

# Transfer of motion direction learning to an opposite direction enabled by double raining: A replication of Liang et al. (2015)

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Abstract (Zhang & Chen, 2016)

Abstract (Zhang & Chen, 2016). In the original study, Liang et al. (2015) showed that learning to discriminate between two directions of motion (e.g., leftward and rightward) led to a transfer of learning to the opposite direction (e.g., rightward and leftward). This transfer was observed even when the two directions were presented simultaneously (double raining). In the present study, we replicated the findings of Liang et al. (2015) using a different set of directions (e.g., up and down) and a different set of stimuli (e.g., dots). We found that learning to discriminate between two directions of motion led to a transfer of learning to the opposite direction, even when the two directions were presented simultaneously. This transfer was observed for 75% of the subjects.

Keywords: motion direction learning, double raining, transfer of learning, VPL

Introduction (Liang, Faingold, & Li, 2015). Human learning of motion direction is highly efficient. For example, subjects can learn to discriminate between two directions of motion (e.g., leftward and rightward) with a high degree of accuracy (Liang et al., 2015). This learning is thought to be based on the visual pathway (VPL) (Liang et al., 2015).

One of the most interesting features of this learning is that it is highly transferable. For example, subjects who learn to discriminate between two directions of motion (e.g., leftward and rightward) also learn to discriminate between the opposite directions (e.g., rightward and leftward) (Liang et al., 2015). This transfer of learning is thought to be based on the VPL (Liang et al., 2015).

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