

On exceptive *nema*-clauses in Icelandic

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1 Introduction

- Consider the example given in (1):

(1) Ég mun koma við **nema** það rigni.
I will come by unless it rains-3SG-PST.SUBJ
'I will come by unless it rains.'

- (1) is a complex sentence consisting of a matrix clause followed by a subordinate clause headed by the complementizer *nema*, corresponding to the English complementizer *unless* as the English paraphrase of (1) indicates. The verb in the *nema*-clause, *sé*, bears subjunctive morphology. In the literature such clauses have been referred to as exceptive clauses (cf. Geis (1973), Brée (1985), von Fintel (1992a), Declerck and Reed (2000), Fretheim (2006), Leslie (2009), Vostrikova (2018)).¹
- Accordingly, (1) can be paraphrased as follows: I will come by except that/if it rains. To put it differently: Let us assume Q to be the proposition of the matrix clause, and P the proposition of the subordinate clause. The dependence relationship between Q and P *nema* establishes (= Q *nema* P) is 'Q in a case other than P'.
- Except for Rögnvaldsson (1992), studies examining the syntax and semantics of *nema*-clauses in Icelandic are, to our knowledge, missing. The paper by Rögnvaldsson (1992) attempts to capture all possible uses of *nema*-clauses in different environments, comparing them with other clause types, but it does not offer an analysis.

- In this talk, we examine subordinate exceptive clauses introduced by *nema* 'unless' in Icelandic.

Overview

- Section 2 delineates *nema*'s selectional possibilities and show that it can function either as a linker or as a complementizer introducing exceptions. In the latter case, it is mainly associated with subjunctive morphology in the subordinate clause, whereas in the former case the finite verb exhibits no mood restrictions.
- By concentrating on subjunctive *nema*-clauses, we examine their semantics and syntax in Section 3.
- Semantically, we argue that subjunctive *nema*-clauses can operate on the content, epistemic, and speech act level (Section 3.1).
- Syntactically, we suggest that *nema*-clauses attach either as JP or as ActP modifiers, and that they are never embedded as central adverbial clauses (see Haegeman (2010, 2012), Haegeman & Schönenberger (to appear), and Frey (2011, 2012, 2016)) (Section 3.2).
- Section 4 summarizes and concludes the discussion.

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¹In general, exceptives are used to express exceptions to generalizations, cf. Reinhart (1991), von Fintel (1992b), Moltmann (1995), Arregui (2006), Álvarez (2008).

2 Selectional properties of *nema*

- As a head *nema* can embed different complements types (for a descriptive overview, see Rögnvaldsson 1992). Mainly, it selects clausal complements of which some parts can be elided, as (2-a) and (2-b) show:

- (2) a. Allir komu **nema** [XP [DP Jón] ~~kom~~].
 everyone come-3PL-PST.IND except John come-3SG-PST.IND
 ‘Everyone came except John.’
- b. Þetta getur ekki endað **nema** þetta getur endað [XP [PP með skelfingu]].
 this can not end except it can end with
 terror
 ‘This can only end badly.’
 viljinn.is (2019)

- It can embed infinitives, both bare (3-a) and non-bare (3-b).

- (3) a. En það er ekki auðvelt að tala um þetta **nema** hafa
 but it is not easy to talk about this except have-INF
 tónðæmin með til þess að þú skiljir hvað ég
 music with so that you understand-2SG-PRES.SUBJ what I
 eigi við.
 mean
 ‘But it’s hard to talk about this without the music so that you understand what I mean.’ DV (28 September 2008)
- b. Það er ekki hægt að útskýra þetta **nema** að segja söguna
 It is not possible to explain this except to say-INF story-the
 frá byrjun.
 from beginning
 ‘You can’t explain this without telling the whole story.’ Mbl.is (2015)

- However, we will not deal with infinitives and PPs.
- As for CP complements, (Thráinsson 2007: 404) observes that *nema* normally requires the subjunctive mood, referring to the two following minimal pairs:

- (4) a. Hún syngur alltaf í sturtu **nema** hún *er/sé
 she sings always in shower unless she be-3SG-PRES.*IND|SUBJ
 mjög hás.
 very hoarse
 ‘She always sings in the shower unless she is very hoarse.’

