

# Inferring Sensory Experiences

Kevin Reuter

kevin.reuter@rub.de

Department of Philosophy, Ruhr University Bochum

## Abstract

Several scholars, e.g. Sellars (1956), Meltzoff & Gopnik (1993), have construed the attribution of experiences as being governed by a folk-psychological theory in which experiences function as theoretical entities. However, so far this claim has not been convincingly supported by an account of how people infer the existence of experiences. In this paper I argue that the mechanisms that lead to the stipulation of experiences are fundamentally inferential and are applied in both self-attribution and third-person attribution of experiences. The two most common sources for going through such inferential processes are (i) disagreements between two people in how the world is presented to them, (ii) being aware of or suspecting differences between how the world is presented to a person and extraneous information the person has about the world. From situations like these, I show that ‘experience’ is a theoretically-acquired concept which refers to entities that play an explanatory role in virtue of fulfilling two conditions: a person entertains the concept experience if that person makes an appearance-reality distinction (C1) and considers the appearance to be subjective (C2).

**Keywords:** experiences, self-ascription, self-attribution, introspection, appearances, appearance-reality distinction, theory-theory, Austin

## 1. The Appearance-Reality Distinction

It is widely held that self-ascribing experiences requires a person to conceive of the way things appear and not how they really are. Tye claims that “if you are attending to how things look to you, as opposed to how they are independently of how they look, you are bringing to bear your faculty of introspection” (2000, p. 46), and Dretske argues that when we self-ascribe experiences “we are conceiving of how things seem” (1994, p.266-7). What it means to conceive of how things seem, however, remains mostly unclear. More

specifically, it is hardly ever discussed, which appearance-statements count as attribution of experiences and which do not. This is especially curious as no one believes that every appearance-statement involves the attribution of an experience, e.g. “she looks chic” is an appearance-statement from which we cannot infer the attribution of an experience.

We often make appearance-statements when we know or suspect that we are in a situation in which it would be wrong to take what we seem to perceive at face value. E.g. we state that ‘the Müller-Lyer lines only appear to be of different length’ (illusion), ‘my phone only appears to be ringing’ (hallucination), ‘the wall looks green to me but it is white’ (unusual lighting conditions), ‘the sponge looks like a rock’ (different surface conditions) - see figure 1 below.

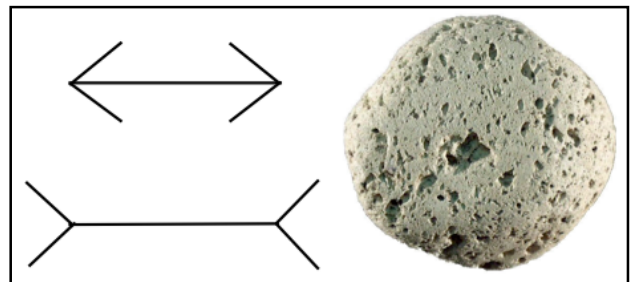


Figure 1: The Müller-Lyer illusion (left) and a sponge looking like a rock (right) are grasped by making an appearance-reality distinction.

It would be wrong, however, to infer without argument that in all of these cases attribution of experiences takes place. Austin makes an observation that deserves our attention. He states:

"It is perhaps even clearer that the way things look is, *in general*, just as much a fact about the world, just as open to public confirmation and challenge, as the way things are. I am not disclosing a fact about myself, but about petrol, when I say that petrol looks like water." (1962, p.43, *my italics*)

The case of a white wall looking green because it is illuminated by green light, and the example of a

sponge looking like a rock because it has a surface that has a rock-like structure, seem to support Austin's claim, that the way things look is as much a fact about the world, just as open to public confirmation and challenge, as the way things are. When it comes to visual examples, the photo test seems to be a possible means to track whether the way an object appears is largely a fact about the world: The illuminated wall will yield a greenish tone on the photo picture, and the sponge is indistinguishable from a rock on the photograph. In contrast, the way the Müller-Lyer lines look to a person does not seem to be subject to public confirmation and challenge. Making a photograph of the lines will not yield lines of differing length on the photograph (assuming of course a head-on photo). Hallucinations, dreams and afterimages are also not subject to public confirmation.

