

Smell, Philosophical Perspectives

Clare Batty

Encyclopedia of the Mind, Pashler (ed.)

As far as the philosophical tradition would have us believe, vision is the model from which all theorizing about perception can proceed. Recently, however, philosophers have begun to re-examine tradition by turning their attention to the other modalities and what they, in their own right, have to tell us about the nature of perception. Still, discussions of olfaction are few. This entry introduces three broad areas of inquiry and discusses olfactory experience with respect to each. They are: (i) the content of experience, (ii) the nature of perceptual objects and (iii) the nature of the perceptual properties. Considering olfactory experience with respect to each presents unique challenges to the traditional visual-based model of theorizing about perception and, as a result, insight into perception unavailable from the visual case alone.

The Content of Olfactory Experience

It is commonplace to suppose that visual experience is world-directed and, in particular, that it has representational content. We can think of the content of a perceptual experience as the way the world appears to a subject when she has that experience. If the world is that way, then the experience is accurate, or veridical. If it isn't, then it is inaccurate, or non-veridical.

What must the world be like in order for an olfactory experience to be veridical? In other words, how does the world appear to be in olfactory experience? Visual experience is importantly object-based, presenting us with ordinary objects like apples and oranges. Perhaps what olfactory experience represents, then, is that there are ordinary objects in our environment with certain olfactory properties. There is no doubt that this view accords with the way we speak. Just as we say that the apple looks red, we also say that the lilac smells sweet. According to William Lycan, olfactory experience does represent ordinary objects such as skunks and lilac blooms, but only at a secondary level of representation. At a first level of representation, olfactory experience represents odors, or collections of airborne molecules. Lycan's view also accords with everyday thought about the objects of olfactory experience. Not only do we say that the lilac smells; we also say that its smell lingers in the garden. And what we suggest when we do the latter is that olfactory experience also presents us with something in the air—a cloud or emanation of sorts.

Despite this, there remains reason to think that we speak more loosely about our olfactory experiences than we do our visual ones, in terms of their presenting ordinary objects as well as individual odors. In each case, the reason for suspicion draws on consideration of the phenomenology of olfactory experience. A characterization of the representational content of olfactory experience should honor the phenomenology of olfactory experience—that is, what olfactory experience is like. (Note that the phenomenological notion of content is not the only notion of content available, though it may be the most common notion at work in the philosophical literature; we will turn briefly to this issue below.) Taking

the ordinary objects proposal first, consider a novel smell, one that you have no reason to suppose is the smell of one object as opposed to another. It is only once you know what the source of the smell is that you are able to make remarks such as “I smell the coffee”. This fact puts pressure on the view that olfactory experience represents ordinary objects. It would seem that nothing in the olfactory experience itself ‘says’ coffee.

There are further considerations against such a view—ones that avoid the controversial suggestion that kind properties (e.g., coffee) are eligible for representation in experience and that set aside issues of a perceiver’s capacity for identification. Many philosophers have held that object perception and, based on that, the ability for thought about individual objects, requires a robust form of spatial differentiation of the properties presented—e.g., a figure-ground distinction. Vision achieves this; olfactory experience does not. Consider the experience you have when you indulge yourself in the smell of the breakfast cooking. (Note that ‘smell’ denotes an olfactory property.) You are able to distinguish the coffee smell and the bacon smell; but your experience does not allow you to discriminate the particular objects that bear these properties—whether these are ordinary objects or odors (or both). Unlike visual experience, smells are not packaged together in space in such a way that these packages can be distinguished from one other and from a common ground. At any instant, it seems as if the smells are simply ‘here’. This not only puts pressure on the view that olfactory experience represents ordinary objects but also on the view that it represents individual odors.

