

SQUIB

Spanning complement-taking verbs and spanning complementizers: On the realization of presuppositional clauses¹

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The paper presents an account of the (non-)realization of the DP shell in presuppositional clauses within a system where such clauses are uniformly DPs. It is argued that the DP shell is realized by a spanning verb (in languages like Russian) or a spanning complementizer (in languages like English). The analysis is extended to account for the distribution of complementizer drop.

KEYWORDS: presuppositional clauses, complementizer drop, DP shell, Russian, spanning

1. INTRODUCTION

Kiparsky & Kiparsky (1970) proposed that factive clauses are embedded in a complex NP headed by a silent *FACT*. In a recently updated version of this proposal, Kastner (2015) extends this analysis to all kinds of presuppositional clauses, including sentential subjects and topics (cf. Davies & Dubinsky 2009, Takahashi 2010) and also complements of so-called response-stance verbs like ‘agree’ and ‘deny’. In addition, Kastner assumes that presuppositional clauses can be nominal not only by virtue of being embedded in a complex NP, but also by being introduced by a (possibly silent) definite D (Δ), which, he argues, happens in English, as illustrated in (1a)–(1b), cf. non-presuppositional clauses in (1c).²

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[2] See Djarv 2019 and Jarvis 2021 for criticisms of Kastner (2015)’s specific proposals. See Haegeman & Ürögdi 2010, Sheehan & Hinzen 2011) for alternative analyses of presuppositional clauses.

- (1) (a) [_{DP} Δ [_{CP} That the building collapsed]] surprised me.
 (b) Bill remembers / denies [_{DP} Δ [_{CP} that John stole the cookies]].
 (c) Bill thinks [_{CP} John stole the cookies]. (Kastner 2015: 161)

In its general form, Kastner's (2015) proposal (referred to as THE DP REQUIREMENT), can be summarized as in (2). The proposal receives crosslinguistic support from languages like Hebrew and Greek where clauses can be introduced by an overt definite D (a DP SHELL), which appears to systematically correlate with the presuppositionality of the clause.

- (2) (a) Presuppositional clauses are embedded in a (definite) DP.
 (b) Clauses embedded in a (definite) DP are presuppositional.

In this paper, I discuss an apparent problem with this proposal posed by Russian data.³ I show that in Russian the correlation between presuppositionality and the presence of the DP shell (*to*) is only partial. Specifically, while in sentential subjects and topics the DP shell is indeed obligatory (or strongly preferred), in complements of presuppositional verbs the DP shell is generally optional. In addition, clauses with DP shells in Russian are not always presuppositional.

I propose a solution to this problem based on the idea that lexical items can realize sequences of heads in a head-complement relation, i.e. SPANS (Svenonius 2012, Ramchand 2018). Specifically, I suggest that presuppositional verbs in Russian can lexicalize the DP shell (D_Δ) by virtue of having SPANNING lexical entries that correspond to V-D_Δ (or V-P-D_Δ) spans. I further suggest that in English the DP shell can also be lexicalized by the complementizer (*that*), corresponding to a D_Δ-C (or a P-D_Δ-C) span. I argue that the spanning analysis is superior to an alternative analysis in terms of a (separate) null D_Δ, which cannot account for the distribution of *to* in a satisfactory way.

Section 2 discusses the distribution of *to* in Russian indicative declarative clauses and introduces the problem for the DP requirement. Section 3 presents the spanning account and discusses arguments for it and against the null D_Δ alternative. Section 4 extends the spanning analysis to C-drop. Section 5 concludes.

2. THE PROBLEM: SUBJECT-COMPLEMENT ASYMMETRY

In Russian, argument clauses can be nominalized by the (case-marked) N.SG. form of the demonstrative 'that'. I assume that such clauses have the structure in (3), with *to* as the definite D head (overtly realizing D_Δ) which takes the CP as its complement (Hartman 2012, Knyazev 2016).⁴

[3] Kastner (2015: 184) acknowledges the relevance of data from Russian and related languages but does not address them in his paper.

