

Representing declension classes

Language-specific groupings of pronunciations
(*libr, man, -ism*) (pall, -ess) (*chiav, fior, -ant*)
that trigger a shared set of inflectional allomorphs,
(-o sg, -i pl) (-a sg, -e pl) (-e sg, -i pl)
which are apparently irrelevant to syntax.

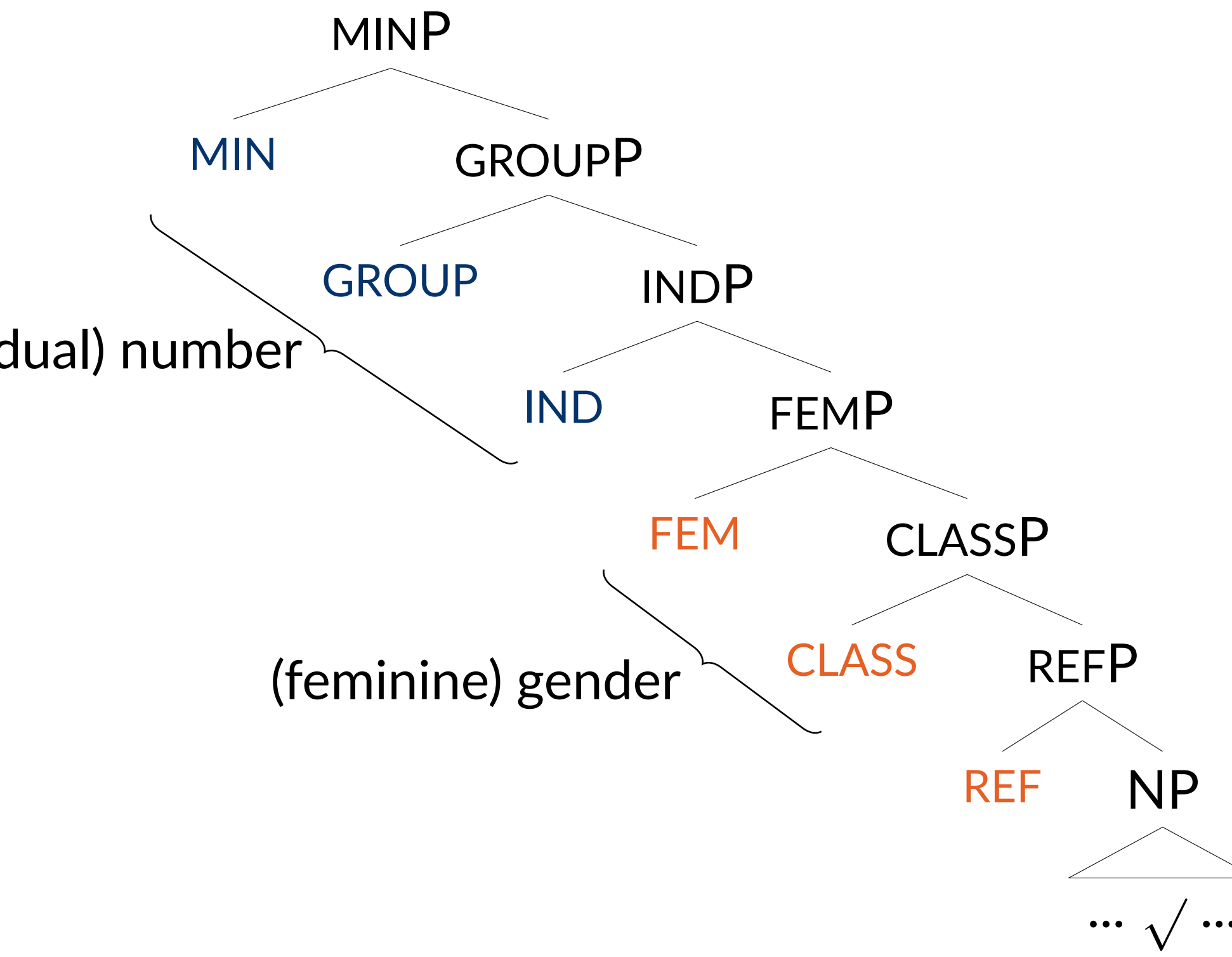
Should declension classes be modeled as:

- meaningless, language-specific
→ (syntactically identical allomorphs sensitive to) diacritic properties of other Vocabulary Items?
(Harley & Blanco 2013; Gouskova & Bobaljik 2022; i.a.)
- necessarily drawn from a language-invariant set
→ syntactically differentiated lexical entries?
(Caha 2021a,b; Janků 2022)

...without declension features?

