Sharing properties of pseudo-coordination in Norwegian

Siri Gjersøe*

Abstract
This paper examines the sharing properties of pseudo-coordination in Norwegian where two verbs are inflected and joined by a coordinator. The main claim is that constituents are shared between the two verbs. I show that crucial properties that would support a subordination analysis are unattested in pseudo-coordination in Norwegian. The current proposal is a vP coordination where the subject and optionally an adjunct are multidominated by nodes in each conjunct. The claim is that subject sharing is a necessary condition for this construction and as soon as it is not shared, properties typical of pseudo-coordination are not found.

1. Introduction

Pseudo-coordination can be defined as a construction with two inflected verbs which are joined by a coordinator. It has been attested in a number of languages and has been discussed by several authors (cf. Lødrup 2002, Vos 2005, Wiklund 2007, Heycock & Petersen 2012, Josefsson 2014, Weisser 2015, among many others). Although there are many cross-linguistic differences, this construction attests several common properties which differ from garden-variety coordination. Some of these are the possibility of asymmetric extraction, fixed order of the verbs, conveyance of an aspectual meaning and the availability of only one subject referent. In (1), an example of pseudo-coordination in Norwegian is given. The two verbs står and hopper are both inflected in present tense and joined by the coordinator og ‘and.’ Together they express progressive aspect.

---

*I would like to thank Gereon Müller, Fabian Heck and Sandhya Sundaresan for comments on earlier versions of this work. I am also grateful for comments from Petr Biskup and Katja Barnickel. All errors are my own.

Replicative Processes in Grammar, 351–376

K. Barnickel, M. Guzmán N., J. Hein, S. Korsah, A. Murphy, L. Paschen, Z. Puškar & J. Zaleska (eds.)

LINGUISTISCHE ARBEITS BERICHTE 93, Universität Leipzig 2016
Pseudo-coordination in Norwegian has been divided into three groups which differ according to aspectual meaning and syntactic properties (cf. Lødrup 2002). The first group is the most heterogeneous one in that different kinds of aspectual meanings can be conveyed and \( V_1 \) can be different verbs. I.e., \( V_1 \) can be a positional verb (stå ‘stand’ (1), sitte ‘sit’ (2a), ligge ‘lie’), a movement verb (komme ‘come’, gå ‘go’), a copula (være), verbs of assuming a position (sette seg ‘sit down’, legge seg ‘lie down’), and ringe ‘call’ (Lødrup 2002). The second group has the verb drive ‘carry on’ as \( V_1 \) and the third group has ta ‘take’ as \( V_1 \). In this paper, I will look at some of the verbs within the first group, abbreviated as (PsC1).

There are three main cues that distinguish PsC1 from ordinary coordination: (i) aspectual interpretation (1), (ii) possibility of asymmetric extraction (2a), and (iii) incompatibility with the distributive operator både which selects two separate events (2c). Cue (ii) can be contrasted with ordinary coordination where asymmetric extraction leads to ungrammaticality (2b). Cue (iii) can be explained by the fact that PsC1 expresses only one event and is therefore incompatible with både (cf. Vos 2005, Wiklund 2007).

PsC1 is a construction with several interesting properties. On the one hand, it attests properties of monoclausality in that \( V_1 \) and \( V_2 \) cannot differ in morphological tense and they express one event. On the other hand, it also
attests biclausal properties in that $V_1$ and $V_2$ can be separately headed by a voice or tense auxiliary. $V_1$ has properties of a functional verb in that it belongs to a closed class, has a fixed position, and contributes to the aspect of the construction. At the same time, it also has properties of a lexical verb: it can be modified by adverbs, it can have subject depictives and it can even take an argument as is the case of $ringe$ ‘call’.

Previous analyses that have been proposed for pseudo-coordination can roughly go under coordination or subordination. The main argument against a coordination analysis has been that it encounters difficulties for the possibility of asymmetric extraction and that this is only allowed out of the right conjunct. According to Weisser (2015), this extraction asymmetry indicates a subordinative relation between the conjuncts. Subordination analyses proposed by Lødru (2002), Vos (2005) and Wiklund (2007) have been the dominating ones for English, Afrikaans and mainland Scandinavian. However, they fail to capture the following properties for $PsC_1$: (i) As also argued by Weisser (2015) for English, the group of possible $V_1$ verbs are too homogeneous to be a light verb; (ii) $V_1$ denotes different activities according to which verb is chosen and its meaning is not entirely bleached. In some cases it is not bleached at all; (iii) $V_1$ can be modified by adverbs and these constituents can also be extracted. Therefore, constituents can be extracted from both the left and the right conjunct.

In this paper, I propose a multidominance analysis where the two verbs share their subjects. Optionally, they can also share adjuncts. This multidominance analysis accounts for why the constituents are allowed out of the coordination without violating the Coordinate Structure Constraint (CSC, Ross 1967) because they have mother nodes in both conjuncts. As for the non-shared constituents that can be extracted out of one conjunct, I discuss the possibility of how the single eventuality combined with structure sharing might influence the coordination in allowing for extraction out of one conjunct alone. The data in this paper either come from ‘The Oslo Corpus of Tagged Norwegian Texts’ (abbreviated: OslCorp) or from blogs and newspapers resulting from Google searches. If no citation is given, the examples are my own and the judgments have been tested with several speakers of the Oslo dialect.
2. PsC1 constituents and extraction

This section aims to show how constituents are shared in PsC1 and that extraction can target both conjuncts. This will be an important component of the analysis in section 5 because it indicates that there might not be a subordinate relationship between the conjuncts in PsC1.

