ARGUMENT PLACEMENT IN ICELANDIC

IDA LARSSON

Østfold University College & University of Oslo

ABSTRACT

This paper gives an overview of the Icelandic data in the Nordic Word Order Database (NWD; Lundquist et al. 2019). The data were collected from 30 native speakers of Icelandic, and the experimental task elicited argument placement (subject shift, object shift, long object shift, particle shift). The results confirm that subject shift of definite subjects and pronouns is produced categorically in Icelandic, as is pronominal object shift. With regard to the placement of non-pronominal objects relative sentence adverbials and particles, there is, on the other hand, variability. Rather surprisingly, the results suggest that the placement of subjects (initial or postverbal) influences non-pronominal object shift. With respect to the ordering of objects and particles, the distinction between directional and metaphorical particles is relevant. The patterns are partly different from what we find in the comparable data from the other North Germanic languages (also available in NWD).

[1] INTRODUCTION

Although all of the modern North Germanic languages are VO-languages and require V2-order in declarative main clauses, there is considerable variation with respect to argument placement.[1] The position of subjects and objects relative sentence adverbials and particles varies both within and across varieties and speakers. As an illustration, compare the Swedish examples in (1) with Icelandic in (2).

(1) a. Då   köpte {Lisa/hon} inte {Lisa/*hon} en   bil. (Swedish)
         then   bought Lisa/she   not Lisa/she   a   car
         'Then Lisa/she didn't buy a car.'

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[1]   There is some restricted variation with respect to V2 in declaratives; see e.g. Eide (2011), Lundquist (2018).

      b.   Lisa   köpte   {*bilen/den}   inte   {bilen/den}   igår.
           Lisa   bought   car.DEF/it   not   car.DEF/it   yesterday
           'Lisa didn't buy the car/it yesterday.'

      c.   Lisa   hällde   {*mjölken/*den}   ut   {mjölken/den}.
           Lisa   poured   milk.DEF/it   our   milk.DEF/it
           'Lisa poured the milk/it out'

      d.   Då   övade   {sig}   Lisa {sig}.
           then   practiced   REFL   Lisa REFL
           'Then Lisa practiced.'

(2)   a.   Þá   keypti   {Lísa/hún}   ekki   {*Lísa/*hún}   bíl.   (Icelandic)
           then   bought   Lisa/she   not   Lisa/she   car
           'Then Lisa/she didn't buy a car.'

      b.   Lísa   keypti   {bílinn/hann} ekki   {bílinn/*hann} í gær.
           Lisa   bought   car.DEF/it   not   car.DEF/it   yesterday
           'Lisa didn't buy the car/it yesterday.'

      c.   Lísa   hellti   {mjólkinni/henni} niður   {mjólkinni/*henni}.
           Lisa   poured   milk.DEF/it   down   milk.DEF/it
           'Lisa poured the milk/it out'

      d.   Þá   æfði   {*sig}   Lísa {*sig}.
           then   practiced   REFL   Lisa REFL
   'Then Lisa practiced.'

In Swedish, all types of subjects can shift across negation (so-called *subject shift*, SS), but, with the exception of weak pronouns, they can also occur after negation; see (1a) (and cf. e.g. Svenonius 2002, Andréasson 2007, Larsson & Lundquist 2022). In Icelandic, subject shift is generally obligatory with definite subjects, as in (2a), but not with indefinite subjects (cf. Thráinsson 2007:45–55). With respect to object placement, there is variability in both languages, but not in the same way. In Swedish, object shift (OS) across negation is impossible with non-pronominal objects, and optional (for many speakers) with pronouns; see (1b) (and cf. e.g. Holmberg 1986, Sells 1998, Andréasson 2010, Erteschik-Shir et al. 2020). Icelandic allows full DPs to shift across negation, and with pronouns, object shift is generally obligatory; see (2b) (see Thráinsson 2013 among others). Moreover, there is no variability in the placement of objects relative to verbal particles in Swedish (1c); all types of objects must follow the particle (see e.g. Toivonen 2003, Larsson & Lunquist 2014, 2022). In Icelandic, pronouns precede particles, whereas non-pronominal objects can either precede or follow a particle, as illustrated in (2c) (e.g. Collins & Thráinsson 1996, Thráinsson 2007:34, 139). Finally, Swedish sometimes allows so-called long object shift (LOS) of object pronouns and (more commonly) reflexives across the subject, as in (1d). Long object shift

is generally not possible in present-day Icelandic; cf. (2d) (Thráinsson 2007:71).

Scandinavian argument placement has previously been investigated both in corpora and with acceptability judgment tasks (see e.g. Andréasson 2010, Thráinsson 2013, Bentzen et al. 2013, Bentzen 2014a, b). However, even large corpora do generally not provide enough examples to investigate inter- and intra-individual variation; the contexts for object shift are rare in spontaneous speech, as are e.g., non-sentence initial, non-pronominal subjects. Moreover, acceptability judgments often do not provide information about prosody or other factors that might influence the speakers choice between several equally possible constructions. (See for instance the judgments on object shift in Swedish reported by Bentzen 2014a, but see also Thráinsson 2013 on how information structure influences the judgments of non-pronominal object shift in Faroese.)

In this paper, I look closer at argument placement in Icelandic, using new experimental data. The paper reports from fieldwork that took place in Reykjavík in the fall of 2018, where 30 native speakers of Icelandic participated in an elicited production task. A total of 5138 sentences were recorded during the fieldwork, and they are now annotated and available in the Nordic Word order Database (NWD). NWD also includes comparable data from all of the other North Germanic languages; see Map 1 (from Lundquist et al. 2019) for the fieldwork locations. The experimental task and the infrastructure are described in detail in the overview article of this special issue (Lundquist et al. 2019).

MAP 1. Overview of fieldwork locations (up to March 2021): Reykjavík, Faroe
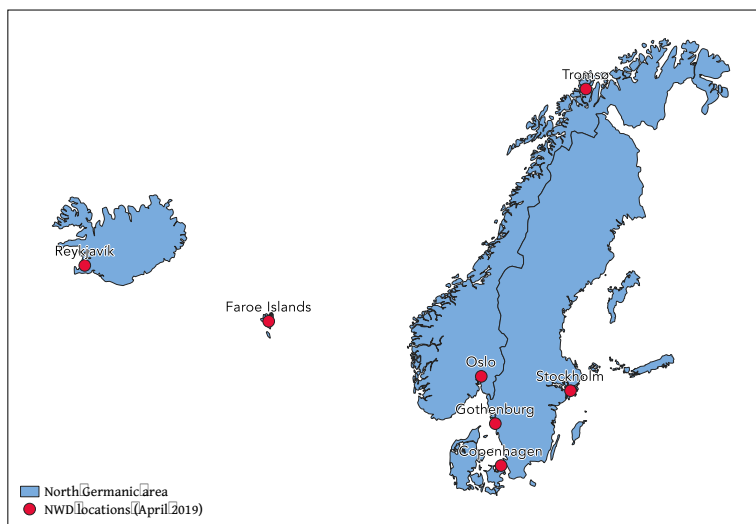
Islands (3 locations), Oslo, Tromsø, Copenhagen, Gothenburg, and Stockholm.

The aim of this paper is to give an empirical overview of the Icelandic data, and

lay the groundwork for future studies on Icelandic argument placement and prosody, and of comparative studies of North Germanic. As we will see in the following, the experimental data can confirm some of the results from previous studies. For instance, subject shift applies categorically with definite subjects and pronouns, and pronominal objects always shift across negation and particles. However, the results also give some new insights into the placement of indefinite subjects relative to particles, and the factors at play in the placement of non-pronominal objects relative to particles. An unexpected result is that the placement of the subject (initial or postverbal) influences non-pronominal object shift. The results raise questions regarding the role of prosody and information structure that can hopefully be given a thorough treatment in the future.[2]

The experimental task elicits subject and object placement with respect to adverbs and particles.[3] The following phenomena are included:

(i)   The order between a non-sentence initial (definite) subject and a sentence adverbial or particle.

