Obviā et Imperā!
A case for 'perspectival control' in directive clauses

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(comments welcome)

Abstract Based on evidence from the parallel behavior of imperatives and directive subjunctives in Slovenian, this paper argues for a unified clause type encompassing both. This clause type is characterized by the presence of a directive operator in MoodP, whose semantics brings about the requirement for a perspectival *PRO* element in the specifier of MoodP. It is argued that the presence of perspectival *PRO* and the directive operator is responsible for the presence of subject obviation in embedded directive clauses, a ban on exclusive first person subjects in matrix directive clauses, as well as the matrix-embedded asymmetry in terms of the inability of the speaker of a directive clause to distance themselves from the directive speech act.

Keywords imperatives · embedded imperatives · (directive) subjunctives · speech reports · subject obviation · Slovenian · performative modals · perspectival *PRO*

1 Introduction

In the generative literature, subjunctive clauses are mainly discussed in terms of how they behave as complements of attitude predicates. The inverse is true of imperatives, where the tendency is to focus on their behavior in matrix contexts. This paper takes a different route, and looks at the syntactic and semantic behavior of imperatives and directive subjunctives as a unified clause type — directive clauses, focusing on both matrix and embedded contexts. In Slovenian, the main focus of this study, imperatives can appear as clausal complements in speech reports (Sheppard and Golden 2002), and directive subjunctives function as *"surrogate imperatives"* (Zanuttini 1997) when the use of imperatives is blocked, but also occur in both matrix and embedded contexts. For comparison, in Spanish, imperatives cannot be embedded in speech reports, as shown in (1a), and a verb in the subjunctive mood must be used as a surrogate imperative to express the intended meaning, as in (1b).[1]

(1) a. *Pido que dad-me   el libro.   Spanish
        ask.1 that give.IMP.(2)-1.(DAT) the book
        'I ask that you give me the book.'

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[1] 1, 2, 3 with no added number information refers to first, second, and third person *singular*. Referential indexes of subjects in *pro*-prop languages are marked on the verb/auxiliary marked for person information.

> b. Pido que me   deis   el libro.
> ask.1 that 1.(DAT) give.SUB.PRS.2 the book
> 'I ask that you give me the book.'   (Han 1998: 39)

In a number of languages, including Spanish, when subjunctive verbs occur embedded under an attitude verb, as in (2a), there is a ban on coreference between the matrix subject and the embedded subject of the subjunctive clause, illustrated in (2b).

(2) a. *Queremos$_i$ [que ganemos$_i$].   Spanish
        want.1PL   that win.SUB.PRS.1PL
        int.: 'We want to win.'

     b. Queremos$_i$ [que ganen$_k$].
        want.1PL   that win.SUB.PRS.3PL
        'We want them to win.'   (Quer 2006: 662)

This phenomenon is called *subject obviation*, as the coreference restriction applies only between subjects, and not any other arguments present in the two clauses.[2] Coreference between matrix objects and the embedded subject is possible, as in (3).

(3) a. Les$_i$ pidió$_k$ [que se   callaran$_i$].   Spanish
        to.them ask.PST.3 that REFL be.quiet.SUB.PST.3PL
        'S/he asked them to be quiet.'   (Quer 2006: 662)

     b. Elisa$_i$ forzó   al   niño$_k$ a [que tomara$_k$ la medicina].
        Elisa forced.3 to.the child to that take.SUB.PRS.3 the medicine
        'Elisa forced the child to take the medicine.' (Kempchinsky 2009: 1791)

In this paper I entertain the notion that a more general *directive clause* type encompasses both imperatives and directive subjunctives (Section 2). This relates to the fact that in Slovenian imperatives can appear embedded in speech reports and maintain their directive canonical function (Section 2.1), and that interestingly subject obviation is observed in Slovenian both with embedded directive subjunctives and embedded imperatives (Section 2.2). In addition, despite the complementary distribution of imperatives and subjunctives, there is also a restriction on the subjects of matrix directive clauses — they cannot be first person exclusive (Section 2.3).

I propose that both restrictions are manifestations of the same phenomenon, *generalized subject obviation* (Section 3), a Condition B-type effect which occurs in directive clauses due to a directive operator in MoodP (Section 3.1).

Building on this, I propose a semantics for directive clauses (Section 4) built on the performative modal analysis of imperatives (Kaufmann 2012) (Section 4.1). The particular semantics of the directive operator derives the need for a "perspectival" *PRO* element serving as a grammatical representation for the source of the directive speech act realized by directive clauses (Sections 4.2 & 4.3). I argue that this perspectival *PRO* is bound in embedded contexts by the matrix subject analogously to the subject *PRO* in control infinitives, and by either the speaker or addressee in matrix contexts via special attitudinal operators (Pearson 2012) (Section 4.4). This derives why generalized obviation manifests as two seemingly distinct phenomena

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[2] Also referred to as the *disjoint reference* effect. I prefer to use subject obviation, as it is a more accurate description of the phenomenon observed in (2) — it references that it is restricted to subjects.

in matrix and embedded contexts, as well as the matrix-embedded asymmetry in so called *"speaker distancing"*. In addition, this approach explains why the first person exclusive ban is lifted in questions and is replaced by a second person subject ban.

Finally, I briefly touch on a number of related phenomena in Slovenian and cross-linguistically, and how they can be subsumed under this analysis (Section 5).

2 Directive clauses, embedding, and restrictions on subjects

Broadly speaking, this paper deals with *directive clauses*, which I use as a cover term for any syntactic construction with a *directive speech act* canonical function. One of the points I make is that most traditional definitions of directive speech acts (or *directives*) like (4), are too restrictive and do not cut out a natural class of clause type.

(4)   **Directives**. *The illocutionary point of these consists in the fact that they are attempts* [. . .] *by the speaker to get the hearer to do something.*

(Searle 1976: 11)

According to (4), only 2nd person imperatives can have a canonical directive function. However, as I argue below, directive speech acts should not be restricted to cases where the addressee is included in the subject of the directive clause. The alternative definition of a directive speech act, that I assume in this paper is provided in (5).

(5)   **Directive Speech Act**. *The speaker attempts to make an individual or group of individuals ensure that the non-modal content of the utterance is realized.*

(5) allows for 1st or 3rd person subjects,[3] which also means that directive clauses are not necessarily restricted to verbs from the imperative paradigm. This is crucial for the discussion of Slovenian below, where I propose that both imperatives and dedicated directive subjunctives can be the manifestation of a directive clause.

2.1 Embedded imperatives

Despite the traditional skepticism regarding the possibility of imperative embedding (Sadock and Zwicky 1985; Han 1998), recent empirical evidence from languages like Korean (Portner 2007; Pak et al. 2008), Japanese (Oshima 2006; Schwager 2006), Old Scandinavian (Rögnvaldsson 1998), Colloquial German (Schwager 2006; Kaufmann and Poschmann 2013), Ancient Greek (Medeiros 2013), Mbyá (Thomas 2012), and (although controversial) even English (Crnič and Trinh 2009a,b), has helped establish a new consensus where, while imperative embedding is recognized as not nearly as liberal as embedding of other clause types, it exists as an option in many languages.

In this group of languages, Slovenian is frequently considered a case where imperative clauses can appear as complements with seemingly no restrictions. This aspect of Slovenian has been discussed by Sheppard and Golden (2002); Dvořák (2005); Rus (2005) and Dvořák and Zimmermann (2008). I direct the reader to these

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[3] Note that (5) also does not require the addressee to be involved in realizing the non-modal content with 1st or 3rd person directives. The implications of this are addressed in footnote 17 in Section 3.3.

sources also for evidence that the relevant cases do not involve direct quotation and that the clausal complements involve 'true' imperatives. Regarding the 'freeness' of embedding, Sheppard and Golden (2002) observe that imperatives can be embedded in Slovenian at least in: *restrictive relative clauses*, shown in (6a), *speech reports*, shown in (6b), as well as *argument clauses*, and *adnominal complement clauses*.

(6) a. To je film, ki si ga ogle-j čimprej. <u>Slovenian</u>
　　　this AUX.3 film which REFL.DAT 3.M.ACC watch-IMP.(2) a.s.a.p
　　　'This is a/the film which you should see as soon as possible.'

　　 b. Rekel je, da dela-j bolje.
　　　said.M AUX.3 that work-IMP.(2) better
　　　'He said that you must work better.'　　(Sheppard and Golden 2002: 251)

The constructions I focus on in this paper are reports like (6b). Crucially, like with all other (non-direct quote) speech reports in Slovenian, indexicals must be interpreted as "shifted" to the original utterance context (see Schlenker 2011 for an overview of indexical shifting). (7) is a scenario where an imperative (7a) is later reported by the same speaker (7b).[4,5] The imperative subject in (7b) must refer to the actual addressee (*Luka*), and not the original addressee (*Marko*). To report (7a) as (7b) is thus false.

(7) a. $Pero_i \Rightarrow Marko_j$: $Pokliči_j$ me_i!
　　　　　　　　　　call.IMP　1.ACC
　　　　　　　　　　'Call me!'

　　 b. $Pero_i \Rightarrow Luka_k$: $Marko$-tu_j sem_i rekel, da me_i $pokliči_{*j,k}$.
　　　　　　　　　　Marko-DAT AUX.1 said.M that 1.ACC call.IMP
　　　　　　　　　　'I said to Marko that you (Luka) should call me.'

Things are different in (8), a felicitous example of an embedded imperative reporting a prior directive speech act. (8a) is the original utterance, a non-imperative directive clause (see Sections 2.2 and 2.3 for more details), and (8b) is its report. Crucially, indexicals are not shifted in the report (1st person = *Marko*; 2nd person = *Luka*), but also the imperative felicitously reports an utterance which did not contain an imperative verb, which should not be possible if (8b) were a direct quotation.

(8) a. $Pero_i \Rightarrow Marko_j$: Naj te_j $obišče_k$!
　　　　　　　　　　LET　2.ACC visit.3
　　　　　　　　　　'He should visit you!'

　　 b. $Marko_j \Rightarrow Luka_k$: $Pero_i$ mi_j je rekel, da $me_{*i,j}$ $obišči_{*j,k}$.
　　　　　　　　　　Pero　2.DAT AUX.3 said.M that 1.ACC visit.IMP
　　　　　　　　　　'Pero said to me that you (= Luka) should visit me.'

Consider now what (8) tells us about the function of the embedded imperative. In the original utterance, *Pero* uses (8a) as a directive in conformance with (5): he wants to bring about the course of events in which *Luka* visits *Marko*. As *Luka* is not the addressee in (8a), *Marko* infers that he himself is expected to convey the message to

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[4] The arrow ($\Rightarrow$) identifies the speaker (left of arrow) and addressee (right of arrow) of the utterance.

[5] The embedding complementizer *'da'* guarantees that this sentence cannot be interpreted as involving a direct quotation — like in English, the complementizer is incompatible with direct quotations.

Luka, and he does so by addressing *Luka* with (8b). The reported embedded imperative in (8b) is then only a directive with respect to the original utterance context.

Coming back to the notion that imperative embedding in Slovenian is mostly unconstrained, Stegovec and Kaufmann (2015) present a number of distinct contexts where this is not true. One restriction is subject obviation (addressed in detail in Section 2.2), another interesting case is a matrix-embedded asymmetry in so called *"speaker distancing"*. In matrix imperatives, the speaker cannot distance him or herself from the directing act (9a) (see also Condoravdi and Lauer 2012). In an embedded imperative, however, it is the distancing by the *original* speaker that is infelicitous, as seen in (9b), while distancing by the *actual* speaker is entirely fine, as seen in (9c).

(9) a. #Pojdi stran! Ampak noče-m,   da greš.
        go.IMP away but   not.want-1 that go.2
        'Go away! But I don't want you to go.'

     b. #Rekel je$_i$,   da pojdi stran in dodal da noče$_i$,   da greš.
        said.M AUX.3 that go.IMP away and added that not.want.3 that go.2
        'He said that you should go away and added that he doesn't want you to.'

     c. Rekel je$_i$,   da pojdi stran ampak noče-m$_i$,   da greš.
        said.M AUX.3 that go.IMP away but   not.want-1 that go.2
        'He said that you should go away, but I don't want you to go.'

Stegovec and Kaufmann (2015) suggest the contrast between (9b) and (9c) reveals a violation of *Shift Together* (see Anand and Nevins 2004), with the embedded clause containing both shifted and non-shifted indexicals. We saw that in Slovenian indexicals in embedded imperatives cannot be shifted to the original context, but in the case of (9c) the embedded subject (addressee) is not shifted, while the *source* of the directing act, or *director*, seems to be shifted to the original context, as evidenced by the distancing ban — distancing concerns the original speaker (the matrix subject), and not the actual one (the individual that utters the sentence in (9c)).

I will argue here for an alternative account of the matrix-embedded asymmetry, based on the analysis of imperatives and subjunctives introduced in Section 4. I will argue the distancing ban is in fact connected to subject obviation and the restrictions on subject selection in directive clauses, which is what I discuss next.

2.2 Subject obviation

As illustrated with Spanish examples in (2) and (3) above, some languages show a co-reference restriction between the subject (SU) of the embedding attitude verb and the subject of an embedded subjunctive (10) — subject obviation (henceforth *SOb*).

(10) $[_{CP1}$ SU$_i$ V$_{att}$ $[_{CP2}$ SU$_{k,*i}$ V$_{SBJ}$]]

Unlike Spanish, Slovenian does not have a subjunctive verbal paradigm, but it has a construction which occurs in some of the contexts subjunctive verbs occur in other

languages.[6] The construction is not traditionally identified as subjunctive in the literature; it is sometimes called the *optative construction* or even the *analytic imperative* (see Roeder and Hansen 2006 for discussion and references) — we will see below that the latter term is actually very telling. However, due to its distribution and canonical function, I refer to it as the *directive subjunctive*, abbreviated as SUB_{dir}.

The SUB_{dir} construction involves an agreeing present indicative verb, and the particle *'naj'*.[7] It is typically used in embedded directives when imperatives cannot be used due to a paradigmatic gap (see also Sections 2.3 and 3.3). Importantly, SUB_{dir} not only occurs in contexts where subjunctives may occur cross-linguistically, it also triggers SOb. This is seen in (11): the embedded SUB_{dir} is grammatical in (11a) as its subject is not coreferential with the matrix subject, while in (11b) the sentence is ungrammatical as both subjects are 1st person singular and thus coreferential.

(11)   a.   Rekl-a je$_i$,   da   naj si   pomaga-m$_k$ sam!
             said-F   AUX.3 that LET REFL.DAT help-1   alone.M
             'She said that I should help myself on my own!'

       b. *Rekel sem$_i$, da   naj si   pomaga-m$_i$ sam!
             said.M AUX.1 that LET REFL.DAT help-1   alone.M
             int.: 'I said that I should help myself on my own!'

Note that the intended reading of (11b) is a perfectly normal statement and can be conveyed by other constructions. There is thus nothing functionally wrong with (11b).

There is further evidence showing this is not just a 1st person paradigmatic gap. SOb is in fact also found with 3rd person subjects. The sentence in (12) is infelicitous only if the matrix subject and the subject of the embedded SUB_{dir} are coreferential.

(12)   Rekel je$_i$,   da   naj si   pomaga$_{k,*i}$ sam!
       said.M AUX.3 that LET REFL.DAT help.3   alone.M
       'He$_i$ said that he$_{k,*i}$ should help himself on his own!'

Given that in languages where SOb is typically studied the embedding of imperatives is impossible and subjunctives must serve as surrogate imperatives, Slovenian provides a unique opportunity to see what happens when a language has both embedded subjunctives and imperatives. Interestingly, imperatives (IMP_{dir}) pattern with SUB_{dir} in showing SOb effects. As observed by Stegovec and Kaufmann (2015), the subjects of the matrix verb and the embedded IMP_{dir} cannot both be 2nd in Slovenian, as illustrated in (13). That is, they cannot be coreferential. (13) thus cannot be used to remind a forgetful addressee of what they had originally imposed on themselves, despite this being an otherwise perfectly normal thing to express using other constructions.

