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ALAPSZAKOS SZAKDOLGOZAT

Lagos Cortes Mátyás Bence

Anglisztika alapszak

Angol szakirány

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ALAPSZAKOS SZAKDOLGOZAT

*Complementizerek az angol nyelvben: a
CP projekció eloszlása*

*Complementisers in the English
Language: The Distribution of the CP
Projection*

Témavezető:

Dr Newson Mark
egyetemi docens

Készítette:

Lagos Cortes Mátyás Bence
anglisztika alapszak
angol szakirány

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Abstract

This paper investigates the categorial status of main and complement clauses in the English language. First, a review is provided of the two main approaches — the IP analysis and the CP analysis — that have been traditionally used to syntactically categorise clauses. It is observed that both of these approaches attempt to classify most clauses uniformly, regardless of whether they are embedded or not. It is then argued that it might be beneficial to consider that the embeddedness of a clause might influence its category. An alternative analysis is proposed, according to which all declarative main clauses are IPs, while all interrogative main clauses and all complement clauses are CPs. It is thus concluded that the role of the CP projection in English is twofold: to allow a clause to be embedded into another clause, and to allow the illocutionary force of a clause to be changed to interrogative or subjunctive.

Keywords: complementiser phrase, main clause, complement clause, PRO clause, exceptional clause, raising clause, null complementiser

Table of Contents

1. Introduction	1
2. A Comparison of Two Approaches	2
2.1. Complement Clauses	3
2.2. Main Clauses	7
2.3. Observations and Proposition	9
3. An Alternative Analysis	11
3.1. The IP Analysis of Declarative Main Clauses	12
3.2. The CP Analysis of Finite Complement Clauses	14
3.3. The CP Analysis of Non-finite Complement Clauses	22
3.4. Conclusion on the Proposed Analysis	32
4. Summary	33
References	35

1. Introduction

One of the results of the recursive nature of all human languages is that clauses can be inserted into other clauses indefinitely. Complementisers are generally defined as the set of words that can be used to introduce a clause when it is inserted as a complement inside another clause. In English, it is traditionally accepted that there are three words that normally fulfil this role: *that*, *if*, and *for*. Their use is illustrated by the following examples:

- (1) (a) John knows [_{CP} that Mary went home]
 (b) Sarah asked [_{CP} if she could wait outside]
 (c) Stan would prefer [_{CP} for the door to be closed]

As the complement clauses above are headed by their respective complementisers, they can all clearly be assumed to be complementiser phrases (CPs). However, in many cases, the categorial analysis of clauses is not so straightforward. Observe the bracketed clauses in the following:

- (2) (a) [Did you deliver the letter?]
 (b) [I uploaded the files]
 (c) John knows [Mary went home]
 (d) She wanted [to dance]
 (e) Jerry believes [Alex to be smart]

(2a) is generally accepted to be a CP, despite the fact that it is not headed by a complementiser and that it is not a complement clause. (2b) is not a complement clause either, nor does it contain an inverted auxiliary like (2a), yet it is claimed by some to be a CP as well. The bracketed clause in (2c) is assumed to be an inflection phrase (IP) in

some analyses, even though it is clearly a complement clause and it can be headed by a complementiser. The bracketed clauses in (2d) and (2e) are assumed to be IPs by some (despite the fact that they are complement clauses) but CPs by others (despite the fact that they cannot contain a complementiser).

While there are compelling arguments that support many of the analyses that have tried to syntactically categorise main and complement clauses, it is clear that this is a complicated issue that has not been settled. In this paper, I am going to first review the two main approaches that have been traditionally used to categorise clauses (the IP analysis and the CP analysis), and then propose an alternative analysis that attempts to provide a consistent categorisation of clauses while taking into account the different distribution and behaviour of IPs and CPs, and also considering the question of what the role of the CP projection might be.¹

2. A Comparison of Two Approaches

Syntactically categorising clauses has proven to be a rather complicated and challenging exercise — there have been a number of attempts at identifying what the category that heads all clauses could be, but as of today there is no general consensus. While some consider complementisers to be a possible candidate for the head position in almost every sentence, others restrict the appearance of this word category to only where it is overtly pronounced and are more in favour of analysing most clauses as IPs. This chapter is an overview of two approaches that have been used to try to decide what kind of phrases clauses could be. Three sources were mainly investigated: Radford's (1988) *Transformational Grammar*; Radford's (1997) *Syntactic Theory and the Structure of*

¹ Note that this paper will not cover the syntax of gerunds, relative clauses, and small clauses, because taking into account these constructions would broaden the scope of the analysis too much.

English, and Newson et al.'s (2006) *Basic English Syntax with Exercises*. These textbooks were selected because they all analyse clauses rather extensively but not too specifically, and — more importantly — there are notable differences in their reasoning, leading to contrasting conclusions. In the following, I will compare these analyses and identify the areas where they substantially differ from each other.

2.1. Complement Clauses

2.1.1. Clauses with overt complementisers. One aspect of this topic where all of these three analyses seem to agree is the status of overt complementisers before complement clauses. All three textbooks argue that if there is an overt complementiser that introduces an embedded clause, then the complementiser is the head of the clause, and therefore this type of construction is a complementiser phrase. As there seem to be no issues to discuss here, I will proceed to examine the more problematic points of analysis.

2.1.2. Complementiserless finite complement clauses. The first major difference among the textbooks that I will investigate is in the analysis of complementiserless finite complement clauses. One theory states that these clauses are CPs headed by a null complementiser, while the other suggests that they are IPs without any kind of complementiser present.

Radford (1988) and Newson et al. (2006) argue for the CP analysis. Radford (1988) presents the grammaticality of the following sentence as evidence for this position (p. 295):

(3) We know [the President will approve the project], and [that Congress will ratify his decision]

It is argued that if the two complement clauses above belonged to different categories, they could not be coordinated.

Newson et al. (2006) point out that if verbs that license finite complement clauses could have both IP and CP complements, it would be expected that some verbs would select only for IP complements, and others only for CP complements. However, it is observed that this is not the case: ‘if a verb selects for a declarative finite IP complement, it also selects for a declarative finite CP complement’ (p. 246).

Another argument by Newson et al. (2006) in support of the CP analysis is the idea of ‘canonical structural realisation principles’ (p. 246), which could permit a generalisation stating that arguments that have a propositional meaning are canonically realised as CPs.