(ii) The order between an object and a sentence adverbial or particle.

(iii) The order between non-sentence initial subjects and objects.

In Section 2 below, I give some background to argument placement in North Germanic, with focus on the phenomena that are included in NWD, and the differences between Icelandic and the other languages. Section 3 describes the experimental design and test items. Section 4 briefly describes the set-up and gives an overview of the participants. The results are discussed in Section 5. Section 6 makes some comparisons with the results from the other North Germanic languages, and points to questions for future work. Section 7 concludes the paper. All examples in the following are in Icelandic if nothing else is said.

[2]   ARGUMENT PLACEMENT IN ICELANDIC

This section provides some background to argument placement in Icelandic. We will look in turn at (i) subject placement, (ii) object placement, and (iii) the ordering of subjects and objects.

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[2]   Björn Lundquist and colleagues are currently carrying out work to investigate similar questions in Swedish, using the data in NWD (in the project Experimental approaches to Syntactic Optionality, project number: 302524, PI: Björn Lundquist).).

[3]   NWD includes data on both argument placement (experiment 1) and verb placement (experiment 2). However, in the Icelandic data collection, only experiment 1 was included. (See Westendorp 2020 on the data from experiment 2 in Faroese.)

[2.1] *Subject placement*

All of the North Germanic languages have V2-order in main declarative sentences, and in the majority of these, the subject is sentence-initial, as in the example in (3).

(3)   Margir   höfðu   aldrei   lokið   því.
        Many   had   never   finished it
        'Many had never finished it.' (Thráinsson 2007:46)

If the subject instead follows the finite verb, it can either precede or follow a sentence adverbial (cf. (1a) and (2a) above). In Icelandic (unlike in Mainland North Germanic), the order between negation (or other sentence adverbials) and subject depends on whether the subject is indefinite and quantified, or not. Definite subjects and pronouns cannot occur after a sentence adverbial, whereas indefinite quantified subjects can; see (4).

(4) a. *Í fyrra   höfðu   auðvitað   aldrei/alltaf   stelpunar
         last year had   obviously   never/always   girl.PL.DEF
         lesið   þessa   bók.
         read   this   book
    b.   Í fyrra   höfðu   auðvitað   aldrei/alltaf   einhverjar
         last year had   obviously   never/always   some
         stelpur   lesið   þessa   bók.
         girls   read   this   book
         'Last year, some girls had obvioysl never/always read this book.'
         (Thráinsson 2007:54)

The other North Germanic languages show different patterns (see Bentzen 2014b for an overview). The Mainland North Germanic languages do not distinguish between indefinite and definite subjects. In Danish, subject shift across a sentence adverbial is generally obligatory (but see Ørsnes 2009 for some qualification), regardless of whether the subject is definite, indefinite, pronominal, or non-pronominal. In Norwegian, there is considerable dialect variation (see e.g. Østbø Munch 2013), but weak pronouns typically precede negation, whereas the placement of non-pronominal subject varies, although the position after negation is generally preferred (cf. Lundquist & Tengesdal 2002 and references therein). In Swedish, as in the other languages, weak pronouns precede negation, and a majority of the non-pronominal subjects also do (see Andréasson 2007:135,

Larsson & Lundquist 2022).[4] According to Jonas (1993), both the Norwegian and the Icelandic system can be attested in Faroese (see Lundquist 2020 for further details).

In the previous literature on Icelandic subject placement, the focus has often been on indefinite subjects and expletive constructions; Icelandic has more available positions for quantified indefinite subjects than the mainland languages (see e.g. Svenonius 2002, Vangsnes 2002, Thráinsson 2007:45–55 and references therein). Since there are no expletives in the experimental data in the precent study, these constructions will not be discussed further here. However, as we will see below, there are a couple of indefinite subjects in our data set, and we should therefore note that Icelandic can have a VP-internal subject even in the absence of an overt expletive; see the example in (5). Here, the position of the subject is presumably the same as for the expletive-associate in Mainland North Germanic sentences like those in (6). Definite subjects cannot remain in a VP-internal position (cf. Section 5.4 below).

(5)   Í dag   hafa   verið   nokkrir   kettir   í   eldhúsinu.
       today   have   been   some   cats   In kitchen.DEF
       'There have been some cats in the kitchen today.' (Vangsnes 2002:(8c))

(6)   Idag   har   det   varit   några   katter   I   köket.   (Swedish)
       today   have   EXPL   been   some   cats   In kitchen.DEF
       'There have been some cats in the kitchen today.'

In addition to subject placement relative to sentence adverbials, the experiment tests the position of subjects relative to verbal particles. In Icelandic, as in the other North Germanic languages, particles are VP-internal (unless they have been topicalized or moved by stylistic fronting). The order between definite subjects and particles are therefore expected to be categorical: the subject always precedes the particle; cf. (7).

(7) a. Í gær   tók   nýi   nemandinn   Til   í   eldhúsinu.
        yesterday   cleaned new   student.DEF PRT   in   kitchen.DEF
    b. *Í gær   tók   til   nýi   nemandinn   í   eldhúsinu.
        yesterday   cleaned PRT   new   student.DEF in   kitchen.DEF
        'Yesterday, the new student cleaned up in the kitchen.'

However, there were still reasons to include items that test definite subjects and

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[4]   Old Swedish appears to have been more similar to Icelandic in this respect. Brandtler & Håkansson (2017) suggest that the higher subject position was a topic position in Old Swedish, and that it was therefore restricted to definite subjects.

verbal particles in the experiment. First, since these items do not include negation, they were used as fillers for sentences that test subject and object shift across negation.[5] Second, sporadic examples of the order particle–subject (corresponding to (7b)) have been reported for Norwegian and Swedish (see Lundquist 2020).[6] Third, regardless of word order variation, the results might tell us something about particle prosody. As pointed out by Lundquist (2020), the data allow us to investigate the prosodic realization of main verb and particle, with the main verb in V2-postion or in the VP, and with the particle adjacent to the verb or with an intervening pronominal or non-pronominal subject (see also Lundquist & Tengesdal 2022).

The experimental data in the present study include sentences with a pronominal or non-pronominal definite, non-quantified subject and negation; see Section 5.1 below. Several items target the order of a definite or indefinite subject and a verbal particle; we return to these in Section 5.4.

[2.2] *Object placement*

In addition to subject placement, the experimental data include conditions that test the placement of (pronominal or non-pronominal) objects relative sentence adverbials and verbal particles.

Consider first object shift across a sentence adverbial. In all of the North Germanic languages, OS is dependent on verb movement (Holmberg 1986); it is only possible if the verb has moved out of the verb phrase. A non-shifted subject or indirect object can also block OS. Whenever OS can apply, it is obligatory with weak pronouns in Icelandic (unlike in many Swedish dialects); see (8) where the weak pronominal form '*ana* 'her' (strong form *hana*) necessarily precedes negation. (All North Germanic languages allow non-shifted pronouns, if they are contrastive; the pronominal form in (8) would then necessarily be *hana*.)

(8) Ég les   {'ana} ekki   {*'ana}.
     I   read   her   not   her
     'I didn't read it.' (Thráinsson 2007:6)

As is also well known, Icelandic allows non-pronominal objects to shift across a sentence adverbial; see (9a) and cf. (2b) above. Non-pronominal object shift is

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[5] As mentioned by Lundquist et al. (2019:8), there was no need for true filler items in the experiment, since all parts of the experiment tests for more than one syntactic construction (see Section 3 below).