2.1. Subjects

Only one subject can appear in PsC1 preceding V₁ and no overt subject of V₂ is allowed (Teleman et al. 1999). If it does, the acceptability is reduced and the aspectual meaning is lost. The sentence in (3) has a reduced acceptability if an overt subject like hun 'she' follows the coordinator and is coreferential with the subject of V₁. The progressive meaning of the construction is also lost. The sentence becomes more acceptable with a locative modifying V₁ as in (4a). The aspectual meaning is also lost in this sentence and the overt subject forces an independent event reading of both verbs. This is shown by the fact that både is compatible with the sentence. Example (4a) does not show typical properties of PsC1 and can therefore rather be referred to as ordinary coordination. Further examples of ordinary coordination with an overt subject of V₂ can be seen in (4b) and (4c).

(3) Overt subject of V₂ in PsC₁
Hun₁ satt og (?hun₁) spiste en brødskive.
she sit.PST and she eat.PAST a sandwich
‘She was eating a sandwich.’

(4) Ordinary coordination with overt subject of V₂
a. Hun (både) satt på biblioteket og (hun) spiste en
she both sit.PST at library.DEF and she eat.PAST a
brødskive.
sandwich
‘She both sat at the library and she ate a sandwich.’
b. Amerikanerne sparer og de vil bruke sine money on own problem.pl home
‘The Americans are saving and they will use their money on their own problems they have at home.’
(OslCorp AV/Af94/01)

c. De vasket og de feiet...
‘They washed and they swept.’
(OslCorp AV/BT95/02)

In the case of PsC₁, there is only one referent of the subject. This is shown by the fact that an independent reading of a DP pronoun within each conjunct is not available in PsC₁. In (5a) the subject *en jente* ‘a girl’ does not result in a reading where one girl sat on the couch and a different girl read a book. This indicates that there is only one available subject as opposed to one overt and one elided one.

(5) **No independent reading of subject**

a. En jente lå på sofaen og leste en bok.
‘A girl was reading a book on the couch.’

b. ≠ ‘Some girl lay on the couch and some (other) girl read a book.’

With a plural subject it is possible to get a reading with a different referent for each predicate. In this case, the construction does no longer have its typical properties of pseudocoordination in that a separate-event reading is forced (compatibility with *både*), the progressive meaning is gone, and an overt pronoun is optionally allowed (6a). In addition, nothing can be extracted (6b).

(6) a. Jentene (både) lå på sofaen og (de) leste en girl.pl.def both lie.pst on couch.def and they read.pst a book.
‘The girls both lay on the couch and read a book.’

b. *[På sofaen]; både lå t; jentene og leste en bok. on couch.def both lie.pst girl.pl.def and read.pst a book
(7) Available readings of (6a)

a. ‘The girls both lay on the couch and read a book.’
b. ‘The girls were (*both) reading a book on the couch.’
c. ‘Some girls lay on the couch and some other girls read a book.’

The same has been noted by Ross (1986) (and later by Kehler 2002) for English (8). When an overt subject appears in front of V₂, asymmetric extraction is no longer allowed. A possible interpretation of this is that the properties typical of pseudo-coordination depend on whether the subject is shared or not.

(8) a. I went to the store and bought some whisky.
b. I went to the store and Mike bought some whisky.
c. Here’s the whisky which I went to the store and bought.
d. *Here’s the whisky which I went to the store and Mike bought.

(Ross 1986: 103)

The selectional restrictions of the two verbs in PsC₁ differ compared to those of each verb outside the construction in that they are less strict in PsC₁. A subject that occurs in PsC₁ is not always grammatical with V₁ alone. In (9a), PsC₁ has an inanimate subject which is semantically selected by V₂ (9b). This is shown by the fact that when it occurs alone with V₂, it forms a grammatical sentence (9b). When it however occurs with V₁ alone, the sentence is no longer grammatical (9c). The same contrast is shown in (10). Outside of the PsC₁ context, in (10a) the subject sirenen ‘the siren’ forms a grammatical sentence with V₂ alone (10b), but not with V₁ (10c).¹

(9) Selectional restrictions outside PsC₁

a. Lyset sto og blinket
light.DEF stand.PST and blink.PST
‘The light was blinking.’
b. Lyset blinket.
light.DEF blink.PST
‘The light blinked.’
c. *Lyset sto.
light.DEF stand.PST

¹See Wiklund (2007: 193) for a discussion on selectional restrictions of pseudo-coordination in Swedish.
2.2. Objects

Depending on the subcategorization frame of $V_2$, a direct or an indirect object can occur in PsC1. This object can be topicalized when it is definite or focused. As widely discussed in the literature on pseudo-coordination, this would be surprising if PsC1 were a coordination because conjuncts form strong islands (Ross 1967). According to the CSC, arguments cannot be extracted from one conjunct alone unless it is extracted from the other conjunct as well (ATB movement).

