Word building and the Icelandic noun phrase

Gísli R. Hardarson
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Abstract
In this paper I explore the different orders of elements found within the Icelandic definite noun phrase where four main patterns are observed: i) ARTICLE > NUMERAL > ADJECTIVE > NOUN > GENITIVE > PP; ii) NOUN-ARTICLE > NUMERAL > ADJECTIVE > GENITIVE > PP; iii) ADJECTIVE > NOUN-ARTICLE > NUMERAL > GENITIVE > PP; and iv) GENITIVE > NUMERAL > ADJECTIVE > NOUN > PP. Previous approaches, working under the assumption that the order in (ii) did not exist, focussed on the derivation of (iii) from (i), generally assuming the fronting of the adjective to be a single movement operation. In recent years, however, it has been shown that not only does the order in (ii) exist, but the choice between (i-iii) is not semantically neutral. Hence to account for the order in (ii), I propose that the fronting of the adjective and noun to be a result of two separate movement operations: head movement of N to D and phrasal movement of AP to Spec-DP. I propose that the orders in (ii-iv) are a direct result of D’s attractiveness.
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1 Introduction

In this paper, I explore the Icelandic traditional noun phrase (TNP), its structure and the order of elements therein. In short, there are four possible orders of elements in definite TNPs. These are listed below.

(1) \( \text{ADJ} > \text{NOUN-DET} > \text{NUM} > \text{GEN} > \text{PP} \)
(2) \( \text{DET} > \text{NUM} > \text{ADJ} > \text{NOUN} > \text{GEN} > \text{PP} \)
(3) \( \text{NOUN-DET} > \text{NUM} > \text{ADJ} > \text{GEN} > \text{PP} \)
(4) \( \text{GEN} > \text{NUM} > \text{ADJ} > \text{NOUN} > \text{PP} \)

I propose an account couched in Distributed Morphology (Halle and Marantz 1993, 1994, Harley and Noyer 2003, Embick and Noyer 2007) utilizing a word structure implied by my previous work on compounding (Harðarson to appear; see also Vangnes 1999 and Julien 2005 i.a. for proposals involving similar nodes under different labels). The structure of the complex head in (5) indicates a mirror image phrasal structure in (6) (cf. Baker 1985), from which (5) is derived via subsequent head movements.

(5) \[
\begin{array}{c}
\omega \\
\phi \\
n \\
\sqrt{\text{ROOT}}
\end{array}
\]

To capture the various orders in (1–4), I furthermore propose that all TNP-internal movement is contingent on D’s attracting a potential host and properties of the moved element.

The paper is organized as follows: In Section 2, I give a brief overview of the relevant aspects of the Icelandic TNP and the order of elements therein. In Section 3 I discuss some previous approaches to the Icelandic TNP. In Section 4 I outline my proposal and ways in which it overcomes some of the issues encountered with previous approaches and in Section 5 I provide some concluding remarks and outline some directions for further study.

2 Word order in the Icelandic NP

There is only one order of elements observed in the indefinite TNP (Magnússon 1984, Sigurðsson 2006, Práinsson 2007), where the order of prenominal elements observed is in accordance with Greenberg’s universal 20.

(7) \( \text{Universal 20 (Greenberg 1966:87)} \)

When any or all of the items (demonstrative, numeral and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite.

Genitives and PPs always follow the noun in such cases. Note also that Icelandic has no indefinite article. The order of elements in the indefinite TNP is as shown below and I take this order to be the default order of elements.\(^1\)

\(^1\)Note that the acceptability of the indefinite possessive construction depends on the semantic class of the noun and the possessor, e.g. the noun in (8) can refer to a particular work, but not the physical object (Práinsson 2007:93, Sigurðsson 1993:192–3) Although there is some speaker variation in that respect.
In definite TNP's, there are four possible orders of elements (e. g. Magnússon 1984, Þráinsson 2007, Pfaff 2007, 2009, 2014, 2015). The genitives in (9), (10) and (12) require a proprial article (Sigurðsson 1993, 2006).²

(9) DET > NUM > ADJ > NOUN > GEN > PP
    hinur þrjár frægu myndir *(hennar) Astridar af Dorian Gray
    the three famous.WK pictures PROP Astrid.GEN of Dorian Gray

(10) NOUN-DET > NUM > ADJ > GEN > PP
    myndir-nar þrjár frægu *(hennar) Astridar af Dorian Gray
    pictures-the three famous.WK PROP Astrid.GEN of Dorian Gray