[6] It is possible that examples with particle-subject order are more common during (L1- or L2-) language acquisition. An anonymous reviewer has observed a few examples, all produced by proficient L2-speakers of Swedish. Lundquist (2020, footnote 3) reports that a Swedish-speaking 8 year old regularly produced examples like *då hoppade över jag två stycken* (lit. 'Then jumped over I two pieces.') 'then I jumped over two pieces, with the order V – particle – subject.'

optional, depending on definiteness, information structure and prosody (see Thráinsson 2007:32–33, 75–79). For instance, indefinite objects normally do not undergo object shift, unless the finite verb or the sentence adverbial is heavily stressed; cf. (9b) and (9c). As pointed out by Thráinsson (2007:33, 76), OS is incompatible with focus and new information; contrastive stress on the verb (as in (9c)) de-focuses the indefinite object, and makes OS possible. OS is, as noted, never possible with the verb in VP, as in (9d).

(9) a. Nokkrir   stúdentar   sáu   þessa   mynd   aldrei   í fyrra.
         some   students   saw   this   movie never   last year
         'Some students never saw this movie last year.' (Thráinsson 2007:23)
     b. Ég   les   {*bækur}   aldrei   {bækur}.
         I   read Books   never   books
         'I never read books.' (Thráinsson 2007:32)
     c. Ég   LES   {bækur}   aldrei.
         I   read books   never
         'I never READ books (I only buy them).' (Thráinsson 2007:32)
     d. Nokkrir stúdentar hafa   {*þessa   mynd}   aldrei
         some   students   have   this   movie   never
         séð   {þessa   mynd}.
         seen   This   movie
         'Some students have never seen this movie.'

OS does generally not affect the semantic interpretation, but as discussed by Thráinsson (2007:75–77), there are cases where the interpretation of quantified indefinite objects depends on word order; whereas non-shifted objects can receive either a specific or a non-specific interpretation, shifted objects are necessarily specific. In the current data set, all objects are definite, and we will therefore not discuss the interpretation of indefinites further here.

Non-pronominal OS across negation is not possible in the Mainland North Germanic languages (see e.g. Holmberg & Platzack 1995). Moreover, it appears to be considerably more restricted in Faroese than in Icelandic (Thráinsson 2013, Lundquist 2020).

The experimental task included items that test the order between pronominal and non-pronominal objects and negation, as well as a couple of items that tested the order between a non-pronominal object and the sentence adverbial *líklega* 'probably' and *aldrei* 'never'; see Section 3 for details.

With respect to the linearization of objects and particles, Icelandic, like Norwegian, has the same overall pattern as English (see Collins & Thráinsson 1996, Svenonius 1996): weak pronouns and reflexives precede the particle, whereas

non-pronominal objects and stressed pronouns can either precede or follow the particle; see the Icelandic example in (10) and the Norwegian example in (11).

(10) a. Ég   skrifaði {símanúmerið/það}   niður {símanúmerið/*það}.
        I   wrote   phone.number.DEF/it down phone.number.DEF/it
        'I wrote it/the phone number down.'

(11) a. Jeg   skrev { telefonnummeret/det} ned   (Norwegian)
        I   wrote phone.number.DEF/ it   down
        {telefonnummeret/%det}.
        phone.number.DEF/ it
        'I wrote it/the phone number down.'

There is some dialect variation in Norwegian, and pronouns following particles occur more frequently in e.g. Central Norwegian (Trøndersk) than in other dialects (see Larsson & Lundquist 2014). Moreover, Larsson & Lundquist (2014) show that the order non-pronominal object–particle is rather infrequent in present-day Norwegian, except in contexts where the particle is followed by a directional PP, as in (12) below (where the particle could be analyzed as a modifier of the PP).

(12)   Vaktene   kastet studenten   ut   av   puben.   (Norwegian)
        guard.PL.DEF   threw student.DEF out of   pub.DEF
        'The guards threw the student out of the pub.'

In Danish, both nominal and pronominal objects precede particles, and in Swedish, all types of objects follow particles (see e.g. Toivonen 2003, Lundquist 2014, Larsson & Lundquist 2022). Faroese has been reported to have the Norwegian/Icelandic system, but in the present-day language, objects mostly precede particles, as in Danish (Lundquist 2020).

   In the North Germanic varieties that have variable word order in particle constructions, different factors play a role. The word order preferences depend not only on the type of object, but also on the particle, and the semantics of the verb-particle combination. In Norwegian, we can note, for instance, that directional particles more often follow the object (e.g. *kaste noe ut* 'throw something out'), whereas metaphorical (or non-transparent) verb–particle combinations (e.g. *skjelle ut noen* lit. 'bark out somebody', 'scold somebody') more often have the object after the particle (see Tengesdal et al. 2018). Particle verbs that take an object with the semantic role GROUND (cf. Svenonius 2003), also seem to prefer the order particle–object (as in *rydde av bordet* 'clear off the table'). In addition,

prosody (and information structure) might play a role, but this needs to be investigated further. The experimental task included items that tested for several different types of particle constructions; we return to these in Section 5.3 below.

[2.3] *The order between subject and object*

In all of the North Germanic languages, an object must generally follow a subject (unless the object has been topicalized). However, in Swedish, there are exceptions, and an object pronoun can sometimes shift across the subject, as in (13).

(13)   Igår   gav mig Lisa   en   chokladask.   (Swedish)
        yesterday gave me   Lisa   a   box.of.chocolate
        'Yesterday, Lisa gave me a box of chocolate.'

This so-called long object shift (LOS) is subject to the same general restrictions as ordinary object shift in Swedish (see Holmberg 1986, Heinat 2007, Larsson & Lundquist 2022, and many others): the main verb must have moved out of VP, and the object must be a weak pronoun. In addition, the object cannot shift across a pronominal subject, as in (14a). Moreover, long object shift is generally only possible with pronouns that have a distinct object form, and therefore impossible with the third person *den/det* 'it' which has identical subject and object forms; see (14b).

(14) a. *Då   gav   mig hon en   chokladask.   (Swedish)
          then   gave   me   she   a   box.of.chocolate
          'Then she gave me a box of chocolate.'
     b. *Då   gav   det   Lisa en   chans.
          Then   gave   it   Lisa a   chance
          Intended: 'Then Lisa gave it a chance.'

In Swedish, long object shift is particularly common with reflexives, as in (15) (see Larsson & Lundquist 2022).

(15)   Det   lär   sig   Lisa   snart.   (Swedish)
        that   learns REFL Lisa   soon
        'Lisa will soon learn that.'

The other North Germanic languages generally do not allow long object shift, but Thráinsson (2007:71) mentions that it can be attested in earlier stages of Icelandic, Norwegian and Danish.[7]

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[7]   Sporadic examples of object shift across a indefinite, quantified subject has been noted in present-day Icelandic (see Berger in progress for discussion).

The experimental task included conditions that tested the order between first person object pronouns and subjects and reflexives and subjects; see further Section 3 and 5.1.

[3]   MATERIAL

In this section, I give an overview of the Icelandic version of the experiment. See Lundquist et al. (2019) for more details regarding both experimental design and the database.

During the experiment, the participant is presented with a subject-initial sentence (the so-called background sentence) on a computer screen, and is asked to read this sentence aloud; an example is given in (16a). The background sentence is followed by the appearance the so-called trigger, which gives the start of a new sentence; see (16b). The participant is asked to complete the sentence, using the material in the background sentence; see (16c) which illustrates the word order that an Icelandic participant is expected to produce.

(16)   a.   Lögfræðingurinn bauð   mér   nýja   vinnu
             lawyer.DEF   offered   me   new   job
             í   síðustu   viku.   (Background)
             in   last   week
             'The lawyer offered me a new job last week.'
       b.   Í   síðustu   viku ...   (Trigger)
             in   last   week
       c.   ... bauð   lögfræðingurinn mér   nýja   vinnu.   (Produced)
             offered   lawyer.DEF   me   new   job

The experiment consists of three parts. In the first part, the participant is presented with a subject-initial background sentence, where the finite verb is followed by an indirect object pronoun (as in (16a)), a reflexive, negation, or a particle. In the produced sentence, there is always an initial adverbial (provided by the trigger), and the subject must therefore be postverbal, due to the V2-requirement. However, the speaker might vary the order between subject–object, subject–reflexive, subject–negation, and subject–particle. The produced sentences therefore give information about the syntactic variables under investigation: long object shift of a pronoun or reflexive, subject shift, and the order between subject and particle.

