## Complementation is relativization: a new syntactic implementation

The aim of this talk is (i) to provide further evidence for the idea that complement clauses (CCs) share the relevant syntactic and semantic properties with relative clauses (RCs), as proposed e.g. in Kayne (2014), Kratzer (2016), (ii) to give an explicit syntactic analysis of clausal embedding by suggesting a small-clause structure for all embedded clausal structures alike: the TP (propositional content) is taken as the predicate of the small clause, a pronominal element (i.e. *that*-type complementizer) is in the subject-position and an equative element is in the pred-head, the latter realizing the identity function, cf. Moulton (2015). The interaction between these elements together with the type of anaphoric relations to the antecedent in the matrix will yield the differences between 'genuine' RCs and CCs as well as the inner Germanic variation in this area.

The main focus of this paper will be on a type of complementizer that has as yet hardly been considered in the analysis of clausal complementation and can be argued to be the missing link in the complementation as relativization controversy, namely complementizers based on equative particles. Various German dialects show equative particles as complementizers in CCs. In some Alemannic variants *ass*, which is a version of German *als* which in turn developed out of the (emphasized) equation particle *all+so*, occurs instead of the pronominal *dass* in CCs, cf. Noth (1993). Recently gained data from Alemannic confirm this finding – and it will additionally be supported by data from Pennsylvania Dutch where the particle *ass* occurs in clausal equatives (EC), in RCs, and in vCCs alike. The similarity between RCs and CCs is thus further bolstered in that CCs can be introduced by elements that are usually analyzed as 'pure relative particles' (RCI for relative clause introducer), which in turn show up in ECs:

(1) a. Seller Kall act yuscht, ass wann er verrickt waar. (equation) Pennsylvania Dutch this guy acts just as if he crazy were b. Ich glaab, ass du oft naus gehscht die Meed karessiere. (vCC) I believe that you often go.out the girls court.inf c. Es iss bauchgatt ass 's Bobbeli greische macht. (relative clause) it is belly ache that the baby cry (2) a. der tuet grad (eso) ass wenn er nünt gwisst hett (equation) modern Alemannic he behaves just (so) as if he nothing know-part have-subj (vCC) b. er het aagrüft und gseet ass er schpöter kunnt he has called and said that he later comes

c. des Huus, **ass** mo jetzt kaufe kaa (relative clause) (relative clause)

the house that one now buy can

(4) der Sache **sô** ir meinent (4) den bok **som** Erik köpte (Swedish) the thing RCI you-pl mean (Reinfried von Braunschweig, 14<sup>th</sup> century, quoted after Paul (1920:238)

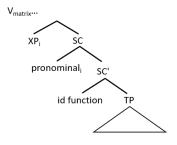
The more common RCI in Alemannic nowadays however is the particle wo – but for which it has been claimed in Brandner & Bräuning (2013) that it goes back to the equative particle as well. In addition, there is abundant diachronic evidence that equative particles are widely used as RCIs – as it is the case in modern Scandinavian languages, cf. the *som* particle in (4).

We thus want to challenge the arguments against the CC-as-RC hypothesis that was raised by de Cuba (2017). He observes that in most Germanic variants, vCCs (and nCCs, i.e. complements of the *rumour*-type nouns) occur preferably with d-pronouns, i.e. *that* – whereas the particles seem to be reserved for RCs. Although it is undeniable that these preferences exist, the data in (1) and (2) suggest that this preference should not be handled in the core syntax but rather that it is a matter of spell-out.

The questions to be solved are thus: (i) what is the common property of d-pronouns and equative particles such that they both can introduce clausal arguments? (ii) why is it nevertheless the case that in declarative vCCs d-pronouns are highly preferred?

Syntactic implementation: In light of this empirical situation and given the semantic analyses that all types of embedded clauses are predicative in nature, we suggest that all have a **small-clause** structure at their base — as this is the predication structure *per se*. The head of the small clause contains the equation particle as the lexical realization of the identity function and its subject is a pronominal element, referring to the relevant expression in the matrix. The different spell-outs of these elements will yield the difference between EC, RCs and vCCs in interaction with the properties of the antecedent in the matrix.

