

# An implicational hierarchy for declarative complement clauses: nominal structure without nominal properties

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**1. Introduction.** The goal of this paper is to expand the Wurmbrand & Lohninger (2020)'s implicational complementation hierarchy (based on Givón 1980) in the subdomain of Proposition complements. I wish to argue that such complements differ in terms of their degree of 'nominality'/'argumenthood', which is reflected in the amount of nominal-like syntactic structure. The relevant data come from a comparison between Russian *čto/to, čto*-clause complements and English *that*-clauses and *that*-less clauses.

**2. Declarative complements in Russian.** Russian has a formal distinction between *čto*-clauses, corresponding to English *that*-clauses, and *to, čto*-clauses, which are *čto*-clauses preceded by a D-like element (a NEUT.SG distal demonstrative case-marked by the predicate head), with which they form a nominal constituent. According to standard accounts (see, e.g., Hartman 2013), *to, čto*-clauses are obligatory in the (preverbal) subject and topic position (where *čto*-clauses are disallowed), as in (1), but are generally optional as complements of V, A and N (except where overt P is present), as in (2), (6) and (7). Still, many 'non-core' complement-taking verbs can only take (P+) *to, čto*-clauses but not *čto*-clauses, as in (3)–(4). Further, many N complements allow *čto*-clauses only in constructions with light verbs, but otherwise strongly prefer (P+) *to, čto*-clauses, as in (8), cf. (7), see Knyazev 2016 for details. Conversely, in standard Russian *to, čto*-clauses are strongly dispreferred with many assertive/volunteer-stance and semi-factive verbs (see Hooper & Thompson 1973, Cattell 1978, Sheehan & Hinzen 2011 for the terminology), as in (5), as opposed to non-assertive and response-stance verbs, as in (6), cf. also (2).

- (1) <sup>??</sup>(**To**), *čto* Vasya pobedil, {nepravda / ona znaet}. SUBJECTS/TOPICS  
DEM.NOM that Vasya won falsity she knows  
'That Vasya has won is false (a falsity) / she knows.'
- (2) Ja somnevajus (v **tom**) / rad (**tomu**), *čto* Vasya priedet. V/A COMPLEMENTS  
I doubt in DEM.LOC glad DEM.DAT that Vasya will come.  
'{I doubt/I am glad} that Vasya will win.'
- (3) Èto govorit <sup>??</sup>(o **tom**) / namekaet <sup>??</sup>(na **to**), *čto* Vasya neprav.  
this says about DEM.LOC hints on DEM.ACC that Vasya wrong  
'This suggests/hints that Vasya is wrong.'
- (4) Vasya riskuet <sup>??</sup>(**tem**) / isxodit <sup>??</sup>(iz **togo**), *čto* on proigraet.  
this risks DEM.INS proceeds from DEM.GEN that he will lose  
'Vasya {takes the risk/proceeds from the possibility} that he will lose.'
- (5) Vasya govorit / dumaet / utverždaet / znaet (<sup>??</sup>**to**), *čto* on proigraet.  
this says thinks claims knows DEM.ACC that he will lose  
'Vasya says/thinks/claims/knows that he will lose.'
- (6) Vasya podtverdil / upomjanul / otrical (**to**), *čto* on proigral.  
this confirmed mentioned denied DEM.ACC that he lost  
'Vasya confirmed/mentioned/denied that he had lost.'
- (7) U menja byla uverennost (v **tom**), *čto* on pobedit. N COMPLEMENTS  
at me.ACC was certainty.NOM in DEM.LOC that he will win  
'I had the conviction that Vasya would win.'
- (8) Menja pugaet Vasina uverennost <sup>??</sup>(v **tom**), *čto* on pobedit.  
me.ACC frightens Vasya certainty.NOM in DEM.LOC that he will win  
'Vasya's conviction that he will win frightens me.'

