On phonologically null verbs

GO and beyond

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The paper discusses the phenomenon of null verbs and provides evidence for three different null verbs in Slovenian. We argue that what looks like a V^0 -less structure with a modal taking a PP complement is best analyzed as containing a null V^0 GO; we thus add GO to FEEL-LIKE, discussed in Marušič and Žaucer (2004, 2005), and to the more widely acknowledged HAVE. Further, we argue that null verbs do not need any formal licensing (contra van Riemsdijk 2002); however, a recoverability condition mandates that they should co-occur with some elements that will signal their presence and thus make them recoverable.

1. The phenomenon of null verbs

When it comes to null elements, there is little disagreement in current linguistic theory that functional elements can be covert, with recent proposals positing null causatives (e.g. Pylkkänen 2002), null modals (e.g. Rivero & Milojević-Sheppard 2003), null prepositions (e.g. MacDonald 2004), null C, null T, etc. In the domain of lexical categories, however, null heads have not been as popular. In the verbal category, the basic idea has only persisted with regard to a null *HAVE* (Ross 1976; McCawley 1979; den Dikken et al. 1996; Larson et al. 1997) (Larson et al. 1997 add a null *BE*). Recently, however, van Riemsdijk (2002) has made a case for a null *GO* in some Germanic languages and Marušič & Žaucer (2004, 2005) have posited a null verb *FEEL-LIKE* for several Slavic languages. In this paper, we do two things. On the one hand, we present a crosslinguistic extension of van Riemsdijk's Germanic-based proposal for a null *GO* to Slovenian, and on the other, we offer a more general discussion of the phenomenon of null verbs, by drawing on several null verbs.

The paper is organized as follows. Sections 2, 3, and 4 introduce three Slovenian null verbs, *HAVE*, *FEEL-LIKE*, and *GO*, respectively, though we put a strong emphasis on presenting/defending the null *GO*, since *HAVE*, on the one hand, seems more widely acknowledged, and *FEEL-LIKE*, on the other, is discussed in detail in Marušič & Žaucer (2005). Section 5 argues against an ellipsis account of the null *GO* phenomena, instead positing a separate, phonologically null verb *GO* (giving support to van Riemsdijk 2002 and Marušič & Žaucer 2005). Section 6 rejects van Riemsdijk's claim that null verbs need to be structurally licensed, proposing instead that the only obvious (null-verb–specific) condition on their use is recoverability. Finally, in view of an apparent tendency whereby only semantically primitive

concepts get realized with lexically null verbs, section 7 briefly addresses the status of two further verbs which are in Slovenian frequently absent/unpronounced.

2. Slovenian null verb HAVE

A null *HAVE/GET* has been proposed for English counterparts of sentences such as the Slovenian (1), with a simplified structure as in (2) (e.g. Ross 1976; den Dikken *et al.* 1996).^{1,2}

- (1) Maša je (včeraj) hotela medvedka ((že) jutri). Maša AUX yesterday wanted teddy bear already tomorrow 'Yesterday, Maša wanted a teddy bear (as soon as) tomorrow.'
- (2) Maša wanted [PRO TO-HAVE a teddy bear].

The reasoning is simple. Sentences like (1) allow two non-agreeing temporal adverb(ial)s (i.e. two positional adverbials referring to two distinct points in time), with *yesterday* modifying the 'wanting' and *tomorrow* modifying the 'having'/'getting'; this suggests that there are two temporally independent events.³ On the assumption that events are introduced only by verbs and other primary predicates that can replace verbs in a sentence (cf. Svenonius 2004), two events provide evidence for two clausal domains (minimally including two VPs/vPs).⁴ Indeed, the adverbial modification in (1) makes such sentences parallel to overtly biclausal control structures such as (3) rather than to monoclausal structures such as (4), thereby confirming the correctness of a biclausal analysis for (1) (along the lines of 2), that is, with an embedded null HAVE. For details, see Ross (1976), McCawley (1979), den Dikken *et al.* (1996), Larson *et al.* (1997), Marušič & Žaucer (2005), etc. A question that we leave open for now is whether (1) contains an elided *have* or a separate null verb HAVE.

- (3) Maša je (včeraj) hotela imeti medvedka ((že) jutri). Maša AUX yesterday wanted have-INF teddybear already tomorrow 'Yesterday, Maša wanted [to have a teddybear (as soon as) tomorrow].'
- (4) * Maša je/bo včeraj igrala košarko (že) jutri.

 Maša AUX-PAST/FUT yesterday played basketball already tomorrow

 * 'Yesterday, Maša played/will play basketball (as soon as) tomorrow.'

¹ As GET is just a change-of-state version of HAVE, we will simplify and use 'HAVE' for both.

² Unless noted otherwise, examples in this paper are from Slovenian. Whenever inflection is not relevant for our argument, we omit it from the word-for-word glosses.

³ Cf. Marušič & Žaucer (2005) for a more detailed discussion of the double adverbial argument, some apparent counterexamples and ways around them.

⁴ Note that such an assumption is neither uncommon nor too controversial; it is obviously supported by the majority of linguistic data, and its conceptual simplicity clearly justifies accepting it as the null hypothesis. This assumption seems to underlie any constrained model where the semantics is compositionally read off of the syntax, and it has proven fruitful in the study of intensional transitive verbs (e.g. den Dikken *et al.* 1996), causatives (e.g. Travis 2000), serial verb constructions (e.g. Baker & Stewart 1999), event nominals (e.g. Alexiadou 2001), etc.