Radford (1997) is in opposition to the CP analysis, concluding that clauses without an overt complementiser must be IPs. Firstly, he rejects the notion that complementisers are always required to set the illocutionary force of a clause; rather, it is argued that ‘clauses which do not contain an interrogative head or specifier are interpreted as declarative by default’ (p. 148), therefore rendering the existence of null declarative complementisers unnecessary. This assumption is argued for by providing the following example, which is a construction that appears in some varieties of English:

(4) I don’t know [which street that he lives in]

Because the complement clause in (4) is interpreted as interrogative, it is claimed that the complementiser *that* does not influence the illocutionary force of its complement.

Coordination observations by Radford (1997) are used to argue against null complementisers. The following sentence is determined to be ungrammatical (p. 149):

(5) *John said [Peter left] and [that Bill kissed Mary]

The ungrammaticality is claimed to result from the fact that the two coordinated complement clauses are not of the same category. It is interesting to note that although he mentions that ‘the grammaticality judgments are very subtle,’ Radford does not provide an account for why he considers (3) to be grammatical but (5) to be ungrammatical.

Economy considerations are also mentioned: CPs with a null complementiser would disobey the ‘economy principle’ (p. 149) defined by Chomsky (1989), requiring derivations and representations to be minimal, ‘with no superfluous steps in derivations and no superfluous symbols in representations.’

The IP analysis is further argued for using observations on preposing. It is shown that the subject of a complementiserless clause can be preposed, but the subject of a clause with an overt complementiser apparently cannot, contrasting the following examples (p. 150):

(6) (a) Money she thinks [can buy happiness]

(b) *Money she thinks [that can buy happiness]

Finally, it is pointed out that the auxiliary *is* can cliticise onto *think* in the following construction (p. 150):

(7) Who do you think's helping him?

It is argued that the possibility of cliticisation in (7) is evidence for the assumption that there is no null complementiser present between *think* and *is*, because otherwise it would block cliticisation.

2.1.3. Complementiserless non-finite complement clauses. Regarding the complicated status of complementiserless non-finite complement clauses, the analyses presented in the textbooks analyse most of them rather similarly with respect to the presence of complementisers: raising clauses and exceptional clauses are all unanimously assumed to lack any kind of complementiser. The only major point of difference among the analyses is the category of clauses with an unpronounced PRO subject; therefore, here I will focus on this topic.

Radford (1988) and Newson et al. (2006) assume that PRO clauses, too, are CPs, similarly to all finite complement clauses according their analyses. Radford (1988) does not call into question whether these clauses could be IPs or not — he is mainly concerned with providing evidence for the existence of PRO, and simply assumes that the clauses containing PRO are clauses where an initial complementiser is always present.

Newson et al. (2006) address this issue explicitly by examining Case assignment in PRO clauses and exceptional clauses. It is argued that the subjects of exceptional clauses can be assigned Case from outside of their own clause because exceptional clauses are IPs, and IPs do not block Case assignment like CPs do. It is also observed that PRO can never occupy positions where full Case is assigned. This leads to the conclusion that all clauses with PRO subjects are CPs so that the CP's property of blocking Case assignment ensures that PRO is never in a full Case position. While this

argument is valid if it is assumed that CPs block Case assignment, it is not clarified why this assumption is made beyond the statement that ‘it is a standard assumption that CP does count as a barrier to government’ (p. 285).

Radford (1997) again argues for the IP analysis, but the case of non-finite complement clauses with PRO subjects is only briefly touched upon. The only argument mentioned against the CP analysis is that the possibility of *wanna*-contraction in the following example would be unexpected if there were a complementiser between *want* and *to* (p. 150):

(8) I *wanna* go home

It is observed that in varieties of English where ‘for to’ infinitives (e.g. ‘I want for to go home’) are allowed, the intervening complementiser blocks the cliticisation of *to* onto the preceding verb. Therefore, there cannot be any kind of complementiser between *want* and *to* in a sentence where this kind of cliticisation is possible. However, it could be pointed out here that it is not clear why the intervening PRO would not block *wanna*-contraction.

2.2. Main Clauses

2.2.1. Interrogative main clauses. Like clauses with overt complementisers, interrogative main clauses are analysed quite similarly in the three textbooks as CPs. While they use slightly different arguments and theories to prove their point, they all conclude that interrogative main clauses are usually CPs where either the inflection moves to the head complementiser position or there is *wh*-movement to the specifier

position of the CP.² I will once again proceed to other issues because there seems to be no disagreement to examine here.

2.2.2. Declarative main clauses. The analyses of declarative main clauses in these books bear much resemblance to their analyses of complementiserless finite complement clauses — possibly due to the fact that these two types of clause seem to be very similar in that they could both be described as ‘non-interrogative, finite, complementiserless clauses.’ Again, the disagreement between the textbooks arises from the fact that one theory sees all of these clauses as CPs, while the other states that they are all IPs.

Radford (1988) and Newson et al. (2006) are once again in favour of the CP analysis. Radford (1988) argues that every main clause must be a CP because non-interrogative main clauses can be coordinated with interrogative main clauses (which have been established to be CPs) (p. 301):

- (9) [Your sister could go to college], but [would she get a degree?]

Radford (1988) also mentions a universalist argument in favour of the CP analysis of main clauses. Sentences from Classical Arabic and Spanish (originally cited by Ross (1970)) are provided as examples for languages that allow complementisers even in front of declarative main clauses (p. 298):

- (10) (a) ?inna lwalada qad taraka lbayta

That the-boy did leave the-house

‘The boy left the house’

² Radford (1997) assumes that subject questions such as ‘Who helped you?’ are actually ‘tense phrases’ where the wh-element moves to the specifier position of TP (p. 292). I will not deal with this assumption in this paper; rather, I will focus on the more general differences between the IP and CP analyses of clauses.

(b) Que mi gato se enratonó

That my cat itself enmoused

‘My cat got sick from eating too many mice’

Newson et al. (2006) also assume that all main clauses are CPs, although they do not seem to strongly reject the notion that they could be IPs. After a brief demonstration of the complexity of this issue, it is concluded that in general all clauses are CPs, but that there are some exceptions.

Radford (1997) does not explicitly mention main clauses: at the end of his analysis of complementiserless complement clauses, he formulates the generalisation that ‘all clauses are IPs, but that only clauses which contain an overt complementiser (like *that/if/for*) project further into CP’ (p. 151). Due to the fact that no declarative main clause can contain an overt complementiser in English, this means that according to this analysis, all of them are IPs.

