Variation in nominal phrases from a minimalist perspective

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1. Introduction

Chomskyan grammar – generative grammar – principles and parameters-theory – minimalism.

- Which aspects of language are fixed once and for all by UG? That is, which properties are common to all natural languages?
- Which aspects of language are allowed by UG to vary, and what are the limits of variation with respect to these aspects?

2. A brief historical outline

2.1 The early days

> "[T]he main task of linguistic theory must be to develop an account of linguistic universals" (Chomsky 1965:28)

> A great deal can be learned about UG from the study of a single language, if such study achieves sufficient depth to put forth rules or principles that have explanatory force but are undetermined by evidence available to the language learner.
> (Chomsky 1981:6)

(1) a. John told Bill about himself.
b. John told Bill about him.

UG specifies certain aspects of language but leaves other aspects open to variation – *parameters*.

The *pro-drop parameter* (cf. Chomsky 1981):

(2) a. Ho trovato il libro.
b. Ha mangiato Giovanni.
c. Chi credi che __ partirá?

(3) a. *(I) found the book.
b. * Ate Giovanni.
c. Who do you think (*that) __ will leave?

(4) a. It's **me**.
b. Sono **io.**

In first language acquisition: when the child has set the parameter on the basis of one of the visible clues, the other properties that follow from that particular setting follow automatically.[1]

2.2. Baker (1988)

(5) (*Japanese*; Baker 1988:177)
Taroo wa Hanako ni sono hon o kaw-sase-ta.
Taroo TOP Hanako DAT that book ACC buy-CAUS-PAST
'Taroo made/had/let Hanako buy that book.'

(6) Taroo [Hanako sono hon kaw] __ sase
V CAUS

(7) causer (subject of causative) → subject, causee (subject of base verb) → oblique, object of base verb → object

(8) Acchan kutt i ye karay-icc-u. (*Malayalam*; Baker 1988:198)
father.NOM child.ACC cry-CAUS-PAST
'Father made the child cry.'

[1] Scandinavian shows that the theory of the pro-drop parameter needs some revision. Pronominal subjects cannot normally be left out in Mainland Scandinavian (Danish, Norwegian, Swedish). But for Swedish speakers in Finland, and for quite a few Norwegians, it IS possible to move out an embedded subject preceded by *att* 'that':

(i) a. *(Jag) komm-er i morgon. (*Swe*)
I come-PRES tomorrow

b. % Vem tro-r du att __ komm-er?
who think-PRES you that come-PRES

As for the contrast shown in (4), a look at Scandinavian tells us that the case of the postverbal pronouns here probably has nothing to do with the possibility of leaving out the subject. Although obligatory subjects and missing agreement on the verb put Swedish and Norwegian in the same camp with respect to the properties that are most relevant to the pro-drop parameter, these two varieties of Scandinavian go separate ways in the construction shown in (ii):

(ii) a. Det er meg. (*Nor*)
it is me

b. Det är jag. (*Swe*)
it is I

Thus, it seems clear that the morphology and syntax of copula constructions like those in (4) and (ii) are not connected to the pro-drop parameter at all.

(9) (*Chichewa*; Baker 1988:163)

a. Anyani a-na-meny-ets-a ana kwa buluzi.
baboons S-PAST-hit-CAUS-ASP[2] children to lizard
'The baboons made the lizard hit the children.'

b. causer (subject of causative) → subject, causee (subject of base verb) → oblique, object of base verb → object

(10) (*Chamorro*; Baker 1988:184)

a. Ha na'-taitai häm i ma'estru ni esti na lebblu.
3SGS CAUS-read 1PL.EX the teacher OBL this LP book
'The teacher made us read this book.'

b. causer (subject of causative) → subject, causee (subject of base verb) → object, object of base verb → oblique

- Every language with a morphological causative will group either with Japanese or with Chamorro.

