

## Chapter 5

# Czech modal complement ellipsis from a comparative perspective

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This paper deals with modal complement ellipsis in Czech from a comparative perspective. I show that Czech modal complement ellipsis displays a mixed behaviour in comparison with languages like English, Dutch and French. Like English, it allows for various extractions from the ellipsis site and for different subjects in antecedent-contained deletion constructions. Like French and Dutch, it does not allow for intervening elements between the modal verb and the ellipsis site and it requires voice identity of the elided VP and its antecedent. Adopting a deletion approach to ellipsis, I propose to account for this behaviour by parametrizing the syntactic properties of a presumably universal ellipsis feature [E], initially proposed by Lobeck (1995). In my proposal, the syntax of [E] includes the head-licensing ellipsis and the ellipsis site. I argue that the type of licensing head (T, V or Mod) and the type of ellipsis site (VP, TP or VoiceP) induce the properties of modal complement ellipsis that I observe at the surface.

**Keywords:** modal complement ellipsis, VP ellipsis, modal verbs, auxiliary verbs, ellipsis parameter

## 1 Introduction

This paper deals with verb-phrase ellipsis that occurs in context of modal verbs, as in (1a). Following Aelbrecht (2008), I will refer to this phenomenon as MODAL COMPLEMENT ELLIPSIS (MCE) in order to distinguish it from a well-known phenomenon of VP ellipsis in (1b) (Ross 1969b; Sag 1976; Merchant 2001; among others). When it comes to other languages than English, it seems relevant to set



apart ellipsis after auxiliary verbs and ellipsis after modal verbs, because the former is not always available in languages that display the latter, as e.g. Romance languages (Busquets & Denis 2001; Depiante 2001; Dagnac 2008; 2010, a.o.) and Germanic languages like German or Dutch (Lobeck 1995; Aelbrecht 2008), see (2) and (3) respectively.<sup>1</sup> The contrast between English on the one hand and Romance and other Germanic languages on the other has been argued to follow from the properties of modal verbs (see §2).

- (1) a. John helped them, but Mary could not.  
 b. John helped them, but I did not.
- (2) a. Jean les a aidés, mais Marie n'a pas pu.  
 J. them has helped.PL but M. NEG.has NEG could  
 'Jean helped them, but Marie could not.' (French)
- b. \*Jean les a aidés, mais je n'ai pas.  
 J. them has helped.PL but I NEG.have NEG  
 Intended: 'Jean helped them, but I did not.' (French)
- (3) a. Jan heeft ze geholpen, maar Maria mocht niet.  
 J. has them helped but M. could not  
 'Jan helped them, but Maria could not.' (Dutch)
- b. \*Jan heeft ze geholpen, maar Ik heb niet.  
 J. has them helped but I have not  
 Intended: 'Jan helped them, but I did not.' (Dutch)

Interestingly, Czech behaves differently from both English-like and Romance-like languages in that: (i) ellipsis is only partially available after auxiliary verbs, compare (4b) with the past auxiliary and (4c) with the future auxiliary, and (ii) ellipsis after modal verbs in (4a) does not behave entirely like either VP ellipsis in English or like MCE in French or Dutch, as we will see in detail in §4.<sup>2</sup> While the possibility of ellipsis after auxiliary verbs in Czech can be claimed to depend on their morphosyntactic status (see §3.1), I will argue that the mixed properties of Czech MCE follow from both the properties of modal verbs (see §3.2) and the structure targeted by ellipsis. Adopting a deletion approach to ellipsis, I will propose that we can account for (not only) Czech MCE by parametrizing the syntactic properties of a presumably universal ellipsis feature [E], initially proposed by Lobeck (1995) and formalized in Merchant (2001), which determines the licensing head and the selection of the ellipsis site in each language.

<sup>1</sup>VP ellipsis after auxiliary verbs is not available in Romance languages, except for Portuguese, see Cyrino & Matos (2002).

<sup>2</sup>See §3.1 for different forms of the auxiliary verb *být* 'be' in Czech.

- (4) a. Jan jim pomohl, ale Marie bohužel nemohla.  
 J. them.DAT helped but Marie unfortunately NEG.could  
 ‘Jan helped them, but unfortunately Marie could not.’ (Czech)
- b. \* Jan jim pomohl, ale já bohužel nejsem.  
 J. them.DAT helped but I unfortunately NEG.AUX.1SG  
 Intended: ‘Jan helped them, but unfortunately I did not.’ (Czech)
- c. Jan jim bude pomáhat, ale Marie bohužel  
 J. them.DAT AUX.3SG help but Marie unfortunately  
 nebude.  
 NEG.AUX.3SG  
 ‘Jan will help them, but unfortunately Marie won’t.’ (Czech)

The paper is organized as follows. §2 briefly presents the main evidence for a deletion approach to MCE. §3 presents the properties of auxiliary and modal verbs in Czech. I discuss here ellipsis after auxiliary verbs and argue that modal verbs behave syntactically neither like T nor like V heads. §4 focuses on the properties of MCE in Czech in comparison with English, French and Dutch. I show that Czech MCE resembles English VP ellipsis in that it allows for various extractions from the ellipsis site and for different subjects in ANTECEDENT-CONTAINED DELETION (ACD) constructions. By contrast, Czech MCE is similar to French and Dutch in that it does not allow for intervening elements between the modal verb and the ellipsis site and it requires voice identity of the elided phrase and its antecedent. §5 proposes a syntactic analysis of this variation based on the mechanism of ellipsis and the syntax of the feature [E], as developed in Aelbrecht (2010). §6 sums up the paper.

## 2 Assumptions about the syntax of ellipsis

There are two main approaches to ellipsis in the literature, the deletion approach and the null-proform approach, both of which have been applied to VP ellipsis and to MCE. Within the first approach, ellipsis is considered to be deletion or not spelling-out of a fully specified verbal phrase. This analysis is generally assumed for VP ellipsis in English after both auxiliary and modal verbs (Ross 1967; Sag 1976; Hankamer & Sag 1976; Merchant 2001; 2008a, a.o.), see (5a), but it has also been recently argued for Dutch (Aelbrecht 2008; 2010) and Romance (Dagnac 2010). The second type of analysis sees ellipsis as involving a null verbal proform, so-called null-complement anaphora, represented by *e* in (5b). This analysis has been in particular proposed by Depiante (2001) for Spanish and Italian, and by Lobeck (1995) for Dutch.