(11) GEN > NUM > ADJ > NOUN > PP
    (*hennar) Astridar þrjár frægu myndir af Dorian Gray
    PROP Astrid.GEN three famous.WK pictures of Dorian Gray

(12) ADJ > NOUN-DET > NUM > GEN > PP
    frægu myndir-nar þrjár *(hennar) Astridar af Dorian Gray
    famous.WK pictures-the three PROP Astrid.GEN of Dorian Gray

In previous approaches, examples such as (9) were usually treated as a stylistically marked variants of (12) and rarely considered in previous accounts (cf. Sigurðsson 1993, Vangsnes 1999, Julien 2005, Norris 2011, Schoorlemmer 2012) and the order shown in (10) was typically assumed not to exist. Hence most previous accounts tended to focus on (12). In recent years, however, Pfaff (Pfaff 2007 et seq.) has, not only provided proof of the existence of (10), but also showed that the choice between (9)–(12) is not semantically neutral. Finally, the order in (11) is only possible under a contrastive reading.

Typically, the order ADJ > DET yields a restrictive reading, 13a, and the order DET > ADJ yields a non restrictive reading, (13b).³

(13) a. Allar góðu bækur-nar hans brunnu.
    all good.WK books-the he.GEN burned
    All of his good books burned. (Some of his bad to mediocre may have survived)
    b. Allar bækur-nar hans góðu brunnu.
    all books-the he.GEN good.WK burned
    All of his good books burned. (They were all good)

In case of, e. g., inherently non-intersective adjectives, the order DET > ADJ is obligatory.

(14) a. # svokallaða afstæðiskenning-in
    so-called theory.of.relativity-the
    the so-called theory of relativity
    b. hin svokallaða afstæðiskenning
    the so-called theory.of.relativity
    c. afstæðiskenningin svokallaða
    theory.of.relativity-the so-called

    (from Pfaff 2014:49)

Non-intersective reading is, however, not limited to the DET > ADJ configuration. With relational nouns, the order ADJ > DET yields a a non-intersective reading, hence no contradiction in 15a but the order DET > ADJ yields an intersective reading, hence the contradiction in (15b) and (15c).

² Note that although I will mark the proprial article in the examples, I will set aside its properties and requirements for the purposes of this paper.
³ Due to space limitations, I will only contrast the readings available in (9) and (10) with those available with (11). For a more thorough discussion of the various contrasts between these orders, I refer the reader to Pfaff (2015).
Hence it would appear that the different readings are contingent on not just the position of the
adjective relative to the determiner, but also on the properties of the adjective itself as well as the
noun it modifies (see Pfaff 2015 for a more detailed discussion).

Finally, pronominal possessors, whether genitive and agreeing, obligatorily follow the noun-
article whereas proper noun possessors cannot.

To sum up, the various different orders observed in the Icelandic TNP appear to be contingent
on the presence of the definite article (or at least definiteness). Furthermore, taking the order of
elements in the indefinite TNP as default (and hence the order in (9)) leaves us with the question of
how the different orders are derived.

3 Previous approaches

As previous approaches were proposed under the assumption that the order in (10) did not exist,
their focus tended to be on deriving (12) from (9). Previous approaches, hence, generally fall into
two categories in that respect: On the one hand there are the head movement accounts, that assume
that the bound article attaches to the noun by N raising to D (e.g. Delsing 1993, Sigurðsson 1993,
Faarlund 2004, 2009, Lohrmann 2011). On the other hand there are the phrasal movement accounts,
that assume that a constituent larger than N is fronted (e.g. Vangsnes 1999, Julien 2005, Norris 2011,
Schoorlemmer 2012).

A common thread in previous approaches has been to unify the fronting of N and A under a sin-
gle movement operation. However, all of them either undergenerate in e.g. disallowing 10 or over-
generate by predicting the postnominal elements to front as well. In the two subsections that follow,
I will discuss Sigurðsson’s (1993) proposal as a representative of the head movement approaches
and Vangsnes (1999) and Julien (2005) as representatives of phrasal movement approaches.
3.1 Sigurðsson (1993)

Sigurðsson (1993) assumes the following configuration of the Icelandic NP, where the NP is a complement of a head K which realizes case. Possessors are generated as specifiers of N and adjectives are head adjoined to N.

