Self-other blurring: self-referential facial dynamics representation

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Abstract

People do not see themselves during real-life face-to-face interactions. Strikingly, after a 5-minute interaction with a stranger, the stranger is likely to be more familiar with the appearance of the interlocutor's facial expressions than the interlocutor is. However, people control and feel their facial movements. We examined whether an internal transformation into a visual representation exists, allowing people to assess the specific dynamics of their own facial expressions compared to those of others. Leveraging advanced video processing AI tools, we decoupled participants' facial features from their facial dynamics and tested whether observers engage preferentially with individuals who share their own facial expression dynamics more than those of others. We further examined whether there is a distinct brain activity when viewing one's own facial expressions compared to others' facial expressions. Altogether, we propose that there is a self-facial dynamics representation that influences the processing and perception of others through self-referenced comparisons.

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