- b. Ég fer ekki nema þú *kemur/komir með.
 I go not unless you come-2SG-PRES.*IND|SUBJ with
 ‘I won’t go unless you come with me.’

- We share this intuition and claim that the subjunctive mood in subordinated *nema*-clauses should be taken as a default mood. This holds both for present/future-oriented and for past contexts, see (5).

- (5) a. Jón kom í hverri viku **nema** hann væri veikur
 John came in every week except he was-3SG-PST.SUBJ sick
 ‘John showed up every week except when he was sick.’
- b. Jón kemur í hverri viku **nema** hann sé veikur
 John comes in every week except he is-3SG-PRES.SUBJ sick.
 ‘John shows up in every week except when he is sick.’

- The occurrence of negation in the matrix clause does not affect the mood selection in the subordinate clause, as observed for causal clauses, for example (cf. Thráinsson 2007: 404–5), see (6).

- (6) Jón kom ekki **nema** hann hefði tíma til þess.
 John came not except he had-3SG-PRES.SUBJ time for that
 ‘John didn’t come unless he had time.’

- Further, *nema* occurs with the complementizer *ef* ‘if’ (7-a), *hvað* ‘what’ (7-b) and *að* ‘that’ (7-c).

- (7) a. Hann notar Ásgeir Örn heldur ekki neitt **nema ef** við eru
 he uses Ásgeir Örn rather not at all unless if we
 manni færri
 are-3PL-PRES.IND man-DAT fewer
 ‘He (the coach) doesn’t use Ásgeir Örn (football player) unless we are missing one player.’ visir.is, 21. January 2010
- b. Hún er söngvaskáld eins og Bergþóra, Bubbi og Bellman, **nema hvað** hennar hljóðfæri er ekki
 She is singer-songwriter like Bergþóra, Bubbi and
 og Bellman, **nema hvað** hennar hljóðfæri er ekki
 Bellman except what her instrument is-3SG-PRES.IND not guitar
 gítar heldur kirkjuorgel
 but church-organ
 ‘She is a singer-songwriter like Bergþóra, Bubbi and Bellman except that her instrument is not a guitar but a church organ.’ ruv.is, 19. January 2013
- c. Ég get lítið sagt um leikaravalið **nema að** það
 I can little say-SUPINE about actor-choice-the except that it
 er athyglisvert og mun koma á óvart.
 is-3SG-PRES.IND interesting and will be surprising

‘I can’t say much about the acting choices except that it is interesting and will be surprising.’ visir.is, 21. mars 2014

- In all these examples the verb in the *nema*-clause are in the indicative rather than the subjunctive. Following Merchant’s (2019) view, we argue that there is category-sensitive selection.
- Usually, *ef* ‘if’ and *hvað* ‘what’ require the indicative and this also holds true when *nema* precedes those elements as in (7-a) and (7-b). Note, however, that *nema að*, as in (7-c), can also easily occur with the subjunctive. Other examples with *nema* and the indicative are shown in (8).

- (8) a. Þetta verður svona þínu eins og ísbíllinn á
this will kind.of little like ice-cream-van-the on
sumrin, **nema** ég er að selja fræðandi
summer-PL-the, unless I **be**-1SG-PRES.IND to sell-INF informative
barnabækur.
children’s-books
‘This is going to be a little like an ice cream van during the summer, except I’ll be selling informative children’s books.’
frettabladid.is, 19. December 2020
- b. Faraldurinn er að geisa aftur í Evrópu eins og hann hefur
pandemic-the is to rage again in Europe like he has
gert í fyrravetur **nema** hann er bara enn
done in last-winter except he **is**-3SG-PRES.IND only more
alvarlegri núna.
serious now
‘The pandemic is raging again in Europe like it did last winter except it has only grown more serious.’
ruv.is, 4. April 2022

- Many *nema*-clauses with the indicative appear to be coordinated structures rather than subordinated (see Rögnvaldsson 1992: 45), compare e.g., (8-b). Here, *nema* is more akin to a coordinating conjunction such as *en* ‘but’ than a subordinator.
- However, there is interesting speaker variation. Thráinsson and Thórðardóttir (2015:184-200) show that most speakers in the Icelandic Dialect Syntax Project (Thráinsson et al. 2013, 2015, 2017) found the subjunctive natural and picked it over the indicative in *nema*-clauses. Nevertheless, some speakers found the indicative also acceptable in such clauses, see indicative in (9-a) and corresponding subjunctive in (9-b).