2.3. Observations and Proposition

After examining these three textbooks’ analyses of the categorial status of clauses, there are a number of observations that should be highlighted. Firstly, it is clear that the status of clauses is indeed problematic, and that there is evidence to be found supporting both the CP analysis and the IP analysis. It is also apparent that neither of these two analyses account for every type of behaviour that clauses exhibit. This can be inferred from the fact that the arguments for a particular theory are almost never addressed by the arguments for the other theory. What I mean by this is that when arguing for a theory, the textbooks usually point to arguments and evidence that are in favour of their analysis, rather than explicitly mentioning and trying to refute ideas that disagree with

them. For example, the CP analysis of main clauses provides no argument for why the supposed complementiser in front of every declarative main clause is never overt, and the IP analysis of complement clauses does not account for the fact that apparently all verbs that can take an IP complement can take a CP complement as well. This ‘nonexhaustiveness’ is without a doubt partly a result of the fact that these books are meant to be used in introductory courses; nevertheless, it emphasises that clauses behave in seemingly contradictory ways.

A much more interesting observation, however, is that there seems to be a pattern in which the textbooks categorise clauses: if a theory claims that, for example, all complementiserless finite complement clauses are CPs, then it will also claim that all main clauses and most non-finite clauses are CPs as well. If, however, a theory claims that complementiserless finite complement clauses are IPs, then this IP analysis will be extended to most other clauses, too.

While in the above review this was taken for granted in order to more easily contrast these theories, it may now be appropriate to ask why all clauses should be analysed with such uniformity. The two opposing sides provide different answers to this question. Newson et al. (2006) mention ‘canonical structural realisation principles,’ through which it could be claimed that ‘something with a propositional meaning is canonically realised as a CP’ (p. 246). However, these principles are only used to argue that all finite declarative complement clauses are CPs; they are not extended to apply to non-finite clauses or main clauses. Radford (1997) emphasises economy considerations: he claims that if the supposed CP ‘has no specifier and contains a head with no phonetic, semantic or grammatical properties’ (p. 149), it violates the ‘no-contentless-

projections-constraint' and thus is best analysed as an IP. Hence, all main clauses and complementiserless complement clauses must be IPs.

Whatever their motivation, both of these approaches seem to produce theories that claim that while the syntactic category of a clause is influenced by a number of factors, it is not affected by the independence or embeddedness of the clause itself. In the following chapter, I am going to attempt to evaluate if this assumption is an accurate one, or if the notion should be considered that clauses might be of different categories depending on whether they are embedded or not. More specifically, I am going to examine if it could be assumed that all declarative main clauses are IPs and all complement clauses are CPs.

3. An Alternative Analysis

As it has been shown in the previous chapter, the two traditional analyses of the categorial status of clauses generally assume either that most clauses are CPs or that most clauses are IPs, regardless of whether they are independent or embedded. While this approach might be beneficial in terms of uniformity, one of its disadvantages is that the role of complementisers ultimately becomes unclear: if IPs can function as complement clauses, non-interrogative finite complementisers seem to exist for no reason; on the other hand, if all clauses are CPs, it is unclear why overt complementisers can appear in front of declarative complement clauses but not in front of declarative main clauses. This chapter attempts to demonstrate that it is possible to analyse all declarative main clauses as IPs and all other main and complement clause types as CPs, thus providing a consistent analysis of the categorial status of clauses while maintaining that the CP projection can provide two functions for which it is always necessary to be

used: to embed a clause into another clause or to make it possible for the illocutionary force of a sentence to be altered to interrogative or subjunctive.

3.1. The IP Analysis of Declarative Main Clauses

Firstly, I am going to investigate what the advantages and disadvantages of analysing most main clauses as IPs would be. As interrogative main clauses have been generally accepted to be CPs (see Haegeman (1991), Radford (1988 and 1997), and Newson et al. (2006)) and the assumption that the CP projection is used to create a question is clearly reasonable and supported by empirical evidence, I will focus on the more controversial issue of declarative clauses.

A very convincing argument for analysing declarative main clauses as IPs is the fact that none of them permit any kind of overt complementiser in the head position in English, and it is also unusual for other languages to allow this. While Radford (1988) cites Ross (1970) as providing two examples of languages that sometimes allow a complementiser to appear in front of a declarative main clause (presented in the previous chapter as (10a–b)), these languages seem to constitute a very small minority, especially considering that Radford could list twelve languages to illustrate his point that interrogative main clauses can be introduced by overt complementisers. In any case, these two languages notwithstanding, certainly in the case of English, stipulating a requirement that there is always an obligatorily non-overt complementiser before every declarative main clause would be problematic because it would not be clear why this complementiser cannot appear overtly, and it would also go against economy principles.

An argument mentioned in Radford (1988) that supports the CP analysis of declarative main clauses is that it is possible to coordinate them with interrogative main clauses (as exemplified in the previous chapter with example (9)), which could suggest

that both are CPs. However, Newson et al. (2006) note that ‘two constituents with the same function can be coordinated, even if they do not have the same categorial status’ (p. 83), as demonstrated by the following sentence (brackets and phrase category markers added):

- (11) You should take the medicine [_{AP}regularly] and [_{PP}under proper medical supervision]

Based on this observation, it could be argued that when an IP and a CP both function as main clauses, their coordination is allowed.

When arguing for the CP analysis of all main clauses, it is argued by Newson et al. (2006) that all main clauses necessarily have a complementiser in the head position because all clauses have an illocutionary force interpretation and this seems to be set by the head complementiser. Radford (1997) disagrees with this assumption and supposes that declarative clauses are interpreted that way not because of the presence of a declarative complementiser, but because of the absence of a non-declarative complementiser. In other words, clauses are claimed to be interpreted as declarative by default.

A piece of evidence that the complementiser *that* and its null variant might not contribute to the setting of illocutionary force is the fact that they can introduce finite non-declarative clauses, as demonstrated by the following examples:

- (12) (a) I suggest that you be careful
 (b) I wish (that) you were here

As the complement clauses above are subjunctive, it would not be acceptable for them to be introduced by a complementiser that only licences declarative complements.

This too indicates that complementisers that can introduce declarative clauses do not influence their illocutionary force, and thus they are not needed to occupy the head position of declarative main clauses. However, Newson (personal communication, April 2016) points out that the complementiser *if* can also introduce two types of clause:

- (13) (a) I asked if she was joking
 (b) If I had been more careful, I would've survived

In (13a), *if* introduces an interrogative clause, while in (13b), it introduces a subjunctive clause. This means that there is most likely something other than *if* that additionally contributes to the interpretation of the clause, which would then imply that the same process happens in (12a–b), thus undermining the argument that the complementiser *that* cannot influence the illocutionary force of a clause. An interesting observation that this provides us with, however, is that CP projections seem to be necessary to appear not just when introducing interrogative clauses, but also when introducing subjunctive clauses.

