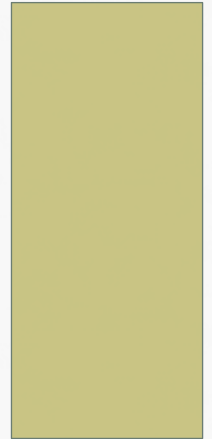


Gender features on *n* & the root: An account of gender in French

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The Problem of Gender

- Gender is NOT just arbitrarily assigned inherent gender on nouns.
 - Inanimates → only grammatical gender
 - Animates → grammatical gender; natural sex
 - Agreement can occur with natural sex
 - Problems arise when natural sex & grammatical gender conflict
- Rather than collapsing the two, the analysis presented here allows each to act in isolation & to interact with one another.

Outline

- I. French gender paradigm
- II. Snapshot of the analysis
- III. Architecture
- IV. Kramer (2009)
- V. Application to French
- VI. Are two features necessary?
- VII. Conclusion

I. French gender paradigm

- Two gender system – masculine & feminine
 - Masculine the default
- Not regularly marked on nouns
 - Marked on articles
 - a) Definite: *le* (m) *la* (f)
 - b) Indefinite: *un* (m) *une* (f)
 - c) Possessive: *mon* (m) *ma* (f)
- Gender on inanimate nouns is purely grammatical
 - a) *un magasin* a store (m)
 - b) *une maison* a house (f)

I. French gender paradigm (cont.)

- Gender on animate nouns interacts with natural sex
 - Sex differences expressed in several ways

Suppletive Forms

- Lexically differentiated by (conflated) sex & gender
 - a) un homme* a man
 - b) une femme* a woman

 - c) un boeuf* a bull
 - d) une vache* a cow

I. French gender paradigm (cont.)

Stem Change

- Phonology of masc/male form modified to generate fem/female form

- a) un chat* a (male) cat
- b) une chatte* a female cat

- c) un étudiant* a (male) student
- d) une étudiante* a female student

Article Change

- Change to form of article but not to form of stem
 - Reserved for human nouns
 - a) un enfant* a (male) child
 - b) une enfant* a female child

 - c) un élève* a (male) student
 - d) une élève* a female student

I. French gender paradigm (cont.)

Epicenes

- No representation of natural sex
 - Fixed grammatical gender
 - a) une souris* a mouse (f)
 - b) un assassin* an assassin (m)
 - c) une sentinelle* a sentry (f)
 - d) un mannequin* a fashion model (m)

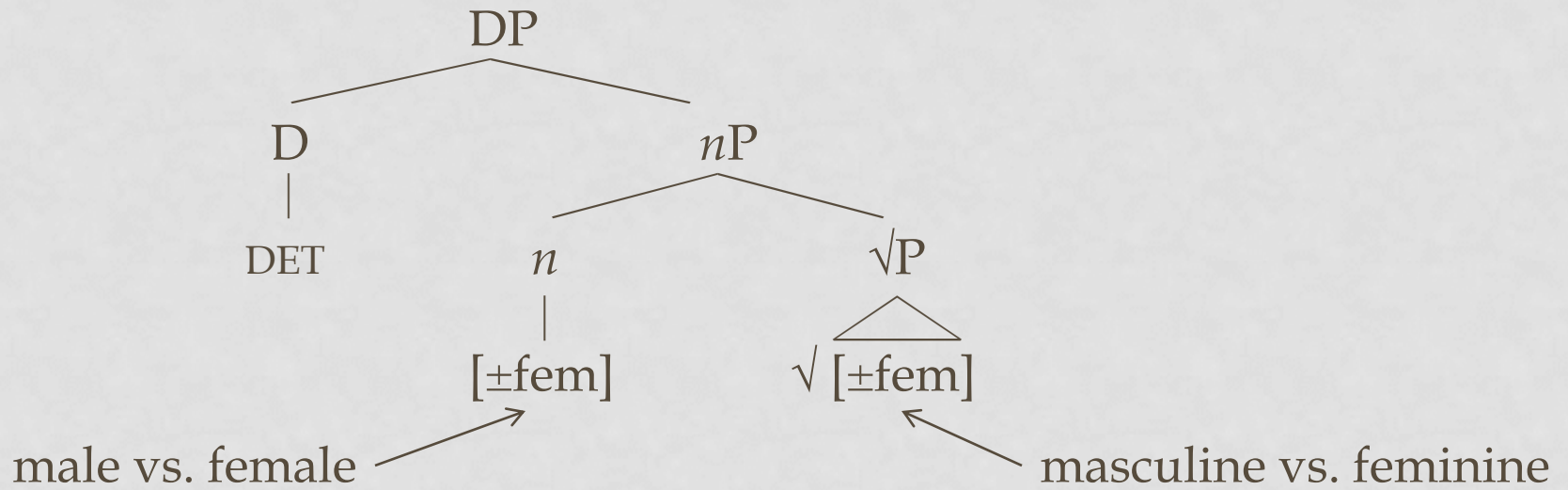
(Badecker 2007; Jones 1996)

(1) Les sentinelles barbues ont été prises (*pris) en otage.

‘The bearded.F.PL sentries were taken.F.PL (*taken.M) hostage.’

