1 Introduction

Variants of spoken Swedish, Norwegian, Danish, and Faroese allow doubling of verbal morphology under a restricted class of matrix verbs, see e.g. Ljunggren (1934), Lockwood (1964), Anward (1988), Josefsson (1991), Teleman et al. (1999), Lødrup (2002), Julien (2003), and Wiklund (2001; to appear). For the purpose of the present paper, the phenomenon will be referred to as TMA-DOUBLING (Tense-/Mood-/Aspect-doubling). The Swedish sentences in (1a-d) exemplify tense-doubling (present/past), mood-doubling (imperative), and aspect-doubling (past participial), respectively.

(1) a. Lars försöker [o skriver ett brev]. (Swedish)
   Lars try.PRES c3 write.PRES a letter
   ‘Lars tries to write a letter.’

b. Lars försökte [o skrev ett brev].
   Lars try.PAST c3 write.PAST a letter
   ‘Lars tried to write a letter.’

c. Försök [o skriv ett brev]!
   try.IMP c3 write.IMP a letter
   ‘Try to write a letter!’

d. Lars hade försökt [o skrivit ett brev].
   Lars had try.PPC c3 write.PPC a letter
   ‘Lars had tried to write a letter.’

The phenomenon belongs to non-standard language and is therefore not found in printed text other than sparsely in texts of less formal style. Standard Swedish uses infinitival forms instead of agreeing forms:

(2) a. Lars försöker [att skriva ett brev]. (Swedish)
   Lars try.PRES to write.INF a letter
   ‘Lars tries to write a letter.’

b. Lars försökte [att skriva ett brev].
   Lars try.PAST to write.INF a letter
   ‘Lars tried to write a letter.’

c. Försök [att skrivta ett brev]!
   try.IMP to write.INF a letter
   ‘Try to write a letter!’

d. Lars hade försökt [att skrivit ett brev].
   Lars had try.PPC to write.INF a letter
   ‘Lars had tried to write a letter.’

Doubling of all forms (including tensed forms) is widespread in northern as well as in southern variants of Swedish, in particular with aspectual verbs such as börja.
‘start’, sluta ‘stop’, fortsätta ‘continue’, and the verbs försöka and pröva, both meaning ‘try’. The other Scandinavian languages, in contrast, appear more selective with regard to forms that may double. Present-day Danish restricts doubling to imperative form, (3), Faroese limits doubling to imperative and participial forms, (4), and the same holds for most doubling variants of Norwegian, (5). Icelandic does not allow doubling, (6).

(3) Begynd [og læs]! begin.IMP e3 read.IMP
‘Start reading!’

(4) a. Byrja [og leš]! begin.IMP e3 read.IMP
‘Start reading!’
b. Han hevði viljað [lisið bokina]. be bad want.PPC read.PPC book.DEF
‘He had/would have wanted to read the book.’

(5) a. Prøv [å sei frå i tie]! try.IMP e3 say.IMP from in time
‘Try to object in time!’
b. Han hadde prøvd [å sagt frå i tie]. be bad try.PPC e3 say.PPC from in time
‘He had to object in time.’

(6) * Ég hef byrjað [og lešið]. (Icelandic)
I have start.PPC e3 write.PPC
‘I have started reading.’

TMA-doubling is syntactic and not phonological. An embedded verb with irregular or strong inflection takes on the expected form from its paradigm, and not a form that is phonologically similar to the matrix verb (PHON-AFFIX stands for phonological affix):

(7) a. Tycho prövade [o sprang].
Tycho try.PAST e3 run.PAST
b.*Tycho prövade [o springde].
Tycho try.PHON-AFFIX[e3 run.PHON-AFFIX]
‘Tycho tried to run.’