It seems then, that it is difficult to provide evidence for the assumption that the default interpretation of all clauses is declarative. However, the stipulation that the supposed head complementiser in front of declarative main clauses must never be overt seems equally hard to justify. For now, I will proceed with the assumption that all declarative main clauses are IPs, and I will attempt to defend this assumption in one of the following sections.

3.2. The CP Analysis of Finite Complement Clauses

When analysing finite complement clauses, the situation becomes even less straightforward due to the fact that there are some cases where the complementiser

seems to be neither required, nor forbidden; it is only optionally present. In this section, I am going to examine whether it could be useful to consider all finite complement clauses to be CPs, regardless of whether the head complementiser appears overtly or not.

3.2.1. Evidence for the existence of null complementisers. The first piece of evidence that I will present in support of the CP analysis of all complement clauses is the ambiguous reference of the subject of the complement clause in the following sentence:

(15) He said [I love cheese]

The pronoun *I* above can refer either to the subject of the main clause of (15), i.e. *He*,³ or to the speaker of (15). The multiple possible references of *I* might be due to one of two reasons. One is lexical ambiguity, which would imply that there are actually two homonym *I*-s with different intensions: one would mean something similar to ‘third person singular’, while the other would mean ‘first person singular.’ The other reason could be structural ambiguity, which would assume that there is only one intension of *I*, but its extension can change because its syntactic position is different in the two possible interpretations. Because it is normally accepted that there is only one pronoun *I* (its intension roughly being ‘the speaker of this sentence’), and it is also evident that its extension can vary, I will argue that this is a case of structural ambiguity.

Consider the interpretation of the following sentence:

(16) He said [that I love cheese]

³ More accurately, it can refer to the same individual that the subject of the main clause refers to; I will use the shorter, less precise phrasing for brevity.

In (16), it is clear that the pronoun *I* refers to the speaker of (16), not to the subject of the main clause. The only difference between (16) and (15) is that there is an overt complementiser heading the embedded clause in (16) but not in (15), which indicates that the complementiser must influence the interpretation of the reference of *I*. Due to the fact that (15) can be interpreted exactly like (16), it follows that (15) and (16) can have the same structure, and thus that (15) can contain a complementiser. But due to the fact that (15) can also *not* be interpreted like (16), it follows that (15) can also *not* contain a complementiser. Therefore, I propose that the phrase category of the embedded clause in (15) can be either IP or CP:

- (17) (a) He said [_{IP} I love cheese]
 (b) He said [_{CP} [_{IP} I love cheese]]

If the embedded clause is an IP (like in (17a)), *I* refers to the subject of the main clause. If the embedded clause is a CP (like in (16) and (17b)), *I* refers to the speaker of the sentence. There is no overt complementiser present in (17b), yet the embedded clause behaves like a CP. X-bar theory states that a phrase XP must be headed by a word of the same category X. This entails that there must be a null complementiser in order to head the CP in (17b). It can be concluded then, that contrary to what Radford (1997) and Bošković (1997) claim, null finite complementisers do exist, and not just to satisfy principles like Canonical Structural Realisation, but also as inferred from empirical evidence such as the above.⁴

It should be pointed out here that this analysis is also a convincing argument for the IP analysis of all declarative main clauses: if all declarative main clauses were CPs,

⁴ For a similar analysis involving ambiguity that also supports the assumption that null complementisers exist, see Kishimoto (2006).

the structural ambiguity of (15) would not be possible because then only CPs could be inserted as embedded clauses.

3.2.2. IP complements as direct speech elements. While the above argument supports the CP analysis of some complement clauses, the statement at the beginning of this chapter was that it should be considered that all complement clauses are CPs. Yet in (17a), the embedded clause is claimed to be an IP. This suggests that at least some complement clauses are better analysed as IPs. I will argue, however, that the IP in (17a) is not a complement clause but a direct speech element (DSE), and that DSEs are semantically and syntactically different from complement clauses. Semantically, this analysis would explain why the pronoun *I* in (17a) can refer to something other than the speaker of (17a): the pronoun is part of a clause that is interpreted to be spoken by the individual that the main clause subject refers to, and thus it can refer only to that individual. As we have seen, this interpretation is not possible when the complement is a CP.

Syntactically, it can be shown that the distribution of embedded IPs patterns more with other DSEs than with CPs. First, observe that the verb *say* can apparently select for any kind of complement:

- (18) (a) He said [_{CP} that I love cheese]
 (b) He said [_{IP} I love cheese]
 (c) He said [_{NP} banana]
 (d) He said [_{PP} under the sofa]
 (e) He said [_{AP} great]

It is unexpected for any word category to allow such a high variety of complement types. It would be better to assume that *say* can select for CP complements (i.e. complement clauses) and also for DSE complements, which can be used to quote anything that someone has said. To demonstrate that embedded IPs behave more like DSE complements than like CP complements, I present the following examples, in which the verb *go* is a near synonym of *say*:

- (19) (a) *He went [_{CP} that I love cheese]
 (b) He went [_{IP} I love cheese]
 (c) He went [_{NP} banana]
 (d) He went [_{PP} under the sofa]
 (e) He went [_{AP} great]

The pattern above could be explained by the assumption that ‘vocal’ *go* can select for DSE complements, but not for CP complements. This assumption is borne out by the fact that in contrast to (15), the pronoun *I* in the following sentence can only be interpreted to refer to the subject of the main clause:

- (20) He went [I love cheese]

It could be argued that (15) is ambiguous because *say* can select for both DSE and CP complements, and (20) is unambiguous because *go* can select for DSE complements but not for CP complements, thus making it impossible for a null complementiser to appear in front of the embedded clause. Note that the verb *know* seems to behave in the exact opposite way:

- (21) He knew [I love cheese]

In (21), the pronoun *I* can only refer to the speaker of (21). This would lead us to expect that *know* can select for CP complements, but not for DSE complements.

Observing the following sentences, this does indeed seem to be the case:

- (22) (a) He knew [_{CP} that I love cheese]
 (b) *He knew [_{NP} banana]
 (c) *He knew [_{PP} under the sofa]
 (d) *He knew [_{AP} great]

The data above show that (21) is unambiguous because *know* can select for CP complements but not for DSE complements, thus making it impossible for a null complementiser not to appear in front of the embedded clause.