- (9) a. Hún ætlar að hætta **nema** hún fær kauphækkun.
She is.going to quit unless she get-3SG-PRES.IND raise
‘She is going to quit unless she gets a raise.’
- b. Hann býður sig ekki fram **nema** hann fái
He offer self not forward unless he gets-3SG-PRES.SUBJ
annað sætið.
second place-the
‘He won’t run unless he gets second place.’

- Among 752 speakers, 14.4% fully accepted (9-a) with the indicative while 92.2% fully accepted (9-b) with the subjunctive. The youngest speakers were much more positive (27%) than the oldest speakers (5.1%) towards the use of the indicative in (9-a) (see also discussion on the use of indicatives in *nema*-clauses in Gärtner and Eythórsson 2020:233). (see also Quer (1998), Marques (2010))
- In what follows, we focus on *nema*-clauses with the subjunctive mood for the sake of consistency.

3 Exceptive *nema*-clauses

- In this section, we examine exceptive *nema*-clauses at the syntax-semantics interface. In Section 3.1, we show that *nema*-clauses can operate on the content, epistemic and speech act level. In Section 3.2, we examine their syntactic properties and account for their differences.

3.1 Semantics

- Remarkably, some types of adverbial clauses are taken to operate on three cognitive levels: i) content level, ii) epistemic level, and iii) speech act level, as shown by Dijk, Teun A van (1977) for conditional clauses, Sweetser (1990), Frey (2016), Haegeman (2022) for causal clauses, Breindl (2015a) for irrelevance conditionals, and Antomo (2013), Breindl (2015) and Frey (2020) for concessive clauses. We illustrate this variation by discussing the following three examples of causal clauses:

- (10) a. John came back because he loved her.
b. John loved her, because he came back.
c. What are you doing tonight, because there’s a good movie on.
(Sweetser 1990: 77, ex. 1a–c)

- In the content domain, causal clauses usually mark a reason relation between two events. In (10-a), the event of loving someone is a reason for

coming back. Their core property is that the information conveyed in the matrix clause is presupposed, whereas the proposition in the subordination clause is asserted.

- In (10-b), i.e., in the content domain, the speaker provides the reason for why he or she thinks the matrix clause is true. Accordingly, the speaker takes the event of coming back to be a reasonable argument to assume that John loves a female person.
- Finally, in the speech act domain the speaker reveals the motivation for why he or she is performing a speech act.
- To our knowledge, the question whether exceptive clauses can operate on all three levels too has not been addressed yet. As the examples in (11-a)–(11-c) show, subjunctive *nema*-clauses can express three different kinds of exceptions:

- (11) a. Jón kom í hverri viku **nema** hann *væri* veikur.
John came in every week except he was-3SG-PST.SUBJ sick
'John showed up every week except when he was sick.'
- b. Jón elskar hana **nema** hann *komi* ekki
John love-3SG-PRES.IND her unless he come-3SG-PRES.SUBJ not
til baka.
back
'John loves her unless he doesn't come back.'
- c. Við skulum bara vera heima, **nema** þú
We shall-1PL-PRES.IND just be home, unless you
hafir betri hugmynd?
have-2SG-PRES.SUBJ better idea?
'We'll just stay at home, unless you have a better idea?'

- In (11-a), the speaker introduces an exception on the content level, by making the assertion that John showed up every week, except for the cases in which he was sick. Here, the speaker relates two propositions making one of them an exception to the other.
- In the epistemic domain, (11-b), the speaker makes the assumption that John must love a female person, otherwise he would not come back. In this case, the speaker takes the exception equal to not coming of John to be an appropriate reason for why he or she thinks that John is in love with a female person.
- Finally, the speaker utters the exception (11-c) to invite the hearer to name a possible reason to leave the house. The speaker takes it as possible not to stay at home if the hearer has another suggestion. To some extent, the speaker does not expect the hearer to have a better suggestion.