3. Null verb feel-like

Marušič & Žaucer (2004, 2005) discuss sentences like (5), whose meaning corresponds to what is usually conveyed with two verbal forms while its surface form only exhibits one verbal form. Marušič & Žaucer argue strongly that (5) is best analyzed as containing a null lexical verb *FEEL-LIKE*, thus going against previous analyses (Franks 1995; Benedicto 1995; Rivero & Milojević-Sheppard 2003), which derived the disposition from a null modal/functional head.

(5) Fantom se je prepevalo. boys-DAT.PL NON-ACTIVE AUX-PAST sang-3P.SG 'The boys felt like singing.'

Marušič & Žaucer's (2004, 2005) clearest evidence for the biclausality of the construction in (5) comes from the possibility of its hosting double non-agreeing temporal adverb(ial)s, as in (6a), and double non-agreeing depictive secondary predicates, as in (6b). Both of these possibilities show that we are dealing with two temporally independent events, and this, in turn (cf. section 2 and footnote 3), suggests that we are dealing with two verbs in two separate clauses. Example (6) further shows that the tense inflection on the auxiliary actually modifies the temporally independent 'feel-like' disposition, not the event denoted by the overt verb, showing that the 'feel-like' disposition must be associated with a TP that cannot be the TP of the overt verb.

- (6) a. Črtu se je včeraj ful šlo domov v Petek. Črt-DAT NON-ACT. AUX-3P.PAST yesterday so went-SG.NEU home on Friday 'Yesterday, Črt really felt like going home this Friday.'
 - b. Črtu se je pijanemu ful šlo domov trezen. Črt-DAT NON-ACT. AUX-3P.PAST drunk-DAT so went-SG.NEU home sober-NOM 'When drunk, Črt really felt like going home sober.'

Further, if one assumes a strict hierarchy of functional projections and the correspondingly fixed linear order of (preverbal/IP) adverbs (Cinque 1999), the only way to switch the order of adverbs is to have two sets of functional projections, with the otherwise irreversible adverbs sitting in distinct clauses. Therefore, the fact that (7b), unlike (7a), allows the reversed order of 'again' and 'nonstop' further suggests that (7b) contains two clauses. And even regardless of any assumptions, (7a) only accepts the two adverbs in one order while its *FEEL-LIKE* counterpart admits both orders (see Marušič & Žaucer 2005 for details).

- (7) a. Fidel je spet nepretrgoma / *nepretrgoma spet kadil havanke. Fidel AUX again nonstop / nonstop again smoked Cubans 'Fidel again nonstop smoked Cuban cigars.'
 - b. Fidelu se je nepretrgoma spet kadilo havanke. Fidel-DAT NON-ACT AUX nonstop again smoked Cubans 'Fidel nonstop felt like again smoking Cuban cigars.'

Moreover, the Serbian *FEEL-LIKE* construction can contain an inceptive prefix, in which case it is not the overt verb that gets the inceptive reading, but rather the disposition, (8). Since functional projections like modals cannot host such prefixes and do not come with their own set of aspectual (and other functional) projections, the disposition must stem from a null V^0 in its

own clause. Also, as inceptivity is widely taken to scope below any kind of modals (e.g. Cinque 2003), pri- can only scope over the disposition if the latter is encoded in a V^0 .

(8) Pri-jele su mi se jabuke. (Serbian)
INCEPTIVE-eat AUX I-DAT NON-ACT apples
'I started to feel like eating apples.' (not: 'I felt like starting to eat apples.')

And on a different note, Marušič & Žaucer (2005) argue that the null *FEEL-LIKE* cannot be a case of (specified) ellipsis, since in Slovenian, *FEEL-LIKE* sentences can get slightly different interpretation from their overt-verb paraphrases, and since in (some dialects of) Serbian as well as in Albanian, which also exhibit the *FEEL-LIKE* construction, there simply is no overt-verb paraphrases at all, which leaves no verb to serve as the input to ellipsis.

4. Null verb GO 4.1. Introduction

Discussing Germanic structures—parallel to the Slovenian one in (9)—which seem to contain a modal and a directional adverb(ial) but no overt main verb, Van Riemsdijk (2002) argues that they contain a null main verb GO. He thus goes against the alternative from Barbiers (1995), which holds that in such structures the modal—normally an F^0 —has turned into a full verb (V^0), which obligatorily selects a directional adverb(ial); the motion is then seen as arising from the directionality of the adverb(ial).

(9) 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.'

Van Riemsdijk shows that while directional adverb(ial)s in Swiss German cannot normally occur sentence finally, i.e. after the auxiliary and/or modals, as shown in (10a-b), this restriction can seemingly be violated in the structures that overtly only contain a modal and a directional (op. cit.:148-9), as in (11). However, if one posits that the overtly sentence-final directional in (11) is actually followed by a null motion verb, such structures present no deviation from the otherwise robust generalization. In addition, this preserves a uniform treatment of modals as FPs, as one avoids having to see the modal in such structures as having turned into a V^0 . For Swiss German and a number of other Germanic languages (excluding English), van Riemsdijk thus proposes a null motion verb GO.

- (10) a. ... wil si iri tochter häi hetted söle schicke. ... because they their daughter home would've had-to send "... because they should've sent their daughter home." b. ... wil si iri tochter hetted (häi) söle (häi) schicke (*häi). ... because they their daughter would've home had-to home send home
- (11) ... wil mer (häi) hetted (häi) söle (häi). ... because we home would've home had-to home '... because we should've gone home.'

