On the Licensing of Silent-GO in Russian

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I. Introduction to Silent-GO

In a number of languages, including Russian, it is possible for a modal to combine with a prepositional phrase complement as shown in (1)[1].

(1) *Russian*
Mne   nužno v   biblioteku
I   need   to   library.ACC
'I need to go to the library.'

In (1), there is no overt go verb in the sentence, however, the meaning of going is present as illustrated by the glossed sentence. The meaning of sentence (1) is essentially equivalent to that of sentence (2) below which includes the overt go verb and is otherwise identical to (1).

(2) *Russian*
Mne   nužno **pojti** v   biblioteku
I   need   **to-go** to   library.ACC
'I need to go to the library.'

The ability to combine a modal with a nonverbal complement, including prepositional phrases, is common among Germanic languages. Van Riemsdijk (2002) employs evidence from Germanic languages to posit that sentences like (1) contain a silent lexical item, silent-GO, which gives the sentence its movement meaning. Marušič and Žaucer (2005) present such constructions in a Slovenian, a member of the Slavic language family. Using tests different from those Van Riemsdijk used in Germanic, Marušič and Žaucer further support the presence of silent-GO. This is in contrast to analyzing such phrases as small clause structures as has been attested in Barbiers (1995). Both of these accounts shall be presented followed by new data from Russian.

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[1] Unless otherwise cited, data is drawn from my fieldwork with native speakers.

II. The Silent-GO Hypothesis

1. Evidence from Germanic

As noted in Van Riemsdijk (2002), in all Germanic languages other than modern English,

modal verbs may be followed by a nonverbal complement[2]. Examples of a few different types of

nonverbal complements following modals can be seen in the following examples from Dutch.

(3) *Dutch*
    a. Stoute   kinderen   mogen geen   snoepje
        naughty   children   may   no   candy
        'Naughty children can't have candies.'

    b. Jan   wil   dood
        John   wants dead
        'John wants to die.'

    c. Die   doos   kan   naar   de   zolder
        That   box   can   to   the   attic
        'That box can be put in the attic.'
        (Van Riemsdijk 2002: 144)

In (3a) the Dutch modal *mogen* 'may' combines with the nominal complement *geen*

snoepje 'not candy'. In (3b) the modal *wil* 'wants' combines with the adjectival complement

dood 'dead'. In (3c) the modal *kan* 'can' combines with the prepositional phrase *naar de zolder*

'to the attic'.

For sentences such as (3c) where the modal takes a directional complement, Van

Riemsdijk (2002) posits that the modal is acting as a functional element, behaving like an

auxiliary verb which can take a phonologically null superlight motion verb, referred to by Van

Riemsdijk as $[e]_{GO}$ and here as silent-GO or GO[3], as a verbal complement. This is contrary to the

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[2] Historically, English was able to have such constructions in sentences such as *I must away* or *I must to Coventry*. For an account of its loss in English see Dooren (2014).
[3] Capitalization will be used to indicate that an element is silent throughout this document.

analysis put forth in Barbiers (1995) wherein the modal is considered to be functioning as a main

verb (with a complete argument structure), and the directional prepositional complement is

analyzed as a small clause. Van Riemsdijk's has two main arguments against Barbiers's analysis

coming from data in Swiss German which shall now be summarized.

1.1 Distribution of PPs in Verbal Clusters

In Germanic OV-languages, that is, languages with object-verb word order, directional

PPs should not be able to occur sentence finally. This is shown by the ungrammaticality of

sentence (4b) below in contrast to the grammatical sentence (4a).

(4) *Swiss German*
    a. De   Hans   isch   scho   häi   ggange
       the   Hans   is   already   home gone
      'Hans has already gone home.'
    b.* De   Hans   isch   scho   ggange   häi
       the   Hans   is   alreadygone   home
      'Hans has already gone home.'
      (Van Riemsdijk 2002: 150)

In (4b), directional PP *häi* 'home' cannot be preceded by the overt go verb *ggange*. This

is as predicted by the above rule. The question arises, however, of why *häi* may appear sentence

finally in (5).

(5) *Swiss German*
    … wil   mer   hetted   söle   häi
    … because   we   would've   had-to home
    '… because we should've gone home.'
    (Van Riemsdijk 2002: 148)

Examples like (5) were first presented in Hoekstra (1997) and are perplexing given

directional PPs like *häi* should not be able to occur sentence finally. Note that the example in (5)

is also a construction without an overt go verb, where the modal *söle* 'had to' appears to be

combining with the prepositional phrase. The presence of a silent-GO verb sentence finally

would account for the grammaticality of (5) given the structure mandating the prepositional phrase complement precedes its verb would be satisfied. Instead of being sentence final, *häi* would actually be preceding this null verb, GO (or GAAN for Dutch), as illustrated in (6).

(6) *Swiss German*
… wil	mer	hetted	söle	häi	GAAN
… because	we	would've	had-to	home	GO

'… because we should've gone home.'
(Van Riemsdijk 2002: 148)

1.2 Verb Doubling

Van Riemsdijk provides additional evidence for the silent-GO analysis via Verb Doubling constructions in Swiss German. In such constructions, an infinitive is introduced by a phonologically reduced copy of the infinitival verb and sometimes a second, even more phonologically reduced copy is present in the sentence. This phonologically reduced verb is referred to as a VIM, verbal infinitive marker. One example is shown in (7).

(7) *Swiss German*

a.
Si	gaat	de	zmittag	go	(ge)	choche
She	goes	the	lunch	VIM	(vim)	cook

'She is going to cook lunch.'

b.
…das	si	de	zmittag	gaat	*(go)	choche
that	she	the	lunch	goes	VIM	cook

'…that she goes cook lunch.'

c.*
Si	wil	häi	go
she	wants	home	VIM

'She wants to go home.'
(Van Riemsdijk 2002: 154-5)

Gaat is the phonologically full form of the verb 'go', conjugated for third person singular. When the verb go is used again in the sentence, the infinitival form which would typically be *gaa* is phonologically reduced to *go*. Optionally, a more reduced form, in this case

ge, can be said after the first reduced form. These are all seen in (7a) where the full form of the verb (*gaat*) is used first, followed by the first reduced form (*go*) and an optional second reduced form (*ge*). (7b) demonstrates that the reduced form is obligatory when a conjugated form of *gaa* is used. (7c) additionally shows that the reduced form cannot be used independently as an infinitival verb. (7b) and (7c) both strongly suggest that the VIM is a copy of its governing verb. With respect to the silent-GO verb, it is relevant that VIMs can occur with the infinitival complement to modal verbs without any overt indication of the motion verb they are supposed to be a copy of. This is shown in (8a).

(8) *Swiss German*
   a. … wän   i   mues go   poschte
       … when   I   must VIM   shop
       '… when I have to go shopping'

   b. … wän   i   mues gaa   *(go) poschte
       … when   I   must go   VIM   shop
       '… when I have to go shopping'
       (Van Riemsdijk 2002: 158)

In (8a), the VIM is able to follow the modal. In (8b), it is shown that the verb in (8a) is in fact a reduction of the verb *gaa* (and not *gaa* itself) given *gaa* by itself is ungrammatical and necessitates the presence of the phonologically reduced form. Given the reduced form *go* has been shown to not be able to stand alone in (7c), a phonologically null verb similar in its properties to *gaa* must be present in (8a) in order to license the phonologically reduced copy. The positioning of GO, or GAA for Swiss German, in that sentence is shown in (9).

