

Modal Knowledge and the Emotions

Gus Turyn

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Introduction

Epistemologists of modality want to know how we know what's possible, what's impossible, what things have which modal properties, and related questions.¹

A host of capacities have been argued to track modal properties:

- A capacity for conceiving of propositions²
- A capacity for running counterfactual simulations³
- Sense perception⁴
- Agentive phenomenology⁵

Two cases

Disgust: Andy left some food in his refrigerator when he went on vacation. While he was gone, his refrigerator broke and the food he left inside has since rotted. When he gets home and opens his door, he immediately smells the food he left inside and feels disgusted. He thinks: "Whatever that is, it's not safe to eat!" and decides to get rid of the source of his disgust.

Fear: Beth is out for a trail run. She hears a low growling noise and sees something large moving out of the corner of her eye. Before she can identify what kind of animal it is, she feels fear and thinks: "That thing might hurt me!" She decides to slowly walk away from it. As it happens, the large, growling thing is a mountain lion.

Andy and Beth have each come to know *de re* modal facts about things in their environments.⁶

The modal facts that they learn are *practical*⁷ and *valenced*.

Explaining the cases

Can any of the items on the list given above explain how Andy and Beth come to learn these facts?

¹ See Williamson (2007), Fischer and Leon (2016), Nolan (2017), and Vetter (2024) for discussion of the methodology of the epistemology of modality.

² Yablo (1993); Chalmers (2002)

³ Williamson (2007); Kroedel (2012); cf. Jenkins (2008) and Mallozzi (2021)

⁴ Strohminger (2015); Vetter (2019); Munton (2025)

⁵ Vetter (2024)

⁶ Andy learns that the food is a contaminant; Beth learns that the mountain lion is dangerous. I won't argue for the claim that these are modal properties in the interest of time, but see Williamson (2000) and Fassio (2025) for arguments that danger is modal.

⁷ See Williamson (2016) and Strohminger and Yli-Vakkuri (2019) for discussion of practical modality.

Not conceivability: conceivability can't explain our knowledge of practical modality in general.

Not counterfactual simulation: (1) no prior empirical experiences are necessary for Andy or Beth to learn the facts in question and (2) neither Andy nor Beth knows enough about the objects of their respective emotions to run epistemically valuable counterfactual simulations.

Not perception: (1) perception can't explain the valenced nature of their experiences⁸ and (2) it's not clear how the brief perceptual snippets that they get could by themselves track the kind of modal properties of concern here.⁹

⁸ Jacobson's (2021) requires that valence in perception is non-veridical.

⁹ See Brody et al. (2024) for discussion of empirical evidence for perceptual tracking of modal properties. Guan and Firestone (2020) offer empirical evidence for perceptual tracking of much simpler modal properties.

Not agentic phenomenology: even if these turn out to be ability modals, they aren't the kind of ability modal with which Vetter (2024) is concerned.

My proposal: the best explanation for these cases is that emotions such as fear and disgust are sources of practical modal knowledge.

The emotions

We can ask questions about what emotions *are* or questions about what emotions *do*: my focus here is on the function of emotions.

Emotions involve (or are?) appraisals.¹⁰

¹⁰ Arnold's (1960) terminology

Emotions are about things in two different senses: they have material (or particular) objects and formal objects.

The material objects of emotions are the things in the world towards which the emotions are directed; the formal objects are (roughly) the properties that the emotions represent the material objects as having.¹¹

¹¹ Andy's disgust is about the rotten food and about its being a contaminant

Biocultural or biocognitive models of the emotions offer architectural accounts of what emotions do.¹²

¹² Levenson (1994); Sripada (2021).

Emotions as sources of modal knowledge

My thesis is that the emotions are foundational sources of modal justification.

Why should we accept this claim?

Disgust*: Andy sits down to eat. As he's about to take a bite, he feels disgusted by the food in front of him. He forms the belief that the food is inedible and decides against eating it. As it turns out, one ingredient had in fact gone bad.

Fear*: Beth is out for a trail run when she feels an overwhelming sense of fear. She cannot identify what caused it but forms the belief that she is in danger and decides to slow down and walk towards the nearest road.

Let's stipulate that Andy's and Beth's appraisal systems are in fact tracking the surface-level indicators of contamination and danger across the two cases. Intuitively, Andy and Beth still come to know the facts in question.

Disgust**: Andy sits down to eat. As he's about to take a bite, he happens to form the belief that the food in front of him has gone bad. As it turns out, one ingredient had in fact gone bad.

Fear**: Beth is out for a trail run when she happens to form the belief that she is in danger. She decides to slow down and walk to the nearest road.

Do Andy and Beth come to know anything in the ** cases? It depends on how we spell out the further details. What process leads to the formation of their respective beliefs?

But presumably, their beliefs are formed through deviant causal chains and are thus too lucky to amount to knowledge, even if their appraisal systems in fact initiated the deviant causal chains.

Conclusion

I've argued that the best explanation for why agents know certain practical modal facts is that certain emotions are sources of modal knowledge.

On the account that I've proposed here, emotions can be understood as foundational sources of modal justification.¹³

I've focused on fear and disgust here, but it's plausible that this generalizes to other emotions as well.

¹³ This thus offers a novel answer to the *access question* that Vaidya and Wallner (2021) pose: how do we come to access the modal facts at all?