, or neutrally experienced depending on the expectations themselves. When you expect something to happen, you can look forward to the occurrence of this thing, be reluctant toward its occurrence, or feel neither inclination nor disinclination toward it. Accordingly, the mismatch will be felt as pleasant, unpleasant or neutral and the surprise good, bad or ... neutral. If there are neutrally felt mismatches, there are neutrally felt surprises.

Briefly, the suggestion is the following: what is responsible for emotions theorists acceptance of the view that there are neutral episodes of surprise is that they adopt a purely cognitive model of surprise in terms of mismatches.

The problem with the purely cognitive model, I will argue now, is that it does not appropriately capture what we commonsensically mean when we speak of a surprise.

Suppose you press the button on the lift, expect the lift to come, wait a few seconds, realize that the lift is not coming, and take the stairs instead. There is a mismatch between your expectations and what you believe to be the case in the world. But are you "surprised"? I do not think so. As such (i.e., without modifying this simple case in any extraordinary ways), speaking of an experience of "surprise" in such a situation is not to use the term commonsensically. When you take the stairs after having waited for the lift to no avail, you would

²⁷ See Deonna and Teroni (2012).

²⁸ See mainly Lorini & Castelfranchi (2007), Reizenstein (2000).

not describe yourself as surprised. And this is true even if I modify the case by specifying that the lift has always come when you have pressed the button.

What I am trying to show with the lift case is simply the following: to experience surprise consists in something more than reacting to a mismatch between what one expects to occur and what one takes to occur.

To sum up, my view is that we need to solve the problem raised by the apparent fact that some episodes of surprise are neutrally valenced (neither positively nor negatively valenced), since we certainly do not want to exclude surprise from the category of the emotions. The solution suggested above takes two steps. First, it explains why the claim according to which there are neutrally valenced episodes of surprise is the theoretical result of the purely cognitive model. Second, it shows that the cognitive model is insufficient to capture surprise by presenting a case in which the mismatch required by the model does not coincide with an experience of surprise. If I am right on the first front – i.e., if the view that there are neutrally valenced episodes of surprise is in fact implied by the purely cognitive model of surprise – the deficiency of the cognitive model is sufficient to cast doubt on the claim that there really are neutral surprises. Thus, there would no longer be any reason to worry about the genuinely emotional nature of our episodes of surprise.

2.2.5. Trust

The exact nature of trust is a complicated topic that has been extensively debated. In particular, a lot has been said regarding the difference between trust and mere reliance.²⁹ The purpose of this section is not to prolong this discussion. My goal is rather to focus on the affective nature of trust.³⁰ More specifically, I would simply like to emphasize that something analogous to what I have stated about interest is true regarding trust: to trust someone is much more often to be in a certain *affective dispositional state* than to actually feel trust.

The affective disposition consisting in trusting someone is susceptible to manifest itself in various ways. One (but only one) of these consists in feeling trust toward this person. Suppose someone is asking you how you can leave your children without feeling the slightest anxiety and that you answer: “I deeply trust my mother, that’s why”. While you give this reply, your affective disposition consisting in trusting your mother as far as your children’s well-being is concerned may manifest itself in an actual feeling of trust. In this

²⁹ See mainly Baier (1986).

³⁰ The assumption of this paper is indeed that trust is, as Jones (1996) claims, an affective phenomenon. Like surprise, trust has also been given a purely cognitive description. See Gambetta D. (1988).

case, you would actually feel trust toward your mother. Now, this potentially occurring (even if rare) feeling of trust seems³¹ to embody all the essential features of the emotions. More interestingly, trust is an intentional phenomenon in that it is directed at persons.³² When I feel trust, I experience an emotion which presents a person as exemplifying an evaluative property, the property of being trustful.

3. *Are epistemic emotions “epistemic”?*

The previous part of the paper was devoted to considering whether some of the so-called “epistemic emotions” (lists 1 and 2) may qualify as genuine emotions and if so under which conditions. As we have just seen, it is not obvious that most of them do.

The alleged unity of the phenomena enumerated in lists 1 and 2 (the so-called epistemic emotions) faces another threat. Not only do these phenomena not share the same “affective nature” (in that some of them are not emotions) but, as I would like to show now, their common epistemicity is dubious as well.

As we have seen above, a specific form of intentionality characterizes emotions in the sense that, whenever someone experiences an emotion, he is presented with something (i.e., the particular object of his emotion) as exemplifying an evaluative property (the formal object of his emotion). Now, the formal objects of the emotions also serve to distinguish between *kinds* of emotions.³³ The general idea is the following:

In order for an emotional episode directed at an object to belong to a certain kind *K*, the subject has to be presented with this object exemplifying an evaluative property of kind *K*. For instance, Jane’s guilt about her drug addiction qualifies as a *moral* emotion if only if her drug addiction is presented to her as exemplifying a *moral* evaluative property, e.g., wickedness.