- (5) a. You can help me, but she can't [<sub>VP</sub> help-me].  
 b. Je kan me wel helpen, maar ze kan niet [<sub>VP</sub> e].  
 you can me PRT help but she can not  
 'You can help me, but she cannot.' (Dutch)

The main argument in favour of a deletion approach that I will adopt here consists in the possibility of extraction from the ellipsis site. Extraction of the wh-object from the elided VP is possible in English, while it seems impossible in Dutch and Spanish, compare (6a) and (6b)–(6c). However, even if Dutch does not behave exactly like English, Aelbrecht (2008; 2010) shows that at least subject extraction from the elided VP in Dutch in (7) is possible, contrary to object extraction. She argues that this is because MCE in Dutch targets a larger string than VP ellipsis in English, namely VoiceP, which constitutes a phase blocking the object extraction (i.e. when the licensing head is merged, the ellipsis site is sent to PHONETIC FORM (PF) and the site is frozen for extraction).

- (6) a. I don't know who Sue invited, but I know who she couldn't invite.  
 b. \*Ik weet wie Katrien moet uitnodigen maar ik weet niet wie ze  
 I know who K. must invite but I know not who she  
 moet niet.  
 must not  
 Intended: 'I know whom Katrien must invite, but I don't know  
 whom she must not.' (Dutch; Aelbrecht 2008)  
 c. \*José no sabe qué libro Maria quiere leer, pero Pedro sabe  
 J. not knows which book M. wants read but P. knows  
 qué revisto Anna no pudo.  
 which revue A. not can  
 Intended: 'José doesn't know which book Maria wants to read, but  
 Pedro knows which revue Anna can't.' (Spanish; Depiante 2001)
- (7) a. Deze broek moet niet gewassen worden, maar die rok moet wel.  
 this pants must not washed become but that skirt must PRT  
 'These pants don't need to be washed, but that skirt does.'  
 (Dutch; Aelbrecht 2010)  
 b. ... maar die rok<sub>i</sub> moet wel [<sub>TP</sub> t<sub>i</sub> [<sub>VoiceP</sub> t<sub>i</sub> gewassen worden]]

Likewise, Dagnac (2010) shows that even object extraction is possible in Romance if subjects in both clauses are identical, as in (8) and (9). She calls this constraint The Same Subject Constraint. Assuming that modal verbs in Romance are raising

verbs selecting a TP, Dagnac argues that the ellipsis after modal verbs in Romance is not a VP deletion but a TP deletion. This allows to explain e.g. why ellipsis in ACD constructions requires subjects of both elided TP and its TP antecedent to be identical.

- (8) a. *Maintenant, je sais à qui je peux confier mon fils, mais je ne*  
 now I know to who I can entrust my son but I NEG  
*sais toujours pas à qui je ne peux pas.*  
 know still NEG to who I NEG can NEG  
 ‘Now I know to whom I can entrust my son, but I still don’t know to  
 whom I can’t.’ (French; Dagnac 2010)
- b. ... à qui<sub>i</sub> je<sub>j</sub> ne peux pas [<sub>TP</sub> t<sub>j</sub> [<sub>VP</sub> t<sub>j</sub> ~~confier mon fils~~ t<sub>i</sub>]]
- (9) *Ahora, ya sé a quién puedo confiar mi hijo, pero todavía*  
 now already know.1SG to who can.1SG confide my son but still  
*no sé a quién no puedo.*  
 NEG know.1SG to who not can.1SG  
 ‘Now I know to whom I can confide my son, but I still don’t know to  
 whom I can’t.’ (Spanish; Dagnac 2010)

In addition, an overt pronoun and the verbal anaphor *le faire* ‘do it’ are ungrammatical with *wh*-extraction and relativization from the VP in French, see (10a) and (10b) respectively (Dagnac 2008).<sup>3</sup> This also supports the claim that there is a movement from an elided structure, which cannot be reduced to a null pronoun.

- (10) a. *Il embrasse {qui il peut / \*qui il peut le faire / \*qui il le peut}.*  
 he kisses who he can who he can it do who he it can  
 ‘He kisses who he can.’ (French; Dagnac 2008)

<sup>3</sup>French modal verbs may combine with an overt pronoun in contexts without extraction. Here, the pronoun can be analysed as a pronominalization of the overt TP complement of the modal verb. These contexts thus constitute arguments neither for deletion, nor for null anaphora. See also §4.1.

- (i) *Jean peut te répondre, mais moi, je ne (le) peux pas.*  
 J. can you answer but me I NEG it can NEG  
 ‘Jean can answer you, but I can not.’ (French)
- (ii) *Je vais résister aussi longtemps que je (le) peux.*  
 I will resist as long that I it can  
 ‘I will resist as long as I can.’ (French)

- b. Léa lit tous les livres {qu'elle peut / \*qu'elle peut le faire /  
Lea reads all the books that.she can that.she can it do  
\*qu'elle le peut}.  
that.she it can  
'Léa reads all the books she can.' (French; Dagnac 2008)

Dagnac's and Aelbrecht's arguments thus make it very reasonable to assume that there is an underlying syntactic structure in contexts involving MCE, but they also suggest that we need to specify for each language:

1. the type of head licensing ellipsis,
2. the ellipsis site.

I will propose in §5 that these two micro-parameters can be encoded in the syntax of the ellipsis feature [E] responsible for the distribution of ellipsis throughout languages.

### 3 Auxiliary and modal verbs in Czech

#### 3.1 The auxiliary *být*

Czech is a West-Slavic language with a rich morphology in both its nominal system (number, gender, case) and its verbal system (tense, voice, aspect). It also differs from English, French and Dutch in that (i) it is a subject pro-drop language, (ii) it has second position clitics (2PCI) including pronominal and verbal (auxiliary) clitics, and (iii) it has – despite its basic SVO order – a relatively free word order that reflects the information structure of the clause. Like many other languages, it shows various elliptical constructions, such as gapping and sluicing (Gruet-Skrabalova 2016).