(from Wechsler & Zlatić 2003)

II. Snapshot of the Analysis



- Gender represented by 2 features:
 - Feature on the root represents grammatical gender
 - Feature on *n* represents natural sex

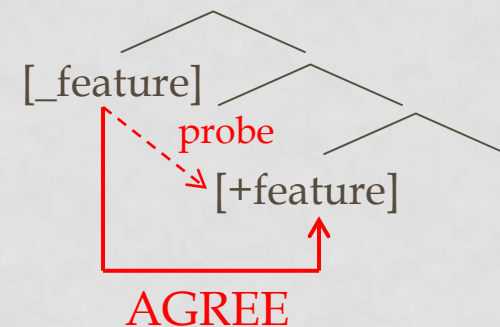
III. Architecture

Structure

- Elements from Distributed Morphology (DM)
 - Lexicon consists of Vocabulary Items that are bundles of features
 - Example: $\left(\begin{array}{l} +1 \\ +\text{PL} \\ +\text{NOM} \end{array} \right) \leftrightarrow [\text{wi}] \text{ 'we'}$
 - Late insertion of VIs
 - Category-neutral roots (\checkmark) are inserted into the lexical heads (e.g., N)
 - Dominated by heads that categorize these roots
 - Nominalizing head = n

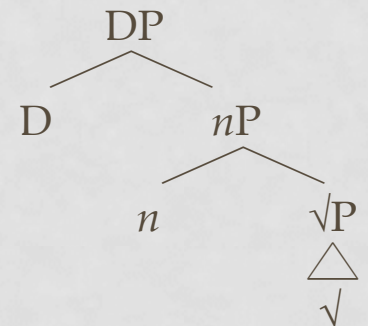
Mechanism

- Actual agreement happens via AGREE
- Unvalued features are probes
 - Probe down the tree to the first valued feature of the same type as the probe
 - Value the feature identically



IV. Kramer (2009)

- Gender features on *n* and the root (both [\pm fem])
 - Root = grammatical gender
 - *n* = natural sex
- Three *n* heads housing features corresponding to sex
 - 1) *n*[+fem] Female Natural Sex
 - 2) *n*[-fem] Male Natural Sex
 - 3) *n* No Natural Sex (Defaults) / Epicenes
- Agreement occurs with highest gender feature
 - Natural sex on *n* unless underspecified
 - Grammatical gender on root otherwise



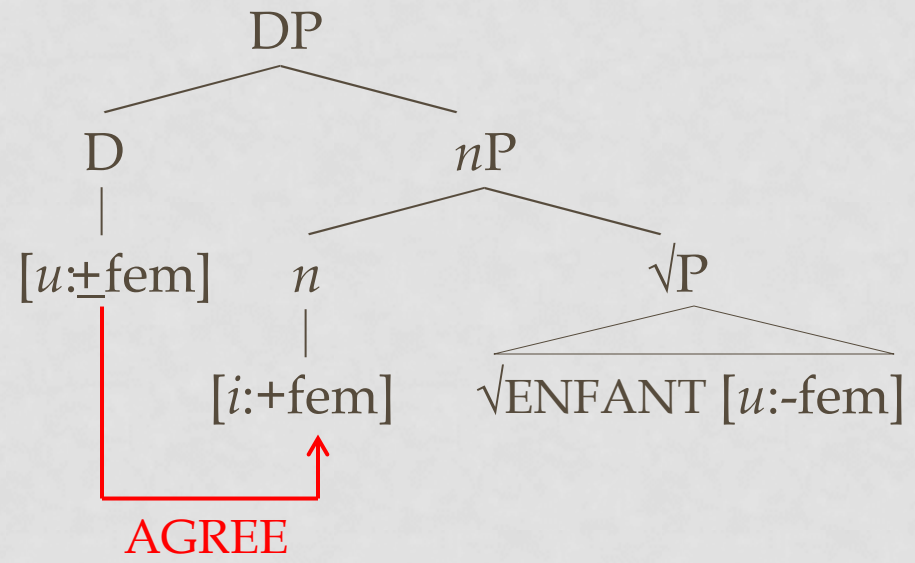
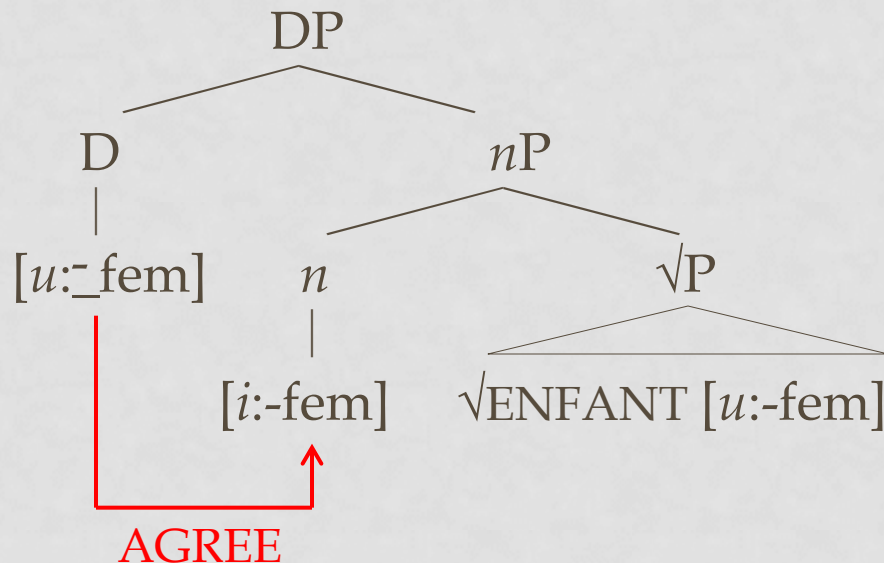
V. Application to French (cont.)