A second possible alternative to avoid positing a null motion verb could claim that the directional PP is a complement of a null copula in vP (i.e. with no intervening VP), with the motion coming from the directionality of the PP (just like in the first alternative). If it can be made to work, such an alternative might be theoretically more appealing in that it would manage to keep another null element in the domain of functional categories, rather than having to include it in the lexicon (cf. Emonds 2000). However, an immediate problem for this approach comes from the fact that goal PPs, (12a-b), do not occur in simple predicative constructions. Note that although such structures are possible with source PPs, (12c), they can only get a static/non-motion interpretation, as shown by (12d). It seems, then, that in order to derive the motion in (9), the directionality of the PP alone will not suffice, so we will need to posit some kind of verbal element.

```
(12) a.*Ta
             pohod je na
                             Triglav.
        this march is onto Mt.-Triglav
                        gostilno.
     b.*Peter
                je v
        Peter
                is into bar
     c. Pivo Mack
                     je iz
                              Tromsöja.
        beer Mack
                     is from Tromsö
        'Mack beer is from Tromsö.'
                        gostilne.
     d. Peter
                je iz
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Peter is from bar 'Peter is originally from the bar (i.e. originally comes from the bar).' (not: 'Peter is going away from the bar.')

A third alternative, related to the one just discussed, could derive the motional interpretation from a null motion copula/v on top of a PP (cf. van Riemsdijk 2002:192-3), rather than from the combination of a predicative little v and a directional PP. Such an account, however, is implausible in view of the fact that the only uncontroversial copula in Slovenian, 'be', is necessarily overt in predicative sentences (i.e. in [vP [PP/AP]] structures), (13c); having to assume that the postulated motion copula is necessarily null, when the predicative/locational one is necessarily overt, is clearly not very appealing. In a similar vein, if a null-motion-copula approach were on the right track for the null GO sentence in (9), then one could reasonably expect—on the basis of structural parallelism—that the predicative/locational copula could be unpronounced at least in (13b), where the copula is embedded under an agreement-carrying modal and is followed by a PP/AP; this structure is a perfect match of the one that would be assumed for (9), yet unlike (9), (13b) is ungrammatical. Furthermore, since copulas (at least in Slovenian) do not seem to be as restricted as the structures of the type in (9), a null motion copula that shows a number of restrictions would actually be very similar to a null verb. Therefore, although a null-motion-copula analysis seems in principle possible, we do not see how the kind of copula we would need to posit to account for (9) would differ from a null verb. And since sentences like (13a) are impossible (in contrast to predicative structures with the (overt) copula 'be', 13c), it seems that this third alternative can be rejected in favor of the theoretically simpler option, where the element in (9) is seen as a null verb. (Also, we do not see how one can empirically differentiate between a null little v and a null V, and furthermore, the sentences with null GO may well have an unaccusative structure—in Dutch they get a 'be'

auxiliary, not 'have' (van Riemsdijk 2003)—which not every syntactic model sees as containing a vP at all.)⁵

```
(13) a.*Peter
                       gostilno.
        Peter
                 into bar
         'Peter is going to the bar.'
     b.*Peter
                                   v gostilni /
                 mora
                                                 pijan.
        Peter
                 must-3P.SG.PRES in bar
                                              / drunk
     c. Peter
                 je v gostilni / pijan.
                 is in bar
                                / drunk
         Peter
         'Peter is in the bar / Peter is drunk.'
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Unfortunately, Slovenian does not exhibit Germanic-style word-order phenomena, so we cannot replicate van Riemsdijk's argumentation; however, we will now present other kinds of empirical evidence to corroborate the initial claims we have just made about the need for positing a null motion verb in structures like (9). Specifically, section 4.2 will discuss data with non-agreeing adverbials, the 'purpose' preposition *po*, supine complements, covert modality, and VP/vP conjunction.

4.2. Arguments for the existence of GO in Slovenian 4.2.1. Non-agreeing adverbials

The argument that is often used for null *HAVE*—the possibility of non-agreeing temporal adverbials—can also be applied to *GO*. As (14) shows, a simple sentence with a single verb cannot accept contradictory temporal adverbials (regardless of the tense of the verb). On the other hand, these are fine in (15), even though there is only one overt verb (i.e. 'feel-like').

- (14) *Včeraj Lina 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.'
- (15) 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.'

Simply, the possibility of two non-agreeing temporal adverb(ial)s in (15) shows that the sentence contains two temporally independent events and, by extension (cf. section 2, footnote 3), a syntactic structure with two VPs/primary predicates. Unless we assume that the directional adverb 'home' and the temporal adverb 'tomorrow' are actually inside a separate clause (with a null verb GO) embedded under 'feel-like', it is not clear why the sentence admits non-agreeing temporal adverb(ial)s. An alternative claiming that the directional adverb(ial) is subcategorized for by the verb 'feel-like', with the motion arising from the directionality of the adverb(ial),

⁵ Note also that van Riemsdijk (2002:192) states that 'specific lexical properties have to be attributed to the various empty light motion verbs in the different languages under scrutiny' (i.e., Swiss German, Dutch, Afrikaans, Frisian, etc.), which, in our view, also argues against a null-motion-copula analysis of the null *GO* counterparts in the various languages, since functional elements should not have different lexical properties across languages, or in fact, should not have lexical properties at all.

would have to claim—contrary to standard assumptions whereby temporal adverb(ial)s are dependents of VPs (e.g. Demirdache & Uribe-Etxebarria 2004)—that the second temporal adverb(ial) is somehow a dependent of the directional PP/AdvP.

4.2.2. Purpose preposition po

Besides a directional adverb(ial), a modal can also appear to select for a non-directional PP with the 'purpose' preposition *po*, as in (16).

(16) Peter mora (v trgovino) po kruh.

Peter must to store for bread

'Peter must go (to the store) and get some bread.'

Po is typically said to signify 'movement with a purpose' (Bajec et al. 1994), or the NP is said to denote the 'object which someone goes to get' (Herrity 2000:293). Just like goal PPs, po cannot be used in predicative constructions, (9). Thus, an analysis taking the PP to be a complement of a null predicative copula in vP (i.e. with no intervening VP) again proves to be unfeasible.