[4] Evidence for the D-CP structure in (3) comes from the fact that there is a selectional relationship between *to* and the CP such that only *to* but not other D-like elements (e.g. *eto* 'this') may select for a CP, as shown in (i) (see Lyutikova & Tatevosov 2019, Hankamer & Mikkelsen 2021 for similar arguments). These facts seem incompatible with an adjunction analysis (see Stepanov 2001), as

- (3) [_{DP} To [_{CP} čto on opozdal]] dokazyvaet / značit mnogo. e.
 that.NOM that he was late proves means much
 ‘That he was late proves/means a lot.’

At first glance, the distribution of nominalized clauses (see e.g. Hartman 2012, Knyazev 2016) seems to comply with the DP requirement in (2). Thus, sentential subjects (corresponding to external arguments), as in (3), which are taken to be presuppositional, almost obligatorily require *to* (cf. (6c)).⁵ Conversely, complements of non-presuppositional verbs, as in (4), normally disallow *to*.⁶

- (4) On utverždaet / predpolagaet (??to), čto ona doma.
 he claims assumes that.ACC that she at home
 ‘He claims/assumes that she is at home.’

However, the correspondence between presuppositionality and the presence of *to* is not perfect: complements of presuppositional verbs, as in (5a), as well as postverbal subjects (corresponding to internal arguments), as in (5b), allow but crucially do not require *to*, in violation of (2a).⁷

- (5) (a) Vasja otricaet / osoznal (to), čto on sdelal ošibku.
 Vasya denies realized that.ACC that he made mistake
 ‘Vasya denies/realized that he made a mistake.’
 (b) Menja udivljaet / bespokoit (to), čto Vasja opozdal.
 me surprises worries that.NOM that Vasya was late
 ‘It surprises/worries me that Vasya was late.’

It might be assumed that presuppositional clauses without *to* in examples like (5) contain a null variant of D_{Δ} , as in (6a–b). However, this analysis is problematic because then null D_{Δ} should also be possible in sentential subjects, as in (3). Yet, overt *to* is required in this case, as shown in (6c). The problem can be characterized as a SUBJECT-COMPLEMENT ASYMMETRY.⁸

well as with a complex NP analysis with a null N (proposed e.g. in Kastner 2015 for nominalized clauses in Hebrew/Greek).

- (i) *Èto, čto on opozdal, dokazyvaet / značit mnogo. e.
 this.NOM that he was late proves means much
 Intended: ‘That he was late proves/means a lot.’

- [5] In a sample of 144 examples with (preverbal) subjects of verbs like ‘prove’ from the Russian National Corpus (RNC, ruscorpora.ru, accessed December 2020), 142 (99%) occurred with *to*. Preverbal subjects of object experiencer verbs like *udivljat* ‘surprise’ and of adjectival predicates like *jasno* ‘clear’ show a slightly weaker preference for *to* (63 out of 71 (89%) and 98 out of 148 (66%)), which presumably reflects the availability of an analysis with topicalization of the clause from the internal argument position (Khomitsevich 2008: 26; see also Section 3.2).
 [6] *To* in examples like (4) is possible in non-standard registers (Korotaeв 2016). In standard Russian, *to* is only possible if it bears a contrastive stress (Khomitsevich 2008: 10–11).
 [7] There is no clear difference in meaning between the variants with and without *to* in (5).
 [8] Note that the problem cannot be fixed by assuming that *to* is the realization of D_{Δ} in the context of nominative case, as suggested by a reviewer, since in postverbal nominative subjects D_{Δ} may be null, as we saw in (5b). Another reviewer suggests that null D_{Δ} in Russian may be constrained not

- (6) (a) Vasja otricaet / osoznal [DP Ø_Δ [CP čto on byl p'jan]].
 Vasya denies realized that he was drunk
 (b) Menja udivjaet / bespokoit [DP Ø_Δ [CP čto Vasja opozdal]].
 me surprises worries that Vasya was late
 (c) [DP To / *Ø_Δ [CP čto on opozdal]] dokazyvaet mnogoe.
 that.NOM that he was late proves much