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[6] Subjunctives typically occur with volitional and other attitude predicates, and sometimes in special matrix contexts (see Schlenker 2005a; Quer 2006; Kempchinsky 2009; Costantini 2014). What is crucial here are subjunctives serving as surrogate imperatives when the use of imperatives is blocked for some reason. My motivation for calling the *naj*-construction a subjunctive is that it occurs in a subset of cases where subjunctives occur. I leave open whether or not the infinitive/indicative/imperative/subjunctive mood distinction is sufficient for all the variation in clause types observed cross-linguistically.

[7] This modal particle, called a 'semi-modal' by Roeder and Hansen (2006), historically arose as the reduced form of *nexaj*, the imperative of *nexati* 'to let, to allow' (Snoj 2003; Roeder and Hansen 2006).

(13) *Rekel si$_i$, da si pomaga-j$_i$ sam!
    said.M AUX.2 that REFL.DAT help-IMP alone.M
    int.: 'You said that you should help yourself on your own!'

The coreference restriction holds only between subjects, as shown by (14) — the matrix indirect object can be coreferential with the IMP$_{dir}$ subject. The coreference restriction in embedded imperatives is thus entirely parallel to SOb with subjunctives.

(14) Rekel (ti$_i$) je$_k$, da mu$_{k,l}$ pomaga-j$_i$ sam!
    said.M (2.DAT) AUX.3 that 3.M.DAT help-IMP alone.M
    'He$_k$ said (to you$_i$) that you$_i$ should help him$_{k,l}$ on your own!'

The fact that both embedded IMP$_{dir}$ and "surrogate" SUB$_{dir}$ are the same with respect to SOb is used in Section 3 to determine their syntactic structure and why the two are in complementary distribution. I elaborate on the latter point in the following section.

2.3 Restrictions on the subjects of matrix directive clauses

The Slovenian imperative paradigm is restricted to 2nd person (2P) and 1st person (1P) subjects. An agreement suffix which marks the person and number of the subject is present with plural (PL) and dual (DU) imperative verb forms.[8] This is shown in (15), where we see examples of imperative verbs with a 2P subject for three different number values.[9] In all three cases, we can identify the imperative morpheme -j-, and the standard indicative agreement suffix (see also Table 1). The examples also show the syntactic presence of a subject through the licensing of the subject oriented anaphor, and the inflected adverb which co-varies with the gender of the subject.

(15)   a. Pomaga-j si sam(-a)!   [SU = 2P.SG]
        help-IMP.(2) REFL.DAT alone.M/-F
        'Help yourself on your own!'

      b. Pomaga-j-<u>te</u> si sam-i/-e!   [SU = 2P.PL]
        help-IMP-<u>2PL</u> REFL.DAT alone-PL.M/-PL.F
        'Help yourselves on your own!'

      c. Pomaga-j-<u>ta</u> si sam-a/-i!   [SU = 2P.DU]
        help-IMP-<u>2DU</u> REFL.DAT alone-DU.M/-DU.F
        'Help yourselves(dual) on your own!'

Although the imperative paradigm extends to 1P subjects, such subjects are restricted to inclusive 1P. To illustrate, in (16) the 1P.PL subject can only be interpreted as including both the speaker (1P) and the addressee (2P). Since inclusive 1P is only possible with non-singular subjects (in Slovenian, 1P.PL/DU), there can be no 1P.SG imperatives, at least in Slovenian. I refer to the ban on 1P.SG and exclusive 1P.PL/DU subjects of IMP$_{dir}$ jointly as *the exclusive* 1P *subject ban* (abbreviated as *XSb*).

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[8] The 2P.SG agreement gap is not limited to Slovenian: if imperative verbs carry regular agreement morphology, the agreement marker is absent for 2P.SG. As of now, I am not aware of any exceptions.

[9] DU forms always pattern with PL forms in all the ways that are relevant for the topics discussed in this paper. For ease of exposition, I will only be providing full examples for SG and PL subjects from now on.

	imperative		indicative	
	1P+2P	2P	1P(+2P)	2P
SG.		pomaga-**j**	pomaga-<u>m</u>	pomaga-<u>š</u>
PL.	pomaga-**j**-<u>mo</u>	pomaga-**j**-<u>te</u>	pomaga-<u>mo</u>	pomaga-<u>te</u>
DU.	pomaga-**j**-<u>va</u>	pomaga-**j**-<u>ta</u>	pomaga-<u>va</u>	pomaga-<u>ta</u>

Table 1 A comparison of imperative and indicative verbal inflection

(16)　Pomaga-j-<u>mo</u> si　　　sam-i/-e!　　　　　　　　　　[SU = 1P+2P.PL]
　　　help-IMP-<u>1PL</u>　REFL.DAT alone-PL.M/-PL.F
　　　'Let's help ourselves on our own!'

If we take inclusive 1P readings to literally reflect the syntactic presence of both 1P and 2P features, we can generalize that IMP$_{dir}$ is restricted to subjects with at least 2P features, which can be extended to explain the absence of 3P imperatives. Crucially, the gap in the IMP$_{dir}$ paradigm does not mean directive clauses are limited to 2P(+1P) subjects. In fact, the SUB$_{dir}$ construction is used for directive speech acts when an imperative form is unavailable (as already noted above). This is shown in (17) for a 3P subject, which can also be an overt NP. The verb in SUB$_{dir}$ constructions is in present indicative form and is obligatorily accompanied by the particle *'naj'*.

(17)　(Marko) **naj** <u>naredi</u> to　sam!
　　　(Marko) LET do.3　this alone.M
　　　roughly: 'Marko/he should do it himself.'

As illustrated with the sentences in (18), the indicative verb inflects for number and gender, while the modal particle always maintains the same form.

(18)　a.　Naj si　　　pomaga sam(-a)!　　　　　　　　　　[SU = 3P.SG]
　　　　　LET REFL.DAT help.3　alone.M/-F
　　　　　'She/He should help herself/himself on her/his own!'

　　　b.　Naj si　　　pomaga-<u>jo</u> sam-i/-e!　　　　　　　　[SU = 3P.PL]
　　　　　LET REFL.DAT help-<u>3PL</u>　alone-PL.M/-PL.F
　　　　　'They should help themselves on their own!'

Crucially, SUB$_{dir}$ is essentially a surrogate used only if an IMP$_{dir}$ form is unavailable. That is, the existence of an IMP$_{dir}$ form for a particular person value blocks the use of SUB$_{dir}$ for that person value. This is illustrated in (19), where SUB$_{dir}$ is shown to be impossible with 2P.SG subjects (19a), 2P.PL/DU subjects (19b), and inclusive 1P.PL/DU subjects (19c), despite the existence of suitable agreeing verb forms.

(19)　a. *Naj si　　　pomaga-<u>š</u> sam(-a)!　　　　　　　　[✗ SU = 2P.SG]
　　　　　LET REFL.DAT help-<u>2</u>　alone.M/-F
　　　　　int.: 'Help yourself on your own!'

　　　b. *Naj si　　　pomaga-<u>te</u> sam-i/-e!　　　　　　　　[✗ SU = 2P.PL]
　　　　　LET REFL.DAT help-<u>2PL</u>　alone-PL.M/-PL.F
　　　　　int.: 'Help yourselves on your own!'

　　　c. *Naj si　　　pomaga-<u>mo</u> sam-i/-e!　　　　　　　[✗ SU = 1P(+2P).PL]
　　　　　LET REFL.DAT help-<u>1PL</u>　alone-PL.M/-PL.F
　　　　　int.: 'Let's help ourselves on our own!'

'pomagati' (to help)		singular	dual	plural
1P (= incl.)	(SUB*dir*)	***naj** pomaga-m	***naj** pomaga-va	***naj** pomaga-mo
1+2P (= excl.)	(IMP*dir*)	IMPOSSIBLE	pomaga-**j**-va	pomaga-**j**-mo
2P	(IMP*dir*)	pomaga-**j**	pomaga-**j**-ta	pomaga-**j**-te
3P	(SUB*dir*)	**naj** pomaga	**naj** pomaga-ta	**naj** pomaga-jo

Table 2 The full paradigm of matrix directive constructions in Slovenian

Note that even though with IMP*dir* a 1P.PL/DU subject must be inclusive and 1P.SG subjects are impossible (= XSb), (19c) is ungrammatical even with an exclusive interpretation, and 1P.SG subjects are also banned with SUB*dir*, as seen in (20).[10]

(20) *Naj si   pomaga-m sam!   [✗ SU = 1P.SG]
       LET REFL.DAT help-<u>1</u>   alone.M
       int.: 'I should help myself on my own!'

From the otherwise complementary distribution of IMP*dir* and SUB*dir*, we would expect SUB*dir* to be possible with singular/exclusive 1P subjects, but this is not what we get. The restrictions on IMP*dir* and SUB*dir* subjects (summarized in Table 2) reveal a pattern of almost complete complementary distribution with one crucial exception: the XSb is observed in both. This kind of pattern is also attested in other languages where subjunctives can be surrogate imperatives/3P directive clauses. In the French examples in (21–23) (Schlenker 2005a), we see the complementary distribution of different matrix directive constructions, again with a 1P.SG/exclusive 1P.PL gap.

(21) a. Que votre Altesse soit   prudente!   French
         that your Highness be.SUB.3.SG cautious
         'Let her majesty be cautious!'

      b. [no 3P imperative forms]

(22) a. *Que { tu / vous } { sois   / soyez   } prudent(-s)!
         that { you / you.PL } { be.SUB.2.SG / be.SUB.2.PL } cautious(-PL)
         int.: 'You (SG/PL) should be cautious!'

      b. { Sois   / Soyez   } prudent(-s)!
         { be.IMP.2.SG / be.IMP.2.PL } cautious(-PL)
         'Be (SG/PL) cautious!'

(23) a. *Que nous soyons   prudents!
         that we   be.SUB.1.PL cautious-PL
         int.: 'We should be cautious!' (both *inclusive* and *exclusive* banned)

      b. Soyons   prudents!
         be.IMP.1.PL cautious-PL
         'Let's be cautious!' (obligatorily *inclusive*)   (Schlenker 2005a: 280)

It might look tempting to tie the XSb to the fact that directives are typically used to direct others, and say that directing oneself is merely pragmatically odd, possibly due to a restriction on what constitutes a directive speech act (cf. Searle's (4)). But I believe this would miss important generalizations concerning the syntax and semantics

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[10] Interestingly, *naj*-constructions can occur with exclusive 1P subjects, but only when not used as directives. I discuss this briefly in Section 3.3, where I suggest those might be a different construction altogether.

of directive clauses. I agree with Zanuttini et al. (2012) in that reducing restrictions on the subjects of directive clauses to a pragmatic restriction takes us further away from providing an autonomous, compositional theory of how the structure of directive clauses is generated and how that structure is associated with the meaning it has.

This is the view I adopt in Sections 3 and 4, where I argue that the XSb in matrix directives and SOb in embedded directives are manifestations of a more general restriction — a *"generalized SOb"*, which arises due to the particular syntactic and semantic properties of directive clauses that explain independent restrictions such as the speaker distancing asymmetry. I am not aware of any fully worked out pragmatic account that also makes explicit predictions about any of these phenomena.

One might alternatively try to frame the XSb as a positive syntactic constraint, tying it to the approach of Zanuttini (2008) and Zanuttini et al. (2012), where the person value of *jussive* clause (imperative, exhortative, or promissive) subjects is determined extrinsically: it is assigned by a dedicated Jussive^0 syntactic head with valued person features. Zanuttini et al. (2012) argue for Korean, that there are three kinds of jussive heads in the language, which differ in the kinds of valued person features they bear: imperative (2P), exhortative (1P+2P), and promissive (1P).[11] The absence of exclusive 1P subjects in Slovenian, and all other languages with the exclusive 1P gap, could then be attributed to the absence of the promissive jussive head. However, what we see in Slovenian is not a universal ban on 1P subjects, but a ban on exclusive 1P subjects, and only in matrix clauses. Recall that even exclusive 1P subjects are fine in embedded contexts, as in (24a). Furthermore, even in matrix contexts, the ban is lifted in questions, as in (24b) (I come back to the issue of questions in Section 4.4).

(24) a. Rekl-a je$_i$,   da   naj si   pomaga-$\underline{m}_k$ sam!   [=(11a)]
          said-F AUX.3 that LET REFL.DAT help-$\underline{1}$ alone.M
          'She said that I should help myself on my own!'

      b. Naj si   pomaga-$\underline{m}$ sam?
          LET REFL.DAT help-$\underline{1}$ alone.M
          'Should I help myself on my own?'

If the XSb resulted from the lack of a particular Jussive^0 type, we could not explain why the restriction changes with respect to matrix or embedded contexts, or declarative and interrogative ones. But also, the parallelism between the XSb and SOb, discussed in the next section, would have to be treated as purely coincidental.

3 Generalized SOb

Let us summarize the two subject restrictions, focusing on their similarities and differences. As we saw above, SOb occurs in Slovenian with embedded IMP$_{dir}$ and SUB$_{dir}$ constructions. This illustrated schematically in (25) for IMP$_{dir}$, and in (26) for SUB$_{dir}$: in both cases, the subjects of the matrix and embedded clause cannot co-refer.

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[11] In Korean, embedded imperatives (and other jussives) are also possible, but there appears to be no SOb. Subjects of embedded jussives can be coreferential with the matrix subject. This may be linked to the existence of promissives, provided they are 'true' exclusive 1P directive clauses, which suggests Korean directive clauses differ from Slovenian ones in interesting ways. I discuss this briefly in Section 5.2.

(25) a. ✗ [$_{CP1}$ SU$_i$ said [$_{CP2}$ that SU$_i$ V$_{IMP}$]]   [=(13)]

  b. ✓ [$_{CP1}$ SU$_i$ said [$_{CP2}$ that SU$_k$ V$_{IMP}$]]   [=(14)]

(26) a. ✗ [$_{CP1}$ SU$_i$ said [$_{CP2}$ that *naj* SU$_i$ V]]   [=(11b,12)]

  b. ✓ [$_{CP1}$ SU$_i$ said [$_{CP2}$ that *naj* SU$_k$ V]]   [=(11a,12)]

Compare this to matrix directive clauses, illustrated schematically in (27) (for expository purposes the inclusive/exclusive distinction is left out). Despite the complementary distribution of IMP$_{dir}$ and SUB$_{dir}$, there is one part of the paradigm where both are impossible: exclusive 1P subjects are consistently unavailable (= XSb) (27a,27d).

(27) a. ✗ [$_{CP}$ SU$_{[1P]}$ V$_{IMP}$]   d. ✗ [$_{CP}$ *naj* SU$_{[1P]}$ V]

  b. ✓ [$_{CP}$ SU$_{[2P]}$ V$_{IMP}$]   e. ✗ [$_{CP}$ *naj* SU$_{[2P]}$ V]

  c. ✗ [$_{CP}$ SU$_{[3P]}$ V$_{IMP}$]   f. ✓ [$_{CP}$ *naj* SU$_{[3P]}$ V]

On an abstract level, both restrictions are the same: the subject of a directive clause cannot be coreferential with the speaker of that directive clause. With the XSb the subject cannot denote the speaker or a group including the speaker and non-speech act participants,[12] while with SOb the subject of the matrix attitude verb *is* the speaker with respect to the original context. Based on this intuition, I propose an account which treats both restrictions as a type of Condition B effect. At least when it comes to SOb, treating it as Condition B, or more broadly as a binding restriction, is an established analysis (see, among others, Picallo 1985; Kempchinsky 1986, 2009; Rizzi 1990; Progovac 1993; Bianchi 2001), what I am proposing here is extending it to the XSb in matrix clauses. Condition B is provided in a simplified form in (28).

