Penultimate version. Please cite the published version.

Sentimental perceptualism and affective imagination

Uku Tooming

1. Introduction

Epistemic sentimental (or emotional) perceptualism (SP in short) proposes that emotions are the source of evaluative or normative knowledge, similarly to how perception is the source of (much of) descriptive knowledge. The view comes in different forms and with different labels (Tappolet 2016; Milona 2016; Döring 2007; Johnston 2001). SP is often discussed in the context of moral epistemology in particular. In this paper, we treat it as a view of the epistemology of evaluative and normative domains more broadly.[1] The idea common to different forms of SP is that affective (or emotional) experiences represent evaluative properties in a manner that is, in epistemically significant respects, similar to how perceptual experiences (or at least visual experiences) represent descriptive properties. By 'epistemically significant respects' we mean the respects in which experience that P contributes to the attainment of knowledge that P. Both affect and perception are supposed to put agents in a position to form properly basic beliefs whose justification is grounded in experience and not in inference or reasoning (Carter 2020: 1234; Cowan 2005: 166).

[1] Although we will be talking about values and representations of value in this paper, we are open to the possibility that *reasons* and representations of reasons are more fundamental.

SP has been subject to various criticisms, often appealing to substantial epistemically significant differences between perception and affect (see Brady 2013). In this paper, we present a novel challenge to SP. At the centre of it is the assumption that if affect is to ground knowledge in the same way as perception does, affective system should have a function to accurately represent evaluative properties, and if it has that function, it should also have it in its *future-directed imaginative* use. There are good empirical reasons to think, however, that affect system does not have that function. Because of this, it is doubtful if affect can do the kind of knowledge-grounding work that SP assumes it does.

The argument goes as follows:

P1: If SP is true, then affect system has a function to generate affective responses that accurately represent value properties.

P2: If affect system has a function to generate affective responses that accurately represent value properties, then it has that function in its future-directed imaginative use.

P3: Affect system, in its future-directed imaginative use, does not have a function to generate affective responses that accurately represent value properties.

C: SP is false.

Some clarifications are in order. First, when we say that an affective response represents a value property, this is a shorthand for saying that the response attributes value or disvalue of some degree to an object or event, and it represents the value *accurately* if that object or event does have the value to the degree that is attributed. We assume that if affective responses represent value, they also represent the degree of value because we also consult our affective responses to

compare the value of different events. If the analogy between affect and perception is to be substantial enough to ground an epistemically relevant similarity, it is reasonable to think that affect represents degrees of value, just like perception can represent gradational variation in different magnitudes like illumination and colour in the case of vision or pitch and timbre in the case of audition.

Second, we will be talking about affect *system* and perceptual *system* which is a simplification that abstracts away from the multifaceted ways in which affective and perceptual processes are realized in the mind/brain. However, such a coarse-grained level of description is appropriate, given that the putative similarities between affect and perception that are relevant for SP are not meant to extend to fine-grained structural features of psychological mechanisms that ground them.

Third, it is also important to stress that, by appealing to the functions of affect system and perceptual system, the proposed argument is naturalist in its outlook and assumes that empirical facts about the function of perceptual and affective mechanisms are relevant for evaluating the epistemic powers of perception and affect, respectively. This is not an assumption that all proponents of SP are committed to. For instance, one could instead appeal to some other epistemically relevant similarity between perception and affect, such as presentational phenomenology, for instance (compare Chudnoff 2012). That said, for those who take sentimentalist perceptualism to constitute a *naturalist-friendly* alternative to moral rationalist views (Milona and Naar 2020), the argument will be a cause for concern. For such views, the significant analogy between perception and affect also involves functional, and not just phenomenological, analogy. In what follows, it should be kept in mind that the argument is only limited to such versions of SP.

The argument is valid, but none of its premisses are probably immediately persuasive. In what follows, we will explain and motivate its premisses. Given the scope of this paper, the ultimate aim is not to disprove SP but to show that it faces a challenge that concerns affective imagination in particular.

2. Function of perception, function of affect

Let's now consider the first premiss of the argument.

P1: If SP is true, then affect system has a function to generate affective responses that accurately represent value properties.