What is important for our discussion, is that Austin seems to have established a feature of appearance-statements which does not hold for all cases, and that this criterion supports our intuition that we self-ascribe experiences just in cases in which the appearance is not open to public confirmation. However, it is of course possible for a person to ascribe a sensory state despite the reason for why something appears to be different from the way it really is, is dependent on external conditions of perception; and surely, people can self-ascribe their sensory states even though there is no reason to doubt the veridicality of their experiences. Hence, a simple classification of appearance-statements that are made because the senses are deceived as self-ascriptive, and appearance-statements that are made because the conditions of perception are unusual as objective, seems false. What really seem to matter, so I will now argue, are the inferences people make when thinking about appearances. To illustrate this point, let us look at two examples: mirages and the moon illusion.

## 2. Inferring the Existence of Experiences

People are often aware or at least suspect that the world appears different from the way it really is. However, they also often lack an understanding of the reasons for why they make an appearance-reality distinction. Mirages are most commonly associated with a thirsty and exhausted person traveling through the desert, suddenly seeming to see an oasis. People offer two distinct explanations

to account for this appearance: illusion and optical phenomenon. Whereas it could of course be the case that a traveler starts to hallucinate an oasis, mirages are properly explained (and most frequently happen) by the bending of light rays from distant objects and can be captured on camera - thus they are optical phenomena. The moon illusion, on the other hand, is a phenomenon that often occurs when people look at the moon which is just above the horizon. The moon appears to be larger on the horizon than it is high up in the sky (see figure 2 below). It was originally thought that due to light refraction in the atmosphere, the moon on the horizon occupies more space in the visual field than it would normally do. However, the moon illusion is not an optical phenomenon but is explained by the workings of our perceptual apparatus and is related to the Ponzo illusion, and cannot be captured on a photograph.



Figure 2: Example of the Moon illusion.

We can see from these two examples that people can be justifiably uncertain about whether the appearance of an object is different from its reality due to external physical conditions or internal psychological conditions. Sometimes it is simply very difficult to ascertain the reasons for a difference in appearance and reality. Misattributions of this difference go both ways: mirages are often misattributed to deranged sensory perception, the moon illusion is often misattributed to the physical properties of the atmosphere. But this also has the consequence that the meaning of an appearance-statement depends on which state - physical or psychological - is blamed for the conceived difference between appearance and reality. Although it is correct to say that the appearance-statement 'the moon appears larger on the horizon' cannot be subject to public confirmation or challenge, a person can say the same words but express a different appearance-statement, one that he thinks expresses openness to public

confirmation. Similarly, although the appearance-statement ‘there seems to be an oasis’ is usually taken to be subject to public confirmation, a person can utter the same sentence, but uses the sentence in a different sense which precludes public confirmation.

If people consider the appearance-statement to be open to public confirmation, they do not focus on their mental states as representing the world in a certain way, but rather talk about how the world is independent of their experiences. In contrast, they might use an appearance-statement to talk about their experiences themselves - statement which then of course should be classified as self-attributive. We are now in a position to formulate the two necessary and jointly sufficient conditions for self-attributing an experience.

**Self-attribution of experiences:** a subject S self-attributes an experience iff,

- (C1) S distinguishes the appearance from the reality of what S experiences,
- (C2) S considers the appearance to be subjective.

Similarly, we can easily specify the conditions for attributing an experience to another person:

**Attribution of experiences to others:** a subject S attributes an experience to agent O iff,

- (O1) S distinguishes the appearance from the reality of what O experiences,
- (O2) S considers the appearance to be subjective.

Being aware of or suspecting differences between the way the world presents itself and other beliefs we have about the world, is one of the two main sources for why people attribute experiences. We often suspect that the way the world presents itself is not how it really is with our less dominant senses, e.g. it may seem to us as if there is faint smell of burned toast in the air, but it might as well be just our imagination or a different scent that we misinterpret accordingly. In these and similar cases, suspicion often arises as to whether we experience the world differently from how it really is.

