The syntax of content
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**Overview.** I argue that complementizers are not semantically transparent, but serve an important role in mediating predicational relations in semantic composition. I follow a theoretical thread built by Kratzer (2006, 2016); Hacquard (2006); Moulton (2009, 2015), but provide the first overt empirical linguistic evidence in support for it thanks to data from Bulgarian.

**Data.** Bulgarian has two morphologically distinct declarative complementizers, *deto* and *če*, that both serve to introduce finite embedded clauses. They are almost never in complementary distribution: *če* but not *deto* can introduce embedded clauses under attitude predicates, as in (1). *Če* but not *deto* can introduce noun modifying clauses, (3). *Deto* but not *če* is the complementizer used in relative clauses, (4). The only case where both *če* and *deto* are allowed is in the complements of emotive factive predicates, such as *regret*, *be upset*, *be happy*, *be angry*, etc., as shown in (2).

(1) Ivan misli/ kaza [*če/*deto* Maria e tuk].
Ivan thinks/ said *ČE*/DETO Maria is here

(2) ...súžaljava [*če*/deto...].
'...regrets *ČE*/DETO

(3) idejata, *če*/*deto* Ivan e tuk
idea.DEF *ČE*/DETO Ivan is here
'the idea that Ivan is here'

(4) idejata, *kojato*/deto/*če* Ivan zapisa v beležnika
idea.DEF which/DETO/ČE Ivan wrote in notebook.DEF
'the idea that Ivan wrote down in the notebook'

**Theoretical background.** I follow a theory starting with Kratzer (2006) that, while some complementizers are trivial (semantically empty), others can encode domain projection functions (Moulton, 2009). One such function projects content. According to Hacquard (2006), mental states have content, which is the set of beliefs, desires, etc. that attitude predicates refer to. Moulton (2009) extends this to the nominal domain, to what he calls content nouns - nouns that denote individuals with propositional content, like *idea, fact, belief*. Content nouns are identified by the property that their content can be overtly described by a predication, (5-b) and can be modified by a CP, (5-a), while in the case of non-content nouns, such as *apple*, denote individuals that have a counterpart in the world of evaluation. Content cannot be predicated of them in any way, (6).

(5) a. the idea that John is a spy
b. The idea is that John is a spy
(6) a. *the apple that John is a spy
b. *The apple is that John is a spy.

Moulton proposes the following content complementizer (called ‘logophoric’ in Kratzer, 2006) that combines with content nouns in cases like (5-a):

(7) \( f_{\text{cont}} = \{ w : w \text{ is compatible with } x \} \)
Moulton (2009): 27, (17)

(8) \[ \text{COMP} = \lambda p. \lambda x_e. f_{\text{cont}}(x_e) = p \]
Moulton (2009): 27, (18)

**Analysis. I. Complementizers.** According to Moulton, English *that* in noun modifying clauses like (5-a), is a complementizer specialized for content. This means that there must be at least two homophonous *that*-complementizers with different syntactic and semantic makeup. I propose that Bulgarian provides the first overt morphological evidence in support of this theory, *če* being a content complementizer. *Deto*, on the other hand, is the spelled out trivial complementizer. This explains why it is allowed in relative clauses. Because it does not host the content function as in (7), *deto* cannot be used in noun modifying clauses, (3).

**II. Relative clauses.** The proposal informs a puzzle on the nature of noun modifying and factive clauses that has instigated a debate in the literature beginning with Kiparsky and Kiparsky (1970), later developed in Kayne (2008), who propose that noun modifying clauses, (3), are relative clauses, and that emotive factive verbs contain a silent noun ‘fact’ that is being relativized by what only
looks like a complement clause. This means that all of (2), (3), and (4), are the same construction.

I present three arguments against this view. First, the data from Bulgarian in (3) shows empirically that the ‘relative’ complementizer deto, cf. (4), cannot be used in the noun modifying case, (3). Second, in order for a noun modifying clause to be a relative clause, it needs a gap, which has to be stipulated, there is no overt evidence for it. Third, intuitively there is a very tangible difference in meaning between the idea that John is here, (3), and the idea that John wrote down in his notebook, (4). This difference is lost in the Kaynean unification theory. Under my analysis, it is preserved: relative clauses cannot tap into content, even when they are relativizing content nouns. Noun modifying clauses, on the other hand, serve exclusively to identify content. This also accounts for the fact that all non-content nouns can be relativized (the apple that I ate) but they do not take content clauses, cf. (6), while the Kaynean view overgenerates this to be possible.

III. Emotive factives. What remains to be explained is the double nature of emotive factives, (2), which can combine with either če or deto - another fact that would be problematic for the Kaynean and Kiparskean views.

According to Kratzer (2006) and Hacquard (2006), be angry and other emotive predicates do not have content and cannot be uniquely identified with the embedded proposition. Predicates like believe, think are all about propositional content, which goes in line with the Bulgarian data in (1) under the analysis that think combines with the complementizer that invokes content, če.

The data in (2), however, suggest that a more fine-grained picture of emotives is needed. I propose that these predicates have two readings, one in which the embedded clause serves as a justification for the emotion, and one in which the embedded clause explains the nature of the emotion. The nature reading is essentially a content reading, making emotive predicates behave similarly to propositional attitude predicates and allowing them to take če, while the justification reading takes deto, similar to the use of because in English:

(9) John is happy because Mary is here.

I propose that deto in emotives has a similar function to because, thus preserving the difference between relative clauses and emotive complements, contrary to Kiparsky and Kiparsky (1970).

Conclusion and cross-linguistic extensions. This paper shows empirical evidence in support of the idea that predication is represented at the morphosyntactic level of natural language. While the data here is from Bulgarian, the analysis can be extended to other languages with two declarative complementizers with similar behavior, such as Greek, Basque, Swedish, Icelandic (de Cuba, 2017), thus forming a crosslinguistically robust pattern.

Mood or C? Kratzer (2016) suggests that domain projection functions are hosted by Mood, not C. In the case of Bulgarian, there is overt evidence for C, as shown above. It remains open for further research whether in other languages content can be represented by Mood.

References