Nanosyntactic ingredients (Caha 2021a,b):

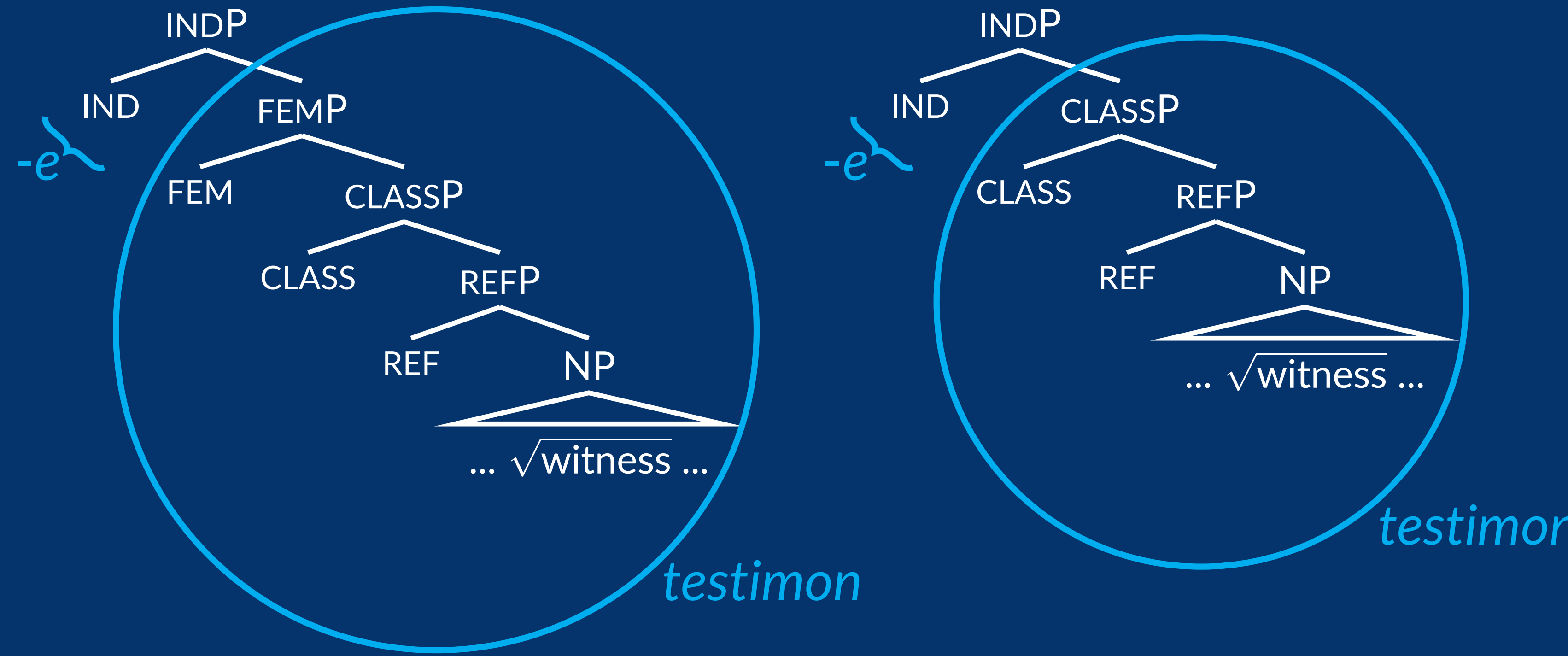
- **additional syntactic material** between Root and number (the inflectional material that actually varies for class)



- **contrastively present** (privative) FEM gender feature
- **phrasal spellout**, allowing lexical entries for pronouncing stems and affixes of different classes to “trade off” that additional syntactic material

