

## AATIC

### Contextually driven agent demotion in impersonal passives and agentivity in German

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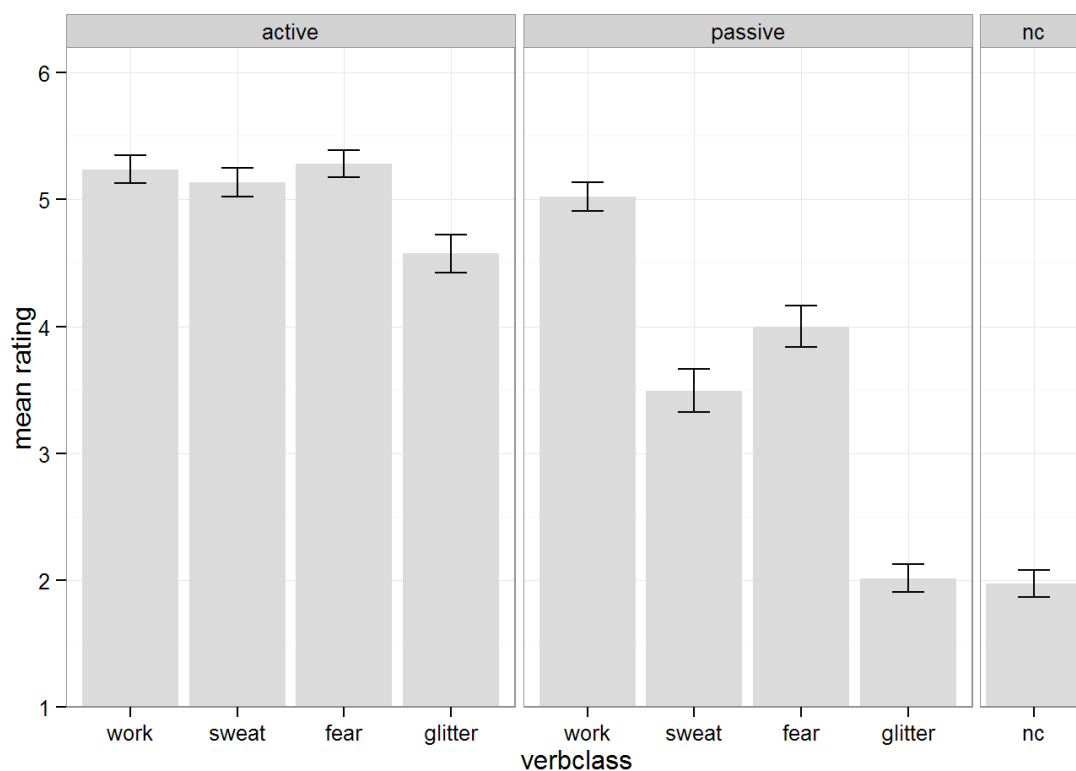
In impersonal passives, the implicit argument is assumed to be restricted to a volitional agent, and hence a human or at least a higher animate entity in a number of languages including Polish, Turkish, Latin, Italian, Arabic, Dutch, and German (e.g. Siewierska 1984; Shibatani 1998; Rapp 1997; Zifonun et al. 1997). Accordingly, (1) cannot refer to furnaces or fire places that were smoking:

- (1) *Es wurde viel ge-raucht-t.*  
EXPL become:3SG.PRT much PTCP-smoke-PTCP  
'There was much smoking.'

However, corpus data and a preliminary acceptability judgement test reveal that the restriction to volitional agents is too strong for German (Primus 2011a,b). In order to find out whether a cluster concept of agentivity can explain the data more adequately, we run an acceptability questionnaire study using Dowty's (1991) proto-agent entailments – volition, causation, autonomous movement, and sentience – with different verb types showing varying sets of entailments (see bar plot below). The test items were controlled for animacy by taking only demoted human referents into account. The class of verbs entailing volition, autonomous motion and sentience for the human participant, such as *work* and *dance*, were judged to be more acceptable in impersonal passive sentences than verbs entailing only sentience and autonomous movement, such as *sweat* and *shiver* (paired t-test:  $p < .001$ ). Both verb types were judged to be more acceptable than verbs with human participants lacking any agentive properties, such as wet swimmers shining in the moonlight (paired t-test:  $p < .001$ ). These items were judged to be as unacceptable as the negative control sentences with verbs that clearly do not allow passivization (paired t-test:  $p > .5$ ). Our results suggest that the restrictions at issue are due to an agentivity cline that is independent of animacy. In pragmatic terms, the passive construction of intransitive verbs demotes the agent as a topic candidate by delinking it from the subject function. The acceptability cline found for sets of agent entailments in the passive seems to be triggered by the contextually driven demotion operation, since we have found no acceptability differences in the corresponding active sentences.

Our work is based on Dowty's proto-role approach (Dowty 1991; Primus 1999, 2012a,b; Ackerman & Moore 2001), but the concepts that define proto-agent in his view are insufficient in several ways. Volition, for example, is tied to the notion of free will and hence inappropriate to explain the actions of automata and other artificial agents (e.g. Cruse 1973). Furthermore, Dowty's movement criterion does not discriminate between highly dynamic motion entailed, for example, by *work* and *dance* from less dynamic motion entailed, for example, by *shiver*, *sweat* or *blossom*. So, an array of basic relations that is larger and finer-grained than Dowty's has to be considered. Finally, it is a still open question whether the cline within the cluster concept of proto-agent is based on summing up (aggregating) entailments, as in Dowty's approach, or by ranking (or weighting) some basic relations higher than others.

Additionally, we present the design and predictions of a currently running ERP study addressing the questions above from an online-processing perspective. The crucial point is that the demoted referent and the relevant agentivity properties have to be incrementally inferred. These inference processes are considered as being contextually and pragmatically driven. Our preliminary prediction in terms of ERP effects is that subtle differences in agentivity will lead to a modulation in the N400 component (cp. studies concerning animacy-related argument manipulations, e.g., Weckerly & Kutas 1999) perhaps accompanied by a subsequent positivity effect.



Mean ratings and SE of active and passive constructions for four verb classes of intransitive verbs (nc = negative control).

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