An additional problem for the DP requirement in (2) is that clauses in object-of-P/oblique positions are generally optional, regardless of whether the predicate is non-presuppositional, as in (7a), or presuppositional, as in (7b).⁹

- (7) (a) On nadeetsja (na to) / xvastaetsja (tem), čto polučil pjat'.
 he hopes on that.ACC boasts that.INS that got five
 'He hopes/boasts that he got an A.'
 (b) Ona sožaleet (o tom) / rada (tomu), čto Vasja ušel.
 she regrets about that.LOC glad that.DAT that Vasya left
 'She regrets/is glad that Vasya left.'

The presence of *to* in examples like (7a) could be accounted for by an independent requirement for complements of P, as well as complements assigned oblique case, to be nominalized so that in such cases (2b) would not apply. Yet, the absence of *to* in examples like (7b) would still violate (2a) unless they contain null D_Δ, which runs into the problem of constraining the distribution of null D_Δ.¹⁰

3. A SPANNING ACCOUNT

3.1. *The account of the subject–complement asymmetry*

As shown in (6), a null D_Δ leads to overgeneration in the case of sentential subjects. I wish to argue that this problem can be avoided if morphemes are allowed to spell-out multiple terminals. I adopt the SPANNING implementation of this idea, which uses the notion of a SPAN, i.e. 'a contiguous sequence of heads in a complementation relation' (Ramchand 2018: 27). On this view, if a lexical item corresponds to a span of category features (e.g. <X, Y, Z>), it can realize any contiguous subspan of it in a given structure (e.g. X, X-Y, X-Y-Z, etc. but not e.g. X-Z or W-X). This is referred to as the Superset Principle. It is also commonly assumed that every syntactic head must be lexicalized and that zero morphemes are by default avoided (see e.g. Caha 2018).

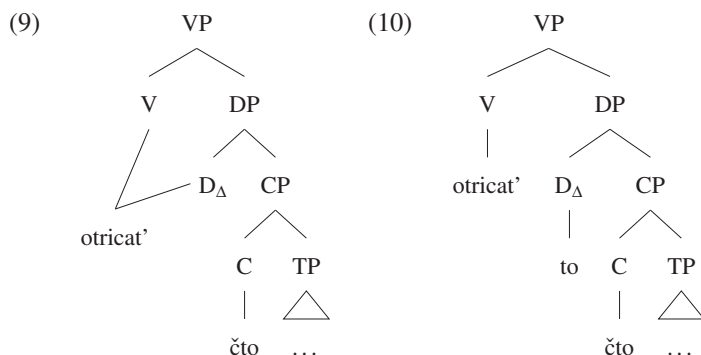
to be generated on its own, but to be always selected by a higher head (hence disallowed as a preverbal subject). This, however, seems to be a restatement of the problem.

[9] Kobozeva (2013) suggests that *to* in examples like (7a) renders the clause discourse-old (and hence presuppositional). However, this is only a tendency as there are numerous examples in RNC with nominalized clauses in object-of-P/oblique position that are non-presuppositional.

[10] A reviewer suggests that the DP requirement may be restricted to direct arguments. However, I see no reason why clauses in object-of-P/oblique positions should be exempt from (2).

The subject–complement asymmetry in (6) can be straightforwardly explained in the spanning framework. Suppose that presuppositional verbs in Russian like *otricat'* ‘deny’ correspond to a span that includes D_{Δ} , as illustrated in (8a). Suppose further that *to* corresponds to D_{Δ} , as I assumed earlier, and *čto* to (indicative) C , as shown in (8b–c). Given these (simplified) lexical entries, the optionality of *to* in presuppositional complements (cf. (5a)) follows from the fact that, due to the Superset Principle, *otricat'* ‘deny’ can lexicalize either the V - D_{Δ} span, as in (9), or just its V subspan (in which case D_{Δ} is lexicalized by *to*), as in (10).¹¹ Postverbal (internal) sentential subjects of presuppositional verbs (cf. (5b)) are accounted for in a similar way.