Why should a proponent of SP accept that affect system has such a function (call it 'R-function')? She should accept it because if affective experiences are to count as sources of evaluative knowledge, analogously to how perceptual experiences count as sources of descriptive knowledge, the mechanism that produces them should serve the role of forming accurate evaluative representations, like perceptual mechanisms serve the role of forming accurate descriptive representations on which one's beliefs can be immediately based. The most natural way to make sense of this is in terms of both having R-function, only relative to different domains.

In this paper, we try to remain as neutral as possible on what having a function exactly amounts to. There are various theories on the market, most notably the etiological view (Godfrey-Smith 1994) and the typicality view (Garson and Piccinini 2014), but P1 does not require taking a stand on which of them is correct. Our view is also open to the idea that functions are to be cashed out in non-biological terms instead, such as in terms of capacities (Schellenberg 2018). Regarding functions, usual qualifications apply: for affect system to have

R-function, it is not necessary that it often successfully discharges that function; furthermore, if it is put in an inhospitable environment, it might even entirely fail to produce veridical representations.

An advocate of SP can try to reject P1 by denying that perceptual system has R-function and thereby also reject the idea that affect system has it. In philosophy and psychology of perception, whether perception has R-function is in fact one of the dividing lines between different authors. On one side, there are those who argue that perceptual system has the function of producing veridical representations (Burge 2010); on the other side, there are those who argue that perceptual system functions to guide actions, irrespective of whether the representations it produces are veridical (Hoffman, Singh and Prakash 2015; see also Sperry 1952). Let's call the former 'representationalists' and the latter 'pragmatists'.

SP, in modelling affect on perception, fits much more naturally with representationalism about perception than with pragmatism. After all, one of the main considerations that made SP attractive was that it seemed to model the source of evaluative knowledge on the psychological capacity that serves to give access to worldly affairs more directly than and independently of reasoning or inference. However, if pragmatism about perception is true, then perceptual system is not by its nature aiming towards accuracy and needs guidance and correction by inference to allow agents to reach accurate representations of their surroundings (compare Hatfield 2009: 187). This would mean that perceptual system does *not* put agents in the position to base their beliefs immediately on experience. Thus, understanding affect on the model of perception, pragmatically understood, seems to steer away from the motivation to embrace SP in the first place.

It is important to stress that P1 does *not* entail that justification or other relevant epistemic properties are defined in terms of functions. It is rather that facts about the function of the psychological mechanism that underlies perception/emotion are *relevant* for evaluating the epistemic role of perception/emotion. For instance, if it turns out that the mechanism does *not* have a function to accurately represent the relevant properties, it gives a reason to doubt that its outputs tend to be accurate or that the mechanism hooks us systematically to the world. As a result, its status as a source of knowledge that is independent of inference becomes suspect. An alternative way to cash out this idea is that if the mechanism does not have a R-function then its deliverances should not be taken at face value, even in normal conditions, because they need to be held in check by some other capacity such as reasoning.[2]

Note also that when a SP theorist denies that perception (and thereby affect) has R-function, the argument in this paper still merits interest because it indicates that a feasible account of SP needs to model affect on an alternative view of perception.

3. Affect's imaginative use

Let's now turn to the second premiss.

P2: If affect system has a function to generate affective responses that accurately represent value properties, then it has that function in its future-directed imaginative use.

By 'future-directed imaginative use', we have in mind the employment of affect system in imagining what some future scenario would feel like if it were to obtain. Let's call this 'Future-Directed Affective Imagining' (FAI). For example, if Arun sets out to imagine what it would be

[2] We are not here committed to reliabilism or any other specific epistemic theory. P1 can be defended under a variety of theories of knowledge and justification.

like to own a gerbil and it seems to him that he would be happy about it, he is engaging in FAI. P2 claims that if affect system has the function to accurately represent value properties, then in imagining what it would be like to own a gerbil, Arun's affect system has the function to generate an offline affective response that veridically represents the prospect of owning a gerbil as good or bad.