(18) a. furðuleg greining Jón á vandamálinu
  bizarre analysis Jón.gen on problem.the
  Jón’s analysis of the problem

b. $\left[ K \left[ N P \right] \left[ N P J Ó N \right] \left[ N \left[ \{ A \text{ BIZARRE} \} \right] \left[ N \text{ ANALYSIS} \right] \left[ \{ \text{PP OF THE PROBLEM} \} \right] \right] \right]$
(adapted from Sigurðsson 1993:191)

The default order in was then derived by A-N first moving to K and, when applicable, A-N-K raises to D, achieving the order in (12).

This approach makes several correct predictions: Namely it correctly accounts for the postnominal sphere; it yields the order observed in (12) and, in principle, it is possible to prepose possessors (although it is ruled out by Sigurðsson (1993:189)).

There are some problems nonetheless. First, since adjectives are head-adjoined to N, it is impossible to derive the order in (10) under standard constraints on head movement (see e.g. discussion in Matushansky 2006 and reference cited therein). Second, it wrongly predicts that adjectives will not survive ellipsis.

(19) Keyptirðu lágt kringlótt borð eða hátt ferkantað _ ?
  bought.you low round table or high square
  Did you buy a low round table or a high square one

However, those problems can be solved by separating the fronting of the adjective from the fronting of the noun, as we will see in Section 4.

3.2 Phrasal movement accounts

An approximation of the structure assumed by Vangsnes (1999) and Julien (2005) for the lower levels of the TNP. Possessors are argued to be generated in SpecNP and NP is dominated by a functional projection, which is also the source of the postnominal article. N then undergoes head movement to F.

(20) a. mynd mín af Garpi
  picture my of Garp
  my picture of Garp

b. $\left[ \text{FP} \left[ \text{FP} \left[ \text{FP} \left[ \{ \text{N PICTURE} \} \left[ \{ \text{PP OF GARPI} \} \right] \right] \right] \right] \right]$}

To derive the order in (12), a constituent containing the adjective and the noun (and possessor) undergoes phrasal movement to Spec-DP. Below is a simplified example of such a structure.\(^5\)

(21) a. gömlu myndirnar mínar þrjár
  old pictures.the my three
  my three old pictures

b. $\left[ \text{DP} \left[ \{ \text{AP} \left[ \{ \text{OLD} \} \right] \left[ \{ \text{FP} \left[ \{ \text{FP} \left[ \{ \text{N PICTURE} \} \left[ \{ \text{F THE} \} \right] \left[ \{ \text{N P MY tj} \} \left[ \{ D \left[ \text{NUMP} \left[ \text{NUM THREE} \right] t_j \right] \right] \right] \right] \right] \right] \right] \right] \right] \right] \right] \right]$

\(^4\)Vangsnes and Julien had different labels for the head labeled here as $F$ ($Dx$ and $n$, respectively). Furthermore, I am omitting $\text{Num}$ which, for Julien (2005:3–5), is the locus of inflection. In Julien’s model, the noun always moves to F, hence its omission will not affect the arguments presented here.

\(^5\)Vangsnes and Julien differ here in how adjectives are represented in the structure. Vangsnes follows Abney (1987) in that adjectives take FP as a complement, whereas Julien, following Cinque (1999), assumes that APs are specifiers to $\alpha$ heads dominating FP.
The main problem that these approaches encounter is that they do not account for the post nominal sphere. Neither Vangsnes nor Julien make a distinction between the positions of pronominal and full noun possessors. As we saw in (16–17), only pronominal possessors can appear to the left of the numeral and in (9–12), PP always remains to the right of the numeral. And furthermore, both assume that PPs are contained in the moved constituent. Hence they wrongly predict the following sentences to be grammatical.

(22) a. * gömlu myndir-nar mínar af Garpi þrjár
old pictures-the my of Garp three
b. * gömlu myndir-nar hans Jónasar þrjár
old pictures-the prop Jónas.GEN three

One possible remedy might be that postnominal elements are rightwardly displaced (cf. Pfaff 2009, Norris 2011). Such displacement, however, would be string-vacuous and does not appear to have any effects on interpretation.

Another remedy that has been proposed is to adopt Adger (2013)’s proposal in which possessors and PPs are generated outside of the constituent containing the noun and adjective (Pfaff 2015). This approach would provide the constituency needed for the phrasal movement approaches, but raises a problem with regards to phenomena such as ellipsis and one-replacement where the constituent targeted appears to contain, e.g. the possessor but not the adjective.

