

Metaphor space-valence congruency effect in bilingual language processing

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The interaction between different axiological parameters (e.g., GOOD, BAD) and spatial concepts such as UP and DOWN has been extensively addressed in previous cognitive linguistic research (e.g., Kövecses 2018, 2020; Lakoff and Johnson 1980; Winter 2014). Sentences like *He fell into a financial trap* or *She climbed the career ladder* automatically activate the conceptual metaphors BAD IS DOWN and GOOD IS UP, respectively, which has been confirmed in previous experimental research (see Citron and Goldberg 2014; Meier and Robinson 2004; Casasanto 2009; also Lynott and Coventry 2013 for a more domain-general approach; but see Hampe 2005 for a critique). Yet, little is known as to whether GOOD metaphors are really perceived as positive, and DOWN – as negative. Furthermore, thus far little attention has been devoted to examining whether the processing of BAD IS DOWN and GOOD IS UP metaphors might be modulated by the conceptual transfer across native and non-native languages. The present study therefore aims to examine the processing of these two types of conceptual metaphors in participants' native and non-native language. To this end, 57 Polish (L1) - English (L2) bilinguals performed a metaphoricity judgment task, whereby they decided if the presented sentence was literal or metaphorical. We compared accuracy rates (ARs) and reaction times (RTs) to four sentence types in L1 and L2: positive-congruent (i.e., GOOD IS UP; *The importance of mental health is growing*), positive-incongruent (i.e., GOOD IS DOWN; *The poverty rate is falling in this country*), negative-congruent (i.e., BAD IS DOWN; *My friend's team fell in scoring*), and negative-incongruent (i.e., BAD IS UP; *The government often raises taxes*) metaphors. The preliminary results showed a strong space-valence congruency effect, with higher ARs and faster RTs to congruent metaphors, irrespective of the language of operation (L1 or L2). Such a space-valence congruency effect has been observed across various domains of human cognition (cf. Citron and Goldberg 2014, Meier and Robinson 2004, Casasanto 2009), and indicates that the stimuli representing prototypical primary metaphorical mappings are privileged over non-prototypical primary metaphorical mappings. Altogether, our results seem to agree with the idea of embodiment, postulating a preferential position of the human body, compared to language status (L1 or L2), as a source of human cognitive processes, including production and interpretation of linguistic stimuli.

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