3.2 Syntax

- In Section 3.2.1 we examine the external syntax of *nema*-clauses operating on three cognitive levels, concluding that they should be considered either peripheral or non-integrated adverbial clauses. In Section 3.2.2, we examine the internal structure of *nema*-clauses.

3.2.1 External syntax

- *Information-structural movement to the left periphery* We take an adverbial clause to be part of the matrix clause, if it can be moved from its base position to the left periphery of the matrix clause. Such a movement is usually triggered by a formal (informational-structure) feature. Fronting *nema*-clauses depends on its interpretation. It is possible on the content level, (12-a), but it is degraded on the epistemic level, (12-b). Movement of the *nema*-clause operating on the speech act level is impossible. If we try to front it, as (12-c) shows, it automatically gets interpreted as an exceptive clause operating on the content level, i.e., an exceptive relation is established between two propositions, and not between a speech act and a proposition.

- (12) a. **Nema** Jón *væri* veikur, (þá) kom hann í hverri
unless John be-3SG-PST.SUBJ sick, (then) came he in every
viku.
week
'Unless John was sick, he showed up every week.'
- b. ??**Nema** Jón *komi* ekki til baka, (þá) elskar hann
Unless John come-3SG-PRES.SUBJ not back, (then) loves he
hana.
her.
'unless John doesn't come back, he loves her.'
- c. ***Nema** þú *hafir* betri hugmynd, (þá)
unless you have-2SG-PST.SUBJ better idea, (then)
skulum við bara vera heima.
shall-1PL-PRES.IND we just be at.home.
Intended: 'Unless you have a better idea, let's just stay at home.'

- As we discuss in Section 4, the variation observed in (12-a)–(12-c) follows from different adjoin positions of *nema*-clauses.
- *Embeddability* Another property to be discussed concerns the embeddability of the exceptive clause as part of a complement clause. As the examples given in (13) show, distinct effects arise.

- (13) a. Sveinn heldur því fram að Jón komi í hverri viku
Sveinn claims that John come-3SG-PRES.SUBJ in every week
nema hann sé veikur.
unless he is-3SG-PRES.SUBJ sick.
'Sven claims that John showed up every week unless he was sick.'
(heldur fram 'claims' > *nema*-clause)
- b. Sveinn heldur því fram að Jón elski hana **nema**
Sveinn claims that John love-3SG-PRES.SUBJ her unless
hann komi ekki til baka.
he come-3SG-PRES.SUBJ not back.
'Sven claims that John loves her, unless he doesn't come back.'
(heldur fram 'claims' < *nema*-clause)
- c. Sveinn heldur því fram að við skulum bara vera
Sveinn claims that we shall-3PL-PRES.IND just stay
heima, **nema** þú hafir betri hugmynd.
at.home, unless you have-2SG-PRES.SUBJ better idea
'Sven claims we should just stay at home, unless you have a better idea.'
(heldur fram 'claims' < *nema*-clause)

- The *nema*-clause operating on the content level can be embedded as part of the complement clause selected by the verb *halda fram* 'claim'. In (13-a), the content of the subordinate clause falls under the scope of the highest verb. Correspondingly, Sveinn claims that John used to show up on a regular basis and that it was not the case when he was sick.
- A different scope relation occurs in (13-b) where the *nema*-clause does not fall under the scope of any linguistic material from higher clauses. Here only the complement clause is embedded, the *nema*-clause, in turn, provides a reasonable argument for why the speaker assumes John to be in love with someone. This epistemic reasoning is then not part of what Sveinn claims, but what the speaker assumes what might be true.
- We can prove this difference by looking at a possible discourse continuation. If person B objected to (13-a) and (13-b) saying *But that's not true*, then in the latter case the objection would only target the content of the complement clause, and not the content of the *nema*-clause, i.e., the clausal anaphoric expression 'that' cannot pick up the exceptive relation established between the higher clauses and the *nema*-clause. In the former case, two options are available: *that* can – but need not – target the content of the *nema*-clause, indicating variation of *nema*-clauses on the content level. In Section 4, we tentatively suggest an analysis, according to which this variation follows from two different adjoin positions of *nema*-clauses.

