

Sharing properties of pseudo-coordination in Norwegian

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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 ν P 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.

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- (1) Gutten står og hopper i hagen.
 boy.DEF stand.PRES and jump.PRES in the garden.DEF
 ‘The boy is jumping in the garden.’

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).

- (2) a. *PSC1 with extraction*
 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’
- b. *Ordinary coordination with extraction*
 *Denne boka_i spiste jeg og leste i går t_i
 this book.DEF write.PST I and read.PST in yesterday
- c. *PSC1 with både*
 *Gutten både sitter og leser en bok
 boy.DEF both sit.PRES and read.PRES a book

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 Lødrup (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 to move 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*

Hun_i satt og (?hun_i) spiste en brødskiye.
 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.PST a
 brødskiye.
 sandwich
 'She both sat at the library and she ate a sandwich.'

- b. Amerikanerne sparer og *de* vil bruke sine
 american.PL.DEF save.PRES and they want.PRES use.INF their
 penger på egne problemer hjemme.
 money on own problem.PL home
 ‘The Americans are saving and they will use their money on their
 own problems they have at home.’
 (OsI Corp AV/Af94/01)
- c. De vasket og *de* feiet...
 they wash.PST and they sweep.PST
 ‘They washed and they swept.’
 (OsI Corp 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 lay on couch.DEF and read a book.
 ‘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
 bok.
 book
 ‘The girls both lay on the couch and read a book.’/
 ‘The girls were reading on the couch.’
- b. *[På sofaen]_i både lå t_i 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 V_2 , 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 V_1 alone. In (9a), PsC1 has an inanimate subject which is semantically selected by V_2 (9b). This is shown by the fact that when it occurs alone with V_2 , it forms a grammatical sentence (9b). When it however occurs with V_1 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 V_2 alone (10b), but not with V_1 (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.

- (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/o1)
- 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

2.2. Objects

Depending on the subcategorization frame of V_2 , a direct or an indirect object can occur in PsC_1 . 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 PsC_1 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.² 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.

- (11) *PsC₁ with extraction from conjunct 2*
- 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.’

²Note 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 kopi_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) *Ordinary coordination with extraction*

*Denne boka_i spiste jeg og leste i går t_i
 this book.DEF write.PST I and read.PST in yesterday

(14) *ATB movement in ordinary coordination*

Hva spiser og drikker du i kveld?
 what eat.PRES and drink.PRES you to night
 ‘What are you eating and drinking tonight?’³

Ringte ‘call’ in the position of V₁ can take an argument (15a). In this case it can be extracted just like the argument of V₂ (15b).

(15) *Object extraction out of conjunct 1*

- 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 V₁ 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 PsC1. This is demonstrated in (16a)

³URL: <http://vgd.no/forbruker/mat-og-drikke/tema/1645432/tittel/hva-spiser-og-drikker-du-i-kveld/innlegg/44526702/> [accessed 02.03.16]

where the PP *i hagen* ‘in the garden’ can either follow V_1 or V_2 without resulting in any semantic or grammatical differences. The locative PP naturally modifies V_1 but not V_2 as has been shown by Teleman et al. (1999) and Lødrup (2002).⁴ 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 V_2 is less acceptable (16c). Nevertheless, the PP can freely switch position after the verbs as in (16a) without changing the acceptability. This kind of V_1 -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 V_2 is more flexible regarding modification when it appears with V_1 in PsC1 than alone in an independent clause.

(16) *Modification restrictions outside PsC1*

- a. Han står (i hagen) og glør (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 glør i hagen
 he stare.PRES in garden.DEF

(Teleman et al. 1999; Lødrup 2002)

(17) *Fronting of adverbial naturally modifying V_1*

- a. I hvilken hage står Richard og glør?
 in which garden stand.PRES R. and stare.PRES
 ‘In which garden is Richard staring?’
- b. I hagen til naboen står han og glør.
 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.’