Type of XP in matrix	pronominal	identity function	outcome
DP = the <i>rumour, claim</i> etc. or correlate (= <i>it</i> )	that, dass,	ass	vCC or nCC
cf. He made the <b>claim</b> [that] He believes ( <b>it</b> ) [that]			
NP (predicate)	that, d-φ	ass, wo, as, som	Relative
cf. (3,4) der <b>Sache</b> , sô; den <b>bok</b> som; Engl. the <b>thing</b> that you said; German die <b>Sache</b> , die du glaubst			
Equation correlate	als, so	ass, wie, som	Equation
cf. (2a)tuet <b>eso</b> ass			



In case of a semantically light DP (or pronominal correlate) as the antecedent, the predicate (TP) is a full-fledged clause, i.e. an explicative RC in the sense of Axel-Tober's (2017) diachronic scenario how verbal CCs in Germanic evolved out of gapless explicative relative clauses in a correlative construction; in case of an NP as antecedent, i.e. the prototypical relative clause, the TP contains a gap, as the antecedent NP has descriptive content on its own and thus cannot be filled with the content of a complete TP - but only additionally be modified. Note that in both cases, there is essentially predicate modification, cf. Simeonova (2018) for a similar analysis. The identity function applies in this case to the referential index of the nominal expression in the matrix and the missing argument in the embedded TP. Finally, in case of an EC, the antecedent is a (sometimes hidden) correlate, cf. *just* in (1a) which conveys the relevant meaning in terms of equation.

The actual output in the languages under consideration is then a matter of conventionalization rather than a parametric difference, as is illustrated with the examples above. That both positions are available is bolstered by further data from Alemannic where e.g. in RCs, a d-pronoun and the equation particle may co- occur. That a demonstrative pronoun can ensure the identity function (without an overt realization of the equation particle) is due to its inherent ability (or rather need) to co-refer with an antecedent (either deictically or at least outside of its local domain, i.e. the matrix clause). And if on the other hand co-reference is conceived of as the equation of two referential indices, the fact that it is demonstratives and equation particles alike that show up as "complementizers" is accounted for. In sum: all three embedding structures consist of a correlative construction with an antecedent in the matrix and of a co-referring element (demonstrative or via equation) in the functional structure of the small clause. The TP (with or without gap) is invariably the predicate of this small clause.

What is not yet accounted for is the strong tendency to have a pronominal in vCC. As both possibilities are attested, the principle governing this distribution must be a rather surface-oriented one. The suggestion is that this has to do with the special predicative nature of the explicative RC in v/nCCs: first, in contrast to a "genuine" RC, there is no singled out nominal expression in the embedded clause which is co-referent with the nominal expression in the matrix (gap); second, because the potential antecedent in the matrix is often empty, cf. the silent correlate under e.g. *believe*-type verbs, the overt realization of at least one nominal (d-type pronoun) in the whole construction seems highly preferred. *Possible extensions*: (i) in Romance, it is wh-items (*que*, *che* etc.) that typically occur in all three types of embedding. It will be suggested that these are invariably in the pronominal-position and the co-referentiality to the matrix in this case is established via (a kind of) unselective binding, as yet another possibility to establish co-referentiality. (ii) the proposed analysis fits neatly with recent suggestions to analyze long wh-movement as base generated predication constructions, i.e. prolepsis, Salzmann (2017), or reduced relatives, Schippers (subm).

References: Axel-Tober, K. (2017). The development of the declarative complementizer in German. *Language* 93: 29-65. Brandner, E. & I. Bräuning 2013. Relative 'wo' – only a complementizer?. *Linguistische Berichte* 131-169. De Cuba, C. (2017). Noun complement clauses as referential modifiers. *Glossa: a Journal of General Linguistics*, *2*(1). Kayne, R. 2014. Why isn't this a complementizer? In *Functional Structure from Top to Toe*, ed. by P. Svenonius, number 9, 188–231. OUP. Kratzer, A. 2016. Evidential moods in attitude and speech reports. Slides presented at UConn Colloquium. Salzmann, M. (2017). Prolepsis. *The Wiley Blackwell Companion to Syntax, Second Edition*, 1-42. Simeonova, V. (2018). Flavors of predicate modification. Proceedings of CLS 54. Schippers, A. (subm). COMP-trace revisited: an indirect dependency analysis, ms. Oldenburg.