In the second part of the experiment, the participant is asked to manipulate both the word order and the tense of the background sentence. The participant is presented with a subject-initial sentence with a complex tense, usually a future tense (with *munu* 'will' or *fara að* 'go to'); an example is given in (17a). The trigger

contains an adverbial and a finite main verb in the past tense, as in (17b) below. (17c) illustrates the word order that the participants are expected to produce.

(17) a. Hlauparinn   mun   gefast   upp   í
          runner.DEF   will   give   up   In
          síðustu   umferðinni.   (Background)
          last   round.DEF
          'The runner will give up in the last round.'

      b. Í   fyrra   gafst...   (Trigger)
          in   last.year gave

      c. ...hlauparinn   upp   í   síðustu   umferðinni.   (Produced)
          runner.DEF   up   in   last   round

In this part of the experiment, the main verb is followed by a particle or a pronominal direct object, and in some conditions, a negation is inserted after the finite auxiliary. This gives us information about subject shift, long object shift, regular object shift across negation, and the order between subject and particle.

In the third part of the experiment, the background sentence is a subject-initial passive sentence, which always includes an agent adverbial.[8] The trigger is the start of the corresponding active sentence (subject plus finite main verb); see (18a) and (18b). Example (18c) and (18d) illustrate two word orders that the Icelandic participants are expected to produce.

(18) a. Nemandanum   var   kastað   út   af
          student.DEF   was   thrown   out   by
          dyravörðunum   í gær.   (Background)
          doorman.PL.DEF   yesterday
          'The student was thrown out by the doorman yesterday.'

      b. Dyraverðirnir   köstuðu...   (Trigger)
          doorman.PL.DEF   threw

      c. ... nemandanum   út   í gær.   (Produced)
          student.DEF   out   yesterday

      d. ... út   nemandanum   í gær.   (Produced)
          out   student.DEF   yesterday

The sentences in this part of the experiment contain either a sentence adverbial (*ekki* 'not', *líklega* 'probably' or *aldrei* 'never') or a particle (or in one case, both). In this way, we get information about object shift and particle shift.

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[8]   Although agent adverbials are less common in Icelandic than in the Mainland North Germanic languages, the background sentences were judged to be acceptable in Icelandic, and nothing suggests that the presence of the agent adverbial caused difficulty for the speakers during the experiment.

As pointed out by Lundquist (2020), it could be argued that the third part of the experiment is more complex and demanding than the two other parts, since it requires not only a change of word order or tense, but a transformation from passive to active, and concomitant changes in case morphology. Considering the results, there are in fact a few more errors in this part than in the first two. However, it is not necessarily the passive to active transformation that causes difficulty: one alternative reason for the errors is that the passive background sentences are introduced with a subject pronoun (corresponding to the object in the active sentence) *það* 'it', which is identical to the expletive and which has unclear reference (since the sentences are provided without context); in most errors in the produced sentences, the object pronoun *það* has been omitted. In the discussion of the results below, irrelevant production errors are excluded; all the data are available in NWD.

Table 1 gives an overview of the experiment, and the number of items in each condition (cf. Table 1 in Lundquist 2020 on Faroese).

The individual test sentences were modelled after the sentences used in the Faroese, Norwegian and Swedish experiments (see Lundquist 2020, Larsson & Lundquist 2022, and Lundquist & Tengesdal 2022); translation was done with the help of Jóhannes Gísli Jónsson. The Icelandic version of the experiment differs from the other versions in a couple of respects. Most notably, the Norwegian and Swedish versions only test object shift across negation; for Icelandic, we also included sentences to test non-pronominal object shift across the adverb *líklega* 'probably' and *aldrei* 'never', as noted above. With respect to the passive sentences and the sentences with particles, they were adjusted in order to be fully grammatical in Icelandic. For this reason, there are fewer prepositional particles in the Icelandic version than in the Swedish and Norwegian ones. The number of sentences per condition is not always identical, either. For instance, the Faroese experiment included 12 sentences to test the placement of particle relative object pronoun; the Icelandic experiment includes 10.

It should be noted that the experiment does not directly provide information about acceptability, but rather addresses the frequency of different word order options, which can later be compared across the different North Germanic languages. Without additional information about acceptability, we cannot know from the results of the experimental context whether a word order option that is never produced is ungrammatical or only just marked compared to the other variants.

Part	Phenomena	Sub cond 1.	Sub cond 2.
1.Subject-Verb inversion (n = 30)	Subject shift (n=8)	NP subj (n = 4)	
		Pro subj (n = 4)	
	Long object shift (n=12)	NP subj (n = 8)	Refl. obj. (n = 4)
			1st. obj (n = 4)
		Pro subj (n = 4)	Refl. obj
	Subject-Particle (n=10)	NP subj (n = 7)	
		Pro subj (n = 3)	
2. Subject-verb inversion, complex to simple tense (n = 20)	Subject shift, (long) object shift (n = 10)	NP subj (n = 4)	Refl. obj
		Pro subj (n = 6)	1st. obj (n = 4)
			NP obj (n = 2)
	Subject-Particle (n=10)	NP subj (n = 5)	
		Pro subj (n = 5)	
3. Passive to active (n = 36)	Object shift, negation (n = 11)	NP obj (n = 4)	
		Pro obj (n = 7)	
	Object shift, *líklega/aldrei* (n = 2)	NP obj (n = 2)	
	Particle shift (n=23)	NP obj (n = 13)	See Section 5.3

TABLE 1. Overview of the Icelandic experiment

Data collection took place in the sound laboratory at University of Iceland in Reykjavík in September–October 2018.[9] The recordings were made in WAV-format at 48.0 kHz audio sampling rate, with a bit depth of 24. The experiment was run on a laptop using the software OpenSesame (Mathôt et al. 2012).

The experiment was always carried out individually. Instructions were given either in English or Icelandic.

The Icelandic part of NWD includes utterances from 30 speakers. Of these, 19

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[9]   Data collection was carried out by Sigurður Hermannsson and the author.

were university students at the University of Reykjavík, who attended an introductory course in linguistics at the time of recording. All of them were born between 1995 and 2000. The other group was recruited through personal connections, and includes participants born between 1953 and 1986. All participants have Icelandic as their mother tounge, but one speaker (IS18) has simultaneously acquired Faroese. Women were in the majority in the student group, and altogether, only 4 of the participants were male. All participants volunteered in their participation.

Most of the participants were born in Reykjavík, and more than half of them also grew up in or around Reykjavík. The others grew up in different locations around Iceland (e.g. Akureyri, Egilstaðir, Melrakkaslétta, Selfoss).

[5] RESULTS

This section presents the results. All the data can be accessed NWD, where also the sound files are available.

As is clear from Section 3 above (see Table 1), several of the phenomena were tested in more than one part of the experiment, but unless there is reason to treat the different parts separately, they will be discussed together in the following. Section 5.1 is concerned with subject shift, and 5.2 discusses pronominal and non-pronominal object shift. Section 5.3 considers the ordering of objects and particles, and Section 5.4 is concerned with the relative order of subjects and particles. Finally, Section 5.5 gives a brief summary of the results.

[5.1] *Subject shift*

The experiment included a number of sentences that tested subject placement relative to negation. First, we tested subject shift in sentences without an object or reflexive, as in (19a). Second, a number of sentences tested subject shift in sentences with a reflexive, as in (19b). In addition, the test items that were included to elicit object shift also necessarily have a sentence adverbial, and some of them therefore also elicits subject shift; cf. (19c). The subjects in all these sentences were either definite full noun phrases or personal pronouns, and they were therefore expected to shift in Icelandic, as in the examples in (19).

