



Introduction

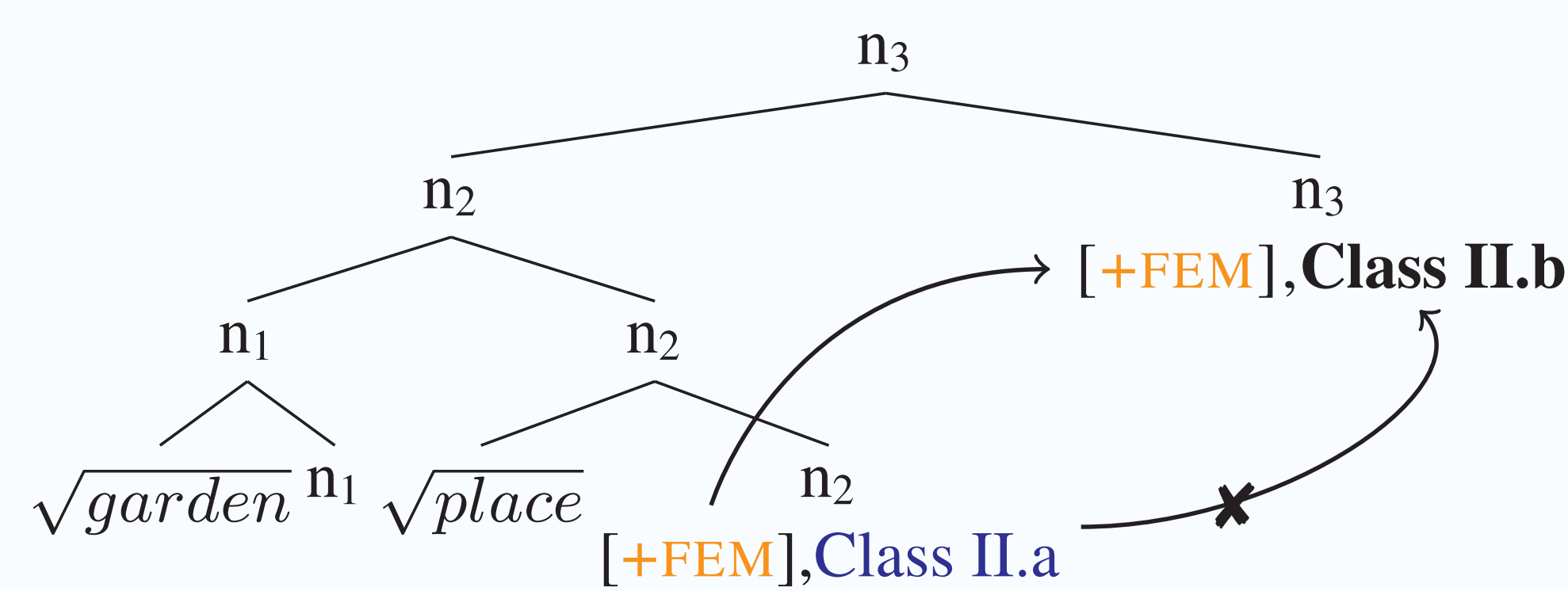
- In Lithuanian N-N compounds, the gender feature of the head is **retained** whereas the inflection class is **lost**.
→ the head in (2) is FEM, the compound in (3) is also FEM
→ all FEM compounds are always **Class II.b**, all MASC compounds are **Class I.b**
→ all compounds have a palatalized stem-final consonant

- | | | |
|--|---|---|
| (1) sod-as
garden.M-SG
'a garden'
(Class I.a) | (2) viet-a
place.F-SG
'a place'
(Class II.a) | (3) sod-viet-ė
garden-place.F-SG
'a place for a garden'
(Class II.b) |
| (4) duon-a
bread.F-SG
'bread'
(Class II.a) | (5) maiš-as
bag.M-SG
'a bag'
(Class I.a) | (6) duon-maiš-is
bread-bag.M-SG
'a bag for bread'
(Class I.b) |

Proposal:

- N-N compounds are morphologically complex: the non-head and the head are categorized and crowned by n_3 (Iordăchioaia et al. 2017; Ingason & Sigurðsson 2020)

(7)



- Highest Gender Wins (HGW) (Kramer 2015:218):** “the gender of the highest n is the agreeing gender of the nominal.”
→ In contrast, in Lithuanian compounds, n_2 determines the gender rather than n_3 , which has important consequences for strict PIC.
- Gender features are **morphosyntactic** and visible in the syntax, class features are **morphophonological** (Gouskova & Bobaljik 2021) and subject to strict locality.