(23) a. Jónas settist við ferkantað borð en Astrid settist við kringlótt _.
Jónas sat.down by square table but Astrid sat.down by round
table
b. * Jónas settist við ferkantað borð Péturs en Astrid settist við kringlótt _
Jónas sat.down by square table but Astrid sat.down by round
table
Sveins
Sveinn.GEN
Jónas sat down at Pétur’s square table but Astrid sat down at Sveinn’s round table.

If possessors and PPs were in fact outside of the constituent containing the adjective and noun, ellipsis would be obligatorily targeting a non-constituent domain in (23) above.

4 Building up the NP

As discussed in the previous section, at the center of the issues encountered by previous accounts appears to stem from the effort to treat the fronting of the adjective and noun as a single movement operation. However, as we have seen, there are instances where the two do not cooccur, namely (10). Hence I propose to separate the two operations. Furthermore, by separating the two operations we remove the motivation for the phrasal movement account, and given that the head movement account fares better with regards to the post nominal sphere, I will adopt the latter.

The structure I assume is as follows: I assume that roots are acategorial and merge with a category node (following e.g. Marantz 1997). Following e.g. Marantz (2001), roots do not take complements. “Complement” PPs could then be merged either in Spec-nP or Spec-\(\sqrt{\text{ROOT}}\) (for the purposes of this paper, I will be placing them in Spec-nP). I assume that, dominating the stem is a node \(\varphi\), which realizes inflection (following e.g. Johnson 1990, Julien 2005 and many others). I assume that possessors/genitives are merged as specifiers to \(\varphi\). This structure is then dominated by \(\omega\), which assumes the roles of e.g. Julien’s \(n\), i.e. it encodes referentiality and licenses arguments. The root undergoes subsequent head movements to \(\omega\). The structure defined so far is as follows.
Turning to the prenominal sphere, I assume that APs are merged in Spec-\(\omega P\) and Numerals are adjoined to \(\omega P\) resulting in the order observed in (8) above, i.e. \(\text{NUM} > \text{ADJ} > \text{N} > \text{GEN} > \text{PP}\). Note that from here on out, the complex \(\omega\) will be collapsed to N. Icelandic does not have an indefinite article and I take that, in addition to the lack of varying orders in the indefinite TNP, to mean that Icelandic is lacking the D layer in indefinite TNPs. The structure of (8) would then be the following.

Turning to definite TNPs, unsurprisingly, 9 simply involves the addition of D without any additional movement. This yields the order \(\text{DET} > \text{NUM} > \text{ADJ} > \text{NOUN} > \text{GEN} > \text{PP}\).

I assume that NP internal movement is triggered by the attractiveness of D, for the sake of argument this could be attributed to a feature \([\pm \text{bound}]\). A D that is \([+\text{bound}]\) will attract the closest
\( \omega \) triggering its movement to D. This derives the order in (10), NOUN-DET > NUM > ADJ > GEN > PP.

(27)

\[
\begin{array}{c}
\text{DP} \\
\text{D} \\
\text{N\textsubscript{i}} \\
\text{PICTURES} \text{ myndir} \\
\text{[+bound]} \text{-nar} \\
\text{D} \\
\text{NUM} \text{ THREE} \text{ prj\textacute{a}r} \\
\text{\omega P} \\
\text{AP} \\
\text{OLD} \text{ gömlu} \\
\text{N\textsubscript{i}} \\
\text{\omega' \phi P} \\
\text{GEN} \ldots \text{PP} \\
\text{Astridar af Dorian Gray}
\end{array}
\]

Under this approach, the only appropriate host will be \( \omega \). D will never attract a phrase or any head that does not contain \( \omega \). Note, however, that this does not mean their edge is not available as an escape hatch, as PPs and PP complements are, in fact mobile.

(28) a. Hverjum sástu mynd \([af _{-}]?)\? \quad \text{Who did you see a picture of?}

b. \([Af \text{ hverjum}]_i sástu mynd _{-}?) \? \quad \text{af who saw.you picture}

The order in (11), ADJ > NOUN-DET > NUM > GEN > PP, is achieved by movement of the adjective to Spec-DP.