Disagreements between people about the way the world is perceived to be, are the second main source for attribution of experiences. Suppose you are at a ball, talking to a woman, and comment on how the

red-coloured dress suits her style. She responds by politely pointing out that the dress is of an orange-coloured shade. The disagreement about the colour might persist, and you cannot get yourself to see the orange colour. Once again, there seem to be two options: you can either blame the lighting conditions or some other external condition, or you can *blame your way* of perceiving the world for the disagreement, and thus attribute to yourself an experience.

Both the first-person and the third-person cases are very similar. People attribute experiences to other people for the same reasons that they self-attribute experiences: there is a difference between what seems to be the case for oneself and what seems to be the case for another person. This situation needs an explanation, and thus people postulate the existence of experiences.

We can generalise this case by following inferential theory-theoretic rule (TT):

- (TT-A) If the perceptual statements of two honest people differ, and if these people have sufficient knowledge and are in a position to make correct statements about the world, it is reasonable to draw a distinction between how the world appears and how the world really is.
- (TT-B) If there is no obvious worldly cause for why people disagree with each other, it makes sense to consider the possibility that the way the world appears is dependent on the sensory system.
- (TT-C) In ‘blaming’ the sensory system for the way the ‘world’ appears, attribution of experiences takes place.

### 3. The Explanatory Power of this Theory-Theory

This theory of self-ascription of experiences not only specifies two necessary and jointly sufficient conditions for the self-attribution of experiences, but also (a) analyses the concept of experience, and (b) captures the cognitive requirements that we need to be in possession of in order to be capable of metacognition.

(ad a) There is a need to specify the minimal but also sufficient conditions for the possession of the concept experience. (C1) and (C2) state that a

person entertains the concept of experience, if that person makes an appearance-reality distinction (C1) and considers the appearance to be subjective (C2). These two conditions have the advantage of specifying the conditions for entertaining the concept of experience in a non-circular way, i.e. we do not need to mention experiences in the description of the two conditions.

(ad b) Empirical results from the psychological literature on the appearance-reality task have a direct bearing on this discussion. According to this theory, children need to make two important advancements in their understanding of the nature of the world in order to have the ability to ascribe experiences. First, children need to understand that things can appear to be different from the way they are (C1). Second, they need to understand that the reason for why things can appear different is not always found in the environment itself (C2). In one of the well-known appearance-reality tasks, a sponge that looks like a rock, is presented to children. Several psychologists and philosophers argue that once children pass the appearance-reality task, they have gained the cognitive ability to self-ascribe experiences (Taylor & Flavell (1984), Nichols & Stich (2003)). But this conclusion is not warranted. It is possible, and indeed highly plausible, to presume that children do not consider the reason for the appearance-reality distinction to be a matter of perceiving the sponge, but rather to blame the deceptive appearance on a visible property of the sponge. Thus, a child might pass the appearance-reality task because he associates the appearance of the sponge as a rock with the form of the sponge, e.g. the surface, shape, and size of the sponge is rock-like. The child does not need to think that the appearance of rock-like properties is explained by the way the sponge is perceived.

It is of course possible to self-ascribe a veridical experience without having any doubts whatsoever regarding the veridical nature of the experience. A person might entertain the concept of experience for other reasons (e.g. she just read about the brain-in-a-vat thought experiment) or for no obvious reason at all (e.g. sometimes thoughts enter our mind without us knowing where they 'came from'). The main conclusion of this paper is that self-awareness of experiences is often arrived at by an inferential process that is governed by a folk-psychological theory that we learn as children. The concept of experience is therefore a theoretically-acquired concept which refers to entities that play an explanatory role in that theory.