(17)* Branje enciklopedije je po dejstva. reading ecyclopedia AUX for facts 'The reading of an ecyclopedia is for facts.'

The preposition *po* is also barred from clauses without a motion verb, (18), where having a purpose preposition would semantically make perfect sense.

```
(18) a.*Prebral je
                      knjigo po
                                    podatke.
        read
                 AUX book
                               for
                                    data
        'He read the book to get data.'
     b.*Basal
                se
                      ie
                                  misliii
                                          po
                                                čimveč energije.
        stuff
                 REFL AUX with cereal
                                          for
                                                more
                                                        energy
        'He was stuffing himself up with cereal to get more energy.'
```

Since (16), which contains no overt motion element, nonetheless works fine with the preposition po, we have to explain where the motion comes from. As shown by (19a), it cannot come from the modal. A modal taking an overt verbal complement does not have a motion interpretation that would license the presence of po. Similarly, a directional PP alone, as in (19b), does not have the motion interpretation that is needed to license po.

```
(19) a.*Črt mora
                                  računalnik.
                     delati
                             po
        Črt must
                     work
                             for
                                  computer
     b.*Črt se
                  je
                       prijavil
                                  na
                                       Šussovo listo
                                                             po
                                                                  čvek.
            REFL AUX subscribed to
                                       ŠUSS
                                              mailing-list
                                                                  gossip
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To sum up, despite there being no overt motion verb, (16) is read as 'he must go and get bread'; at the same time, po in (16) needs a motion verb to be licensed. It seems that the only feasible

⁶ In other words, the 'motion' that arises solely from a change-of-state operator does not license *po*, the motion coming from motion verbs (such as *iti* 'go', *GO*, *teči* 'run', *seči* 'reach') does.

conclusion one can draw is that a motion verb is actually present but is not pronounced. While the null predicative copula+PP account is simply unfeasible, the only way to uphold the modal-turned-full-verb account would be to claim that this categorially converted element in (16) also converts semantically, i.e., it comes to encode both modality and motion.

4.2.3. Supine complement

Standard Slovenian distinguishes between infinitive and supine verbal forms, *beračiti* 'to beg' vs. *beračiti* (supine lacks final -*i*). Unlike the infinitive, which occurs in typical nonfinite contexts, the supine follows verbs of motion (Herrity 2000), especially *go* and *come* (but also *carry, take, drive, send,* etc.). The supine conveys some kind of 'purpose', *in order to V*.⁷ (20) is a typical example.

(20) Lani sta šla / prišla študirat(*-i) v Ljubljano. last-year AUX go / come study-SUPINE into Ljubljana 'Last year they went / came to Ljubljana to study.'

Interestingly, the supine can also occur following a modal, as in (21). If the supine gets licensed by the motion verb, then the acceptability of (21) suggests that there must be a null motion verb in the sentence.

(21) Moram beračit.
must-1P.SG beg-SUPINE
'I must go and beg.' [uttered lying on the bed at home]

Note that there is no directional PP in (21) and that—given the context in the square brackets—the supine is actually the only possible form for (21). Note, further, that the directional PP is impossible in a comparable sentence with an infinitive, (22).

(22) Za preživetje so morali (*na cesto) beračiti. for survival AUX-3P.PL.PAST must-PL onto street beg-INFINITIVE 'In order to survive, they had to beg.'

The alternative that sees the modal in a typical null GO example like (9) as a full verb that selects for a PP, as well as the one that posits a null predicational copula/v with a directional PP complement—that is, the alternatives that derive the motion solely from the directionality of the PP—cannot explain (21), since the latter contains no directional PP. But if there is no PP in the sentence, where is the motion coming from? It cannot come from the supine, when the

⁷ Though reminiscent of the English *come see the band* and *go and see the band*, whose *come/go* Cardinaletti & Giusti (2001) analyze as a lexical verb merged in a functional projection (and the structures as monoclausal), our supine cases are structurally different. The English structures allow only the most primitive motion verbs, while the supine works under any motion verb. The English construction is barred from the past tense, the supine construction works in all tenses. Also, both the motion verb and the verb in the supine can occur in either their perfective or imperfective form (with all 4 combinations possible); if both verbs come with their own AspPs, the structure is presumably biclausal. Moreover, the two verbs can actually have distinct subjects, and can both come with an internal/accusative-marked argument, as in (i), clearly showing that both verbs project VPs.

⁽i) Poslali so ga študirat jezikoslovje. Sent-PL AUX-3P.PL he-ACC study-SUPINE linguistics-ACC 'They sent him to study linguistics.'

supine itself is supposed to be licensed by a preceding motion verb. To explain (21) and the licensing of the supine, the null predicative copula+PP account obviously fails, and the putative modal-turned-full verb in (21) should thus even encode motion semantics. But if the modal-turned-full verb also encodes motion, then it is not clear why the PP in, say, (9) is necessary in the first place. The only way out, for such a proposal, seems to be the completely ad hoc claim that the modal-turned-full verb in (9) lacks motion but the modal-turned-full verb in (21) (as well as (16)) encodes motion as well, or the claim that the motion in (9) in fact also comes from the modal-turned-full verb, with which the PP is obligatory just to signal the converted $(F^0$ -to- V^0) nature of the modal. All these stipulations seem quite ad hoc, and are clearly inferior to the principled, null-verb analysis.

In other words, sentences like (21) (and (16)) simply must contain a (null) verbal element providing the motion semantics. And in view of our discussion above (cf. section 4.1), which shows that positing a null motion copula would be problematic in several respects, we conclude that these sentences contain a null verb *GO*.

4.2.4. Covert modality