It can be concluded based on the above observations that complement clauses can be clearly distinguished from direct speech element complements, and that embedded IPs behave more like a type of direct speech element than a type of complement clause. It is then a reasonable statement that when a verb selects for a clausal complement, it always selects for a CP with an overt or null complementiser, and when a verb selects for a direct speech element complement, it can be of any category. It is possible for a verb to select for both CP and DSE complements (e.g. *say, yell, whisper, answer*), to select for CP but not DSE complements (e.g. *know, decide, show, doubt, claim, believe*), or to select for DSE but not CP complements (e.g. *go*), although the latter is unusual. Admittedly, some verbs (e.g. *think*) are difficult to categorise in this regard, but generally these three groups can be quite clearly distinguished from each other.

3.2.3. Potential arguments against the CP analysis. A counterargument to the CP analysis of all complement clauses is mentioned by Radford (1997), who refers to Bošković's (1994) argument that the following sentence is ungrammatical because the two complement clauses that are coordinated are not of the same phrase category (one being an IP, the other a CP):

(23) *John said [Peter left] and [that Bill kissed Mary]

As Radford points out, 'the grammaticality judgments are very subtle' (p. 149); indeed, it should be mentioned that Radford (1988) uses a very similar construction to argue for the CP analysis of all complement clauses, claiming that the following sentence is grammatical:

(24) We know [the President will approve the project], and [that Congress will ratify his decision]

However, even accepting that (23) can be ungrammatical does not refute the CP analysis of all complement clauses. As it has been observed previously, the verb *say* can take both CP and DSE complements, which can result in ambiguity when there is no overt complementiser after the main clause. As there is no overt complementiser after the main clause in (23), the complement can be interpreted either as a CP or as a DSE. If the listener interprets it as a DSE, then he or she will assume that the following sentence has been said by someone (in this case, John):

(25) *Peter left and that Bill kissed Mary

The sentence above is ungrammatical because an IP main clause and a CP complement clause are coordinated, therefore (23) could be evaluated by some as being ungrammatical because it can be interpreted as containing an ungrammatical

complement. Note that there appears to be no such problem with (24), which could be attributed to the fact that — as has been previously concluded — the verb *know* can take CP complements but not DSE complements, so the absence of an overt complementiser in front of the complement clause cannot result in ambiguity because it is impossible for a null complementiser not to appear there.

Another argument mentioned by Radford (1997) that could be a problem for the CP analysis of all finite complement clauses is the contrast in grammaticality between the following sentences (cited in the previous chapter as (4a–b)):

- (26) (a) Money she thinks [can buy happiness]
 (b) *Money she thinks [that can buy happiness]

However, as pointed out by Newson (personal communication, April 2016), *she thinks* in these sentences could be reasonably assumed to be an epenthetic comment.

This is supported by the following:

- (27) (a) Money can buy happiness, she thinks
 (b) *Money that can buy happiness, she thinks

(27a–b) illustrate that it is possible to add *she thinks* as an epenthetic comment to a sentence, therefore (26a–b) may not be an instance of movement out of a complement clause; instead, *she thinks* is most likely inserted into a main clause. (26b) is then ungrammatical for the same reason that (27b) is ungrammatical: because it is unacceptable for a complementiser to appear between the subject and the auxiliary that directly follows it.

3.2.4. Conclusion on finite complement clauses. In summary, this section has shown that null finite complementisers exist, and that the different distribution patterns

of CP and IP complements could be explained by the assumption that only CPs are complement clauses while IP complements are simply a type of direct speech element complement. It has thus been shown that the CP analysis of all finite complement clauses does not pose any serious theoretical or empirical problems, and it explains certain phenomena better than the IP analysis; therefore, it can be concluded that it is reasonable to assume that when a verb selects for a finite clausal complement, it always selects for a CP.

3.3. The CP Analysis of Non-finite Complement Clauses

When dealing with non-finite complement clauses, there is an altogether different set of problems to solve if one would like to claim that all of them are CPs. In these types of clause, it is sometimes not just unnecessary, but ungrammatical for an overt complementiser to appear:

- (28) (a) *I want for to dance
 (b) *I believe for her to be intelligent
 (c) *Mary seems for to be weird

The complement clause in (28a) is a clause that contains PRO, the complement clause in (28b) is an exceptional clause, and the complement clause in (28c) is a raising clause. The PRO clause in (28a) has been argued to be an IP by Radford (1997) and Bošković (1997), and it has been argued to be a CP by Radford (1988) and Newson et. al. (2006). Exceptional clauses and raising clauses have been generally accepted to be IPs. I will first address PRO clauses.

3.3.1. PRO clauses as CPs. Newson et al. (2006) argue that PRO clauses must be CPs because some kind of complementiser is necessary to be present in order to block full Case assignment to the PRO subject of the complement clause. Without a complementiser, some verbs could assign full Case to PRO from outside of the complement clause, which would be unacceptable because PRO is never in a full Case position. As there is no overt complementiser before the PRO clause, it is assumed that there is a null complementiser that heads the CP.

A significant problem with this analysis is highlighted by Radford (1997), Bošković (1997), and Hornstein (1999), namely the possibility of *wanna*-contraction in the following type of sentence:

(29) I *wanna* dance

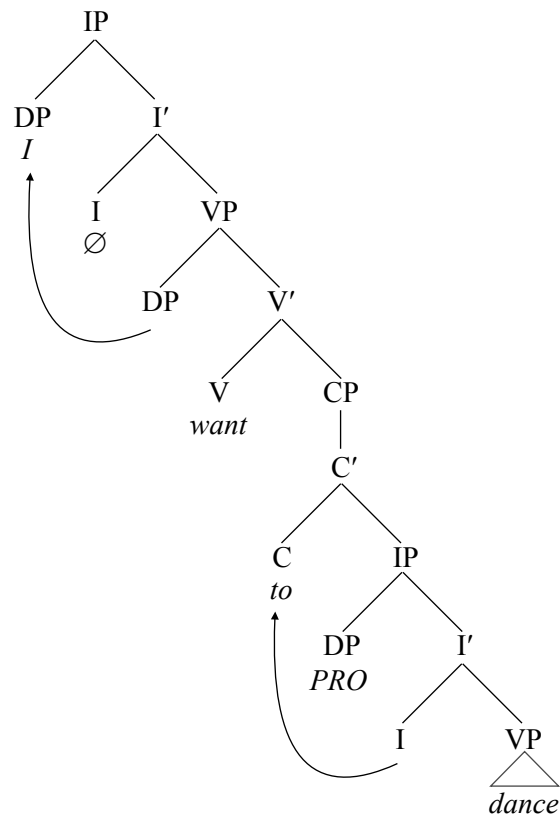
That *to* can cliticise onto *want* in (29) indicates that there cannot be any kind of complementiser between them, otherwise it would block cliticisation. However, it is then reasonable to ask why the intervening PRO subject does not block cliticisation.⁵