Czech uses only the auxiliary verb *být* 'be', in three series of forms: (i) forms in *js-* in the past tense, (ii) forms in *by-* in the conditional mood, (iii) forms in *bud-* in the future tense. Past and conditional forms are 2PCI, which combine with lexical *-l* participles in the active voice and with the (non-clitic) passive auxiliary *byl* 'been' and lexical *-n* participles in the passive voice, see (11a)–(11b).<sup>4</sup> The future forms are autonomous words and combine with non-finite imperfective verbs in the active voice and with *-n* participles in the passive voice, see (11c)–(11d).

<sup>4</sup>Czech morphologically distinguishes active *-l* participles and passive *-n* participles. The former are considered as tensed forms (see Veselovská 1995; 2008), which may bear sentential negation *ne-*.

Veselovská (1995; 2008) argues that Czech clitic auxiliaries bear agreement, but not tense features, and thus that they are generated above T (cf. Roberts 2010, who places Slavic 2PCL in the C-system). By contrast, the non clitic future auxiliary should be merged within the extended VP since it is sensitive to aspect on the lexical verb (cf. Kyncl 2008), as shown in (11c). For the purpose of this paper, I assume that 2PCL auxiliaries are generated in a low C-head, while non clitic future and passive auxiliaries are generated below T (Aspect and Voice respectively, see Cinque 2004), as indicated in (12). I also assume the finite auxiliaries move to T to check their T-feature.

- (11) a. Já jsem    {(ne-) četl        / (ne-) přečetl} všechny tyhle knihy.  
           I PAST.1SG NEG read.IMPF NEG PF.read all        these books  
           ‘I (have) (not) read all these books.’ (Czech)
- b. Já jsem    (ne-) byl    pozván.  
           I PAST.1SG NEG been invited.PASS  
           ‘I was (not) invited.’ (Czech)
- c. Já budu    {číst            / \*přečíst} všechny tyhle knihy.  
           I FUT.1SG read.IMPF PF.read all        these books  
           ‘I will read all these books.’ (Czech)
- d. Já (ne-) budu    pozván.  
           I NEG FUT.1SG invited.PASS  
           ‘I will (not) be invited.’ (Czech)
- (12) [CP ... CL [TP ... [AspP bud- [VoiceP byl [VP ...]]]]]

As has already been shown in §1, ellipsis is not available with clitic auxiliaries, see (13b). Gruet-Skrabalova (2012) argues that this follows precisely from their clitic status: 2P clitics cannot license VP ellipsis because they appear too high in the structure with respect to the VP domain. I will return to the analysis of ellipsis after the future auxiliary as in (13a) in §5.2.

- (13) a. Já budu    číst nahlas, a ty budeš taky.  
           I FUT.1SG read aloud and you FUT.2SG too  
           ‘I will read aloud, and you will too.’ (Czech)
- b. \*Já {jsem    / bych} četl nahlas, a ty {jsi        / bys}  
           I PAST.1SG COND.1SG read aloud and you PAST.2SG COND.2SG  
           taky.  
           too  
           Intended: ‘I read aloud, and you did too.’ / ‘I would read aloud, and  
           you would too.’ (Czech)

### 3.2 Modal verbs

There are five strictly modal verbs in Czech: *moci/mocht* ‘can/be able to’, *smět* ‘may/be allowed to’, *muset* ‘must/have to’, *nemuset* ‘need not’, and *mít* ‘have to’. These verbs have mixed morphosyntactic properties, as shown in Kyncl (2008): like functional verbs, they have no imperative (*\*mus*) and no passive (*\*musen*, *\*mocen*) and they do not combine with aspectual affixes (*\*domuset*, *\*musívat*). They are not sensitive to the aspectual makeup of the lexical verbs either, contrary to the future auxiliary *budu* requiring imperfective verbs in (11c) above. Like lexical verbs, modal verbs combine with the auxiliary *být* ‘be’, see (14b)–(14c), and bear the prefix *ne-* expressing sentential negation when they are finite, as we can see in (14a)–(14b). They can be followed by active or passive infinitival verbs, see (14d).

- (14) a. Nemůžu přece {přečíst / číst} všechny tyhle knihy.  
 NEG.can.1SG though PF.read read.IMPF all these books  
 ‘I cannot read all these books.’ (Czech)
- b. Nemohl jsem přece {přečíst / číst} všechny tyhle knihy.  
 NEG.could PAST.1SG though PF.read read.IMPF all these books  
 ‘I could not read all these books.’ (Czech)
- c. Nikdy nebudu moci {přečíst / číst} všechny tyhle knihy.  
 never NEG.FUT.1SG can PF.read read.IMPF all these books  
 ‘I will not be able to read all these books.’ (Czech)
- d. Já budu muset být pozván.  
 I FUT.1SG must be invited.PASS  
 ‘I will have to be invited.’ (Czech)

Although modal verbs can occur with auxiliary verbs, modal verbs cannot co-occur, just like in English, and contrary to Romance or Dutch, see (15). The co-occurrence of French and Dutch modal verbs in (15c) and (15d) respectively can be explained if we assume, as has been argued in the literature (Ruwet 1972; Wurmbrand 1999; 2001), that they are raising verbs selecting not a VP, but a TP complement.<sup>5</sup>

- (15) a. \*Já musím moci přečíst ty knihy.  
 I must can PF.read these books  
 Intended: ‘I must be able to read these books.’ (Czech)

<sup>5</sup>Traditionally (e.g. Ross 1969a), deontic verbs have been claimed to be control predicates and epistemic verbs to be raising predicates. For Wurmbrand (1999), however, this semantic difference is not represented in syntax.