Article Change

- Licensing Rule: All 3 *ns* possible
 - Natural sex expressed (except in default case)

(1) *un enfant* a male child

(2) *une enfant* a female child

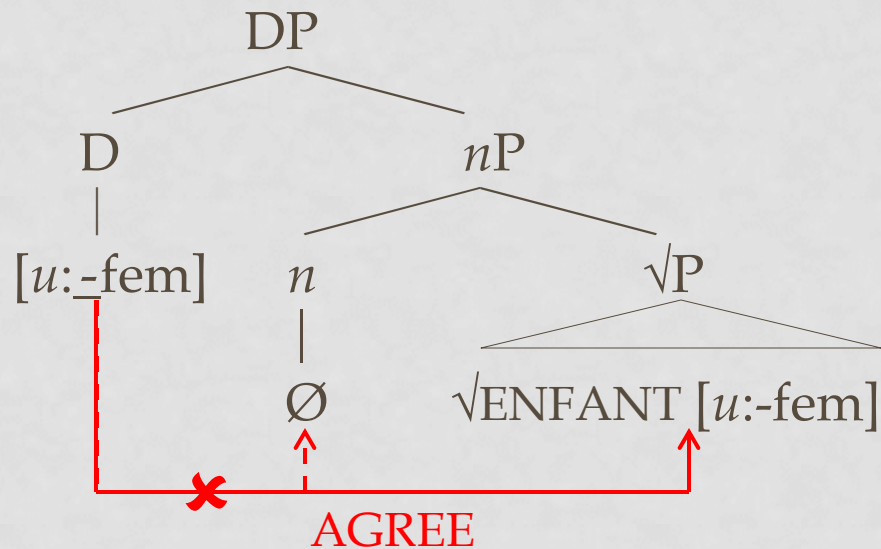


V. Application to French (cont.)

Article Change - Default

- Licensing Rule: All 3 *ns* possible
 - In default case, grammatical gender is expressed

(3) *un enfant* a child



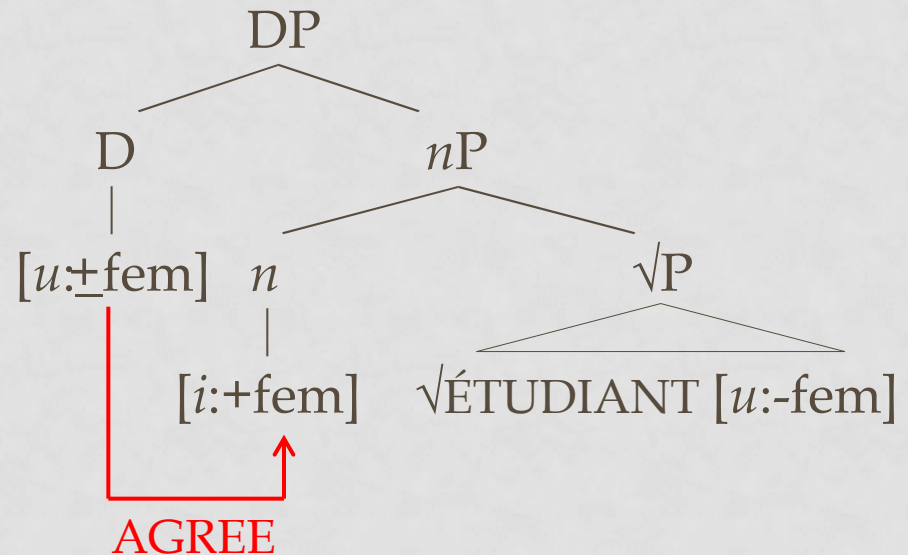
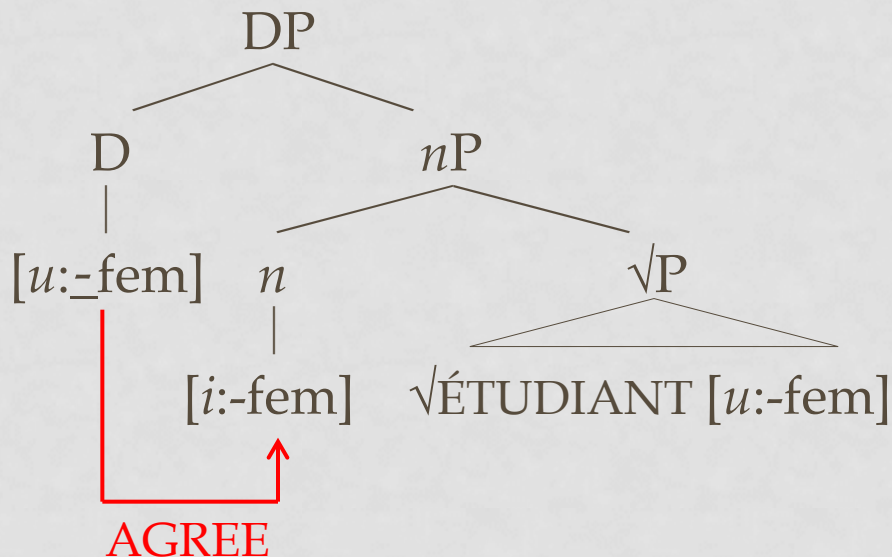
V. Application to French (cont.)