To motivate P2, we proceed from the idea that in performing FAI and evaluating future scenarios on their basis, one employs the same affect system as in responding affectively to some perceived situation and since it is the same capacity, it presumably has the same function in both contexts (see Balcerak Jackson 2018: 219 for a similar point about perceptual imagination). This is exactly what at least some sentimental perceptualists seem to say. For example, Milona and Naar (2020: 3092) suggest that those affective states that are responses to imagined contents function in the same way as those affective states that are responses to actually perceived contents. They think that this makes sense in light of considerations regarding how our affective systems evolved. P2 thus seems to be in line with the views of at least some proponents of SP.

Our main reason for accepting P2 concerns the ubiquity of affect's imaginative use. Our emotional lives are only sometimes focused on the present moment. Instead, a large portion of our emotional life is engaged with imagining the future (D'Argembeau et al. 2011). In the context of deliberation, in order to evaluate our options, we need to do that before action. By activating emotional responses towards imagined action outcomes before action, our affect system has a crucial role to play in that evaluation (Damasio 1994; Bechara et al. 2000). In virtue of activating those responses, we can then predict our affective reactions if an outcome were to obtain, and these predictions are arguably constitutive of assigning utilities to the outcome (Lerner et al. 2015). Offline use of affect system is therefore at least as pervasive as its online use.

The ubiquity of the future-directed imaginative use of affect system is relevant for P2 because it indicates that the imaginative uses constitute the normal conditions or typical circumstances in which affect system achieves its function (see Millikan 2004: 69). This in turn gives a reason to think that the function of the affect system in its future-directed imaginative use does not seem to be essentially different from its function in its present-directed use.[3]

Note that is in principle possible to argue for P2 without assuming that perceptual system retains R-function in its imaginative use. If we relativize the function of a psychological mechanism to circumstances in which the mechanism typically makes its contribution, then it is in principle possible that the function of the perceptual system does not extend to its imaginative use because the latter does not constitute its typical circumstances, while the function of affect system does.

As a further reason for P2, if the future-directed us of affect system is as pervasive as indicated, then the proponent of SP should accept that it is epistemically as central as the present-directed use and that it thereby shouldn't be functionally disanalogous to the present-directed use. As Milona (2018: 208) has pointed out, our ethical deliberation is largely concerned with what to do in the future, and not with the value of the present states of affairs. SP as an account of the source of evaluative knowledge wouldn't be extensionally adequate if it were only about currently perceivable matters. Consequently, if P2 were false and the R-function of affect system were limited to the present-directed use, SP would assign to emotion a too limited epistemic role for it to serve as the ground of evaluative knowledge.

---

[3] Millikan is a proponent of the etiological view of functions. This does not mean, however, that something like typical circumstances do not figure in non-etiological views (see Rubner forthcoming).

4. Affective forecasting

We can now move on to motivate the last premiss in the argument.

P3: Affect system, in its future-directed imaginative use, does not have a function to generate affective responses that accurately represent value properties.

To challenge the idea that affect system has R-function in its future-directed imaginative use, we should consider if it is prone to systematic inaccuracies that are adaptive and not just due to unlucky environmental or physiological circumstances. If it is possible to show that affect system has a function for which such errors are instrumental and that thwarts the production of accurate representations, then there is reason to think that it does not have R-function.[4]

Relevant data for answering this question come from the research on affective forecasting. In affective forecasting tasks, participants are asked to imagine possible future scenarios and how they would feel about them (Kurtz 2018). Since both FAI and affective forecasting involve the future-oriented use of affect system, it is plausible that the data about successes and failures of affective forecasting can be used as (admittedly indirect) evidence about the function of future-directed imaginative use of affect system. This evidence is indirect because the research on affective forecasting has not itself been about representations of value.

It could be objected that affective forecasting is not a form of imagining in any substantial sense. Predicting, after all, need not amount to imagining. However, affective forecasts do not

[4] Note that this line of reasoning is consistent with the idea that psychological mechanisms can have multiple functions. The point is that if affect system has a function whose realisation directly counteracts the production of accurate representations, then this makes it likely that perceptual system does not have R-function.