In (2a) (repeated here as (11a)), and in (11b) the object has been extracted out of the second conjunct. In (12b), the verb *ringe* ‘call’ is $V_1$ and $V_2$ is *spørre* ‘ask’. $V_2$ has an argument which is extracted. Example (13) shows ordinary coordination with *eat* and *write* as verbs. When the same constituent (also object of $V_2$) is fronted, the sentence becomes ungrammatical. Note that ATB movement is allowed in coordination in Norwegian as in (14) where the two coordinated verbs both subcategorize for the fronted object.

(10) a. Sirenen i den forlatte patruljebilen sto fremdeles siren.DEF in the abandoned patrol.car.DEF stand.PST still og ulte.
and howl.PST
‘The siren in the abandoned patrol car was still howling.’
(OslCorp SK/JeJH/01)

b. Sirenen (i den forlatte patruljebilen) ulte fremdeles.
siren.DEF in the abandoned patrol.car.DEF howl.PST still
‘The siren (in the abandoned patrol car) still howled.’

c. *Sirenen (i den forlatte patruljebilen) sto fremdeles.
siren.DEF in the abandoned patrol.car.DEF stand.PST still

PsC1 with extraction from conjunct 2

(11) a. Denne boka$_i$ satt jeg og leste i går $t_i$.
this book.DEF sit.PST I and read.PST in yesterday
‘I was reading this BOOK.’

---

2 Note that the extracted object has to be marked for definiteness by a determiner in order for the sentence to be grammatical: *boka$_i$ satt jeg og leste i går $t_i$. *
b. Hva sitter du der og smiler av?
what sit.PRES you there and smile.PRES of
‘What are you smiling about?’

(OslCorp SK/GrEl/01)

(12) a. Ringte du og spurte etter søknaden din?
call.PST you and ask.PST after application.DEF yours
‘Did you call and ask for your application?’
b. Nei, en kop i ringte jeg og spurte etter t i.
no a copy call.PST I and ask.PST after
‘No, I called and asked for a COPY.’

(13) *Denne boka i spiste jeg og leste i går t i
this book.DEF write.PST I and read.PST in yesterday

(14) Hva spiser og drikker du i kveld?
what eat.PRES and drink.PRES you to night
‘What are you eating and drinking tonight?’

Ringe ‘call’ in the position of V 1 can take an argument (15a). In this case it can be extracted just like the argument of V 2 (15b).

(15) a. Ketil ringte Telenor og bestilte et kontantkort.
K. call.PST T. and order.PST a prepaid.card
‘Ketil called Telenor and ordered a prepaid card.’
b. Hvem i ringte Ketil til t i og bestilte kontantkort?
who call.PST K. to and order.PST prepaid.card
‘Who did Ketil call to order a prepaid card?’

2.3. Adverbials

The positional V 1 can be followed by adverbs which naturally modify it. These adverbs can freely switch position between the verbs even when they would only naturally modify one of the verbs outside PsC. This is demonstrated in (16a)

3URL: http://vgd.no/forbruker/mat-og-drikke/tema//one.oldstyle/six.oldstyle/four.oldstyle/five.oldstyle/four.oldstyle/three.oldstyle/two.oldstyle/tittel/hva-spiser-og-drikker-du-i-kveld/innlegg//four.oldstyle/four.oldstyle/five.oldstyle/two.oldstyle/six.oldstyle/seven.oldstyle/zero.oldstyle/two.oldstyle/ [accessed 02.03.16]
where the PP *i hagen* ‘in the garden’ can either follow *V₁* or *V₂* without resulting in any semantic or grammatical differences. The locative PP naturally modifies *V₁* but not *V₂* as has been shown by Teleman et al. (1999) and Lødrup (2002). This is indicated by the fact that when each verb forms an independent sentence and contains the same adverbial, the positional verb results in an acceptable sentence (16b) while *V₂* is less acceptable (16c). Nevertheless, the PP can freely switch position after the verbs as in (16a) without changing the acceptability. This kind of *V₁*-modifying adverbial can be fronted as a contrastive topic or a wh-word (17). The syntactic position of adjuncts in PsC₁ is not entirely clear. The main point here is that *V₂* is more flexible regarding modification when it appears with *V₁* in PsC₁ than alone in an independent clause.

(16) **Modification restrictions outside PsC₁**

a. Han står *(i hagen)* og glor *(i hagen)*  
   *he* stand.PRES in garden.DEF and stare.PRES in garden.DEF  
   ‘He’s staring in the garden.’

b. Han står *(i hagen)*  
   *he* stand.PRES in garden.DEF  
   ‘He stands in the garden.’

c. ?Han glor *(i hagen)*  
   *he* stare.PRES in garden.DEF
   (Teleman et al. 1999; Lødrup 2002)

(17) **Fronting of adverbial naturally modifying *V₁***

a. I hvilken hage står Richard og glor?  
   *in which* garden stand.PRES R. and stare.PRES  
   ‘In which garden is Richard staring?’

b. I hagen til naboen står han og glor.  
   *in garden.DEF to neighbor.DEF* stand.PRES he and stare.PRES  
   ‘He is staring in the neighbor’s garden (not anywhere else).’

The same flexibility is attested in subordinated PsC₁-contexts, see (18) and (19).

---

4Note that *i hagen* ‘in the garden’ here has a locative meaning as opposed to a directional one like ‘into the garden’.
Adverbials in subordinated PsC

Han trodde at Jon sto (i hagen) og glodde (i he think.pst that John stand.pst in garden.def and stare.pst in hagen) garden.def

‘He thought that John was staring in the garden.’