Stem Change

- Licensing Rule: All 3 *ns* possible
 - Natural sex expressed (except in default case)

(4) *un étudiant* a male student

(5) *une étudiante* a female student

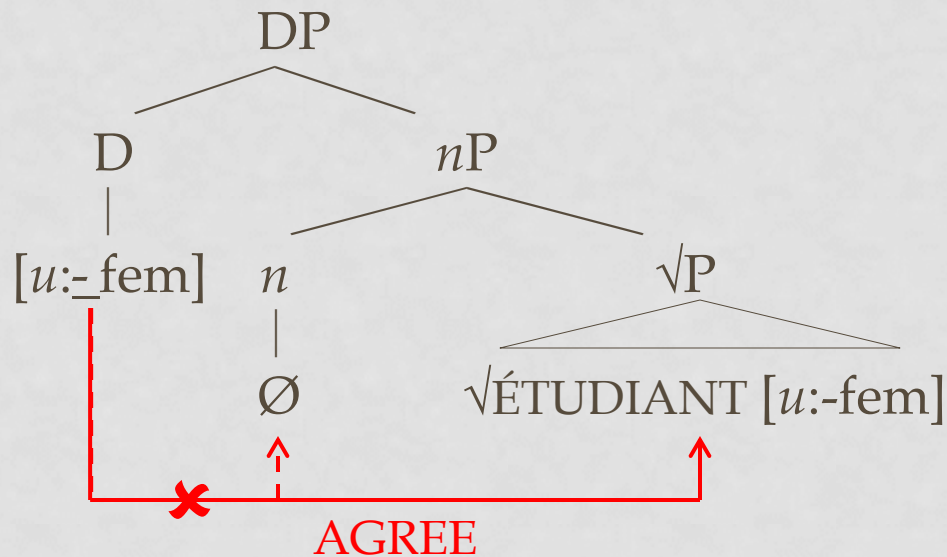


V. Application to French (cont.)

Stem Change - Default

- Licensing Rule: All 3 *ns* possible
 - In default case, grammatical gender is expressed

(6) *un étudiant* a student

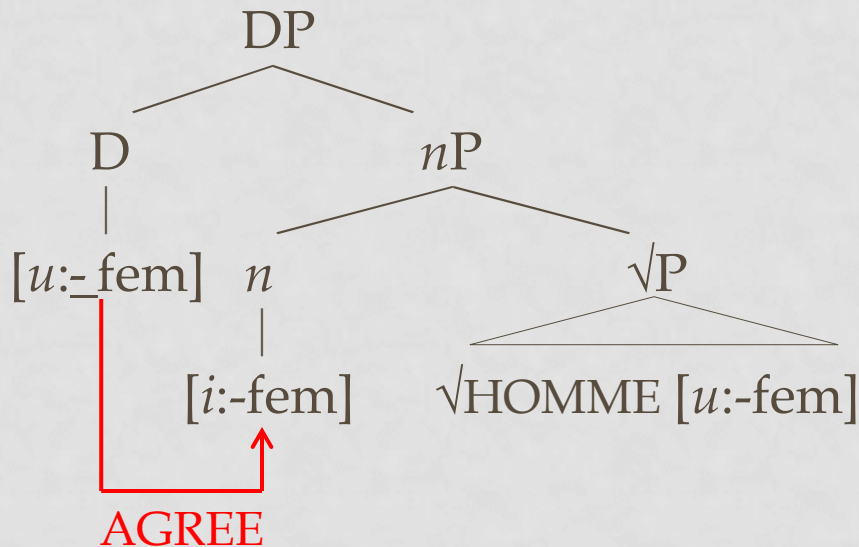


V. Application to French (cont.)

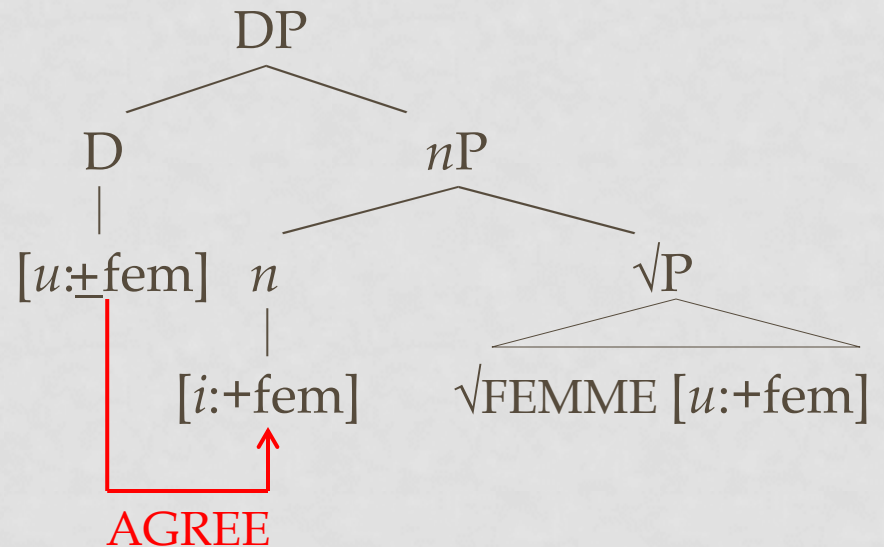
Suppletive Forms

- Licensing Rule: Only *n* matching natural sex (= grammatical gender)
 - Natural sex expressed