Not all TMA-doubling is non-standard. TMA-doubling with posture and motion verbs (pseudocoordination) is part of standard Danish, Faroese, Norwegian, and Swedish. With these verbs, TMA-doubling is obligatory in the sense that infinitival counterparts do not exist in the relevant languages:

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2 I am grateful to Line Hove Mikkelsen (Da.), Hjalmar Páll Petersen and Jógvan í Lon Jacobsen (Fa.), Marit Julien (No.), and Gunnar Hrafnsbjargarson (Ic.) for data. (4b) is from (Lockwood 1964:141). The doubling sentences all have infinitival counterparts.
3 In §5.1 below we will see that doubling obeys syntactic locality constraints.
4 Certain variants of Icelandic are reported to allow some of these pseudocoordinations, Gunnar Hrafnsbjargarson p.c.
5 Note that the Dutch counterpart of (8b) is fine (see Geerts et al. 1984:p.537ff): (i) Hij zit [te eten]. (Dutch)
be sit.PRES to eat.INF
‘He is eating.’
a. Tycho sitter [o(ch) äter]. (Swedish)
    Tycho sit.PRES c3 eat.PRES
    'Tycho is eating (in a sitting position).'

b.*Tycho sitter [o/att äta].
    Tycho sit.PRES c3/to eat.INF

For arguments that (8a) involves TMA-doubling on a par with (1a), see Wiklund (to appear). I argue that the former differs from the latter in involving a light verb use of an otherwise lexical verb. In what follows, we restrict attention to the type in (1), which has an infinitival counterpart. Discussion is limited to Swedish.6

In this paper, we investigate similarities and differences between TMA-doubling and the corresponding standard infinitival construction and factors restricting variation. I will show that the morphology on the embedded verb in the doubling construction is semantically vacuous, thus instantiating a kind of agreement. Nevertheless, the TMA-doubling construction will be shown to involve dependencies between the matrix and embedded clause that are not present in the corresponding standard infinitival. Variations in the set of matrix verbs that allow doubling and in the set of forms that may duplicate, I will demonstrate, are limited by factors such as locality, presence of non-overlapping tense, and amount of structure. TMA-doubling is island sensitive, obeys relativized minimality, is restricted to tenseless environments, and is proportional to number of functional projections in the embedded clause. A brief review of arguments in favour of taking TMA-doubling to be a surface reflex of restructuring will be presented.

2 ▪ The linking element

The linking element o(ch) that may appear between the two verbs in the doubling construction is homophonous to the conjunction element o(ch) 'and', the short form of which is pronounced /ɔ/. Therefore, TMA-doubling has been analyzed as a special type of coordination (pseudocoordination), see e.g. Josefsson (1991) and Teleman et al. (1999:III; 902-909). Note, however, that the conjunction-like element can also appear instead of the infinitival marker att (pronounced /ɑt/) in the standard infinitival construction. Thus, the infinitivals in (2) above - involving att (careful register) - alternate with (9) below involving o(ch) (casual register).7

(9)

a. Lars försöker [o skriva ett brev].
   Lars try.PRES c3 write.INF a letter
   'Lars tries to write a letter.'

b. Lars försökte [o skriva ett brev].
   Lars try.PAST c3 write.INF a letter
   'Lars tried to write a letter.'

c. Försök [o skriva ett brev]!
   try.IMP c3 write.INF a letter
   'Try to write a letter!'

d. Lars hade försökt [o skriva ett brev].
   Lars had try.PPC c3 write.INF a letter
   'Lars had tried to write a letter.'

6 Judgements are my own (Jamtland Swedish) and conform to those of speakers of Västerbotten dialects.
7 I accept the full form o(ch) wherever the short form o is possible.
I follow Holmberg (1986), Platzack (1986), and Holmberg (1990) in taking the infinitival marker *att* to be a complementizer, just like the homophonous element *att* introducing finite clauses in Swedish. Arguments include the fact that finite *att* and infinitival *att* behave similarly with respect to deletion (Holmberg 1990) and the fact that material (sentential adverbs and floating quantifiers) can be inserted between *att* and the infinitive (Wiklund to appear). Given that these facts carry over to the element *o(ch)* in (9) (Wiklund to appear), I take *o(ch)* to be capable of functioning as a complementizer. Turning to *o(ch)* in (1) (doubling context), there is ample evidence that it is the same element.

*O(ch)* may appear in a doubling context only in combination with verbs that select an infinitival marker (*och* or *att*) in the corresponding infinitival construction. Illustrative examples can be construed with the aspectual verb *fortsätta ‘continue’* and the modal verb *kunna ‘can’/’be able’. *Fortsätta* selects an infinitival marker (*och* or *att*), which can be dropped in contexts like (10a) in my variant. In the corresponding doubling construction, *o(ch)* has the same property. It may but need not be overt, cf. (10b).

