## Expressing evidence by expressing experiences

Utterances about appearances, as in (1) and (2), communicate that one has appearance-based evidence, through the relevant sensory channel, for the embedded claim (Rett and Hyams, 2014; Asudeh and Toivonen, 2017).

- (1) A: 'It **looks** like John is tired.'
  - → A has visual evidence that John is tired.
- (2) A: 'It **tastes** like this cake contains cinnamon.'
  - → A has gustatory evidence that this cake contains cinnamon.

And so on for utterances of simple sentences with the other specific sensory verbs.

Call these the *evidential inferences* associated with appearance claims. These inferences can be distinguished from the *acquaintance inferences* associated with appearance constructions of other forms (Pearson, 2013; Ninan, 2014). (3), for instance, gives rise not only to the inference that the speaker has the relevant kind of perceptual evidence, but also to the inference that the speaker is perceptually acquainted with a particular stimulus.

- (3) A: 'John looks like he's tired.'
  - $\rightsquigarrow$  A has visual evidence that John is tired.

(Evidential inference)

 $\rightsquigarrow$  A has seen John.

(Acquaintance inference)

This specification of the inferences leaves out an important connection between them. For where both inferences arise, there is the further requirement that the speaker's visual evidence for the proposition in question be from the visual appearance of the stimulus they must be acquainted with.<sup>1</sup> While there is much to say about the acquaintance inferences of appearance constructions and their relation to evidential inferences, I focus here solely on the evidential inferences. Thus, null-subject constructions as in (1) and (2) will be most useful. They do not require the speaker to be acquainted with any particular stimulus, but just that the speaker have evidence, of the appropriate sensory type, for the embedded proposition.<sup>2</sup>

Similarly to acquaintance inferences, evidential inferences are not inferences to either entailed or presupposed content. That they are not inferences to presupposed content can be seen for the same reasons as those offered by Ninan (2014) against that hypothesis for acquaintance inferences: namely, the inferences are canceled in environments, like embedded under 'might', out of which ordinary presuppositions project:

- (4) A: 'It **might** look like John is tired (you should check before deciding whether to put more make-up on him for the show).'
  - $\not\rightarrow$  A has visual evidence that John is tired.

<sup>&</sup>lt;sup>1</sup>This is a theoretically neutral way of describing the data point that has led theorists to posit a "perceptual source" interpretation of the matrix subject in copy raising constructions, of which (3) is an example (Asudeh and Toivonen, 2012).

<sup>&</sup>lt;sup>2</sup>They thus do give rise to the inference that the speaker is visually acquainted with *something* of relevance — which (Rudolph, to appear) calls a "general acquaintance inference". Here, however, I focus not on the inference to the speaker having acquaintance of any kind, but rather on the inference to the speaker having a certain kind of evidence.

That evidential inferences are not inferences to entailed content can be seen by considering them embedded in counterfactual constructions.

(5) Even if no one had been around to see, it would still have looked like that wall was about to fall down.

(I change to a different proposition so that we can imagine there are no perceivers at all in the counterfactual scenario.)

Like acquaintance inferences, the evidential inferences associated with appearance claims seem to be tied to the felicity of utterances, rather than to definedness-conditions or truth-conditions. When the sentence is modified to include overt reference to an experiencer, the evidential inference becomes an ordinary entailment, about the evidence that the experiencer has.<sup>3</sup>

(6) A: 'It looks **to B** like John is tired.'

⇒ B has visual evidence that John is tired.

I propose an expressivist analysis of bare appearance claims, according to which they serve to express speakers' experiential states. Utterances with 'look', like (1), express a speaker's *visual* experiential state; those with 'taste', like (2), their *gustatory* experiential state; and so on. Experiential states are (among other things) sources of evidence about the (experience-independent) world. Thus, the evidential inferences of appearance claims follow straightforwardly.

