

# The role of the correlate in clause-embedding

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In languages like German and Russian, the embedding of clauses can be connected with the presence of a correlative pronoun. In German, it is the neuter personal pronoun *es* or its suppletive forms *dessen*, *dem*, *da* (*r*), and in Russian, the demonstrative pronoun *to* in its various case forms is used. The respective forms are governed by the embedding lexical head.

The embedded clause, CP, gets by the correlate a nominal shell and becomes opaque for extractions. Furthermore, the correlate allows to mark the respective complement as part of the discourse and as ingredient of information structure.<sup>1</sup>

The type of the clause is determined by the governing embedding lexical head.

(1) represents the corresponding syntactic configurations.

(1) [XP X<sub>α</sub> ... ([PP P] [DP [D' [D {*es*, *to*}]] CP](*l*) ... X<sub>-α</sub>]

X is the governing lexical head with a PP- or DP-complement and an embedded clause, located in SpecDP, where it is accessible for government by X.

The governed c-selectional properties concern the preposition and/or the case of the DP and the syntactic types of the embedded CP. The non-adverbial P and the case of the governed PP or DP are licensed by the governing head, and the syntactic clause type, too, and both by feature agreement.

In addition to these c-selectional features there are s-selectional relations between the governing head and its complements. The analysis proposed in (1) guarantees that the pertinent governed constituents are accessible independently from one another for the governor.

It deserves mention that idiosyncratic PPs and DPs with lexical or structural cases<sup>2</sup> can be omitted such that the embedded CP appears directly associated with the governing head. Predominantly this is the case, whenever the correlate does not signal givenness. The possible omission – like the extraposition of CP – is considered as a PF-operation.

The lexical entry for the German and Russian correlates is represented in (2).<sup>3</sup>

(2) a. /{*es*/*to*}/, ([DP \_\_ ])<sub>α</sub>  
b. +D +def +spec –deict βgiven –I –II –pl –fem –masc {γgoverned  
–oblique/γR –P –U}

<sup>1</sup> For details see the comprehensive treatment of Willer-Gold (2013).

<sup>2</sup> For structural, lexical and inherent cases see Smirnova & Jackendoff (2017).

<sup>3</sup> Schwabe, Frey & Meinunger (2016); Knjazev (2016), Zimmermann (2016).

c.  $\lambda Q\lambda P_2. [P_2 (\iota x [[P_1 (x)] \wedge [Q (x)]])]$

$Q, P_1, P_2 \in \langle \delta t \rangle, \delta \in \{st, \langle st \langle st \rangle \rangle\}$

The correlates are characterized as multivalent definite non-deictic determiners which are used cataphorically. They require an attribute  $Q$  and express a generalized quantifier with a parametric restrictor  $P_1$  and the nucleus  $P_2$ :

In order to serve as an attributive predicate like  $Q$  in (2c) the following type shift of complement clauses is necessary:

(3)  $TS_{PM1}: \lambda Y\lambda Z. [Z = Y]$

$Y, Z \in \{st, \langle st \langle st \rangle \rangle\}$

This type shift converts non-interrogative and interrogative complement clauses into predicates with the help of the identity functor. By this treatment of the correlate the type of the clausal complement of the governing head is retained.

Another accommodation of clausal complements is proposed by Kratzer (2006, 2016) and Moulton (2014, 2015). A corresponding type shift for complement clauses would be (4).

(4)  $TS_{PM2}: \lambda Y\lambda x. [CONSIST-IN (Y) (x)]$

$Y \in \{st, \langle st \langle st \rangle \rangle\}, x \in \{e, i\}$

I propose to apply this template in cases where the restrictor of definite DPs is expressed by content nouns like *Idee/ideja*, *Plan/plan*, *Frage/vopros* etc.

Another realm of application are adverbial clauses. For example, adverbial clauses with *damit ... /{dlja togo/ s tem}*, *čtoby ...* can be interpreted as WITH-THE GOAL-CONSISTING-IN  $\|CP\|$ , where GOAL is the specification of the parameter  $P_1$  of (2c).

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