(28) ***Binding Condition B.*** *A pronoun must be free in its binding domain.*[13]

Similarities between Condition B and the XSb/SOb are more than superficial. For instance, both can be voided the same way in partial referential overlap configurations. As noted by Lasnik (1989), in examples like (29a), where the referent of the object 'me/myself' is a subset of the referents of the subject 'we', neither Condition A nor B can be satisfied. However, such partial overlap configurations improve with a collective reading of 'we' (see, among others, Reinhart and Reuland 1993: 676-677). Thus, (29b) is grammatical despite having a pronoun configuration excluded in (29a).

(29) a. *We like { me. / myself. }   b. We elected me.

The partial overlap restriction is also active with SOb in Slovenian. In (30), the subject of the embedded IMP$_{dir}$/SUB$_{dir}$ cannot be interpreted as coreferential with any of the individuals in the group of people encompassed by the (inclusive) 1P.PL subject. This holds for 2P subjects (30a), as well as for 1P subjects (30b) and 3P subjects (30c).

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[12] See discussion below on groups including the speaker and addressee(s) (i.e. inclusive 1P subjects).

[13] The syntactic and semantic literature on Condition B is full of competing accounts, and it is beyond the scope of this paper to discuss them or to compare which one fits better with the proposed analysis of SOb (see, for instance, Lasnik 1989; Reinhart and Reuland 1993; Safir 2004; Schlenker 2005b for some influential examples of post-Chomsky (1981) treatments of Condition B). But as the reader will see, the exact nature of Condition B is not crucial for my account of the generalized SOb. What matters is the nature of its domain of application, the elements it pertains to, and cases in which it appears to be relaxed. More details concerning the role of Condition B in the proposed analysis of SOb are given in Section 3.1.

(30)   a. *Rekl-i   smo$_{i+k}$, da vpraša-j$_i$ Marko-ta.   [SU = 2P.SG; IMP$_{dir}$]
          said-PL.M AUX.1PL that ask-IMP.(2) Marko-ACC
          int.: 'We$_{i+k}$ said that you$_i$ should ask Marko.'

       b. *Rekl-i   smo$_{i+k}$, da   naj vpraša-m$_i$ Marko-ta.   [SU = 1P.SG; SUB$_{dir}$]
          said-PL.M AUX.1PL that LET ask-1   Marko-ACC
          int.: 'We$_{i+k}$ said that I$_i$ should ask Marko.'

       c. *Rekl-i   smo$_{i+k}$, da   naj vpraša$_i$ Marko-ta.   [SU = 3P.SG; SUB$_{dir}$]
          said-PL.M AUX.1PL that LET ask.3   Marko-ACC
          int.: 'We$_{i+k}$ said that he$_i$ should ask Marko.'

However, just like with Condition B, where partial overlap is disallowed only with
distributed and not collective interpretations of plural pronouns (Safir 2004: 94–96),
SOb is lifted in directive clauses if plural subjects are interpreted as collective. If we
interpret (31b) (an analogue of (30a)) with respect to context (31a), the matrix subject
must be interpreted collectively, and the partial coreference restriction is then voided.

(31)   a. [Context:] *A group of coworkers voted on how to get a piece of informa-
          tion, and it was decided that the addressee (who also voted) should ask
          their boss for the information. But the addressee immediately forgot what
          the decision was, so another member of the group reminds him:*

       b. Rekli   smo$_{i+k}$, da vpraša-j$_i$ šef-a.   [SU = 2P.SG; IMP$_{dir}$]
          said.PL.M AUX.1PL that ask-IMP.(2) boss-ACC
          'We said (= decided by vote) that you should ask the boss.'

Partial coreference is allowed, even without a special context, if the matrix subject is
a subset of the group referenced by an inclusive 1P.PL/DU subject, as seen in (32).

(32)   a. Rekel sem$_i$, da vpraša-j-mo$_{i+k}$ Marko-ta.   [SU = 2P.PL; IMP$_{dir}$]
          said.M AUX.1 that ask-IMP-1PL   Marko-ACC
          'I said that we should ask Marko.'

       b. Rekel si$_i$,   da vpraša-j-mo$_{i+k}$ Marko-ta.
          said.M AUX.2 that ask-IMP-1PL   Marko-ACC
          'You said that we should ask Marko.'

       c. Rekel je$_i$,   da vpraša-j-mo$_{i+k}$ Marko-ta.
          said.M AUX.3 that ask-IMP-1PL   Marko-ACC
          'He said that we should ask Marko.'

The fact that a special context is not required in (32) could be due to a number of
reasons, but due to space limitations I will only consider one option suggested in the
literature. It has been observed that partial coreference is more readily available with
1P arguments (see Schlenker 2005b: 49–50), so it could be that in (32), like in (33),
the collective reading is much more salient due to the inclusive 1P.PL subject.

(33)   I like us (as a couple).

In directive clauses, inclusive 1P.PL/DU subjects seem to yield a collective reading,
as in (34a). In order to express a distributive reading in a matrix directive clause in
Slovenian, a 3P subject SUB$_{dir}$ construction like (34b) must be used instead.
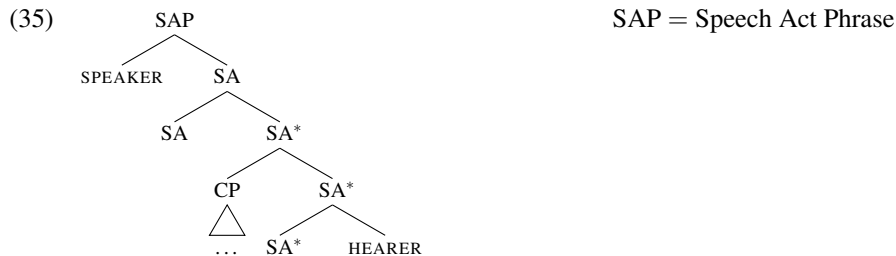
(34)   a. Vpraša-j-mo$_{i+k}$ Marko-ta!
          ask-IMP-1PL   Marko-ACC
          'Let's ask Marko!' (#'Each of us should ask independently.')

    b. Naj vsak$_i$ zase   vraša$_i$ Marko-ta!
          LET each for.self ask.3   Marko-ACC
          'Let's each individually ask Marko!'

The discussion of partial coreference does not offer any new insights regarding the correct analysis for it, but it does show that, in Slovenian directive clauses, SOb as well as the XSb pattern consistently with Condition B effects. This I take as an indication that the two should be analyzed as the same kind of restriction.

3.1 Generalized SOb as Condition B

The similarity between SOb and the XSb can be captured if subjects of directive clauses are restricted in a manner parallel to Condition B. That is, if the binder is understood as either the matrix subject (SOb) or the actual speaker of the utterance (XSb). This is perhaps not so surprising from the perspective of the *performative hypothesis* (Ross 1970), or the more current proposal by Speas and Tenny (2003), where the speaker of an utterance is directly encoded in the syntax. So it may not be such a stretch to conceive of the speaker as playing a role in syntactic binding.

Consider Speas and Tenny's (2003) *Speech Act Phrase* approach, sketched out in a simplified way in (35). The syntactic positions of speech act participants and content are modeled after argument structure: the speaker (SPEAKER) is "the subject" and sits in the specifier of SA, the CP encoding the utterance content is "the indirect object", while the hearer (HEARER) is "the direct object" in the complement of SA.[14] The configuration between SPEAKER and the utterance content is thus parallel to that of the matrix subject of an attitude verb and the clause the verb embeds.

(35)   SAP   SAP = Speech Act Phrase

              SPEAKER   SA

                      SA   SA*

                          CP   SA*

                          △
                        ...   SA*   HEARER

The XSb can then be characterized as effectively an instance of SOb. If the subject of IMP$_{dir}$ is 2P, the subject is not coreferential with SPEAKER (36a). However, if the subject is 1P, a binding violation occurs (36b) Similarly, in a SUB$_{dir}$, 3P subjects do not trigger binding violations with SPEAKER (37a), but 1P subjects do (37b).

(36)   a. ✓ [$_{SAP}$ SPEAKER$_{[=1P]}$ SA [$_{CP}$ $pro_{[2P]}$ V$_{IMP}$] ...]   [=(15)]
    b. ✗ [$_{SAP}$ SPEAKER$_{[=1P]}$ SA [$_{CP}$ $pro_{[1P]}$ V$_{IMP}$] ...]

---

[14] SA* marks SA before moving and re-projecting similarly to Larson's (1988) "VP-shells".

(37) a. ✓ [$_{SAP}$ SPEAKER$_{[=1P]}$ SA [$_{CP}$ *naj pro*$_{[3P]}$ V$_{IND}$] ...]   [=(18)]

  b. ✗ [$_{SAP}$ SPEAKER$_{[=1P]}$ SA [$_{CP}$ *naj pro*$_{[1P]}$ V$_{IND}$] ...]   [=(20)]

By treating both restrictions as SOb, we can say that a binding violation occurs between the subject of IMP$_{dir}$/SUB$_{dir}$ and the *director*, i.e. the matrix subject in embedded directives or the actual speaker (SPEAKER) in matrix directives, when they denote the same entity. However, an issue arises if we characterize "matrix SOb" as a direct ban on binding between subject and SPEAKER. Why should a comparable restriction then not apply also in non-directive clauses? One way out would be to assume an 'extended binding domain' only in SOb contexts, as proposed by Picallo (1985); Rizzi (1990); Progovac (1993). Unfortunately, it has proven very hard, following these seminal works, to find a principled and consistent link between the environments where SOb occurs, and the proposed binding domain extension. The original intuition that domain extension is tied to the 'defective' subjunctive inflection, will not work for Slovenian, given that IMP$_{dir}$ not only involves dedicated imperative morphology, but also a more or less intact indicative agreement paradigm (see Table 1 in Section 2.3). There exist, however, analyses of SOb as Condition B that do not involve domain extension and which can better explain the SOb/non-SOb context split.
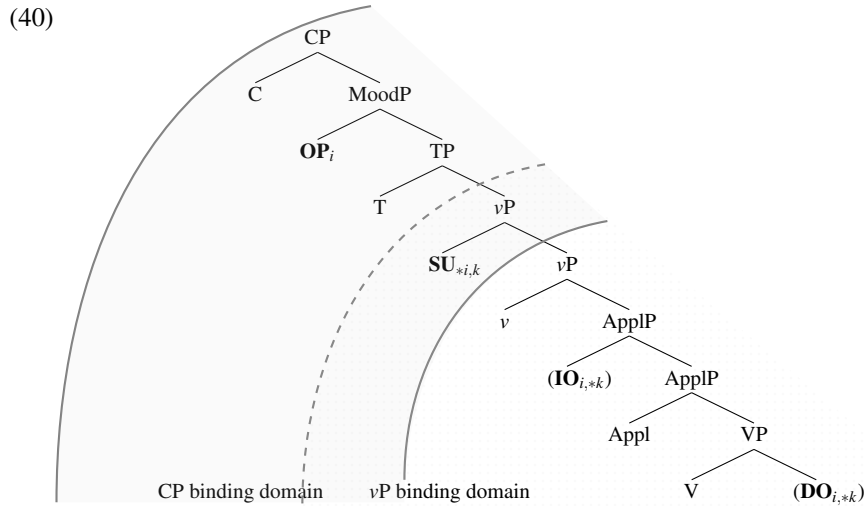
There are independent reasons to believe the meaning of subjunctives can be at least partly derived from the presence of a special operator in MoodP (Kempchinsky 1986, 2009; Bianchi 2001), positioned between the TP and CP-fields of a clause. Similar proposals have also been made regarding imperatives (Schwager 2006; Kaufmann 2012). Let us stipulate for the moment that this kind of operator may be considered a binder for Condition B. This would then explain why SOb only occurs with particular constructions and clause types. I propose that (at least Slovenian) directive clauses, regardless of whether they are IMP$_{dir}$ or SUB$_{dir}$, have the structure in (38).

(38) [$_{CP}$ C [$_{MoodP}$ OP$_{Dir}$ [$_{TP}$ T [$_{vP}$ SU *v* [$_{ApplP}$ (IO) Appl [$_{VP}$ V (DO)]]]]]]]

Crucially, it is the presence of *OP$_{Dir}$* that yields the generalized SOb only in directive clauses, and we will see in Section 4 how this can be made to follow from the semantic requirements of OP$_{Dir}$. Pending that, it suffices to stipulate for now that OP$_{Dir}$ must always carry the referential information of the director — it is semantically bound by the either the speaker or matrix subject (cf. Kempchinsky 1986), as illustrated in (39).

(39) a. [$_{SAP}$ SPEAKER$_i$ SA [$_{CP}$ C [$_{MoodP}$ OP$_i$ [$_{TP}$ T [$_{vP}$ SU *v* [...]]]]]]]

  b. [$_{vP}$ SU$_i$ *v* [$_{VP}$ V$_{att}$ [$_{CP}$ C [$_{MoodP}$ OP$_i$ [$_{TP}$ T [$_{vP}$ SU *v* [...]]]]]]]]

Recall that Condition B is domain restricted. Roughly speaking, the domain is minimally the structure containing all the arguments of a clause. I suggest that perhaps the domain of Condition B should be characterized in terms of phases (Chomsky 2000, 2001). This will allow us to capture the fact that the subject and OP$_{Dir}$ are in the same binding domain, but also that the subject and any internal argument are part of the same binding domain to the exclusion of OP$_{Dir}$. If we follow Chomsky (2000, 2001) and assume CP and *v*P are phases, and further that both phases are separately domains for Condition B, then the subject, introduced in Spec,*v*P — the phase edge, is in a unique position that is part of both binding domains, as shown in (40).

(40)

CP
C MoodP
OP$_i$ TP
T vP
SU$_{*i,k}$ vP
v ApplP
(**IO**$_{i,*k}$) ApplP
Appl VP
V (**DO**$_{i,*k}$)

CP binding domain vP binding domain

The position of the subject (SU) in Spec,vP means that internal arguments (IO, DO) will trigger a Condition B violation if coreferential with SU, as they are within the vP binding domain. Likewise, SU will violate Condition B if coreferential with OP$_{Dir}$. As OP$_{Dir}$ is bound by the director, which is the speaker in matrix contexts and the matrix subject in embedded contexts, the generalized SOb effect is derived. Crucially, if OP$_{Dir}$ is coreferential only with an internal argument, which is inaccessible to it because it is beyond the vP phase edge no Condition B violation should arise.

There is a potential issue here: any IO/DO can in principle move at least as high as Spec,vP and become accessible to OP$_{Dir}$. One way to explain why they are never part of the CP binding domain is to assume such movement is always focus-related. It is known that focus ameliorates SOb violations (Quer 2006), which can be tied to the fact that focus can also void certain binding violations (see for instance Eckardt 2002; Despić 2011, 2013; Charnavel 2015). However, this analysis cannot be easily extended to IO/DO clitics, which under most analyses must move at least as high as Spec$v$P and are typically not focused. Another option is an alternative definition for binding domains which also singles out SU as being simultaneously in two binding domains. At this point, I leave this question open to be resolved in future work.

To sum up, I propose IMP$_{dir}$ and SUB$_{dir}$ involve a syntactic structure with OP$_{Dir}$, and OP$_{Dir}$ can trigger a binding violation with the subject. This captures SOb and the XSb as manifestations of a generalized SOb, itself a type of Condition B violation.

3.2 Why not an alternative account?

Apart from the Condition B approach, a number of alternative analyses of SOb have been proposed (see Costantini 2005; Quer 2006 for an overview), the most popular being the "competition approach", which reduces SOb to a case of blocking by infinitival subject control constructions (Bouchard 1982; Farkas 1992; Schlenker 2005a). In sum, infinitives must be selected over subjunctives when subjects are coreferential.