- b. \* You must can read these books.  
 c. Vous devez pouvoir lire ces livres.  
 you must can read these books  
 ‘You must be able to read these books.’ (French)  
 d. Hij moet goed kunnen koken.  
 he must well can cook  
 ‘He must be able to cook well.’ (Dutch; Lobeck 1995)

Czech modal verbs also systematically require climbing of pronominal clitic complements of the lexical verb, and thus behave obligatorily like restructuring verbs (Medová 2000). Although clitic climbing is typical for Romance languages (e.g. Rizzi 1978; Roberts 1991), it is no longer true for modal verbs in French.

- (16) a. Petr musí přečíst ty knihy. / Petr (je) musí (\*je)  
 P. must PF.read these books P. CL:them must CL:them  
 přečíst.  
 PF.read  
 ‘Petr must read these books / them.’ (Czech)  
 b. Pierre doit lire ces livres. / Pierre (\*les) doit (les) lire.  
 P. must read these books P. CL:them must CL:them read  
 ‘Pierre must read these books / them.’ (French)

The properties of Czech modal verbs discussed above suggest that they behave neither like T heads, as in English (Sag 1976 a.o.), nor like V heads, as in French or Dutch (Aelbrecht 2008; Dagnac 2010). Given their restructuring properties, I assume that modal verbs are heads of a specific functional projection ModP between V and T (cf. Cinque 2004) selecting an extended VP projection as complement.

As already said, ellipsis is available after modal verbs, as shown in (17a). Interestingly, ellipsis may occur even if the modal verb follows the future auxiliary and is therefore non-finite, as in (17b). This suggests that MCE is not licensed by the head T. Note that the modal verb does not appear in the first sentence and thus constitutes new information in the elliptical clause.

- (17) a. I když já čtu nahlas, ty nemusíš.  
 even if I read.1SG aloud you NEG.must.2SG  
 ‘Although I read aloud, you do not have to.’ (Czech)  
 b. I když já budu číst nahlas, ty nebudeš muset.  
 even if I FUT.1SG read aloud you NEG.FUT.2SG must  
 ‘Although I will have to read aloud, you will not have to.’ (Czech)

## 4 Modal complement ellipsis in Czech

### 4.1 English-like properties

This section focuses on Czech MCE in comparison with English, Dutch and French. We will see that Czech MCE looks like English VP ellipsis with respect to extraction and subjects in ACD constructions, and like French and Dutch MCE with respect to the size of the elided string and voice properties of the elided VP and its antecedent.

Starting with non-elliptical constructions, we can see that the verbs ‘can’ and ‘must’ in the languages under discussion can have two readings, a deontic (root) reading and an epistemic reading. Czech is similar to English in that both readings are also acceptable in elliptical constructions, although ellipsis appears most frequently with the deontic reading. In contrast, it has been observed for Romance and Dutch that MCE is only available with deontic reading of these modal verbs:<sup>6</sup>

#### (18) Deontic reading

- a. John couldn’t come to the party, and Peter was not allowed.  
b. Jan na večírek přijít nemohl a Petr nesměl.  
J. to party come NEG.could and P. NEG.could  
‘Jan was not able to come to the party, and Petr was not allowed.’  
(Czech)
- c. Jean a pu venir à la soirée, mais Pierre n’a pas pu.  
J. has could come to the party but P. NEG.has NEG could  
‘Jean could come to the party, but Pierre couldn’t.’  
(French)
- d. Jan kon naar het feest kommen, maar Piet mocht niet.  
J. could to the party come but P. could not  
‘Jean could come to the party, but Piet was not allowed.’  
(Dutch)

#### (19) Epistemic reading

- a. It can be true, but it doesn’t have to.  
b. Může to být pravda, ale nemusí.  
can it be true but NEG.must  
‘It can be true, but it doesn’t have to.’  
(Czech)

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<sup>6</sup>Cf. Barbiers (1995); Lobeck (1995); Aelbrecht (2008). For my informants, the verb *moeten* ‘must’ would be ruled out in (18d), the verb *hoeven* ‘should’ being more acceptable.

5 *Czech modal complement ellipsis from a comparative perspective*

- c. \* Cela peut être vrai, mais cela ne doit pas.  
 this can be true but this NEG must NEG  
 Intended: 'It can be true, but it doesn't have to.' (French)
- d. ? Het zou waar kunnen zijn, maar het hoeft niet.  
 it should true can be but it should not  
 'It should be true, but it shouldn't have to.' (Dutch)

Another property Czech shares with English concerns the possibility of pronominalizing the elided string. Actually, missing material after modal verbs in Czech is not in complementary distribution with an overt pronoun, as shown in (20). French and Dutch behave differently except for contexts with extraction like in (21); see §2, footnote 3. This might be not completely surprising if both pronominalization and MCE in these languages target a TP, as proposed by Dagnac (2010); see §5.1.

- (20) a. John will answer you, but I can't (\*it).  
 b. Jan ti odpoví, ale já (\*to) nemůžu.  
 J. you.DAT answers but I it NEG.can  
 'Jan will answer you, but I can't.' (Czech)
- c. Jean te répondra, mais moi, je ne (le) peux pas.  
 J. you answer.FUT.3SG but me I NEG it can NEG  
 'Jean will answer you, but I can't.' (French)
- d. Jan zal je antwoorden, maar ik kan (het) niet.  
 J. will you answer but I can it not  
 'Jan will answer you, but I can't.' (Dutch)
- (21) a. Jean lit tous les livres qu'il (\*le) peut.  
 J. reads all the books that he it can  
 'Jean reads all the books he can.' (French)
- b. Joris leest elk boek dat hij (\*het) kan.  
 J. reads every book that he it can  
 'Joris reads every book he can.' (Dutch)

Elliptical relative clauses, so-called antecedent contained deletion (ACD), display another property in which languages may differ. In Czech and English, a relative clause containing ellipsis and its matrix clause may have different subjects. In

contrast, Romance and Dutch require both subjects to be identical (the Same Subject Constraint, see §2):<sup>7</sup>

- (22) a. John reads all the books that Mary can't.  
 b. Jan čte všechny knihy, které Marie nesmí.  
 J. reads all books that M. NEG.can  
 'Jan reads all books that Marie is not allowed to read.' (Czech)  
 c. \*Jean lit tous les livres que Marie ne peut pas.  
 J. reads all the books that M. NEG can NEG  
 Intended: 'Jean reads all the books that Marie can't.'  
 (French; Dagnac 2008)  
 d. \*Joris leest elk boek dat Monika moet niet.  
 J. reads every book that M. must not  
 Intended: 'Joris reads every book that Monika doesn't have to.'  
 (Dutch; Aelbrecht 2008)

Finally, recall that the main argument for the deletion approach of MCE is based on extraction from the elided string. In Czech, several types of extraction are possible, to both A- and A'- positions. Extraction to subject position can be seen with the inaccusative verb přijít 'come' in the example (16a) above, repeated in (23).