(19) a. Í gær   fann   lögfræðingurinn/hann ekki   lyklana
          yesterday   found   lawyer.DEF/he   not   key.DEF.PL
          að   skrifstofunni.
          to   office.DEF
          'Yesterday, the lawyer didn't find the key to the office.'

b. Í gær   sneri   leikarinn/hann sér   ekki í átt að
    yesterday turned actor.DEF/he   REFL not   toward
    áhorfendum.
    audience.DEF
    'Yesterday, the actor didn't turn toward the audience.'

c. Í gær   hjálpaði hún mér ekki með   heimavinnuna.
    yesterday helped   she me   not   with homework.DEF
    'Yesterday, she didn't help me with the homework.'

The results confirm that both pronouns and definite non-pronominal subjects categorically precede negation in Icelandic: all speakers always shift the subject across negation, in all types of test sentences.[10] In the Icelandic part of NWD, 246 (100%) sentences with non-pronominal subjects and 130 (100%) sentences with pronominal subjects have the subject before negation. As we will see below in Section 5.4, there is, however, some evidence of variation in the placement of indefinite subjects; this is also what we expect (see Section 2.1 above).

[5.2] *Object shift*

With respect to object placement, let us first consider pronominal OS, which is expected to be obligatory in Icelandic (whenever it can apply). The experiment included 4 test items that elicited the order between a first person object pronoun and negation, as in (19c) above; in these cases, the produced sentences all have a postverbal subject pronoun. In addition, 7 items were included to elicit the order between a third person pronoun and negation, as in (20) below; the produced sentences are subject initial.

(20)   Blaðamaðurinn gagnrýndi hann ekki fyrir ræðuna.
         journalist.DEF   criticized him   not   for   speech.DEF
         'The journalist didn't criticize him for the speech.'

As expected, pronominal objects shift across negation in Icelandic: there are 323 examples of shifted object pronouns in NWD, and one example of a non-shifted pronoun.[11] (The non-shifted pronoun is unstressed and produced without any hesitation.[12])

Another set of 4 items tested reflexive object shift across negation, as in (21).

[10] Two produced sentences have been excluded since they involve production errors. In one case, a non-pronominal subject is exchanged for a pronoun, and, in the other, the participant produces a subject-initial sentence.

[11] Three produced sentences have been excluded since the participant uses a non-pronominal object instead of a pronoun. Another sentence has been excluded since the participant does not transform the passive background sentence to an active sentence.

[12[It is produced by informant IS109, sentence number 1328.

The subject is postverbal and non-pronominal. Here, object shift applies without exception, in 119/119 of the cases. (One sentence has been excluded due to a production error.)

(21)   Í gær   rakaði lögreglumaðurinn sig   ekki með rakvél.
         yesterday shaved policeman.DEF   REFL not with razor
         'Yesterday, the policeman didn't shave with a razor.'

Note that the definite subject does not block pronominal/reflexive OS in Icelandic, as it often does in Norwegian: the Norwegian participants prefer non-shifted non-promominal subjects, and since long object shift is not possible, the non-shifted subject blocks OS (see Lundquist & Tengesdal 2022). As we have seen, subjects always shift in the Icelandic data, and the presence of a shifted postverbal subject does not effect pronominal object shift. However, it remains to be investigated to what extent indefinite subjects appear in the non-shifted position, and what the effect on OS is.

A number of items were included to elicit long object shift with pronominal or reflexive objects, but, as expected, there are no instances of long object shift in the Icelandic data. Instead, there are 239 produced sentences like that in (22a), with the reflexive following the subject, and 120 sentences with an object pronoun following the subject, as in (22b). (One sentence has been excluded due to a production error.)

(22) a. Skyndilega sneri   leikarinn sér   í átt að áhorfendum.
         suddenly   turned   actor.DEF REFL toward audience.DEF
         'Suddenly the actor turned toward the audience.'
     b. Í gær   gaf kennarinn   mér nýja   bók.
         yesterday gave teacher.DEF me   new   book
         'Yesterday, the teacher gave me a new book.'

Like the results concerning subject shift, the experimental data on pronominal object shift confirm what it previously known about Icelandic: in a context where object shift is possible, weak pronouns and reflexives must shift.

Next, let us consider OS with non-pronominal objects, which is expected to be possible, but not obligatory, in Icelandic (cf. Section 2.2 above). Non-pronominal OS was investigated in both part 2 and 3 of the experiment, and since the results are partly different for the two parts, they will be discussed separately below.

Part 2 of the experiment elicited non-pronominal object shift in two sentences with a postverbal (pronominal or non-pronominal) subject and negation; see (23).

(23) a. Í gær   keypti   nemandinn {bókina}   ekki   {bókina}.
          yesterday   bought   student.DEF book.DEF   not   book.DEF
          'Yesterday, the student didn't buy the book.'
      b. Í gær   hjálpaði hún {nemandanum} ekki {nemandanum}
          yesterday   helped   she student.DEF   not   student.DEF
          með   heimavinnuna.
          with   homework.DEF
          'Yesterday, she didn't help the student with the homework.'

There are altogether 59 produced examples of the sentences in (23) in NWD; 5 of these (8%) have a shifted object. Notably, all the examples with OS involve the sentence in (23b) with a pronominal subject and a final adverbial; of these 5/30 (17%) have a shifted object. As pointed out by Jóhannes Gísli Jónsson (p.c.), sentence-final negation is typically avoided in Icelandic, and this disfavors OS in (23a).

    In part 3 of the experiment, a number of sentences elicited non-pronominal object shift in subject-initial sentences, as in (24). 4 sentences include negation (24a), and 2 sentences have the adverbs aldrei 'never' (24b) and líklega 'probably' (24c). The sentence with aldrei also has a verbal particle, and there are therefore, at least potentially, three possible object positions (cf. Section 5.3 below on the order between object and particle).

(24) a. Lögreglan handtók   {ræningjana} ekki   {ræningjana}
          police.DEF arrested robber.PL.DEF not   robber.PL.DEF
          í gær.
          yesterday
          'The police didn't arrest the robbers yesterday.'
      b. Ungi   lögreglumaðurinn yfirheyrði {ræningjana} líklega
          young   policeman.DEF   interrogated robber.PL.DEF probably
          {ræningjana}.
          robber.PL.DEF
          'The young policeman probably interrogated the robbers.'
      c. Dyraverðirnir Köstuðu {konunni}   aldrei {konunni} út
          doorman.PL.DEF Threw   woman.DEF never   woman.DEF out
          {konunni} af   barnum.
          woman.DEF of   bar.DEF
          'The doormen never threw the woman out of the bar.'

The sentence with *líklega* in (24b) is produced with OS in 11/30 (37%) of the cases. The sentence with *aldrei* (24c) shows a similar pattern, with OS in 7/28 (25%) of

the cases. There are no examples of (24c) where the object follows the particle.

With respect to non-pronominal OS across negation (24a), there are 118 relevant examples in NWD; in 65 of these (55%), the object has shifted. In other words, non-pronominal OS across negation is more common than across the other two adverbials. Moreover, it is considerably more common in the subject-initial sentences than in sentences with a post-verbal subject (like (23b) above).[13] As pointed out in Section 2.2 above, (non-pronominal) object shift depends on factors relating to prosody and information structure, and it seems likely that this is what we can observe as an interaction of subject and object placement. As pointed out by Höskuldur Thráinsson and Jóhannes Gísli Jónsson (p.c.), non-pronominal object shift is not unacceptable in sentences with a postverbal subject, but require a particular context (and intonation) to be natural. The interaction of information structure and prosody for non-pronominal OS remains to be investigated in more detail.

