Being Friendly is Difficult: On Underspecifcation and Coercion in Copula Sentences

The difference between (1a) and (1b) has been subject to much debate. (1a) describes Sophie's characteristic; (1b) carries an element of Sophie's control over her behavior, i.e. agentivity (Partee, 1977; Carlson, 1977). Some see the agentive interpretation as the result of an optimal re-interpretation (Maienborn, 2003). Others argue that the copula is underspecified relative to the situation argument it can take; the agentive interpretation arises through composition (Rothstein, 1999). The German copula has the same surface form for both stative and agentive interpretations. We present three studies that investigate the semantics of the German copula.

(1) (a) Sophie is friendly. (b) Sophie is being friendly.

(2) (a) *Sophie | {war, verhielt sich} | freundlich, | und zwar | um*
      Sophie {was, behaved herself} friendly   and namely   in.order.to
      | die Eltern | stolz auf sie zu machen.
        the parents   proud of her to make

     (b) *Sophie | {war, verhielt sich} | freundlich, | und zwar | weil |*
      Sophie {was, behaved herself} friendly   and namely   because
      die Eltern | sie gut erzogen haben.
       the parents   her well raised   have

Experiment 1 investigated whether the agentive interpretation of copula predicate constructions involves a semantic re-interpretation of the copula. The eye-tracking during reading study had a 2×2 design: verb (*sein* copula, *sich verhalten* 'to behave'), conjunction (agentive *um*, neutral *weil*). *Sich verhalten* was used as a control condition. 40 participants were tested in 4 lists with 60 items; see (2), | indicate invisible IAs. Critical IAs were the conjunction *weil/um*, one IA preceding and one following it. The results confirm that the agentive interpretation of the copula requires coercion: copula+*um* was more difficult than copula+*weil*. This was visible in 1st fixation duration (β=0, SE=0, t=3.8, p<0.01), 1st pass RT (β=0, SE=0, t=3.4, p<0.01) and regression path duration (β=0.4, SE=0.1, t=4, p<0.01) on the conjunction IA.

Experiment 2 investigated whether agentive coercion is easier when the adjective is modified by the particle *so*. *So* introduces evaluation or focus, possibly facilitating agentive coercion (Wiese, 2011). Methods and analysis were as in Exp. 1. Materials had one crucial modification: in copula sentences, the adjective was preceded by *so*. There was an interaction between factors in regressions out of IA *und zwar* (β=1.19, SE=0.51, t=2.36, p<0.05). This effect was was weaker than in Exp. 1 and present in only one measure. Otherwise, the participants favoured the agentive conjunction over the neural one (1st fixation duration: β=-0.20, SE=0.08, t=-2.6, p<0.01; 1st pass RT : β=-0.23, SE=0.08, t=3.05, p<0.005). The addition of *so* facilitates the agentive re-interpretation of the stative VP in combination with the conjunction *um*.

Experiment 3 is an ongoing eye-tracking study, which will be completed by June '18. It explores whether the coercion effects from Exp. 1 and 2 persist when the neutral conjunctions is *da* 'since' instead of *weil*. *Da* removes the need to correct for word length differences compared to *um*. Replicating the results would strengthen the claim that the copula is semantically stative.

In sum, Exp. 1 and 2 found evidence of the copula's lexical stativity. The agentive interpretation requires a cognitively costly process of coercion, but the addition of *so* facilitates it.

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