More precisely, when a matrix attitude predicate denotes a *de se* attitude, a control infinitive must be used, as it is the clause type directly associated with the expression of *de se* attitudes (41a) — for now it suffices to characterize *de se* attitudes as involving self-identification by the attitude holder as the individual who has the property described by the embedded clause (see Section 4.3 for a more detailed description). The selection of infinitives in this environment then blocks the use of the subjunctive (41b), which is argued to express a broader notion of world dependency.

(41)   a. *de se* ☞ $[_{CP1}$ SU$_i$ V$_{att}$ $[_{CP2}$ SU$_i$ V$_{IFN}$]]   control
       b. *de se* * $[_{CP1}$ SU$_i$ V$_{att}$ $[_{CP2}$ SU$_i$ V$_{SUB}$]]   obviation

One of the advantages of competition approaches to SOb is that they can straightforwardly capture why SOb can be voided when a non-*de se* reading of a coreferential embedded subject is coerced (Schlenker 2005a; Szabolcsi 2010; Zu 2015).[15]

The principle behind the competition approach is illustrated for French in (42). The subjunctive is disallowed with the person constellation in (42a) because the control infinitive in (42b) is the dedicated construction for *de se* subject constellations.

(42)   a. *Je veux que je parte.   b. Je veux partir.   French
          I   want that I leave.SUB.1   I   want leave.INF
          int.: 'I want for me to leave.'   'I want to leave.'
                                                            (Szabolcsi 2010: 1)

However, the competition approach is problematic when it comes to SOb with Slovenian directive clauses. Specifically, SOb-inducing clauses are never actually in competition with infinitive control clauses. This is because the predicates that can select IMP$_{dir}$ complements do not take infinitive complements. We see this with the contrast between (43a) and (43b); *'say'* does not select infinitive complements in Slovenian.

(43)   a. Rekel sem (ti$_i$),   da pomaga-j$_i$ sestr-i.   [IMP$_{dir}$ complement]
          said.M AUX.1 2.M.DAT that help-IMP   sister-F.DAT
          'I told you that you should help your sister.'

       b. *Rekel sem (ti$_i$)   pomagati$_i$ sestr-i.   [infinitive complement]
          said.M AUX.1 2.M.DAT help.INF   sister-F.DAT
          int.: 'I told you to help your sister.'

It is true that the intended interpretation of (43b) is that of object control, but even if we adapt both constructions to conform to subject control configurations, as in (44), both come out ungrammatical: IMP$_{dir}$ due to SOb (44a), and the infinitive due to *'say'* not allowing infinitive complements (44b). The two are thus never in competition.

(44)   a. *Rekel si$_i$,   da pridi$_i$ na obisk.   [IMP$_{dir}$ complement]
          said.M AUX.2 that come.IMP on visit.ACC
          'You said that you should come visit.'

       b. *Rekel si$_i$ priti$_i$ na obisk.   [infinitive complement]
          said.M AUX.2 come.INF on visit.ACC
          inf.: 'You said that you should come visit.'

---

[15] The competition approach can in principle be extended to matrix clauses as well (see Zu 2015 for an analysis of matrix clauses in a conjunct-disjunct marking language, and Section 5.3 for some discussion).

Nothing changes if we instead use SUB_{dir} and a subject control infinitive, as in (45). The SUB_{dir} is bad due to SOb (45a), but the infinitive in (45b) is also ungrammatical.

(45) a. *Rekel sem$_i$, da naj pomaga-m$_i$ sestr-i. [SUB_{dir} complement]
said.M AUX.1 that LET help-1 sister-F.DAT
int.: 'I said that I should help my sister.'

b. *Rekel sem$_i$ pomagati sestr-i. [infinitive complement]
said.M AUX.1 help.INF sister-F.DAT
int.: 'I said to help my sister.'

The reverse is also the case: infinitive selecting attitude verbs cannot take IMP_{dir} or SUB_{dir} complements. With the pair in (46), we see that *'want'* can select an infinitive complement in (46a), but that a SUB_{dir} equivalent is impossible (46b). Crucially, the reference of the embedded subject plays no role, as even with non-coreferential subjects, both IMP_{dir} (47a) and SUB_{dir} (47b) complements are still impossible.

(46) a. Hoče-m$_i$ pomagati$_i$ sestr-i. [infinitive complement]
want-1 help.INF sister-F.DAT
'I want to help my sister.'

b. *Hoče-m$_i$, da naj pomaga-m$_i$ sestr-i. [SUB_{dir} complement]
want-1 that LET help-1 sister.F.DAT
int.: 'I want that I should help my sister.'

(47) a. *Hoče-m$_i$, da pomaga-j$_k$ sestr-i. [IMP_{dir} complement]
want-1 that help-IMP sister-F.DAT
int.: 'I want that you should help your sister.'

b. *Hoče-m$_i$, da naj pomaga$_k$ sestr-i. [SUB_{dir} complement]
want-1 that LET help.3 sister-F.DAT
int.: 'I want that he/she should help his/her sister.'

The examples above are problematic for competition approaches to SOb, because they show that both IMP_{dir} and SUB_{dir} are systematically absent in the environments where competition with control infinitives should arise. The only cases where constructions involving an infinitive verb can be used with IMP_{dir}/SUB_{dir} embedding verbs are *modal + infinitive* constructions like (48a), which can be used to express the intended meaning of directive clauses like (48b), ungrammatical due to SOb.

(48) a. Rekel si$_i$, da mora-š$_i$ priti na obisk. [mod. + inf. complement]
said.M AUX.2 that must-2 come.INF on visit.ACC
'You said that you must come visit.'

b. *Rekel si$_i$, da pridi$_i$ na obisk. [IMP_{dir} complement]
said.M AUX.2 that come.IMP.(2) on visit.ACC
int.: 'You said that you must/should come visit.'

Unlike with control infinitives, the subject of such constructions can be an unbound *pro*, as in (49a), or even an overt NP (49b). Such constructions are also not restricted to canonical control contexts, as shown by (49c) where no attitude verb is present.[16]

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[16] It may also be that the modal verb in such constructions is a raising verb, where the subject moves from its base position into the specifier of the modal, roughly in line with the proposal for modal verbs in Wurmbrand (1999). But even with this analysis such constructions are not obligatory control infinitives.

(49) a. Rekel si$_i$ da mora-m$_k$ priti   na obisk.
          said.M AUX.2 that must-1   come.INF on visit.ACC
          'You said that I must come visit.'

      b. Rekel si$_i$ da mora Luka$_k$ priti   na obisk.
          said.M AUX.2 that must.3 Luka   come.INF on visit.ACC
          'You said that Luka must come visit.'

      c. Luka mora   priti   na obisk.
          Luka must.3 come.INF on visit.ACC
          'Luka must come visit.'

Further evidence that SOb in Slovenian cannot be analyzed in terms of a competition approach comes from the fact that a configuration analogous to partial control occurs with embedded IMP$_{dir}$. While (50a) is a standard case of SOb, note that the same embedded IMP$_{dir}$ construction allows a partial control configuration with partial coreference between subjects, as in (50b). This is possible when the matrix subject is singular and the embedded subject is 1P.PL/DU (see also Sections 3.1 and 5.5).

(50) a. *Rekel si$_i$,   da zapo-j$_i$ to pesem.
          said.M AUX.2 that sing-IMP this song
          int.: 'You said that you should sing this song.'

      b. Rekel sem$_i$, da zapo-j-mo$_{i+k}$ to   pesem.
          said.M AUX.1 that sing-IMP-1PL this song
          'I said that we should sing this song.'

      c. Rekel sem$_i$, da mora-mo$_{(i+)k}$ zapeti   to   pesem.
          said.M AUX.1 that must-1PL   sing.INF this song
          'I said that we should sing this song.'

As Pearson (2012, 2015) points out, partial control infinitives can also be analyzed as involving a *de se* attitude. A competition approach to SOb then falsely predicts partial control infinitives should block the use of an embedded IMP$_{dir}$ in (50b). Even if the blocking effect would somehow arise from competition with the *modal + infinitive* construction, the *modal + infinitive* paraphrase of (50b) given in (50c) allows but does not require partial coreference with the subject, which contrasts with (50b) where it is the only possible interpretation. This means there is no blocking relation between (50b) and (50c), since partial coreference and a *de se* reading is possible with both.

To conclude, the fact that SOb occurs in Slovenian in cases where the IMP$_{dir}$ or SUB$_{dir}$ is not in direct competition with canonical control constructions is an issue for competition approaches, as the SOb effect cannot be derived as a case of blocking by a control infinitive or another construction restricted to *de se* interpreted subjects.

3.3 What is left of competition?

I have proposed that IMP$_{dir}$ and SUB$_{dir}$ constructions in Slovenian both give rise to generalized SOb because they are directive clauses with a syntactic structure that involves the presence of OP$_{Dir}$ sandwiched between TP and CP in the clausal MoodP

	no paradigm: Rapanui (*'go'*)	imperative only: Bulgarian (*'play'*)	also exhortative: Slovenian (*'play'*)	full paradigm: Hungarian (*'copy'*)
2P.(PL)	**ka** oho	igra-**ĭ**(-te)	igra-**j**(-te)	másol-**j**(-atok)
1P.PL	**ki** oho	**da** igrae-m	igra-**j**-mo	másol-**j**-unk
3P.(PL)	**ki** oho	**da** igrae(-yat)	**naj** igra(-jo)	másol-**j**-on/-anak

Table 3 Cross-linguistic distribution of true (white cells) and surrogate imperatives (gray cells)

field. I have not, however, provided a reason for why IMP$_{dir}$ and SUB$_{dir}$ have a complementary distribution. I argue in this section that the complementary distribution is the result of the two being surface realizations of the same base syntactic structure.

Across languages, the size of imperative paradigms varies (see Table 3). Specifically, they differ in the person values they cover: in Slovenian, imperative forms exist for 2P and inclusive 1P, while Bulgarian has only 2P forms. But there are also languages with imperative forms for all persons, like Hungarian (Tóth 2007), and languages without imperatives, like Rapanui (du Feu 1996: 36–40). In the latter, directive speech acts must be expressed by using the 'momentary' particle *'ka'/'ki'* otherwise used to express posterior duration ('from *X* onward'), future, and definite future. Thus, all directive clauses in Rapanui are surrogate imperatives due to the lack of imperatives, in contrast with Slovenian and Bulgarian, where surrogate forms are only used when an imperative form does not exist for that particular person value.

I propose that in all cases of true/surrogate imperative complementary distribution, the two are distinct surface realizations of the same syntactic structure involving OP$_{Dir}$.[17] Imperatives are merely realizations where the verb undergoes (person determined) head-movement to OP$_{Dir}$, or in cases like French to C (see below). This

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[17] I assume, crucially, that 3P directives (cf. (5)) can be true imperatives and that non-2P directives are not actually directed at the addressee (contra Zanuttini 2008; Zanuttini et al. 2012). Zanuttini et al. (2012) suggest speech acts like *'Let the table be clean!'* really mean *'See to it that the table is clean!'*. I argue that the perceived addressee dependence arises due to it normally being the only pragmatically relevant interpretation. When the addressee is removed and we have a scenario where the speaker does not require a mediator to accomplish the desired action, the addressee dependence goes away. Consider example (1a).

(1) a. Let there be light!   b. # (You!) See to it so that there is light!

It is infelicitous (maybe blasphemous) to consider (1b) a paraphrase of (1a). There is no addressee, or anything else, in existence in the relevant context to be directed. The two Slovenian translations of (1a) are also very telling. The official, and archaic, one in (2) is an imperative, despite the lack of an addressee.

(2) Bodi   svetloba!
     be.IMP.(2) light
     'Let there be light!'

The more natural sounding equivalent of (1a) is found in the song *'Osmi dan' [The Eight Day]* by the band *Pankrti*, as given in (3) (unfortunately, *'Let there be light'* is not used in the song, so a close equivalent is used). Note that it is a SUB$_{dir}$ with a 3P subject and to paraphrase it like (1b) is impossible.

(3) Prvi dan je   reku nej bo   nebo in nej bo   zemlja …
     first day AUX.2 said.M LET AUX.FUT.3 sky and LET AUX.FUT.3 ground …
     'On the first day he said, 'Let there be sky and let there be ground!' …'

3P directive clauses are thus reminiscent of another kind of performative (see Dong 1992): cf. '██ *you!'* vs. *'Go* ██ *yourself!'*, where the former would involve a Condition B violation if the null subject were 2P, indicating that the expressed "wish" is really for some other entity to ██ the addressee.

instance of verb movement may, in languages like Slovenian which have a dedicated imperative morpheme, feed a *vocabulary insertion rule* (Halle and Marantz 1993) that realizes OP_{Dir} itself as imperative morphology. The proposal is based on an analysis of true/surrogate imperative alternation developed elsewhere (Stegovec 2016, in preparation) that is mostly orthogonal to the main point of this paper. I therefore only briefly touch on the key points of the analysis here, focusing on Slovenian and how the complementary distribution arises from the single directive clause structure.

In Slovenian, *'naj'* distinguishes SUB_{dir} from indicatives, and I propose that *'naj'* is actually an overt realization of OP_{Dir}. Conversely, with IMP_{dir} the same OP_{Dir} realizes as imperative morphology on the verb. OP_{Dir} is a suffix on the verb with the latter because the verb head-moves to OP_{Dir}, which does not happen with SUB_{dir}. This lack of head-movement is reflected, among other things, in the fact that, unlike with IMP_{dir} (51a), clitics and other material can intervene between *'naj'* and the verb (51b) (see also Sheppard and Golden 2002 on clitic placement in Slovenian imperatives). A similar contrast with clitic placement occurs in French, see (52a) vs. (52b), where the subjunctive verb must be used with a complementizer in surrogate imperatives.

(51) a. Ne pomaga-j **mu**!
 not help-IMP.(2) 3.M.DAT
 'Don't help him!'

b. Naj **mu** ne pomaga!
 LET 3.M.DAT not help.3
 'Don't let him/her help him!'

(52) a. Écris -**le**!
 write.IMP.2 -3.ACC
 'Write it!'

b. Que Jean **l'**- écrive!
 that Jean 3.ACC- write.SUB.PR.3
 'Let Jean write it!'

The complementary distribution of IMP_{dir} and SUB_{dir} arises because both are realizations of the same underlying structure (cf. (38)), so if head-movement to OP_{Dir} takes place (53a) a directive clause surfaces as IMP_{dir}, while if it does not (53b), it surfaces as SUB_{dir}. The head-movement itself is conditioned by the person features on T (acquired from the subject via Agree, cf. Chomsky 2000, 2001), where in Slovenian the verbal complex is attracted by OP_{Dir} only if T has either 2P or 1P+2P features.

(53) a. $[_{Mood} [_{Mood} [_T [_v \sqrt{HELP}\ v\ ]\ T\{2P,PL\}\ ]\ OP\ ]\ AGR\ ]$ $\Leftrightarrow IMP_{dir}$
 [[[**pomaga-**] **-j-**] **-te**]

b. $[_{Mood} OP\ ]\ \ldots\ [_T [_T [_v \sqrt{HELP}\ v\ ]\ T\{3P,PL\}\ ]\ AGR\ ]$ $\Leftrightarrow SUB_{dir}$
 [**naj**] … [[**pomaga-**] **-jo**]

In this account, languages can vary in: **(i)** the person values that trigger verb movement to OP_{Dir}, **(ii)** the presence or absence of a rule realizing OP_{Dir} as an imperative suffix, and **(iii)** whether verb movement is to OP_{Dir} or C. Movement to C is what we see in French, where imperatives are in complementary distribution with complementizers and imperative and subjunctive verbs are homophonous (Schlenker 2005a).