- (23) *Extraction to subject position:*  
 Jan na večírek přijít nemohl a Petr nesměl.  
 J. to party come NEG.could and P. NEG.could  
 'Jan could't come to the party and Petr was not allowed.' (Czech)

The example (24) shows regular wh-object extraction of the dative wh-word *komu* 'to whom' to the CP domain (cf. §2, ex. (7)), and the example (25) shows topicalization of an accusative DP-object. It must, however, be noted that extraction from VP in English, like in (25a), usually requires a specific contrastive focus

<sup>7</sup>Here is an attested and more natural example for (22b):

- (i) Helenku bolelo břicho a tak Elizabetka snědla všechny bonbóny který  
 Helenka.ACC ached stomach and so Elizabetka ate all sweets that  
 Helenka nemohla.  
 Helenka NEG.could  
 'Helenka had a stomach ache, so Elizabetka ate all sweets that Helenka could not.'  
 (Czech)

(Schuyler 2001; Lasnik 2001; Merchant 2008b). This is also true for French, where topicalization is acceptable provided the context is contrastive enough. In Czech, no specific prosody is required to accompany extraction in the examples below. I assume that this is because the word order in Czech is much freer than in English and French and serves to mark a specific information status of a phrase. In English, the information focus or topic status is generally marked by prosody. With respect to extraction, Czech may thus seem even more permissive than English.

(24) *Wh-object extraction:*

Vím komu můžu děti svěřit a komu nemůžu.  
 know.1SG who.DAT can.1SG children confide and who.DAT NEG.can.1SG  
 ‘I know to whom I can confide my children and to whom I can’t.’ (Czech)

(25) *Object topicalization:*

- a. The toy she had already bought, but the book she really couldn’t.
- b. Hračky už jsem koupila, ale knížky jsem ještě  
 toys.ACC already PAST.1SG bought but books.ACC PAST.1SG yet  
 nemohla.  
 NEG.could  
 ‘I have already bought the/some toys, but I was not yet able to buy  
 the/some books.’ (Czech)
- c. Les jouets, je les ai déjà achetés, mais les livres, je  
 the toys I them have already bought but the books I  
 n’ai pas encore pu.  
 NEG.have NEG yet could  
 ‘I have already bought the toys, but I haven’t yet been able to buy  
 the books.’ (French)
- d. \*Het speelgoed had ik al gekocht, maar het boekje kon ik  
 the toy have I already bought but the book could I  
 niet.  
 not  
 Intended: ‘I have already bought the toy, but I haven’t yet been able  
 to buy the book.’ (Dutch)

The last example in this section presents a more questionable extraction: in English, (26a) is generally considered as a case of pseudogapping, but some also analyse it as involving movement (Aelbrecht 2008; Gengel 2013). Whether or

not we assume that (26b) involves an object extraction, Czech would again be similar to English rather than to French or Dutch.

- (26) a. I will vote for him, and you can for her.  
b. Já budu volit pro něj a ty můžeš pro ni.  
I FUT.1SG vote for him and you can for her  
'I will vote for him and you can for her.' (Czech)  
c. \*Je voterai pour lui, et tu peux pour elle.  
I vote.FUT.1SG for him and you can for her  
Intended: 'I will vote for him and you can for her.'  
(French; Dagnac 2010)  
d. \*Ik zal voor hem stemmen, en je kan voor haar.  
I will for him vote and you can for her  
Intended: 'I will vote for him and you can for her.'  
(Dutch; Aelbrecht 2008)

## 4.2 Differences from English

Despite several similarities with English VP ellipsis presented in the previous subsection, Czech MCE is also (at least to some extent) similar to French and Dutch MCE.

First, we observe that verbal elements intervening between modals and the VP must be elided, see the passive auxiliary 'be' in (27). In French and Dutch, these elements also include negation and aspect morphemes, which in Czech appear directly on the verb stem.<sup>8</sup>

- (27) a. This text can be read aloud but this poetry really cannot (be).

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<sup>8</sup>See also these two examples:

- (i) \*Paul peut avoir fini en juin, et Luc peut aussi avoir [~~fini~~—en juin].  
Paul can have finished in June and Luc can too have finished in June  
Intended: 'Paul can have finished in June and Luc can have.'  
(French; Dagnac 2008)  
(ii) \*Paul peut repasser LM01 et Luc peut ne pas [~~repasser LM01~~].  
Paul can take LM01 and Luc can not take LM01  
Intended: 'Paul is allowed to take LM01 and Luc is allowed not to.'  
(French; Dagnac 2008)

5 Czech modal complement ellipsis from a comparative perspective

- b. Tento text může být čten nahlas, ale tato báseň skutečně  
 this text can be read.PASS aloud but this poetry really  
 nemůže (\*být).  
 NEG.can be  
 ‘This text can be read aloud but this poetry really cannot be.’ (Czech)
- c. Ce texte peut être lu à voix haute, mais ce poème ne peut  
 this text can be read in voice high but this poetry NEG can  
 vraiment pas (\*être).  
 really NEG be  
 ‘This text can be read aloud but this poetry really cannot be.’  
 (French; Dagnac 2010)
- d. Deze tekst kan hardop gelezen worden, maar deze poëzie kan echt  
 this text can aloud read be but this poetry can really  
 niet (\*zijn).  
 not be  
 ‘This text can be read aloud but this poetry cannot be.’ (Dutch)