- The fact that we do not find every pattern that we might expect to be possible, suggests that syntax is involved in causativisation:

(11) [Causer $CAUS_V$ [Causee V (Object)]]

2.3 Holmberg & Platzack (1995)

Icelandic vs. Mainland Scandinavian (Holmberg & Platzack 1995:10–11).

Ordering of sentence adverbs and the finite verb in embedded clauses:

(12) a. …að Jón keyp-ti ekki bók-ina. *(Ice)*
that Jón buy-PAST.3SG not book-DEF
'…that Jón did not buy the book.'

b. …att John inte köp-te boken. *(Swe)*
that John not buy-PAST book-DEF
'…that John did not buy the book.'

[2] The following abbreviations are used in the glosses: ACC = accusative, ASP = aspect, ATTR = attributive, CAUS = causative, CG = common gender, DAT = dative, DEF = definite, EX = exclusive, GEN = genitive, IDF = indefinite, LP = linking particle, M(ASC) = masculine, N(EUT) = neuter, NOM = nominative, OBL = oblique, PASS = passive, PL = plural, PRES = present, REFL = reflexive, S = subject, SG = singular, SUBJ = subjunctive, TOP = topic., W = weak inflection.

Long distance reflexives:

(13) a. Jón seg-ir að María elsk-i sig/hann. *(Ice)*
Jón say-PRES.3SG that María love-PRES.SUBJ.3SG 3REFL/him
'Jón says that María loves him.'

b. John säg-er att Maria älsk-ar *sig/✓honom. *(Swe)*
John say-PRES that Maria love-PRES 3REFL/him
'John says that Maria loves him.'

Omitted (or empty) expletives:

(14) a. Í gær var (*það) dansað á skíp-inu. *(Ice)*
yesterday was it danced on ship-DEF
'There was dancing on the ship yesterday.'

b. Igår dansa-de-s *(det) på skepp-et. *(Swe)*
yesterday dance-PAST-PASS it on ship-DEF
'There was dancing on the ship yesterday.'

c. I går vart *(det) dansa på skip-et. *(Nor)*
yesterday became it danced on ship-DEF
'There was dancing on the ship yesterday.'

Subjects in other cases than nominative:

(15) a. Hana vant-ar peninga. *(Ice)*
her(ACC) lack-PRES.3SG money.PL.ACC
'She lacks money.'

b. *Henne/✓hon sakn-ar peng-ar. *(Swe)*
her/she lack-PRES money-PL
'She lacks money.'

Stylistic Fronting:

(16) a. kon-an sem kosin var forseti *(Ice)*
woman-DEF that chosen was president
'the woman who was chosen president'

b. * kvinn-an som vald blev till president *(Swe)*
women-DEF that chosen became to president

c. kvinn-an som blev vald till president *(Swe)*
women-DEF that became chosen to president
'the woman who was chosen president'

The associate of the expletive in front of the main verb in an active clause:

(17) a. Það hafa sennilega margir menn komið hingað í dag. *(Ice)*
it have.PRES.3PL probably many men come here today
'Many men have probably come here today.'

b. * Det ha-r sannolikt många män kommit hit idag. *(Swe)*
it have-PRES probably many men come here today

c. Det ha-r sannolikt kommit många män hit idag. *(Swe)*
it have-PRES probably come many men here today
'Many men have probably come here today.'

Expletive constructions with transitive active verbs:

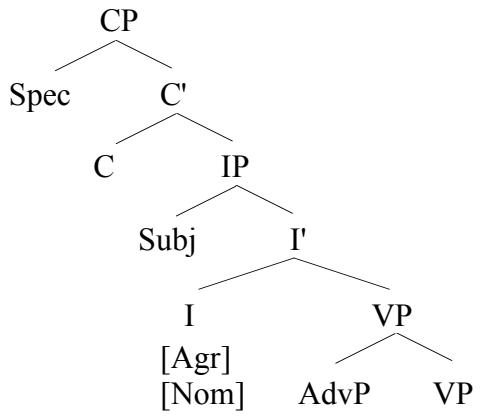
(18) a. Það hefur sennilega einhver maður étið hákarl-inn. *(Ice)*
it has probably some man.SG.NOM eaten shark-DEF.M.SG.ACC
'Some man has probably eaten the shark.'

b. * Det har troligen någon ätit haj-en. *(Swe)*
it has probably someone eaten shark-DEF

c. Någon har troligen ätit haj-en. *(Swe)*
somebody has probably eaten shark-DEF
'Somebody has probably eaten the shark.'