Infinitival [+wh] clauses get some sort of modal interpretation, although they do not have any overt modal element (cf. Bhatt 2000). In Slovenian, these clauses with covert modality can also occur with no overt verb and a directional PP.

(23) 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].'

The lower clause in (23) has no overt verbal element. Since a clause should not consist of a complementizer and a directional PP alone, some invisible verb has to exist for the PP to be licensed. To explain (23) (assuming that there is no null motion copula in Slovenian, cf. section 4.1 above), we simply have to postulate a null V, either a null modal-turned-full verb or a null GO; but if so, then the alternative analysis, whose only advantage for sentences like (9) would be that it avoids positing null verbs, has to posit a null verb too, obliterating its very purpose of existence. The same objections can be raised also in view of (24), where covert modality co-occurs with the purpose po.

(24) Še zdaj ne ve [kako z biciklom po vino]. still now not knows how with bike for wine 'He still doesn't know how to go and get wine with his bike.'

4.2.5. VP/vP conjunction

If the GO constructions indeed contain a (null) VP and the modal is just an FP, it should be possible to conjoin the VP with another VP. This prediction is borne out, as shown by the examples in (25).

(25) a. 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.'

b. Črt ni mogel niti po kruh niti dokončati domače naloge. Črt not can neither for bread neither finish home task 'Črt could neither go and fetch bread, nor finish his homework.'

Since the modal in (25a-b) scopes over both conjuncts, as shown by the gloss, the conjoined phrases have to be smaller than TP and at least a VP, as the second conjunct clearly has a VP. If (25) is a VP conjunction, both conjuncts have to be VPs; therefore, the PP needs a verb to which it is a complement. If (25) conjoins two vPs (or anything higher), the PP could in principle be a complement to v; but again, the only option for the v of the first conjunct would be the theoretically controversial null motion copula, while a null predicational copula is not an option, since—as we explained above—goal PPs and the purpose po-PPs cannot be complements to the predicational copula/v. In short, the PP in (25) must be a complement of a null motion verb. Note that this argument is valid regardless of the nature of the modal. Even if the modal is a V^0 (not an F^0), it cannot have the PP as its complement, since the modal scopes over both conjuncts. The complement of the modal is the conjunction, and since the conjoined phrases should be identical, the reasoning applied above applies here as well.

On the one hand, section 4.1 has provided substantial empirical evidence against two of the alternative accounts, namely, the modal-turned-full-verb account and the account with a null, PP-embedding predicational copula. On the other hand, not seeing how one could empirically differentiate between an account with a null motion V^0 and one with a null motion copula/ v^0 , we have raised several theoretical objections against the null motion copula account. Therefore, we conclude that the constructions under consideration are best analyzed as containing a null motion verb (V^0) GO.

4.3. The environments Slovenian GO appears in

Van Riemsdijk (2002) shows that the Germanic GO co-occurs with a modal and a directional PP. It seems, then, that the Slovenian GO has a wider distribution; we posited the existence of GO when a modal co-occurred with a directional PP, (9), with the non-directional purpose preposition po, (16), and with the supine, (21). Moreover, we posited GO when it co-occurred with covert modality, (23), and when a directional PP occurred under a propositional attitude report verb, (15). Note that the latter use does not stop with feel-like but is also found with other main verbs expressing volition, such as want or wish, (26)-(27).

- (26) Peter hoče k najboljšemu zdravniku / po pivo. Peter wants to best doctor / for beer 'Peter wants to go to the best doctor / ... to go and get beer.'
- (27) Matija si želi z Jono na pivo / po pivo.

 Matija REFL wish with Jona onto beer / for beer

 'Matija wishes to go for a beer / ... to go and get beer with Jona.'

Furthermore, GO also occurs under main verbs expressing permission. Since (28) obviously involves two events occurring at two different times, as the non-agreeing adverbials show, and since the modality-introducing element hosts internal arguments, it has to be a full verb selecting for a clausal complement rather than a functional verb or a verb selecting for a directional PP argument.

(28) Ob petih mi dovolila gostilno šestih. mama ni ob six five I-DAT permit into pub mum not at 'At five o'clock, I did not have mum's permission to go to the pub at six.'

Finally, GO can occur with grammaticalized non-verb world-creating elements such as the predicative element rad 'like' in (29), as well as with the imperatives in (30).

- (29) Kuža bi **rad** k sosedovi psički. puppy SUBJ like to neighbor's bitch 'The puppy would like to go to the neighbor's bitch.'
- (30) Takoj domov / po kruh / spat!
 right-now home / for bread / sleep-SUPINE
 'Go home right now! / Go get bread right now! / Go to bed right now!'

To sum up, in section 4 we have corroborated van Riemsdijk's (2002) proposal by providing evidence for the existence of a null motion verb GO in Slovenian, but we have also shown that Slovenian appears to be more relaxed in its use of the null GO than the Germanic languages van Riemsdijk discusses (Swiss German, German, Dutch, Afrikaans, Alsatian, West Flemish, Frisian, and Luxemburgish). (This fact will be of importance in section 6, where we turn to the issue of null-verb licensing.) Next we turn to a discussion of the nature of our null verb GO, in particular, whether it represents a case of ellipsis of iti 'go' or a separate, phonologically null verb.

5. (Specified) ellipsis of iti 'go' or a separate null verb GO?

Having established that the structures such as (9) contain a null V^0 , one needs to determine whether the nullness of this V^0 is due to (specified) ellipsis (say, of the Slovenian verb iti 'go') or simply to the phonological emptiness of a lexical item. Based on independent evidence, van Riemsdijk (2002) and Marušič & Žaucer (2005) reject ellipsis accounts for GO in Swiss German and FEEL-LIKE in Slovenian, respectively. We will argue that the Slovenian GO should also be analyzed as a separate null verb, rather than an elided iti 'go'.

First, even in their non-idiomatic uses, *iti* 'go' and *GO* are not always interchangeable, (31), which is obviously incompatible with an ellipsis account (cf. van Riemsdijk 2002) but manageable on a null-verb account. Given that aspectual verbs such as *začeti* 'begin' only admit imperfective complements, (31) suggests that while *iti* 'go' (also) has an imperfective reading (and is thus aspectually underspecified), *GO* is aspectually more constrained, perhaps simply lexically perfective (as is the case with a number of Slovenian verbs, cf. Dickey 2003).

(31) Moral je začeti *(iti) proti meni. must AUX-3P.SG begin-INF go-INF towards me 'He could start going towards me.'