(9) *Swiss German*
    … wän   i   mues GAA go   poschte
    … when I   must GO   VIM   shop
    '… when I have to go shopping.'
    (Van Riemsdijk 2002: 159)

2. Evidence from Slovenian

Marušič and Žaucer (2005) present the construction where modals may be followed by a

directional PP in Slovenian. An example is given in (10).

(10)   *Slovenian*
        Vsak   Slovenec   mora   vsaj   enkrat   na   Triglav
        every   Slovenian   must   at-least once   onto   Triglav
        'Every Slovenian must go up Mt. Triglav at least once.'
        (Marušič and Žaucer 2005: 4)

Given Slovenian word order, among other things, differs greatly from that of Germanic

OV languages, Marušič and Žaucer (2005) employ different evidence to support the presence of

silent-GO in Slovenian. They use a number of tests which are outlined in this section.

2.1 Origin of the Motion Meaning

In Barbiers's (1995) small clause analysis, when a modal is followed by a directional PP,

the modal acts as a main verb which selects a directional prepositional phrase as its complement.

Under this analysis, the motion meaning of such sentences is thus seen as arising from the

directionality of the prepositional phrase. As an alternative to positing the existence of the null

motion verb GO, Marušič and Žaucer (2005) explore the possibility of the directional PP being

the complement of a null copula in vP. This, like Barbiers's analysis, would entail the motion

meaning coming from the directional PP; however, Marušič and Žaucer demonstrate that this

cannot be the case.

(11)   *Slovenian*
      a.* Ta   pohod je   na   Triglav
          this   march is   onto   Mt.-Triglav
          'This march is onto Mt. Triglav.'

b.* Peter je   v   gostilno
   Peter is   into   bar
   'Peter is going into the bar.'

c. Peter je   iz   gostilne
   Peter is   from   bar
   'Peter is originally from the bar.' (not: 'Peter is going away from the bar.')
   (Marušič and Žaucer 2005: 5)

A null copula and the directionality of the PP would not suffice as an explanation for sentences with a modal and directional PP complement like in (10) given the inability for directional PPs, or goal PPs, to be used in a simple predicative construction as shown in (11a-c). (Note that in (11c), the sentence is grammatical but cannot have the intended motion-related meaning.) Marušič and Žaucer instead present evidence in support of a silent-GO analysis.

2.2 Non-agreeing Adverbials

In sentences (12a) and (12b) below, there are two non-agreeing temporal adverbials, *včeraj* 'yesterday' and *jutri* 'tomorrow'.

(12)   *Slovenian*
a.* **Včeraj**   Lini   ni/   nau   šla   **jutri**   domov
   yesterday   Lina   not-PAST/   not-FUT   go   **tomorrow**   home
   'Yesterday, Lina didn't/doesn't/won't go home tomorrow.'

b. **Včeraj**   se   Lini   ni   ljubilo   **jutri**   domov
   yesterday NON-ACTIVE Lina   not-PAST   felt-like   **tomorrow**   home
   'Yesterday, Lina didn't feel like going home tomorrow.'
   (Marušič and Žaucer 2005: 6)

(12a), a sentence with a single verb, is shown to not be able to be grammatical given the two contradictory temporal events. (12b), however, is grammatical despite likewise having these two contradictory temporal events. The presence of two non-agreeing temporal adverbials in a sentence suggests that the sentence is biclausal. The grammaticality of (12b) can thus be

explained by analyzing the sentence as biclausal, that is, having two main verbs. However, in the sentence there is only one overt verb, *ljubilo* 'feel like', suggesting that a silent GO verb serves as the main verb in the second temporal event.

2.3 Purpose preposition *po*

Another piece of evidence for the presence of silent-GO is that modals in Slovenian may select for the 'purpose preposition' *po*, which signifies 'movement with a purpose.'

(13)   *Slovenian*
    a. Peter mora (v   trgovino)   po   kruh
        Peter must to   store   for   bread
        'Peter must go (to the store) and get some bread.'

    b.* Branje   enciklopedije je   po   dejstva
        reading   encyclopedia AUX   for   facts
        'The reading of an encyclopedia is for facts.'

    c.* Prebral je   knjigo po   podatke
        read   AUX   book   for   data
        'He read the book to get data.'
        (Marušič and Žaucer 2005: 6-7)

In (13a), the purpose preposition *po* is present in the sentence, indicating the purpose of going, in this case – to obtain bread. As shown by the ungrammaticality of (13b), *po* cannot be used in simple predicative constructions like those in (11). This again suggests that a null copula analysis is insufficient for explaining the structure of such sentences. In (13c), it is shown that the preposition *po* is ungrammatical in clauses without a motion verb even if it would semantically make sense. The question thus arises of where the motion meaning required to license *po* comes from in sentence (13a). As shown in (14) below, the motion meaning cannot arise from the modal.

(14)   *Slovenian*
    *   Črt   mora   delati   po   računalnik
       Črt   must   work   for   computer
       'Črt must work to get a computer.'
       (Marušič and Žaucer 2005: 7)

The modal in (14), *mora* (must), is insufficient for licensing the preposition *po*, which

requires a motion meaning. Therefore, in sentences like (10a), it cannot be the modal which is

creating the motion meaning, further suggesting silent-GO is present in the sentence and begets

this meaning.

2.4 Supine vs. Infinitival Verbs

The distinction between supine and infinitive verbal forms in Slovenian provides further

support for a silent-GO analysis. Infinitives in Slovenian occur in typical nonfinite contexts, but

the supine form of verbs on the other hand follows verbs of motion (Herrity 2000). The supine

conveys some kind of purpose, such as 'in order to V'. (15) is an example of a sentence wherein

the supine is grammatical yet the infinitival form is not. Note that the supine form of verbs is the

same as the infinitival form except it lacks the final *–i*.

(15)   *Slovenian*
    Lani   sta   šla   študirat(*-i)   v   Ljubljano
    last-year   AUX   go   study-SUPINE   into   Ljubljana
    'Last year they went to Ljubljana to study.'
    (Marušič and Žaucer 2005: 8)

In sentence (16) below, it is shown that the supine may follow a modal.

(16)   *Slovenian*
    Moram   beračit(*-i).
    must-1P.SG   beg-SUPINE
    'I must go and beg.' [uttered lying on the bed at home]
    (Marušič and Žaucer 2005: 8)

In (16), the supine form is following the modal and given the context of being "uttered lying on the bed at home," the infinitival form is ungrammatical in this instance. The grammaticality of the supine, which necessitates being preceded by a motion verb, suggests a null motion verb GO is present after the modal in order to license the supine.

2.5 Covert Modality

In (17), the embedded infinitival wh-clause does not have any overt modal element, though it receives a modal interpretation.

(17)   *Slovenian*
        Tinčku   so   pokazali   [kako   do   štacjona]
        Tinček-DAT   AUX-3P.PL.PAST   showed.PL   how   to   train-station
        'They showed Tinček [how to go to the train station].'
        (Marušič and Žaucer 2005: 9)

Marušič and Žaucer take such constructions to be indicative of the presence of GO given that the embedded clause has no overt verbal element yet cannot consist of only the wh-word *kak* and the PP *do štacjona*; therefore, GO must be present for the PP to be licensed.

2.6 VP/*v*P Conjunction

Lastly, Marušič and Žaucer employ conjunction as a test for if the GO constructions contain a null VP.