- (8) (a) <*otricat'* ‘deny’, < V , D_{Δ} >>
 (b) <*to*, < D_{Δ} >>
 (c) <*čto*, < C >>



By contrast, the obligatoriness of *to* in preverbal (external) sentential subjects (cf. (3), (6c)), follows from the fact that they are not in the complement position and thus, by definition of a span, D_{Δ} cannot form a span with V , precluding lexicalization by a spanning verb. As a result, D_{Δ} is lexicalized by *to*, assuming that zero morphemes are disallowed. Thus, the overgeneration problem in (6c) does not arise because null D_{Δ} is not postulated in the first place.

The optionality of *to* in presuppositional clauses in object-of-P/oblique position with verbs like *sožaljet'* ‘regret’ (cf. (7b)) can also be easily captured on the spanning view if we allow such verbs to include not just D_{Δ} but also P (or the head that licenses/realizes the oblique case) in their span, as in (11). Presuppositional clauses without *to* would be observed when the verb lexicalizes the whole V - P - D_{Δ} span, whereas clauses with *to* would correspond to the lexicalization of just the V subspan (with P and D_{Δ} lexicalized by designated morphemes).¹²

[11] The account must be constrained to prohibit a spanning verb to lexicalize subspans that do not include V , e.g. by assuming that V has a privileged status within the relevant span.

[12] Interestingly, the lexicalization of the V - P subspan by the verb (with D_{Δ} lexicalized by *to*) is disallowed for reasons that remain to be understood.

- (11) <sožalet' 'regret', <V, P
- _{about}
- , D
- _Δ
- >>

An alternative analysis with a null D_Δ requires an additional stipulation: it would need to posit a null P (P_Δ) that only selects for null D_Δ (as contrasted with verbs like *otricat* 'deny', which would select either for overt or null D_Δ), given that verbs like *sožalet* 'regret' do not take overt *to* or ordinary DPs (without overt P), as shown in (12). This is problematic as we expect null and overt D_Δ (*to*) to differ only phonologically, but not in syntactic selectional features.

- (12) Ona sožaleet [PP P
- _Δ
- [DP Ø
- _Δ
- /*to [čto on ušel]]] / *čto.
-
- she regrets that.ACC that he left this.ACC

The optionality of *to* in non-presuppositional clauses in object-of-P/oblique position with verbs like *nadejat'sja* 'hope' (cf. (7a)) can be taken to follow from the fact that such verbs (disjunctively) select not only for a PP/oblique complement (in which case the clause is obligatorily nominalized), but also for a CP. The latter option is available because non-presuppositional clauses do not require D_Δ.¹³ By contrast, in the respective case of presuppositional clauses an analysis with a disjunctive selection is unavailable because a (bare) CP complement would violate the DP requirement.¹⁴

To summarize, the spanning analysis of presuppositional verbs provides a simple and straightforward account of the distribution of the DP shell in Russian, particularly of the subject–complement asymmetry in (6). Below, I present two further arguments in favor of this analysis over the null D_Δ alternative.

3.2. Further arguments for the spanning account

A similar overgeneration problem as in the case of sentential subjects (cf. (6c)) arises with sentential topics, which are also presuppositional (Kastner 2015) and hence subject to the DP requirement in (2a). While not as strongly as in the former case, sentential topics without *to* are disfavored, as shown in (13a–b).¹⁵

[13] Alternatively, the optionality of *to* with verbs like *nadejat'sja* 'hope' may follow from the fact that *nadejat'sja* 'hope' has a spanning entry, like *sožalet* 'regret' (cf. (11)). As I suggested earlier, when verbs take an overt P (or assign oblique case) the clause is obligatorily nominalized, rendering *to* semantically inert and exempting it from (2b). Exemption should also apply in the case when P and D_Δ are lexicalized by a spanning verb. Thus, nothing seems to preclude an analysis of *nadejat'sja* 'hope' as corresponding to the V-P-D_Δ span.