just represent future affect, they also enact/simulate it. As Gilbert and Wilson (2007: 1352) put it, affective forecasting involves 'prefeeling' the predicted event. This coheres well with the view of imagination according to which imaginings recreate or simulate other mental states (Arcangeli 2018; Goldman 2006). What is more, even if not all cases of affective forecasting involve FAI, we take it that all FAI involve affective forecasting because one needs to project one's affective reaction to the imagined situation. Future-directed imaginative uses of affect system result in representations of what a future scenario would feel like and are in that sense at least implicitly predictive of future affective states. Evidence about affective forecasting is therefore relevant for evaluating the function of affect system in its imaginative use.[5]

As it turns out, in producing FAI, affective system exhibits a robust tendency towards mispredictions. Investigations into affective forecasting have demonstrated that individuals commit errors when predicting their future affective reactions (Wilson and Gilbert 2005). Specifically, individuals tend to overestimate, and sometimes underestimate, their emotional responses. This tendency to overestimate emotional responses is commonly known as the impact bias. In particular, although people are able to correctly assess the overall valence of their future emotions, there are significant discrepancies in intensity and duration between expected and

[5] As a reviewer pointed out, it could also be objected that affective forecasting data is not relevant for evaluating SP because affective forecasts represent affective states, not value properties, while SP is a claim about what affective states themselves represent. However, to rehearse the point that affective forecasts also *recreate or enact* the affective states that they predict, we take it that they at least indirectly represent corresponding value properties that those affective states are supposed to represent. As a result, they should at least be indirectly predictive of value if SP is true.

actually experienced states. For instance, studies have shown that people are bad at forecasting the intensity and duration of their affective reactions to such life events as romantic breakups, election results, failing to get tenure, and winning a lottery (Gilbert et al. 1998).

That people are prone to inaccurate imaginings of their future affect does not yet show that this is an outcome of the proper functioning of our affective system. However, there is also evidence for the latter claim. In their study, Morewedge and Buechel (2013) hypothesized that overestimating the affective impact of an event serves the function to increase one's motivation to either produce or to avoid it. They tested three predictions: that 1) people were less prone to impact bias when they were not committed to producing the predicted event than when they were so committed; 2) people were more prone to impact bias when they believed that they were able to influence the event in question than when they did not believe that; 3) affective forecasts influenced agents' effort to bring about the predicted event.

The first hypothesis was confirmed: affective forecasts that were made after the decision to pursue the outcome were more likely to exhibit impact bias. The second hypothesis was also confirmed: impact bias was more likely when the agent was still in the position to make a difference to the predicted event. They also confirmed the third hypothesis: by manipulating the perceived worth of the outcome by using a hedonic contrast effect, it was shown that people spent greater effort to pursue an outcome that was seen as affectively more rewarding. Taken together, these results suggest that impact bias has the function to increase one's motivation, rather than accurately represent one's future feelings. Similar results were obtained by

Greitemeyer (2009) whose study indicated that impact bias contributed to persistence in goal pursuit.[6]

The motivational function of affective forecasting errors was also supported by a study by Marroquín et al. (2013) which showed that blunted affective forecasts for positive events predicted being drawn to escape fantasies and that individuals who had attempted suicide (a salient example of maladaptive escape behaviour) in the past made more blunted affective forecasts for positive events than those who had not. This again suggests that overestimations of affect are adaptive in that they increase perseverance in goal pursuit and make maladaptive escape behaviours under duress less likely.

More speculatively, also the frequent underestimation of predicted negative affect with respect to a future situation may serve the motivation to pursue it. Take, for instance, the prospect of having a child. By underestimating the negative affect that raising a child can cause, one is more motivated to have the child than one would be if the prediction were accurate.[7]

We have thus reasons to believe that the robust inaccuracies that FAIs exhibit are outcomes of the proper functioning of affective system (for further evidence, see also Miloyan and Suddendorf 2015). Therefore, affect system does not seem to have the function to accurately represent offline future contents, i.e., P3 is true.

It could be objected that affective forecasting errors are not substantial enough to pose a problem for SP. As we saw, they primarily concern only intensity and duration of the predicted affect. It could be argued that FAIs still function to adequately represent the value of what is

[6] This is not to say, of course, that affective forecasting errors are always adaptive (see Bauer et al. 2022).