(18) *Adverbials in subordinated PsC1*

Han trodde at Jon sto (i hagen) og glodde (i
 he think.PST that John stand.PST in the garden.DEF and stare.PST in
 hagen)
 garden.DEF
 ‘He thought that John was staring in the garden.’

- (19) a. Jeg ler av at vi har sittet på hver vår side
 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)
- b. Jeg ler av at vi har sittet og ventet på
 I laugh.PRES over that we AUX.PRES sit.PTCP and wait.PTCP at
 hver vår side av åsen...
 each our side of hill.DEF
 ‘I laugh about the fact that we have been waiting for each other on
 each side of the hill.’

The same property is found in PsC1 with *ringe* as V₁. The adjunct *hjemmefra* ‘from home’ can follow V₁ or V₂ in PsC1. Outside this construction, it forms an acceptable sentence with V₁ alone (20b) but the acceptability is reduced with V₂ alone (20c). This shows that the semantics of V₂ changes when it combines with V₁ in PsC1 in that it allows an adjunct to follow it that would not be compatible with the sentence alone.

- (20) a. Jeg ringte (hjemmefra) og vekket henne (hjemmefra).
 I call.PST from.home and wake.PST her from.home
 ‘I called and waked her from home.’
- b. Jeg ringte henne (hjemmefra).
 I call.PST her from.home
 ‘I called her from home.’
- c. ?Jeg vekket henne hjemmefra.
 I wake.PST her from.home

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

(21) *V₁-modifying adjuncts*

- a. Regjeringen sitter *stille* og ser på flyktningskrisen.
government sit.PRES quietly and look.PRES at refugee.crisis.DEF
'The government is quietly looking at the refugee crisis.'⁵
- b. Bernt Nor sto *ivrig* og filmet det hele...
B. N. stand.PST eagerly and film.PST it all
'Bernt Nor was eagerly filming it all.'⁶

As (19b) showed, PsC₁ also allows complex adverbials following V₁. More examples of this is shown in (22).

(22) *Complex adverbials intervening between V₁ and V₂*

- a. Vi sitter *i kollektivet et sted i fylket* og prater.
we sit.PRES in collective.DEF a place in region.DEF and talk.PRES
'We are talking in the shared apartment some place in the region.'
(OsI Corp AV/Ad96/01)
- b. Tre menn sitter *på fødeklinnikkens venterom* og
three men sit.PRES at birth.clinic.GEN waiting.room and
biter negler.
bite.PRES nails
'Three men are sitting in the birth clinic's waiting room biting nails.'
(OsI Corp AV/Ad96/01)

Regarding adverbials, the group of PsC₁ discussed is now compared with the second group of pseudo-coordination which has *drive* 'carry.on' as V₁. 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 PsC₁, for the *drive*-group there are much more restrictions regarding the type and position of adverbials which can follow *drive* as V₁. No adverbial naturally modifies *drive*. Even a temporal adverbial such as *nå* 'now' is less acceptable following V₁ compared to when it follows V₂ (23a). Other temporal adverbials like *i går* 'yesterday' are only acceptable when following V₂ (23b). In addition, V₁ cannot form an independent sentence outside the coordination like the positional verb can (23c).

⁵URL: <http://www.lo.no/politikk/Okonomi-og-sysselsetting/Artikler/Fortsatt-svekkelse-av-arbeidsmarkedet/> [accessed 10.03.16]

⁶URL: <http://sfkut.blogspot.de/2013/02/lgnin-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.ON 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

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 sovnet.
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 tommer...
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 ,

⁷Norwegian 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).

⁸URL: <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 PsC1.

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 PsC1, 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 PsC1 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 PsC1, 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. V_1 is more than a light verb:
 - V_1 is a heterogeneous group which retains lexical meaning
 - V_1 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 ν P or above it. If PsC1 is coordination of ν P or a higher projection, it would have to be assumed that the subject of V_2 is either elided or it is a PRO. If it is a PRO, it would have to be postulated that V_2 is [-FINITE]. Again, we come into the argument that V_2 can be headed by a tense or voice auxiliary and must have morphological tense. Evidence against ν P 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 ν P₂ in PsC1 is deleted under identity with the subject preceding V_1 . 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 V_1 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 ν P-coordination analysis, subject replication is a necessary component for PsC1.¹⁰ 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 V_1 outside PsC1 can follow either V_1 or V_2 in PsC1.