I assume, crucially, that *'naj'* is not restricted to realizing OP_{Dir}. It is more generally an elsewhere exponent of Mood[0]. I build here on Schlenker's (2005a) intuition that subjunctive is the unmarked mood. As he observes, the contexts where subjunctive occurs in French do not form a natural class, but the contexts where indicative, infinitive and imperative occur do. In Slovenian, *'naj'* in fact also appears outside directive clauses in very distinct functions. The sentence in (54a) can be used to

announce an action in the immediate future, describe an action being performed simultaneously as the utterance, or express an offer. Unlike with directive uses, the subject can be 1P, indicating OP$_{Dir}$ is not involved. Furthermore, the non-directive interpretation is incompatible with a high scoping future adverb, as (54b) shows.

(54) a. Naj vam predstavi-mo naš novi izdelek (jutri).
LET 2PL.DAT present-1PL our new product.ACC (tomorrow)
'Let us introduce you to our new product (*tomorrow*).'

b. #Jutri naj vam predstavi-mo naš novi izdelek.
tomorrow LET 2PL.DAT present-1PL our new product.ACC
'Tomorrow, let us introduce you to our new product.'

Although the reason behind this last restriction is unclear, it is another asymmetry separating the directive use of *'naj'* from the one in (54). Observe that both IMP$_{dir}$ (55a) and SUB$_{dir}$ (55b) are compatible with a high scoping temporal adverb.

(55) a. Jutri pridi pravočasno!
tomorrow come.IMP.(2) on.time
'Tomorrow come on time.'

b. Jutri naj pride pravočasno!
tomorrow LET come.3 on.time
'Tomorrow he/she should come on time.'

Interestingly, this use of *'naj'* is only possible in matrix contexts. The construction in (56a) can only be interpreted as involving an embedded directive clause. Recall that (54a) does not show a generalized SOb effect, but (56b) does, because it is a directive.

(56) a. Rekli so, da naj vam predstavi-mo naš novi izdelek.
said.PL.M AUX.3PL that LET 2PL.DAT present-1PL our new product.ACC
'They said they we #will/should introduce you to our new product.'

b. *Rekli smo$_i$, da naj vam predstavi-mo$_i$ naš novi izdelek.
said.PL.M AUX.1PL that LET 2PL.DAT present-1PL our new product.ACC
int.: 'We said we should introduce you to our new product.'

Another example of the *'naj'* modal particle appearing outside directive constructions is given in (57). In this case *'naj'*, with the addition of the conditional particle *'bi'* (roughly 'would'), gives the meaning of an epistemic possibility modal.

(57) Kupil je ta avto, ker naj **bi** imel boljšo porabo.
bought.M AUX.3 this.M car.ACC because LET would have.M better.F mileage
'He bought this car, because its supposed to have better mileage.'

I treat all these functions of *'naj'* as realizations of different 'flavors' of Mood^0, what is crucial is only that when Mood^0 is OP$_{Dir}$ the generalized SOb is observed.

Recall that in the generalized SOb analysis OP$_{Dir}$ was stipulated to serve as a potential binder for Condition B and to carry the referential information of the director — the speaker in matrix directives, and the matrix subject in embedded ones. I elaborate on this below, by proposing that it is not the OP$_{Dir}$ itself that is a potential binder, that role falls to a perspectival *PRO* in the specifier of MoodP. I then proceed to provide a semantics for OP$_{Dir}$ which derives the need for a *PRO* in that position and has interesting further consequences for the interpretation of directive clauses.

4 The semantics of OP$_{dir}$ and 'perspectival moods'

In her work on Romance subjunctives, Kempchinsky (1986, 2009) suggested subjunctives and imperatives both involve a (quasi-)imperative operator: the imperative operator in 'true imperatives' restricts subjects to those with an 'anyone other than the speaker' interpretation, while the quasi-imperative operator in subjunctives (which she actually calls 'embedded imperatives') restricts subjects to those with an 'anyone but the matrix subject' interpretation. We saw that Slovenian corroborates an even stronger version of this view, as both imperatives and (directive) subjunctives can occur in matrix and embedded contexts and both show a generalized SOb effect. I argued that this results from both constructions being underlyingly the same and only differing in their surface realization, and suggested that there is no difference between the operator in imperatives and directive subjunctives. However, I did not yet offer an account of its semantics and how its directive function comes about.

Related to this, Quer (1998, 2001) argues the semantics of subjunctives involves a shift in the *model of evaluation* of the proposition, where truth is relativized to models within a context and to individuals (see also Farkas 1992; Giannakidou 1998). In matrix contexts, the individual anchor is the speaker and the relevant model is the epistemic model of the speaker — the world in which the proposition is assigned a truth-value is the actual world according to the speaker. Similarly, in embedded contexts the individual anchor is the matrix subject. The analysis I introduce below is designed to incorporate this intuition, although in a different framework, and derive from it the generalized SOb and the speaker distancing ban (see Section 2.1).

Quer's analysis requires the presence of an element of a complex semantic type akin to a modal verb, which could correspond to our OP$_{Dir}$. Which brings us to an open issue with the current analysis of generalized SOb. Condition B was stipulated to operate between OP$_{Dir}$ and the subject, and OP$_{Dir}$ has to be semantically bound by the speaker in matrix contexts and the matrix subject in embedded contexts (cf. Kempchinsky 1986). The modal operator of a complex semantic type must be bound like a type e element and problematically also count as type e for Condition B.[18]

I propose alternatively, that it is actually not the OP$_{Dir}$ which is semantically bound, but a *"perspectival PRO"* in the specifier of MoodP headed by OP$_{Dir}$. This perspectival *PRO* is bound analogously to the argumental *PRO* in obligatory control constructions (see Chierchia 1987; Pearson 2012, 2015) and is required in imperatives and (directive) subjunctives due to semantic requirements of OP$_{Dir}$, which I assume is a special kind of modal operator. In this I follow the performative modal analysis of imperatives of Schwager (2006); Kaufmann (2012), but propose a further refinement: the difference between regular modal constructions used as directive speech acts and those with an OP$_{Dir}$ is that only the latter involve the perspectival *PRO* as a grammaticalized representation of the source of the directive speech act. This captures both Quer's intuition about the subjunctive, as well as Kempchinsky's idea that the 'core' subjunctives, i.e. those that show SOb effects, are essentially imperatives.

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[18] One could assume alternatively, like Kempchinsky (2009), that the operator only restricts the interpretation of the subject. But even in this refinement of her original proposal, Kempchinsky requires semantic binding between the matrix subject and the operator, and thus the issue of the operator's type carries over.

The semantics for imperatives I adopt in this paper is not the only one on the market. There has been a number of influential alternative proposals recently; see among many others Portner (2007), Condoravdi and Lauer (2012), and von Fintel and Iatridou (to appear), and it may very well be that they can be adapted to capture the relevant facts just as well. What I show in this section is only that the facts can be straightforwardly explained with minor modifications of Kaufmann's approach.

4.1 Performative modals

The approach to the semantics of imperatives that I use as a base for my analysis is the so called *performative modal* approach (see also Lewis 1979b) as developed by Schwager (2006); Kaufmann (2012). This particular approach to imperatives is built around the observation that modal verb constructions can be used performatively just like imperatives. A modal construction can either have a descriptive reading as in the examples in (58), or can be used performatively as in (59). The modal verb construction in (59a) invokes an obligation for the addressee to call the speaker, while the one in (59b) is a permission for the addressee to come at 11 (cf. also Ninan 2005).

(58) a. You should do the shopping today (as far as I know).
      b. Peter may come tomorrow. (The hostess said it was no problem.)

(59) a. You must call me!
      b. Okay, you may come at 11. (Are you satisfied now?) (Kaufmann 2012: 58)

Furthermore, both performative modals (60a) and imperatives (60b) disallow the speaker to express disbelief that the action described by the verb will take place.

(60) a. Sam must go to confession (#but he is not going to).
      b. Go to confession (#but I know you won't go).   (Kaufmann 2012: 58)

Kaufmann concludes that at the level of at-issue content, imperatives are equivalent to modal declaratives. The differences between them arise due to specific presuppositions triggered only with imperatives. This view is summarized in (61).

(61) **Imperative Semantics.** *An imperative of the form* '(SUBJECT)ϕ!' *denotes the same object as* 'SUBJECT/you should ϕ' *with performative* should.

(Kaufmann 2012: 60)

The consequence of this is that modal verbs only give rise to performative effects when they occur in contexts where the right conditions for performative use arise. Conversely, imperatives — though denoting the same object as their modal declarative equivalents — have an additional presuppositional meaning component restricting their felicitous use to contexts where their modal declarative equivalents can be used performatively. The details regarding the presuppositional component of imperatives are orthogonal to the main topic of this paper, so I do not discuss them in detail here. I focus instead on the semantics of the modal component of directive clauses as a superset of imperatives, and depart from Kaufmann (2012) by arguing that modal declaratives and directive clauses show differences beyond the presuppositional component, and that precisely those differences give rise to generalized SOb in the latter.

4.2 The *director* as a grammaticalized point of view

Under the performative modal analysis of imperatives of Kaufmann (2012), a modal operator (OP_{Imp}), equivalent in its at-issue content to a necessity modal, is present in every imperative clause. Comparing this to the structure proposed for directive clauses in Section 3.1, OP_{Dir} is a natural choice as the stand in for Kaufmann's OP_{Imp} within the current approach. Taking this as a starting point, I refine the structure of directive clauses assumed thus far to the one given in (62); to be elaborated on below.

(62)

$$CP_{<e,<s,t>>}$$

$$C_{\lambda x_2 . \lambda w_3} \quad MoodP_t$$

$$w_3 \quad Mood'_{<s,t>}$$

$$PRO_2 \quad Mood'_{<e,<s,t>>}$$

$$OP_{Dir <st,<e,st>>} \quad vP_{<s,t>}$$

$$\lambda w_4 \quad v'_t$$

$$w_4 \quad v'_{<s,t>}$$

$$x_3 \quad P_{<e,<s,t>>}$$
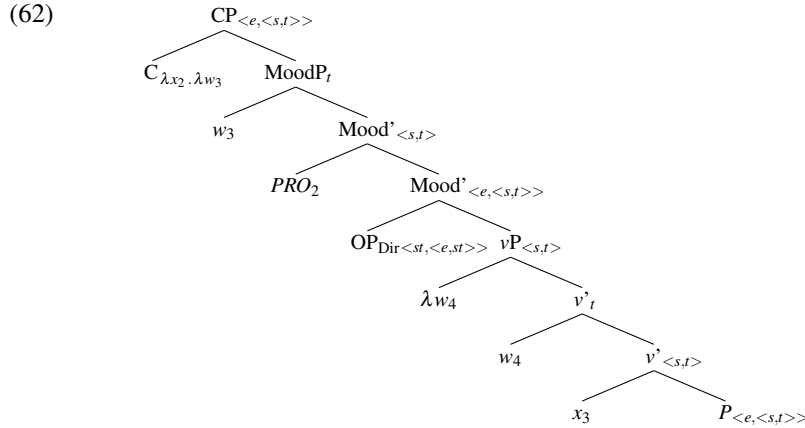
The key change from the earlier structure is a *PRO* in SpecMoodP, variable bound through lambda abstraction analogously to *PRO* in control infinitives (Chierchia 1987; Pearson 2012, 2015).[19] I call this the *perspectival PRO*, in contrast to 'argumental' *PRO* of control infinitives. The need for a silent perspectival pronoun or syntactically grammaticalized perspective has been invoked before for independent reasons (Bianchi 2001, 2003; Speas and Tenny 2003; Speas 2004; Baker 2008; Sundaresan 2014), typically in relation to logophoric pronouns or long distance anaphora. Here I argue explicitly for the syntactic representation of perspective as a bound *PRO*, and develop a semantics for OP_{Dir} which explains the need for the perspectival *PRO* in directive clauses. I propose that OP_{Dir} is of type $< st, < e, st >>$, which makes it first combine with a proposition (vP; type $< s, t >$)[20] and subsequently *PRO*, of type e.

I follow here the standard assumption that modal verbs are quantifiers over possible worlds, and that they combine with propositions. More importantly, I follow Kratzer (1981) (see also Kratzer 1991, 2012) in assuming that the meaning of modal elements depends on *conversational backgrounds* — functions from worlds to sets of

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[19] I follow Pearson (2012, 2015) in assuming that all clauses (embedded and matrix) are properties ($< e, < s, t >>$), as opposed to propositions ($< s, t >$). To the best of my knowledge, this does not change any predictions regarding my core proposal. I chose to adopt this view, as it allows making use of the attitudinal operators proposed by Pearson (2012) in my analysis of matrix directive clauses in Section 4.4 without drastic alterations. I could have just as easily made all relevant clauses propositions and change the denotation of the attitudinal operators instead. Of course, I do not exclude the possibility that the two options make different predictions regarding phenomena not discussed in this paper. That said, for the sake of a simpler exposition, matrix-level CPs are presented as propositions in derivations before Section 4.4.

[20] I ignore tense throughout, as it is orthogonal to the issue of SOb. Below I will note if tense is part of an analysis I adopt, and provide modified versions of the relevant denotations and derivations.

propositions ($<s,<st,t>>$, henceforth *cb*). The first of two conversational backgrounds is the *modal base*, which yields a (necessarily consistent) body of information, while the second is the *ordering source*, which induces an ordering amongst the worlds that comply with the modal base (and is possibly inconsistent). In practice, the modal base specifies the contextually salient relevant facts, while the ordering source specifies the criteria for comparing those facts. Let us now see how this works.

Like Kaufmann (2012), I deal only with finite ordering sources, so I employ simplified denotations for modals drawing on the *Limit Assumption* of Lewis (1973) (cf. Kaufmann and Kaufmann 2015: 283, for a formulation in a Kratzer-style framework). I assume the semantics for the necessity modal *'must'* in (63). Necessity is encoded as universal quantification over possible worlds, where $O(f,g,w)$ relativizes the set of worlds, namely the ones that are compatible with f and optimal with respect to g.

(63) $[\![must]\!]^c = \lambda f . \lambda g . \lambda p . \lambda w . (\forall v \in O(w,f,g))[p(v)]$

    a. f is the modal base (the body of information)

    b. g is the ordering source (criteria for comparing worlds compliant with f)

    c. $O(w,f,g)$ is defined as the set of worlds conforming to f at w (i.e., in $\bigcap f(w)$) that are the best according to g at w.

Switching to how the conversational backgrounds come to combine with the modal verb in the syntax, the most straightforward assumption is that the modal base and ordering source are introduced essentially as covert pronouns. Like referential pronouns, which are free variables, the value of a conversational background must also be supplied from the utterance context. *'Must'* in (63) is type $<cb,<cb,<st,st>>>$, which means that it requires two conversational backgrounds. As illustrated in (64) using a simplified entry for *'must'*, the modal verb has to first combine with a modal base m, then with an ordering source l, and only then with the proposition p expressed by *v*P, which is a complement in the phrase projected by the modal.

(64)
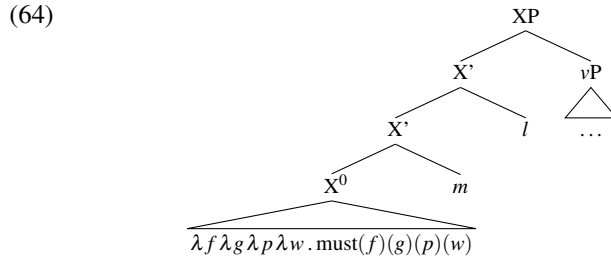
If we compare *'must'* with Kaufmann's (2012) entry for OP$_{\text{Imp}}$ in (65),[21] we see that they are identical. We then expect it to have a derivation parallel to (64), and similar (if not identical) syntactic properties. But as we saw above, this is not the case.