Compared to the wealth of detail afforded by visual experience, then, olfactory experience seems a mere smudge. This ‘smudgy’ feature of olfactory experience has prompted some philosophers to suggest that olfactory experience has no representational content. Subjectivist views of perceptual experience maintain that experiences are not world-directed, that they have no ‘objective purport’. Subjectivist views are also characterized as the view that perceptual experiences are raw feels or ‘mere sensations’. Although discussions of olfaction in the philosophical literature are rare, the subjectivist view is held up as the *prima facie* view of the nature of olfactory experience.

But a subjectivist view is not inevitable. There is a moderate representational view available that honors the phenomenology of olfactory experience and yet maintains that it is world-directed. Recently, discussions of the representational content of visual experience have focused on a debate between the view that visual experience has existentially quantified, or abstract, content and the view that it has object-involving content. To see the difference between these two views, consider the visual experience you have when you look at an orange on the counter. According to the existentially quantified account (from here on, the ‘abstract account’), your experience has the following content: there is some object x at location L and x is orange, oval, and so on. According to abstract theorists, it is possible that experiences of two qualitatively identical, yet distinct, oranges might be phenomenally indistinguishable. Indeed, a perceiver might hallucinate an orange before her and yet have that experience be phenomenally indistinguishable from a veridical experience of an orange. To preserve this possibility, the abstract theorist proposes that the content of each is content into which no particular object enters. The object-involving theorist, on the other hand, claims that such a view ignores the particularity of visual experience. It’s not that *some* object appears to be orange, oval, and so on. *This one* does! The very orange

before you, then, must be a part of the content of your experience. Letting 'o' name the actual orange before you, the object-involving account claims that your experience has the content: *o* is orange, oval, and so on...and at L.

This entry will not consider the solution to this debate about visual experience. The debate itself, however, draws attention to the moderate view of olfactory content. Given its phenomenology, an object-involving account is unsuitable for olfactory experience. Unlike visual experience, olfactory experience does not seem to present particular things. As a result, olfactory experience cannot live up to the particularity that such a view demands of experience. However, the abstract account, which requires no such particularity, seems like a natural fit. A version of it can respect that smells are experienced as external to a perceiver and that olfactory experience does not present us with the individual objects that instantiate those smells. Drawing on the considerations of spatial presentation discussed above, the moderate view posits that olfactory experience only ever represents that a single 'something or other' is smelly and 'here'. On this view, the following schema specifies the content of any olfactory experience: there is some *x* here that is F, G, and so on. If there is nothing in the vicinity that is F and G, then the experience is non-veridical.

There are several reasons to think that any world-directed view is preferable to a subjectivist one. Despite their difference in phenomenology, we still think of the senses as informational systems. Using the senses, we are able to gather information about the world. Although we might think their phenomenology is impoverished, our olfactory experiences still function to guide behavior and action. If someone smells smoke in the building, they flee. As guides of behavior and grounds of belief, the experiences of the sense modalities form a common kind. A shared world-directedness provides a way of accounting for this commonality.

Olfactory Objects

If we accept the abstract view, the next question is: given that some olfactory experiences are veridical, what objects have the properties those experiences present? That is: what are the olfactory objects? As we have seen already, there are several options: olfactory objects are (1) 'source' objects, (2) odors, or (3) both odors and source objects.

Given the traditional, 'visuocentric', approach to theorizing about perception, we might feel tempted to say that the properties of which we are aware in olfactory experience are qualities had by regular old objects—lilac blooms, skunks and pots of coffee. Although olfactory experience is not discriminating enough to report that there are particular objects, on proposal (1) the bearers of the properties presented in olfactory experience are in fact ordinary objects. We certainly think of lilacs, skunks and portions of coffee as the sources of smells. But we also speak of them as having a good, or bad, smell. Consider how, when rooting around in the fridge for the rotten food, you say of the uncovered cabbage: "it's this that stinks". What you direct our attention to is the head of cabbage. Or to take a more pleasant example, we take pride in the roses in our garden not only because they look

beautiful but also because they have wonderful smells. We attribute a property—namely, a smell—to the rose. The same is true of the cabbage. It has a very bad smell, we say.