I laugh.pres over that we aux.pres sit.ptcp at each our side av åsen og ventet...
of hill.def and wait.ptcp

‘I laugh about the fact that we have been waiting for each other on each side of the hill.’ (OslCorp SK/ArRa/01)

‘I called and waked her from home.’

Examples in (21) show that PsC1 can take adverbs that directly modify the action denoted by V₁.

Examples in (21) show that PsC1 can take adverbs that directly modify the action denoted by V₁.
Sharing properties of pseudo-coordination in Norwegian

(21) \( V_1 \)-modifying adjuncts
a. Regjeringen sitter stille og ser på flyktningkrisen.  
   government sit.\textsc{pres} quietly and look.\textsc{pres} at refugee.\textsc{crisis.\textsc{def}}  
   ‘The government is quietly looking at the refugee crisis.’\textsuperscript{5}

b. Bernt Nor sto ivrig og filmet det hele…  
   B. N. stand.\textsc{pst} eagerly and film.\textsc{pst} it all  
   ‘Bernt Nor was eagerly filming it all.’\textsuperscript{6}

As (19b) showed, PsC\textsubscript{1} also allows complex adverbials following \( V_1 \). More examples of this is shown in (22).

(22) Complex adverbials intervening between \( V_1 \) and \( V_2 \)

a. Vi sitter i kollektivet et sted i fylket og prater.  
   we sit.\textsc{pres} in collective.\textsc{def} a place in region.\textsc{def} and talk.\textsc{pres}  
   ‘We are talking in the shared apartment some place in the region.’  
   (OslCorp AV/Ad\textsubscript{96}/01)

b. Tre menn sitter på fødekinikkens venterom og  
   three men sit.\textsc{pres} at birth.\textsc{clinic.\textsc{gen}} waiting.\textsc{room} and  
   bite.\textsc{pres} nails  
   ‘Three men are sitting in the birth clinic’s waiting room biting nails.’  
   (OslCorp AV/Ad\textsubscript{96}/01)

Regarding adverbials, the group of PsC\textsubscript{1} discussed is now compared with the second group of pseudo-coordination which has drive ‘carry.on’ as \( V_1 \). This group also conveys a progressive meaning. Drive is a functional verb which seems to lack lexical properties entirely. Compared to the first group of PsC\textsubscript{1}, for the drive-group there are much more restrictions regarding the type and position of adverbials which can follow drive as \( V_1 \). No adverbial naturally modifies drive. Even a temporal adverbial such as nå ‘now’ is less acceptable following \( V_1 \) compared to when it follows \( V_2 \) (23a). Other temporal adverbials like i går ‘yesterday’ are only acceptable when following \( V_2 \) (23b). In addition, \( V_1 \) cannot form an independent sentence outside the coordination like the positional verb can (23c).

\textsuperscript{5}URL: http://www.lo.no/politikk/Okonomi-og-sysselsetting/Artikler/Fortsatt-svekkelse-av-arbeidsmarkedet/ [accessed 10.03.16]

\textsuperscript{6}URL: http://sfkut.blogspot.de/2013/02/ignin-en-perle-i-namdalseid.html [accessed 02.03.16]
(23) Adverbials in pseudo-coordination with drive
a. Jeg driver (nå) og spiser (nå).
   I carry.pres.now and eat.pres.now
   ‘I am now eating.’

b. Jeg drev (*i går) og spiste (i går).
   I carry.on.pst in yesterday and eat.pst in yesterday
   ‘I was eating yesterday.’

c. *Jeg drev i går.
   I carry.on.pst in yesterday

2.4. Summary

Several particular properties of PsC1 were shown in this section. Firstly, the subject is interpreted in both conjuncts but only pronounced in one. This indicates that it might be shared between the two verbs. Secondly, V2 attests more flexibility of being modified by an adjunct compared to when it forms an independent clause outside PsC1. When V2 enters a PsC1, an adjunct that outside this construction only naturally modifies V1 can linearly follow V2 or V1 without leading to any differences of meaning or acceptability. Two properties indicate that there is not a subordinate relationship between the conjuncts in PsC1; (i) adjuncts that naturally modify the action denoted by V1 are acceptable in PsC1. This indicates that V1 is not a light verb. (ii) PsC1 differs from pseudo-coordination in other languages in that argument extraction is allowed out of both conjuncts. Extraction out of the first conjunct was showed with PsC1 with ‘call’ as V1. Finally, complex adjuncts are allowed to intervene between the V1 and V2. This shows that there must be structure between the two verbs that allows this material to intervene.

3. Voice and tense

Morphological tense mismatches on V1 and V2 are not allowed in PsC1 (24). However, Lødrup (2002, 2014) shows that both V1 as well as V2 can be preceded by an auxiliary expressing perfective tense (25). The ungrammatical sentence in (24) can be compared to (25b) where V2 is in perfect and the sentence is grammatical. It is also possible that an auxiliary expressing periphrastic passive precedes either V1 (26a) or V2 (26b). In the former example, both verbs have a
Sharing properties of pseudo-coordination in Norwegian

participle form while in the latter example, $V_1$ has present (active) tense while $V_2$ is passive.\(^7\)

(24) **Morphological tense mismatches**

*Jenta ligger og sov.
girl.DEF lie.PRES and sleep.PST

(25) **Periphrastic tense mismatches**

a. …der hun ligger og har sovet.
where she lie.PRES and AUX.PRES sleep.PTCP
‘…where she has been sleeping.’\(^8\)
b. Går ut fra at dere ikke har sittet på gjerdet
go.PRES out from that you not AUX.PRES sit.PART at fence.DEF
og tvunnet tomler…
and twist.PST thumb.PL
‘I assume that you have not been procrastinating on the fence.’