The theory I have presented belongs in certain respects to the group of theories which are commonly labelled 'theory-theories of self-awareness' (TTSA) and which originate in the theories of Ryle (1949) and Sellars (1956). Proponents of TTSA hold a *theory* according to which a person who self-attributes an experience, uses a *theory* to do so - hence the name 'theory-theory of self-awareness'. In a sense, I also claim that a person *often* uses a theory to self-ascribe her experiential states, but it must be clearly differentiated from other theory-theories that have been advocated in the literature. It is often argued that theory-theory accounts of self-awareness state that self-ascriptions of mental states are based on the same or similar processes as ascriptions of mental states to others (Kind (2005), Schwitzgebel (2010)). This claim is ambiguous: it can either mean that we determine the *content* of other people's mental states by the same or similar mechanisms that we use when determining the content of our own mental states; or it can mean that the mechanisms that lead from thoughts about the world to the attribution of experiences to others are the same or similar to the mechanisms when self-attributing mental states. Whereas I reject the former claim, I endorse a restricted form of the latter thesis. We do not infer *what* we experience but rather *that* we experience. *What* we experience, we know by perceptual attention and recognition. *That* we experience, we know by theorising about the circumstances we often find ourselves in

#### 4. Objections

In this section I evaluate two rather specific objections against construing the self-attribution of experiences in the way I have suggested above. First, Carruthers argues that the theory that children apply when they attribute experiences, is a nativistic theory. I show that Carruthers's claim is not warranted and that instead the inferential mechanisms that we apply when attributing experiences, are learned by children. Second, Papineau argues that experiences cannot be entities embedded in a folk-psychological theory because we can conceive of experiences as epiphenomenal states. I agree that Papineau's argument is valid, but he presupposes a conception of experiences as theoretical entities that my theory is not committed to.

## Are self-attributive inferences nativistic or learned?

Carruthers claims:

“I favour such a nativistic theory-theory because if, firstly, young children are pictured as little scientists, constructing a mentalistic theory as the best explanation of the data, then it beggars belief that they should all hit upon the same theory, and at the same tender age too (at about the age of four, in fact). But if, secondly, the theory is supposed to be learned by the child from adult practitioners, then it is puzzling how this can take place without any explicit teaching or training;” (1996, p.23)

I agree with Carruthers that if we do conceive of young children as little scientists who need to construct their mentalistic theory all by themselves, then we should expect diverging theories to emerge from different children at different ages. But what is Carruthers’s evidence that adult practitioners do not teach young people their theory of experiences? He gives none. So let me present what I consider to be a plausible story about how adults teach young children to self-attribute their experiences.

I have argued that the capability to make a distinction between appearance and reality is one of two necessary conditions required to grasp the concept experience. Adults not only provide children with the linguistic tools to make this distinction, they also actively educate children in making this distinction in appropriate circumstances and explain why appearance and reality can come apart. If a child asks what a rainbow is, the parent might tell the child that rainbows are not what they appear to be, but are only optical phenomena; or when the lights are switched off, then things do not become black, but only appear to be black. By then, children have also learned that bodily states like pains and itches are only felt by themselves, simply because they are the only ones who are ‘connected’ with their body. The distinction between public and private objects is, moreover, manifested in everyday conversations with adults. Adults *ask* children whether they are hungry, and *ask* them where the pain is located, but they *tell* them to watch out where they are going, *tell* them to eat food, and *tell* them to listen to what they say. Thus, children learn that (a) objects often do not change but rather their perceptual properties do, and that (b) they can draw a distinction between private objects and public objects of discourse. However, if it was not for situations in which children are required to combine

both ideas, the stipulation of experiences would seem unnecessary - at least from a folk-psychological standpoint. These situations exist though, and provide Kuhnian puzzles for children. Although illusions and hallucinations are the prime examples of non-veridical experiences in the philosophical literature, the most common and persistent non-veridical experiences are dream experiences. Children are not only regularly confronted with dreams they also want support from their parents especially after having had nightmares. But now the following curious situation occurs: parents *tell* their children that they need not worry because what they dreamed was not real. However, they also *ask* their children about what happened in their dreams. Thus, children are told that they had *appearances* that are *private* to them. They now only need to combine these two ideas, and thereby understand the concept of experience. I therefore reject Carruthers’s claim that the concept of experience is nativistic.