[7] I owe this example to Jaana Eigi-Watkin.

imagined. Since inaccuracies in affective forecasts do not generally concern valence, but only intensity and duration, FAIs can still count as a source of knowledge, by having the function to adequately represent the *approximate* value or disvalue of imagined object or event. Analogously, if it turned out that perceptual future-directed imaginings exhibit distortions of some perceptual dimensions of what is represented (compare Green and Rabin 2019) this would at most suggest that its R-function is to produce *approximately* accurate representations, which can still ground knowledge about the world. SP theorist could then say the argument in this paper has been misguided, given that although P3 is strictly speaking true, this does not disprove the weaker claim about approximate accuracy, which is all that SP needs to justify affect's status as a ground of evaluative knowledge.

Note, however, that this kind of response to the argument implies that FAI are prone to be illusory in the sense of misrepresenting the magnitude of value of imagined future events, analogously to how perceptual illusions misrepresent perceptual dimensions.[8] If that is the case, then a proponent of SP finds herself in an uneasy situation. Illusions, after all, do not seem to count as proper foundation of knowledge. Furthermore, if representations of value that result from FAIs are prone to be illusory due to motivational factors, they cannot be epistemically benign illusions. Rather, they are representations that are distorted by the agent's desires, and this compromises their epistemic value. As a relevant parallel, consider Markie's (2005: 356f) case in which one's desire to find gold makes it seem that a pebble in one's sight is gold.

[8] A comparable idea can be found in Milona and Naar (2020: 3091) who consider, but ultimately reject, Illusion Analogy, according to which emotions directed at imagined objects are like perceptual illusions. Milona and Naar reject Illusion Analogy because it entails that all emotional responses to imagined object are unfitting.

Intuitively, in such cases of wishful seeming, it is problematic to rely on the seeming to form on its basis the belief that the pebble is gold. Since FAIs are in general distorted by motivational factors, it is in general problematic to rely on them in forming beliefs on their basis. Thus, they do not seem fit to function as grounds of evaluative knowledge either.

5. Conclusion

In this paper, we presented a challenge to SP from affective imagination. We are ever so often occupied with the question of what we would feel like in various imagined situations. Unfortunately, given that our affective imaginings function in a way that is prone to error gives a reason to think that the revelations of those imaginings cannot be immediately trusted and instead need correction by inference and reasoning. They are thus not well-suited to play the perception-like foundational role in value epistemology that SP assigns to them.[9]

Funding

The research in this paper was supported by Estonian Research Council grant MOBTP1004.

University of Tartu

Estonia

[9] I am grateful to two anonymous referees for their very helpful critical commentary. The preliminary versions of this paper were presented at the 17th Annual Estonian Philosophy Conference in Käsmu and “Imagination and Belief” workshop in Jerusalem. I thank the audience members at those events for their questions and comments. The paper also benefited from feedback by Riin Kõiv.

uku.tooming@gmail.com

References

Arcangeli, M. 2018. *Supposition and the Imaginative Realm: A Philosophical Inquiry*. London: Routledge.

Balcerak Jackson, M. 2018. Justification by imagination. In *Perceptual Imagination and Perceptual Memory*, eds. F. Macpherson and F. Dorsch, 209–26. Oxford: Oxford University Press.

Bauer, B.W., M.A. Hom, A.T. Karnick, C.J. Charpentier, L.A. Keefer, D. W. Capron, M.D. Rudd, and C.J. Bryan. 2022. Does hopelessness accurately predict how bad you will feel in the future? Initial evidence of affective forecasting errors in individuals with elevated suicide risk. *Cognitive Therapy and Research* 46: 686–703.

Bechara, A., H. Damasio and A. Damasio. 2000. Emotion, decision making and the orbitofrontal cortex. *Cerebral Cortex* 10: 295–307.

Brady, M. 2013. *Emotional Insight: The Epistemic Role of Emotional Experience*. Oxford: Oxford University Press.

Burge, T. 2010. *Origins of Objectivity*. Oxford: Oxford University Press.

Carter, J.A. 2020. Epistemic perceptualism, skill and the regress problem. *Philosophical Studies* 177: 1229–54.

Chudnoff, E. 2012. Presentational phenomenology. In *Consciousness and Subjectivity*, eds. S. Miguens and G. Preyer, pp. 51–72. Heusenstamm: Ontos Verlag.