(18)   *Slovenian*
        Vid   ni   mogel   več   niti   do   avta   niti   postaviti   šotora
        Vid   not   can   still   neither to   car   neither put-up   tent
        'Vid could neither go to the car nor put up a tent.'
        (Marušič and Žaucer 2005: 9)

In (18), as is indicated by the gloss, the modal verb scopes over both *do avta* 'to car' and *postaviti šotora* 'put-up tent', that is, the two are able to be conjoined. Given *postaviti šotora*

'put-up tent', is clearly a VP given *postaviti* is an infinitival verb, the conjunction is VP

conjunction. Therefore, the VP overtly written as *do avta* 'to car' must have a silent motion verb

present which licenses the PP.

3. Evidence from Russian

In my fieldwork, I applied Marušič and Žaucer's tests for Slovenian to Russian in order

to see if the modal and directional prepositional phrase construction behaves similarly in the two

languages, thus leading Russian to serve as further support for the silent-GO analysis. One

simple example of the construction in Russian is shown in (19).

(19)   *Russian*
Mne   nužno v   biblioteku
I   need   to   library.ACC
'I need to go to the library.'

New data from Russian will now be presented and compared to that of Slovenian. Data

from Slovenian which was discussed in Part II, Section 2, above will be repeated in each

subsection below for convenience.

3.1 Origin of the Motion Meaning

In Part II, Section 2.1, it was discussed that Marušič and Žaucer (2005) asserted that the

motion meaning present in sentences where the modal is followed by a directional prepositional

phrase cannot arise from the directional prepositional phrase itself. This is contrary to what must

be supposed by Barbiers's (1995) small clause analysis given said analysis attributes the motion

meaning to the directionality of the prepositional phrase. To establish that the meaning cannot

arise from the directional prepositional phrase alone, Marušič and Žaucer explored the possibility

of the directional PP being the complement to a null copula which, like Barbiers's analysis,

would entail the motion meaning arising from the directional PP; however, a null copula explanation cannot suffice given the inability for directional PPs to be used in a simple predicative construction as shown in the data repeated below in (20). Data for Russian is shown in (21), and it is in parallel to that of Slovenian.

(20)　*Slovenian*
　　a.* Ta　　pohod je　　　na　　　Triglav
　　　　this　　march is　　　onto　　Mt.-Triglav
　　　　'This march is onto Mt. Triglav.'

　　b.* Peter　je　　v　　　　gostilno
　　　　Peter　is　　into　　bar
　　　　'Peter is going into the bar.'

　　c.　Peter　je　　iz　　　　gostilne
　　　　Peter　is　　from　　bar
　　　　'Peter is originally from the bar.' (not: 'Peter is going away from the bar.')
　　　　(Marušič and Žaucer 2005: 5)

(21)　*Russian*
　　a.* Ètot　　poxod v　　　　gory
　　　　this　　hike　to　　　　mountains
　　　　'This hike is to the mountains.'

　　b.* Pjotr　v　　　bar
　　　　Peter　to　　bar
　　　　'Peter is going to/into the bar.'

　　c.　Pjotr　iz　　　bara
　　　　Peter　from　bar
　　　　'Peter is originally from the bar.' (not: 'Peter is going away from the bar.')

The data from Russian in (21) is essentially equivalent to that of Slovenian. Note that in Russian the present tense form of the auxiliary 'to be' is null hence it not being present in the sentence in (21). As is the case in Slovenian, directional PPs in Russian are unable to be used in simple predicative constructions which is shown in (21a-c). Note that (21c) is grammatical, though like the Slovenian (20c), it cannot have the intended directional meaning.

3.2 Non-agreeing adverbials

In Part II, Section 2.2, the grammaticality of a sentence such with two non-agreeing adverbials but only one overt verb was interpreted as indication of a silent verb, in this case GO, serving as the main verb for the second temporal event's clause. Again, Slovenian and Russian pattern similarly for this test.

(22) *Slovenian*
a.* **Včeraj**   Lini   ni/   nau   šla   **jutri**   domov
   yesterday   Lina   not-PAST/   not-FUT   go   **tomorrow**   home
   'Yesterday, Lina didn't/doesn't/won't go home tomorrow.'

b. **Včeraj** se   Lini   ni   ljubilo   **jutri**   domov
   yesterday NON-ACTIVE Lina not-PAST   felt-like **tomorrow**   home
   'Yesterday, Lina didn't feel like going home tomorrow.'
   (Marušič and Žaucer 2005: 6)

(23) *Russian*
a.* **Včera**   Anna ne   poexala   v   Pariž **v**   **ijune**
   yesterday   Anna not   went   Paris **in**   **June**
   'Yesterday, Anna didn't go to Paris in June.'

b. **Včera**   Anne xotelos'   v   Pariž **v**   **ijune**
   yesterday   Anna feel-like   Paris **in**   **June**
   'Yesterday, Anna felt like going to Paris in June.'

The sentences in both languages show the same phenomenon. (22a) and (23a), the sentences with the single verb *šla* or *poexala*, are ungrammatical given two contradictory temporal adverbials. However, (22b) and (23b) are both grammatical with only a single overt verb present, *ljubilo* or *xotelos'*, suggesting that the null verb GO serves as the main verb in the second temporal event, *jutri domov* 'home tomorrow' or *v Pariž v ijune* 'to Paris in June'.

3.3 Purpose Preposition

Another piece of support for the silent-GO hypothesis presented in Marušič and Žaucer (2005) is that modals in Slovenian may precede the 'purpose preposition' *po*, which signifies 'movement with a purpose' and requires a motion verb to license it. The Russian equivalent of this preposition is *za*. Data in Slovenian and Russian are shown in (24) and (25), respectively.

> (24) *Slovenian*
> Peter mora (v trgovino) **po** kruh
> Peter must (to store) **for** bread
> 'Peter must go (to the store) and get some bread.'
> (Marušič and Žaucer 2005: 6)

> (25) *Russian*
> a.* Pjotr dolžen (v magazin) **za** xlebom
> Peter must (to store) **for** bread
> 'Peter must go (to the store) and get some bread.'
>
> b. Emu nužno (v magazin) **za** xlebom
> He needs (to store) **for** bread
> 'He needs to go (to the store) and get some bread.'

At first blush, it appears that Russian does not behave similar to Slovenian with respect to this test; however, it turns out that this is relates to the particular modal in question. The Russian modal *dolžen* 'must' cannot participate in constructions where silent-GO is posited to be, hence the grammaticality of (25a). As shown in (25b), another Russian modal, *nužno* 'needs', can participate in this construction and results in a grammatical sentence comparable to the Slovenian example in (24), thus showing further Russian support for the silent-GO analysis. Which Russian modals are able to participate in this construction will be addressed in Part IV which discusses a link between modality and aspect in Russian.

3.4 Supine vs. Infinitival Verbs

The distinction between supine and infinitival verbs which exists in Slovenian is not

present in Russian, hence this test may not be performed. See Part II, Section 2.4, above for discussion of this test in Slovenian.

3.5 Covert Modality

In (26), the embedded infinitival wh-clause does not have any overt modal element, though it receives a modal interpretation. Marušič and Žaucer take constructions such as that in (26) to be indicative of the presence of GO given that the embedded clause has no overt verbal element yet cannot consist of only the wh-word *kak* and the PP *do štacjona*; therefore, GO must be present for the PP to be licensed. This test is another in which Russian and Slovenian differ.

