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Sommario/riassunto

Binocular rivalry is often considered an experimental window on the neural processes of consciousness. We propose three distinct approaches to exploit this window. First, one may look through the window, using binocular rivalry as a passive tool to dissociate unaltered sensory input from wavering perceptual output. Second, the mechanisms underlying binocular rivalry may yield detailed knowledge of the neuronal underpinnings of binocular vision and increase the value of rivalry as a tool to study consciousness. Finally, smart experimental manipulations allow experimenters to 'reach through the window' and interact with mechanisms of conscious visual perception. Within this distinction, we discuss the major open questions in

binocular rivalry research and examine how recent technological developments may be incorporated in future studies.