(10) a. Hans *fortsatte* (*o/att*) *skriva*.
   *Hans* *continue.PAST* *c/to write.INF*

b. Hans *fortsatte* (*o*) *skrev*.
   *Hans* *continue.PAST* *c write.PPC*
   ‘Hans continued writing.’

*Kunna*, in contrast, selects a bare infinitival where no infinitival marker is possible, see (11a). Likewise, no linking element is possible in the corresponding doubling construction, cf. (11b).

(11) a. Han *hade kunnat* (*o/*att*) *skriva*.
   *be had can.PPC c/to write.INF*

b. Han *hade kunnat* (*o*) *skrivit*.
   *be had can.PPC c write.PPC*
   ‘He had been able to write.’

Conforming to our expectations, wherever *att* (or *o*) is required in the infinitival construction, *o* is also required in the corresponding doubling construction, such as e.g. under the verb *undvika ‘avoid’*:

(12) a. Han *hade undvikit* *(o/att)* *skriva*.
   *be had avoid.PPC c/to write.INF*

b. Han *hade undvikit* *(o)* *skrivit*.
   *be had avoid.PPC c write.PPC*
   ‘He had avoided to write.’

The linking element in the doubling construction is thus a subordinating rather than a coordinating conjunction. I have proposed that it is a complementizer, cf. Aboh (2004) and Faraci (1970) for the same proposal concerning English and in similar construction types. A more well-known argument in favour of a complementation analysis is the fact that the construction is not subject to the Coordinate Structure Constraint (Ross 1967). Argument and adjunct extraction is

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8 *Att* can not replace *o(ch)* in doubling context (see Wiklund to appear for more details):

(i) Hans *fortsatte* *(att)* *skrev*.
   *Hans* *continue.PAST* *to write.PAST*
   ‘Hans continued writing.’
possible out of the doubling clause, (13a), just as these extractions are possible out of the corresponding standard infinitival, (13b).

(13) a. Vad/hur prövade han [o sjöng _]? what/how try.PAST he o sing.PAST _
b. Vad/hur prövade han [att sjunga _]? what/how try.PAST he to sing.INF _
'What/how did he try to sing _?'

Likewise, fronting of the doubling clause is possible, (14a), to the extent that the corresponding infinitival clause can be fronted, (14b).

(14) a. [Skrev brev] började han o gjorde i lördags. write.PAST letter start.PAST be o did last Saturday
b. [Skriva brev] började han att göra i lördags. write.INF letter start.PAST be to do last Saturday

We may conclude that TMA-doubling does not involve a special type of coordination with a permission to violate the Coordinate Structure Constraint. Rather it involves a special type of complementation where the inflectional form of the matrix verb is replicated in the embedded clause. The semantic vacuity of this doubling is discussed next.

3 INFINITIVAL IN DISGUISE

A literal translation of (15a) below - involving tense doubling - may lead one to suppose that there was a ‘writing’ event in the past. However, the tense inflection on the embedded verb does not affect the interpretation of the complement. (15a) and its non-doubling (infinitival) counterpart in (15b) have identical truth conditions. Both sentences imply that that the subject referent did not write the letter, because he forgot to do so.

(15) a. Han glömde [o skrev brevet]. be forget.PASTo write.PAST letter.DEF 'He forgot to write the letter.'
b. Han glömde [att skriva brevet] be forget.PASTto write.INF letter.DEF 'He forgot to write the letter.'

One way of showing this is to add the tag Det skickades omedelbart ‘It (the letter) was mailed immediately’ to the sentences. Whenever the tense inflection of skrev brevet ‘wrote the letter’ is interpreted, the tag yields a good result, as in (16).

(16) Han skrev brevet. Det skickades omedelbart. write.PAST letter.DEF it mail.PAST.PASS immediately 'He wrote the letter. It was mailed immediately.'

When added to the sentences in (15), however, the tag yields a pragmatically odd result in both cases:

(17) a. Han glömde [o skrev brevet]. #Det skickades be forget.PASTo write.PAST letter.DEF #it mail.PAST.PASS omedelbart immediately 'He forgot to write the letter. #It was mailed immediately.'
b. Han glömde [att skriva brevet]. #Det skickades
be forget.PAST to write.INF letter.DEF #it mail.PAST.PASS
omedelbart.

immediately

'The forgot to write the letter. #It was mailed immediately.'