By contrast, second position clitic auxiliaries are obligatory with MCE in Czech, see (28a), which is not surprising since they occur very high in the clause (cf. §3.1).<sup>9</sup> Note also that second position pronominal clitics that are complements of the lexical verb are excluded. These clitics normally appear on modal verbs, see (16a) above and (28b). This suggests that pronominal clitics must be elided before clitic climbing.<sup>10</sup>

- (28) a. Já jsem to musela podepsat, ale ty \*(jsi) (\*to)  
 I PAST.1SG it.CL had.to sign but you PAST.2SG it.CL  
 nemusel.  
 NEG.had.to  
 ‘I had to sign it, but you didn’t have to.’ (Czech)
- b. Já jsem to musela (\*to) podepsat (\*to).  
 I PAST.1SG it.CL had.to it.CL sign it.CL  
 ‘I had to sign it.’ (Czech)

<sup>9</sup>Contrary to MCE, auxiliary clitics cannot escape sluicing, as has been noted by Merchant (2001) in his Sluicing-Comp Generalization. This follows if MCE targets a smaller structure than sluicing does.

<sup>10</sup>For Roberts (2010), pronominal clitics consistently escape the interior of the low *v*-cycle. If this is true, MCE in Czech targets a larger structure than the low *v*-cycle, which is compatible with my analysis in §5.

Finally, it has been pointed out (Hardt 1993; Merchant 2008a; 2013) that the voice of the elided VP and that of its VP antecedent in English may differ. In (29a), the elliptical clause is in the active voice, while the clause with the VP antecedent is in the passive voice. The example (29b) shows the opposite distribution: passive elliptical clause and active clause containing the antecedent.<sup>11</sup> Assuming that voice is encoded on the head Voice and that Voice is distinct from the head *v*, Merchant (2008a) argues that VP ellipsis in English targets a verbal phrase (*vP/VP*) below Voice head. Ellipsis therefore does not include VoiceP.

- (29) a. This problem had to be solved long ago, but obviously nobody could  
(solve it). (Merchant 2008a)
- b. The janitor must remove the trash whenever it is apparent that it  
should be (removed). (Merchant 2008a)

Contrary to English, we can see in (30) that Czech, French and Dutch require the same active or passive morphosyntax in both the elliptical clause and the clause containing the VP antecedent.<sup>12</sup> Ellipsis is excluded here because the elliptical clause is presumably in the active voice, while the clause containing the antecedent is in the passive voice. This suggests that VoiceP is included in the ellipsis site.

- (30) a. Ten problem měl být dávno vyřešen ale nikdo zřejmě  
this problem had.to be longtime solved.PASS but nobody obviously  
nemohl \*(ho vyřešit).  
NEG.could it solve  
'This problem had to be solved long ago, but nobody could solve it.'  
(Czech)
- b. Ce problème aurait déjà dû être résolu, mais personne  
this problem has.COND yet had.to be solved but nobody  
n'a pu \*(le résoudre).  
NEG.has could it solve  
'This problem had to be solved long ago, but nobody could solve it.'  
(French; Dagnac 2010)
- c. Dit probleem had al lang geleden opgelost moeten worden  
this problem had already long ago solved must be

<sup>11</sup>Apparent counter-examples in English are reanalysed by Merchant (2013) as cases of pseudogapping.

<sup>12</sup>Voice identity also applies to ellipsis after the auxiliary future verb, see §5.2.



maar niemand kon \*(het opgelessen).  
but nobody could it solve  
'This problem had to be solved long ago, but nobody could solve it.'  
(Dutch)

Given the properties discussed above, I conclude that Czech MCE seems to target a larger structure than VP ellipsis in English, but probably a smaller structure than MCE in French or Dutch.

### 4.3 Summary

Table 1 summarizes the properties discussed in this section. Rows 1 to 3 indicate for each language whether it allows ellipsis after auxiliary verbs (Aux + ellipsis), co-occurrence of an auxiliary and a modal verb (T + Mod), and co-occurrence of two modal verbs (Mod + Mod). With respect to MCE, rows 4 to 8 indicate whether it is compatible with deontic and epistemic reading of modal verbs (Deont/Epist reading), with subject extraction, object topicalization, wh-object extraction and object scrambling (if there is any). Finally, rows 9 to 12 show whether MCE requires identical subjects in ACD constructions (Same Subject Constraint) and identical voice on the verb (Voice identity) and whether it allows a passive auxiliary to occur after the modal verb (Passive Aux). We can see that Czech shares most but not all the examined properties with English.

## 5 Proposal

Before proposing an analysis of MCE in Czech, I present here my assumptions about the general mechanism licensing ellipsis, following in particular Aelbrecht (2010), and to some extent Lobeck (1995), Merchant (2001) and Craenenbroeck & Lipták (2013). I thus assume that (i) ellipsis is triggered in a checking relation (Agree) between the licensing head X and the ellipsis site YP, (ii) there is a feature [E] that occurs on the head of Y and indicates that YP will not be spelled out (non-pronunciation at PF) once the feature is checked out by the head X.<sup>13</sup>

The feature [E] has a specific syntax consisting of two properties: (i) selection of the head on which the feature may occur, i.e. the head of the constituent that will be elided (SEL X), (ii) uninterpretable features that must be checked against the features of the head licensing ellipsis (uY). I will propose that parametrizing

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<sup>13</sup>This assumption is at variance with Merchant (2001), for whom it is the complement of the head bearing [E] that is elided.