(7) *un homme* a man



(8) *une femme* a woman

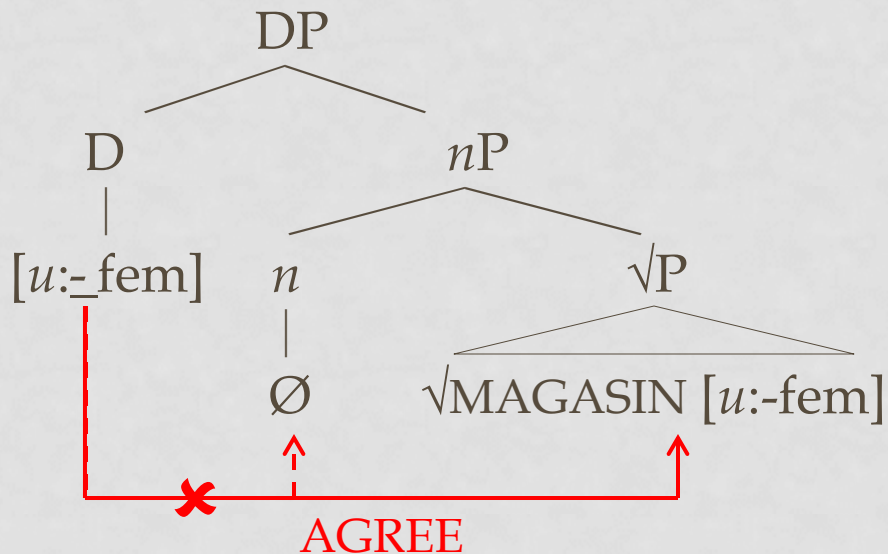


V. Application to French (cont.)

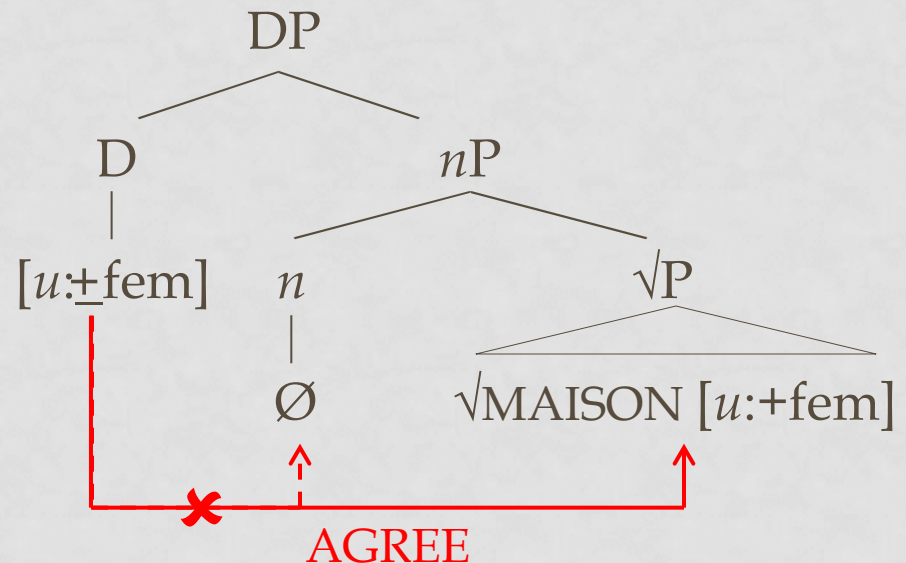
Inanimate Nouns

- Licensing Rule: Only underspecified n
 - Grammatical gender expressed

(9) *un magasin* a store (masc)



(10) *une maison* a house (fem)



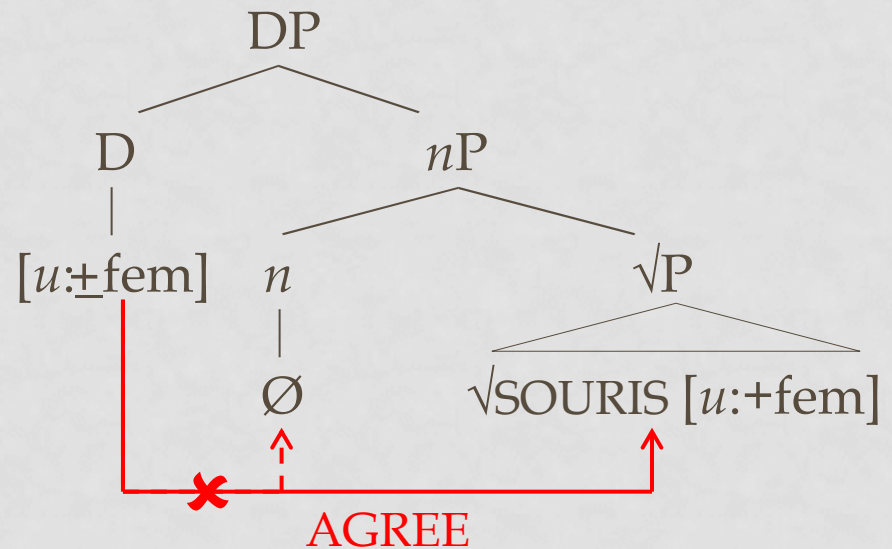
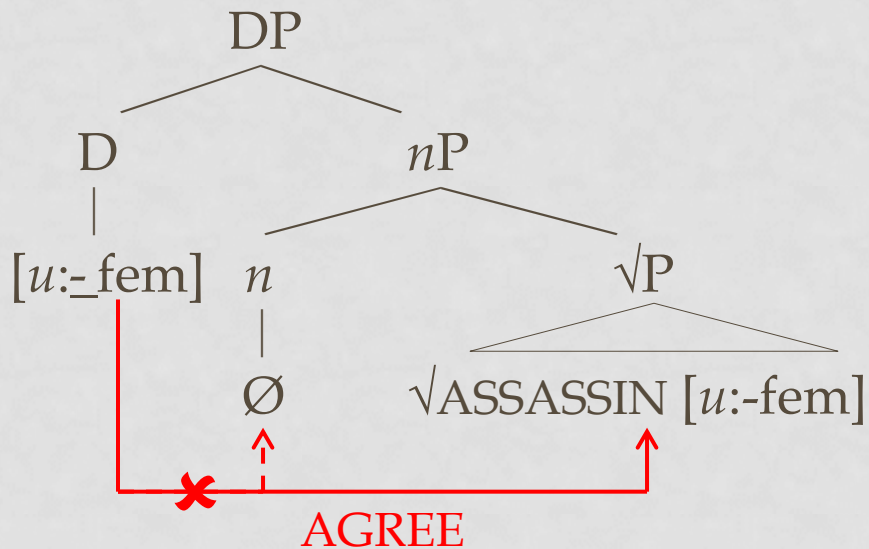
V. Application to French (cont.)