I believe that there may be a relatively simple way to account for the behaviour of PRO clauses that adequately addresses the issue of *wanna*-contraction and the Case assignment process as well. My analysis assumes that there is movement taking place within these clauses when they are inserted into the complement position of the verb. More specifically, I propose that the inflection *to* moves from the head inflection position to the head complementiser position, as illustrated in the following figure:

⁵ Bošković (1997) explains this by stating that ‘*wh*-traces are invisible at PF’ (p. 35), and since PRO behaves like a *wh*-trace, it has no effect at the Phonological Form level either. Hornstein (1999), on the other hand, observes that obligatorily controlled PRO cannot be straightforwardly distinguished from NP-traces, and proposes that under the Minimalist Program, it is doubtful that NP-traces exist as grammatical constructs; rather, they are ‘simply copies of lexical material and so have no specific shapes whatsoever’ (p. 78). Consequently, they have no influence on cliticisation.

While these analyses are without a doubt insightful, they have significant implications that reach beyond the scope of this paper, therefore I will not attempt to address them here.

(30) I want to dance



I will first provide reasons for why the above analysis is possible. As mentioned earlier, the syntax of interrogative clauses is widely believed to make extensive use of I-to-C movement, for example in the case of yes-no questions. It can also be shown that this kind of movement is not restricted to interrogative clauses:

- (31) (a) If you had bought the tickets, we could have gone to the concert
 (b) Had you bought the tickets, we could have gone to the concert

In addition, the above sentences demonstrate that I-to-C movement does not necessarily change the illocutionary force of a clause.

The motivation for such movement in PRO clauses could be explained by adopting the hypothesis that PRO is always assigned null Case, as proposed by Chomsky and Lasnik (1993) and supported by Bošković (1997). So far, it has been

presumed that null Case is assigned by *to* to its specifier. This is rather problematic because then in non-finite complement clauses headed by the overt complementiser *for* it is not clear why the subject DP can be in a position to receive two kinds of Case; nowhere else does this situation seem to arise, and it would also be hard to explain why the ‘right’ kind of Case is always assigned, and the ‘wrong’ kind blocked.

Thus, it would perhaps be preferable to assume that Case in non-finite complement clauses is assigned uniformly by the head complementiser⁶ (*for* or *to*) to the specifier of its complement. Under this assumption, the subject DP of non-finite clauses headed by *for* is never in a doubly Case-marked position and is always clearly assigned accusative Case. Moreover, it is also obvious why the subject DP of PRO clauses is never assigned accusative Case, as the head complementiser *to* fulfils three roles: it blocks exceptional Case marking by the main clause verb, prevents the accusative marking complementiser *for* from appearing (because the head complementiser position is already filled), and marks the specifier of its complement for null Case. I-to-C movement in PRO clauses can thus be assumed to be motivated by Case assignment, which is something that has been observed to be a reason for movement in many other constructions. This analysis would also satisfy economy considerations, as the CP in (30) is not a contentless projection because it contains an overt head.

In addition to being clearly motivated and economical, the I-to-C analysis of PRO clauses also possesses considerably more explanatory power than both the covert-CP analysis and the IP analysis. Firstly, the possibility of *wanna*-contraction in sentences like (29) is a problematic phenomenon to explain for both of the traditional

⁶ Note that I do not mean to imply that *to* is a complementiser; by ‘head complementiser,’ I am referring to the element that occupies the head position of the CP projection.

analyses because they allow cliticisation over one or more intervening elements.

Adopting the I-to-C analysis eliminates this problem completely and turns wanna-contraction into empirical evidence for the assumption that *to* directly follows the main clause verb.

Another observation that neither of the traditional analyses can account for is the fact that PRO clauses can act as the subject of a sentence. Observe that normally, phrases that can function as complement clauses can appear in the subject position of a sentence if and only if they are headed by an overt complementiser (or some other part of the CP projection is overt):

- (32) (a) [That she left] saddened me
 (b) *[She left] saddened me
 (c) [How she became successful] was left unexplained
 (d) *[She became successful] was left unexplained

Given the pattern above, the grammaticality of the following sentence would be unexpected if it were an IP or a CP with a null head complementiser:

- (33) [To skate in this car park] is forbidden

That the sentence above is grammatical suggests that the head complementiser position of the subject CP must be filled by something, and the obvious candidate for this position is the inflection *to*.

In conclusion, the I-to-C analysis of PRO clauses has significant advantages over both the IP and covert-CP analyses: the motivation of I-to-C movement can be clearly explained in terms of Case assignment, its derivation and representation are minimal, and it can explain several phenomena that the traditional analyses cannot

straightforwardly deal with. Consequently, it can be reasonably assumed that all PRO clauses are CPs.

3.3.2. Exceptional clauses as CPs. I will now examine exceptional clauses, which are currently generally believed to be IPs. There are two main reasons for analysing exceptional clauses as IPs. First, their subjects can receive Case from the main clause verb, which is claimed to be impossible through a CP projection, and second, they never contain an overt complementiser. While these arguments are compelling, they are not unquestionable: it is not clear why Case assignment would be blocked by a CP projection but not an IP projection, and it is plausible that there may be a null complementiser head in all of these clauses. The latter statement is supported by the fact that exceptional clauses and clauses headed by the complementiser *for* are in complementary distribution, and that exceptional verbs can clearly select for CP complements when they are finite:

(34) Mary believes that John is alive

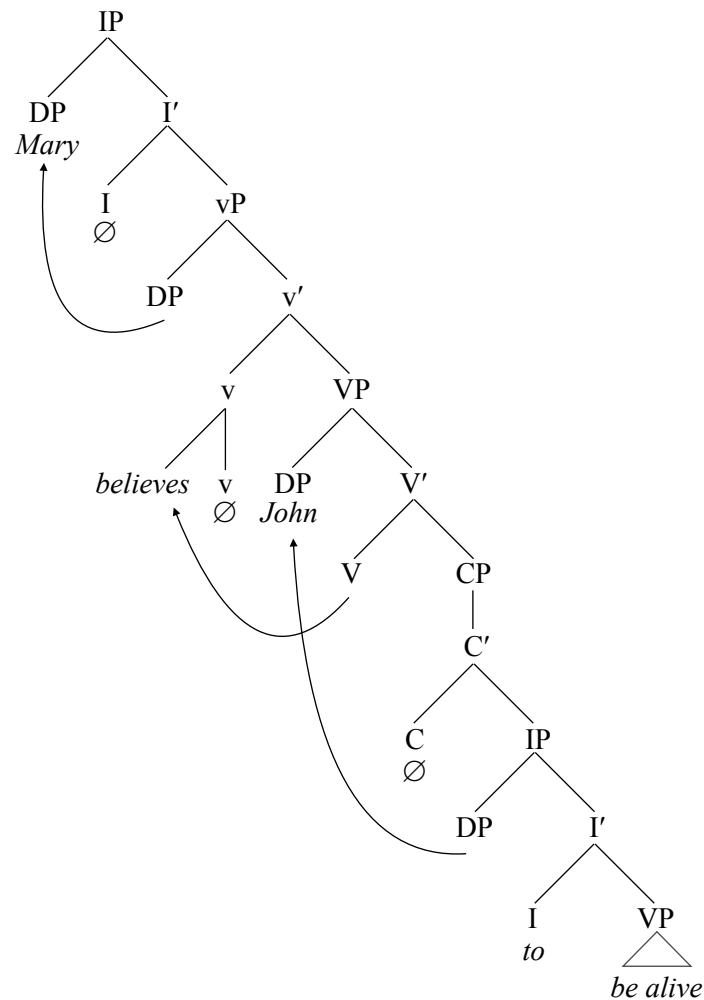
These observations would be explained by the assumption that exceptional verbs can select for either a finite CP or a non-finite CP with a null head. Thus, the following sentences could be analysed uniformly:

(35) (a) Mary believes [_{CP} that John is alive]
 (b) Mary believes [_{CP} John to be alive]

However, it should then be explained what the structure of the CP in (35b) is, how its subject is assigned Case, and why its complementiser cannot be overt. I will argue that this is another case of movement and propose the following construction,

adopting the ‘light verb phrase’ analysis outlined in Newson et al. (2006), where the head of the light vP assigns accusative Case to the specifier of its complement:

(36) Mary believes John to be alive



The crucial assumption here is that exceptional verbs differ from non-exceptional verbs in that, as suggested by Newson (personal communication, April 2016), when exceptional verbs select for a CP complement, their structure contains an abstract light verb that normally assigns accusative Case to the main clause object (situated in the specifier position of its complement), while the structure of non-exceptional verbs does not. In (36), *believe* moves to support the light verb, and *John* moves to the specifier position of the thematic verb to receive Case from the light verb.

It can then be claimed that exceptional Case marking is possible because exceptional verbs have an empty object position that can be moved into.

This analysis would eliminate two restrictions that have only applied to CP projections: that CPs block Case assignment, and that A-movement out of CPs is impossible. The former assumption would be eliminated because it would be rendered unnecessary. It has been shown that in PRO clauses, the complementiser is not there to block Case assignment, but rather to assign null Case, and in exceptional clauses, given the movement to object account, the complementiser is not in a position to block Case assignment; therefore, the rule that CPs block Case assignment applies nowhere. The latter observation — that A-movement out of CPs is impossible — would now be restricted to finite CPs, where it is explained by the more general Last Resort Condition. Out of non-finite CPs, however, A-movement could now be assumed to be allowed, with the condition that it is always to another argument position, such as in (36) where the DP moves to the object position.

Adopting this analysis, it would also be unsurprising that exceptional verbs can have finite CP complements because it could be reasonably assumed that they can select for finite or non-finite complement clauses, and complement clauses are always CPs.

It can then be concluded that analysing exceptional clauses as CPs eliminates the need for arbitrary, CP-specific restrictions, and it allows a more uniform analysis of the subcategorisation frame of exceptional verbs.

3.3.3. Raising clauses as CPs. Now that it has been established that A-movement out of CPs is possible, it can also be used to straightforwardly account for raising clauses. That exceptional clauses and raising clauses can be analysed similarly is

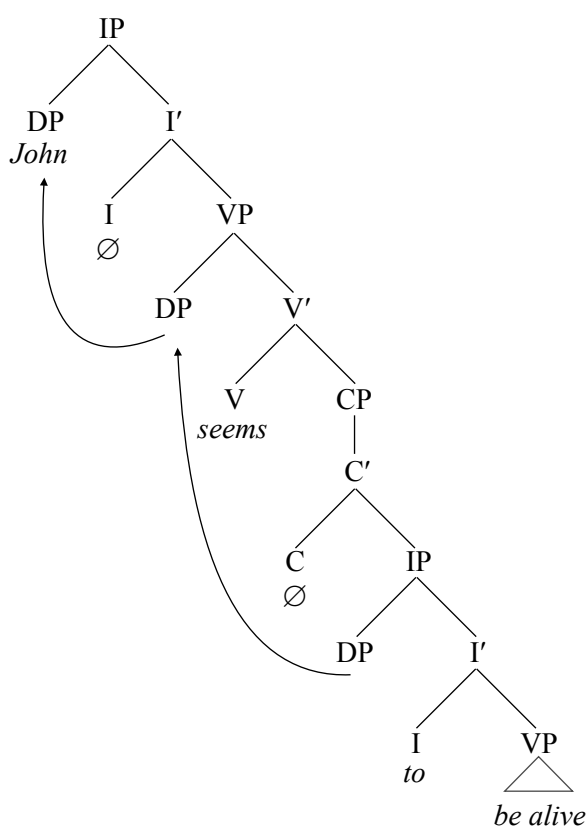
not unexpected because as Newson et al. (2006) mention, raising structures seem to be similar to the structure of passivised exceptional clauses:

(37) (a) John is believed [to be alive]

(b) John seems [to be alive]

Therefore, raising clauses could be analysed in the following way:

(38) John seems to be alive



Again, movement would be motivated by Case assignment, but because raising verbs have no light verb to assign Case and thus no available object position, the subject of the complement clause has to move to the empty subject position⁷ of the main clause in two steps, where it receives nominative Case from the finite inflection. This is also

⁷ The claim that the subject position of raising verbs is empty is supported by the fact that when *seem* is followed by a finite complement clause where the subject cannot move out due to the Last Resort Condition, a pleonastic *it* has to be inserted into the main clause subject position to make the sentence grammatical:

- (i) It seems that we finally won

what seems to happen in the case of passivised exceptional verbs: as passivised verbs cannot assign Case, the complement clause subject has to move further upwards in the structure. The grammaticality of the following sentence is then accounted for without problem:

(39) John seems to be believed to appear to be alive

In (39), the subject moves leftwards in the sentence until it can receive Case from the finite inflection of the main clause.