(65) $[\![\text{OP}_{\text{Imp}}]\!]^c = \lambda f . \lambda g . \lambda p . \lambda w . (\forall w' \in O(f,g,w))[p(w')]$ (Kaufmann 2012: 86)

While in principle one could view the difference between simple modal verb constructions and directive clauses as purely syntactic, I propose that the difference is in

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[21] This is her preliminary version of OP$_{\text{Imp}}$. Her final version also takes into account temporal variables. And noted above, I ignore issues of tense in relation to the semantics of imperatives in this paper.

fact both syntactic and semantic, where the semantics of OP_{Dir} plays a crucial role in regulating the presence or absence of the perspectival *PRO* in the syntax.

The core of the proposal is that OP_{Dir} has a semantics distinct from regular necessity modals: it has to combine with what I term *centered conversational backgrounds*: conversational backgrounds further restricted in relation to an individual of type *e*. Such conversational backgrounds are then functions from individuals to conversational backgrounds ($< e, cb >$). I propose (66) as the entry for OP_{Dir}.

(66) $[\![OP_{Dir}]\!]^c = \lambda f . \lambda g . \lambda p . \lambda x . \lambda w . (\forall w' \in O(f_x, g_x, w))[p(w')]$

    a. f_x is the body of information available to *x* in *w*

    b. g_x are criteria to decide between worlds compliant with f_x endorsed by *x*

Consider how (66) specifies the order in which OP_{Dir} combines with the conversational backgrounds and an individual. As illustrated in (67), OP_{Dir} must first combine with the conversational backgrounds *m*, *l*, after that the relevant propositional content (*v*P), and finally it must combine with an individual — the perspectival *PRO*.

(67)
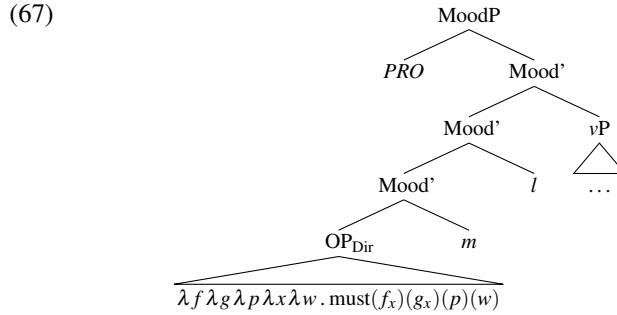
OP_{Dir} differs from standard necessity modals in that it takes an individual argument. Recall also that I suggested above the perspectival *PRO* is bound by a lambda abstractor in C. This should be analogous to how argumental *PRO* is bound in Chierchia's (1987) or Pearson's (2012, 2015) approach to control. Using the simplified illustrative example from Pearson (2015) in (68,69), we see how the semantics of the control sentence in (68) is derived in an approach where control constructions involve self-ascription of a property (see also Lewis 1979a; Chierchia 1987; and footnote 19).

(68)   John expects to become rich and famous.

(69) $[\![expect]\!]^{c,g} = \lambda P_{<e,<s,t>>} \lambda x \lambda w . \forall < w', y > [< w', y, > \in \text{Expect}_{x,w} \rightarrow P(y)(w')]$

    a. $[_{CP1} \lambda w_1 [w_1 \text{ John expects } [_{CP2} \lambda x_2 \lambda w_3 [_{TP} w_3 \text{ PRO}_2 \text{ to become rich and famous}]]]]$

    b. $[\![CP2]\!]^{c,g} = \lambda x \lambda w . x$ is rich and famous in *w*

    c. $[\![CP1]\!]^{c,g} = \lambda w . \forall < w', y > [< w', y > \in \text{Expect}_{John,w} \rightarrow y$ becomes rich and famous in $w']$ (Pearson 2015: 7)

The attitude verb *'expect'* takes as its first argument what is essentially a set of *doxastic alternatives* (70) (Lewis 1979a; Chierchia 1987), which are centered worlds,

that is world-individual pairs. *'Expect'* is a universal quantifier over a special kind of doxastic alternative that concerns the attitude holder's candidates for future realities.

(70) **Doxastic alternatives**:
$\text{Dox}_{x,w} = \{<w',y>:$ it is compatible with what x believes in w for x to be y in $w'\}$

In the derivation itself, we see that as a consequence the attitude holder (matrix subject) self-identifies as the individual who has the property of "being rich and famous" (69b) in some future reality (69c); we will see in Section 4.3 below, how this relates to *de se* attitudes. For now, the self-identification will be treated as equivalent to co-reference for expository purposes. The result we get is that the subject of the attitude verb (*John*) is also the subject of the infinitive (*PRO*). This is possible because of the lambda abstractors introduced in the left periphery in the C of CP2 (69a); the abstractor over individuals — λx_2 and the subject of CP2 — PRO_2 must be co-indexed in obligatory control constructions, which results in *PRO* being semantically bound by the matrix subject. I have nothing new to add on how the co-indexation comes about, and I refer the reader to the discussion in Chierchia (1987); Pearson (2012, 2015), I only note that this same co-indexation relation must be present also with constructions involving a perspectival *PRO*, which I discuss below.[22]

Consider now the embedded imperative in (71) (the "English" paraphrase is meant to correspond to a Slovenian embedded imperative) and its derivation in (72), where I follow the assumption from above that attitude verbs combine with properties.

(71) *'John said that* LEAVE*!'*

(72) $[\![\text{say}]\!]^{c,g} = \lambda P_{<e,<s,t>>}\lambda x\lambda w \, . \, \forall <w',y> [<w',y,> \in \text{Say}_{x,w} \to P(y)(w')]$

$\text{Say}_{x,w} = \{<w',y>:$ it is compatible with what x says in w for x to be y in $w\}$

  a. $[_{CP1} \, \lambda w_1 \, [\, w_1 \, \text{John says} \, [_{CP2} \, \lambda x_2 \, \lambda w_3 \, [\, w_3 \, PRO_2 \, OP_{Dir} \, [\, \lambda w_4 \, w_4 \, 2P$ leaves $]]]]]$

  b. $[\![\text{CP2}]\!]^{c,g} = \lambda x\lambda w \, . \, (\forall w' \in O(f_x,g_x,w)) [\, addr(c) \text{ leaves in } w']$

  c. $[\![\text{CP1}]\!]^{c,g} = \lambda w \, . \, \forall <w',y> [<w',y> \in \text{Say}_{John,w} \to (\forall w'' \in O(f_y,g_y,w)) [\, addr(c) \text{ leaves in } w'']]$

The derivation in (72) is almost parallel to the derivation of the canonical control construction in (69), the difference being that *PRO* and the embedded subject are not the same individual, cf. (72a). The subject of the embedded clause is a free variable with 2P features ($addr(c)$ = addressee in context c), while the embedded *PRO* is now the individual that the matrix subject (*John*) self-identifies with. As suggested above, OP_{Dir} combines with the proposition expressed by *v*P and yields a proposition, which combines with the perspectival *PRO* and a world variable. The lambda abstractors in C then make the clause a property again, resulting in the CP2 illustrated in (72b). The *PRO* semantically binds into the f_x and g_x of OP_{Dir}. The lambda abstractors

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[22] A further complication arises with object control, where *PRO* is bound by the matrix object. See Pearson (2015) for discussion of object control in her framework. To my knowledge, the same configuration does not seem to arise with perspectival *PRO*, which always seems to pattern with subject control.

introduced in C then ensure that the subject of the attitude verb (*John*) self-identifies with *PRO* and consequently also the bound variable components of f_x and g_x.[23]

Under this analysis, SOb is essentially parallel to binding restrictions in control infinitives. An object pronoun cannot be coreferential with the matrix subject in control infinitives (73a) (cf. the object anaphor in (73b)). Similarly, the subject *pro* of an embedded directive clause cannot be coreferential with the matrix subject (74a). In both cases *PRO* acts as a proxy for the matrix subject inside the binding domain.[24]

(73) a. *He$_i$ promised [*PRO$_i$* to shave him$_i$].

b. He$_i$ promised [*PRO$_i$* to shave himself$_i$].

(74) a. *He$_i$ said [that *PRO$_i$* OP$_{f_i,g_i}$ [pro$_i$ leave]].

b. He$_i$ said [that *PRO$_i$* OP$_{f_i,g_i}$ [pro$_k$ leave]].

This analysis of SOb can be straightforwardly extended also to matrix environments in the spirit of the generalized SOb proposed in Section 3. Only now, no stipulation regarding the distinct behavior of OP$_{Dir}$ in matrix and embedded environments is needed. Following Pearson (2012), matrix clauses can also be viewed as properties, in which case an attitudinal operator serves the same function an attitude verb does in embedded environments. The full derivation of matrix directive clauses will be given below in Section 4.4. For now it suffices to say that the speaker must self-identify with perspectival *PRO* in (non-interrogative) directive clauses, which results in the exclusive 1P subject ban. A rough sketch of how the ban arises is given in (75).

(75) a. *[SPEAKER$_i$ [*PRO$_i$* OP$_{f_i,g_i}$ [pro$_i$ leave$_{1P(=i)}$]]]   (int. 'I must leave.')

b. [SPEAKER$_i$ [*PRO$_i$* OP$_{f_i,g_i}$ [pro$_k$ leave$_{2P(=k)}$]]]   ('Leave!')

What is missing is an explanation for how either matrix directive or embedded directive constructions gain their speech act status. This will also be discussed in Section 4.4, where I propose that this can also be derived through the use of attitudinal operators. Pending that, I stick to the at-issue semantic content of directive clauses.

The generalized SOb is not the only restriction that this analysis derives. Another restriction found in directive clauses which was discussed briefly in Section 2.1 is the so called ban on speaker distancing. The Slovenian examples showing the ban with matrix (9a) and embedded imperatives (9b) are repeated here as (76a) and (76b) respectively. In matrix clauses the ban manifests itself as the impossibility for the speaker of the directive clause to distance himself/herself from the directive speech

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[23] For attitude verbs that, unlike *'say'*, have modal content themselves (like *'order'*), a doubling of modality arises (V$_{att}$ + OP$_{Dir}$) (cf. Portner 1997). One way around this is to follow recent work by Angelika Kratzer, where she suggests that embedding attitude verbs only describe events of different types, while the modal component is located entirely in the left periphery of the embedded clause (see, for instance, Kratzer 2013). This kind of account is needed independently to explain other instances of doubled modality like: *'Ralph advised that Ortcutt should turn himself in'*. An analysis of embedded directive clauses in these terms strikes me as promising, given that in Slovenian any embedding verb that can be somehow construed as a verb of communication can be used to form an embedded directive clause construction.

[24] This raises the question of why there is no equivalent of (73b) with directive clauses. There are at least two possible explanations. One is the *anaphor agreement effect* (Rizzi 1990; Woolford 1999): the absence of anaphora in contexts that trigger agreement on the verb — in the case of Slovenian, the subject position. Another reason could be simply that Slovenian does not have nominative anaphora and reciprocals.

act (76a), which usually means continuing with a phrase like *"But I don't want you to do that."*. In embedded directive clauses, the ban on distancing applies to the matrix subject, as reporting the imperative is infelicitous if the original speaker's act of distancing is also reported (76b). Crucially, the speaker of the embedded imperative construction may freely distance himself/herself from the directing act (76c).

(76) a. #Pojdi   stran! Ampak noče-m,   da gre-š.
        go.IMP.(2) away but   not.want-1 that go-2
        'Go away! But I don't want you to go.'

    b. #Rekel je$_i$,   da pojdi   stran in da noče$_i$,   da gre-š.
        said.M AUX.3 that go.IMP.(2) away and that not.want.3 that go-2
        'He said that you should go away and that he doesn't want you to go.'

    c. Rekel je,   da pojdi   stran ampak noče-m,   da gre-š.
        said.M AUX.3 that go.IMP.(2) away but   not.want-1 that go-2
        'He said that you should go away but I don't want you to go.'

The distancing restriction and the matrix/embedded asymmetry, can be straightforwardly accounted for by the semantics I proposed for OP$_{Dir}$, repeated here in (77). Note that crucially the ordering source refers to "the criteria [...] <u>endorsed</u> by x".

(77) $[\![OP_{Dir}]\!]^c = \lambda f . \lambda g . \lambda p . \lambda x . \lambda w . (\forall w' \in O(f_x, g_x, w))[p(w')]$

    a. f_x is the body of information available to x

    b. g_x are criteria to decide between worlds compliant with f_x endorsed by x

The x variable in g_x is what the speaker self-identifies with in matrix contexts, and what the matrix subject self-identifies with in embedded contexts. That means the criteria that restrict the worlds that the modal quantifies over are always publicly endorsed by the director (also *source*), which is encoded within a directive clause by the perspectival *PRO*. The infelicity results from the directive speech act being a public endorsement of an ordering source by the director, and distancing is an attempt by the director to negate the endorsement of that same ordering source.

However, the ban on distancing is not limited only to directive clauses as defined in this paper. It arises also when modal verb constructions are used performatively (see Kaufmann 2012; Condoravdi and Lauer 2012). Consider the examples in (78): The imperative (78a) does not allow distancing despite the fact that "the recipe" is primed as a salient body of information. The modal construction (78b) bans distancing only under a performative modal reading. But this is not even an option with (78c), where the subject is not a potential actor for the act described by the verb.[25],[26]

(78)   a. According to the recipe, put in the peppers now.
          #But I don't think that you should do that.

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[25] Despite not being a part of (North American) colloquial English, constructions with deontic *'must'* seem to yield the same asymmetry. This seems to go against the claim made by Ninan (2005) that deontic *'must'* is always interpreted preformatively in English when occurring in a matrix clause.

[26] It is possible that at least some speakers can also construe (78c) as performative, provided that *'According to the recipe'* is dropped. This needs to be investigated further, but it goes beyond the scope of this paper, and it does not affect the general relevance of the contrast between (78a) and (78c).

    b. According to the recipe, you have to put in the peppers now.
(#)But I don't think that you should do that.

    c. According to the recipe, the peppers have to be put in now.
But I don't think that you should do that.

I take this to mean that simple modals *can* express speaker endorsement of an ordering source under the right conditions, while directive operators *must* express it. This parallels the pronoun vs. anaphor split: pronouns *can* be bound under the right conditions, but anaphora *must* be bound. It is conceivable that the endorsement component is a prerequisite for performativity, but I leave this open for future exploration.

Let us see the contrast again with Slovenian examples, focusing on the embedding asymmetry with a similar scenario. In (79,80), A is chopping onions and asks B: *'How should the onion be chopped?'* B may reply with (79a), a matrix directive clause, or (80a), a construction with an embedded directive clause. (79a) cannot be felicitously followed up with a distancing act, as seen in (79b), but (80a) can, as seen in (80b).

(79) a. Čebula naj bo   drobno sesekljan-a ...
          onion LET AUX.FUT.3 finely chopped-F
          'The onion should be finely chopped ...'

      b.#... ampak noče-m,   da je   drobno sesekljan-a.
           but   not.want-1 that AUX.3 finely chopped-F
          '... but I don't want it to be finely chopped.'

(80) a. Recept pravi, da naj bo   čebula drobno sesekljan-a ...
          recipe say.3 that LET AUX.FUT.3 onion finely chopped-F
          'The recipe says that the onion should be finely chopped ...'

      b. ... ampak noče-m,   da je   drobno sesekljan-a.
           but   not.want-1 that AUX.3 finely chopped-F
          '... but I don't want it to be finely chopped.'

The ban on distancing in (79b) shows the speaker only 'endorses' the recipe or any other set of instructions as a relevant body of information.[27] However, the absence of the ban in (80b) reveals that the recipe in fact the source/director. This even more clearly shows that although embedded directive clauses can be used as speech acts, even an inanimate abstract entity such as a recipe can be construed as the source of the directive speech act, even though pragmatically this does not make any sense. Under the current approach, this fact follows from the semantics of OP_{Dir} and how it relates to perspectival *PRO*.[28] It is unclear how the distancing ban could be captured with a purely pragmatic account, due to the existence of such examples.