Epicenes

- Licensing Rule: Only underspecified n
 - Grammatical gender expressed; natural sex *cannot* be expressed

(11) *un assassin* an assassin (masc)

(12) *une souris* a mouse (fem)

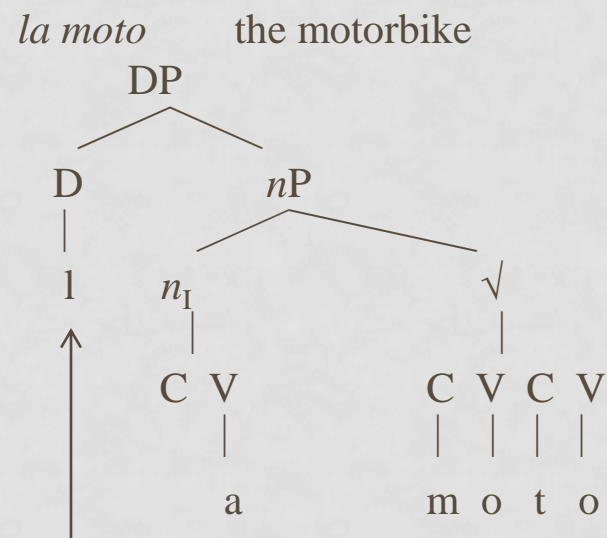


VI. Are two features really necessary?

- Short answer: **Yes!**
- Previous accounts of gender have attempted to use a single feature:
 - Feature on n – Lowenstamm (2008)
 - Feature on the root – Alexiadou (2004)
- Both fail to account for a subset of the French data.

VI.i Feature on *n* (Lowenstamm 2008)

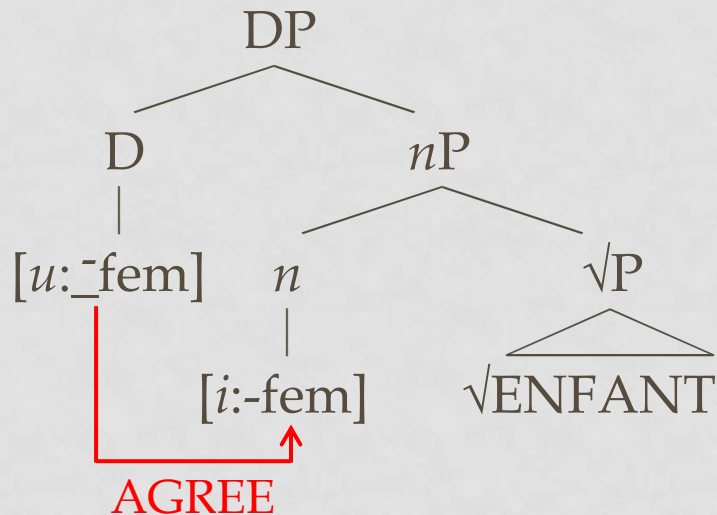
- Gender feature on nominalizing head (i.e., *n*)
 - Based on observations of final vowel patterns in French
 - One head for each gender (i.e., [-fem] & [+fem] heads)
- Assumes functional categories *must* have phonological content
 - [+fem] = CV shell with [a] in vowel slot
 - [-fem] = empty CV shell
 - Default vowel inserted



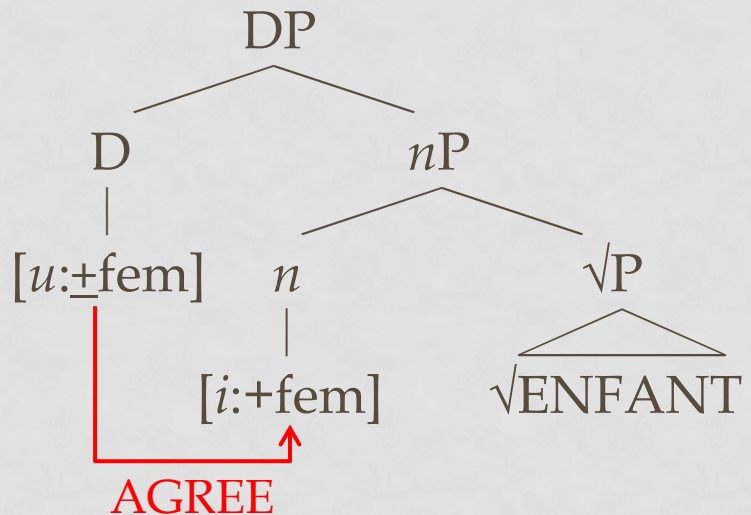
VI.i Feature on *n* (cont.)