This analysis would also allow a uniform analysis of all raising verb complements and would remove the need to presume that they sometimes select for CP and other times for IP complement clauses:

(40) (a) It seems [_{CP} that John is alive]

(b) John seems [_{CP} to be alive]

But more importantly, it would imply that there is some pattern in how the subjects of complement clauses receive Case. In finite complement clauses, it is clear that the finite inflection of the complement clause assigns them nominative Case. In non-finite complement clauses, however, due to the absence of the finite inflection, Case assignment has to be done differently. Some main clause verbs have no empty argument positions for the complement clause subject to move into in order to receive Case, so these verbs either license the complementiser *for* to assign accusative Case to overt DPs, or they leave the head complementiser position empty so that the inflection *to* can move there in order to assign null Case to PRO. Other verbs, however, have an empty argument position, therefore they license a null complementiser head that allows the DP to move into either an empty object position to receive accusative Case (in the

case of exceptional verbs) or to an empty subject position to receive nominative Case (in the case of raising verbs). This would imply that raising structures are actually just a different type of exceptional Case marking, where the movement of the complement clause subject depends on the lexical properties of the main clause verb. A number of similarities would be explained by this observation, namely that raising clauses and passivised exceptional clauses make use of the same structure, that PRO subjects cannot appear in either raising or exceptional clauses, and that raising and exceptional verbs' finite (i.e. already Case-marked) complement clauses are indistinguishable from each other but their non-finite complement clauses in need of Case-marking behave differently.

3.3.4. Conclusion on non-finite complement clauses. To sum up the above, it seems that in addition to non-finite clauses headed by the overt complementiser *for*, all other non-finite complement clauses can be analysed as CPs as well. PRO clauses are headed by *to*, and non-finite clauses with an exceptionally Case-marked subject (i.e. exceptional clauses and raising clauses) are headed by a null complementiser. This analysis has been shown to generate no serious problems, to eliminate restrictions specifically concerning CP projections, and to allow all non-finite complement clauses to be analysed as uniformly as possible.

3.4. Conclusion on the Proposed Analysis

As this chapter has demonstrated, it is not necessary to analyse all clauses uniformly as either CPs or IPs; on the contrary, it has been shown that the IP analysis of declarative main clauses and the CP analysis of all complement clauses are compatible with each other, and that these two analyses together can provide insight into the role of the CP

projection. Adopting the analyses proposed in this chapter would lead to the conclusion that the role of the CP projection is to allow a clause to be embedded into another clause and to allow the illocutionary force of a clause to be changed to interrogative or subjunctive. This assumption would explain a variety of observations that have previously not been accounted for and would provide a rather consistent form of representation of main and complement clauses.

4. Summary

In this paper I have examined the categorial status and syntactic behaviour of main and complement clauses in the English language. First, two traditional approaches to the categorisation of clauses were examined: the CP analysis, which assumes that most clauses are CPs headed by an overt or a null complementiser, and the IP analysis, which assumes that most clauses are IPs and only the ones with an overt complementiser project into CP. It was concluded that while both of these approaches have their merits, they categorise main and complement clauses with a uniformity that may not be beneficial: these two analyses seem to allow a relatively high number of exceptions, and their conclusions result in the role of the CP projection being left undefined.

After reviewing the two approaches mentioned above, I proposed an alternative analysis that categorises all declarative main clauses as IPs and all other main and complement clauses as CPs. Declarative main clauses were concluded to be IPs after observing that they never permit overt complementiser heads and later pointing out that certain cases of structural ambiguity would not be able to arise if declarative main clauses were CPs. Next, it was shown that null finite complementiser heads do exist, and that finite complement clauses are always CPs because finite IP complements

pattern more similarly to direct speech element complements. Subsequently, arguments for the CP analysis of all non-finite complement clauses were provided. PRO clauses were argued to be headed by the inflection *to*, which is assumed to move to the head complementiser position to assign null Case to PRO. The complement clauses of exceptional and raising verbs were argued to be headed by a null complementiser which is presumed to be licensed so that the subject of the complement clause can move out into an empty argument position in the main clause in order to receive Case. Finally, it was concluded that the analysis presented in this paper, while maintaining similar uniformity as the traditional approaches, also clearly provides two possible reasons why CP projections exist: to allow a clause to be embedded into another clause, and to allow the illocutionary force of a clause to be changed to interrogative or subjunctive.

References

- Bošković, Ž. (1994). Categorical status of null operator relatives and finite declarative complements. *Language Research*, 30, 387–412.
- Bošković, Ž. (1997). *The syntax of nonfinite complementation: An economy approach*. Cambridge, MA: The MIT Press.
- Chomsky, N. (1989). Some notes on economy of derivation and representation. *MIT Working Papers in Linguistics*, 10, 43–74.
- Chomsky, N., & Lasnik, H. (1993). The theory of principles and parameters. In J. Jacobs & A. von Stechow & W. Sternefeld & T. Vennemann (Eds.), *Syntax: An international handbook of contemporary research* (506–569). Berlin: Walter de Gruyter.
- Haegeman, L. (1991). *Introduction to government & binding theory* (2nd ed.). Oxford: Blackwell.
- Hornstein, N. (1999). Movement and control. *Linguistic Inquiry*, 30(1), 69–96. <http://www.jstor.org/stable/4179050>
- Kishimoto, H. (2006). On the existence of null complementisers in syntax. *Linguistic Inquiry*, 37(2), 339–345. <http://www.jstor.org/stable/4179369>
- Newson, M., & Hordós, M., & Pap, D., & Szécsényi, K., & Tóth, G., & Vincze, V. (2006). *Basic English syntax with exercises*. Budapest: Bölcsész Konzorcium.
- Radford, A. (1988). *Transformational Grammar: A first course*. Cambridge: Cambridge University Press.
- Radford, A. (1997). *Syntactic theory and the structure of English: A minimalist approach*. Cambridge: Cambridge University Press.

Ross, J. R. (1970). On Declarative Sentences. In R. A. Jacobs & P. S. Rosenbaum
(Eds.), *Readings in English Transformational Grammar* (222–272).