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# Kinetic elements in genuflexion correlate with the degree of power relations in societal strata: The CONTROL IS UP metaphor in medieval miniatures

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## Abstract

The CONTROL IS UP metaphor is an embodied cognitive mechanism that helps western speakers reason about power relations in terms of vertical spatial organization. This paper explores its multimodal elaboration in visual manifestations of pyramidal structured arrangements and kinetic practices such as genuflexion in medieval miniatures in order to (i) demonstrate the role of multimodal representations of metaphors in reasoning, (ii) unveil power relationships between different societal strata. 34 miniatures (12th ct. Liber feudorum maior) were analysed with the “multimodal genuflexion test” to describe and measure (CAD-software) distances between kinetic elements (facial/manual gestures, postures). Results indicate that (i) power relations are not just vertically represented (kneeling & bowing), physical distance between characters and position of hands are crucial, (ii) there is a significant positive correlation [ $U = 61,119$ ;  $p = 0.003$ ] between the power figure and the degree of “body bending” (bowing, kneeling) and hand distance.