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From the body to the tools: The roots of presence

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Different neuropsychology studies clearly show that the perception of our body and its surrounding space is not a given fact but it is influenced by the outcome of our interactions. In this view, a possible starting point for a better understanding of Presence is the study of mediated action and its effect on our spatial experience. The presented framework distinguished between two different types of mediated action: *one–level* (I use the body to control a proximal artifact, e.g. a tennis player striking the ball with the racquet) or *two–level* (I use the body to control a proximal artifact that controls a different distal one, e.g. a cranemen using a lever to move a mechanical boom to lift materials). These two mediated actions, if produced intuitively, have different effects on our experience of body and space: a successfully learned *one–level* mediated action produces *incorporation* - the proximal tool extends the peripersonal space of the subject – while a successfully learned *two–level* mediated action produces *incarnation* – the distal tool shifts both the peripersonal and the extrapersonal space of the subject. In this view Presence is the outcome of an intuitive experience-based metacognitive judgment that controls our action. More, the difference between "presence" and "telepresence" in mediated action is the one between incorporation and incarnation.

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