- Simplifying theory to feature on *n* head (no CV shell)

(1) *un enfant* a male child



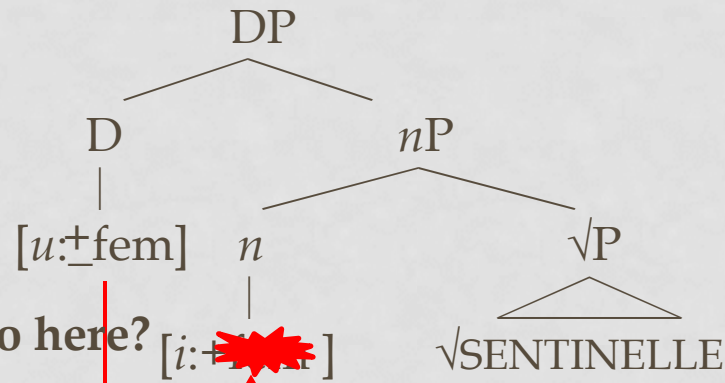
(2) *une enfant* a female child



VI.i Feature on *n* (cont.)

- Problems:
 - Designed to account for inanimates with related roots, but does not easily extend to animates
 - Limiting to two *n* heads means sex & gender must be conflated
 - 1) *n*[+fem] Female Sex / Feminine Gender
 - 2) *n*[-fem] Male Sex / Masculine Gender
 - Sex & gender do not always pattern in this way (i.e., epicenes).

(3) *une sentinelle* a ~~sentinelle~~ sentry



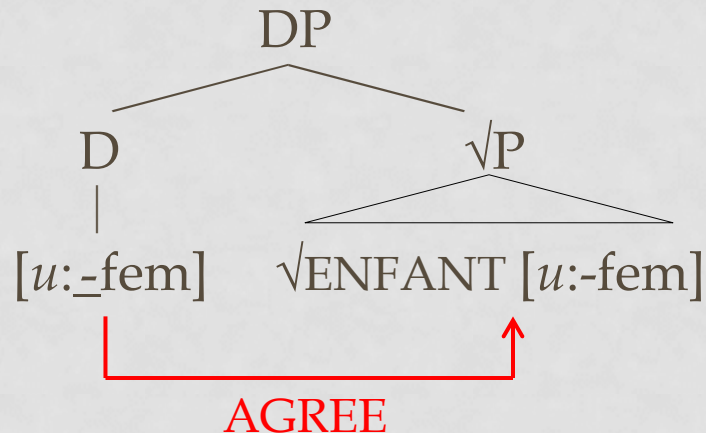
Which feature should go here?

AGREE

VI.ii Feature on the root (Alexiadou 2004)

- Gender determined in two ways...
 - 1) Feature on the noun stem
 - 2) Agreement with a discourse referent (i.e., natural sex)
- Based on adjectival agreement in Spanish, Italian, Greek, & Hebrew

(1) *un enfant* a male child

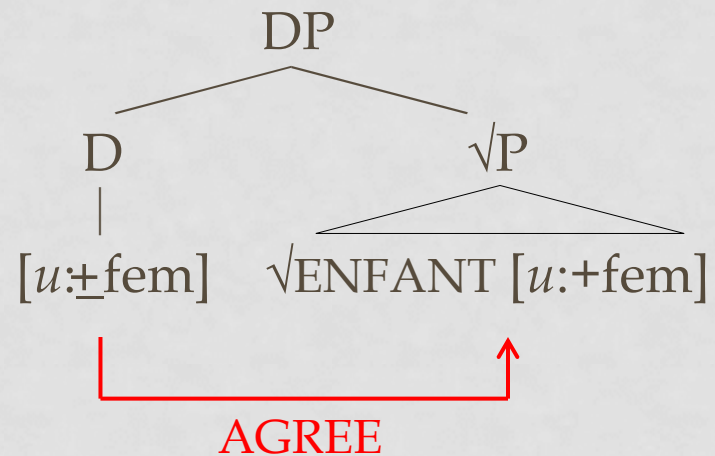
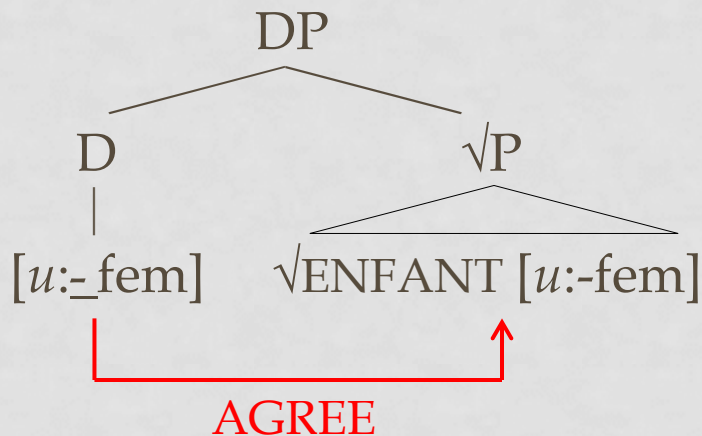


VI.ii Feature on the root (cont.)

- Problems:
 - No procedure for agreement with discourse referent
 - Article change nouns (e.g., *enfant*) & stem change nouns (e.g., *un chat* vs. *une chatte*)
 - Require two lexical entries: $\sqrt{\text{ENFANT}} [-\text{fem}]$; $\sqrt{\text{ENFANT}} [+fem]$
 - Potential to generate the wrong form in the default case

(2) *un enfant* a child

(3) *une enfant* a female child



VI. Conclusions

- None of the theories of gender that posit a single feature (feature on the root, feature on n) account for all of the French data.
- Although formulated in response to Amharic data, only Kramer's theory – a gender feature on n & the root – covers the entire French paradigm.
 - Feature on n → natural sex
 - Feature on root → grammatical gender
- This approach is successful for two very different languages – French (Romance) & Amharic (Afroasiatic) – which suggests this may be a general solution to the problem of gender representation.