(26)   *Slovenian*
Tinčku   so   pokazali   [kako   do   štacjona]
Tinček-DAT   AUX-3P.PL.PAST   showed.PL   how   to   train-station
'They showed Tinček [how to go to the train station].'
(Marušič and Žaucer 2005: 9)

(27)   *Russian*
  a. *Emu   pokazali   [kak   do   vokzala]
     him-DAT   showed.PL   how   to   train-station
     'They showed him [how to go to the train station.]'

  b. Emu   pokazali   [kak   dojti   do   vokzala]
     him-DAT   showed.PL   how   to-get   to   train-station
     'They showed him how to get to the train station.'

  c. Emu   pokazali   [kak   projti   vo   vokzal]
     him-DAT   showed.PL   how   to-go   to   train-station
     'They showed him how to go to the train station.'

The Russian equivalent of (26), shown in (27a), is ungrammatical, requiring an overt verb of motion to be present in the embedded clause, such as *dojti* in (27b) or *projti* in (27c). The ungrammaticality of (27a), however, does not lessen support for the silent-GO hypothesis as it can be attributed to another fact of this construction in Russian: prefixed verbs of motion, such as *dojti* or *projti* which would be present in this context, cannot be elided. This will be discussed in

more detail in Part III, Section 2.3, on restrictions on elision of go in Russian as they pertain to prefixed verbs of motion.

3.6 VP/*v*P Conjunction

The final test presented in Marušič and Žaucer (2005) to support the silent-GO hypothesis is VP/*v*P conjunction.

(28)   *Slovenian*
       Vid   ni   mogel več   niti   do   avta   niti   postaviti   šotora
       Vid   not   can   still neither to   car   neither put-up   tent
       'Vid could neither go to the car nor put up a tent.'
       (Marušič and Žaucer 2005: 9)

(29)   *Russian*
       Ja   ne   xoču   ni   na   rabotu ni   ostat'sja   doma
       I   not   want   neither to   work   nor   to-stay   home
       'I do not want to go to work nor stay at home.'

In (28), the modal *mogel* 'can' scopes over both *do avta* 'to car' and *postaviti šotora* 'to put-up a tent'. Likewise, in (29) the modal *xoču* 'want' scopes over both *na rabotu* 'to work' and *ostat'sja doma* 'to stay at home'. Given *postaviti šotora* and *ostat'sja doma* are both VPs, the conjunction present in the sentence is VP conjunction. Therefore, the Slovenian and Russian VPs which are overtly just the directional prepositional phases *do avta* and *na rabotu* must have a silent motion verb GO present which licenses these directional PPs. This is another similarity between the two languages.

3.7 Additional Evidence from Russian

One further point to make about Russian which supports the silent-GO hypothesis is that the DP of the prepositional phrase in these constructions is in the accusative case. An example is shown in (30a) where 'library' appears in its accusative form, *biblioteku*. The accusative case is

also the case of the DP of prepositional phrases when an overt go verb is present in sentence indicating motion toward the DP with the prepositions *v* or *na* as shown in (30b).

(30)　*Russian*
 a. Ja xoču v biblioteku
    I   want to library.ACC
    'I want to go to the library.'

 b. Ja xoču pojti v biblioteku
    I   want to-go to library.ACC
    'I want to go to the library.'

III. Elision of Go in Russian: A Broader Look

After looking into elision of go in Russian in cases similar to those in Slovenian, we will now take a step back and look at elision of go in Russian more generally. Before jumping into some restrictions on the elision of go, however, it is necessary to cover some background information on Russian verbs of motion.

1. Russian Verbs of Motion

In Russian, there is a large number of verbs which can be glossed as 'go.' These verbs, unlike the verb 'go' in English, contain a few types of information which describe the action of going. This includes information about the method of transportation, directionality of the movement, and perfective versus imperfective aspect. Furthermore, Russian verbs of motion can be prefixed which further specifies the manner of motion. Each of these will be discussed below followed by data and analysis of how these features relate to when 'go' can and cannot be elided in Russian.

1.1 Method of Transportation

The first feature of Russian verbs of motion which will be discussed is method of transportation. Russian verbs of motion indicate different methods of transportation via different verbal roots, which differ based on whether the travel is by foot, transport, running, flying, etc. Examples can be found in (31).

(31)   *Russian*
    a. Travel by foot
       Ja   budu   **idti**   v   kino
       I   will   **go**   to   movie-theater
       'I will go to the movie theater' (on foot)

    b. Travel by transport (in general; bus, car, train, plane, etc.)
       Ja   budu   **exat'**   v   Evropu
       I   will   **go**   to   Europe
       'I will go to Europe' (by transit)

    c. Travel by flying
       Ja   budu   **letat'** v   Evropu
       I   will   **fly**   to   Europe
       'I will fly to Europe'

1.2 Directionality of Motion

Russian verbs of motion additionally indicate the directionality of the motion, that is, whether it is describing unidirectional or multidirectional/habitual movement. This distinction results in variation of the verb, such as *idti* 'to go by foot, unidirectional' and *xodit'* 'to go by foot, multidirectional/habitual'. Examples of context can be found in (32).

(32)   *Russian*
    a. Unidirectional
       Ja   **idu**   v   biblioteku
       I   **go**   to   library
       'I am going to the library'

    b. Multidirectional
       Utrom   ja   **xodila**   po   gorodu

      morning   I   **going.PST** (by foot)   around   city
      'In the morning I was going (walking) around the city.'

    c. Habitual (same form as multidirectional)
      Každoe utro   ja   **xožu** v   biblioteku
      every morning   I   **go**   to   library
      'Every morning I go to the library.'

1.3 Prefixed Verbs of Motion

Russian verbs of motion may also have a number of prefixes which further specify their manner of motion. For instance, the prefix *vy-* seen in (33) indicates motion out of an enclosed area. These prefixes may attach to either the unidirectional or multidirectional roots. The prefix and unidirectional root correspond to perfective aspect while the prefix and multidirectional root combine to form a verb of the imperfective aspect.

(33)   *Russian*
      Mne   nado   **vyjti** iz   komnaty
      I   need   **go-out** from room
      'I need to leave the room.'

1.4 Perfective and Imperfective Aspect

Lastly, like all other verbs in Russian, Russian verbs of motion indicate perfective or imperfective aspect. The perfective aspect of unidirectional verbs is indicated by the addition of the prefix *po-*. Multidirectional verbs may only be of the imperfective aspect given multidirectionality or habituality of movement contradicts the notion of perfective aspect, indicating a single completed, or telic, event. Examples of aspectual contrast in unidirectional motion verbs are found in (34).

(34)   *Russian*
    a. Perfective
      Posle uroka ja   pojdu   v   magazin

after   class   I   go.PFV   to   store
'After class, I will go to the store.'

  b. Imperfective
     Sejčas   ja   idu   v   magazin
     now   I   go.IMPF   to   store
     'Now I am going to the store.'

2. Restrictions on Elision of Go in Russian

Given the previous insight into the properties of Russian verbs of motion, we are able to analyze the different contexts in Russian, pertaining to specific aspectual, directional, and semantic varieties of go, in which go may or may not be elided.

2.1 Method of Transportation

Firstly, in Russian go may only be elided when the context requires a neutral method of transportation. This corresponds to either transport by foot or general transport by vehicle, *pojti* or *poexat'*, respectively. An example of elision of *pojti* can be seen in (35).

(35)   *Russian*
   a.   Ja   xoču   **pojti**   v   magazin
       I   want   **to-go**   to   store
     'I want **to go** to the store'

   b.   Ja   xoču   v   magazin
       I   want   to   store
     'I want **to go** to the store.'

Note that when a vehicle is specified, *poexat'* necessarily must be used rather than *pojti* as seen in (36).

