Agreement in Copula Clauses: Evidence for a dual mechanism of Agreement

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Summary In this paper we present novel data from German and other Germanic languages to show that C-related agreement occurs more generally in Germanic than is typically assumed, and can be detected even in the absence of agreement morphology on complementizers (C[omplementizer] A[greement]) or "I[nversion] A[greement]" (where a distinct type of morphology appears on the verb just in case it is in C and is agreeing with a subject immediately below it). The data are drawn from agreement patterns observed in S[pecificational] C[opular] C[lauses]. While it is well-known that the agreement found in these clauses varies *between* languages, we demonstrate that in fact there is a robust pattern of *intra*-language variation in Germanic that has gone undocumented. We argue that the observed pattern provides further support for a general dual mechanism of T and C agreement, even in the absence of overt independent morphology for C-agreement, and that it also contributes to a better understanding of the derivation of SCCs cross-linguistically.

Agreement in Germanic Data from CA and IA suggest that languages may show subject agreement both in the T-domain and in the C-domain. While CA and IA have been documented in a number of Germanic dialects (see Bayer 1984; Zwart 1997; Ackema and Neeleman 2004; van Koppen 2005), our data show that the underlying agreement mechanism is also detectable in Standard German, a language that does not have specific morphology for complementizer agreement. The crucial data come from SCCs, where there are two nominative DPs that can act as goals for agreement. Data from our production and rating studies show that in German agreement with the second DP (DP2) is strongly preferred (like Italian, but unlike English or French), both in root and embedded clauses (that is, this is not simply a V2 phenomenon—Table 1, (a) and (b)). However, the new observation is that in V2 clauses with an initial nonsubject XP (c) the preference is reversed (in production) or cancelled out (in rating).

		%DP2	R-sg	R-pl
a.	Die Ursache des Feuers war/waren vielleicht brennende Kerzen.	82%	48	.42
	the cause of the fire was/were maybe burning candles			
b.	Er fragte zuerst, ob die Ursache des Feuers brennende Kerzen war/waren	88%	54	.03
	He asked first if the cause of the fire burning candles was/were			
c.	Meiner Meinung nach war/waren die Ursache des Feuers brennende Kerzen.	30%	12	.002
	in my opinion was/were the cause of the fire burning candles			

Table 1: Results of production study (fill-in-the-blanks) and thermometer rating study (z-scores: -1 (bad) to 1)

Analysis We argue that German (and Dutch) allow for two processes of syntactic subject verb agreement: low agreement of the probe T when the verb does not raise to C and agreement of the probe C when the verb moves to C, similar to what we find in IA (see e.g. Höhle's (1997) *Inversionsformen* and Zwart's (1997) double agreement) and CA (see van Koppen 2005; Ackema and Neeleman 2004 among others).

Concerning SCCs, we follow Heycock (2012) in arguing that SCCs are a type of equative that nevertheless involves "inversion" of the two DPs (DP1 is merged in a position below DP2). In a root clause in German we take it that it is possible for the lower DP (*das Problem*) to cross the underlying subject and move directly to Spec,CP.

(1)
$$\left[\operatorname{CP} \left[\operatorname{DP} \operatorname{das} \operatorname{Problem} \right]_{i} \operatorname{sind}_{V} \left[\operatorname{TP} \left[\operatorname{VP} \left[\operatorname{PrP} \left[\operatorname{DP} \operatorname{deine} \operatorname{Eltern} \right] \operatorname{Pr} t_{i} \right] t_{V} \right] \right] \right]$$

Agreement can be established directly from T, probing the highest DP below it (the underlying subject *deine Eltern* 'your parents'), as standardly assumed.

In an embedded clause, we can see from examples like (b) that the lower DP can invert to a lower position, between V/T and C. Standard German shows no morphological expression of CA, so we see no agreement in the C position; as before, the verb shows agreement with the highest DP below it (the underlying subject *deine Eltern* 'your parents').

In root clauses in which an initial adverbial occupies the Spec, CP position, inversion clearly targets this same low position; but since in this case the verb moves above the position occupied by DP1 (das Problem 'the problem'), this gives rise to a configuration in which the two probes can find two different goals: DP1 is closest to C, and DP2 to T. C-agreement with DP1 is thus possible (and, in production, preferred).

(2)
$$[CP XP ist_V [DP das Problem]_i [VP [PP [DP deine Eltern] Pr t_i] t_V] T+t_V]$$

Note that the apparent impossibility of C-agreement with DP1 followed by subsequent movement of DP1 to Spec,CP (as shown by the very low acceptability/production of DP1 agreement in the configuration in (a) in Table 1) exactly mirrors the phenomenon of "inversion agreement" standardly argued to be a case of C-related agreement (see e.g. Ackema and Neeleman 2004).

Although it is marginally possible to front true predicate nominals to what appears to be a similar position immediately below C, this does not appear to induce C-related agreement:

(3) Meiner Meinung nach sind/*ist ein gutes Team die Frauen. my opintion after are/*is a good team the women

We will argue, following Rochemont and Culicover (1990); Broekhuis (2008); Ramchand (2013) among others, that this predicate inversion actually targets a larger constituent, so that the nominal contained within it is not closer to the C head than DP2 is.

Consequences and Extensions The new data presented here constitute a contribution to the recent lively discussion of the status of agreement as—in at least some cases—a post-syntactic process (see discussion in e.g. Bobalijk 2008; Ackema and Neeleman 2004; van Koppen 2005; Bošković 2009; Bhatt and Walkow 2013). Further, we will argue that they shed light on the analysis of SCCs and the cross-linguistic variation they show in their agreement. Our analysis argues for "inversion," but not of a predicate (as we will show, DP1 agreement cannot be taken to be agreement with a predicate); and it derives the variation in agreement from the interaction of this inversion with independently motivated differences in landing sites within the T domain—which we demonstrate by a comparison with Dutch—and the dual mechanism of agreement that we argue is generally available.

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