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[27] Unfortunately, examples parallel to the English ones with adverbials in (78) are marginal in Slovenian with matrix directive clauses for unknown reasons. To the extent that marginal examples can be compared to the grammatical (79a) and (80a) in terms of the distancing ban, they seem to pattern with (79a) and do not allow distancing, as predicted. I leave open why the examples are only marginally acceptable.

[28] Although tense was not discussed, it plays a major role in imperative/directive clauses (Kaufmann 2012: §3.2.2) and control infinitives (Pearson 2015). In relation to perspectival *PRO*, it appears that the matrix subject must self-identify as *PRO* with respect to the time of the original utterance. The equivalent of: *'I said that* LEAVE.IMP.2P*, but now I don't want you to go'* is fine in Slovenian, indicating that it is the *original context speaker* that self-identifies with the perspectival *PRO*, not the *actual context speaker*, despite them being the same individual. I suspect this is related to similar temporal constraints in (partial) control infinitives discussed by Pearson (2015), but I leave it for "future me" to work out the details.

4.3 The perspectival *PRO* is inherently *de se*

So far we set aside the fact that argumental *PRO* in control constructions must always be interpreted *de se*. Control constructions involving attitude predicates have long been argued to obligatorily express *de se* attitudes (Morgan 1970; Chierchia 1987). In this paper I follow Pearson's (2015) definition of *de se* attitudes:

(81)   An attitude *de se* is an attitude (a belief, desire, expectation, etc.) that has the following properties:
    (i)   *Aboutness condition:* the attitude is about the attitude holder *and*
    (ii) *Awareness condition:* the attitude holder is aware that the attitude is about herself   (Pearson 2015: 4)

In practice, the obligatory *de se* nature of *PRO* can be identified by using control constructions in contexts where the attitude holder is not aware that the attitude is about himself. One such example, taken from Pearson (2015), is provided in (82).

(82)   [Context:] *John is an amnesiac. He reads a linguistics article that he himself wrote, although he has forgotten this fact. Impressed, he remarks, 'The author of this paper will become rich and famous. Unfortunately, I won't.'*
    a. #John expects [*PRO* to become rich and famous].
    b. John expects [that he will become rich and famous].   (Pearson 2015: 5)

In (82), only (82b) has a possible reading where it is true with the supplied context, while (82a) can only be false. This follows from the self-identification which results from the attitude verb combining with a set of doxastic alternatives (see discussion in Section 4.2). This also means that if the proposed analysis of directive clauses is correct, we predict perspectival *PRO* to be inherently *de se*. As far as I can tell, this is borne out. Consider the (long and complicated) scenario in (83) and the two possible ways to describe what happened provided in (83a) and (83b).

(83)   [Context:] *Daša and Maša are twins. They are also spies. On alternating days they relay orders to another spy, Boris. On Monday, Wednesday, Friday, and Sunday, Daša meets with Boris and either says nothing or: 'The spotted cuckoo bird is flying backwards.' To which Boris must reply: 'It's a cold day for pontooning.' By saying the phrase Daša instructs Boris to find to a new hideout. On Tuesday, Thursday, and Saturday, Maša does the same thing as a distraction for enemy spies. She doesn't give any real instructions and only chooses if she will say the phrase or not at random. However, Boris cannot tell Daša and Maša apart, so he relies on knowing the day of the week to figure out who he's talking to and whether the instructions are real or fake.*
    One Sunday Daša and Maša got drunk and forgot what day it was. Because of this Maša met with Boris instead of Daša and decided to say: 'The spotted cuckoo bird is flying backwards.' Boris replied and left to look for a new hideout. Coincidentally, that was what Daša was supposed to tell him to do.

    a. #Maša je   Boris-u   sporočil-a, da   naj poišče novo skrivališče.
       Maša AUX.3 Boris-DAT informed-F that LET find.3   new hideout.ACC
       'Masha told Boris to find a new hideout.'

> b. Maša je   Boris-u   sporočil-a, da   mora   poiskati novo skrivališče.
>   Maša AUX.3 Boris-DAT informed-F that must.3 find.INF new hideout.ACC
>   'Masha told Boris that he must find a new hideout.'

Although the judgment is very delicate, and the context needs to be very compli-
cated in order to even get the contrast, the construction with the embedded directive
subjunctive in (83a) cannot be used to accurately describe the events that transpired
in (83), while the modal verb construction in (83b) can. This seems to indicate that
the perspectival *PRO* analysis of directive clauses is correct. Only the modal con-
struction where the conversational backgrounds are not tied to an obligatorily *de se*
perspectival *PRO* can be used with the context, while the directive clause cannot.

4.4 Matrix directives and the interrogative perspective shift

I briefly mentioned in Section 2.3 that the exclusive 1P subject ban (XSb), illustrated
here again in (84a), is lifted in interrogative contexts, as (84b,84c) show. I will show
below that this asymmetry actually follows from the current analysis in conjunction
with the matrix-level attitudinal operators proposed independently by Pearson (2012).

(84)   a. *Naj si   pomaga-m sam!   [✗ SU = 1P.SG]
           LET REFL.DAT help-1   alone.M
           int.: 'I should help myself on my own.'

       b. Naj si   pomaga-m sam?   [✓ SU = 1P.SG]
          LET REFL.DAT help-1   alone.M
          'Should I help myself on my own?'

       c. Kaj   naj naredi-m?   [✓ SU = 1P.SG]
          what LET make-1
          'What should I do?'

I suggested earlier in this section that the speaker of the directive clause self-identifies
with perspectival *PRO* by virtue of an attitudinal operator. This operator is Pearson's
(2012) ASSERT (85), which occurs in matrix declarative clauses. Crucially, Pearson
also proposes that a different operator occurs in matrix questions: QUEST (86).

(85) $[\![\text{ASSERT}]\!]^{c,g} = \lambda P_{<e,<i,<s,t>>>} : \forall < w',t',y > \in \text{Dox}_{speaker(c),world(c),time(c)}$
       $\rightarrow P(x)(t')(w') \,.\, P$ (Pearson 2012: 128)

(86) $[\![\text{QUEST}]\!]^{c,g} = \lambda Q_{<<e,<i,<s,t>>>,t>} : \forall P \in Q \rightarrow \exists < w,t,x > \in \text{Dox}_{spkr(c),w(c),t(c)}$
       $: \forall < w',t',y > \in \text{Dox}_{addr(c),w,t} \rightarrow P(y)(t')(w') \,.\, Q$ (Pearson 2012: 168)

ASSERT is a covert operator that takes a root sentence meaning (a property) as its
argument and returns a property only if the property is true in the speaker's belief
worlds. This is due to the operator's presuppositional component which also estab-
lishes ASSERT as a quantifier over doxastic alternatives of the speaker. What makes
ASSERT different from an attitude predicate is that the latter may introduce a different
person feature on the associated abstractor depending on the attitude holder/subject,
while ASSERT is restricted to introducing 1P on its abstractor (Pearson 2012: 151).

I adopt a modified version of ASSERT, renamed COMMIT (87) to avoid any confusion when non-assertive constructions like directive clauses. The operator is in fact underspecified, and can be part of all sorts of speech acts executed with propositions. I postpone the speech act aspect of directive clauses and operators until the end of the section. The derivation of a matrix imperative (88) is given in (88a) through (88c).

(87) $[\![\text{COMMIT}]\!]^{c,g} = \lambda P_{<e,<s,t>>} : \forall <w',y> [<w',y> \in \text{Dox}_{speaker(c),world(c)} \to P(y)(w')].P$

$\text{Dox}_{x,w} = \{<w',y>: \text{it is compatible with what } x \text{ believes in } w \text{ to be } x \text{ in } w'\}$

(88) Leave!

    a. [COMMIT [$_{CP}$ λx_2 λw_3 [w_3 PRO$_2$ OP$_{\text{Dir}}$ [λw_4 w_4 2P leaves]]]]

    b. $[\![\text{CP}]\!]^{c,g} = \lambda x \lambda w . (\forall w' \in O(f_x,g_x,w))[\, addr(c) \text{ leaves in } w'\,]$

    c. $[\![\,(88a)\,]\!]^{c,g}$ is defined iff $\forall <w',x> [<w',x> \in \text{Dox}_{spkr(c),w(c)} \to (\forall w'' \in O(f_x,g_x,w))[\, addr(c) \text{ leaves in } w''\,]]$

COMMIT is an identity function with a definedness condition, so the only consequence of it combining with a directive clause CP is that the meaning of CP can only be defined if the speaker self-identifies with *PRO*. That is, the presuppositional component of COMMIT restricts the set of doxastic alternatives $<w',x>$ to those compatible with the speaker's belief at w to be x in w'. Within the current approach this means that perspectival *PRO* is coreferential with the speaker, and induces a Condition B violation with the subject if the subject is exclusive 1P, but also that the speaker — through perspectival *PRO* — binds the variable in the centered conversational backgrounds f_x and g_x, which makes the distancing ban apply to the speaker.

I turn now to questions and the QUEST operator, which I renamed ASK. Its denotation is provided in (89). ASK takes as a complement an interrogative sentence Q, which denotes a set of properties, type $<<e,<s,t>>,t>$, and introduces the presupposition that for every member of this set P it is compatible with the speaker's beliefs that P is true at each of the addressee's doxastic alternatives. The derivation of a directive clause under ASK is given in (90). I assume the set of properties expressed by a question comes about the WH operator, which takes the property expressed by a clause, returning a set of properties,[29] as shown in (90b). In the sample derivation for a polar question, the resulting set of properties contains a property where P, the non-modal content under the scope of OP$_{\text{Dir}}$, is true, and one where P is not true.

(89) $[\![\text{ASK}]\!]^{c,g} = \lambda Q_{<<e,<s,t>>,t>} : \forall P [P \in Q \to \exists <w,x> [<w,x> \in \text{Dox}_{speaker(c),world(c)} \land \forall <w',y> [<w',y> \in \text{Dox}_{addr(c),w} \to P(y)(w')]]].Q$

(90) *I* LEAVE.DIR*?*

    a. [ASK [$_{CP}$ WH [λx_2 λw_3 [w_3 PRO$_2$ OP$_{\text{Dir}}$ [λw_4 w_4 1P leaves]]]]]

    b. $[\![\text{CP}]\!]^{c,g} = \{ \lambda x . \lambda w . (\forall w' \in O(f_x,g_x,w))[\, speaker(c) \text{ leaves in } w'\,],$
       $\lambda x . \lambda w . (\forall w' \in O(f_x,g_x,w))[\neg speaker(c) \text{ leaves in } w'\,] \}$

    c. $[\![\,(90a)\,]\!]^{c,g}$ is defined iff $\forall P [P \in Q \to \exists <w,x> [<w,x> \in \text{Dox}_{spkr(c),w(c)} \land \forall <w',y> [<w',y> \in \text{Dox}_{addr(c),w} \to P(y)(w')]]]$

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[29] The WH operator essentially yields what in the current system amounts to Karttunen's (1977) *proto-questions* (in his case sets of propositions), which then become either polar or constituent questions.

The key difference, compared to (88), is that now the addressee's doxastic alternatives are relevant for *PRO*. The denotation of *PRO* must be compatible with what the speaker believes the addressee self-identifies as. This is because, as opposed to COMMIT, the ASK operator introduces 2P on its abstractor. This explains why the XSb is lifted in questions, and further predicts that interrogatives should instead give rise to a 2P subject ban. I suggest that this is in fact borne out as the ban on imperative questions, as illustrated by the contrast between the two utterances in (91).

(91)   a. Pomaga-j   si   sam!   [✓ SU = 2P.SG]
           help-IMP.(2) REFL.DAT alone.M
           'Help yourself on your own!'

       b. *Pomaga-j   si   sam?   [✗ SU = 2P.SG]
           help-IMP.(2) REFL.DAT alone.M
           int.: 'Should you help yourself on your own?'

The standard assumption regarding the ban on imperative questions is that the two clause types are simply incompatible. The analysis above, in contrast, derives the ban as merely a consequence of ASK and the proposed semantics for the directive operator, without requiring stipulated restrictions on combining clause types.[30]

So far, I set aside the issue of how directive clauses gain their speech act status. I suggest that this is also achieved via COMMIT and ASK, which I modify further from Pearson's original proposal, where the modeling of specific speech acts was not her primary concern. In order to move beyond the truth conditional at-issue semantic level, we need to adopt a model for discourse contexts and context change. I take as a starting point the treatment of sentence meaning in *dynamic semantics* theories (Kamp 1981; Heim 1982; Groenendijk and Stokhof 1991). That is, a sentence is a function that maps input discourse contexts into output discourse contexts, or — the meaning of a sentence is its context change potential (CCP). Let us assume, following Gunlogson (2003), the CCP of a sentence is defined in terms of an update to the *commitment set* of an individual discourse participant, the *set of public beliefs* (PB) (see also Lauer 2013). I modify this so that these are sets of properties: PB_S^c and PB_A^c, the public belief sets of the speaker (S) and addressee (A) of context c respectively.

I propose that COMMIT and ASK, in addition to their properties discussed above, also update sets of public beliefs. Specifically, COMMIT adds its prejacent (the property expressed by the clause) to PB_S^c, and ASK adds to PB_S^c the property of wanting the addressee to commit to the truth of one of the properties in the set.[31]

This refinement allows the property expressed by directive clauses to be used performatively. By updating the *PB* component of the discourse context the speaker either publicly commits to the necessity of the prejacent *P* (COMMIT) or to wanting the addressee to commit to the necessity of the prejacent *P* (ASK). The difference between matrix and embedded directives is then in the individual that binds the centered conversational backgrounds of OP$_{\text{Dir}}$ (speaker in matrix clauses; matrix subject

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[30] The new account is also less restrictive, which might be independently needed. Matrix imperatives can in fact occur at least in questions that are not true information seeking questions, like echo questions and rhetorical questions (Kaufmann and Poschmann 2013). This can be explained in the current approach through different kinds of interrogative operators. I leave the exact details to be worked out in future work.

[31] An account roughly along these lines is worked out in more detail in Davis (2011).

in embedded clauses). Strictly speaking, the embedding of imperatives or other directives is not the embedding of a speech act. A directive clause only gets its CCP at the matrix level, whether the directive clause is embedded or itself the matrix clause.

5 Extensions and future directions

In this section I review some possible extensions of the current proposal as well as additional phenomena that can now be subsumed under the generalized SOb approach. They are not meant as fully fledged analyses, but only rough illustrations of how the analysis could be extended and where it needs to be developed further.

5.1 Where else can perspectival *PRO* occur?

I argued above that the perspectival *PRO* is required in all 'true' directive clauses. This assumption derived, among other things, the generalized SOb effect. The same logic can be extended to other constructions where SOb is occurs cross-linguistically.

However, the contexts where SOb is found vary greatly across languages. Nonetheless, Kempchinsky (2009) observes that the core case of SOb is with directive constructions, and that there is an implication relation in terms of the presence of SOb: if a language has SOb with non-directive subjunctives it will also have it with directive subjunctives. This is reminiscent to the control selecting verbs — there are clear core cases, but also a lot of cross-linguistic variation with non-core cases.

Interestingly, SOb is not always restricted to specific clause types. Costantini (2014) identifies a case of SOb with indicative clauses in Italian. In (92), *'sapere'* ('(come to) know'), a semifactive, takes indicative complements. The construction "*implicates that the source of information is indirect.* [... (92) ...] *is infelicitous in a context where the speaker has witnessed Maria's leaving* (Costantini 2014: 13)".