(36)   *Russian*
   a.   *Ja   xoču   **pojti**   na   mašine   v   Kanadu
       I   want   to-go   by   car   to   Canada
     'I want to go to Canada by car.'

   b.   Ja   xoču   **poexat'**   na   mašine   v   Kanadu

	I	want	to-go	by	car	to	Canada

'I want to go to Canada by car.'

This allows us to see that *poexat'* may also be elided as shown in (37).

(37) *Russian*

a.	Ja	xoču	poexat'	na	mašine	v	Kanadu
	I	want	to-go	by	car	to	Canada

'I want to go to Canada by car.'

b.	Ja	xoču		na	mašine	v	Kanadu
	I	want		by	car	to	Canada

'I want to go to Canada by car.'

Certain vehicles, such as airplanes, have their own corresponding verbal roots which are preferred over *poexat'* when the vehicle is specified, such as *poletet'* 'to fly'. Such verbs cannot be elided as seen in (38c).

(38) *Russian*

a.	Ja	xoču	**poletet'**	na	samolete	v	Evropu
	I	want	to-go	by	plane	to	Europe

'I want to go to Europe by plane.'

b.	?Ja	xoču	**poexat'**	na	samolete	v	Evropu
	I	want	to-go	on	plane	to	Europe

'I want to go to Europe by plane.'

c.	*Ja	xoču		na	samolete	v	Evropu
	I	want		on	plane	to	Europe

'I want to go/fly to Europe by plane.'

2.2 Directionality of Motion

Another observation about when go may be elided is that elision is only possible in a unidirectional context. As seen in (39b), elision in a multidirectional or habitual context is ungrammatical.

(39) *Russian*

a.	Mne	nado	xodit'	v	magazin	čašče

      I   need   to-go   to   store   more-often
      'I need to go to the store more often.'

b. *Mne nado   v   magazin   čašče
      I   need   to   store   more-often
      'I need to go to the store more often.'

2.3 Prefixed Verbs of Motion

Yet another observation is that prefixed verbs of motion, that is, excluding the perfective

prefix *po*, cannot be elided as shown in (40).

(40)   *Russian*
    a. Mne   nado   vyjti   iz   komnaty
        I   need   go-out from room
        'I need to leave the room.'

    b. *Mne nado   iz   komnaty
        I   need   from room
        'I need to leave the room.'

The inability for prefixed verbs of motion to be elided can be analyzed with information

from Svenonius (2004) which discusses two types of Slavic prefixes: lexical prefixes and

superlexical prefixes. Examples of lexical prefixes are shown in (41a) and (41b). An example of

a superlexical prefix is shown in (41c).

(41)   *Russian*
    a. Helder za-brosil   mjač v   vorota angličan
        Helder into-threw   ball in   goal   English
        'Helder kicked the ball into the English goal.'

    b. David sovsem   za-brosil   futbol
        David completely   into-threw   soccer
        'David completely gave up soccer.'

    c. Ricardo   nervno   za-brosal   mjač
        Ricardo   nervously   INCP-threw[4] ball

---

[4] INCP meaning INCEPTIVE.

'Ricardo began to nervously throw the ball.'
(Svenonius 2004: 205-6)

In (41a-c), prefixes attach to the verb *brosil / brosal* 'threw'. In (41a), the lexical prefix *za-* gives the verb a resultative meaning, 'throw or kick-in'. The prefix is also lexical in (41b), though its affixation to the root *brosil* results in an idiosyncratic meaning, 'gave up'. In (41c) the prefix is superlexical. It is inceptive, marking the start of the action, in this case 'start throwing'.

Svenonius (2004) analyses the structure of these two types of prefixes differently. Lexical prefixes originate in a VP-internal position. Svenonius analyzes them essentially as small clause predicates assuming a Result head below V which is shown in (42a) below. Superlexical prefixes on the other hand are essentially adverbial which is shown diagrammed in (42b) assuming the presence of an Aspect head above V.

(42)
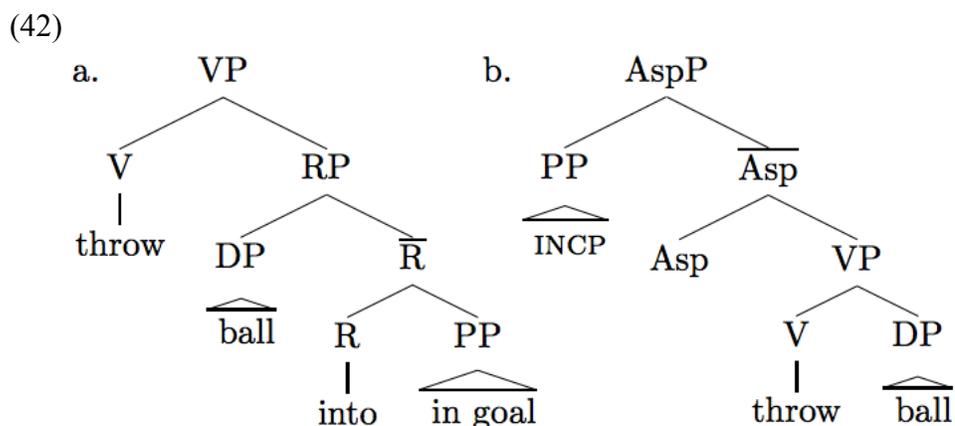
(Svenonius 2004: 206)

For Russian verbs of motion, the aspectual prefix *po-* would be a superlexical prefix. The other prefixes which may attach to Russian verbs of motion and further specify the manner of motion are lexical prefixes. In (40) above, an example is given demonstrating that verbs of motion with lexical prefixes may not be elided whereas *pojti*, a verb of motion with a superlexical prefix may be elided. We may posit that this is not possible based on where the

elision of go takes place in the syntactic structure of the sentence. To further specify, if verbs of

motion with lexical prefixes exhibit a structure similar to that of (42a) and if verbs of motion

with superlexical prefixes exhibit a structure similar to that of (42b), one possible analysis could

be that the ellipsis of go targets go verbs in AspP phrases such as (42b). Another possibility is

that the ellipsis could not occur to VPs containing a small clause structure within them, such as

(41a).

Regardless of which analysis on adopts to explain this phenomenon, data from part II,

section 3.5, can be accounted for due to this same structural difference. Data from (26) and (27)

above are repeated here as (43) and (44) for convenience.

(43)   *Slovenian*
Tinčku   so   pokazali   [kako do   štacjona]
Tinček-DAT   AUX-3P.PL.PAST   showed.PL   how   to   train-station
'They showed Tinček [how to go to the train station].'
(Marušič and Žaucer 2005: 9)

(44)   *Russian*
a. *Emu   pokazali   [kak   do   vokzala]
him-DAT   showed.PL   how   to   train-station
'They showed him [how to go to the train station.]'

b. Emu   pokazali   [kak   dojti   do   vokzala]
him-DAT   showed.PL   how   to-get to   train-station
'They showed him how to get to the train station.'

c. Emu   pokazali   [kak   projti vo   vokzal]
him-DAT   showed.PL   how   to-go   to   train-station
'They showed him how to go to the train station.'

(43) was used as support for the silent-GO hypothesis in Slovenian given a modal

meaning arises from the embedded clause which overly only contains the wh-word *kako* and the

directional PP *do štacjona*. The Russian equivalent of (43), shown in (44a), is ungrammatical,

requiring an overt verb of motion to be present in the embedded clause, such as *dojti* in (44b) or

projti in (44c). The ungrammaticality of (44a), however, does not lessen support for the silent-GO hypothesis as it can be attributed to the fact that prefixed verbs of motion, such as *dojti* or *projti* which would be present in this context, cannot be elided.