Cowan, R. 2015. Perceptual intuitionism. *Philosophy and Phenomenological Research* 90: 164–93.

Damasio, A. 1994. *Descartes' Error*. London: Papermac.

D'Argembeau, A., O. Renaud and M. Van der Linden. 2011. Frequency, characteristics and functions of future-oriented thoughts in daily life. *Applied Cognitive Psychology* 25: 96–103.

Döring, S. 2007. Seeing what to do: Affective perception and rational motivation. *dialectica* 61: 363–93.

Garson, J. and G. Piccinini. 2014. Functions must be performed at appropriate rates in appropriate situations. *The British Journal for the Philosophy of Science* 65: 1–20.

Gilbert, D.T. and T.D. Wilson. 2007. Prospection: Experiencing the future. *Science* 317: 1351–4.

Gilbert, D.T., E.C. Pinel, T.D. Wilson, S.J. Blumberg and T.P. Wheatley. 1998. Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology* 75: 617–38.

Godfrey-Smith, P. 1994. A modern history theory of functions. *Noûs* 28: 344–62.

Goldman, A.I. 2006. *Simulating Minds: The Philosophy, Psychology, and Neuroscience of Mindreading*. Oxford: Oxford University Press.

Green, E. J. and G.O. Rabin. 2020. Use your illusion: Spatial functionalism, vision science, and the case against global skepticism. *Analytic Philosophy* 61: 345–78.

Greitemeyer, T. 2009. The effect of anticipated affect on persistence and performance. *Personality and Social Psychology Bulletin* 35: 172–86.

Hatfield, G. 2009. *Perception and Cognition: Essays in the Philosophy of Psychology*. Oxford: Oxford University Press.

Hoffman, D.D., M. Singh and C. Prakash 2015. The interface theory of perception. *Psychonomic Bulletin & Review* 22: 1480–506.

Johnston, M. 2001. The authority of affect. *Philosophy and Phenomenological Research* 63: 181–214.

Kurtz, J. L. 2018. Affective forecasting. In *Handbook of Well-Being*, eds. E. Diener, S. Oishi and L. Tay, 159–67. Salt Lake City, UT: DEF Publishers.

Lerner, J.S., Y. Li, P. Valdesolo and K.S. Kassam. 2015. Emotion and decision making. *Annual Review of Psychology* 66: 799-823.

Markie, P. J. 2005. The mystery of direct perceptual justification. *Philosophical Studies* 126: 347–73.

Marroquín, B., S. Nolen-Hoeksema and R. Miranda. 2013. Escaping the future: Affective forecasting in escapist fantasy and attempted suicide. *Journal of Social and Clinical Psychology* 32: 446–63.

Milona, M. 2016. Taking the perceptual analogy seriously. *Ethical Theory and Moral Practice* 19: 897–915.

Milona, M. 2018. On the epistemological significance of value perception. In *Evaluative Perception: Aesthetic, Ethical, and Normative*, eds. A. Bergqvist and R. Cowan, 200–18. Oxford: Oxford University Press.

Milona, M. and H. Naar 2020. Sentimental perceptualism and the challenge from cognitive bases. *Philosophical Studies* 177: 3071–96.

Miloyan, B. and T. Suddendorf. 2015. Feelings of the future. *Trends in Cognitive Sciences* 19: 196–200.

Morewedge, C.K. and E.C. Buechel. 2013. Motivated underpinnings of the impact bias in affective forecasts. *Emotion* 13: 1023–29.

Rubner, A. Forthcoming. Mechanistic explanations and teleological functions. *The British Journal for the Philosophy of Science*. DOI: https://doi.org/10.1086/725653

Schellenberg, S. 2018. *The Unity of Perception: Content, Consciousness, Evidence*. Oxford: Oxford University Press.

Sperry, R.W. 1952. Neurology and the mind-brain problem. *American Scientist* 40: 291–312.

Tappolet, C. 2016. *Emotions, Values, and Agency*. Oxford: Oxford University Press.

Wilson, T.D. and D.T. Gilbert. 2005. Affective forecasting: Knowing what to want. *Current Directions in Psychological Science* 14: 131–4.