⇒ If gender is the **highest notch** before inflectional region, all but one set of declensions will **bake in / be restricted to a single gender**

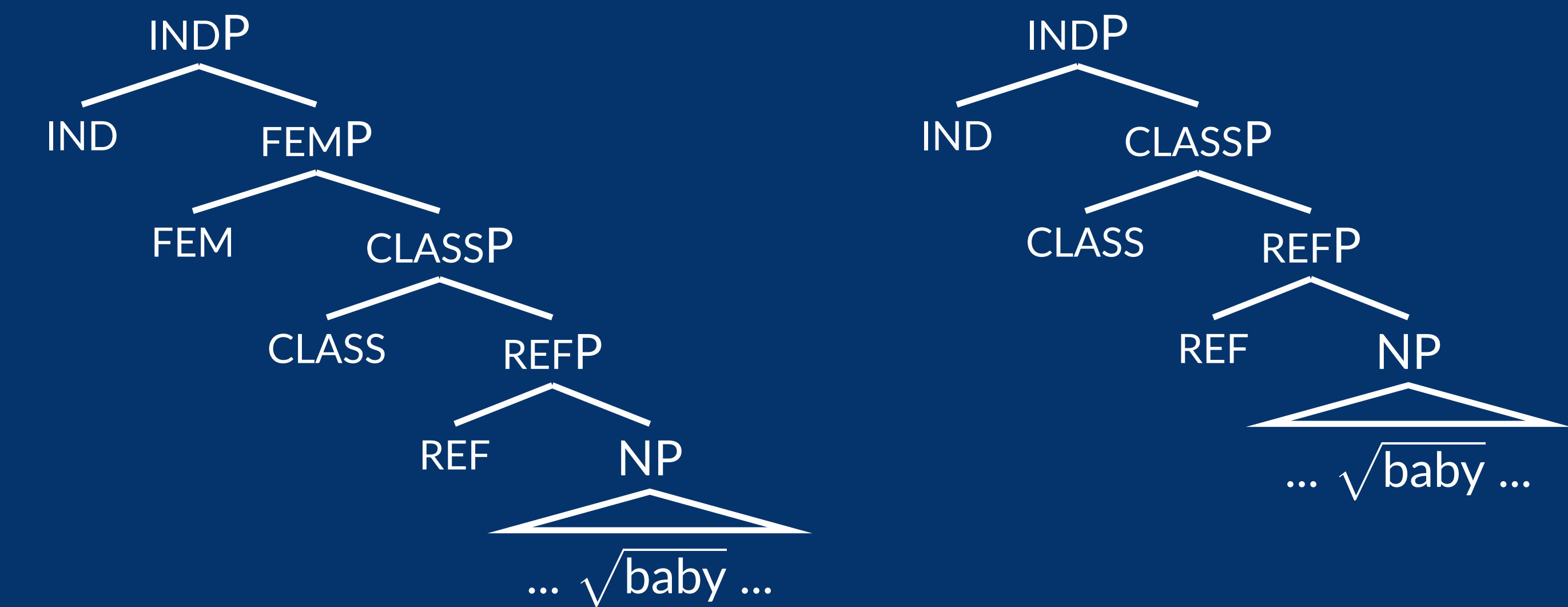
Nanosyntax predicts that each language can only have one declension class containing gender doublets.



Class III feminine singular
la testimon-e ‘the witness (woman)’
la fin-e ‘the end (conclusion)’
la noc-e ‘the walnut’

Class III masculine singular
il testimon-e ‘the witness (man)’
il fin-e ‘the aim (end, purpose, goal)’
il noc-e ‘the walnut tree’

But (even) Italian has two.