From examples of this kind, we may conclude that the inflectional morphology on the embedded verb does not make a semantic contribution. It is merely a phonological reflex of an agreement relation between the matrix and embedded clause (cf. Anward 1988). The embedded verb in (17a) is an infinitive in disguise (en førklaedt infinitiv), to use the words of Jespersen (1895:170).

4 □ Difference between doubling and non-doubling structures

So far, the difference between the standard infinitival construction, (18a), and the TMA doubling infinitival, (18b), seems rather superficial.

(18) a. De försökte [o skriva ett brev].
they try.PAST c₃ write.INF a letter

'They tried to write a letter.'

b. De försökte [o skrev ett brev].
they try.PAST c₃ write.PAST a letter

'They tried to write a letter.'

A closer look at the possibility of splitting the infinitival marker/complementizer and the verb, however, reveals that the two sentences are associated with subtly different structures and therefore differ also underlyingly. Whereas floating quantifiers and sentential adverbs may be inserted between o and the verb in the standard infinitival, see (19a), such a splitting is not possible in the corresponding TMA-doubling infinitival, cf. (19b).

(19) a. De försökte [o alla alltid skriva ett brev].
they try.PAST c₃ all always write.INF a letter

b. De försökte [o (*alla) (*alltid) skrev ett brev].
they try.PAST c₃ all always write.PAST a letter

Anticipating a proposal to be made below, TMA-doubling infinitivals involve dependencies between the matrix and embedded clause, disabling insertion of the relevant elements. These dependencies are absent in the standard infinitival construction. In the next section, the limits of variation in doubling is discussed.

5 □ Limits of variation

Whereas many speakers allow doubling under aspectual verbs such as fortsätta 'continue', as in (10b), not all of these speakers allow doubling under implicatives such as glömma 'forget', exemplified in (15a). Similarly, whereas many speakers allow doubling of the participial form with försöka 'try', as in (1d), not all of these speakers allow doubling of the past tense with the same verb, as in (1b). Thus, there is variation with regard to the set of matrix verbs that may select a TMA-doubling infinitival, as well as with regard to the set of verb forms that may duplicate under the relevant verbs. In this section, the limits of this microvariation is discussed. As we will see, TMA-doubling is:
• Locality sensitive
• Tense sensitive
• Proportional to structure

5.1 Locality

Speakers generally agree that doubling is dispreferred or impossible into islands. Thus, doubling into the complement position of a noun, as in (20a), yields an unacceptable result, even though TMA-doubling with glömma ‘forget’ is possible in other contexts, cf. (15a).⁹

(20) a. *Han hade glömt rådet [o åkt hem].
   be bad forget.PCC advice c^3 go.PCC home
b. Han hade glömt rådet [att/o åka hem].
   be bad forget.PCC advice to/c^3 go.INF home
   ‘He had forgotten the advice to go home.’

The phenomenon is also subject to relativized minimality (Rizzi 1990). In multiple embeddings, either all verbs agree, (21a), or all but the most embedded verb agree, (21b). Long-distance doubling across a verb that does not itself participate in the doubling leads to ungrammaticality, cf. (21c).

(21) a. Han prövade o fortsatte o gick längs stigen.
   try.PAST c^3 continue.PAST c^3 go.PAST along path.DEF
b. Han prövade o fortsatte o gå längs stigen.
   try.PAST c^3 continue.PAST c^3 go.INF along path.DEF
c.*Han prövade o fortsatte o gick längs stigen.
   try.PAST c^3 continue.INF c^3 go.PAST along path.DEF
d. Hanprövade o fortsatte o gå längs stigen.
   try.PAST c^3 continue.INF c^3 go.INF along path.DEF
   ‘He tried to continue walking along the path.’

Not only is TMA-doubling restricted to infinitivals that are selected by the verb from which the inflection is duplicated, these infinitivals have to be tenseless, as will be shown next.

5.2 Tenselessness

Consider (22) below.

