

## A multimodal comparison of Bulgarian and isiZulu pragmatic development in oral narratives

Do speakers of different languages think differently? To what extent are certain linguistic phenomena underpinned by universal principles or language specific experiences? Over the past three decades or so, the study of language and thought has experienced an interesting revitalisation, largely thanks to conceptual and methodological advances since the time of Wilhelm von Humboldt seminal work on linguistic relativity and determinism (Slobin, 2007). The evidence accumulated to date provides a nuanced picture of the relationship between language and thought, showing that language affects specific cognitive processes under certain conditions.

Oral narratives in face-to-face interaction include the use of both auditory (linguistic and prosodic) and visual (gesture) dimensions. This talk examines how discursive activity develops in children. We examine age related changes in the way children and adults conceptualise discursive behavior in both narration and gestural production. This leads us to better estimate the relative weight of social and cognitive factors in narrative development (Berman, 2004).

The present research focuses on the role of culture in monologue oral discourse performed by typically developing Bulgarian and Zulu children aged between 5/6 and 9/10 years as well as adults. We employ a bimodal perspective in which we examine speech and co-speech gesture narrative behaviour. This cross-linguistic study investigates if discourse development is universal across all languages as well as the effect of the type of language; Bulgarian is analytical and largely a satellite framed language (Talmy, 1985, 1991) whereas isiZulu is agglutinative and verb-framed language (Kunene, 2010).

Participants watched a speechless short cartoon and then were asked to retell the story they had seen to the interviewer (Colletta *et al.*, 2018). Narratives were annotated for language complexity; length and type of clause across the ages. Narratives were also annotated for gesture; type of gesture, function of gesture, temporal synchrony to speech and the form of gesture. The focus of this presentation will be on pragmatic speech acts and gesture development of children between the ages of 5/6 and 9/10 years.

Results show a significant age effect on the pragmatics of speech and gesture activities, which follows a universal pattern. Our analyses revealed a difference in the perception of the task by the two language groups, which in turn influenced the type of pragmatic clauses used by the speakers. Zulu narratives were longer and accompanied with more referential co-speech gestures than the Bulgarian narratives. The Bulgarian narratives were brief, synthetic accounts and accompanied by few gestures than the Zulu narratives. We aim to show that this difference is linked to culture; each language group perceived the task differently. Cognitive processes can be influenced by social and cultural behaviour to a certain extent, as well as some universal trends that are non-language specific.