(OslCorp AV/Bb95/01)
c. Jeg sitter og har brukt opp datakvoten min
I sit.PRES and AUX.PRES use.PART up data.quota.DEF my
‘I have filled my quota of data.’

(Lødrup 2014: 6)

(26) **Periphrastic voice mismatches**

a. Men det blir sittet og produsert
but there become.PRES sit.PART and produce.PART
‘One sits and produces.’
b. Der står bilen og blir lakkert
there stand.PRES car.DEF and become.PRES paint.PART
/*lakkeres
paint.PRES.PASS
‘The car is standing there being painted’

(Lødrup 2014: 5)

There is evidence that $V_1$ is in T or a higher position. Sentence adverbials and negation elements which are assumed to adjoin to projections higher than $vP$,

\(^7\)Norwegian also has morphological passive (-s). In PsC1, this marking can only be on $V_2$ if the first verb has it (in this case, it is obligatory) (cf. Lødrup 2014).

\(^8\)URL: http://www.bokselskap.no/boker/ulvehiet/v [accessed 10.03.16]
can follow $V_1$ (27a) but they cannot follow (or precede) $V_2$ in PsC1 (27b) (cf. Lødrup 2002, 2014). When PsC1 is embedded, negation precedes $V_1$ (28).

(27) **Position of $V_1$ and $V_2$**
   a. Han sitter *ikke* og leser.
      he sit.pres not and read.pres
   ‘He is not reading.’
   b. Han sitter og (*ikke) leser (*ikke).
      he sit.pres and not read.pres not
      (Lødrup 2014: 12)

(28) Jeg merket at han *ikke* satt og leste i går.
    I notice.pst that he not sit.pst and read.pst in yesterday
    ‘I noticed that he wasn’t reading yesterday.’

The possibility of different voice- and TAM marking in PsC1 indicates that the construction is biclausal. A possible explanation for the impossibility of different morphological tense marking on the verbs is that the two conjuncts express two sub-events happening simultaneously. If the morphological tense differs, they no longer express a simultaneous action of two sub-events that overlap. Thus, it seems that the verbs in PsC1 can have any tense as long as the events denote simultaneity.

4. **Intermediate summary and non-solutions**

A recurring analysis of pseudo-coordination involves different forms of subordination. A prominent work on pseudo-coordination in Swedish and Mainland Scandinavian comes from Wiklund (2007). Her proposal is a subordination analysis of pseudo-coordination in Swedish where TAM is copied onto $V_2$. She also suggests that this analysis accounts for Norwegian and Danish. Arguments for this include $V_1$ having light verb properties and impossibility of TAM mismatches. As Lødrup (2014) has already discussed, the availability for temporal overlapping in PsC1 indicates that tense on $V_2$ is not vacuous and simply copied from $V_1$.

The previous account for pseudo-coordination in Norwegian is a biclausal control analysis in the LFG framework proposed by Lødrup (2002, 2014). Under his analysis, $V_1$ in PsC1 (first group) shares some properties with ordinary control verbs in Norwegian but differs from them in that PsC1 control verbs
have structure sharing instead of a pro. The main argument against this analysis is that control verbs take infinitives while $V_2$ has tense. It can also be argued that it is unappealing to introduce a new type of control verbs into the grammar of Norwegian in order to account for PsC.

Other subordination analyses involve pseudo-coordination being a complex head where no material can intervene, cf. Vos (2005). This is referred to as Contiguous Coordination and is found in English. An analysis that makes the same prediction comes from Cardinaletti & Giusti (2001) who propose for Marlese that $V_1$ has properties of a functional verb and is situated in a functional projection that impedes it from projecting arguments as a lexical verb. In both languages, no adverbials can intervene between the two verbs. Examples of this kind of pseudo-coordination is given for Marlese in (29b) and for American English in (30b).

(29) **Impossibility of intervening material**

a. Va (agghiri a casa) a mangiari (*agghiri a casa).  
   [he]go.3s (towards to home) to eat-INF (towards to home)  
   ‘He goes towards home to eat.’

b. Va (*agghiri a casa) a mangia (*agghiri a casa).  
   [he]go.3s (towards to home) to eat.3s (towards to home)  
   \[Marlese; Cardinaletti & Giusti 2001\]

(30) **Impossibility of intervening material**

a. #I go all the way there and eat.

b. *I go and eat all the way there.
   \[American English; Cardinaletti & Giusti 2001\]

For PsC, it was shown in section 2.3 that VP-adverbials can intervene between the two verbs when this construction is in a matrix clause and also, when it is embedded. This indicates that PsC is not a complex head. Indeed, it is even possible to have a PP embedded in another PP as was shown in (22) in section 2.3.

