

Expressing intention through redundant action in a remote control task: A natural behavior approach

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Abstract: Individuals often act out intended actions in situations where they are unnecessary or have no impact on the execution of that intention. We refer to these behaviors as redundant actions. Despite the apparently superfluous nature of redundant actions, they are frequently produced in certain situations and have the potential to provide insight into the embodied nature of intentions. One clear example of this behavior comes from video game playing whereby individuals have a tendency to lean in the direction they wish an object or character they are in control of to go. By having participants play a racing video game, we were able to create a controlled environment to observe these behaviors. By manipulating aspects of player immersion, control input, and temporal demand, we investigate what factors lead individuals to express intentions via redundant actions.