Smell, Philosophical Perspectives
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Encyclopedia of the Mind, Pashler (ed.)

Much of the philosophical work on perception has focused on vision. Discussions of olfaction are rare. Interesting issues arise for olfactory experience in three broad areas: the representational content of experience, the nature of olfactory objects and the nature of the olfactory properties. Future philosophical work on olfaction should focus on bringing the breadth of discussion in these areas to the level that we see in the visual domain.

It is commonplace to suppose that visual experience is world-directed and, in particular, that it has representational content. Just as we say that the tomato looks red, we might say that the lilac smells sweet. Perhaps what olfactory experience represents, then, is that there are ordinary objects in our environment that have certain olfactory properties (sweetness, perhaps). William Lycan claims that we do represent ordinary objects such as skunks and roses, but at a secondary level. At a first level of representation, olfactory experience represents odors, or collections of airborne molecules. This view also accords with the way that we speak. Not only do we say that the lilac smells, but we also suggest that something in the air smells.

But perhaps we speak more loosely about our olfactory experiences than we do our visual ones. 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 puts pressure on the view that olfactory experience represents ordinary objects. Many philosophers hold that the perception of an object presupposes a determinacy in the spatial representation of its properties. Consider the experience you have when you indulge yourself in the smell of the breakfast cooking. You distinguish the coffee smell and the bacon smell. But your experience does not allow you to discriminate the
odor clouds that bear these properties. Indeed, it doesn’t allow you to know whether there are multiple clouds. Perceivers may get up and move around to determine where the properties are located and where they are not. But olfactory experience alone only allows one to smell that the coffee smell and the bacon smell are instantiated—not where and, thus, by what. It seems as if the smells are just ‘around you’. This puts pressure on the view that olfactory experience represents individual and, in this case, multiple odors. Compared to the wealth of detail and intricacy afforded by visual experience, olfactory experience seems a mere smudge.

This ‘smudgy’ feature of olfactory experience has made some philosophers suggest that olfactory experience has no representational content. Subjectivist views of perceptual experience maintain that experiences are raw feels or mere sensations. Proponents of this view draw attention to the fact that any account of the nature of a perceptual experience must honor the phenomenology of that experience. Olfactory experience itself does not seem to provide us with the objects that bear the properties instantiated. Given this feature of its phenomenology, a subjectivist view of olfactory experience is certainly understandable.

But some have argued that is it not inevitable. There is a moderate representational view that honors the phenomenology of olfactory experience and yet maintains its world-directedness. Recently, discussions of the representational content of visual experience have focused on the debate between existentially quantified content and object-involving content. Consider the visual experience you have when you look at a ripe tomato. According to the existentially quantified account, your experience has the following content: there is some object \(x\) at location \(L\) and \(x\) is red, and round, (and so on). Letting ‘\(t\)’ name the actual tomato before you, the object-involving account claims that your experience has this content: \(t\) is red, round, (and so on)…and at \(L\).
This debate draws attention to the moderate view of the representational content of olfactory experience. Given its phenomenology, an object-involving account is unsuitable for olfactory experience. Unlike visual experience, olfactory experience does not present particular things; olfactory experience cannot live up to the particularity that such a view demands. But, the existentially quantified account seems like a natural fit for olfactory experience. It respects that the properties experienced are experienced as external to a perceiver, albeit in a very broad location. And it respects that olfactory experience does not present us with the individual objects that instantiate the presented properties. The moderate view posits that olfactory experience only ever represents a single ‘something we know not what’. On this view, the following schema specifies the content of any olfactory experience: there is some $x$ ‘out there’ with olfactory properties $F, G$ (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. First, we admit that creatures with better senses of smell than ours enjoy olfactory experiences that are world-directed. After all, their olfactory experiences are for them as our visual experiences are for us. And if their olfactory experiences are world-directed, we ought to think that our olfactory experiences differ from theirs in degree of richness and not in kind. Secondly, 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 the 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.
A natural next question is: what are the olfactory objects that appear coffee-ish or bacon-ish, for example? World-directed views of olfactory experience presuppose that there are external olfactory objects, those things that bear the coffee or bacon smell. The natural impulse is to say that the qualities of which we are aware in olfactory experience are qualities had by regular old objects—roses, skunks and pots of coffee. We certainly think of roses, skunks and portions of coffee as the sources of smells. But we also think of them as having a good, or bad, smell. Although olfactory experience is not discriminating enough to report that there are such particular objects, perhaps the bearers of the properties presented in olfactory experience are in fact ordinary objects like this. As suggested above, this is 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. You might smell the rubbish from your apartment window even though it is outside in the bin. But the rubbish is not anywhere near you; it is downstairs and outside. This kind of circumstance is not rare. If olfactory objects are things like piles of rubbish, much of our olfactory experiences will turn out to be non-veridical.