Despite the ungrammaticality of elision of a prefixed verb itself, if *pojti* is also grammatical in the given context, the verb may be elided and potentially have the meaning of either the prefixed verb or the simpler verb *pojti*. This is shown in (45).

(45)   *Russian*

a. Ja   xoču   pereexat'   v   novuju   kvartiru
     I   want   to-move   to   new   apartment
     'I want to move to a new apartment.'

b. Ja   xoču   pojti v   novuju   kvartiru
     I   want   to-go to   new   apartment
     'I want to go to the new apartment.'

c. Ja   xoču   v   novuju   kvartiru
     I   want   to   new   apartment
     either (a) or (b) meaning

2.4 Perfective and Imperfective Aspect

One stark contrast between imperfective and perfective verbs in Russian incorporated in both Macdonald (2008) and Mayshark (2010) is the difference in grammaticality judgements for imperfective and perfective verbs with differing kinds of temporal prepositional phrases. (46) shows such a contrast in a non-modal context while (47) does in a modal context.

(46)   *Russian*

a. Ja   pil   butylku   vina/vino   * za čas/   v tečeniji časa
     I   drank.IMPF   bottle   wine/wine   in hour   in course hour
     'I drank a bottle of wine/wine *in an hour/for an hour.'

b. Ja   vypil   butylku   vina/vino   za čas/   * v tečeniji časa
     I   drank.PFV   bottle   wine/wine   in hour   in course hour
     'I drank a bottle of wine/wine in an hour/*for an hour.'

(MacDonald 2008: 146)

(47) *Russian*

a. Nel'zja pit' butylku vina/vino * za čas/ v tečeniji časa
  impossible drink.IMPF bottle wine/wine in hour in course hour
  'It is impossible to drink a bottle of wine *in an hour/for an hour.'

b. Nel'zja vypit' butylku vina/vino za čas/ * v tečeniji časa
  impossible drink.PFV bottle wine/wine in hour in course hour
  'It is impossible to drink a bottle of wine in an hour/*for an hour.'
  (Mayshark 2010: 5)

These examples above show that the time span adverbial *za čas* 'in an hour' is only

grammatical with perfective aspect given it implies a telic or completed reading of the event. The

durative adverbial *v tečeniji časa* 'for an hour' on the other hand does not imply such completion

and is, therefore, only grammatical with the imperfective. (47) additionally shows that the

presence of a modal does not influence this contrast. Using this knowledge, we may see that in

sentences where go is elided like those in (48), if there is a silent-GO lexical item, it corresponds

to imperfective aspect given it is grammatical with the durative adverbial *v tečeniji časa* 'for an

hour' and not with the timespan adverbial *za čas* 'in an hour'. The interaction of aspect and

silent-GO will be discussed further in the following section.

(48) *Russian*
  Mne nužno GO v biblioteku * za čas/ v tečeniji časa
  I need GO to library in hour in course hour
  'I need to go to the library within the hour.'

IV. Aspect and Modality

It is well documented that verbal aspect interacts with other linguistic categories.

Rappaport (1985) discusses a few clear examples of this in Russian which will first be discussed

before diving into aspect's apparent interaction with modality and its possible relation to the

ellipsis of go in Russian.

In Russian, for example, aspect interacts with tense as documented in (49) and (50).

(49)　*Russian*
　　Imperfective
　　　　a. Past
　　　　Pjotr　čital　　　　knigu
　　　　Peter　read.PST.IMPF　book
　　　　'Peter was reading a book.'

　　　　b. Present
　　　　Pjotr　čitaet　　　　knigu
　　　　Peter　read.PRS.IMPF　book
　　　　'Peter is reading a book.'

　　　　c. Future
　　　　Pjotr　budet　　　　čitat'　　　　knigu
　　　　Peter　will　　　　read.INF.IMPF　book
　　　　'Peter will read a book.'

(50)　*Russian*
　　Perfective
　　a. Past
　　　　Pjotr　pročital　　　knigu
　　　　Peter　read.PST.PFV　book
　　　　'Peter read a book.'

　　　　b. Non-past
　　　　Pjotr　pročitaet　　　knigu
　　　　Peter　read.NPST.PFV　book
　　　　'Peter will read a book.'

As is shown above, imperfective verbs such as in (49) have three tense distinctions, past,

present, and future[5]. On the other hand, there are only two tense distinctions for perfective verbs,

---

[5] The "future tense" referred to here is a periphrastic future construction consisting of a conjugated form of the verb *byt'* 'to be' followed by the infinitival form of the imperfective verb. Regardless, this construction is ungrammatical for perfective verbs as shown here where *budet* cannot combine with the perfective form of 'to read', *pročitat'*.
　　　　* Peter　budet　pročitat'　　　knigu
　　　　Peter　will　read.INF.PFV　book
　　　　'Peter will read a book.'
Note that when in combination with negated modals, it is possible to have perfective though this is not crucial to the point above as negated modality has a unique interaction with aspect choice discussed further in Mayshark (2010) and in some detail later in this paper.

past and non-past, as shown in (50). Another example from Russian in (51) shows that the influence of aspect can extend beyond the verb form.

(51) *Russian*
    a. Ja   čital   (knigu)
        I   read.IMPF   book
        'I was reading (a book).'

    b. Ja   pročital   knigu
        I   read.PFV   book
        'I read a book.'

    c.* Ja   pročital
        I   read.PFV
        'I read.'

In (51a) it is shown that the verb *čitat'* 'to read' can optionally take a direct object in the imperfective; however, the perfective form of the verb *pročitat'* must be transitive. This is shown due to the ungrammaticality of (51c) as opposed to the grammaticality of (51b). One last example of aspect interacting with other linguistic features can be shown by the varying interpretations of (52a) and (52b).

(52) *Russian*
    a. Perfective
        On   vstal   kogda ona   vošla   v   komnatu
        He   stood-up.PFV.PST   when she   went-in   to   room
        'He stood up when she entered the room.'

    b. Imperfective
        On   vstaval   kogda ona   vošla   v   komnatu
        He   stood-up.IMPF.PST   when she   went-in   to   room
        'He was standing up when she entered the room.'

In the examples in (52), the choice of aspect seems to take on a semantic function which is not strictly aspectual in nature. In (52a) when the perfective form of the verb 'stood up' *vstal* is used, the two events in the sentence are interpreted as occurring sequentially. When the imperfective form of the verb 'stood up' *vstaval* is used instead as in (52b), the two events are

interpreted as occurring simultaneously. One other linguistic feature with which aspect is known to interact in Russian is modality. As the ellipsis of go in Russian involves modals, it is worth investigating if there is any connection between how modality behaves in these two phenomena. One significant point to make is that, in line with Eide (2005), phonetically unrealized verbs, such as silent-GO, are not tensed, that is, are temporally bare. Before addressing how this may relate to the licensing of silent-GO in Russian, some background on the interaction between modality and aspect another temporally bare context will be discussed: aspect choice in negated modal contexts.

1. Aspect and Modality in Negated Contexts

Rappaport (1985) draws attention to a connection between verbal aspect choice in Russian and the interpretation of negated modal phrases to which the verb is a complement. Mayshark (2010) then analyzes the behavior of the modals Rappaport studied, eventually dividing them into two groups: those for which aspect choice and modality interact and those for which there is no interaction. These two groups and their relevant data shall now be discussed.