## Do experiences necessarily have effects?

Papineau considers the possibility that self-attribution like ‘this auditory experience’, utilises a concept of experience, that is “some kind of theoretical concept, constituted by its role in some theory of experiences” (2007, p.121). He rejects this solution because he argues that if we really derive the concept of experience from some folk-psychological theory then we conceive of experiences as states with causes and effects. These causes and effects do not need to be specified by folk-psychology but they would be nonetheless an analytic part of our conception of experience. However, Papineau states, we can without contradiction think of experiences as epiphenomenal states without any subsequent effects like behaviour.

Papineau’s argument is sound but only under a more specific reading of what a theoretical concept involves, which we do not need to accept. I argue that when children learn how to distinguish appearance from reality, they theorise that experiences have causes but not necessarily any effects. Possessing the concept of experience enables a person to conceptually distinguish veridical from illusory or hallucinatory experiences, and if there is a difference between appearance and reality, the person understands that the experience was not merely caused by worldly objects and events. However, I do not see any reason why we

should believe that this concept of experience is committed to the fact that experiences have cognitive or behavioural effects. Applying the appearance-reality distinction only implies that appearances are caused by the world, but not that appearances themselves have any effects. Thus, epiphenomenalism is consistent with phenomenal concepts being constituted by a theoretically-acquired concept of experience.

## 5. Conclusion

In this paper I have argued that we understand experiences to be (a) appearances that are (b) subjective. In most circumstances in which a person attributes an experience, there are very good reasons for doing this. These reasons follow the twofold structure of the concept of experience. I have argued that there are two main ‘sources’ of experience attribution. First, a person might become aware of or suspect differences between how the world appears and how it really is. Second, disagreements between two people about how the world ‘presents itself’, can make people aware of such differences. The inferential nature of attribution of experiences was defended against two objections.

## References

1. Austin, J.L. (1962). *Sense and sensibilia*. Oxford: Oxford University Press.
2. Carruthers, P. (1996). Autism as mind-blindness: an elaboration and partial defence. in P. Carruthers, P. Smith (eds.) *Theories of Theories of Mind*, Cambridge University Press.
3. Dretske, F. (1994). Introspection. *Proceedings of the Aristotelian Society*. 94, 263-78.
4. Kind, A. (2012). Introspection. in *The Internet Encyclopedia of Philosophy*, ISSN 2161-0002, <http://www.iep.utm.edu/introspe/>.
5. Meltzoff, A., Gopnik, A. (1993). The role of imitation in understanding persons and developing theories of mind. in Baron-Cohen *Understanding other minds: Perspectives from autism*, Oxford: Oxford University Press.
6. Nichols, S, Stich, S. (2003). How to read your own mind: a cognitive theory of self-consciousness. in Q. Smith and A. Jokic (eds.) *Consciousness: New Philosophical Perspectives*, Oxford: Oxford University Press.
7. Papineau, D. (2007). Phenomenal and perceptual concepts. in T. Alter and S. Walter (eds.) *Phenomenal Concepts and Phenomenal Knowledge*, NY: Oxford University Press.
8. Ryle, G. (1949). *The concept of mind*. Chicago: Chicago University Press.
9. Schwitzgebel, E. (2010). Introspection. *The Stanford Encyclopedia of Philosophy*, E. Zalta (ed.), URL = <http://plato.stanford.edu/entries/introspection/>
10. Sellars, W. (1956/1997). *Empiricism and the philosophy of mind*. Cambridge, MA: Harvard University Press.
11. Taylor, M., Flavell, J. (1984). Seeing and believing: children’s understanding of the distinction between appearance and reality. *Child Development*, 55, 1710-20.
12. Tye, M. (2000). *Consciousness, Color and Content*. Cambridge: MIT Press.