[14] As pointed out by a reviewer, independent evidence for a disjunctive selection with non-presuppositional, as opposed to presuppositional, verbs (e.g. CP ∨ PP) may come from the fact that the former allow long-distance extractions to a greater extent than the latter. I leave this to another occasion, as the relevant data are complicated by the fact that extractions from indicative complements in Russian are generally degraded (Khomitsevich 2008).

[15] In an RNC sample, 141 out of 201 (70%) topicalized complements with ACC-taking verbs occurred with *to*. With PP-taking verbs, 246 out of 282 (87%) examples occurred with *to*.

- (13) (a) ?(To), čto on byl p'jan, Vasja ne otricaet.
 that.ACC that he was drunk Vasya not denies
 ‘That he was drunk Vasya does not deny.’
 (b) ??(V to), čto Vasja byl p'jan, ona ne verit.
 in that.ACC that Vasya was drunk she not believes
 ‘That Vasya was drunk she does not believe.’

Yet, a null D_{Δ}/P_{Δ} account, illustrated in (14a–b), wrongly predicts that such examples should be fully acceptable. By contrast, on the spanning account the structures in (14a–b) are ruled out since D_{Δ} (and P_{Δ}) cannot form a span with V (assuming that spell-out happens after topicalization), resulting in the lexicalization of D_{Δ} (and P_{Δ}) by separate morphemes.^{16,17}

- (14) (a) [_{DP} D_{Δ} [_{CP} čto on byl p'jan]] Vasja ne otricaet
 that he was drunk Vasya not denies
 (b) [_{PP} P_{Δ} [_{DP} D_{Δ} [_{CP} čto Vasja byl p'jan]]] ona ne verit
 that Vasya was drunk she not believes

More importantly, on the spanning account we expect that presuppositional verbs will vary as to whether they require overt *to*.¹⁸ This is because whether *to* may be dropped depends on whether a given verb has a spanning entry (that includes D_{Δ}). We do indeed find such variability. Although many presuppositional predicates alternate between complements with and without *to*, some, especially less common ones, e.g. *obusloven* (INS) ‘driven (by)’, as in (15a), *otreagirotat*’ (*na*) ‘react (on)’, as in (15b), *stojat*’ (*na*) ‘stick (to)’ and others require overt *to*.¹⁹ The obligatoriness

[16] A structure with topicalization of the CP with (P_{Δ})- D_{Δ} stranded in the complement position (which would render examples like (14a–b) without *to* acceptable) is independently ruled out, as suggested by the ungrammaticality of (i).

(i) *_{[CP} Čto Vasja byl p'jan]_i ona ne verit [_{PP} v [_{DP} to _{t_i}]].
 that Vasya was drunk she not believes in that.ACC
 Intended: ‘That Vasya was drunk, she does not believe.’

[17] The fact that examples like (13a–b) without *to* are only mildly degraded might be related to the existence of a different construction with the CP in the hanging topic position (presumably exempting it from the DP requirement) co-indexed with an overt pronominal copy, as in (i). The degradedness of (13a–b) without *to* could then follow from an independent disfavor for dropping a pronominal copy in such constructions (under the hanging topic analysis).

(i) [_{CP} Čto Vasja byl p'jan]_i ona v èto_i ne verit.
 that Vasya was drunk she in this not believes
 ‘That Vasya was drunk, she does not believe in this.’

[18] The following argument was suggested to me independently by two reviewers.

[19] An interesting question, left for future work, is whether this is an idiosyncratic feature of such verbs or they all share a common semantic property.

of *to* with such verbs would follow from the fact that they simply do not have spanning entries, unlike *otricat* ‘deny’ and *sožalet* ‘regret’.

- (15) (a) Èto rešenje obuslovljeno *(tem), što igra byla otmeneana.
 this decision driven that.INS that game was canceled
 ‘This decision is driven by the fact that the game was canceled.’
- (b) Ona ne otreagirovala *(na to), što on promolčal.
 she not reacted on that.ACC that he stayed silent
 ‘She did not reacted to the fact that he stayed silent.’

