

## **Perceptual Learning: The Flexibility of the Senses**

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People often say things like the following: Cabernet Sauvignon tastes differently to an expert wine taster, or Beethoven's Ninth Symphony sounds differently to a seasoned conductor. The examples just described are cases of perceptual learning—cases of long-term changes in perception that result from practice or experience. Philosophers have been discussing such cases for centuries, from the 14<sup>th</sup>-century Indian philosopher Vedānta Deśika to Thomas Reid as well as to contemporary philosophers like John McDowell, Ned Block, Susanna Siegel, and Christopher Peacocke. In the book, I use recent evidence from psychology and neuroscience to show that perceptual learning in fact occurs. I also offer a way for philosophers to distinguish between various different types of it. In some cases, perceptual learning involves changes in how one attends; in other cases, it involves a learned ability to differentiate two properties, or to perceive two properties as unified. I show how this taxonomy helps to classify cases in the philosophical literature. I then go on to re-think several domains in the philosophy of perception in terms of perceptual learning, including multisensory perception, color perception, speech perception, and sensory substitution. As a whole, the book offers a theory of the function of perceptual learning. Perceptual learning embeds into our quick perceptual systems what would be a slower task were it to be done in a controlled, cognitive manner. This frees up cognitive resources for other tasks. For instance, a novice wine taster drinking a Cabernet Sauvignon might have to think about its features first and then infer the type of wine, while an expert would be able to identify it immediately. This learned ability to immediately identify the wine enables the expert to think about other things like the vineyard or the vintage of the wine. My account gives us a new way to understand such cases in terms of cognitive resources and cognitive economy.