Table 1: Properties related to MCE

	English	Czech	French	Dutch
1 Aux + ellipsis	Yes	Yes/No (2PCI)	No	No
2 T + Mod	No	Yes	Yes	Yes
3 Mod + Mod	No	No	Yes	Yes
4 Deont/Epist reading	Yes/Yes	Yes/Yes	Yes/No	Yes/No?
5 Subject extraction	Yes	Yes	Yes	Yes
6 Object topicalization	Yes	Yes	Yes	No
7 Wh-object extraction	Yes	Yes	Yes	No
8 Object scrambling (?)	Yes	Yes	No	No
9 Same Subject Constraint	No	No	Yes	Yes
10 Overt pronoun	No	No	Yes/No	Yes/No
11 Voice identity	No	Yes	Yes	Yes
12 Passive Aux	Yes	No	No	No

these two properties accounts for the behaviour of (not only) Czech MCE. The elided YP must be given (Barbiers 1995; Lobeck 1995; Merchant 2001) and syntactically/structurally isomorphic with its antecedent (cf. Fiengo & May 1994).

### 5.1 Specifying the properties of the [E]-feature in MCE

We have seen in §3 that the behaviour of modal verbs in Czech suggests that they are neither T nor V head, but rather head of a specific functional projection between T and V, which I call Mod. They can therefore co-occur with T but not with other modal verbs.

To account for ellipsis licensed in the contexts of modal verbs in Czech, I propose in (31a) that the feature [E] is merged on the head Voice, i.e. that it selects as ellipsis site the phrase headed by Voice (SEL Voice). Moreover, the feature [E] must have its uninterpretable features (uMod) checked out by the head Mod, i.e. it is licensed by Mod. The properties of the [E] feature in Czech would differ from the properties of the [E] feature in English, French and Dutch respectively, as shown in (31b)–(31d). In English, ellipsis targets  $\nu$ P and is licensed by T (see Merchant 2008a). In French, ellipsis targets TP and is licensed by modal V selecting a TP (see Dagnac 2008). In Dutch, ellipsis targets VoiceP but it is licensed by a deontic V (see Aelbrecht 2008). Contrary to Dutch, however, we do not need to

5 Czech modal complement ellipsis from a comparative perspective

postulate that the VoiceP in Czech constitutes a phase blocking object extraction, since both subject and object extractions may take place before VoiceP is sent to PF.

- (31) The syntax of [E] feature in MCE: (cf. Merchant 2008a)
- a. Czech:  $E_{MCE}$  [INFL [uMod], SEL [Voice]]
  - b. English:  $E_{MCE}$  [INFL [uT], SEL [v]] (see Merchant 2008a)
  - c. French:  $E_{MCE}$  [INFL [uV], SEL [T<sub>nf</sub>]] (see Dagnac 2008)
  - d. Dutch:  $E_{MCE}$  [INFL [uV<sub>deon</sub>], SEL [Voice]] (see Aelbrecht 2008)
- (32)
- a. Czech: [<sub>ModP</sub> může [<sub>VoiceP</sub> [<sub>vP</sub> t<sub>subj</sub> [<sub>VP</sub> ...]]]]
  - b. English: [<sub>TP</sub> can [<sub>AspP</sub> (have) [<sub>VoiceP</sub> (been) [<sub>vP</sub> t<sub>subj</sub> [<sub>VP</sub> ...]]]]]]
  - c. French: [<sub>VP</sub> peut [<sub>TP</sub> t<sub>subj</sub> [<sub>AspP</sub> [<sub>vP</sub> t<sub>subj</sub> [<sub>VP</sub> ...]]]]]]
  - d. Dutch: [<sub>VP</sub> kan [<sub>TP</sub> t<sub>subj</sub> [<sub>VoiceP</sub> [<sub>vP</sub> t<sub>subj</sub> [<sub>VP</sub> ...]]]]]]

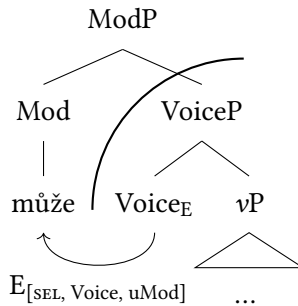


Figure 1: Syntactic structure for (32a)

The proposed analysis can account for the properties of Czech MCE as follows. First, MCE requires voice identity in both the elliptical clause and its antecedent, i.e. both clauses must be either active or passive. Assuming that the parallelism requirement on ellipsis includes voice features, postulating that the feature [E] targets VoiceP guarantees that ellipsis takes place only if elided and antecedent VoiceP are identical. Furthermore, since VoiceP is neither a nominal nor a clausal phrase, it follows that it cannot be pronominalized by an overt pronoun.

Second, MCE does not target the clitic and the future auxiliaries, but it cannot leave aside the passive auxiliary. Since clitic auxiliaries are generated high in the structure, the analysis predicts that they will not be included in the ellipsis site. Likewise, the future auxiliary generated above modal verbs will not be elided,

see §3.2, ex. (17b). In contrast, the passive auxiliary located in the VoiceP will be elided along with the VoiceP.

Third, MCE allows extraction of focused (wh-object) and contrastively focused XPs (contrastive topics). Since elided elements are informationally given, it follows that only focused XPs can escape ellipsis and undergo extraction. This is especially visible in the case of pronominal object clitics, which cannot be focused, and will thus never be allowed to escape the ellipsis site. Extraction of non-identical XPs from the ellipsis site could, however, be viewed as problematic for parallelism constraints assumed for deletion, although these constraints do not mean full morphophonological identity. I thus propose to assume with Merchant that focus overrides “identity condition” in deletion (Merchant 2001). In the case of subject extraction from vP to TP, for instance, the identity required for deletion reduces to the type of argument (referential DP), but it does not concern the meaning or the reference of the DP subjects themselves. In the case of ACD, we can consider that the subject of the relative clause must escape deletion precisely because it is contrasted with the subject on the main clause.

- (33) a. Jan čte všechny knihy, které<sub>i</sub> Eva nesmí (číst t<sub>i</sub>).  
 Jan reads all books that Eva NEG.can read  
 ‘Jan reads all the book that Eva can’t.’ (Czech)
- b. Jan čte [<sub>VoiceP</sub> [<sub>VP</sub> t<sub>sub</sub> t<sub>v</sub> všechny knihy [<sub>CP</sub> které<sub>i</sub> [<sub>TP</sub> Eva [<sub>ModP</sub> nesmí [<sub>VoiceP</sub> [<sub>vP</sub> t<sub>sub</sub> [<sub>VP</sub> ... t<sub>i</sub> ]]]]]]]]]]]

The observation that extraction is relatively easy in Czech can be related to the monoclausal structure of sentences with modal verbs. In the case of an intermediate extraction (if we assume objects scrambling instead of pseudogapping), like in (34), we can suppose that extracted elements are hosted by a TP-internal Focus position (following Belletti 2004) between the modal verb and the elided VoiceP. This kind of extraction would not be available in French or Dutch, where ellipsis targets the TP complement of the modal V.