Holmberg & Platzack (1995): all these differences stem from the presence of verbal agreement in Icelandic and its absence in Mainland Scandinaviant. The verbal agreement in Icelandic is associated with an Inflection head and has a nominative feature.

(19)



3. A minimalist analysis of the syntax of nominal phrases

3.1 Definiteness markers: preposed and suffixed articles

Danish, Norwegian and Swedish have indefinite articles that precede the noun and definite articles that are suffixed to the noun:

(20) a. en hund
IDF.CG/MASC.SG dog
'a dog'

b. hund-en *(Dan/Nor/Swe)*
dog-DEF.CG/MASC.SG
'the dog'

(21) a. et(t) hus
IDF.NEUT.SG house
'a house'

b. hus-et *(Dan/Nor/Swe)*
house-DEF.NEUT.SG
'the house'

Norwegian and Swedish have "double definiteness" in definite nominal phrases with prenominal modifiers. Danish only has a preposed definiteness marker:

(22) a. en stor hund *(Dan/Nor/Swe)*
IDF.CG/MASC.SG big dog
'a big dog'

b. den stor-e/-a hund-en *(Nor/Swe)*
DEF.CG/MASC.SG big-W dog-DEF.CG/MASC.SG
'the big dog'

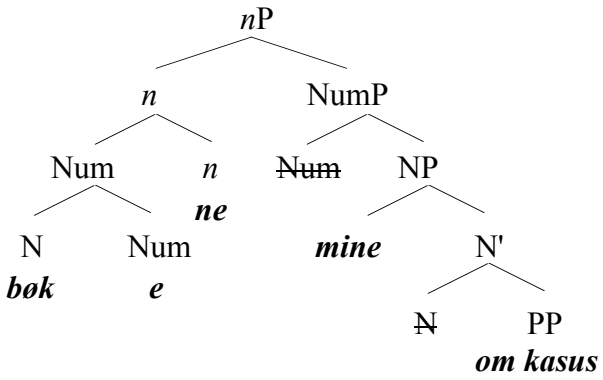
c. den stor-e hund *(Dan)*
DEF.CG.SG big-W dog
'the big dog'

(23) dei to gaml-e bøk-e-ne mine om kasus *(Nor)*
DEF.PL two old-W book-PL-DEF my.PL about case
'my two old books about case'

- Syntactic structures are built from the bottom upwards.
- The trigger for syntactic movement is in the attracting element.
- Morphologically complex words are built in the syntax (= the *nonlexical* approach to morphology).
- The suffixed definite article represents a head which is separate from N, and it becomes suffixed as a result of N moving to that head (see Taraldsen 1990, Kester 1993, Santelmann 1993, Sigurðsson 1993, Giusti 1994, and the analysis of Icelandic in Vangsnes 1999).

- I call the head *n*, and I assume that at least in Scandinavian there is obligatory movement of N to *n*.

(24)



- Adjectives and numerals are phrasal categories that are structural specifiers of functional heads that are added on top of *n*P.