- Finally, the *nema*-clause operating on the speech act level patterns with its epistemic counterpart, as it cannot be embedded either, (13-c).
- The last external syntax test concerns variable binding and the distinction between content-related exceptive clauses on the one hand and evidence-based and speech act related clauses on the other.

- (14) a. *Hver einasti þriðja árs nemi* verður að vera á bókasafninu
Who each third year student must to be in library-the
öllum stundum **nema** hann sé búinn með prófin.
all times unless he is-SUBJ done with exams-the
'Each third year student must stay in the library at all times unless he has finished his exams.'
- b. **Hver einasti þriðja árs nemi* hlýtur að vera á bókasafninu
Who each third year student has to be in library-the
öllum stundum **nema** hann sé búinn með
all times unless he be-3SG-PRES.SUBJ done with
prófin.
exams-the
'Each third year student has to stay in the library at all times unless he has finished his exams.'
- c. **Hver einasti þriðja árs nemi* ætti að vera á bókasafninu
Who each third year student should to be in library-the
öllum stundum, **nema** þér finnst hann eigi að
all times unless you think-IMP-PRES.SUBJ he should to
ráða því sjálfur.
decide that himself.
'Each third year student should stay in the library at all times unless you think he should decide that for himself.'

- The matrix clause allows binding into the content-related clause while the evidence-based clause and speech act related clauses disallow it.

3.2.2 Internal syntax

- Given that (15-a) is an content-related clause, (15-b) is an evidence based exceptive clause, and (15-c) is a speech act related exceptive clause, we expect that (15-a) cannot host any adverbial modifiers if it is analyzed as a central adverbial clause, while (15-b) and (15-c) should tolerate adverbial modifiers (see discussions in Angantýsson and Jędrzejowski (2022) on similar conditions in causal clauses in Icelandic):

- (15) a. Jón kemur aftur **nema** hann elski hana.
John come-3SG-PRES.IND back unless he love-3SG-PRES.SUBJ her
'John will be back unless he loves her.'
- b. Jón elskar hana **nema** hann komi ekki til baka
John love-3SG-PRES.IND her unless he come-3SG-PRES.SUBJ not back
'John loves her unless he doesn't come back.'
- c. Af hverju verðum við ekki bara heima, **nema** þú hafir betri hugmynd?
Why will.be we not just at.home, except you have-2SG-PRES.SUBJ better idea?
'Why don't we just stay at home, unless you have a better idea?.'

- This prediction is not borne out, as shown in (16).

- (16) a. Jón kemur aftur **nema** hann *sannarlega* elski
John come-3SG-PRES.IND back unless he truly love-3SG-SUBJ hana
her
'John will be back unless he truly love-3SG-PRES.SUBJ her.'
- b. Jón elskar hana **nema** hann *sannarlega*
John love-3SG-PRES.IND her unless he truly komi ekki til baka
come-3SG-PRES.SUBJ not back
'John loves her unless he truly doesn't come back.'
- c. Af hverju verðum við ekki bara heima, **nema** þú *sannarlega*
Why will.be we not just at.home, except you truly hafir betri hugmynd?
have-2SG-PRES.SUBJ better idea?
'Why don't we just stay at home, unless you truly have a better idea?.'

- Example (16-a) actually allows the JP modifier *sannarlega* 'truly' when interpreted as content-related. Note, that (16-a) is also acceptable if it is interpreted as an evidence-based exceptive clause (which is an available interpretation as well). Examples (16-b) and (16-c) cannot be analyzed as central adverbial clauses, and a JP adverbial modifier like *sannarlega* 'truly' is also available there.
- Evidence-based exceptive clauses and speech act related clauses differ with respect to what kind of adverbial modifiers they can combine with. Whereas evidence-based exceptive clauses having the peripheral adverbial clause status are not able to licence ActP modifiers like *í hreinskilni sagt* 'honestly', speech act related clauses do not exhibit any such restrictions, see (17).