Note that the impossibility of GO in (31) cannot be ascribed simply to the non-delimiting nature of *proti* 'towards', because GO does occur with *proti* providing that a perfective reading is available, as shown in (32).

(32) Zdaj boš moral pa počasi (iti) proti domu. now AUX-3P.SG must-SG PTCL slowly go-INF towards home 'Now you will soon have to head home.'

In addition, given that replacing a word in an idiom typically results in the loss of the idiomatic reading, as in *when the shit hits* / #reaches the fan, the fact that the idiomatic reading of (33a) is blocked if we replace *iti* 'go' with GO, as in (33b), suggests that we are not simply dealing with ellipsis but rather with two near-synonymous motion verbs. These two arguments lead us to conclude, with van Riemsdijk (2002) for the Germanic GO and Marušič & Žaucer (2005) for the Slovenian FEEL-LIKE, that the Slovenian GO is not an elided *iti* 'go' but a separate, phonologically null verb. (Note that the argument with idioms can be applied also to HAVE.)

(33) a. Šest mescev teme ti sme iti ietra. ne na liver six months darkness you-DAT not may go to 'Six months of darkness should not get on your nerves.' b.#Šest mescev teme ti ne sme na ietra. six months darkness you-DAT not may to liver 'Six months of darkness should not get on your nerves.'

As we have just suggested, the elision of an element should not result in the loss of an idiomatic reading. Indeed, gapping does not block an idiomatic reading; the gapped verb in (34a) normally cooperates in the interpretation of the idiom (note that both conjuncts in (34a) contain idioms with a *go*+PP structure and a very similar interpretation, with the one in the first conjunct expressing a stronger degree of irritation). Similarly, the idiomatic reading is preserved in (34b), where the whole verb phrase has undergone ellipsis. And needless to say, idiomatic reading is also preserved with sluicing, (34c). All of this shows that PF-ellipsis (including gapping) cannot explain the occurrence of the null GO, and (33) and (34) (in addition to 31-32) can safely be taken as support for positing an independent null verb *GO*.

- (34) a. Blair mi gre samo na živce, Bush pa že kar na jetra.

 Blair I-DAT goes only to nerves Bush PTCL already to liver 'Blair only gets on my nerves, but Bush really annoys the hell out of me.'
 - b. Bush mi gre res ornk na jetra, Blair pa tudi. Bush I-DAT goes really a-lot to liver Blair PTCL also 'Bush really gets on my nerves, and so does Blair.'

⁸ A similar control test cannot be used for the aspectual facts from (31). Though sluicing and VP-ellipsis could be said to support our claim, we are not too sure of their relevance, since they may delete too much structure. Gapping, however, which in principle *should* be relevant, seems to target the aspectual and the main verb as a unit, thus obscuring the validity of this test as well. That is, if we gap both the aspectual and the main verb *iti* 'go', *iti* can indeed be read imperfectively, (i); however, we cannot test a sentence that gaps only the main verb *iti* without the aspectual verb, since such structures are ungrammatical for independent reasons (regardless of what verb we use), as shown by (ii).

⁽i) Črt začel iti proti meni, Vid proti tebi. je pa (*je začel) started go-INF towards me Vid PTCL AUX started towards you 'Črt started going towards me, and Vid towards you.'

⁽ii) Črt je začel laufati proti meni, Vid začel *(laufati) proti tebi. je pa AUX started run-INF towards me Vid PTCL AUX started run-INF towards you 'Črt started running towards me, and Vid started *(running) towards you.'

c. Čuti, da mu gre nekdo fajn na jetra, ampak ni zihr, kdo. Feels that he-DAT goes someone a-lot to liver but not sure who 'He feels that someone really gets on his nerves, but he is not sure who.'

6. Licensing and recoverability of null verbs

Given that null verbs do not seem to be very common, van Riemsdijk (2002) proposes that in addition to the visibility granted upon *GO* by the modal and the directional adverb(ial), its occurrence has to be *structurally licensed* via the presence of a higher modal-verb FP; it is such formal licensing that presumably constrains the occurrence of null verbs. We argue that while null verbs obviously need to be visible/recoverable, they do *not* require any special structural licensing.

6.1. Non-uniformity of 'licensing' across null verbs

If licensing were structural, it should presumably be uniform for all null verbs (or else we are bringing structural requirements into the lexicon). This prediction, however, is not borne out. First, van Riemsdijk's formal licensing for *GO* does not work for *HAVE*, which cannot occur under modals, (35) (compare with (1) above). Second, the Slovenian *FEEL-LIKE* also freely occurs without a modal, (36).

- (35)*Janko mora medvedka.

 Janko-NOM must-1P.SG.PRES teddybear-ACC

 'Janko must have a teddybear.'
- (36) Janku se gre v hribe.
 Janko-DAT NON-ACTIVE go-SG.PRES to mountains
 'Janko feels like going to the mountains.'

Third, GO—in both Germanic (van Riemsdijk 2002) and Slovenian—is not restricted only to modal environments but also occurs under 'want', which is not a modal but a propositional attitude verb (e.g. Heim 1992, cf. also Wurmbrand & Bobaljik 2003, Marušič & Žaucer 2005). Moreover, in Slovenian it also occurs under other full verbs such as 'feel-like' (cf. above). Van Riemsdijk's modal-verb licensing therefore cannot capture null verbs in general, as a class.

6.2. Overtness of agreement as structural licensing of null verbs?

Van Riemsdijk (2002) notes that one of the functions of modals in structures with GO is to carry inflection. Extrapolating from this, one could perhaps see overtness of agreement as formal licensing for null verbs. This correctly predicts that English modals (e.g. must) do not occur with GO. The hypothesis also seems to work for HAVE as in (1), and GO as in (9), as their inflection would have been infinitival/default inflection, which presumably does not really need to be realized. The same may hold for imperative sentences as in (37), which—though containing no element to carry imperative inflection—can be analyzed as infinitival

imperatives. On the other hand, agreement is indeed (partly) realized in the case of *FEEL-LIKE* (on the overt verb, cf. Marušič & Žaucer 2005).

(37) Takoj v posteljo! immediately to bed 'Go to bed right now!'

Similarly, although the null *GO* in (38) would have had the gender and person agreement-carrying form of a participle (as seen on the bracketed forms), the very same agreement is doubled on the (grammaticalized) predicative *rad* 'like', thus presumably saving the overt-agreement generalization.

(38) Tinček/Tinka bi rad/rada (šel/šla) v Partizane. T-MASC/T-FEM COND like-PRED.M/F go-PTCP.M/F to Partisans 'Tinček/Tinka would like to go to (= join) the Partisans.'