(25) a. det veldig mye større hus-et *(Nor)*
DEF.NEUT.SG very much bigger house-DEF.NEUT.SG
'the very much bigger house'

b. den mot dei fleste mistenksamm-e hund-en
DEF.SG towards DEF.PL most suspicious-W dog-DEF.MASC.SG
'the dog that is/was suspicious towards most people'

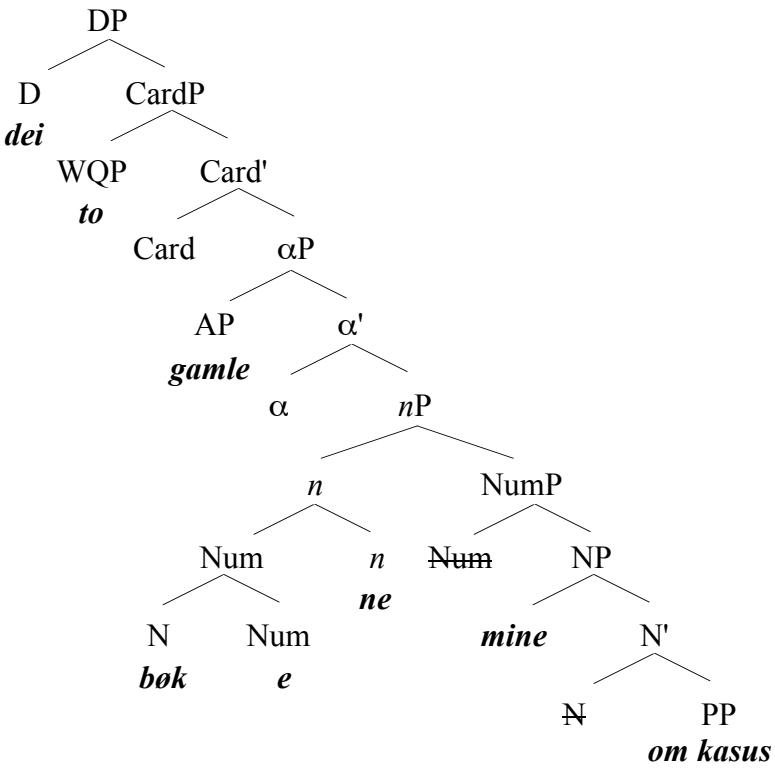
(26) a. dei meir enn ti hus-a *(Nor)*
DEF.PL more than ten house-DEF.PL
'the more than ten houses'

b. desse alt-for mange u-interessert-e student-a-ne
these all-too many un-interested-W student-PL-DEF
'these all too many uninterested students'

- The heads that have adjectival phrases as their specifiers I call α heads, and the heads that have numerals and other weak quantifiers as their specifiers I call Card heads. (On the syntax of DP-internal numerals, see Löbel 1989, Cinque 1996, Duffield 1996, Vangsnes 1999, 2001, Zamparelli 2000).

The structure of the DP:

(27)



The α heads are sometimes pronounced:

(28) % et stor-t et styg-t et hus *(Nor/Swe)*
IDF.N.SG big-N.SG IDF.N.SG ugly-N.SG IDF.N.SG house
'a big ugly house'

- CardP and αP are generated only when they contain lexical material. NP, NumP, *n*P and DP are present in every DP.
- There is considerable variation as to which heads get a phonological realisation.
- *Late insertion* of phonological features.

But why both *n* and D?

(29) a. Dei oppfør-er seg som dei verst-e bøll-ar. *(Nor)*
they behave-PRES 3REFL as DEF.PL worst-W brute-PL
'They behave like the worst brutes [whoever those are].' *non-specific*

b. Dei oppfør-er seg som dei verst-e bøll-a-ne.
they behave-PRES 3REFL as DEF.PL worst-W brute-PL-DEF
'They behave like the worst brutes [and we know who those are].' *specific*

(30) a. Den kvit-e mann(-en) har alltid undertrykt andre kultur-ar.
DEF.SG white-W man-DEF.SG has always oppressed other culture-PL
'The white man has always oppressed other cultures.' *generic*

b. Den kvit-e mann*(-en) åt ein is.
DEF.SG white-W man-DEF.SG ate an ice
'The white man ate an ice-cream.' *individual reference*

(31) a. Han er en lærer av den gaml-e skole(-n). *(Nor)*
he is a teacher of DEF.SG old-W school-DEF
'He is a teacher of the old school.' *abstract*

b. Vi så på den gaml-e skole*(-n).
we saw at DEF.SG old-W school-DEF
'We looked at the old school.' *concrete*

- *n* has to do with specificity, D element adds *inclusiveness* (*uniqueness)*.