- (17) a. *Jón elskar hana **nema** hann *í hreinskilni sagt*
John loves-IND her unless he honestly komi ekki til baka.
come-3SG-PRES.SUBJ not back
'John loves her unless he honestly doesn't come back.'
- b. Af hverju verðum við ekki bara heima, **nema** þú
Why will.be we not just at.home, except you *í hreinskilni sagt* hafir betri hugmynd?
honestly have-2SG-PRES.SUBJ better idea?
'Why don't we just stay at home, unless you honestly have a better idea?.'

- Note that if content related exceptive clauses have disintegrated adverbial status, they are expected to host all types of modifiers. This prediction is borne out in examples like (18).

- (18) Ég held að við ættum að ráða Jón **nema** hann sé
I think that we should to hire John unless he be-3SGPRES.SBJ
í hreinskilni sagt án gríns alveg örugglega njósnari.
honestly no joke certainly spy
'I think we should hire John unless he honestly no joke certainly is a spy.'

- Example (18) is to be interpreted as a content-related clause. At the same time, (18) hosts the ActP modifier *í hreinskilni sagt* 'honestly', the CompP modifier *án gríns* 'seriously', whereby the former c-commands the latter.

4 Summary and preliminary results

- In this talk, we examined exceptive clauses in Icelandic introduced by *nema* 'except'. We showed that *nema* can be used as a linker or as a subordinating conjunction introducing exceptive adverbial clauses containing the finite verb inflected for subjunctive morphology. By focusing on the latter, we argued that *nema*-clauses can operate on three cognitive levels (content, epistemic, speech act), and attach at two distinct structural heights.
- Syntactically, we suggested that *nema*-clauses attach either as JP or as ActP modifiers, and that they are never embedded as central adverbial clauses in the sense claimed by Haegeman (2010, 2012), Haegeman & Schönenberger (to appear), and Frey (2011, 2012, 2016) (see *Appendix*).
- Essentially, we take interpretative differences to follow from the distinct attachment heights. The main arguments for this three part division are

based on movement restrictions, embeddability, binding, and acceptability of different adverbial modifiers.