(29)

\[
\begin{array}{c}
\text{DP} \\
\text{AP\textsubscript{i}} \\
\text{OLD} \text{ gömlu} \\
\text{N-D} \\
\text{PICTURES-The} \text{ myndir-nar} \\
\text{D'} \\
\text{NUM} \text{ THREE} \text{ prj\textacute{a}r} \\
\text{\omega P} \\
\text{AP\textsubscript{i}} \\
\omega' \\
\text{GEN} \ldots \text{PP} \\
\text{Astridar af Dorian Gray}
\end{array}
\]

The numeral never moves. This can be explained by an appeal to a version of antilocality where movement must cross a full phrase (Bošković 2005 i.a.). The numerals are adjoined to \( \omega P \), and assuming D is a phase, any movement of the numeral must involve adjunction to D, which would only cross a segment of D, not the entire phrase.

As we saw in Section 2, not all adjectives can be fronted, and the availability of readings is also contingent on the position of the adjective relative to the article. Hence this movement seems to be contingent on the properties of the adjective itself. It remains to be seen at this point what these properties are and why they would trigger this movement. Another issue that arises is that this why
this movement only occurs in the context of N-to-D movement. I will leave these questions open for now.

Finally, as we saw in Section 2, it is possible for possessors to be fronted when bearing contrastive focus. Hence for the purposes of this paper, I assume that such possessors carry a feature [+focus]. Note, however, that although focus is necessary, it is not a sufficient condition for this movement. Possessors can be focalized in situ. And so, in order to achieve the order GEN > NUM > ADJ > NOUN > PP, I assume that D must also bear the feature [+focus].

(30)

Furthermore, I assume that the fronted possessor must be a head and undergoes morphological merger with D. I believe this is supported by the various restrictions on fronted possessors. First, proper names and pronominal genitives can be fronted with ease. Note, that unlike the other constructions discussed, above, the proprial article is ungrammatical when the genitive is fronted (as indicated in (12). Given the assumption that pronouns and proper nouns are Ds (e.g. Dobrovie-Sorin and Giurgea 2011 and references cited therein), fronted possessors must be of category D and undergo morphological merger with the matrix D.

(31) a. Garps skinka
    b. hans skinka
    c. mín skinka
    Garp.Gen ham
    he.Gen ham
    my ham
    Garp’s ham
    his ham
    my ham

Common nouns must be definite if fronted; They are however far less acceptable (Þráinsson 2007:93–4). This is expected if the fronted possessor must be D, since as argued above, D is only present in definite TNPs. It is also expected that fronted common noun possessors cannot be modified in any way. This is borne out, as shown in (34–35).

(32) * stelpunnar bók
    girl.the.Gen book
    the girl’s book
    (from Þráinsson 2007:93)

(33) * stelpu bók
    girl.Gen book
    a girl’s book

(34) * ungu stelpunnar bók
    young girl.the.Gen book
    the young girl’s book

(35) bók ungu stelpunnar
    book young girl.the.Gen
    the young girl’s book

To account for the position of pronominal possessors, I assume that they must cliticize to either D or ω (cf. Sigurðsson 2006). This fronting is not of the same nature as the possessor fronting
described above, as exemplified by (16–17). This difference is further exemplified by the fact that pronominal possessors can be fronted in certain quantifier constructions, where proper nouns cannot.

(36) a. allar þínar þrjár nýju kenningar
    all your three new theories
b. allar hennar þrjár nýju kenningar
    all she.GEN new theories
    (from Þráinsson 2007:119)

c. * Allar María þrjár nýju

5 Conclusions and directions for further study

To sum up, in this paper I adopted a structure for the TNP that mirrors the structure of the noun and a head movement account of the postnominal article in Icelandic. I argued that by separating the movement of the elements into three separate operations allows for a full coverage of the different orders found in the definite TNP. These operations included: i) head movement of N to D, ii) phrasal movement of AP to Spec-DP and iii) the cliticization of pronominal possessors. The movement of N was made contingent on the properties of D and movement of AP was made contingent on the properties of the adjective. The fronting of a focalized possessor was made contingent on matching properties of the matrix D, allowing only for fronting of a possessor of the category D.

As mentioned above, there are still a few loose ends. Namely there is the question of why AP only moves to Spec-DP when N moves to D and what are precisely the properties that determine whether AP can move. There is also the question of how this may fair cross-linguistically. In that respect, the most immediate issue would be to extend this theory to the other North Germanic languages (see e.g. Harðarson 2015 for a more detailed outline in that respect). Each of these questions is worthy of an intricate discussion, as is evident from the vast amount of literature thereof, hence I will leave it at that and save them for further study.

References


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