Lyons (1999:11): inclusiveness is the situation when "the reference is to the totality of the objects or the mass in the context which satisfy the description".

- In this model, every functional element that is introduced into the structure will agree with the elements that are already there.

- Each head is generated with a set of unvalued features, which must be valued by agreement with an element that has valued features. The head is a *probe*, seeking a *goal*—an element with valued features (Chomsky 2001, 2004).

3.2 The identification of D

- The DP projection can be phonologically empty in Scandinavian when the reference of the DP as a whole equals the set that is picked out by αP/*n*P—the *set of selection* (Stroh-Wollin 2003).

(32) a. [$_{DP}$ *e* Vesle Anna] fekk ei dokke. *(proper name)*
little.W.SG Anna got IDF.FEM.SG doll
'Little Anna got a doll.'

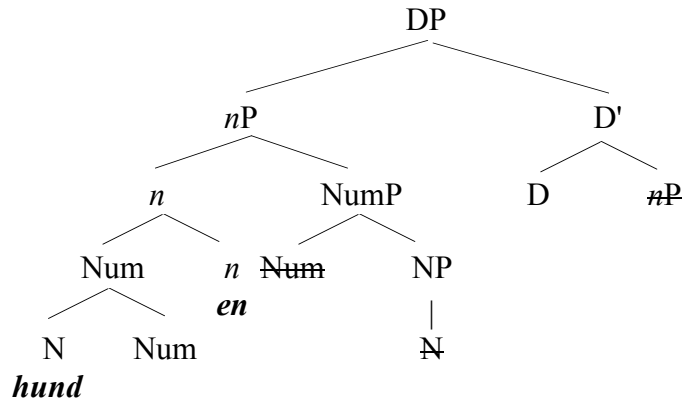
b. Kvit-e nashorn er nesten utrydda. *(kind-referring)*
white-W rhinos are nearly extinct
'White rhinos are nearly extinct.'

c. Kvit-e kattar er ofte døv-e. *(generic)*
white-W cats are often deaf-W
'White cats are often deaf.'

d. Eg har kjøp-t mjølk. *(mass noun)*
I have-PRES buy-PAST milk
'I have bought milk.'

- Whenever the reference of the DP is specified relative to the set of selection, but is neither determined by an operator outside the DP nor comes from αP or *n*P alone, it is D that specifies the reference of the DP relative to the set of selection. D must then be identified—the DP projection cannot be phonologically empty. There must be phonologically overt material either in D or in Spec-DP. In addition, the highest projection of the DP must have a nominal category feature—be able to have a referential index (cf. Baker 2003). (See also Longobardi 2001.)

(33)



(34) kristall-en den fin-a *(Swe)*
crystal-DEF DEF.SG fine-W
'the fine crystal'

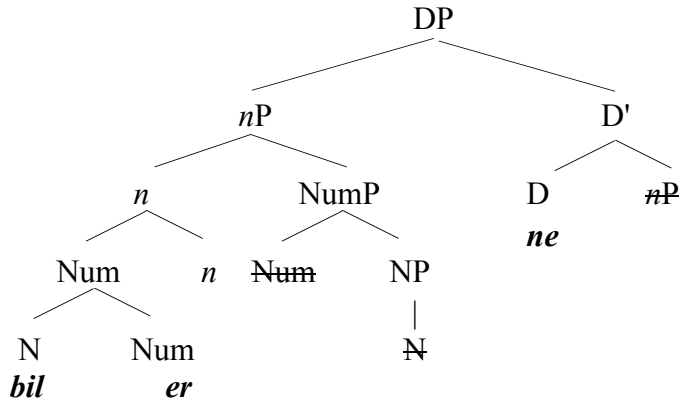
- Numerals or adjectives intervening between D and *n*P block movement of *n*P. The AP/numeral becomes the closest goal for D, but adjectives have no nominal category feature, and numerals (and weak quantifiers) do not spell out any definiteness feature.