(22) a. *Han började [att läsa boken imorgon].
   start.PAST to read.INF book.DEF tomorrow
b. *Han börjar [att ha läst boken igår].
   start.PRES to have.INF read.PCC book.DEF yesterday

The event referred to by an infinitival embedded under börja ‘start’ cannot be located in the future with respect to the time of the event referred to by the matrix predicate, (22a), nor in the past, (22b). In this sense, börja differs from besluta ‘decide’, which selects a future-oriented infinitival, cf. (23), and tro ‘think’/’believe’, which may select a past-oriented infinitival, see (24).

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⁹ (20a) is fine on the irrelevant coordination reading He had forgotten the advice and gone home. Counterfactual environments are exceptional in that some speakers allow participle doubling into islands in contexts of that kind, see Julien (2003) and Wiklund (to appear) for discussion.
(23) Han beslutade [att resa hem imorgen].  
be decide.PAST to travel.INF home tomorrow  
‘He decided to go home tomorrow.’

(24) Han trodde sig [ha läst dokumentet ifjol].  
be think.PASTREFL have.INF read.PCC document.DEF last-year  
‘He thought that he read the document last year.’

In the above sense börja selects a TENSELESS infinitival, whereas besluta and tro select TENSED infinitivals. Only the former is compatible with tmaTMA-doubling:10

(25) Han började [o läste boken].  
be start.PAST c3 read.PAST book.DEF  
‘He started reading the book.’

(26) *Han beslutade [o reste hem].  
be decide.PAST c3 travel.PAST home  
Intended meaning: ‘He decided to go home.’

(27) *Han trodde sig [läste dokumentet].  
be think.PASTREFL read.PAST document.DEF  
Intended meaning: ‘He thought that he was reading the document.’

An overlapping tense orientation between the matrix and embedded clause is thus a prerequisite for (full) TMA-doubling and variation in the set of verbs that allow selection of TMA-doubling infinitivals is therefore limited to verbs selecting tenseless infinitivals. See Wiklund (to appear) for a detailed description of the relevant classes of infinitive selecting verbs.

5.3 THE MORE STRUCTURE – THE MORE DOUBLING

Whereas doubling of the participial form is fine in the complement of a modal verb like kunna ‘can’, see (28a), tense doubling under the same verb is impossible, cf. (29a).

(28) a. Han hade kunnat skrivet.  
be had can.PPC write.PCC  
‘He had been able to write.’

   b. Han hade kunnat scriva.  
be had can.PPC write.INF  
‘He had been able to write.’

(29) a.*Han kunde skrev.  
be can.PAST write.PAST  
‘He was able to write.’

   b. Hankunde skriva.  
be can.PAST write.INF  
‘He was able to write.’

The relevant generalization is that verbs that select bare infinitivals (infinitivals that can not be introduced by an infinitival marker/complementizer), see (30), restrict doubling to participial form, whereas verbs that select non-bare infinitivals (infinitivals that can be introduced by an infinitival marker/complementizer) allow doubling of all forms in liberal variants, provided the infinitival is tenseless in the above sense, cf. (1) above.

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10 Doubling is exemplified with past tense. All forms may double with börja in my variant. No form may double with besluta, nor with tro.
(30) Hans kunde (*att) skriva.
Hans can.PAST to write.INF
‘Hans was able to write.’

In Wiklund (to appear) I argue that the relevant non-bare infinitivals are full CPs, whereas the relevant bare infinitivals are AspectPs, lacking the C- and T-domains of the clause.

- Non-bare infinitivals: [CP [TP [AspP [vP]]]]
- Bare infinitivals: [AspP [vP]]

The former may or must involve a complementizer (+CP), may contain adverbs quantifying over times, sentential negation (+TP), and the perfect (+AspP). The latter may not contain a complementizer (-CP), nor adverbs quantifying over times or sentential negation (-TP), but may contain the perfect (+AspP).

Given that a TMA-doubling infinitival retains the non-bare/bare status of the corresponding standard infinitival in the sense that försöka ‘try’ selects a non-bare infinitival regardless of whether or not doubling is present, whereas kunna ‘can’/’be able’ selects a bare infinitival regardless of whether or not doubling is present, we may formulate the intuitive hypothesis that the category selected by the matrix verb remains constant between non-doubling and doubling constructions. An infinitival selected by försöka is a CP, regardless of presence/absence of doubling, and an infinitival selected by kunna is an AspP, regardless of presence/absence of doubling.