This might seem a common view; but it is also subject to question. Consider how you can have an olfactory experience even though the object that you think of as responsible for the smell is far away. For example, you might smell the rubbish from your apartment window even though it is outside in the bin. If my olfactory experience represents that properties are instantiated by something or other ‘here’ then your experience must be non-veridical. The rubbish is not anywhere near you; it is downstairs and outside. The problem with proposal (1) arises because this kind of circumstance is not rare. If olfactory objects are things like piles of rubbish, many of our olfactory experiences will turn out to be non-veridical. And this is a view that we ought to avoid.

Proposal (2) has it that olfactory objects are collections of airborne molecules given off by the rubbish—i.e., odors. On this proposal, the experience you have when you smell the rubbish through the window is a veridical one. The rubbish gives off an odor, that odor is ‘at’ you (indeed, it has gone up your nose), and your experience reports it as such. This is a more plausible result. Experiences we intuitively count as veridical turn out to be so.

Nevertheless, we might feel drawn to the view that the rubbish *also* has the stinky property. After all, the rubbish gives off or emits the odor. If we feel the pull of such a view, there are two ways that we can accommodate it. First, we might hold that the rubbish has the stinky property but that olfactory experience does not present that object (i.e., it presents the rubbish odor only). The second option is more controversial. We do think of ourselves as smelling the rubbish *by* smelling the odor it emits. If we take this proposal seriously, as denoting something about the content of olfactory experience, then we arrive at proposal (3): olfactory objects are both odors and source objects.

Lycan’s multi-layered view of representational content noted above is version of proposal (3). Both odors *and* ordinary objects are olfactory objects, each definitive of successive levels of representation. According to Lycan, insofar as we might think that there is something both correct and incorrect about a situation in which a rose odor is present when no rose is, his view respects our judgments. On one level, one’s experience is veridical; on another, it is non-veridical.

But the view that olfactory objects are (also) things like roses faces a challenge. If ordinary objects are among the olfactory objects, then content cannot be determined by phenomenology alone. As we have seen, the phenomenological notion of content and, in particular, the abstract view applies nicely to Lycan’s first level of representation (where the represented objects are odors); it does not, however, fit the second (where the represented objects are ordinary objects). Advocates of such a view, like Lycan, owe us an account of an additional kind of content and an argument for why we ought to think that olfactory experiences have that. One candidate view is the teleological view of content advocated by both Ruth Millikan and Fred Dretske—in short, the view that the content of an experience depends on its function within the system, or organism, of which it is a part. This, it would seem, is just the approach that Lycan takes—although he endorses it not only for the second level of representation, but also the first.

Olfactory Properties

A final issue to consider is the nature of the smells themselves. Although very little has been written about olfaction in the philosophical literature, the little that there is reveals a contrast in the views favored for the cases of smell and color. For many philosophers, the view that colors can be explained in purely physical terms has seemed very appealing. In the case of smell, this kind of view has seemed less appealing. Those who have discussed olfaction have favored either dispositionalism or projectivism. According to dispositionalism, smells are dispositions to cause certain kinds of experiences in perceivers. Dispositionalists do not deny that smells are properties of objects (we will assume, for the sake of discussion, that these objects are odors); but they do maintain that the nature of these properties cannot be specified without reference to experience. According to dispositionalists, the lilac smell, for example, is the disposition to cause a distinctive kind of experience in suitable perceivers. Unlike dispositionalists, projectivists argue that the lilac smell is a mental property and that something internal to the perceiver (e.g., a sense datum, experience, or portion of the 'olfactory field') has that property. Projectivists argue that these properties are then 'projected' onto objects in the external world.