- Consequently, whe prenominal adjectives or weak quantifiers are present, *n*P does not move to Spec-DP. Instead, D itself is spelled out as a prenominal determiner.

- Danish: suffixed and preposed definiteness markers are realisations of D.

(35) a. bil-er-ne *(Dan)*
car-PL-DEF
'the cars'

b.



- Morphemes inside what we tend to conceive of as one single word can in principle bear any structural relation to each other (Julien 2002).

- The trigger of *n*P-movement in Danish is a requirement that the noun itself should appear in the DP projection?

(36) a. (falleg-t) hús *(Ice)*
beautiful-NEUT.SG.NOM/ACC house
'a (beautiful) house'

b. (falleg-a) hús-ið
beautiful-DEF.NEUT.SG house-DEF.NEUT.SG.NOM/ACC
'the (beautiful) house'

(37) a. tveir ung-ir menn *(Ice)*
two.MASC.NOM young-IDF.MASC.PL.NOM men.NOM
'two young men'

b. menn-ir-nir tveir
men.PL.NOM-DEF.MASC.PL.NOM two.MASC.NOM
'the two men'

c. ung-u menn-ir-nir tveir
young-DEF.PL men.PL.NOM-DEF.MASC.PL.NOM two.MASC.NOM
'the two young men'

d. þessir tveir ung-u menn
this.MASC.PL.NOM two.MASC.NOM young-DEF.PL men.NOM
'these two young men'

- Icelandic: *n*P moves to Spec-DP in the absence of adjectives, αP moves if there is one.

- Movements triggered by D and other functional elements in the nominal phrase is another source of variation.

3.3 Preposed and postposed possessors

DP-internal possessors are nominal arguments and must be licensed ⇒ much variation in position and shape.

(38) a. (den gaml-e) katt-a mi *(Nor)*
DEF.SG old-W cat-DEF.FEM.SG my.FEM.SG
'my (old) cat'

b. (den gaml-e) katt-a åt grann-en
DEF.SG old-W cat-DEF.FEM.SG to neighbour-DEF.MASC.SG
'the neighbour's (old) cat'

- Postnominal possessors in Scandinavian are licensed in their base position in Spec-*n*P through agreement with *n* (cf. (24).)

(39) a. mi-n (gaml-e) kat *(Dan)*
my-CG.SG old-w cat_{CG}
'my (old) cat'

b. nabo-en-s (gaml-e) kat
neighbour-DEF.CG.SG old-w cat_{CG}
'the neighbour's (old) cat'

(40) a. mi-n (gaml-a) katt *(Swe)*
my-CG.SG old-w cat_{CG}
'my (old) cat'

b. grann-en-s (gaml-a) katt
neighbour-DEF.CG.SG old-w cat_{CG}
'the neighbour's (old) cat'

- Are the prenominal and postnominal possessor positions derivationally related?

(41) a. Detta er tekann-a mi. *(Solør Norwegian)*
this is teapot-DEF.FEM.SG my.FEM.SG
'This is my teapot.'

b. Detta er MI tekanne.
this is my.FEM.SG $\text{teapot}_{\text{FEM}}$
'This is MY teapot.'

c. * Detta er mi TEKANNE.
this is my.FEM.SG $\text{teapot}_{\text{FEM}}$
'This is my TEAPOT.'

d. * DETTA er mi tekanne.
this is my.FEM.SG $\text{teapot}_{\text{FEM}}$
'THIS is my teapot.'

- All possessors originate in Spec-*n*P, and get their thematic role in a local relation to the noun.