Another option is that olfactory objects are odors, those collections of airborne molecules. On this proposal, the experience you have when to smell the rubbish through the window is a veridical one. This is a much more plausible result. It would seem, then, that odors are the primary objects of olfaction. Ordinary objects cannot be primary olfactory objects. If they are olfactory objects at all, they are secondary ones. We smell the rubbish by smelling the odor it gives off. This is the idea behind Lycan’s multi-layered view of representational content.

There are interesting questions to ask about the nature of odors that have yet to be dealt with in the philosophical literature. For example, what are the persistence conditions of odors? Because molecules outlast odor-particulars, it is an interesting question of when, and how, a
particular odor ceases to be. Similarly, we can ask how odors are individuated. How do we characterize their boundaries? Do they have to be present in certain concentrations and configurations and, if so, what are the constraints on these concentrations and configurations? Related questions arise when we consider mixing. Suppose that you spray lavender air freshener over a cloud of cigarette smoke. This is a case in which the lavender odor mixes with the cigarette odor. After you spray the air freshener, is there now a single odor with a complex property or the same two odors in an overlapping location? These are all interesting, and necessary, questions for future research.

A final broad issue to consider is the nature of the olfactory properties. 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 smell have favored either dispositionalism or projectivism. The trend so far, then, has been to favor views that take into account the ‘felt character’ of olfactory experience, or our subjective reactions. There is reason to think that these kinds of views are a plausible starting point. There can be significant intersubjective differences between the ways that perceivers smell certain odorants to be. If the olfactory domain is rife with such variation, and unless theorists have a principled reason to favor one class of perceivers over another, it is difficult to see how they can avoid relativizing the nature of the olfactory properties to a perceiver (or set of perceivers). Still, consideration of the nature of the olfactory properties is in its infancy; indeed, it would be a mistake to say that there is any significant debate about them as of yet. Future work in this area should focus on examining the nature, and the extent, of perceptual variation in the olfactory domain.
This task will be complicated by the two most pressing questions about the olfactory properties: (1) what olfactory properties are there? and (2) what relations do they bear to one another? Although philosophers disagree about the nature of the colors, they have a firm idea of what colors there are and of the qualitative relations they bear to one another. Color theorists have located their subject matter; they know what they are asking after the nature of. In the case of color, we have a well-structured quality space with three primaries spanning a three dimensional space—hue, saturation and brightness. Unlike the colors, we do not even have a unique set of terms with which to refer to smells. Quite often we refer to olfactory properties by using the names of their sources (or the sources of the odors of which they are properties)—the smell of a rose, or the sulfur smell. Moreover, we are yet to have a structured quality space for smell. Many systems have been proposed—for example, Linnaeus’ that grouped smells into seven categories, Henning’s smell prism with three dimensions and six primaries, and Crocker and Henderson’s four-dimensional space with four primaries. No system 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 the philosopher interested in knowing what the olfactory properties are can even know what she is asking after.

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Cross References: Content of Perception; Intentionality of Perception; Intentionality, Representation and Consciousness; Object Recognition (?); Olfaction

Further Readings