³¹ The question whether trust is accompanied with specific physiological changes is, to my knowledge, still open.

³² You might object that we sometimes trust objects, animals or institutions. There are several replies to give to this objection. One of them is to insist that trust is not to be confused with mere reliance. For a detailed description of the latter distinction, see Baier (1986).

³³ See Deonna and Teroni (2008, 2012), De Sousa (1987), Mulligan (2007, 2009), Tappolet, (2000), Teroni (2007). Note that there are once again – as for the view according to which each emotion is either positively or negatively valenced, see section 2.2.4 above – one strong and one weak way of fleshing out the claim according to which each emotion belongs to the kind to which its formal object belongs. According to the strong way, each emotion *type* belongs to the kind to which belongs its formal object. The weak interpretation only says that each particular episode of an emotion belongs to the kind to which its formal object belongs. In what follows, I only assume that the weak way of conceiving the relation between the kinds of emotions and their formal objects.

There is no reason why this way of proceeding could not be used in order to distinguish *epistemic* emotional episodes from non-epistemic ones. If so, the epistemicity of the emotional episodes would be ruled by the following standard:

The Formal Object Standard of Epistemicity (FOS)

An emotional episode is epistemic if and only if its formal object is an epistemic evaluative property.

The consequence of the adoption of FOS is the following: questioning the epistemic unity of the phenomena enumerated in lists 1 and 2 above will actually amount to questioning the epistemic unity of distinct evaluative properties. Hence, the next pressing question is:

What, if anything, makes the following distinct evaluative properties (the surprising, the interesting, the trustful) epistemic ones?

A natural way of classifying distinct evaluative properties in the same category is to show that they hold a specific relation with a final evaluative property of a certain kind, in our case, with the final *epistemic* evaluative property.

Now, one recurring proposal since Plato is that being true is the final epistemic evaluative property.³⁴ Are the interesting, the surprising and the trustful connected to the true in a way that could explain why they all belong to the class of the epistemic evaluative properties?³⁵

This is doubtful.

To see this, we need to note, first, that, among the evaluative properties, some are more determinate than others.³⁶ For instance, the property of being scarlet is a more determinate property than the property of being red; the property of being generous is a more a determinate property than the property of being morally good. Just as, for instance, the property of being square is a

³⁴ There are other candidates for the title of final *epistemic* evaluative property, viz., knowledge and understanding. See Kvanvig (2003, 2009). At first sight, I do not see any reason to think that knowledge or understanding will perform better as regards to the unification of such diverse evaluative properties as the surprising, the interesting, and the trustworthy.

³⁵ Another difficulty faced by this proposal is that it is not clear that truth is an evaluative property value rather than the bearer of an evaluative property. If truth is not itself an evaluative property but something that exemplifies an evaluative property, it cannot of course be identified as the evaluative property responsible for the unification of the distinct epistemic evaluative properties.

³⁶ The same idea is often captured by distinguishing between thick and thin evaluative properties, the thinnest evaluative properties being the property of being good (generally, i.e., not in a specific respect) and the property of being bad (generally, i.e., not in a specific respect).

more determinate property than the property of being equilateral, the property of being melodious is a way of being aesthetically good.

The second thing to note is that it is common practice to rely on the evaluative property under which a certain determinate evaluative property falls in order to categorize this determinate evaluative property. More concretely, given that being generous consists in a way of being morally good, being generous is a moral property. Given that being melodious consists in a way of being aesthetically good, being melodious is an aesthetic property.

With this in mind, let us go back to our initial question: are the interesting, the surprising, and the trustworthy connected to the true in a way that could explain why they all belong to the class of the epistemic evaluative properties?

The simplest way of answering positively would be by showing that to be interesting, to be surprising, and to be trustworthy constitute specific ways of being true. But this is clearly not the case. Clearly, an interesting or a surprising claim is not a claim which is true (in some specific respect). Many interesting claims are false and sometimes even known to be so. An analogous conclusion holds for the property of trustworthiness. For a claim to be trustworthiness is not to be true in a specific way.

4. *Conclusion*

Diverse phenomena (list 1 and 2 above) have been called “epistemic emotions”. The first part of this paper is devoted to pointing to the genuine emotions in these two lists. Its main upshot is that most of these phenomena – potential exceptions are surprise, interest, and trust – do not qualify as such. Most of them are not eligible as emotions.

The second part of the article asks a general question. Epistemic emotions are meant to constitute a specific kind of emotions in the way moral emotions, for instance, do. If so, what constitutes their common epistemicity? The question leads to difficulties since the apparently plausible suggestion – that it is their connection to truth that makes emotions epistemic ones – fails. This, I think, is sufficient to cast doubt on the very possibility of delineating an *epistemic* kind of emotions.*

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