

Abstract zum Vortrag von **Simone Schöffner**,  
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## **The role of input and output modality in language processing**

*In cooperation with Iring Koch & Andrea M. Philipp*

Language processing can require the combination of compatible (auditory-vocal and visual-manual) or incompatible (auditory-manual and visual-vocal) input and output modalities. Input-output modality compatibility is defined as the similarity of stimulus modality and the modality of response-related sensory consequences (cf. Stephan & Koch, 2010). The aim of the present study was to examine the influence of modality compatibility while performing language-related cognitive operations. We used a task-switching paradigm, in which participants had to switch between compatible or incompatible input-output modality combinations while performing verbal semantic categorizations or word-form decisions. The results demonstrate higher switch costs (i.e. higher RT and an increased percentage of errors in switch trials compared to repetition trials) for incompatible modality combinations than for compatible combinations. Taken together, we could show that input-output modality compatibility plays an important role in language processing.

### **References:**

Stephan, D. N., & Koch, I. (2010). Central cross-talk in task switching: Evidence from manipulating input-output modality compatibility. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 36, 1075–1081.