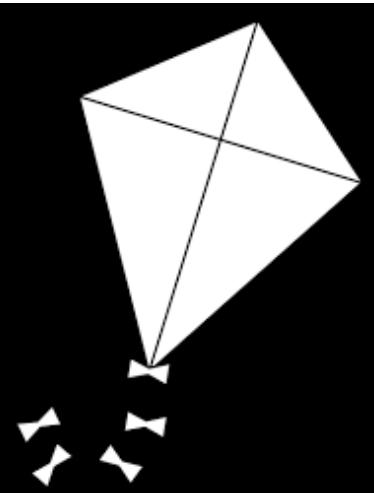
Jolijn Sonnaert
KU Leuven – Brussels Campus
OG ComForT – CRISSP
jolijn.sonnaert@kuleuven.be



Limitations on Concept Formation for Person

In Personal Pronouns

Outline

1. The Atoms of Person
2. The Concept Formation Constraint
3. Conclusion
4. Questions

1. The Atoms of Person

- The atoms of person:
  1, 2, 3: sp, hr, non-part (Dutch)

	sg		pl	
1	ik	sp	wij	sp +associates
2	jij	hr	jullie	hr +associates
3	hij, zij, het	non-participant	zij	non-participant +associates

- Problem: inclusive (Marquesan Cablitz 2006)

	sg		pl	
INCL			ta-tou	sp+hr (+associates)
1	au	sp	ma-tou	sp +associates
2	koe	hr	ko-tou	hr +associates
3	ia	non-part	a-tou	non-part +associates

Question: WHAT is the inclusive?

- Semantics: group consisting of SP & HR
- Morphology:
  - Most often morphologically independent (80%) (Daniel 2005)

    E.g. Tümpisa Shoshone (Dayley 1989)

	sg	pl
INCL		ta-mmü
1	nü	nü-mmü
2	ü	mü-mmü
3	(Demonstratives)	

– Otherwise: related to 1st (and 2nd)

E.g. Quechua (Adelaar 1977)

	sg	pl
INCL		nuxa-ñči(k)
1	nuxa	nuxa:-guna
2	xam	xam-guna
3	pay	pay-guna

– NOT a plural of 1st

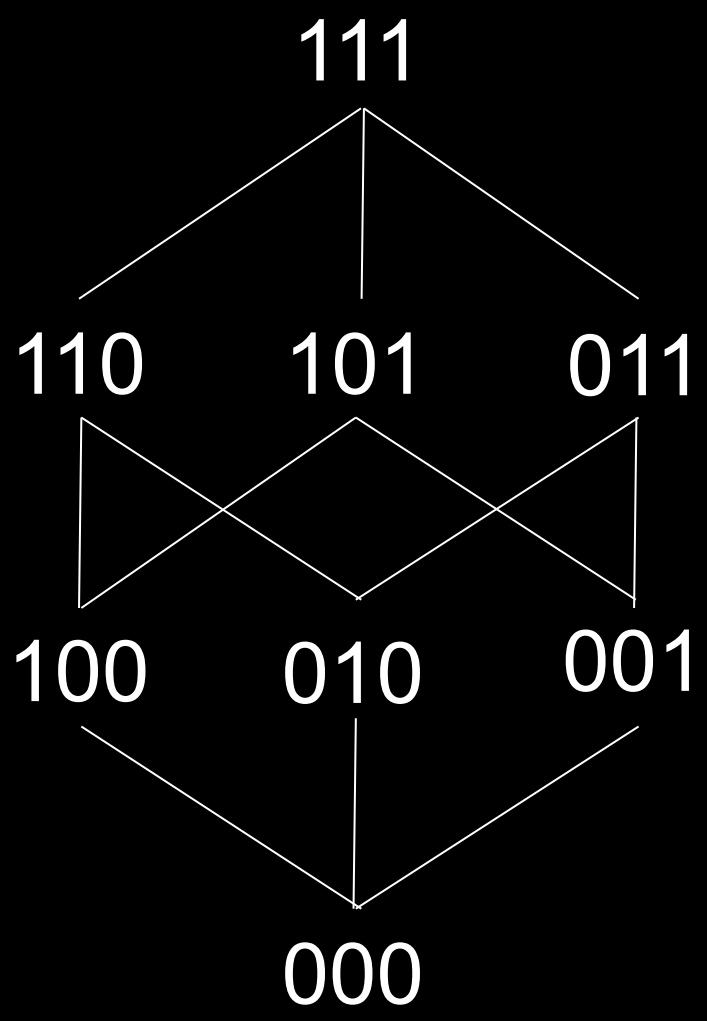
– NOT an extra dimension similar to number

Question: INCL as an atom of person?