Finally, Weisser (2015: 145) has proposed that the first conjunct is base-generated as an adjunct before it moves to the specifier position of &P. This derivational analysis predicts that extraction is allowed out of the second conjunct (when it is the matrix verb of $V_1$), but not out of the first one because adjuncts form an island. Because this asymmetry does not apply for PsC, it
seems that there is not a subordinate relationship between the conjuncts where one starts out as an adjunct.⁹

Overall, a subordination analysis is not necessarily excluded for PsC₁. However, I showed that it might not be the best account for PsC₁ because it attests properties that contradict a subordinative relation between the conjuncts. These properties are summarized in (31).

(31)  **Non-subordinate properties of PsC₁**

i. Constituents can be extracted from both conjuncts.

ii. $V₁$ is more than a light verb:
   - $V₁$ is a heterogeneous group which retains lexical meaning
   - $V₁$ can either be modified or have an argument (*ringe*)

If PsC₁ is not subordination, then perhaps it is coordination. An ordinary coordination analysis would however encounter some problems. If PsC₁ is a low coordinative structure where there is only one subject and the verbs are coordinated in their base position in V, it would have to be accounted for why material can intervene between the V heads assuming that adverbials attach to a projection higher than the V head. Indeed, material which is assumed to adjoin to a projection higher than VP can intervene in PsC₁. This indicates that for a coordination analysis, the &P projection has to be of the vP or above it. If PsC₁ is coordination of vP or a higher projection, it would have to be assumed that the subject of $V₂$ is either elided or it is a PRO. If it is a PRO, it would have to be postulated that $V₂$ is $[-\text{Finit}]$. Again, we come into the argument that $V₂$ can be headed by a tense or voice auxiliary and must have morphological tense. Evidence against vP coordination with ellipsis was shown in section 2.1 where independent reference of the subject is unavailable. Under an ellipsis account, it would have to be assumed that the subject of vP₂ in PsC₁ is deleted under identity with the subject preceding V₁. However, the subject in PsC₁ can never be overt and also, no independent reading of the subject DPs within each

---

⁹Weisser (2015) addresses this very issue for a pseudo-coordination structure in English which allows extraction out of both conjuncts. He suggests that this might be accounted for by the fact that the conjuncts have a defective T head which needs to be valued. Following Müller (2010, 2011), he proposes that extraction out of the first conjunct in medial clauses or pseudo-coordination is possible because they have a defective T head which needs to be valued. Therefore the phase head remains active and allows for extraction. I do not assume for PsC₁ that $V₁$ is defective for reasons discussed in the previous section.
conjunct is available. It was demonstrated that if independent subject referents are available, PsC1 does no longer have its characteristic properties (extraction out of one conjunct, aspectual- and singular event-reading). Since singular referentiality is an indication of subject sharing (as opposed to subject ellipsis), subject sharing can be considered a necessary component for PsC1. Under a vP-coordination analysis, subject replication is a necessary component for PsC1. The sharing properties of PsC1 are summarized in (32).

(32) **Sharing properties of PsC1**

i. The subject is interpreted in both conjuncts but only pronounced in one.

ii. Singular referentiality of the subject is a necessary condition for PsC1.

iii. Adjuncts that naturally modify only V₁ outside PsC1 can follow either V₁ or V₂ in PsC1.

5. **Analysis: PsC1 with structure sharing**

What I propose is that PsC1 is vP coordination where the two conjuncts are headed by &P and the subject is shared between vP₁ and vP₂. In addition, the verbs can share an adjunct. This captures the properties of (32). Above the &P, there is a TP- and a CP-layer. The shared constituents ATB-move like the subject and adjuncts.

The main indicator for structure sharing is that a constituent is interpreted in two conjuncts but only pronounced in one (Grćanin-Yuksek 2012: 107). This qualifies for the subject and adjuncts. The kind of structure sharing that I am proposing here is derivational in that the shared constituents can be traced back to where they were first projected in the tree. I already showed that for some verbs, the subject semantically belongs to V₂. Similarly, some adjuncts naturally modify V₁ but not V₂. I propose the following generalization for PsC1 in (33) which is based on Collins (1997). Subject sharing is not optional under the present analysis as reasoned in (32). As soon as a reading with an independent subject referent is available for V₂, PsC1 turns into ordinary coordination (see section 2.1).

(33) **External argument sharing in PsC1**

In pseudo-coordination in Norwegian (group 1), vP₁ and vP₂ must share a DP. Optionally, they can share an adjunct.

---

10 Other accounts of this property are not excluded under a different analysis.
I make the following assumptions: structure building goes bottom-up and all syntactic operations are feature-driven. One basic operation is *Merge* for structure building. Structure building features (e.g. subcategorization features \( \bullet F \bullet \)) trigger Merge with an element that bears a corresponding feature \([F]\) (for notation see Sternefeld 2006, Heck & Müller 2007). The derivation of \( \text{PsC}_1 \) goes as follows. \( V_2 \) enters the derivation first. Depending on its argument structure, it can have a D feature for a complement. \( vP_2 \) projects a D feature for a subject (34). After \( vP_2 \) has merged its subject, \( V_1 \) enters the derivation. \( vP_1 \) also projects a D feature (35). If it merges a different DP as subject, ordinary coordination arises. If it enters parallel merge with the DP of \( vP_2 \) (cf. Citko 2005), pseudo-coordination arises (36). Evidence for that the subject originates in \( V_2 \) was shown in (9).

\[\begin{align*}
\text{(34) } & \text{Step 1: merging } vP_2 \\
& \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \孤儿
\end{align*}\]
Parallel merge means that structure is replicated so that one constituent belongs to both conjuncts of a coordination. This results in a subject DP having two parent nodes. According to this analysis, parallel merge is optional for coordination but necessary for PsC. The full structure of PsC is shown in (38).