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Musings about Stem Change Nouns

- Lowenstamm's full proposal includes procedures for generating nouns with similar, related stems by including additional phonological content in n
 - Relates *la balle* 'the ball' and *le ballon* 'the balloon'
 - Claims they have a common stem, along the lines of *ball-*
 - The ending is a realization of n after left adjoining the noun stem
- Though may not be quite right, may be able to be adapted for stem change nouns.
 - Change to stem in female form generated as phonological content in n and affixed to stem

Licensing Rules Summary

- Licensing rules – ensure that certain nouns merge with certain *ns*
 - Inanimates – underspecified *n*
 - Grammatical gender expressed
 - Suppletive forms – *n* matching natural sex
 - Natural sex expressed
 - Stem change – all 3 *ns*
 - Natural sex expressed except in default case
 - Open question: Where does the change to the stem originate?
 - Article change – all 3 *ns*
 - Natural sex expressed except in default case
 - Epicenes – underspecified *n*
 - Grammatical gender expressed without concern for natural sex

Agreement with Discourse Referent

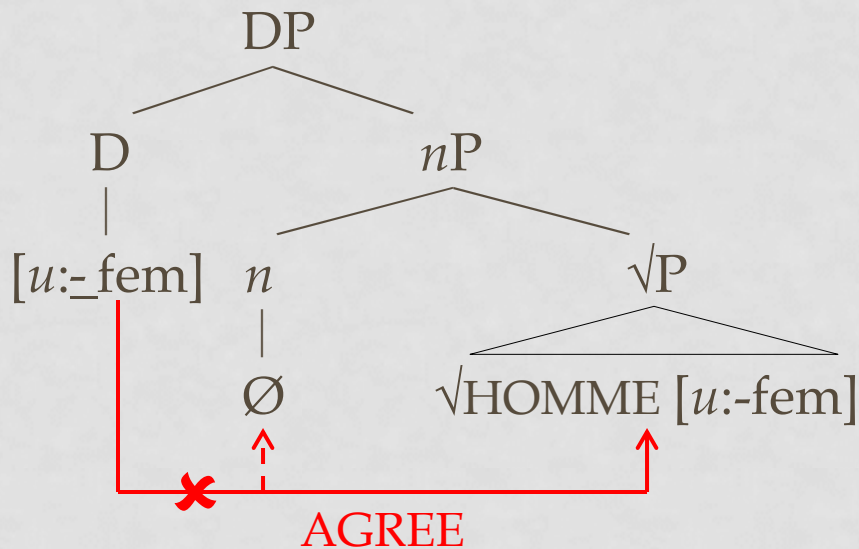
- Natural sex in this analysis could be construed as agreement with a discourse referent.
 - Epicenes - Strict agreement with grammatical gender can be 'overridden' provided enough context.

- (1) Le mannequin et sa maquilleuse sont assises (*assis) dans le coin.
'The fashion model & her make-up artist are sitting.F.PL (*sitting.M) in the corner.'
- (2) La sentinelle et sa femme ont été pris (*prises) en otage.
'The sentry and his wife were taken.M (*taken.F.PL) hostage.'

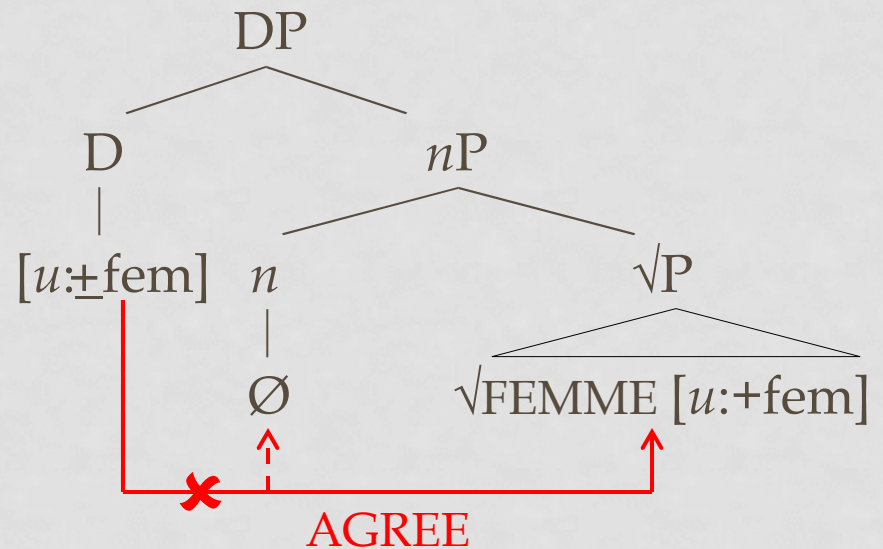
(Wechsler and Zlatić 2003)

Suppletive Forms - Alternate Analysis

(7b) *un homme* a man



(8b) *une femme* a woman



- Licensing Rule: Only underspecified *n*
 - Grammatical gender (= natural sex) expressed

Gender Projection (Picallo 1991)

- Gender feature heads its own projection (GenP)
 - Dominates NP and is dominated by NumP
- Based on phonological realization of gender in Catalan
- Problems:
 - Not semantically or syntactically necessary
 - Independent projections can only be headed by features with semantic meaning (Chomsky 1995; Alexiadou 2004)
 - Gender of a noun does not affect its semantics
 - Argued not to drive purely syntactic operations (i.e., movement or agree in the purely Chomskian (2001) sense)
 - Not always phonologically distinct element