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paper or poster
Listening; Psycholinguistics and SLA; Others: Situated & Naturalistic SLA

Title: Top-down Cues Help to Understand Foreign Language Input and Improve Word Learning

When listening to foreign language input, top-down cues (e.g., visual and linguistic context and world knowledge) can compensate for comprehension gaps (Vandergrift, 2007). It is a matter of debate, however, how exactly and how quickly language novices' processing is influenced by these information sources (Field, 2004).

We designed a stepwise adult-language-learning experimental scenario, using a pseudo-natural language (Germans learning modified Indonesian) to investigate the speed of the on-line integration of these cues and the effect on noun learning. Participants first learned verbs. Then they were confronted with a combined sentence-comprehension and noun-learning task: Subject-verb-object sentences with the already learned verbs and novel nouns were presented, together with co-present scenes depicting relevant referents plus other characters and objects. For sentence (1), for instance, the scene would depict a clown, a ballerina, a mushroom, and a skirt. We recorded eye movements to get insights into on-line comprehension processes. Noun learning was tested at the end of the experiments.

(1)	*Si*	*badut*	*bermamema*	*si*	*worel*
	The	clown	eats	the	mushroom

In Experiment 1 (N=24), all verbs were semantically restrictive: They required arguments referring to certain categories (e.g. *bermamema*, 'to eat' requires food). Eye-movement data of the sentence-comprehension part of the experiment reveals that participants rapidly used these verb restrictions together with their world knowledge and the scene to predictively infer correct referents for novel post-verbal nouns to understand sentences on-line: When hearing the verb (e.g. *bermamema*), they looked at the matching visual referent (e.g. mushroom). In Experiment 2 (N=32), we manipulated the strength of selectional verb restrictions and found that noun-referent mappings are also learned better if restrictions helped identifying plausible visual referents.

We take this as evidence for the hypothesis that top-down contextual cues, firstly, help language learners to understand language input quickly on-line and, secondly, to learn words.

References

Field, J. (2004). An insight into listeners' problems: too much bottom-up or too much top-down? *Sytem*, 32, 363-377.
Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, 40, 191-210.