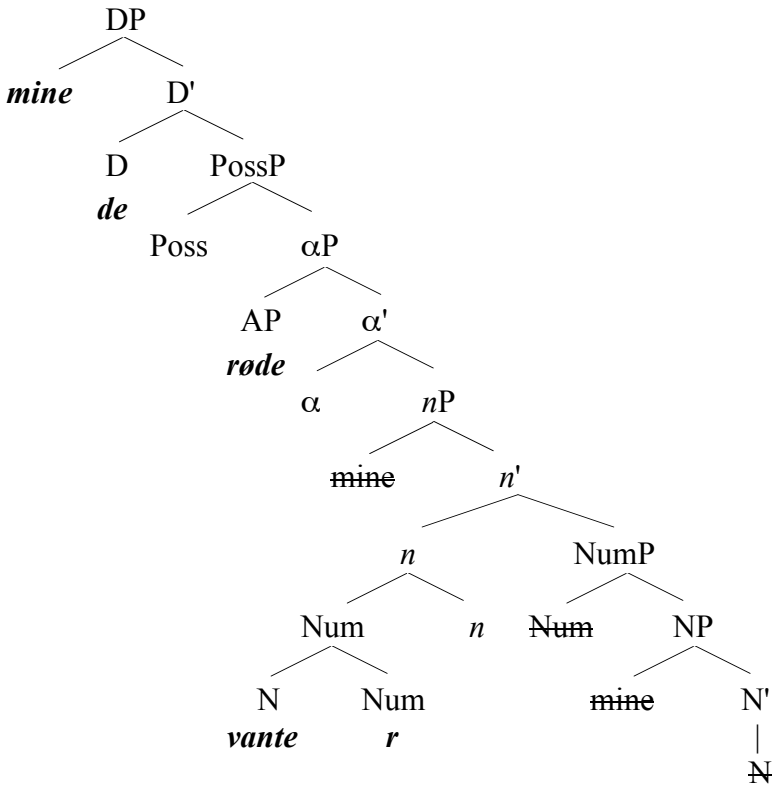
(42) a. mi-ne de rød-e vante-r *(Colloquial Danish)*
my-PL DEF.PL red-W glove-PL
'my red gloves'

b. mi-ne de kræft-er
my-PL DEF.PL strength-PL
'my strength'

c. Mine de gaml-e har længe haft computer.
my-PL DEF.PL old-W have long had computer
'My parents have had a computer for a long time.'

- In Danish (and Swedish), licensing of the possessor requires the activation of a functional head Poss, located immediately below D. *n*P is a *phase* (Chomsky 2004), licensing cannot take place across phase boundaries ⇒ the possessor must move at least to Spec-*n*P. But it is then closer to D than what *n* is (Pesetsky & Torrego 2001), it agrees with D and is nominal ⇒ the possessor is attracted to Spec-DP.

(43)



- The touchdown of the possessor in Spec-*n*P that prevents *n* from being spelled out—prenominal possessors do not cooccur with the suffixed definite article! The possesor agrees with *n*, so that *n*'s features are represented in the possessor.[3]

3.4 Some crosslinguistic perspectives

(44) a. biila
car.SG.NOM
'a/the car'

b. ruks-es biila *(North Sami)*
red-ATTR car.SG.NOM
'a/the red car'

[3] But if the possessor is phonologically empty, which are not uncommon in Scandinavian in cases where the possessor can be bound by an antecedent outside the possessed nominal phrase, the suffixed article will appear in those varieties that spell out *n*:

(i) Hon$_i$ skaka-de på [(e$_i$) huvud-et (e$_i$)]. (*Swe*)
she shake-PAST on head-DEF.NEUT.SG
'She shook her head.' or 'She shook the head.'

Whether the possessor is postnominal or prenominal in this construction (there is the possibility that a phonologically empty possessor stays in its base position, even in the varieties where overt possessors move obligatorily), it is clearly the case that there is no overt possessor in Spec-*n*P at any stage of the derivation. This is an indication that the absence of the suffixed definiteness marker in (40ab) is due to the movement of the overt possessor.