The results on non-pronominal OS are summarized in Table 2. (2 sentences have been excluded due to production errors.)

	Object–Negation	Object–*líklega*	Object–*aldrei*	TOTAL
Non-initial subject pronoun	5/30 (17%)	-	-	5/30 (17%)
Non-initial NP subject	0/29 (0%)	-	-	0/29 (0%)
Initial subject	65/118 (55%)	11/30 (37%)	7/28 (25%)	83/176 (47%)
TOTAL	70/177 (40%)	11/30 (37%)	7/28 (25%)	88/235 (37%)

TABLE 2. Overview of non-pronominal object shift in the Icelandic part of NWD.

To summarize the data on Icelandic object shift, we first of all noted that pronominal and reflexive object shift across negation is categorical, as expected; there is one single exception in the dataset. With respect to non-pronominal object shift, there are some differences in frequencies depending on type of adverb: OS across negation is more common (55%) than across *líklega* 'probably' (37%) and *aldrei* (25%) – but note that the latter two adverbs were only tested in one sentence each. Moreover, the results seem to suggest that non-pronominal ob-

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[13] The difference between the sentences with a non-initial subject pronoun and with an initial subject is statistically significant; P < 0.005, prop.test in R.

ject shift interacts with subject placement. In sentences with a non-initial sub-
ject, OS across negation is considerably less common than in subject initial sen-
tences. The tendency to avoid sentence-final negation probably plays a role, but
it cannot fully account for the data. As mentioned, it seems plausible that pro-
sodic and information structural factors play a role, not only with respect to
avoidance of sentence-final negation, but also more generally with regard to the
interaction between subject placement and non-pronominal OS. I return to this
briefly in the discussion in Section 6.

[5.3] *Particle shift*

As briefly mentioned in Section 2.3 above, the order between a particle and an
object can potentially depend on a number of factors (see Tengesdal et al. 2018,
Larsson & Lundquist 2022): the form of the object (pronoun or not), the category
of the particle (adverb or preposition), semantics (directional or non-transpar-
ent particles), the presence of a directional PP, information structure, and pos-
sibly prosodic factors. For this reason, the experiment included a number of
items to test for the placement of pronominal and pronominal objects relative
different types of particles.

　There were 8 items in the experiment that tested particle shift with a direc-
tional particle and a pronominal (4 items) or non-pronominal (4 items) object, as
in (25a). In addition, 8 items (4 with pronoun, 4 with non-pronominal objects)
tested particle shift with a directional particle + a PP, as in (25b).[14]

(25)　a.　Dyraverðirnir　　hleyptu　　{vitninu/honum}　　inn
　　　　　doorman.PL.DEF　let　　　　witness.DEF/him　　　in
　　　　　{vitninu/honum}　í gær.
　　　　　witness.DEF/him　　yesterday
　　　　　'The doormen let the witness in yesterday.'
　　　b.　Dyraverðirnir　　hleyptu　　{vitninu/honum}　　inn
　　　　　doorman.PL.DEF　let　　　　witness.DEF/him　　　in
　　　　　{vitninu/honum}　í　　salinn.
　　　　　witness.DEF/him　　in　　room.DEF
　　　　　'The doormen let the witness into the room.'

The results show that the order object–particle is preferred in both of these con-
texts. With a pronominal object 111/112 (99%) has the order pronoun–particle
in the context without a PP.[15] In the context of a PP, 115/115 produced sentences

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[14]　Here, the item with *aldrei* in (24c) is not included; with this item the object never follows the particle, as
　　　noted above.

[15]　The exception is produced by IS11, sentence number 1312 in NWD.

have the order pronominal object–particle. With non-pronominal objects, there is some variation. In the condition without a PP, 7/120 (6%) have the object after the particle. The produced sentences that include a PP have the object after the particle in 3/117 (3%) of the produced sentences. (See also the discussion of (23c) above, where it was noted that there were no produced examples with the order particle–object.) The difference between the items with and without a PP is not statistically significant.[16]

There were 6 items in the experiment that elicited word order in sentences with non-directional (metaphorical) particles, 4 with a non-pronominal object and 2 with a pronominal object; one example is given in (26).

(26)   Nemandinn   fyllti   {blaðið/það} út   {blaðið/það} í gær.
          student.DEF   filled   paper.DEF/it out   paper.DEF/it yesterday
          'The student filled out the paper yesterday.'

The produced sentences with pronominal objects all (58/58) have the pronoun before the particle, as expected. Of the sentences with non-pronominal objects, 31% (37/120) have the object after the particle. In other words, considering the placement of non-pronominal objects, there is a clear difference between directional and non-directional particle constructions in Icelandic.[17] A similar observation has been made for Norwegian (Tengesdal et al. 2018, Lundquist & Tengesdal 2022), but in Norwegian, there is a strong preference for all non-pronominal objects to follow particles (see also Larsson & Lundquist 2014; cf. also older Swedish in Larsson & Lundquist 2022) – unless there is a directional PP present (cf. *kastet ut studenten i går* 'threw out the student yesterday' and *kastet studenten ut av puben* 'threw the student out from the pub'). In Icelandic, as noted, semantics (directional or not) plays a role, but for directional particles, the presence/absence of a particle does not.

Only one item in the experiment had a prepositional particle; see (27). The object is non-pronominal, and it precedes the particle in 28/28 of the produced sentences.

(27) a. Ræstingakonan   skrúfaði   {lokið}   á   {lokið}.
          cleaning.lady.DEF   screwed   lid.DEF   off   lid.DEF
          'The cleaning lady screwed the lid off.'

To sum up the data on particle shift, it is clear that both the type of object (pronoun or not) and semantics (directional – non-directional) plays a role, and that

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[16]   P=0.35, prop.test in R.
[17]   The difference between directional particles without a PP and metaphorical particles is statistically significant; P<<0,005, prop.test in R.

it can also matter whether the particle is an adverb or a preposition. These factors are known to play a role also in Norwegian and older Swedish (see Larsson & Lundquist 2022), but the particulars vary, as do the word order preferences. Interestingly, the distinction between directional and non-directional particles seems to be of more consequence in Icelandic than in the other North Germanic varieties. I return to this in Section 6 below.

The results concerning the ordering of particles and objects are summarized in Table 3, which gives the frequency of the order particle–object of all relevant examples. As mentioned in Section 3 above, the third part of the experiment (which elicited particle shift) caused more production errors than the other parts, and 14 sentences have been excluded due to production errors. In several cases, the participant omits the object pronoun or the PP, in other cases a noun phrase is changed to a pronoun, and in some cases a negation is inserted.

	Particle-NP	Particle-pronoun
Directional particle	7/120 (6%)	1/112 (1%)
Directional particle + PP	3/117 (3%)	0/115 (0%)
Metaphorical particle	37/120 (31%)	0/58 (0%)
Prepositional particle	28/28 (100%)	-
TOTAL	75/385 (19%)	1/285 (0.4%)

TABLE 3. Overview of particle placement in the Icelandic part of NWD.

[5.4] *Subject placement with respect to particles*

The experiment contained 20 items that tested the placement of subjects with respect to verbal particles. Of these, 8 had pronominal subjects, as in (28a), 10 had definite, non-pronominal subjects (28b), and two had a quantified, indefinite subject (28c). With respect to pronominal and definite subjects, we hardly expect any word order variation, but since indefinite subjects can be realized in a VP-internal position in Icelandic (even in the absence of an overt expletive, see Section 2.1 above and Thráinsson 2007:45–55), we might expect some variation in those cases.

(28)   a.   Í gær   brotnaði   hann   niður   við   yfirheyrsluna.
            yesterday broke   he   down   at   interrogation.DEF
            'Yesterday, he broke down during the interrogation.'
       b.   Í gær   tók   nýi   nemandinn   til   í   eldhúsinu.
            yesterday took new   student.DEF PART   in   kitchen.DEF
            'Yesterday, the new student cleaned up in the kitchen.'

    c.   Í gær   duttu niður þrjú   málverk í   stóra   salnum.
           yesterday fell   down three paintings in   big   hall.DEF
           'Yesterday, three paintings fell down in the great hall.'