Class VI (indeclinable) feminine singular/plural
la/le baby ‘the baby (girl(s))’
la/le lanciarazzi ‘the flaregun(s)’
la/le auto ‘the car(s)’
la/le gravel ‘the mountain bike(s)’

Class VI (indeclinable) masculine singular/plural
il/i baby ‘the baby (boy(s))’
il/i lanciarazzi ‘the rocketlauncher(s)’
il/i auto ‘the bus(es)’
il/i gravel ‘the mountain bike competition(s)’

Italian gender & class possibilities:

numero	def	Example root / stem	masculine (ll / l)	feminine (la / le)	ambigeneric (ll / le)
✓	✓	✓ball ↔ /ball/	sg / pl	1 -o / e	sg / pl
✓	✓	✓book ↔ /libr/		II -o / e	
✓	✓	✓youth ↔ /ragazz/		II -o / e	
✗	✓	✓hand ↔ /man/		II -o / e	
✓	✓	✓flower ↔ /fior/		III -e / i	
✓	✓	✓key ↔ /chiav/		III -e / i	
✓	✓	✓witness ↔ /testimon/		III -e / i	
✓	✓	✓(land)lord ↔ /padron/		III -e / i	
✓	✓	✓problem ↔ /problem/		IV -a / i	
✓	✓	✓weapon ↔ /arm/		IV -a / i	
✓	✓	✓poet ↔ /poet/		IV -a / i	
✓	✓	✓film ↔ /film/		VI -o / e	
✓	✓	✓jeep ↔ /džip/		VI -o / e	
✗	✓	✓baby ↔ /bebbi/		VI -o / e	
✗	✓	✓finger ↔ /džir/		VI -o / e	
✓	✓	✓arm ↔ /bracci/		II -o / e	

Lexicalization tables:

(Italian in the spirit of Caha 2021a,b for Russian)

fixed gender roots

feminines

fem. Class I	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*ball' F, SG	pall		a				
*ball' F, PL	pall			e			
*ball' F, DU	pall						
fem. Class III	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*key' F, SG	chiav			e			
*key' F, PL	chiav				i		
*key' F, DU	chiav						i
fem. Class VI	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*jeep' F, SG	džip						
*jeep' F, PL	džip						
*jeep' F, DU	džip						

masculines

masc. Class II	xNP	REF	CLASS	IND	GROUP	MIN
*book' M, SG	libr		o			
*book' M, PL	libr			i		
*book' M, DU	libr					i
masc. Class III	xNP	REF	CLASS	IND	GROUP	MIN
*flower' M, SG	fior			e		
*flower' M, PL	fior				i	
*flower' M, DU	fior					i
masc. Class IV	xNP	REF	CLASS	IND	GROUP	MIN
*problem' M, SG	problem		a			
*problem' M, PL	problem			i		
*problem' M, DU	problem					i
masc. Class VI	xNP	REF	CLASS	IND	GROUP	MIN
*film' M, SG	film					
*film' M, PL	film					
*film' M, DU	film					

different gender, same root (doublets)

Il masc / I fem

masc. Class II	xNP	REF	CLASS	IND	GROUP	MIN
*youth' M, SG	ragazz		o			
*youth' M, PL	ragazz			i		
*youth' M, DU	ragazz					i

fem. Class I	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*youth' F, SG	ragazz		a				
*youth' F, PL	ragazz			e			
*youth' F, DU	ragazz					e	

IV masc / I fem

masc. Class IV	xNP	REF	CLASS	IND	GROUP	MIN
*poet' M, SG	poet		a			
*poet' M, PL	poet			i		
*poet' M, DU	poet					i

fem. Class I	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*poet' F, SG	poet		a				
*poet' F, PL	poet			e			
*poet' F, DU	poet					e	

III masc / I fem

masc. Class III	xNP	REF	CLASS	IND	GROUP	MIN
*'(land)lord' M, SG	padron			e		
*'(land)lord' M, PL	padron				i	
*'(land)lord' M, DU	padron					i

fem. Class I	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*'(land)lady' F, SG	padron		a				
*'(land)lady' F, PL	padron			e			
*'(land)lady' F, DU	padron					e	

III masc / III fem

masc. Class III	xNP	REF	CLASS	IND	GROUP	MIN
*witness' M, SG	testimon			e		
*witness' M, PL	testimon				i	
*witness' M, DU	testimon					i

fem. Class III	xNP	REF	CLASS	FEM	IND	GROUP	MIN
*witness' F, SG	testimon			e			
*witness' F, PL	testimon				i		
*witness' F, DU	testimon					i	