**3. Comparison with declarative complements in English.** At first glance, the distributional profile of *čto/to, čto*-clauses is very different from what we see in English, where there is no counterpart of *to, čto*-clauses (as *it+that*-clauses do not form a constituent) and *that*-clauses do not show restrictions characteristic of *čto*-clauses, cf. (1), (3) and (8). It turns out, however, that there are striking parallels between Russian *čto*-clauses and English *that*-less clauses. First, *that*-less clauses are also disallowed as preverbal (non-extraposed) subjects and topics. Second, they are normally disallowed as complements of N (see, e.g., Doherty 2000, Bošković & Lasnik 2003). Interestingly, exceptions to the latter claim cited in the literature (cf. *get the message (the idea)/come to the conclusion*, see Dor 2005) are tantalizingly similar to the kinds of environments where *čto*-clause complements of N are possible, cf. (7). Relatedly, the distribution of *that*-

less clauses is much wider than that of Russian *čto*-less clauses. For example, *čto*-less clauses are only allowed with assertive verbs (and only in the affirmative), whereas English *that*-less clauses are possible with several semi-factive, response stance and emotive factive verbs (Sheehan & Hinzen 2011, Hegarty 1991), as in (9), even though there are also lexical restrictions with predicates of these classes, especially among ‘non-core’ verbs (see Dogherty 2000, Dor 2005). This suggests that *that*-less clauses are more closely matched by Russian *čto*-clauses than by *čto*-less clauses, even though the class of *that*-less clause-taking verbs in English is smaller than that of *čto*-clause taking verbs in Russian.

- (9) Ja (\*ne) govovil/dumal/byl uveren/?znal/\*byl rad/\*somnevalsja/\*soglasilsja, on priedet.  
 I not said/thought/was sure/knew/was glad/doubted/agreed he wil come  
 ‘I said (did not say)/though/was sure/knew/was glad/doubted/agreed he would come.’

In turn, *that*-clauses closely correspond to *to,čto*-clauses in that both are the default complement type with almost no distributional restrictions. The only discrepancy appears to be that *to,čto*-clauses are disallowed with assertive verbs, cf. (5). Note however, that in non-standard language, especially among youth, *to,čto*-clauses are widely attested in examples like (5) (see Serdobolskaya & Egorova 2019). The distributional patterns are summarized in the Table below.

	subjects/ topics	other complements of N	non-stance (emotive factives, non- assertive, other)	complements of N + light V / manner of speaking / response stance	semi- factive	assertive
<i>that</i> - clauses	√	√	√	√	√	√
<i>that</i> -less clauses	*	*	%	%	√	√
<i>to,čto</i> - clauses	√	√	√	√	√ (non- standard)	√ (non- standard)
<i>čto</i> - clauses	*	*	%	√	√	√
<i>čto</i> -less clauses	*	*	*	*	%	√

**4. The implicational hierarchy.** The distributional pattern in Table above suggests that there is an implicational hierarchy linking the type of position and complement type such that positions to the left tend to be syntactically more complex, i.e., a complement type corresponding to a position cannot be syntactically less complex than a complement type corresponding to a position to the left. I wish to argue that this hierarchy reflects the relative semantic complexity of complements to the left, specifically, their more nominal-/argument-like status, which has to be marked by some kind of nominal structure. I assume that the nominal vs. non-nominal semantic distinction is discrete, binary and universal (cf. Haegeman 2012) and lies somewhere in the grey area, although more research is needed to fill in the details.

The hierarchy straightforwardly accounts for the Russian data, predicting that nominal-like complements will be marked by a nominal-like element *to*. (There is similar crosslinguistic evidence for the obligatoriness of D-like elements at least in the subject/topic position in D+CP structures in Modern Greek, Persian and Modern Hebrew. It has also been shown that sentential subjects tend to be more nominal cross-linguistically, see Schmidtke-Bode 2014.) As for English, a similar assumption, in the form of a null DP-layer, has been proposed for sentential subjects/topics, and recently for factive/‘referential’ complements (see Kastner 2015). See also de Cuba 2017 for the nominality/referentiality of noun complements. Taking the formal marking of complements seriously, the question then is why ‘non-nominal’ complements should receive the same marking/structure as ‘nominal’ complements.

Here, the present account goes one step further than the previous accounts in suggesting that *that*-clauses *always* have an extra nominal structure even in assertive contexts, which are non/least nominal-like. Crucially, however, this structure may be *semantically inert*. The converse is not true, as a nominal status must be syntactically marked. In this assumption, the account follows Wurmbrand & Lohninger 2020, who show, e.g., that Event complements may be VP, TP or CPs, with an inert TP/CP layer, whereas Proposition complements must be minimally CPs. An interesting further question is what precisely the

nominal structure for *that*-clauses is so that it fits with the fact that *that*-clauses may appear in positions where DPs are not allowed (see Elliott 2017 for a recent discussion).