

Contribution of first-person sensory experience to thinking about seeing: Evidence from blindness

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Abstract

Do we need to reflect on our own perceptual experiences to understand what another person is seeing/hearing? Sighted (n=18) and congenitally blind (n=18) participants listened to scenarios describing sighted or blind observers looking at or hearing another person (target). Participants rated the likelihood that observers would know features of the target (e.g., age, gender, eye/hair color). We manipulated distance of observer from the target (nearby versus far) and duration of perceptual experience (extended versus brief). Blind and sighted groups agreed on features easiest to discern (e.g. hair easier than eye color), although blind participants judgments about vision were more variable. Both groups judged nearby and extended perception more likely to result in knowing. For seeing experiences, blind participants judgments were more influenced by duration, whereas sighted participants by distance. Linguistic communication is sufficient for discovering basic variables governing perception (i.e., distance, duration), but first-person experience calibrates weighting of the variables.