Solution:

- Atoms for 1, 2, 3
- Represented as bitstrings
- In Hasse Diagram

(Smessaert 2009, Jaspers 2012)



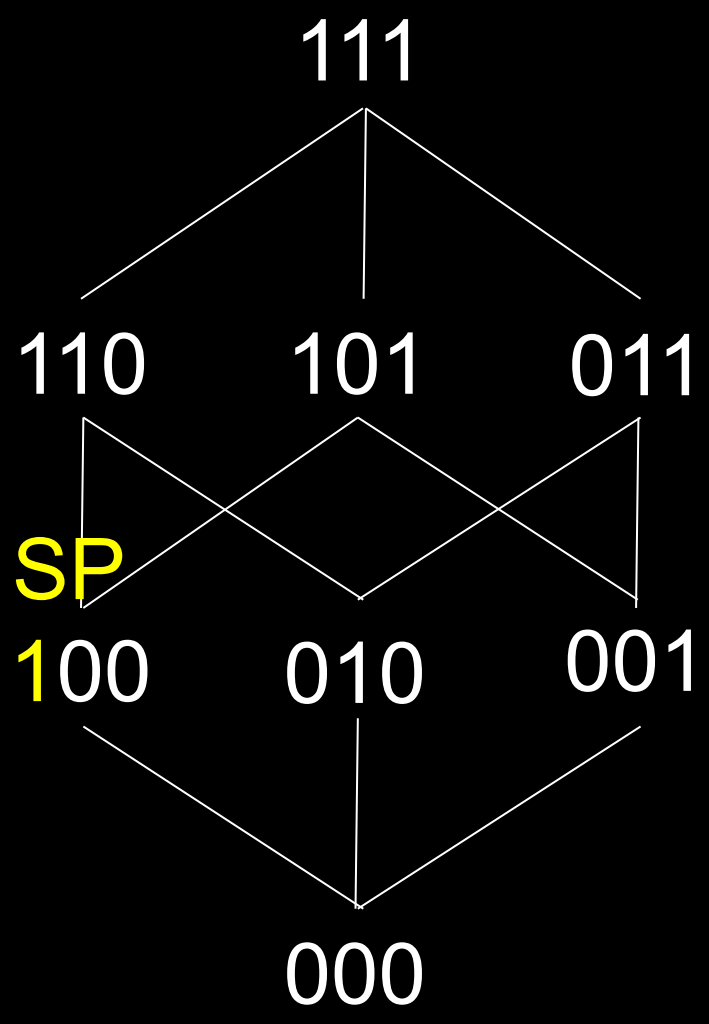
Universe

Level 2

