Translational biological motion stimuli for perceptual research

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Since the studies of Johanson in 1973 the standard stimulus for biological motion perception has been the Point-Light Walker (PLW). This consists of a pattern of moving dots with the common translational component removed as if the target person was walking on a treadmill. The translational motion component has remained as a matter of interest only for researchers on biomechanics and its applications in fields such as rehabilitation, sports training or virtual actors design. Nevertheless, there are specific features of the translational path that may be useful for our visual system in several tasks like recognition, motion perception and action control. In this communication, we will highlight visual relevant features of the translational component in biological motion and we will address motion capture conceptual and methodological issues.