1.1 Russian Modals with an Aspect-Modality Connection

The Russian modals which demonstrate a connection between aspect choice and modal interpretation are *nado* 'need/have to', *nužno* 'need/have to', *nel'zja* 'impossible/impermissible', and *vozmožno* 'possible'. Relevant to this connection is the two interpretations of modals which are readily available in Russian: the deontic interpretation and the epistemic interpretation. The deontic reading generally pertains to obligation, necessity, or permissibility, whereas the epistemic reading concerns possibility or validity with respect to the speaker's knowledge on the subject of discussion. Each of the modals in this group select for an imperfective verb when

expressing deontic modality. On the other hand, each of them select for a perfective verb when

expressing epistemic modality. Examples for aspect choice for each modal are shown below.

Nado and *nužno* both mean 'need/necessary/have to.' Both are strictly deontic modals,

and therefore under negation they combine solely with imperfective verbs as shown in example

(53) below.

(53)   *Russian*
    a. Ne   **nado** mne   glaza **vykalyvat'**
       not   need   me   eyes   gouge.**IMPF**
       'I don't need my eyes gouged out.'

    b. Èto   vam   poka   tože   ne   **nužno znat'**
       this you   presently also not   need know.**IMPF**
       'For the present, this is also not necessary for you to know.'
       (Mayshark 2010: 35)

Vozmožno 'possible', opposite *nado* and *nužno*, is a strictly epistemic modal. Therefore,

under negation it combines solely with perfective verbs as shown in (54).

(54)   *Russian*
      Ja   real'no dumaiju   čto   bol'šego   **sdelat'** ne   **vozmožno**
      I   really think   that   more   do.**PFV** not possible
      'In reality, I think that it is impossible to do more.'
      (Mayshark 2010: 37)

Nel'zja 'impossible/impermissible', unlike the modals previously discussed in this

section, can express both epistemic and deontic modality. When expressing deontic modality

under negation, it combines with imperfective verbs as shown in (55a). When expressing

epistemic modality under negation, it combines with perfective verbs as shown in (55b).

(55)   *Russian*
    a. Deontic
       Nel'zja   čitat'   knigu
       impossible   read.**IMPF**   book
       'It is forbidden to read a book.'

    b. Epistemic

```
Nel'zja        pročitat'      knigu
impossible     read.PFV       book
'It is impossible to read a book.'
```

1.2 Russian Modals without an Aspect-Modality Connection

The Russian modals which do not demonstrate a connection between aspect choice and

modal interpretation are *moč* 'can' and *dolžen* 'must'. This is independent of what type of

modality (such as deontic or epistemic) the modals are expressing. Examples are shown below in

(56) of each negated modal taking both imperfective and perfective verbs as complements.
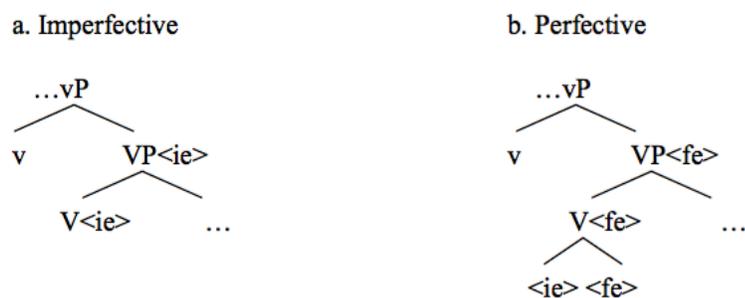
(56)   *Russian*
        Moč

```
a.  Ja      ne      mogu  pisat'       knigu
    I       not     can   write.IMPF   book
    'I cannot write a book.'
b.  Ja      ne      mogu  napisat'     knigu
    I       not     can   write.PFV    book
    'I cannot write a book.'
```
        Dolžen
```
c.  Ja      ne      dolžen zvonit'     otsjuda
    I       not     should call.impf   from here
    'I should not call from here.'
d.  Ja      ne      dolžen pozvonit'   otsjuda
    I       not     should call.pfv    from here
    'I should not call from here.'
```
(Mayshark 2010: 41, 44)

1.3 Mayshark (2010)'s Analysis of Two Groups of Russian Modals

Mayshark (2010)'s structural analysis of the two groups of Russian modals outlined

above in 1.1 and 1.2 builds on ideas put forth in MacDonald (2008)'s *The syntactic nature of*

inner aspect. MacDonald (2008) discusses the English and Russian aspect systems and their

differences, though does not address modals in either language. Mayshark (2010) then modifies

structures put forth in MacDonald (2008) to account for the influence of negated modality on

aspect choice. MacDonald uses the label Event Structure for the realm of syntactic interpretation

of verbal aspect and is specifically concerned with the sub-event structure of the predicate, which

includes the interactions between aspect and the predicate at a deeper syntactic level. For

Russian, the following two structures are presented for how aspect is incorporated into the
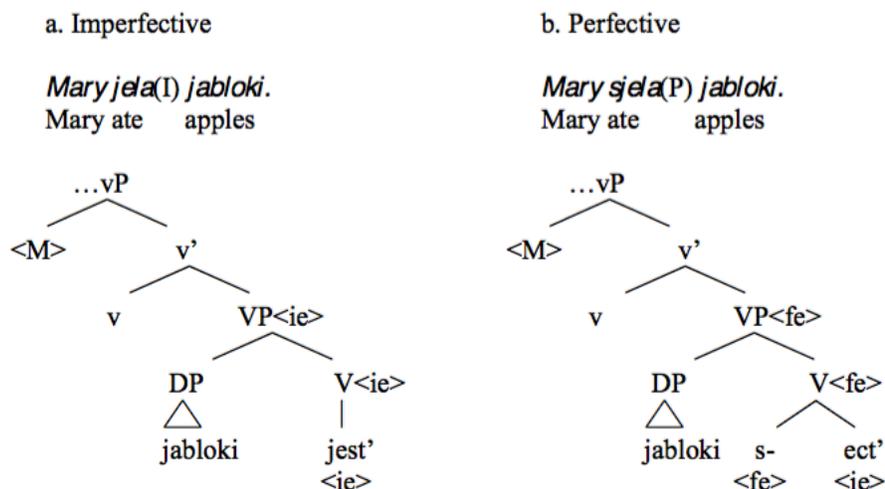
syntax.

(57)

a. Imperfective

...vP
v   VP<ie>
   V<ie>   ...

b. Perfective

...vP
v   VP<fe>
   V<fe>   ...
      <ie> <fe>

(MacDonald 2008: 149)

The <ie> feature is the initial event feature. In Russian, this feature is introduced by the

simplex imperfective verb and is projected to the VP when the <fe> feature is not present. The

<fe> feature is the final event feature, signifying the completion of the event. The <fe> feature is

a strong feature and thus projects to the VP level when it is present and then to the verb head,

being reflected on the overt verbal form. It originates on the perfective prefix of the verb.

Mayshark (2010) provides examples of how each of these trees would work for Russian aspect

using the verb *jest'* 'to eat'.

(58)

a. Imperfective

Mary jela(I) jabloki.
Mary ate   apples

```
        ...vP
        /    \
     <M>      v'
             /  \
            v    VP<ie>
                 /    \
               DP      V<ie>
               △        |
             jabloki   jest'
                       <ie>
```

b. Perfective

Mary sjela(P) jabloki.
Mary ate   apples

```
        ...vP
        /    \
     <M>      v'
             /  \
            v    VP<fe>
                 /    \
               DP      V<fe>
               △       /  \
             jabloki  s-    ect'
                     <fe>  <ie>
```

(Mayshark 2010: 26)

Mayshark then develops the Event Structure proposed by MacDonald to account for the effect of negated modals on aspect choice. For those modals which have this interaction, modals which Mayshark defines as modal adverbials, the ModP is placed as vP-internal such that its negated epistemic or negated deontic features may interact with the perfective (as opposed to <fe>) and imperfective (as opposed to <ie>) features in the V head[6]. This derivation of the structure is shown in (59) below.