By contrast, such verb-by-verb variability is not predicted by the null D_{Δ} account. Rather, we expect language-by-language variability because whether null D_{Δ} is available (as a separate morpheme) depends on the lexicon of a particular language.²⁰ While the difference between *otreagirovat* ‘react’ and *sožalet* ‘regret’ can still be captured on the null D_{Δ}/P_{Δ} account, e.g. by taking *sožalet* ‘regret’ to select either for overt P or null P_{Δ} (see (12) and the surrounding discussion) and *otreagirovat* ‘react’ to select only for overt P, overall the spanning account provides a simpler and more principled explanation of the relevant facts.

3.3. Comparison with English

I argued that in Russian bare CPs (without *to*) are disallowed as sentential subjects and topics because their DP shell cannot be lexicalized by a spanning verb (since D_{Δ} is not in the complement position). This raises the question as to why English *that*-clauses are allowed in the corresponding examples. I wish to suggest that in English D_{Δ} can be lexicalized by a spanning complementizer corresponding to a D_{Δ} -C span, as illustrated in (16a–b), cf. a non-spanning entry for Russian *što* in (8c).²¹ As a result, *that*-clauses, unlike Russian *što*-clauses, can occur in non-complement positions such as subjects and topics. Note that *that* can still lexicalize just a C head (due to the Superset Principle).

- (16) (a) <that, < D_{Δ} , C>> (preliminary version)
 (b) [DP that [CP <that> the building collapsed]] surprised me

In fact, there is evidence that *that* actually lexicalizes a larger span that includes P, as in (17a). First, *that*-clauses can occur with verbs that select for PPs and do not take DPs such as *agree*, as in (17b). Moreover, this is possible when the clause is extraposed to the right, when P cannot remain in the complement position and thus

[20] Note that on the spanning account languages may only differ in the availability of a separate morpheme lexicalizing D_{Δ} (e.g. *to* in Russian) or of spanning entries lexicalizing D_{Δ} (such as verbs or complementizers). Importantly, languages do not differ on the availability of D_{Δ} as such, which is viewed as an abstract syntactic formative provided by UG.

[21] The difference between *that* and *što* might be related to the fact that *that*, unlike *što*, is homophonous with the demonstrative *that* (see Axel-Tober 2017 for a pertinent discussion). For a general discussion of decomposition of complementizers, see e.g. Baunaz & Lander 2018.

cannot be lexicalized by the verb (given that rightward P-stranding is prohibited), as in (17c). Second, the entry in (17a) may provide an explanation for why *that*-clauses, unlike Russian clauses with *to* (cf. (7)), are disallowed as objects of P, as shown in (17d). Specifically, we could argue that the lexicalization of the P-D_Δ-C span directly by *that* is preferred to and thereby blocks the lexicalization of the same span with a separate P plus *that* (due to a blocking principle favoring fewer exponents when possible (Svenonius 2012)).²²

- (17) (a) <that, <P, D_Δ, C>> (revised version)
 (b) Bill agreed [_{PP} that [_{DP} <that> [_{CP} <that> he stole the cookies]]].
 (c) Bill agreed without hesitation [_{PP} that [_{DP} <that> [_{CP} <that> he stole the cookies]]].
 (d) * Bill agreed [_{PP} to [_{DP} that [_{CP} <that> he stole the cookies]]].

Space precludes a detailed examination of the distribution of English *that*-clauses (see e.g. Bruening & Al Khalaf 2020 for a recent discussion). Instead, I now turn to evidence for spanning verbs in a different domain.