(92) Ho   saputo che Maria é   partita.   Italian
      have known that Maria is.IND left
      'I have come to know that Maria has left.'   (Costantini 2014: 13)

As seen in (93), *'sapere'* gives rise to SOb with an indicative complement. Which, as Costantini points out, is not predicted by standard approaches to SOb.

(93) Pietro$_i$ ha saputo che ha$_{*i,k}$ il mal di testa.
      Pietro has saputo che has.IND.3.SG the headache
      'Pietro has come to know that he has a headache.'   (Costantini 2014: 13)

It is possible that semifactives have this "indirect information" interpretation because they obligatorily select a covert modal operator which, like OP$_{Dir}$, requires the presence of a perspectival *PRO*, and this encodes in the embedded clause that the matrix subject acquired the knowledge of the prejacent. The presence of SOb outside subjunctives or imperatives can then be explained in parallel to the current approach.

5.2 Non obviating subjunctives and directive clauses

So far I set aside a key question regarding perspectival *PRO*: is it subject to any purely syntactic licensing restrictions. Presumably, it is restricted, like its argumental counterpart, only to certain syntactic positions. Recall that the need for perspectival *PRO* results from the semantic type of OP_{Dir}, but in principle nothing blocks OP_{Dir} from being saturated by another type e element. In addition to the SOb yielding structure in (94a), (94b) can also satisfy the type requirements of OP_{Dir} or similar operators.
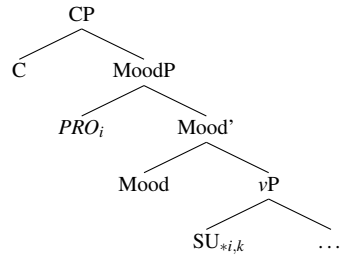
(94) a. Obviating mood: b. 'Raising' to mood:
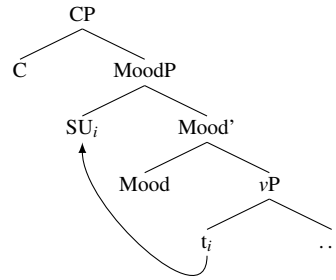
In (94b) the external argument moves to SpecMoodP, predicting that no SOb should then arise. In fact, not all subjunctive paradigms cross-linguistically show SOb effects. In Balkan-type subjunctives (see Quer 2006: 674–676) there is no SOb, and subjunctive complements can behave like control constructions. Such a result would be expected from (94b) if the moved subject was an argumental *PRO*.

This option is reminiscent of approaches to modal verbs in the tradition of Zubizarretta (1982), where modal constructions are treated essentially as raising constructions. Considering that imperatives and subjunctives both involve a special kind of modal operator, this parallelism is not entirely unexpected. However, just like with the original raising approach to modal constructions, it is not entirely clear how such constructions can be interpreted, which is a problem I leave open for the time being.

The split between (94a) and (94b) could potentially also exist within a single language. In fact, the split may exist within the different Korean embedded jussive clauses (Pak et al. 2008). It has been reported that the three different jussive types, marked by three different clause type particles, behave differently in terms of the embedded subject: **(i)** *promissive* — the subject of an embedded promissive must be bound by the matrix subject, **(ii)** *imperative* — the subject of an embedded imperative must be bound by the matrix dative, and **(iii)** *exhortative* — the subject of an embedded exhortative is bound by both the matrix subject and the dative. Within the current approach, both (ii) and (iii) can be viewed as SOb conforming constructions, where the matrix subject binds the embedded perspectival *PRO*, while the embedded subject can only be coreferential with another matrix argument (ii), or a superset of the individuals denoted by *PRO* (iii). With the promissive, however, the subject would have to raise to SpecMoodP to yield a subject control-like configuration. For this reason, and the fact that the subjects appear to behave like shifted indexicals (Pak et al. 2008), Korean seems to be an interesting place to test how the current theory can be extended to other languages with a rich inventory of embedded directive clauses.

5.3 Comparison with conjunct-disjunct marking

Another phenomenon with seems to pattern with generalized SOb is so called *conjunct-disjunct marking*. In Newari, as discussed by Hale (1980) and Zu (2015), conjunct marking (CONJ) is the non-obviative option; it occurs in matrix clauses when the subject is the speaker (1P) and results in ungrammaticality with 2P or 3P subjects (95a). Disjunct marking (DISJ) is the obviative option, banned with 1P subjects (95b).

(95) a. { ji / *cha / *wa } ana wan-ā.   [✓SU = 1P | ✗ SU = 2P/3P]
           I / you / (s)he there go-PAST.CONJ
           'I/*You/*(S)he went there.'

      b. { cha / wa   / *ji } ana wan-a.   [✓SU = 2P/3P | ✗ SU = 1P]
           you / (s)he / I   there go-PAST.DISJ
           'You/(S)he/*I went there.'

In Newari questions, we see the same shift found in Slovenian directive clauses (Section 4.4). Non-obviative CONJ marking is ungrammatical with 1P and 3P subjects (96a), and obviative DISJ marking is ungrammatical with 2P subjects (96b).

(96) a. { cha / *ji / *wa } ana wan-ā   lā? [✓SU = 2P | ✗ SU = 1P/3P]
           you / I / (s)he there go-PAST.CONJ Q
           'Did you/*I/*(s)he went there?'

      b. { ji / wa   / *cha } ana wan-a   lā? [✓SU = 1P/3P | ✗ SU = 2P]
           I / (s)he / you there go-PAST.DISJ Q
           'Did I/(S)he/*you went there?'

Crucially, in embedded clauses, CONJ and DISJ marking pattern with control and SOb respectively. In (97a), *Shyam* is the matrix subject, and the subject of the CONJ embedded clause must be co-referential with it, while in (97b) the subject of the DISJ embedded clause cannot be co-referential with the matrix subject.

(97) a. Shyam-o$_i$ [wa$_{i,*k}$ ana wan-ā   dhakā:] dhāla
           Shyam-ERG (s)he there go-PAST.CONJ that   said
           'Shyam$_i$ said that he$_{i/*k}$ went there.'   [CONJ = coreference]

      b. Shyam-o$_i$ [wa$_{*i,k}$ ana wan-a   dhakā:] dhāla
           Shyam-ERG (s)he there go-PAST.DISJ that   said
           'Shyam$_i$ said that he$_{*i/k}$ went there.'   [DISJ = obviation]

The distribution of the DISJ paradigm thus appears to be identical to that of directive clauses in Slovenian, while the distribution of CONJ marking is its complement. One possibility of reconciling this with generalized SOb is to assume that the 'raising to Mood' option suggested above occurs with (marked) CONJ morphology, which syntactically licenses a non-*PRO* element (98a). The DISJ alternative is then the standard SOb configuration (98b), with a perspectival *PRO*.

(98) a. [$_{CP}$ I$_i$ [OP$_{conj}$ [$_{vP}$ t$_i$ [v [VP]]]]]
      b. [$_{CP}$ *PRO*$_i$ [OP$_{disj}$ [$_{vP}$ SU$_{*i,k}$ [v [VP]]]]]

However, the parallelism with generalized SOb is not complete. For instance, generalized SOb persists in Slovenian with plural subjects, in that PL/DU.2P subjects are also banned in interrogative matrix directive clauses, as illustrated in (99).[32]

(99)   a. Pomaga-j-te si   sami!   [✓ SU = 2P.PL]
          help-IMP-2PL REFL.DAT alone.PL.M
          'Help yourselves on your own!'

       b. *Pomaga-j-te si   sami?   [✗ SU = 2P.PL]
          help-IMP-2PL REFL.DAT alone.PL.M
          int.: 'Should you help yourselves on your own?'

Vera Zu (p.c.) informs me that the pattern is more complicated with conjunct-disjunct marking, at least in Newari. With plural (inclusive and exclusive) 1P subjects, what matters for the choice of CONJ or DISJ marker seems to be whether the speaker knows the answer to the question or not. When the speaker does not know the answer, DISJ marking is used, but when the speaker already knows the answer, CONJ marking is used. This suggests the status of the question matters in conjunct-disjunct systems. Within the current system the difference could be attributed to different types of the ASK operator (see footnote 30), with differences in the updates to the speaker's and addressee's public belief sets. I leave this open as a potential future exploration.

5.4 Obviating obviation

As discussed briefly in Section 3.2, it has been observed that contexts where the subject of an embedded subjunctive is forced to be interpreted as non-*de se*, SOb is lifted (Schlenker 2005a; Szabolcsi 2010; Zu 2015). This seems to also be true of SOb with Slovenian IMP$_{dir}$ and SUB$_{dir}$. An example of this is provided in (100).

(100) [Context:] *An old man lived in a cave and wrote a set of commandments on the wall of the cave to share his wisdom with whoever finds them. A piece of the cave then broke off and fell on his head, giving him amnesia. The old man then read the following commandments thinking someone else wrote them:*

       a. Kdorkoli najde te   zapovedi,   naj jih   spoštuje.
          whoever finds these commandments LET 3PL.ACC adhere/respect
          'Whoever finds these commandments should adhere to them.'

       b. Kdorkoli najde te   zapovedi,   naj jih   ne izbriše.
          whoever finds these commandments LET 3PL.ACC not erase
          'Whoever finds these commandments should not erase them.'

It is perfectly fine, as an outside observer, to report the course of events with the sentences in (101). The fact that the commandments were not written with the old man in mind as the person who must obey them seems to be lifting the SOb effect.

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[32] Note that the subset-superset relation between interrogative perspectival *PRO* (2P.SG) and subject (2P.PL) is not enough to void SOb as with 1P.PL/DU subjects in non-questions. This could be due to Schlenker's (2005b) observation that partial coreference is more easily available with 1P (see Section 3).

(101) a. Starec si   je$_i$ naročil, da naj spostuje$_i$ zapovedi.
      old.man REFL.DAT AUX.3 instructed that LET respect   commandments
      'The old man instructed himself he should obey the commandments.'

   b. Starec si   je$_i$ naročil, da naj ne izbriše$_i$ zapovedi.
      old.man REFL.DAT AUX.3 instructed that LET not erase   commandments
      'The old man instructed himself he shouldn't erase the commandments.'

The same effect can be observed with 1P/2P subjects of embedded IMP$_{dir}$. In the novel and movie *Fight Club*, Tyler Durden and The Narrator are at first presented to us as separate characters, but by the end they are revealed to be one person with a split personality. (102) is taken from the Slovenian subtitles for the movie.

(102) [Context:] *Tyler challenges the Narrator to punch him. It is later revealed that to observers this was really the Narrator/Tyler talking to himself.*

   a. Tyler ⇒ Narrator: Udari   me   kolikor močno lahko!
                        hit.IMP.(2) 2.ACC as much hard   possible
                        'Hit me as hard as you can.'

   b. Narrator ⇒ Tyler: Kaj!?
                        what

The SOb effect is lifted in all three possible reports of the event. In (103a), a 3P observer reports what happened. In (103b) Tyler/Narrator is talking to himself, and in (103c) Tyler/Narrator is explaining what happened to a third party.

(103) a. Tyler je$_i$ rekel, da naj { se$_i$ / ga$_{*i}$ } udari$_i$.
         Tyler AUX.3 said.M that LET   REFL.ACC / 3.M.ACC   hit.3
         'Tyler$_i$ said (to himself), that he$_i$ should hit himself$_i$/him$_{*i}$.'

   b. Rekel si$_i$ (si$_i$),   da se$_i$ udari$_i$.
      said.M AUX.2 (REFL.DAT) that REFL.ACC hit.IMP.(2)
      'You$_i$ said (to yourself$_i$), that you$_i$ should hit yourself$_i$.'

   c. Rekel sem$_i$ (si$_i$),   da naj se$_i$ udarim$_i$.
      said.M AUX.1 (REFL.DAT) that LET REFL.ACC hit.1
      'I$_i$ said (to myself$_i$), that I$_i$ should hit myself$_i$.'

These SOb voiding facts are often used as evidence for a competition approach to SOb (see Section 3.2). However, binding restrictions are also known interact with the *de se*/*de re* distinction (Lakoff 1972; Anand 2007), and as shown in Section 3, SOb can also be lifted in contexts not tied only to coerced non-*de se* readings. As it stands, further evidence is required to tease apart which approach better handles such cases.

5.5 Shifting clusivity?

Recall that I assumed 2P features are required for the inclusive interpretation of a 1P.PL/DU.IMP$_{dir}$ (104a). Due to the complementary distribution of IMP$_{dir}$ and SUB$_{dir}$, the latter is impossible with inclusive 1P subjects, and due to generalized SOb, SUB$_{dir}$ also cannot have an exclusive 1P subject in matrix contexts, as shown again in (104b).

(104) a. Posluša-j-mo! [✔ SU = 1P+2P.PL]
listen-IMP-1PL
'Let's (= incl.) listen.'

b. *Naj posluša-mo! [✘ SU = 1P+3P.PL]
LET listen-1PL
int.: 'We (incl./excl.) should listen.'

The restrictions are different in embedded contexts: IMP$_{dir}$ is again restricted to inclusive 1P subjects (105a), but with SUB$_{dir}$ it is the matrix subject that cannot be a subset of the PL/DU embedded subject (105b), and interestingly there is no restriction on the embedded subject with respect to inclusive and exclusive 1P distinction.

(105) a. Rekel je, da posluša-j-mo. [SU$_1$ (SPEAKER) $\subset$ SU$_2$]
said.M AUX.3 that listen-IMP-1PL
'He$_i$ said that we$_{k+i}$ should listen.'

b. Rekel je, da naj posluša-mo. [SU$_1$ (SPEAKER) $\not\subset$ SU$_2$]
said.M AUX.3 that LET listen-1PL
'He$_i$ said that we$_{k-i}$ should listen.'

According to the current approach, the subject in (105a) must be 1P+2P, while in (105b) it can only be 1P. However, SUB$_{dir}$ is not limited to an exclusive interpretation of 1P, it instead is interpreted as exclusive with respect to the matrix subject. This is reminiscent of the LF/PF mismatches found in attitude reports in languages like Telugu (Messick 2015), where *de se* subjects of embedded clauses are 3P pronouns, but trigger 1P agreement on the embedded verb. A more careful examination of Slovenian examples like (105) might help us learn more about how (in)clusivity is encoded in the grammar and what are the limits of possible LF/PF mismatches.

6 Conclusion

I proposed that a number of seemingly independent phenomena concerning the behavior of subjects in imperatives and directive subjunctives in Slovenian can be explained in a unified way if the two constructions are actually the realizations of the same directive clause construction. The restrictions on subjects in embedded contexts (subject obviation — SOb) and matrix contexts (exclusive 1P subject ban — XSb) are both manifestations of a generalized SOb, a binding restriction active between a perspectival *PRO* and the subject of directive clauses. This follows from the compositional requirements of the directive operator OP$_{Dir}$, responsible for directive semantics. The operator requires an element of type e in its specifier in order to provide an interpretation for what I term centered conversational backgrounds. I suggested that this e-slot is filled by a perspectival *PRO* which is bound in embedded contexts by the matrix speaker analogously to *PRO* in subject control infinitives. Conversely, in matrix environments it is bound either by the speaker itself, via the attitudinal operator COMMIT, or in questions by the addressee, via the attitudinal operator ASK.

The analysis not only derives the generalized SOb effect as following from the particular semantics of OP$_{Dir}$, but also explains the speaker distancing asymmetry

that occurs in directive clauses, and how it changes with respect to matrix and embedded contexts. Furthermore, it explains a previously unnoticed fact that the ban on exclusive 1P subjects in directive clauses is lifted in interrogative contexts, where it is replaced by the 2P subject ban. I have argued that the latter essentially provides an account for the cross-linguistic absence of interrogative imperatives.

To conclude, the intricate system of Slovenian directive clauses allowed us to test different theories of SOb and imperative/directive constructions. And the proposed analysis offers a starting point to look at related phenomena and offer new insights regarding directive constructions and directive speech acts more generally.

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