(37) *Extraction out of the &P: Subject and V₁*

Nina satt i hagen og leste en bok
N. sat.pst in garden.def and read.pst a book
‘Nina was reading a book in the garden.’

(38) *Extraction out of the &P: Subject and V₁*
The two \( v \)Ps are joined by a coordination phrase \( &P \) where \( vP_1 \) is the specifier while \( vP_2 \) is the complement of \( &P \) (Munn 1993). There is only one \( T \) head which is above the coordination layer. It agrees with the two \( v+V \) heads via c-command. This results in that identical morphological tense is realized on both verbs. Below \( T \) there is a AspP. This attributes to the aspectual interpretation in PsC\( _1 \). The two \( v \) heads can project a separate PerfP or VoiceP as has already been assumed for scene-setting coordination in English (cf. Weisser 2015). This allows for each conjunct to be independently headed by an auxiliary of voice or tense/mood. The subject moves into the specifier position of TP and then into the specifier position of CP. In case another constituent is topicalized, it stays in spec,TP. \( V_1 \) moves to C because of \( V_2 \) in Norwegian (see Josefsson 1991). It should be noted that under this analysis, the two verbs are not dependent on moving into \( T \) to get tense because this is checked by the \( T \) head onto both verbs through c-command.

The proposed analysis is conform with the lexical properties that \( V_1 \) shows and the generalizations in (31) that PsC\( _1 \) is not subordination. In addition, the fact that there is only one subject which has mother nodes in each conjunct means that it is associated with each sub-event denoted by the verbs. Together they form one event with the shared subject. With a non-shared subject, each conjunct would access an independent agent and this can lead to a separate event interpretation which is rather typical of ordinary coordination. Finally, under a multidominance analysis the subject and the adjunct can be topicalized without violating the CSC: no CSC violation occurs because these constituents are linked to positions of both conjuncts. Therefore, they actually move out of both conjuncts via ATB-movement. As Citko (2005) argues, this kind of ATB-movement where one constituents moves out of a position with shared mothers makes the operation straight-forward without having to stipulate that two constituents become one. It remains to be accounted for why other constituents which are not linked to both conjuncts can move out of the coordination. This is one of the topics I adress in the next section.

6. Discussion and open issues

Multidominance analyses usually account for coordinated constructions where one phonologically overt element positioned at the right or left periphery of a conjunct is interpreted in both conjuncts. The arguments for a multidom-
inance analysis have predominantly been that there is only one referent of the constituent, and that an element is interpreted in both conjuncts but only pronounced in one. Both of these criteria apply for PsC. The differences lies in that the shared material is intervened by non-shared material. Indeed, current multidominance analyses mainly account for shared material which is positioned at landing sites of movement on the left or right periphery, for example, a coordination with a ATB wh-question as in (39). What is assumed to be shared between John buy and Mary think Sam should read.

(39) What will John buy and Mary think Sam should read?

(Citko 2005: 48)

According to Citko (2005), Gračanin-Yuksek (2007, 2012, 2013), unshared material dominated by multiple mothers of shared material must move. If it does not move, the structure cannot be linearized because according to the c-command-algorithm, “a shared node with more than one highest mother never c-commands an unshared node regardless of the structural position of either of them” (Gračanin-Yuksek 2012: 105). De Vries (2009) accounts for shared constituents at the left and right periphery. Wilder (1999, 2008) accounts for shared material in Right Node Raising which is subject to the right edge constraint. PsC is therefore a different multidominance structure compared to other ones that have been proposed. For this reason, the multidominance algorithms proposed in the literature cannot account for constructions such as PsC. The main reason for this is that PsC has shared material which intervenes with unshared material. This regards the subject if it does not move to the spec position of CP, and it concerns adjuncts.

PsC is however not alone in differing from current multidominance structures. Another construction that cannot be accounted for by existing algorithms is the German construction Subjekt­lücke in finiten Sätzen (SLF). This construction is analyzed by Mayr & Schmitt (2013) as a coordination of V2 clauses with a shared subject. Extraction is allowed out of the left conjunct only.

(40) Subjekt­lücke in finiten Sätzen

Den Hund, hat er t, gefüttert und wird jetzt essen gehen.
the dog has he fed and will now eat go
‘The dog, he fed it and will now eat.’