- (34) Já třeba napíšu Heleně básničku, a ty zas můžeš písničku.  
 I maybe PF.write H.DAT poem.ACC and you then can song.ACC  
 ‘I might write a little poem for Helen, and you, you can write a little song for her.’ (Czech)

## 5.2 Extending the analysis to ellipsis after the future auxiliary

Since English modal and auxiliary verbs represent the same kind of head (Ross 1967), it is not surprising that they behave alike with respect to ellipsis. We can

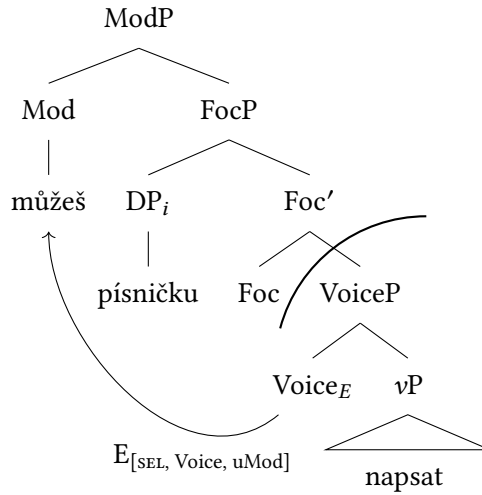


Figure 2: Syntactic structure for (34)

thus reduce the analysis of MCE to the analysis of VP ellipsis, by having the same [E] feature for both. In French and Dutch, modal and auxiliary verbs are syntactically different heads and behave differently with respect to ellipsis. If these languages only possess the [E] feature with the syntax given above, ellipsis after auxiliary verbs will be excluded since auxiliary verbs are not V heads and do not have a non-finite TP complement.

As for Czech, I propose that the analysis in terms of VoiceP-ellipsis can be extended the future auxiliary because: (i) the future auxiliary is a functional verbal head between V and T, (ii) its complement is an extended VP, and (iii) the ellipsis also requires voice identity:

- (35) a. Udělali to, kdykoliv {museli (~~to~~ udělat) / \*to muselo} ( did.PL it whenever had.to.PL it do it had.to být uděláno).  
 be done.PASS  
 'They did it whenever they did have to (do it).' (Czech)
- b. Měl být operován, ale {nebude (operován) / had.to be operated.PASS but NEG.FUT.3SG operated.PASS \*nebudou (~~ho~~ operovat)}.  
 NEG.FUT.3PL him operate  
 'He had to be operated but he will not (be operated).' (Czech)

To allow both the future auxiliary and modal verbs to license ellipsis, I suggest defining the [E] feature as follows:

1. the licensing head is a functional verbal head  $F_v$ , that can be realized as Mod and Asp,
2. the uninterpretable features of [E] are  $uF_v$ , see Figure 3.

- (36) Měl být operován, ale pro<sub>i</sub> [<sub>AspP</sub> nebude  
had.to be operated.PASS but NEG.FUT.3SG  
[<sub>VoiceP</sub> PASS [<sub>VP</sub> operován  $t_i$ ]]].  
operated.PASS  
‘He had to be operated but he will not (be operated).’ (Czech)

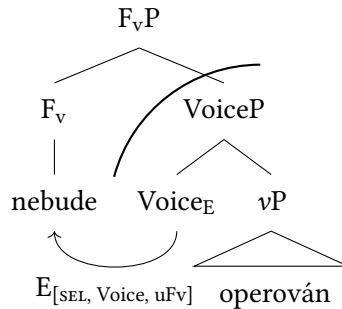


Figure 3: Syntactic structure for (36)

## 6 Conclusion

In this paper, I have dealt with MCE in Czech from a comparative perspective. I have shown that Czech modal verbs and Czech MCE exhibit a mixed behaviour with respect to languages like English, French, and Dutch. Like English, it allows for various extractions from the ellipsis site and for different subjects in ACD constructions. Like French and Dutch, it does not allow for intervening elements between modal verb and ellipsis site and it requires voice identity of the elided VP and its antecedent.

I have argued that the properties of MCE that we observe at the surface are induced by the head licensing ellipsis ( $F_v$ , V, or T) and the ellipsis site (VoiceP,

TP, or VP). Adopting a deletion account of MCE based on a presumably universal ellipsis feature [E], I have undertaken to parametrize this feature [E], whose properties include precisely the licensing head and the ellipsis site. In addition, the properties of this [E] feature also imply whether ellipsis is available with auxiliary verbs. As for Czech, I have proposed that [E] is licensed by a functional verbal head  $F_v$ , which can be realized by modal verbs or the future auxiliary and targets VoiceP.

The question remains whether we can relate the parametrization of the [E] feature to other language properties. One hypothesis to explore can be found in Cyrino & Matos (2002), who claim that there is a correlation between the possibility of verbal ellipsis (after both auxiliary and modal verbs) and the structure of the extended verbal projection, in particular the realization of aspect. This issue is however outside the scope of this paper and must be left to further investigation.

## Abbreviations

1, 2, 3	first, second, third person	Mod	modal verb
2PCI	second position clitics	MCE	modal complement el- lipsis
ACC	accusative	NEG	negation
ACD	antecedent-contained deletion	PASS	passive
AUX	auxiliary	PAST	past tense
CL	clitic	PF	phonetic form
COND	conditional	PF	perfective
DAT	dative	PL	plural
deont/epist	deontic/epistemic	PRT	particle
FUT	future tense	SG	singular
IMPF	imperfective		

## Acknowledgements

I would like to thank two anonymous reviewers for their helpful comments and suggestions.

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