(45) a. guokte ruks-es biilla
two.NOM red-ATTR car.SG.ACC/GEN
'two red cars'

b. dat guokte ruks-es biilla
those.NOM two.NOM red-ATTR car.SG.ACC/GEN
'the/those two red cars'

- D needs to be identified by a phonologically overt material in the DP projection in much the same way in North Sami as in Scandinavian?

- *n*P has moved to Spec-DP in (44a) and αP has moved in (44b)? Movement blocked in 45b)?

(46) a. hari mala nguna (*Kotoko*; Demeke 2002:86,94)
dog black big
'a big black dog'

b. hari de
dog DEF
'the dog'

c. hari yi mala nguna (de)
dog DEF.MASC.SG black big DEF
'the big black dog'

(47) (*Kotoko*; Demeke 2002:73)

a. dar yi Adam
gun_{MASC} DEF.MASC.SG Adam
'Adam's gun'

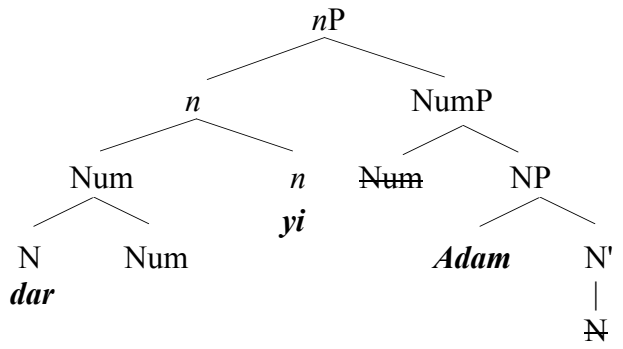
b. làbà c□ Adam
$\text{story}_{\text{FEM}}$ DEF.FEM.SG Adam
'Adam's story'

c. dar-i t□ Adam
gun-PL DEF.PL Adam
'Adam's guns'

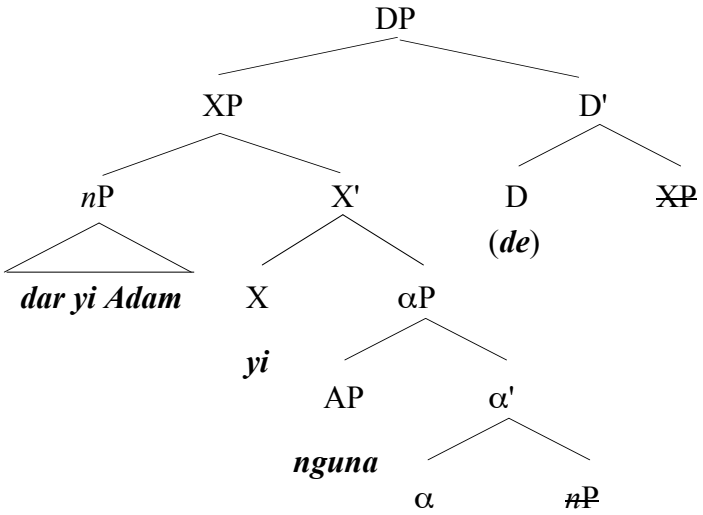
d. làbá t□ Adam
story.PL DEF.PL Adam
'Adam's stories'

(48) dar yi Adam yi nguna (de)
gun DEF.MASC.SG Adam DEF.MASC.SG big DEF
'Adam's big gun'

(49)



(50)



- The X head agrees with α and n. Since it contains the same features as *n*, it can be spelled out in the same way.
- D is spelled out by an element that only can represent D.
- *n* is spelled out if it licenses a possessor (the possessor relation needs to be made visible).
- X and *n* are in different phases ⇒ the spelling out of X is not influenced by the spelling out of *n*.

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