

## When the Senses Don't Match

Our perceptual system is attuned to detecting mismatches in the information carried by different senses. In ordinary circumstances, this capacity operates outside of consciousness. When there is a mismatch in the information delivered by different senses, specialized mechanisms resolve the conflict before it can rise to consciousness, allowing perceptual processing to proceed seamlessly. However, this is not always the case. Sometimes, the mismatch between the senses is not resolved at an unconscious level and instead becomes something of which the subject is consciously aware. A familiar example is the experience of watching a film in which the audio and the video are temporally misaligned. In such cases, one is not merely aware of visual events, like an actor's lips moving, and auditory events, like the actor uttering a line, occurring at slightly different times. Rather, one is also consciously aware that what one sees and what one hears fail to match with one another.

Despite the ubiquity of such experiences, the philosophical literature has largely focused on the mechanisms that prevent sensory mismatch from reaching consciousness, rather than on the nature of conscious experiences of mismatch *themselves*. Subconscious processes of mismatch detection integration and conflict resolution have been extensively investigated in empirical psychology and neuroscience, and their philosophical implications have been widely discussed (see, e.g., Briscoe 2016a, 2016b; O'Callaghan 2012). By contrast, comparatively little attention has been paid to what it is like for a subject to consciously experience a mismatch between the senses. What kind of phenomenal character is distinctive of such experiences? This presentation aims to address this question by offering the first systematic discussion of the phenomenal character of experiences in which the senses are consciously experienced as not matching with one another.

The presentation is divided into four parts. In the first part, I introduce a series of phenomenal contrast cases designed to bring into focus the distinctive phenomenology of conscious sensory mismatch. These scenarios will involve a contrast between ordinary perceptual experiences, in which multisensory information is smoothly integrated and no mismatch is detected, with experiences in which subjects are consciously aware that information delivered by different sense modalities are mismatching. By attending closely to these contrasts, I aim to isolate the phenomenal difference between merely perceiving some multisensory stimuli and perceiving the very same stimuli as mismatching. The phenomenal character of experiences in which we are consciously aware of a mismatch will serve as the primary explanatory target for the remainder of the presentation.

The second part of the presentation introduces three competing accounts of the nature of this distinctive phenomenal character. According to the *cognitive* account, the phenomenal character associated with experiences of sensory mismatch is fundamentally cognitive. On this view, what it is like to experience a sensory mismatch depends on the subject's consciously entertaining a belief or judgment to the effect that the information delivered by different sensory modalities does not match. According to the *affective* account, by contrast, the distinctive phenomenal character of sensory mismatch experiences is affective rather than cognitive. On this view, what distinguishes experiences of mismatch is the subject's characteristic affective response, such as surprise, puzzlement, or unease, to the detection of conflicting sensory information. Finally, according to the *perceptual* account, experiences of multisensory mismatch possess a genuinely perceptual phenomenal character. On this view, subjects enjoy a primitive form of perceptual awareness of a mismatch between the senses, one that is not reducible to either cognitive judgment or affective reaction.

In the third part of the presentation, I raise several challenges for both the cognitive and affective accounts. With respect to the cognitive account, I draw on empirical evidence suggesting that relatively cognitively unsophisticated organisms, such as non-human animals and pre-verbal human infants, nonetheless appear capable of consciously experiencing sensory mismatch. These subjects reliably exhibit behavioral and attentional responses that strongly suggest conscious awareness of multisensory mismatch. Since such organisms are intuitively incapable of forming sophisticated, conscious judgments about the relationships between what they experience via different senses, this evidence puts significant pressure on the claim that the phenomenal character of mismatch experiences is essentially cognitive. With respect to the affective account, I argue that it faces difficulties because it is phenomenologically plausible that subjects can experience sensory mismatch without any distinctive affective response. In familiar cases, surprise or puzzlement may accompany the experience of mismatch, but these affective reactions do not appear to be necessary for the experience itself.

The final part of the presentation develops the perceptual account in greater detail by distinguishing between two ways it might be understood. On the first interpretation, sensory mismatch is represented at the level of the intentional content of perceptual experience. When one experiences an actor's moving lips and voice as mismatching, one perceptually represents a certain relation, namely, the relation of mismatching, as holding between what one sees and what one hears. On a second interpretation, sensory mismatch is not part of the intentional content of perception but is instead a non-intentional phenomenal feature: a distinctive quale that accompanies certain perceptual contents and serves as a phenomenal

indicator of multisensory conflict. I conclude by raising several challenges to the content-based interpretation. First, from a phenomenological standpoint, multisensory mismatch does not present itself as a feature bound to perceptual stimuli in the way that other features represented in perceptual content usually do. Second, if mismatch were part of perceptual content, it should figure in the accuracy conditions of perceptual experience, which is implausible. Finally, a non-intentional interpretation better accords with the way multisensory mismatch is typically conceptualized in empirical psychology.

## **Bibliography**

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