The Properties of Lithuanian Nouns

- Lithuanian nouns inflect for number and case.
- There are five inflectional classes which correlate with gender, but there is no one to one correspondence (Ambrazas et al. 1997).
(8) žvėris ‘beast, M, Cl. III’ ~ avis ‘sheep, F, Cl. III’
- The inflectional ending and the theme vowel depend on the base’s class feature:
(9) tur[g]-u-mis (Class IV) market.M-TH-INS.PL
(10) šun-tur[g]-a-is (Class I.b) dog-market.M-TH-INS.PL
- Classes I and II are the default e.g., they appear with borrowed words
→ **I.a:** *Niu-jork-as* ‘New York.M’; **I.b:** *kompiuter-is* ‘computer.M’
II.a: *konstitucij-a* ‘constitution.F’, **II.b:** *doz-ė* ‘dose.F’
- The subclasses I.b and II.b are the default classes for MASC and FEM nouns respectively with **palatalized** stem-final consonants.
(11) **I.b:** brolis /brɔ:lʲ-i-s/ ‘brother-TH-SG’, **II.b:** upė /ɔ:pʲ-e-Ø/ ‘river-TH-SG’
(12) **I.a:** maišas /mɛjʃ-a-s/ ‘bag-TH-SG’, **II.a:** vieta /viet-a-Ø/ ‘place-TH-SG’

The properties of Compounds

The first member of the compound is a modifier and the second member is a head.

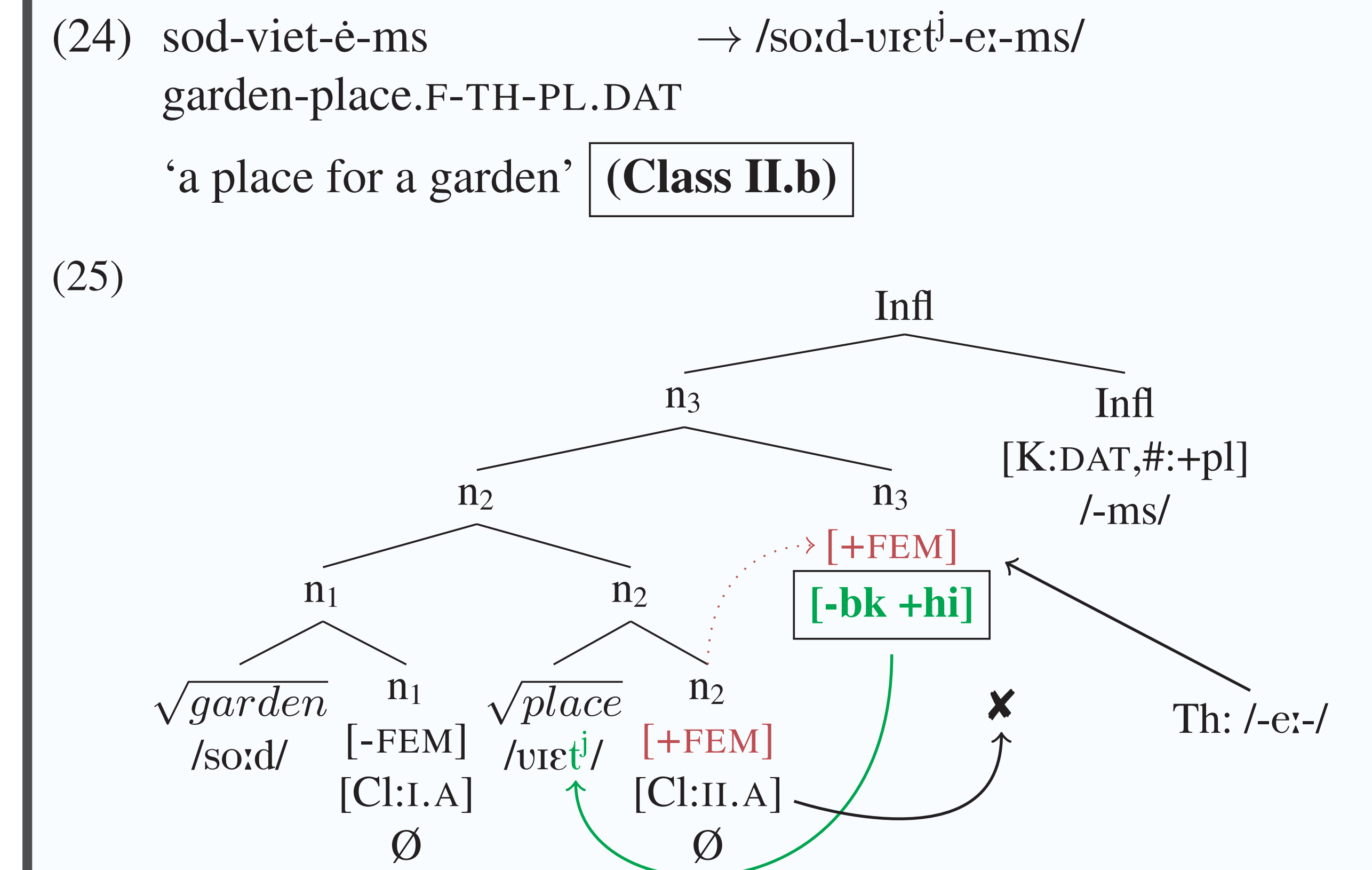
- The gender feature of the second element percolates up, thus it is the head.
(13) didel-is duon-maiš-is (14) erdv-i sod-viet-ė
big-M-SG bread-bag-M-SG spacious-F-SG garden-place-F-SG
'a big bag for bread' 'a spacious place for a garden'
- If the second element is an inherently plural noun, then the compound is also plural.
(15) milt-ai/*-as (16) duon-milči-ai/*-is
flour.M-PL/-SG bread-flour.M-PL/-SG
'flour' 'flour for bread', 'bread flour'
- The second element of the compound is the hyponym of the compound – a characteristic behavior of the head.
(17) duon-maiš-is yra maišas
bread-bag.M-NOM.SG is bag
'a bag for bread is a bag'
- The first element of the compound is a modifier, it is an optional element as in (18).
→ As opposed to synthetic compounds like (19)
(18) Ieva tur-i maiš-a/duon-maiš-i.
Ieva have-PRS.3 bag.M-SG/bread-bag.M-SG
'Ieva has a bag/ a bag for bread.'
- (19) Ieva yra *(mėsos) valgy-toj-a
Ieva is meat.GEN eat-n-F.SG
'Ieva is a meat eater.'