5. Analysis: PsC1 with structure sharing

What I propose is that PsC1 is ν P coordination where the two conjuncts are headed by &P and the subject is shared between νP_1 and νP_2 . 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 (Gračanin-Yukse 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 V_2 . Similarly, some adjuncts naturally modify V_1 but not V_2 . 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 V_2 , PsC1 turns into ordinary coordination (see section 2.1).

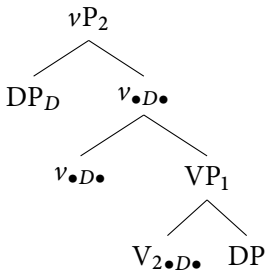
(33) *External argument sharing in PsC1*

In pseudo-coordination in Norwegian (group 1), νP_1 and νP_2 must share a DP. Optionally, they can share an adjunct.

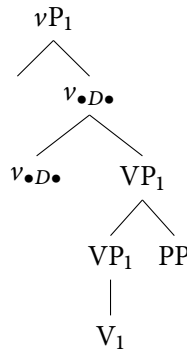
¹⁰Other accounts of this property are not excluded under a different analysis.

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) [**•F•**] trigger Merge with an element that bears a corresponding feature [F] (for notation see Sternefeld 2006, Heck & Müller 2007). The derivation of PsC1 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).

