

Berichte aus der Robotik

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**Kinematic analysis in prehensile movement:
obstacle avoidance, bimanual and joint action**

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Abstract

In this work, we investigated the kinematic parameters of the grasping movement with different grasping experiments. These parameters are affected by different factors originating from human bodies (e.g. bimanual movement), circumstances of the movement (e.g. the presence of an obstacle) and interpersonal links in a multi-agent task. Although many problems remain unsolved, our experiments offer some evidence to suggest how humans take different movement contexts into account when planning and executing their movements. Future work is expected to lead up to a general model that can explain humans' flexible grasping movements in different contexts.