---

[6] Mayshark (2010) uses the labels [PERF] and [IMP] instead of <fe> and <ie>, respectively, in his derivation due to the fact that the temporality of the event in question has been changed or modalized.

(59)
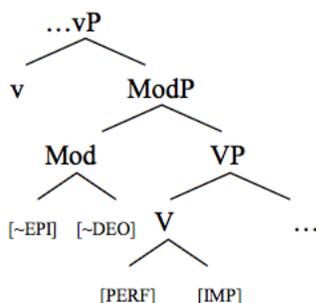
(Mayshark 2010: 47)

In this derivation, once the modality of the modal is recognized syntactically, the relevant aspect feature is selected and projects to the VP where it may become syntactically visible. If a modal is understood with [~EPI], the [PERF] feature projects, which corresponds to the fact that negated epistemic modality corresponds with perfective aspect. If a modal is understood with [~DEO] on the other hand, the [IMP] feature projects and is realized on the verb form, corresponding to the fact that negated deontic modality selects for an imperfective verb.

For modals which do not show such a correlation between aspect and negated modality, including *moč* and *dolžen*, Mayshark (2010) follows the same structure as MacDonald (2008)'s structures for Russian perfective and imperfective aspect shown in (57), incorporating the <ie> and <fe> features. This is due to the fact that with these modals, aspect choice is transparent, that is, can be attributed solely to the projection of the initial or final event features without respect to modality. These analyses can be applied to silent-GO constructions, indicated which modals in Russian allow such constructions.

2. Russian Modals, Aspect, and Silent-GO

The previous section showed the interaction between modality and aspect in one temporally bare context: under negated modality for a specific set of modals, modal adverbials

nado, *nužno*, *nel'zja*, and *vozmožno*. Contrarily, the modal verb *moč* and modal particle *dolžen* do not show such interaction when negated. This grouping of the two modal groups also, with slight alteration, translates to which modals do and do not allow silent-GO as a complement which in line with Eide (2005) can likewise be treated as a temporally bare context given the silent verbal element not bearing tense. This correlation will be further explored in this section for each of the aforementioned modals.

2.1 *Nado* and *nužno*

Nado and *nužno* as shown in Part IV, section 1.1, both belong to the class of modals in which modal interpretation correlates with aspect choice under negation. Both are strictly deontic modals and thus take imperfective verbs as a complement. They may both take silent-GO as a complement as shown in (60).

(60)   *Russian*
   a. Mne   nado   GO   v   biblioteku
       I   need   GO   to   library
       'I need to go to the library.'

   b. Mne   nužno GO   v   biblioteku
       I   need   GO   to   library
       'I need to go to the library.'

2.2 *Moč* and *dolžen*

Moč and *dolžen* as shown in Part IV, section 1.1, both belong to the class of modals in which modal interpretation does not correlate with aspect choice. Neither may take silent-GO as a complement as shown in (61).

(61)   *Russian*
   a.* Ja   ne   mogu GO   v   biblioteku
       I   not   can   GO   to   library
       'I cannot go to the library.'

b.* Ja   ne   dolžen GO   v   biblioteku
I   not   must   GO   to   library
'I must not go to the library.'

2.3 *Nel'zja* and *vozmožno*

At first glance, *nel'zja* and *vozmožno* appear to break this pattern given silent-GO

contexts such as those in (62) are ungrammatical.

(62)   *Russian*
a.* Vozmožno   GO   v   biblioteku
possible   GO   to   library
'It is possible to go to the library.'

b.* Nel'zja   GO   v   biblioteku
impossible   GO   to   library
'It is impossible to go to the library.'

Despite this apparent issue with the correlation discussed at the beginning of part IV,

section 2, it is possible to have silent-GO with *nel'zja* in examples like (63).

(63)   *Russian*
Mne   nel'zja   GO   v   biblioteku
I   impermissible GO   to   library
'I cannot go to the library.'

There are two key differences between (62b) and (63): *nel'zja* in (63) is deontic rather

than epistemic and *nel'zja* in (63) has a dative subject. Both could be possible explanations for

why *vozmožno* does not seem to be able to take silent-GO in any situation. This is because

vozmožno is a strictly epistemic predicate while the epistemic reading of modals is notably lost in

constructions with a modal followed by a prepositional phrase. One possible explanation for the

loss of the epistemic reading if analyzing silent-GO as somehow connected to inner aspect is

dependent on the data in Part III, section 2.4, establishing that silent-GO is imperfective aspect.

As Mayshark (2010) shows the expression of epistemic modality correlates with perfective

aspect, perhaps silent-GO being necessarily imperfective prevents epistemic modality from being

realized in these contexts. Alternatively, *vozmožno* is unable to take a dative subject which may restrict its ability to take GO as a complement due to GO potentially needing to assign an agent theta role to its subject.

2.4 Analysis

From looking at data presented in Rappaport (1985) and follow-up data in Mayshark (2010), it is clear that for some Russian modals, including *nado, nužno, nel'zja*, and *vozmožno*, negated modality affects inner aspect. Negated modality due to the effects it has on the temporality of an event results in a temporally bare verb being taken by the modal. Likewise, according to Eide (2005), phonetically null verbs are not tensed; therefore, if silent-GO is posited to be a lexical item in Russian, it would also be a temporally bare verb and could behave similarly with respect to modals as the interaction between negated modality and inner aspect does – and in fact it does behave similarly: *nado* and *nužno* which express this effect on inner aspect for negated modality also allow silent-GO as a complement. In the same line of thought, *moč* and *dolžen* which do not have this effect on inner aspect under negated modality do not allow silent-GO as a complement. *Nel'zja* and *vozmožno* with some explanation laid out in the previous section can also still fit into this pattern. More research, however, is needed to determine what modals belong to each group. For instance, part of Mayshark (2010)'s justification for dividing the modals into two groups as so is that the modal adverbials (*nado, nužno, nel'zja*, and *vozmožno*) are different syntactically than the modal verb *moč* and the modal participle *dolžen*. If the correlation between silent-GO and these two modal categories is significant, then an issue arises for Mayshark basing part of the division on this syntactic distinction given the fact that *xotet'* 'to want' is a modal verb much like *moč* which can take silent-GO as a complement. Likewise, *xotet'* behaves similarly to *nado* and *nužno* in that it does

show an interaction with aspect choice under negated modality: only selecting for imperfective complements.

V. Summary, Conclusions, and Suggestions for Future Research

The proposal of a silent-GO lexical item in constructions in Germanic and Slavic languages among others is further supported by some data in Russian both corresponding to preexisting data in Slovenian à la Marušič and Žaucer (2005) and additional data specific to Russian. Furthermore, the ellipsis of go in Russian more generally allows us to generalize about possible features of this phonetically null lexical item if it does in fact exist, including, perhaps most important, that it seems to be imperfective aspect which may be related to why epistemic readings of modals do not appear to be possible in silent-GO type constructions. The apparent division of modals in Russian into two groups, those allowing silent-GO and having an interaction between modality and aspect under negation and those not, warrants further investigation as the boundaries between these two categories may not be as clear as previously posited. Further studies are also warranted to better investigate crosslinguistic variance in this construction, both in what allows the construction generally and in which modals are able to participate in it in any given language. Van Dooren (2014) breaks into this somewhat in a number of European languages but can be built upon.

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