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Adaptation aftereffects in the perception of gender from biological motion

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Human visual perception is highly adaptive. While this has been known and studied for a long time in domains such as color vision, motion perception, or the processing of spatial frequency, a number of more recent studies have shown that adaptation and adaptation aftereffects also occur in high-level visual domains like shape perception and face recognition. Here, we present data that demonstrate a pronounced aftereffect in response to adaptation to the perceived gender of biological motion point-light walkers. A walker that is perceived to be ambiguous in gender under neutral adaptation appears to be male after adaptation with an exaggerated female walker and female after adaptation with an exaggerated male walker. We discuss this adaptation aftereffect as a tool to characterize and probe the mechanisms underlying biological motion perception.