There are altogether 238 produced sentences with pronominal subjects and particles in the Icelandic part of NWD, and, as expected, they all have the particle after the subject, as in (28a).

    Out of the 359 examples with non-pronominal subjects, 11 (3%) have the particle before the subject.[18] Of the indefinite subjects, 8/60 (13%) have the subject after the particle, as in (29). It seems likely that these should be interpreted as presentationals (but without an overt expletive).

(29)   Í gær   fuðruðu upp tvö   hús   í   eldsvoðanum.
           yesterday burned   up   two houses in   fire.DEF
           'Yesterday, two houses burned down in the fire.'

However, there are also three cases (1%) with a definite subject following the particle, as in (30), and these can hardly be interpreted as presentationals.

(30)   Í gær   tók   til   nýi   nemandinn í   eldhúsinu.
           yesterday took PART new student.DEF   in kitchen.DEF
           'Yesterday, the new student cleaned up in the kitchen.'

Although the number of cases is very low, the results are somewhat surprising, not least considering how categorically definite subjects precede negation in the data set; given that definite subjects obligatorily shift across negation, the subject in (30) can hardly be VP-internal. I return to this question briefly in Section 6 below.

[5.5] *Summary*

With respect to argument placement, the experimental data from Icelandic reveal some categorical patterns, much as expected: definite and pronominal subjects always shift across negation, as do pronominal objects. Moreover, pronominal objects also always precede a verbal particle (independently of the type of particle). In the sentence with a prepositional particle, also non-pronominal objects categorically precede the particle. With few exceptions, definite subjects and pronouns precede verbal particles.

    There is also variability. With respect to non-pronominal OS there are differences in the frequency of shift depending on the adverb, as well as on the placement of the subject and whether OS would lead to sentence-final negation or not;

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[18]   One example has been excluded due to a production error.

the latter two factors most likely relate to prosodic preferences (and information structure). With respect to particle shift, non-pronominal objects most often precede a directional particle (with or without PP), but more often follow a metaphorical particle.

In this section, I will briefly make some comparative notes, considering the data from the other North Germanic languages (discussed in detail in the other papers in this thematic issue). I will also point to some questions for future work.

With respect to subject shift, the Icelandic data in NWD looks just like Faroese and Danish: subject shift is completely categorical. Note though that only definite subjects and pronouns were tested, and with indefinite subjects Icelandic is expected to be different (as we see to some extent in the items with particle constructions). In Norwegian and Swedish, on the other hand, subject shift is clearly optional with all types of non-pronominal subjects, and non-shifted non-pronominal subjects are preferred in Norwegian.

Pronominal object shift is also by and large obligatory in Icelandic, Faroese and Danish, but in the Danish and Faroese data, there are a few more exceptions (7.5% non-shifted third person pronouns in Faroese; see Lundquist 2020:22). This difference is not completely negligible; remember that the experimental task is (almost) identical in the different languages. The Norwegian data set also includes a fair amount of non-shifted object pronouns, much like in Danish and Faroese, but there is also a substantial difference: the non-shifted subjects in Norwegian block pronominal and reflexive object shift (see further Lundquist & Tengesdal 2022). For Icelandic, it remains to be seen if there is a similar effect with indefinite subjects.

There are a few of indefinite subjects following a verbal particle in the Icelandic data. This is expected, given that indefinite subjects can remain in a VP-internal position (like an expletive-associate in Mainland North Germanic). However, there are also a few rare examples of definite subjects following a particle. This is unexpected, not least given that the subject shift data is so categorical. It is of course possible that these are simply irrelevant outliers, but they might also be genuine examples of the order particle–subject that has been sporadically observed also in Norwegian and Swedish, particularly in children and young speakers (see Lundquist 2020). There are also a couple examples from Norwegian and Swedish in NWD, but not enough to draw any firm conclusions. In any case, the items that elicit subjects and particles provide ample data for future studies of the prosody in verb particle constructions, in different syntactic configurations (see Tengesdal et al. ms. for further motivations for such studies).

In Swedish, pronominal object shift is far from obligatory; in the Swedish part of NWD, only 61% of the pronouns are shifted. It has been suggested (e.g. by Erteschik-Shir et al. 2020) that the difference between Danish and Swedish is due to prosodic differences between the languages. While it seems plausible that prosodic constraints are involved in pronominal object shift, the fact that Norwegian seems to pattern with Danish rather than with Swedish remains to be explained. Moreover, there is also a constrast between Icelandic, on the one hand, and Danish/Faroese/Norwegian, on the other: pronominal object shift appears to be fully categorical only in Icelandic. The exceptional cases need to be investigated further, not least with respect to prosody. Note also that pronominal subjects behave the same in all North Germanic languages – they always shift. The difference between subject and object pronouns can hardly be explained in an account that is *purely* prosodic.

With respect to non-pronominal object shift, we can first note that it is considerably more common in the Icelandic data than in Faroese. In fact, in the Icelandic experimental data, non-pronominal object shift is considerably more frequent than expected given results from corpus studies, where it is extremely rare (see Thráinsson 2013:160); this is probably to a large extent due to the lack of relevant contexts. In Icelandic, more than half of the produced sentences with a postverbal subject have object shift across negation; the corresponding number in Faroese is 6.3%. Still, as mentioned by Lundquist (2020:22), non-pronominal object shift is clearly more frequent in Faroese than in Mainland Scandinavian, where we only find a few scattered examples, usually connected to production difficulties (as is evident from the sound files). This is in line with the judgment data from Faroese and Danish presented by Thráinsson (2013), which show that in Faroese, non-pronominal object shift is possible but contextually restricted, but in Danish it is ungrammatical.

It seems reasonable to account for variable pronominal object shift in Swedish partly in terms of prosodic constraints. In Icelandic and Faroese, prosodic factors (and information structure) seem to play a role when it comes to non-pronominal object shift. In the experimental data, there are no examples of non-pronominal OS when it would lead to sentence-final negation; this suggests that prosody is involved. The fact that object placement interacts with subject placement also point toward i prosody (even when disregarding sentence-final negation). It is a task for future work to investigate the prosody of the Faroese and Icelandic recordings, not least with respect to the intonation in the different sentences with and without non-pronominal object shift. The quality of the sound files is in general good enough for this to be a feasible task.

When it comes to particle shift it is particularly relevant to compare the Icelandic data to Norwegian, since both languages show the same overall pattern: pronouns precede particles, whereas non-pronominal objects can either precede or follow a particle. However, although the same factors seem to be at play, the distribution of non-pronominal objects is quite different in Icelandic from what we find in Norwegian. In Norwegian, the order particle–object is highly preferred with non-pronominal objects, unless there is a directional PP: 34% of the objects precede directional particles without a PP, whereas 68% precede the particle when there is a PP (Lundquist & Tengesdal 2022). The corresponding numbers for Icelandic is 94% and 97% respectively (cf. Section 5.3 above). In other words, the PP only has a significant effect in Norwegian. In Icelandic, directional semantics seem to be the more important factor. Metaphorical particles favor the order particle–object to a significantly higher degree: 69% of the objects precede a non-directional particle in Icelandic; the corresponding number in Norwegian is 11% (Lundquist & Tengesdal 2022). In Norwegian, the word order correlates to some extent with different prosodic realization of the verb–particle complex. Again, the role of prosody for the Icelandic word order variation still remains to be investigated.