References

- Alvarez, I. G. (2008). *Generality and exception: A study in the semantics of exceptives*. Ph. D. thesis, Stanford, CA: Stanford University dissertation.
- Angantýsson, Á. and Łukasz Jędrzejowski (2022). Layers of subordinate clauses: A view from causal *af-því-að*-clauses in Icelandic. In Łukasz Jędrzejowski & Constanze Fleczonek (Eds.), *On the Variation of Causal Clauses (Studies in Language Companion Series)*. Amsterdam: John Benjamins.
- Antomo, M. . M. S. (2013). Zur Semantik von Konzessivsätzen mit *obwohl*. *Linguistische Berichte* 236, 427–453.
- Arregui, A. (2006). *Cualquier*, exception phrases and negation. In J. Doetjes and P. González (Eds.), *Romance languages and linguistic theory 2004*, pp. 1–22. Amsterdam: Benjamins.
- Breindl, E. (2015). Konzessive Konnektoren. In A. V. . U. H. W. Eva Breindl (Ed.), *Handbuch der deutschen Konnektoren. Semantik der deutschen Satzverknüpfungen (Schriften des Instituts für Deutsche Sprache 13)*, pp. 903–962. Berlin: Mouton de Gruyter.
- Brée, D. S. (1985). On the semantics of *unless*. In Hoppenbrouwers, Geer A. J. & Seuren, Pieter A. & Weijters, Tom J. H. H. (Ed.), *Meaning and the lexicon. Proceedings of the second international colloquium on the interdisciplinary study of the semantics of natural languages*, pp. 309–316. Dordrecht: Kluwer.
- Declerck, R. and S. Reed (2000). The semantics and pragmatics of *unless*. *English Language & Linguistics* 4, 205–241.
- Dijk, Teun A van (1977). *Text and Context. Explorations in the Semantics and Pragmatics of Discourse (Longman Linguistics Library 21)*. London: Longman.
- Fintel, Kai von (1992a). Exceptive conditionals: The meaning of *unless*. *Proceedings of the North East Linguistics Society* 22, 135–151.
- Fintel, Kai von (1992b). Exceptive constructions. *Natural Language Semantics* 1, 123–148.
- Fretheim, T. (2006). A relevance-theoretic analysis of *unless*. *Working papers isk* 3, 27–41.
- Frey, W. (2011). Peripheral adverbial clauses, their licensing and the prefield in German. In G. F. Eva Breindl and A. Volodina (Eds.), *Satzverknüpfung – zur Interaktion von Form, Bedeutung und Diskursfunktion*, pp. 41–77. Berlin: de Gruyter.
- Frey, W. (2012). On two types of adverbial clauses allowing root-phenomena. In L. H. . R. N. Lobke Aelbrecht (Ed.), *Main Clause Phenomena: New Horizons (Linguistik Aktuell/Linguistics Today 190)*, pp. 405–429. Amsterdam: John Benjamins.
- Frey, W. (2016). About some correlations between formal and interpretative properties of causal clauses. In I. R. . A. Speyer (Ed.), *Co- and Subordination in German and Other Languages*, pp. 153–179. Hamburg: Buske.
- Frey, W. (2020). German concessives as TPs, JPs and ActPs. *Glossa: A Journal of General Linguistics* 5, 1–31.
- Geis, M. L. (1973). *If and unless*. In B.B. Kachru, R.B. Lees, Y. Malkiel, A. Pietrangeli and S. Saporta (Ed.), *Issues in linguistics*, pp. 231–253. Urbana Chicago: University of Illinois Press.
- Haegeman, L. (2010). The internal syntax of adverbial clauses. *Lingua* 120, 628–648.
- Haegeman, L. (2012). *Adverbial clauses, main clause phenomena, and the left composition of the left periphery (The Cartography of Syntactic Structures 8)*. Oxford: Oxford University Press.
- Haegeman, L. . M. S. (2022). English rationale *since* and a reassessment of the typology of adverbial clauses. In Ł. J. . C. Fleczonek (Ed.), *On the Variation of Causal Clauses Studies in Language Companion Series*. Amsterdam: John Benjamins.
- Leslie, S.-J. (2009). “if”, “unless”, and quantification. In V. C. Stainton, R.J. (Ed.), *Compositionality, Context and Semantic Values*, pp. 3–30. Dordrecht: Springer.
- Marques, R. (2010). Modality, context change potential and mood selection in European Portuguese. In M. G. B. . E.-M. Remberger (Ed.), *Modality and Mood in Romance: Modal Interpretation, Mood Selection, and Mood Alternation (Linguistische Arbeiten 533)*, pp. 133–162. Berlin: De Gruyter Mouton.
- Merchant, J. (2019). Roots don’t select, categorical heads do: Lexical-selection of PPs may vary by category. *The Linguistic Review* 36, 325–411.
- Moltmann, F. (1995). Exception sentences and polyadic quantification. *Linguistics and Philosophy* 18, 223–280.
- Quer, J. (1998). *Mood at the Interface (LOT International Series 1)*. The Hague: Holland Academic Graphs.
- Reinhart, T. (1991). Elliptic conjunctions-non-quantificational *qr*. In A. Kasher (Ed.), *The Chomskian turn*, pp. 360–384. Cambridge: Blackwell.
- Rögnvaldsson, E. (1992). *Nema*. *Íslenskt mál* 14, 35–61.
- Sweetser, E. (1990). *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure (Cambridge Studies in Linguistics 54)*. Cambridge: Cambridge University Press.
- Thráinsson, H. (2007). *The Syntax of Icelandic*. Cambridge: Cambridge University Press.
- Thráinsson, Höskuldur, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson (eds.) (2013). *Tilbrigði í íslenskri setningagerð I [Variation in Icelandic syntax I]*. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Thráinsson, Höskuldur, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson (eds.) (2015). *Tilbrigði í íslenskri setningagerð II [Variation in Icelandic syntax II]*. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Thráinsson, Höskuldur, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson (eds.) (2017). *Tilbrigði í íslenskri setningagerð III [Variation in Icelandic syntax III]*. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Vostrikova, E. (2018). On the similarity between *unless* and *only-if-not*. *Proceedings of Sinn und Bedeutung* 21, 1271–1288.

Appendix: Attachment heights of *nema*-clauses