Although dispositionalism and projectivism each take into account the 'felt character' of olfactory experience, they fall on two sides of one debate over the nature of what John Locke called the secondary qualities—colors, sounds, smells, tastes and feels. This is the debate between realism and eliminativism. Olfactory realism claims that things in the world have the property ascribed to them by olfactory experience. Dispositionalism is just such a view. Eliminativism, on the other hand, claims that smells are not properties of things in the world. In claiming that smells are properties of experiences, projectivism is a form of eliminativism.

Because it renders all olfactory experience illusory, eliminativism is often regarded as a last resort, a kind of view rendered plausible by the failure of any realist view. Realism, then, is the default position for any view of the secondary qualities. All realist positions fall into one of two camps: relationalism and non-relationalism. According to relationalism, smells are constituted by relations between objects and perceivers. Dispositionalism is one such view. Non-relationalism, on the other hand, maintains that smells are perceiver-, or mind-, independent properties. A natural non-relationalist position is that smells are molecular properties (also known as physicalism).

There can be significant intersubjective differences between the ways that perceivers smell certain odorants to be and, on these grounds, relationalists can argue against non-relationalism as follows: Significant intersubjective differences in perceived smell exist. If smells are non-relational properties of odors, then the smell of an odor does not in any way depend on the experiences that perceivers have when they come into contact with it. So, there ought to be a unique smell that an odor has and, as a result, a reason to favor one group of perceivers over any other—i.e., those whose experiences present the smell of the odor. But, there is no reason to favor one set of perceivers over another. Because it cannot live up to its own demands, non-relationalism is false.

As it turns out, the issue is not as simple as this argument might make it initially appear. Non-relationalism is threatened only if these intersubjective differences involve major shifts in perceived

quality. If the differences involve minor shifts in perceived quality, then the threat is little to none. All sensory systems have limits of resolution. And when a system is pushed to the limits of its resolution, it is bound to make minor mistakes. If shifts in perceived quality are the result of just such a mistake, then we do have a reason to favor one group of perceivers over another. One group is simply mistaken—i.e., their experiences are non-veridical.

One opportunity for future research on the nature of smells, then, involves determining whether the shifts in perceived quality are major or minor. But we are yet to have a structured quality space for smell and, as a result, lack a model by which to evaluate differences in perceived quality. Many systems have been proposed; none has been found satisfactory. Given the breadth of our olfactory discrimination, each system has been accused of oversimplifying olfactory experience. Obviously some sort of consensus is necessary before we can evaluate claims of perceptual variation. What we can be sure of at this point is that future philosophical work on the olfactory properties will progress with further developments in olfactory psychophysics.

-- Clare Batty

Cross References: Content of Perception; Intentionality of Perception; Intentionality, Representation and Consciousness; Olfaction

Further Readings

Amoore, J. E. (1971). *Chemical senses*. New York: Springer-Verlag.

Batty, C. (2009). What's that smell? *Southern Journal of Philosophy* 47, 321-348.

Batty, C. (forthcoming.) A representational account of olfactory experience." *Canadian Journal of Philosophy*.

Beauchamp, G. K. and L. Bartoshuk. (1997). *Tasting and smelling*. San Diego: Academic Press.

Harper, R., E. C. Bate-Smith and D. G. Lad. (1968). *Odour description and odour classification: A multidisciplinary examination*. London: Churchill.

Lycan, W. (1996). Peacocke's arguments. In his *Consciousness and experience* (pp. 143-160). Cambridge, MA: MIT Press.

Lycan, W. (2000). The slighting of smell. In N. Bhushan & S. Rosenfeld (Ed.), *Of minds and molecules* (pp. 273-290). Oxford: Oxford University Press.

Perkins, M. (1983). *Sensing the world*. Indianapolis: Hackett Publishing.

Reid, Thomas. ([1764] 2000). On smelling. In D. Brookes (Ed.), *An inquiry into the human mind and the principles of common sense* (pp. 25-45).

Wilson, D. A. & Stevenson, R. J. (2006). *Learning to smell*. Baltimore: Johns Hopkins University Press