[7] CONCLUSION

The aim of this paper was to give an empirical overview of the Icelandic data in NWD, and thereby lay the groundwork for future studies on Icelandic argument placement and prosody, as well as comparative studies of North Germanic. The experimental data in NWD can comfirm some of what is previously known about Icelandic, with regard to e.g. subject placement and pronominal object shift. At the same time, the comparative data suggest that there might be differences between Icelandic, on the one hand, and Danish/Norwegian on the other, considering how obligatory pronominal object shift is. Considering non-pronominal object shift the data clearly suggest that prosodic factors are involved in Icelandic. With regard to particle placement, the data reveal that the word order variation is conditioned to a varying extent by semantics, the category of the particle and the form of the object.

REFERENCES

Andréasson, Maia. 2007. *Satsadverbial, ledföljd och informationsdynamik i svenskan.* Göteborgsstudier i nordisk språkvetenskap 7. https://hdl.handle.net/2077/17006

Andréasson, Maia. 2010. Object shift or Object Placement in General. In *Proceedings of LFG10*, Miriam Butt & Tracy Holloway King (eds.). 26-42. CSLI Publications. LFG10 Carleton University, Ottawa, Canada, June 18–20, 2010.

Bentzen, Kristine. 2014a. Object Shift. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 332–343. https://dx.doi.org/10.5617/nals.5402

Bentzen, Kristine. 2014b. Subject Shift. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 332–343. https://dx.doi.org/10.5617/nals.5402

Bentzen, Kristine, Merete Anderssen & Christian Waldmann. 2013. Object Shift in spoken Mainland Scandinavian: A corpus study of Danish, Norwegian, and Swedish. *Nordic Journal of Linguistics*, 36(2). 115–151. DOI: 10.1017/S0332586513000218

Berger, Mikael. In progress. *Objekt i svenskans historia. En studie av varierande objektsplacering i fornsvenska.* Lund University.

Collins, Chris & Höskuldur Thráinsson. 1996. VP-Internal Structure and Object Shift in Icelandic. *Linguistic Inquiry* 27. 391–444.

Eide, Kristin Melum. 2011. Norwegian (non-V2) declaratives, resumptive elements, and the Wackernagel position. *Nordic Journal of Linguistics* 34(2): 179–213.

Erteschik-Shir, Nomi, Gunlög Josefsson & Björn Köhnlein. 2020. Variation in Mainland Scandinavian Object Shift: A Prosodic Analysis. *Linguistic Inquiry* 52(4). 1–66. https://doi.org/10.1162 / ling_a_00393

Brandtler, Johan & David Håkansson. 2017. From topic to subject in the history of Swedish. Paper presented at GLAC 23, University of Texas at Austin. May 21.

Heinat, Fredrik. 2007. Long object shift and agreement. *Working Papers in Scandinavian Syntax* 81. 65-77

Holmberg, Anders. 1986. *Word order and syntactic features in the Scandinavian languages and English.* Doctoral dissertation, Stockholm University.

Holmberg, Anders & Christer Platzack. 1995. *The role of inflection in Scandinavian Syntax.* New York: Oxford University press.

Jonas, Dianne. 1993. The TP parameter in Scandinavian syntax. In *Proceedings of the XIVth Scandinavian Conference of Linguistics and the VIIIth Conference of Nordic and General Linguistics,* Cecilia Hedlund and Anders Holmberg (eds.), 33–60. Gothenburg Papers in Theoretical Linguistics, Gothenburg University.

Larsson, Ida & Björn Lundquist. 2014. Objektsplacering vid partikelverb i norska dialekter och äldre svenska. In: Janne Bondi Johannessen and Kristin Hagen (eds.), *Språk i Norge og nabolanda,* 99–131. Novus forlag.

Larsson, Ida & Björn Lundquist. 2022. The development of particle placement in Swedish. In *Morphosyntactic Change in Late Modern Swedish,* Ida Larsson & Erik Petzell (eds.), 145–194. Language Science Press.

Larsson, Ida & Björn Lundquist. 2022. Argument Placement in Swedish. *Nordic Atlas of Language Structures (NALS) Journal* 7(1). 73-107. https://doi.org/10.5617/nals.10101

Lundquist, Björn. 2014. Verb-particles: active verbs. *Nordic Atlas of Language Structures (NALS) Journal,* 1(1). 110–118.

Lundquist, Björn. 2018. Mer om de preverbala adverbialens syntax, semantik och prosodi. *Norsk Lingvistisk Tidsskrift* 36(1). 179–195.

Lundquist, Björn. 2020. Argument Placement in Faroese. *Nordic Atlas of Language Structures (NALS) Journal,* 5(1). 5–27.

Lundquist, Björn, Ida Larsson, Maud Westendorp, Eirik Tengesdal, and Anders Nøklestad. 2019. Nordic Word Order Database: Motivations, Methods, Material and Infrastructure. *Nordic Atlas of Language Structures (NALS) Journal* 4(1). 1–33. https://doi.org/10.5617/nals.7529

Lundquist, Björn & Eirik Tengesdal. 2022. Argument Placement in Norwegian. *Nordic Atlas of Language Structures (NALS) Journal* 7(1). 31-72. https://doi.org/10.5617/nals.10099

Mathôt, Sebastiaan, Daniel Schreij, and Jan Theeuwes. 2012. OpenSesame: An open-source, graphical experiment builder for the social sciences. *Behavior Research Methods* 44(2). 314–324.

Nordic Word order Database [Dataset]. University of Oslo: the Text Laboratory. https://tekstlab.uio.no/nwd

Ørsnes, Bjarne. 2009. Preposed negation in Danish. In *Proceedings of the 16th International Conference on Head-Driven Phrase Structure Grammar,* Stefan Müller (ed.), 255–275. CSLI Publications.

Østbø Munch, Christine. 2013. North-Germanic Negation. A Microcomparative Perspective. Doctoral dissertation, University of Tromsø.

Sells, Peter. 1998. Scandinavian clause structure and object shift. In *Proceedings of the LFG98 Conference. The University of Queensland, Brisbane,* Miriam Butt & Tracy Holloway King (eds.). CSLI Publications, Stanford.

Svenonius, Peter. 1996. The optionality of particle shift. *Working Papers in Scandinavian Syntax* 57. 47–95.

Svenonius, Peter. 2002. Subject positions and the placement of adverbials. In *Subjects, Expletives and the EPP*, Peter Svenonius (ed.), 201–242. Oxford University Press.

Svenonius, Peter. 2003. Limits on P: filling in holes vs. falling in holes. *Nordlyd. Proceedings of the 19th Scandinavian Conference of Linguistics* 31(2). 431–445.

Tengesdal, Eirik, Ida Larsson & Björn Lundquist. 2018. Partikelvariationer i norska dialekter. *Syntaktisk variation och förändring i de nordiska dialekterna*, *Den elfte nordiska dialektologkonferensen*, Augusti 2018, Reykjavík.

Tengesdal, Eirik, Ida Larsson & Björn Lundquist. 2021. Particle Prosody in Norwegian dialects. Ms. University of Oslo, UiT-Archtic University of Norway, Østfold University College.

Thráinsson, Höskuldur. 2007. *The Syntax of Icelandic*. Cambridge University Press.

Thráinsson, Höskuldur. 2013. Full NP Object Shift: The Old Norse Puzzle and the Faroese Puzzle revisited. *Nordic Journal of Linguistics*, 36(2). 153–186. https://doi.org/10.1017/S033258651300022X

Toivonen, Ida. 2003. *Non-projecting Words: A Case Study of Swedish Particles*. Kluwer.

Vangsnes, Øystein A. 2002. Icelandic Expletive Constructions and the Distribution of Subject Types. In *Subjects, Expletives and the EPP*, Peter Svenonius (ed.), 43–70. Oxford University Press.

Westendorp, Maud. 2020. Verb placement in embedded sentences in Faroese. *Nordic Atlas of Language Structures (NALS) Journal*, 5(1). 28–42.

CONTACTS

Ida Larsson
Østfold University College/University of Oslo
ida.larsson@hiof.no