Motivation for the Structure

In compounds, the two roots are nominalized and then crowned by a high n_3 -projection as in (7).

- I.** Both n_1 and n_2 can be overt and thus, are present in the structure.
(20) dirv-on-viet-ė (21) med-pjū-kl-is (22) šlamš-t-a-mok-sl-is
soil-n1-place.F-SG tree-cut-n2-M.SG trash-n1-L-teach-n2-M.SG
'a place with soil' 'saw for wood' 'trash science'
- II.** The gender features are hosted by n in Lithuanian (Adamson & Šereikaitė 2019). If the head of the compound determines the gender feature, then that feature must be hosted by n_2 .
- III.** If these were root-root compounds, we would expect idiosyncratic meanings (Iordăchioaia et al. 2017). However, Lithuanian attributive compounds are compositional e.g., (3-6).
- IV.** Every compound has a palatalized stem (23). This palatalization is the systematic exponent of a functional head. The [-bk] expones - in the shape of a floating feature - the topmost n_3 head of the compound (also see Cavarani & Van Oostendorp 2020).
(23) **Class I.b:** duonmaišis /dɔɔn-mɛjʃ-i-s/ ‘a bag for bread’
Class II.b: sodvietė /so:d-vietʲ-e-Ø/ ‘a place for a garden’

Syntactic Analysis



- n_1 is a modifier and thus, is attached to n_2 via adjunction, Pair Merge (Chomsky 2004).
- n_3 is a **head**: the class feature on n_2 is **invisible** to *Infl* and the theme vowel because n_3 triggers spellout of the n_2 cycle;
- The gender of n_2 **percolates** up to n_3 , which has no gender feature.
→ According to the HGW hypothesis, the plain n_3 should be assigned the default gender – masculine. This prediction is not borne out!
→ This constitutes evidence for PIC2 (Chomsky 2001)
- n_3 is expressed phonologically by a floating dorsal feature, triggering palatalization on the closest segment to its left;
- The exponent on *Infl* depends on the class of the base, which is always the default class in compounds. The class on n_3 is supplied automatically based on gender: I.b for M, II.b for F;
- The theme vowel is inserted late between *Infl* and the highest functional node to the left (Embick 2010, Gleim et al 2022).

Conclusion

- Gender features and inflection class features are distinct:**
→ gender features are subject to percolation algorithm whereas inflection class features are not
→ inflection class features are subject to strict locality
- While some studies assume that both roots are categorized in compounds, this study shows that the structure can also be crowned by another cyclic head.
- This study lends additional support to PIC2: the gender features of one cyclic head can be supplied to another cyclic head.

Select. Ref: Ambrazas et al. 1997. Lithuanian Grammar, Iordăchioaia et al. 2017. Morphosyntactic sources for nominal synthetic compounds in English and Greek; Cavarani & van Oostendorp 2019. Empty morphemes in Dutch dialect atlases, Glossa 4(1), p.88; Kramer 2015. The Morphosyntax of Gender.