This hypothesis, however, overgenerates. If overtness of agreement were indeed a formal licensor of null verbs, then we falsely predict that null *GO* will be found under *all* functional verbs (e.g. implicationals), that null *HAVE* in Slovenian will be possible under modals (cf. (35)), that English *GO* will be fine under the perfect auxiliary (*have*, *has*, *had*) and *want* (*wants*, *wanted*), etc., none of which is true. And as for the fact that all null-verb occurrences conform to the above generalization, we suggest that this stems from a more general morphosyntactic requirement for overtness of agreement, i.e. a requirement that pertains to any structure, not specifically to null-verb structures. Overtness of (meaningful/finite) agreement may thus be a precondition for null-verb structures, but it is not a structural licensor, and it is not null-verb specific. ¹⁰

6.3. No special structural licensing for null verbs (contra van Riemsdijk 2002)

We have shown that van Riemsdijk's licensing cannot capture all occurrences of null verbs, and that overtness of agreement cannot serve as structural licensing (specific to null verbs) either. In fact, we see no reason why null verbs should require any special structural licensing in the first place. That is, if the lexicon contains phonologically null lexical items, they should be just as good syntactic building blocks as overt ones. Also, while lexical items can have selectional restrictions as to the syntactic category of their complement, they should not be able to lexically

⁹ The status of this requirement can be language-specific. Unlike Slovenian, Polish and Czech, Russian allows *GO* with no overt agreement, (i). Interestingly, this pattern correlates with copula ('be') omissibility in predicative sentences, which works in Russian but not in the other languages.

⁽i) a. ✓ Ja v magazin. (Russian; McShane 2000: 206) b.* Ja do sklepu. (Polish; McShane 2000: 206) c.* Ja do obchodu. (Czech; McShane 2000: 206) d.* Jaz v štacuno. (Slovenian)

^{&#}x27;I'm going/I'm off to the store.'

¹⁰ Larson *et al.* (1997) formally license null verbs by positing their (abstract) incorporation into the matrix verb (*want a unicorn*) or complementizer (*look for a unicorn*). Though such an approach could perhaps be extended to all null verbs, we reject it as unobservable/untestable (how does one know/show that a null/invisible element is incorporated in another element rather than occurring on its own?), and as such unfalsifiable.

determine the type/extent of functional structure above them. Of course, null verbs have to be visible/recoverable; to be able to interpret (or acquire) them, the hearer has to be able to figure out that they are there. So there obviously have to be some flags signaling the presence of the null element. For example, the presence of *HAVE* is flagged by a DP complement to a propositional attitude verb such as 'want' or 'need'; the presence of *FEEL-LIKE* is flagged by a dative argument, a non-active voice morpheme, default agreement on the verb, incongruent tense and aspect inflection on the overt verb and semantic incongruence of the overtly lexicalized elements with the real-world affairs (Marušič & Žaucer 2005); and the presence of *GO* is flagged by a higher 'world-creating' element (be it a modal F⁰, a lexical V⁰, a predicative such as the Slovenian *rad* 'like', etc.) and a directional adverb(ial), or in Slovenian also by a supine verbal form or the purpose *po*-phrase. However, in addition to flags that ensure recoverability, there is—in fact there should be—no other, structural licensing. And then, given that these flags are not a case of structural licensing, there is no reason why they could not be construction/null-verb-specific, or (to some extent) language-specific.

But while null verbs require no structural licensing, they are nonetheless fairly rare, so there *does* seem to be something that restricts their occurrence (something non-structural, though, since e.g. *to ski* does not have a null counterpart in any language we know, regardless of whether it occurs under a modal, etc.). Looking at the verbs we have discussed, one option that comes to mind is that only semantically (or perhaps, cognitively) somehow primitive/basic concepts can be encoded with null verbs. Note that while this suggests that such basicness of meaning is a necessary condition for a verb to be null, it does not suggest that it is a sufficient condition; we are thus not predicting that all languages should share the full array of semantically primitive null verbs. The verbs we have discussed indeed all seem to express a primitive/basic relation, *GO*, *HAVE*, *FEEL-LIKE*¹¹ (cf. also Larson *et al.* 1997), and it may be suggestive that all three fall among the verbs that—still with their lexical meaning—in some languages undergo phonological reduction or are even realized as bound morphemes. ¹² Moreover, all three also fall among the verbs that crosslinguistically often come to be used as purely grammatical morphemes for forming future and perfect tenses, which—perhaps from a slightly different perspective—again suggests a somehow basic status.

In sum, not only does van Riemsdijk's modal-verb licensing fail to capture null verbs as a class, it actually seems that there simply cannot—and should not—be any uniform structural licensing for null verbs. We thus conclude that the licensing of null verbs cannot be structural, though their occurrence seems restricted in several ways (overtness of agreement, visibility, semantic basicness). Note that the absence of a formal licensing condition distinguishes the occurrence of null verbs from ellipsis, which presumably *does* require some sort of (uniform) formal licensing (Merchant 2001).

¹¹ Note that *FEEL-LIKE* is just a rough gloss for some sort of desire, close to what several Slavic languages also convey with a non-active form of 'want' — a more obvious primitive. Similarly, Larson *et al.* (1997) propose a null verb *FIND*, which may be less obviously primitive; however, note that the Slovenian 'find', *najti*, is (diachronically) merely a combination of *iti* 'go' and the prepositional prefix *na* 'on' (cf. the English prepositional verb *come across*). See also Marušič & Žaucer (2005) for a speculation about a (possibly decomposed) null *GIVE* in Russian, Polish and Czech. But see Inkelas (1993) for some null verbs whose meanings are less obviously basic/primitive.

Note that phonological reduction or morphemic status do not necessarily equal an F⁰ nature (cf. e.g. Travis 2000).

7. Other cases of unpronounced verbs in Slovenian

Besides the verbs we described in section 2, Slovenian has at least two other verbs that are frequently unpronounced, *TALK* and *HIT*. While we think one can safely conclude that *TALK* is a case of an elided 'talk', not of a separate null verb, the status of *HIT* does not seem to be that clear to us at this point, so we will simply point out some considerations that one should take into account when looking for a firm answer.

As shown in (39a), an overtly verbless question can be interpreted as if it contains the verb *talk*. It seems that such cases require a certain context, but that the latter is, at the same time, very often readily available. So in (39a), which is a question about the conversation itself, the context for *talk* is there by default. In (39b), on the other hand, the targeted topic is some distant event, which does not provide the required context, and an overt verb would have been necessary.