4. THE SPANNING ANALYSIS OF COMPLEMENTIZER DROP

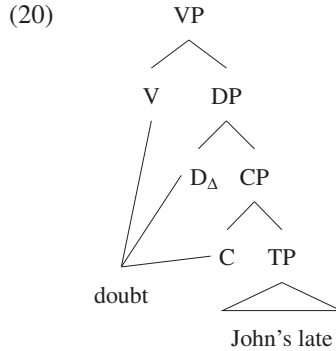
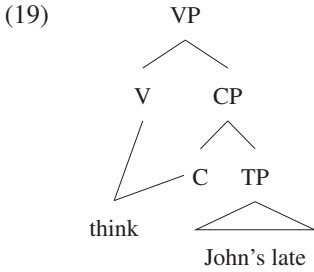
The proposed account of the distribution of the DP shell (D_Δ) in Russian in terms of its lexicalization by a spanning verb can be extended to the distribution of zero complementizer (vs. *that*), or ‘C-drop’. C-drop is in some respects similar to ‘*to*-drop’ in Russian. For example, it is possible in complements, as in (18a), but disallowed in sentential subjects and topics, as shown in (18b–c).

- (18) (a) I think (that) John is late.
 (b) *(That) he liked linguistics, was widely believed.
 (c) *(That) John likes Mary, Jane did not believe.
 (Bošković & Lasnik 2003: 529)

The spanning analysis provides a straightforward account of the asymmetry in (18). Verbs that allow C-drop like *think* can be analyzed as having <V, C> entries, with C-drop corresponding to the lexicalization of the whole V-C span by the verb, as in (19), whereas overt C (*that*) would correspond to the lexicalization of just the V subspan. In turn, the ungrammaticality of C-drop in sentential subjects and topics would follow from the fact that the CP is not in the complement position and thus V cannot form a span with C, precluding a spanning lexicalization.²³

[22] This raises a question as to why blocking is not operative with spanning verbs in Russian (cf. (9)–(10)). I leave this to future work (but see Adger 2014 for a possible solution).

[23] In a similar vein, the fact that C-drop is usually disallowed in noun complement clauses (Stowell 1981) can be explained if such clauses are not true complements (Moulton 2015).



A further argument for the spanning account comes from the well-known fact that not all verbs allow C-drop and, more importantly, that there are some idiosyncratic restrictions. For example, C-drop is disallowed with manner-of-speaking verbs (Stowell 1981) and, most relevantly, presuppositional verbs including response-stance (Hegarty 1992) and emotive factive verbs, as in (21a). At the same time, C-drop is allowed with some presuppositional verbs, including cognitive factives, as in (21b), as well as with various exceptions among emotive factives and response-stance verbs, as in (21c–d).

- (21) (a) I regret/care *(that) John's late.
 (b) He realized/knew/found out/confessed it was raining.
 (c) I doubt (that) John's late.
 (d) I'm glad/happy you're here. (Sheehan & Hinzen 2011: 38, 41)

On the spanning analysis, the variability among presuppositional predicates in (21) is expected and can be captured by analyzing presuppositional predicates that allow C-drop like *doubt/deny* as having spanning entries that include not just C but also D_{Δ} in their span, i.e. as $\langle V, D_{\Delta}, C \rangle$, as in (20), whereas verbs that disallow C-drop like *regret* would be analyzed as lacking $\langle V, D_{\Delta}, C \rangle$ entries (cf. a parallel argument in Section 3.2).²⁴

By contrast, the observed verb-by-verb variability is not explained by the traditional analysis of C-drop in terms of null C and its licensing conditions (Bošković & Lasnik 2003). In a system with a null D_{Δ} (Kastner 2015), one may try to capture the distribution of C-drop in terms of selection, e.g. by taking D_{Δ} to select only for overt, but not null, C. However, this is problematic since overt and null C are not expected to differ in syntactic features (cf. Section 3.2). Moreover, it is

[24] Similarly, the fact that C-drop is disallowed with some non-presuppositional verbs like *assert*, *conjecture*, etc. (Hegarty 1992) would follow if these verbs lack $\langle V, C \rangle$ entries, unlike *think*.

unclear how this account can deal with exceptions among presuppositional verbs. Should there be another D_{Δ} that selects for either null or overt C?