(7) 
$$[looks]^v = \lambda p. \forall w \in B_v[p(w) = 1]$$

Where v is a visual experiential state (conceived as a set of worlds: those left open by the relevant agent's visual experiences), and  $B_v \subseteq v$  is the set of best or most typical worlds in that state.  $B_v$  will thus be determined with the help of a typicality ordering:

- (8) a. **Typicality ordering:** For set of worlds X and set of "typical" propositions T,  $\forall w_1, w_2 \in X, w_1 <_T w_2$  iff  $\{p \in T : p(w_2) = 1\} \subset \{p \in T : p(w_1) = 1\}$ 
  - b. Best visually accessible worlds:  $B_v = \{w \in v : \neg \exists w' \in v[w' <_T w]\}$

Thus, with the utterance in (1), A expresses that her visual experiential state is such that John is tired in all its most typical worlds; that is, that John being tired is the most typical scenario, given her visual experience. However, crucially, she *expresses* that her visual experience is of this type, without *asserting* that she has such visual evidence.

The account proposed here combines the modal semantics for appearance verbs proposed by Doran (2015) with an expressivist approach inspired by the one developed for epistemic modals in Yalcin (2007) and Yalcin (2011). Indeed, There is an important analogy between epistemic modal claims and the appearance constructions at issue here: whereas the former express a feature of the speaker's total body of information, the latter express a feature of the information the speaker has, restricted just to the relevant sensory modality (Rudolph, 2018b).

<sup>&</sup>lt;sup>3</sup>By contrast, in overt-experiencers cases, acquaintance inferences turn into ordinary presuppositions about the experiencer's acquaintance (Anand and Korotkova, 2018; Muñoz, ms.).

The current proposal also accounts for the evidential inferences of appearance utterances similarly to the way that Franzén (2018) accounts for the acquaintance inferences with utterances with predicates of personal taste and aesthetic vocabulary, with the important difference that the states expressed in the cases of interest here do not have any special connection to affect or emotion.

There are also similarities between my approach and that of Anand and Korotkova (2018). They take the acquaintance inference with PPTs and other subjective expressions to arise due to a requirement that the "kernel" directly settle the asserted proposition. Because a proposition about looks (say) can only be directly settled by visual evidence, this amounts to a requirement that the speaker have visual evidence of the relevant kind. Experiential states on my view do rather similar work to kernels on theirs. However, because they only develop their analysis fully for the case of PPTs, they do not deal with the added structure that appearance cases present, given that they contain embedded propositions. A fuller comparison will have to await future work.

## References

- Anand, P. and Korotkova, N. (2018). Acquaintance content and obviation. In Sauerland, U. and Solt, S., editors, *Proceedings of Sinn und Bedeutung 22*, pages 55–72.
- Asudeh, A. and Toivonen, I. (2012). Copy raising and perception. Natural Language & Linguistic Theory, 30:321–380.
- Asudeh, A. and Toivonen, I. (2017). A modular approach to evidentiality. *Proceedings of the LFG '17 Conference*.
- Doran, D. (2015). A semantic analysis of English copy raising constructions. Master's thesis, McMaster University.
- Franzén, N. (2018). Aesthetic evaluation and first-hand experience. Australasian Journal of Philosophy. DOI: 10.1080/00048402.2018.1425729.
- Munoz, P. (2018). The origin of acquaintance inferences: Experiential semantics and direct evidentiality. Unpublished ms.
- Ninan, D. (2014). Taste predicates and the acquaintance inference. *Proceedings of SALT*, 24:290–309.
- Pearson, H. (2013). A judge-free semantics for predicates of personal taste. *Journal of Semantics*, 30(1):103–154.
- Rett, J. and Hyams, N. (2014). The acquisition of syntactically encoded evidentiality. *Language Acquisition*, 21(2):173–198.
- Rudolph, R. E. (2018a). The acquaintance inference with 'seem'-reports. *Proceedings of the 54th Meeting of the Chicago Linguistics Society.* Forthcoming.
- Rudolph, R. E. (2018b). Talking about appearances: the roles of evaluation and experience in disagreement. *Philosophical Studies*. DOI: 10.1007/s11098-018-1185-5.
- Yalcin, S. (2007). Epistemic modals. Mind, 116:983–1026.
- Yalcin, S. (2011). Nonfactualism about epistemic modality. In Egan, A. and Weatherson, B., editors, *Epistemic Modality*, pages 295–332. Oxford University Press.