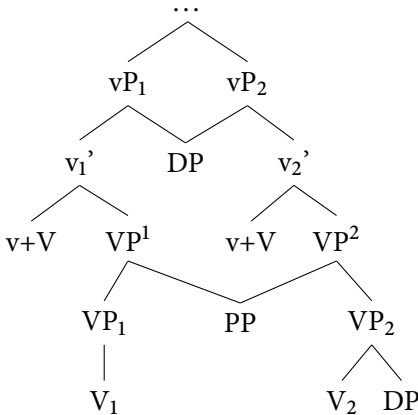
(34) Step 1: merging vP_2



(35) Step 2: merging vP_1



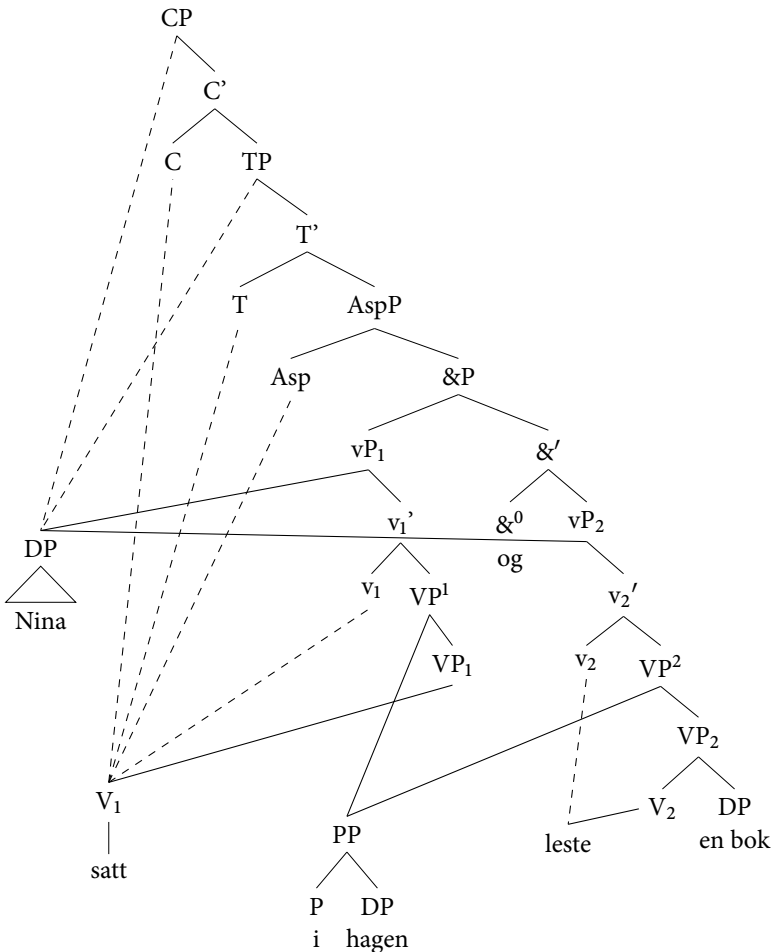
(36) Step 3: parallel merge



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 PsC1. The full structure of PsC1 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 ν Ps are joined by a coordination phrase &P where νP_1 is the specifier while νP_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 $\nu+V$ 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 *PsC1*. The two ν 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 *PsC1* 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 PsC₁. 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. PsC₁ 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 PsC₁. The main reason for this is that PsC₁ 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.

PsC₁ 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_i hat er t_i 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-Yukse (2012) notes that the shared subject in SLF is sandwiched between unshared material and that this is a problem for current linearization algorithms.¹¹

Although it might seem problematic that current multidominance approaches cannot offer a linearization algorithm for PsC₁, the reason for this is that they were designed to account for shared constituents in landing sites of movement. PsC₁ is different under this point of view. Structure sharing in PsC₁ 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-Yukse 2012). In sentences like (39), both *buy* and *read* subcategorizes for *what* and this allows sharing. Under the current analysis of PsC₁, structure sharing is a necessary component of PsC₁ in that it allows for a singular event interpretation. In addition, as was observed in section 2, subjects and adjuncts are allowed in PsC₁ 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 adjoin to compared to non-shared constituents. These two observations of sharing in PsC₁ 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 PsC₁.

The remaining issue to explain is why an unshared constituent of PsC₁ like the object of a transitive V₂ and V₁, 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 PsC₁ 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, PsC₁ 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

¹¹According to Mayr & Schmitt (2013), there is evidence for covert ATB movement of the subject. Gračanin-Yukse 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-Yukse 2007).

subject is no longer shared, ordinary coordination emerges. Following this argumentation, I propose that the CSC can be violated in PsC₁ 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 PsC₁ are sub-events of one event. Therefore, if an argument of V₂ 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 PsC₁ 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.'¹²

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

- Bickel, Balthasar (2010): Capturing particulars and universals in clause linkage: a multivariate analysis. In: I. Biril, ed., *Clause linking and clause and clause hierarchy: syntax and pragmatics*. Amsterdam: John Benjamins, pp. 51–102.
- Cardinaletti, Anna & Giuliana Giusti (2001): “Semi-lexical” motion verbs in Romance and Germanic. In: N. Corver & H. v. Riemsdijk, eds, *Semi-lexical Categories. The Function of Content Words and the Content of Function Words*. De Gruyter Mouton, Berlin, pp. 323–370.

¹²URL: <http://www.propaganda.net/skoleside/?stil=12558> [accessed on 10.03.16]