A selection-based analysis where D_{Δ} selects only for overt, but not null, C may be more plausible for Russian, where C-drop is consistently disallowed with presuppositional verbs, as shown in (22a), and where overt *to* is incompatible with null C, as shown in (22b). But this account still invokes an unmotivated featural difference between overt and null C. On the spanning view, by contrast, the relevant data can be easily captured by saying that Russian simply lacks verbs that include both C and D_{Δ} in their span (and only has verbs of the $\langle V, C \rangle$ class), whereas the restriction in (22b) would follow from the contiguity condition on spans (the verb would have to skip P and D_{Δ} to lexicalize C).²⁵

- (22) (a) On dumaet / ?nadeetsja / *rad / *somnevaetsja, ona doma.
 he thinks hopes glad doubts she at home
 ‘He thinks/hopes/realized/is glad/doubts that this will happen.’
- (b) Vasja nadeetsja na to [_{CP} čto / *∅_C ona doma].
 Vasya hopes on that.ACC that she at home
 ‘Vasya hopes that she is at home.’

To summarize, the spanning analysis provides a straightforward account of the distribution C-drop, specifically of the subject/topic–complement asymmetry, as well as of its partly idiosyncratic character.²⁶

5. CONCLUSION

In this paper, I presented an account of the (non)-realization of the overt DP shell (*to*) in Russian, in particular, its obligatoriness in sentential subjects/topics and its optionality in complements of presuppositional verbs. The account was based on the DP requirement, namely, that presuppositional clauses are introduced by the definite determiner (D_{Δ}) (Kastner 2015), and, crucially, on the proposal that D is lexicalized by verbs with spanning lexical entries (that include D_{Δ}). I also suggested that in English D_{Δ} can be lexicalized by a spanning complementizer (*that*), an

[25] I thank a reviewer for pointing out this argument to me.

[26] An additional argument for the spanning analysis comes from sentences with coordination of clauses (see Bassi & Bondarenko 2020 for discussion). When both conjuncts contain an overt *that*, as in (ia), the sentence is felicitous on a reading where AND scopes over the matrix predicate. But when C in the second conjunct is dropped, the sentence is infelicitous (AND only has a low-scope reading). This is unexpected on the null C/ D_{Δ} analysis since (ib) should have the same structure, hence the same scope possibilities, as (ia). By contrast, this follows from the spanning analysis since C (plus P_{Δ}/D_{Δ}) in the second conjunct is not in the complement position of *glad*, precluding a spanning lexicalization. I thank a reviewer for suggesting this argument.

- (i) *Context*: Misha is glad to see both Petya and Vasya individually but hates to see them together because they always quarrel with each other.
- (a) Misha is glad that Petya came and that Vasya came (to the party). (AND > *glad*)
- (b) # Misha is glad (that) Petya came and Vasya came. (*glad* > AND, *AND > *glad*)

option unavailable in Russian. Finally, I showed that the spanning account can be extended to C-drop (by taking verbs that allow C-drop to include C in their span), capturing its intriguing similarities with *to*-drop.

Many questions remain: What is the exact mechanism of spell-out in the spanning framework? How does it interact with the timing of the derivation? Whether and how do spanning and non-spanning lexicalizations compete? Regarding the latter, it is sometimes assumed that the grammar contains a general blocking principle that (under certain conditions) favors a single spanning exponent over multiple exponents lexicalizing the same span (as in the case of *du* vs. *de l(e)* in French (Svenonius 2012)). An alternative view is that blocking is not a principle of grammar but rather is a result of routinization of particular structures during the learning process and thereby is subject to frequency effects and other factors outside grammar proper.²⁷ These and other important issues must be addressed in future work. For now we may conclude that spanning provides a promising approach to the study of clausal complementation.

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[27] An indication that this may be correct is that C-drop (i.e. a spanning lexicalization) typically occurs with most frequent verbs (Huddleston & Pullum 2002: 952–953). Similarly, verbs that require *to* in Russian (i.e. that lack spanning entries) are typically less common (cf. (15)).

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