Commentary on Louise Richardson, "Flavour, Taste and Smell"

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Richardson begins her paper with a question: How does scientific work on the senses relate to our everyday thought and talk about them? This is a question that has recently come under renewed philosophical scrutiny, particularly in the light of recent psychological and neuroscientific discoveries about the operation of the senses. Some of these findings – including those concerning flavor perception that are the focus of Richardson's discussion – are surprising, and seem at odds with what we ordinarily think about the senses.

A distinction between different senses seems central to our thought and talk about perception. Furthermore, the distinction that is central to our thought and talk about perception seems almost universally to be the distinction between the five familiar senses of vision, touch, hearing, smell, and taste. It is a bit surprising, given the ubiquity and (almost) universal nature of the distinction, that when we reflect further and ask, for example, What do we mean by a sense? or Why do we distinguish five different senses? the answers are not clear.

Richardson is non-committal about what she takes to be the nature of our everyday conception of the senses, other than saying that it is the conception of the senses we employ in our everyday thought and talk about them. If that is what the everyday conception explains, then is there any reason to think that it is more than a rough and ready collection of platitudes about the different senses and their operations? Platitudes, for example, about the role of different sense organs in perceiving, that we hear with our ears, see with our eyes, smell with our nose, taste with our tongue; the idea that these sense organs are sensitive to different stimuli, together with some thoughts about what these different stimuli are; some views about the causal necessary condition for the operation of these different sense organs; that each sense enables the perception of a different range of objects or properties; that perceiving with different senses involves different kinds of perceptual activity, such as looking, or tasting, or exploring with our hands; that there are similarities in the character of the experiences associated with particular senses, and differences in the character of experiences associated with different senses; and so on.

Not all of these platitudes will be true; some will involve errors or mistakes; and they may not all be consistent with one another. When we discover these mistakes and inconsistencies we may revise or reject platitudes. Some might be more central or more important to our everyday understanding of the senses than others, and some more peripheral; so some might be revisable without much alteration to the rest, while others might only be revisable at the cost of more substantial revisions to the whole. Together they constitute our everyday understanding the senses, and they amount to a partial and superficial account of the senses, rather than anything approaching a rigorous theory of the senses.

If this is what our everyday conception amounts to then it is not surprising that we don't get clear answers to questions about the nature of the senses as we

ordinarily understand them. Our ordinary understanding is partial, perhaps superficial, and may involve mistakes.

We talk about the senses in the context of doing such things as reflecting on the sources of our perceptual knowledge, or directing another's perceptual attention to things we perceive. So despite being partial and superficial, our grasp of these platitudes seems sufficient to explain our understanding of the concepts of the senses that feature in our everyday thought and talk, and our use of those concepts to think and talk about perception in the ways that we do.

Philosophical approaches to the senses have often taken the form of attempts to organize and these platitudes into a coherent and rigorous *theory* of the senses. I think what Richardson calls "naturalism" about the senses is the idea that a rigorous theory of the senses can be formulated, and that the concepts of the senses that feature in our everyday conception of the senses will map on to the concepts of the senses that feature in a rigorous theory of the senses.

The approach is familiar from other areas in which scientific progress has been made. We begin from a partial and perhaps superficial understanding of some subject that gets refined and improved over time. In some cases the refinement is sufficiently radical that the concepts that figured in the partial understanding are shown to be empty and are replaced by new concepts; in other cases they are refined or revised, but not replaced.

It may be that it is possible to refine our every conception of the senses into a rigorous theory of the senses that preserves the concepts of the senses that figure in our everyday conception. On some ways of thinking, such a theory would vindicate our everyday conception by showing it to be a more or less correct conception of the senses. Suppose, however, that it is not possible to refine our everyday conception in way that preserves our concepts of the senses. What should we conclude from that? There are two possibilities. First, we might conclude that our everyday conception is hopelessly mistaken and should be given up, in the way that mistaken empirical theories in other areas have been given up. Or, second, we might conclude that our everyday conception of the senses cannot be refined into a rigorous theory of the senses, perhaps because, as Richardson suggests may be the case, the senses "have no hidden depths to be discovered by science" (11). According to this view, the platitudes that constitute our everyday conception of the senses are all (or nearly all) there is to be said about the senses as they feature in our everyday thought and talk.

Some philosophers assume that the everyday conception has built into it elements from which it would follow that, if it cannot be refined, it should be given up. But if our everyday conception is sufficient to explain our thought and talk about the senses, then I don't think that conclusion is warranted. It can still play that role even if it cannot be refined into a rigorous theory.

Given this background, what does scientific evidence show about our everyday conception of the senses? In particular, does it show that our everyday conception of the senses is wrong? There are at least three possibilities:

1. It might give us reasons for thinking that a vindication of our everyday conception is not possible. That is, empirical evidence might convince us that it is not possible to refine our everyday conception of the senses into a rigorous theory. It wouldn't follow from this – not at least without further argument, that our everyday conception should be rejected.

