

## Are there olfactory objects?

What do we directly smell? *Odors* suggest themselves as the most plausible candidates for the direct objects of olfactory experience, but it is far from clear what is the nature of these odors, or how they are given to us in experience; are they olfactory *objects*, represented in experience as bearers of the olfactory qualities we perceive, or should we construe olfactory qualities as *sensational* properties, mere qualitative modifications of conscious experience?

Many philosophers argue for the latter view; according to **subjectivism**, olfactory states are non-perceptual and non-representational experiential states with no semantic properties of their own. Although we may talk about and refer to odors as if they were perceptual objects, this is seen in subjectivism as a cognitive achievement, a belief we arrive at upon having a certain olfactory sensation. Two types of arguments have been presented in favor of this view:

1. **Phenomenological arguments:** from a phenomenological point of view, olfactory qualities are not presented in experience in any particular location in relation to us, as properties of objects spatially distinct from one another. Thus, it seems that experience does not attribute olfactory qualities to external objects, but merely tell us that certain qualities are instantiated and experienced in the form of unstructured sensations.
2. **Psychological-theoretical arguments:** we should only posit perceptual representations when there is need, in order to explain the state of a given organism being the state that it is, to distinguish what is registered in the organism's sensory systems from what is supposed to be represented in the organism's perceptual state, by mentioning transformational processes that take the initial input and transform it into genuine perceptual representations, thus affording the organism a perception of the distal object *as the same* enduring entity across shifts in perspective. But nothing of the sort seems to be found in olfaction, where there is no room for the notion of an "olfactory perspective", no need to distinguish the odorants proximally

detected at the olfactory bulb from what is supposed to be represented in the corresponding olfactory state.

Despite these arguments, some philosophers have argued for a **representationalist** view of olfaction, but there is reason to be unsatisfied with these accounts. By giving too much weight to type-1 arguments, these philosophers construe representational contents as constituted by simple olfactory features like *'fruity'* or *'smoky'*, attributed to an undifferentiated space "around the subject". This proposal leaves no role for olfactory objects, as all smelled qualities would simply blend and be attributed to this undifferentiated space, and have trouble accounting for a range of olfactory experiences through time. In addition, these accounts do not seriously address type-2 arguments, and it is unclear what role *representations* are playing in the theory, over and above sensory registration of olfactory features.

In this talk I will move beyond these views and propose a representational account of olfaction, defining an odor as an olfactory object in a *psychological* sense, a perceptual kind posited in order to mark psychological abilities of the olfactory system, in virtue of which an odor is represented as the same enduring entity across shifts in perspective and differences in proximal stimulation, and bears olfactory qualities of its own.

The phenomenological argument that there cannot be olfactory objects because olfaction does not spatially distinguish them simply begs the question against a non-spatial modality like olfaction, and presupposes a highly visuo-centric notion of objecthood. Representations of olfactory objects should be posited not because odors are perceived as occupying distinguished spatial positions, but to account for how an odor is identified and perceived as the same despite enormous variations in stimuli.

In response to type-2 arguments, I will draw on current empirical research on olfaction and show that odors *do* fulfill conditions for perceptual representations. Type-2 arguments have mostly focused on odor detection at the olfactory bulb, a level that can be plausibly taken to sensorily register features rather than perceptually represent them, but nowadays psychologists look beyond the olfactory

bulb to the piriform cortex as the *locus* of odor representation, where genuinely perceptual processes like figure-ground segregation and perceptual constancies occur.

These considerations give support to the claim that olfaction may be seen as a proper perceptual modality. Through smell, the olfactory system identifies, classifies, and construes a perceptual representation of an olfactory object – an odor – that is perceived as the same across variations in stimuli, plays the role of a direct object of olfaction, and functions as a unit of olfactory attention.