```
(39) a. O kom ti to?

about who you this
'Who are you talking about?'

b.*O kom je Gaber včeraj?

about who AUX Gaber yesterday
'Who did Gaber talked about yesterday?'
```

Similarly, (40) is felicitous only when checking this volume's table of contents. It seems, then, that these are most likely context-dependent cases of ellipsis. As the context is often there by default, it is no surprise that such cases are far from rare (cf. McShane 2000 for a discussion of Russian.).

```
(40) Joj, tadva bosta pa spet o svojih ničtih glagolih... oh these-two will PTCL again about their null verbs 'Oh boy, these guys will again talk about their null verbs...'
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As for the other frequently absent verb, *HIT* (cf. McShane 2000 for Russian), we do not wish to commit ourselves as to the ellipsis vs. null-verb nature of it, so we will simply put forth a few hints. On the one hand, one could attribute the absence of verbs in (41)-(44) to some sort of taboo-style ellipsis. Moreover, the array of possible verbal meanings in (41)-(44) ('hit', 'poke', 'spank', 'slap') may suggest that we are dealing with several different verbs, and hence with ellipsis. But on the other hand, unlike (39)-(40), such cases require no special context and may thus not be elliptical. Note also that the seemingly diverse possible verbal meanings are all from the same semantic class; and since—as we pointed out earlier—one may expect null verbs to be semantic primitives, we could perhaps reduce the variation in interpretation of the null element in (41)-(44) to something rather basic like 'affect (and possibly cause pain)', and thus account for these cases with a single null verb *AFFECT*. Nevertheless, in view of our discussion in section 6.2, an ellipsis account would be suggested also by the fact that agreement in (41)-(44) stays unrealized, regardless of the fact that it would have had a non-default/"meaningful" value (the same goes for *TALK* in (39)-(40)).

```
(41) Jona je Matijo na gobec.

Jona AUX Matija-ACC on mouth

'Jona hit Matija on the mouth (= punched Matija in the face).'
```

- (42) Lina je Filipa z nalivnikom v uč. Lina AUX Filip-ACC with pen into eye 'Lina **poked** Filip in the eye with a pen.'
- (43) Te bom po nagi riti. you-ACC will-1P on naked butt 'I'll give you a **spanking** on the naked butt.'
- (44) Hišnik je sosedovega mulca okol ušes. janitor AUX neighbor's kid around ears 'The janitor **slapped** the neighbor's kid once or twice.'

8. Conclusion

We hope to have shown that null verbs are real. We identified three null verbs in Slovenian: *GO*, *FEEL-LIKE*, *HAVE*. We claimed that these are separate null verbs, rather than a result of ellipsis of the otherwise overt verbs *go*, *feel-like*, *have*.

We have also shown that these null verbs do not share any kind of structural licensing, which led us to conclude that structural licensing of null verbs does not exist. Given that this might sound as a theoretical downside, we stressed that the reasons for structural licensing are actually theoretically dubious. The only thing that null verbs need is something to make them visible/recoverable/learnable, something to mark their presence in the sentence. Unlike licensing, simple *flagging* (a term due to van Riemsdijk) can and in fact should be different for different null verbs, if it is to be efficient.

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