2. It might give us reasons for thinking that some of the platitudes that make up our everyday conception of the senses are wrong. Given the nature of our everyday conception we should expect that to be the case. But giving up or revising some of the platitudes in the light of empirical evidence might not have much impact on the conception as a whole, and may leave many of the ways we think and talk about the senses intact.

3. It might give us reasons for thinking that there are more thoroughgoing problems with our everyday conception – that it is hopelessly mistaken or incoherent and should be radically revised or given up.

What does the evidence about flavor perception tell us? Richardson argues that even if 1 is true it doesn't follow – for roughly the reasons that I have sketched – that we should give up our everyday conception of the senses. I think she's exactly right about that. Does Richardson think that 1 is true? That is, does she think that the evidence concerning flavor perception that she describes gives us reason to think that our everyday conception cannot be refined into a rigorous theory of the senses? I'm not sure. A case can be made that it does and that it doesn't:

We might think that it doesn't because the empirical evidence can be accommodated within a theory of senses that includes a sense corresponding to the sense of taste as it features in our everyday conception. The concept of taste as it features in our everyday conception is – it might be suggested – in fact the concept of a sensory system that functions to enable the perception of flavor. The empirical evidence shows that operation of this sensory system involves the detection of olfactory information. That tells us about how the sense of 'taste' works – how it carries out its function. And it might involve a refinement in our everyday conception of the sense of taste, but not a rejection or elimination of the concept of taste.

However, the suggestion that our everyday conception of taste involves the concept of a sensory system for the perception of flavor – and so of a sensory system understood in terms of its function to enable us to perceive a certain kind of thing (flavor) – won't generalize to the other senses. In particular it won't generalize to sight and touch: we can't characterize vision or touch as sensory systems that function to enable to the perception of certain kinds of thing. That suggests that thinking of 'taste' as a system for the perception of flavor can't be a way of making our everyday conception more rigorous – a rigorous theory of the senses in general won't characterize taste in that way – and that suggests that a rigorous theory will involve a substantial revision or elimination of the concept of taste as it features in our everyday conception.

Does Richardson think that 2. or 3 is true? In her discussion of the two mistakes involved in flavor perception, she argues that we don't have any reason to think 3. is true rather than 2. The evidence suggests that some of what we think about flavor perception is mistaken, but that these mistakes are relatively peripheral to our thought and talk about the sense of taste and so can be accommodated without substantial revision to our everyday conception. I think Richardson's argument here may be a bit quick and that the mistakes she describes may pose more of a threat to our everyday ways of thinking and talking about taste and flavor perception than she allows.

When we taste the flavor of something we experience what appears to be a property – a particular flavor – of the substance that is in our mouth, and on the basis of this experience we take ourselves to be in a position to know something about that substance. The worry is that the mistakes that Richardson describes undermine this picture.

Suppose I taste something lemony, and I judge that the substance in my mouth has a lemon flavor on the grounds that it appears that way, i.e. it appears to have a lemon flavor. Suppose I think it appears this way because of how it affects my mouth and tongue: I take it that I have found out about the lemon flavor by putting the substance on my tongue and rolling it around my mouth. In fact it appears that way because of the way it affects my nose. I have found out about the lemon flavor by putting it in my mouth only because that has – unbeknownst to me – allowed the smell of the substance to be picked up by retronsal olfaction. So although my judgement is correct, I am ignorant or mistaken about the basis of my judgement. Does my mistake undermine my knowledge? In some cases at least, ignorance or error about the basis of a judgement, or about why the basis of a judgement provides a reason for the judgement, does undermine our knowledge. Does the mistake about how we perceive flavor undermine our knowledge of flavor?

The suggestion that our experience of flavor involves a projective error might also undermine our perceptual knowledge. I don't know that we do, but suppose we take flavor to be an intrinsic property of the substances we taste. Perhaps we take flavor to be intrinsic because it appears that way. It seems plausible to me the lemony flavor of a substance in my mouth appears to be an intrinsic property of that substance – a feature of what is in my mouth. However, if Richardson is right that the empirical evidence shows that my experience involves a projective error, then that the lemony flavor I experience is not what it seems to me to be. If experience of flavor involves a projective error, it doesn't directly track a property of the substance in my mouth, but instead tracks a property of something olfactory – something in my nose – which is projected onto what is in my mouth. That undermines my knowledge: I take myself to know about the substance in my mouth because I take my experience to reveal a property of that substance. In fact my experience doesn't reveal what is really going on, it doesn't reveal a property of the substance and so is misleading. The suggestion is not that the empirical evidence shows that there is no such thing as flavor. Perhaps we can defend an account of the metaphysics of flavor that shows that flavors are

real and objective properties. The suggestion is that experience of flavor is misleading about the nature of flavor, and misleading experiences cannot ground knowledge.

If anything like this is true, then it the empirical evidence might be taken to show that we are mistaken about flavor perception in ways that are more fundamental to our everyday conception of taste than Richardson allows. It also suggests that a non-naturalist about the senses – who doesn't think that it is possible to make rigorous our everyday conception of the senses – may still be forced to substantially revise or give up elements of the everyday conception of the senses in the light of empirical evidence.