(Mayr & Schmitt 2013: 2)
Gračanin-Yuksek (2012) notes that the shared subject in SLF is sandwiched between unshared material and that this is a problem for current linearization algorithms.\textsuperscript{11}

Although it might seem problematic that current multidominance approaches cannot offer a linearization algorithm for PsC\textsubscript{1}, the reason for this is that they were designed to account for shared constituents in landing sites of movement. PsC\textsubscript{1} is different under this point of view. Structure sharing in PsC\textsubscript{1} differs from the movement-motivated sharing constructions regarding the kind of sharing it is. The kind usually discussed in the literature applies for sentences where the argument structure of each verb of a conjunct is compatible with the shared constituent. Sharing is possible because the argument structure of each conjunct subcategorizes for the shared constituent (Gračanin-Yuksek 2012). In sentences like (39), both buy and read subcategorizes for what and this allows sharing. Under the current analysis of PsC\textsubscript{1}, structure sharing is a necessary component of PsC\textsubscript{1} in that it allows for a singular event interpretation. In addition, as was observed in section 2, subjects and adjuncts are allowed in PsC\textsubscript{1} which would not be compatible with one verb alone. This indicates that the verbs are more flexible regarding the shared constituents they can merge with or adjjoin to compared to non-shared constituents. These two observations of sharing in PsC\textsubscript{1} indicates that it differs from sharing of constituents positioned in landing sites of movement. Therefore it seems reasonable that the linearization algorithms offered in the literature do not apply for PsC\textsubscript{1}.

The remaining issue to explain is why an unshared constituent of PsC\textsubscript{1} like the object of a transitive V\textsubscript{2} and V\textsubscript{1}, can move out of the second conjunct. I do not have a solution for this. However, a semantic explanation might be offered here. I again point to the observation that the properties of PsC\textsubscript{1} such as CSC violations is rendered possible because of subject sharing. As was shown in section 2.1 in (6) and generalized in (32), if a reading of independent referents of the subject DP is available, PsC\textsubscript{1} does no longer have all its typical properties and becomes ordinary coordination (each verb forms a separate event, no aspectual meaning, and extraction not allowed). Thus, when the

\textsuperscript{11}According to Mayr & Schmitt (2013), there is evidence for covert ATB movement of the subject. Gračanin-Yuksek notes that in this case, the subject would be expected to be linearized preceding the rest of the sentences which it does not. For this she proposes a constraining factor for multidominance structures: Constraint on Sharing (COSH) which demands that two mothers of a shared node must dominate identical sets of terminal nodes (Gračanin-Yuksek 2007).
subject is no longer shared, ordinary coordination emerges. Following this argumentation, I propose that the CSC can be violated in PsC\textsuperscript{1} because (i) the two verbs have shared constituents, and (ii) this sharing allows a singular event reading. Under a semantic account of CSC violations, the one-event reading allows a constituent to be interpreted in both conjuncts even though it is not shared.

Contrary to ordinary coordination like (39) which denotes separate events, the conjuncts in PsC\textsuperscript{1} are sub-events of one event. Therefore, if an argument of $V_2$ is extracted, ungrammaticality does not arise because the object is interpreted as part of both sub-events. When there are two events, this interpretation is not possible. The observation is that in a construction with coordination of two sub-events, the CSC is not enforced, while with coordination of two events it is enforced.

The connection between illocutionary force and island violations has been discussed by several authors. Bickel (2010) discusses the general possibility of extraction in a cross-linguistic survey. According to this work, languages allow extraction depending on independent scope of illocutionary force. For example, it cannot be extracted from an adjunct clause if it forms an independent illocution. This is also discussed in Weisser (2015) who points out that illocutionary force is associated with a C head in a given clause. Zhang (2010) shows that the CSC is relativized in non-distributive coordination.

Coming back to the SLF construction, this is a construction which is claimed to go under natural coordination which opposes to accidental coordination (Wälchli 2005, Haspelmath 2004, Zhang 2010). SLF can be considered natural coordination because the events denoted by the conjuncts are part of a bigger event. Zhang (2010) claims that this construction has a cause-effect or contiguity reading which makes it part of ‘natural coordination’. This might differ from sub-events like the ones in PsC\textsuperscript{1} however there is a parallel: the events denoted by the coordinated verbs relate to each other. In both SLF and pseudo-coordination the events relate to each other and extraction is allowed. In Norwegian, ordinary coordination with event contiguity seems to permit the fronting of an adjunct that semantically relates more to the first conjunct than to the other (41a).
(41) **Adjunct fronting in coordination with event contiguity**

a. Forsiktig åpnet jeg døren og tittet ut...
   carefully open.pst I door.def and look.pst out
   ‘I opened the door carefully and looked outside.’

7. **Summary**

This paper discussed the sharing properties of one type of pseudo-coordination in Norwegian. I showed that the subject is shared between the two verbs and optionally, an adjunct can be shared. The indications of this is that these constituents are pronounced in one conjunct but interpreted in both. Regarding the subject, there is only one subject referent available for the two verbs. Interestingly, as soon as an independent reading of a subject referent is available for each verb, a separate event reading arises and the aspectual interpretation and possibility of extraction out of one conjunct is no longer found. PsC1 attests properties of syntactic independence in that V1 can be modified or have an argument, and extraction is allowed out of both conjuncts. In addition, each verb can be headed by a tense/mood or voice auxiliary. Based on these properties, a vP coordination was proposed with subject and adjunct sharing. This explains why an adjunct which naturally modifies one conjunct outside PsC1 can, like wh-words, also be fronted: it is dominated by nodes in both conjuncts. Regarding the possibility of moving non-shared constituents like the object of one of the verbs, I suggested this might be semantically motivated and related to the fact that PsC1 forms a singular event and therefore, the constituents are interpreted as part of both sub-events denoted by the conjuncts.

**References**


12URL: http://www.propaganda.net/skoleside/?stil=12558 [accessed on 10.03.16]
Sharing properties of pseudo-coordination in Norwegian