On the proposal that doubling of a given form is contingent on the presence of the corresponding functional projection in the embedded clause, the difference between börja and kunna with regard to number of forms that may double is captured, (1) vs. (28)-(29).

- The category selected by the matrix verb remains constant between non-doubling and doubling constructions.
- Doubling of a given form is contingent on the presence of the corresponding functional projection in the embedded clause.

More specifically, doubling of the imperative form requires an embedded C-domain (on the imperative and CForce, see Rizzi 1997). In turn, doubling of tensed verb forms (present and past) requires an embedded T-domain. Finally, doubling of the participial form is contingent on an embedded Asp-domain. It follows that all forms may double under verbs that select non-bare infinitivals (CPs), whereas doubling is restricted to participial form under verbs that select bare infinitivals (AspPs).

Variation in the set of forms that may double is in the above sense structurally restricted. The more structure there is in the TMA-doubling infinitival, the larger the set of forms that may duplicate. For a brief discussion of variation within these limits, see Wiklund (to appear).

6  A Surface Reflex of Restructuring

Since the structure involved is constituted by functional projections, doubling of a given form is possible when the corresponding functional projection is present. This is captured in the hypothesis that:

- Doubling is a reflex of dependencies between functional heads of the same label.

Since the form of the embedded verb is determined by the form of the matrix, the downstairs head must be underdetermined, doubling the value of the head upstairs.
On the intuitive assumption that an unvalued functional head does not license modifiers, the contrast between (19a) and (19b) above, repeated below, is captured.\(^{11}\)

\[(31)\]

\[a. \text{ De försökte [o alla alltid skriva ett brev].} \]
\[
\text{they try.PAST c\^ all always write.INF a letter}
\]

\[b. \text{ De försökte [o (*alla) (*alltid) skrev ett brev].} \]
\[
\text{they try.PAST c\^ all always write.PAST a letter}
\]

I propose that the relevant dependency is Agree (Chomsky 2000; 2001) and refer the reader to Wiklund (to appear) for a discussion of the theoretical implications of this proposal. An unvalued functional head in the embedded clause triggers Agree with a higher head of the same label, yielding doubling.\(^{12}\)

The present analysis bears similarities to tense (or Infl) raising approaches to restructuring infinitivals, see e.g. Kayne (1989), Terzi (1996), Roberts (1997), and references cited in Wurmbrand (2001). In Wiklund (to appear; 2006) two principal arguments are presented in favour of taking TMA-doubling to be a surface reflex of restructuring. One concerns the distribution of TMA-doubling. The other concerns evidence of deficiency in the relevant infinitivals.

- TMA-doubling and restructuring phenomena involve identical sets of matrix verbs, are both restricted to tenseless infinitivals, and co-occur in some languages.

\(^{11}\) Another way to put this is to say that Merge of a specifier results in valuation.

\(^{12}\) On a more careful formulation, the relevant Agree dependency may be phonologically reflected by doubling.
TMA-doubling and restructuring configurations both display restrictions on adverbs and other modifiers.

If restructuring effects derive from the same basic underlying structural configurations cross-linguistically, studies of TMA-doubling should provide new insight into the phenomenon of restructuring in natural language. In particular, we have seen that the category selected by the matrix verb may remain constant between doubling (restructuring) and non-doubling (non-restructuring) infinitival constructions. I refer the reader to Wiklund (to appear; 2006) for a detailed discussion.

7 Conclusion

I have presented evidence in favour of taking TMA-doubling constructions to be infinitivals in disguise. I have argued that TMA-doubling infinitivals differ from the corresponding non-doubling (standard) infinitivals in involving dependencies between the matrix and embedded clause, more specifically between heads of the same label. The analysis captures the fact that doubling appears proportional to the number of functional projections in the embedded clause. I have shown that variation is limited by factors such as locality, presence of non-overlapping tense, and number of functional projections in the embedded clause. On the basis of the distribution of the phenomenon and indications of deficiency, I have proposed that TMA-doubling is a surface reflex of restructuring.

References


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