- Citko, Barbara (2005): 'On the nature of merge: External merge, internal merge, and parallel merge', *Linguistic Inquiry* 36, 475–496.
- Collins, Chris (1997): 'Argument Sharing in Serial Verb Constructions', *Linguistic Inquiry* 28(3), 461–497.
- Gračanin-Yukse, Martina (2007): About sharing. PhD thesis, MIT.
- Gračanin-Yukse, Martina (2012): Clitic placement and multidominance. In: M. Uribe-Etxebarria & V. V. Elguea, eds, *Ways of structure building*. Oxford, UK: Oxford University Press, pp. 93–113.
- Gračanin-Yukse, Martina (2013): Linearizing Multidominance structures. In: T. Biberauer & I. Roberts, eds, *Challenges to linearization*. Mouton de Gruyter, Berlin, pp. 269–294.
- Haspelmath, Martin (2004): Coordinating constructions: an overview. In: M. Haspelmath, ed., *Coordinating constructions, Typological Studies in Language*. Vol. 58, Amsterdam: John Benjamins, pp. 3–39.
- Heck, Fabian & Gereon Müller (2007): Extremely local optimization. In: E. Brainbridge & B. Agbayani, eds, *Proceedings of the 26th WECOL*. California State University, pp. 170–183.
- Heycock, Caroline & Hjalmar P. Petersen (2012): Pseudo-coordinations in Faroese. In: K. Braunmüller & C. Gabriel, eds, *Multilingual individuals and Multilingual Societies*. Hamburg studies on Multilingualism, John Benjamins, pp. 259–280.
- Josefsson, Gunlög (1991): 'Pseudocapplication - A VP + VP coordination', *Working papers in Scandinavian syntax* 47, 130–156.
- Josefsson, Gunlög (2014): Pseudo-coordination with gâ 'go' and the "surprise effect". In: *Working Papers in Scandinavian Syntax*. Vol. 93.
- Kehler, Andrew (2002): *Coherence, Reference, and the Theory of Grammar*. Stanford, CA: CSLI Publications.
- Lødrup, Helge (2002): 'The syntactic structures of Norwegian pseudocoordinations', *Studia Linguistica* 56, 121–143.
- Lødrup, Helge (2014): How can a verb agree with a verb? Reanalysis and pseudocoordination in Norwegian.. In: M. Butt & T. H. King, eds, *Proceedings of the LFG14 Conference*. Stanford, CA: CSLI Publications. pp. 367–86.
- Mayr, Clemens & Viola Schmitt (2013): Order and the Coordinate Structure Constraint. Ms.
- Müller, Gereon (2010): 'On deriving CED effects from the PIC', *Linguistic Inquiry* 41, 35–82.
- Müller, Gereon (2011): *Constraints on Displacement*. Amsterdam: John Benjamins.
- Munn, Alan (1993): Topics in the Syntax and Semantics of Coordinate Structures. PhD thesis, College Park: University of Maryland.
- Ross, John R. (1986): *Infinite Syntax!*. Ablex Publishing Corporation, Norwood, New Jersey.

- Ross, John Robert (1967): Constraints on Variables in Syntax. PhD thesis, MIT, Cambridge, Massachusetts.
- Sternefeld, Wolfgang (2006): *Syntax: Eine morphologisch motivierte generative Beschreibung des Deutschen*. Vol. 1, Stauffenburg, Tübingen.
- Teleman, Ulf, Staffan Hellberg & Erik Andersson (1999): *Svenska akademiens grammatik*. Vol. 4, Stockholm: Svenska Akademien.
- Vos, Mark de (2005): The syntax of pseudo-coordination in English and Afrikaans. PhD thesis, LOT Dissertation Series 114, LOT, Utrecht.
- Vries, Mark de (2009): 'On Multidominance and Linearization', *Biolinguistics* 3, 344–403.
- Wälchli, Bernhard (2005): *Co-Compounds and natural coordination*. Oxford: Oxford University Press.
- Weisser, Philipp (2015): *Derived Coordination*. De Gruyter, Berlin.
- Wiklund, Anna-Lena (2007): *The syntax of tenselessness: tense/mood/aspect-agreeing infinitivals*. Vol. 92, Mouton de Gruyter, Berlin.
- Wilder, Chris (1999): 'Right node raising and the LCA', *West Coast Conference on Formal Linguistics (WCCFL)* 18, 586–598.
- Wilder, Chris (2008): Shared constituents and linearization. In: K. Johnson, ed., *Topics in ellipsis*. Cambridge: Cambridge University Press, pp. 229–258.
- Zhang, Niina Ning (2010): *Coordination in Syntax*. Cambridge University Press.