Level 1

Bottom

1st person



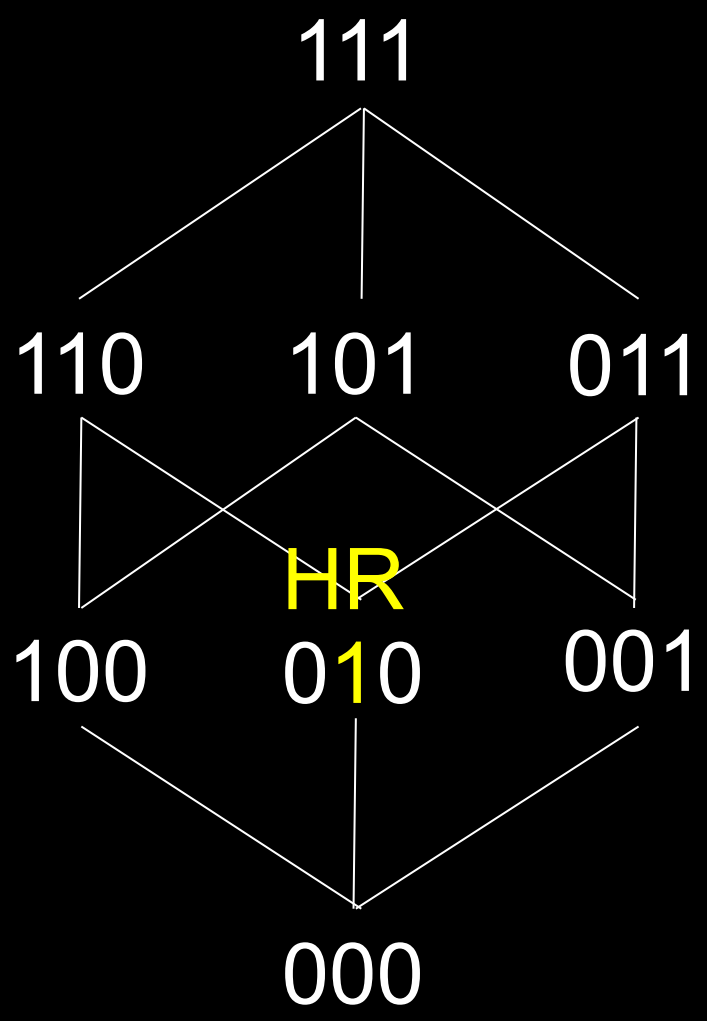
Universe

Level 2

Level 1

Bottom

2nd person

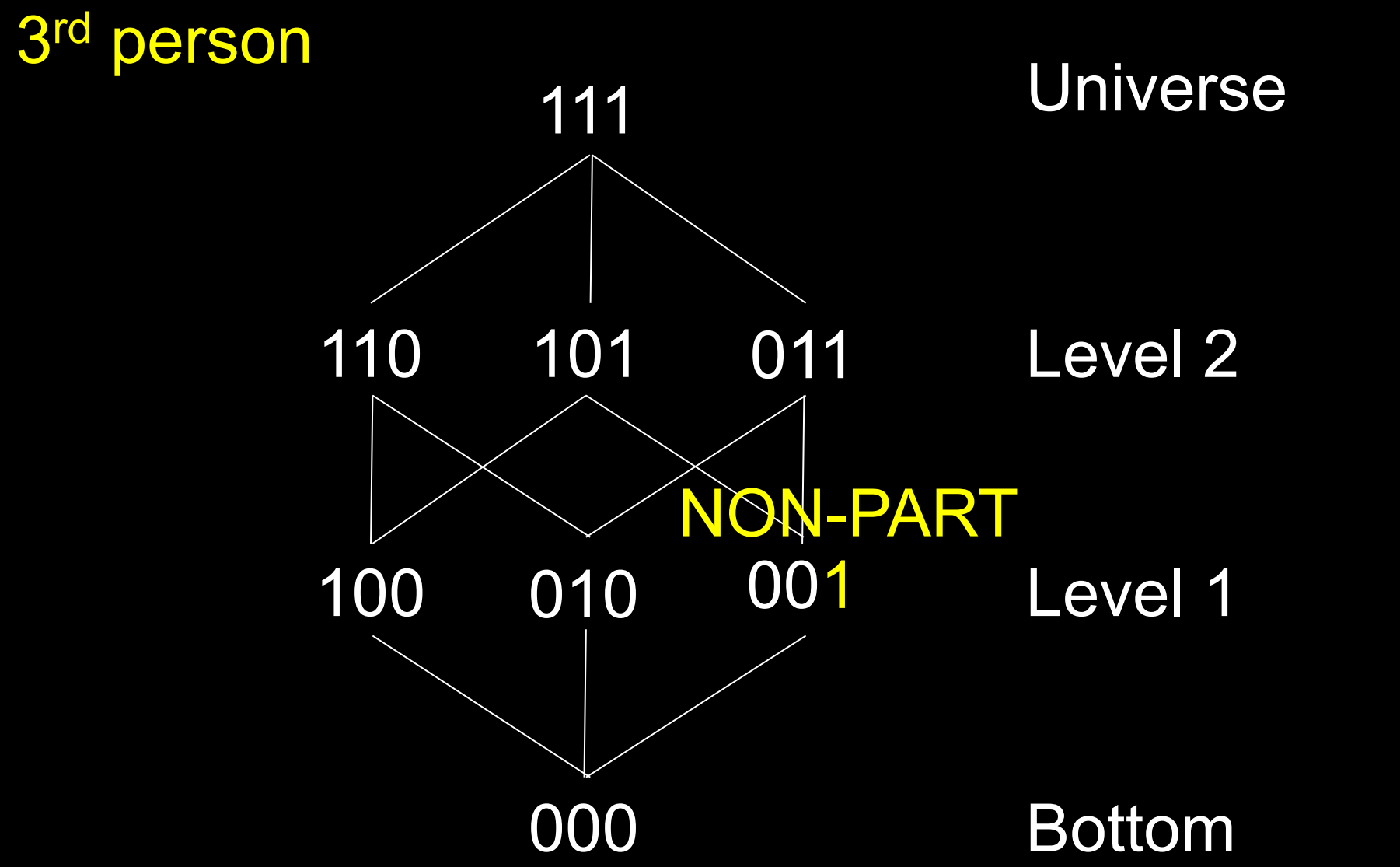


Universe

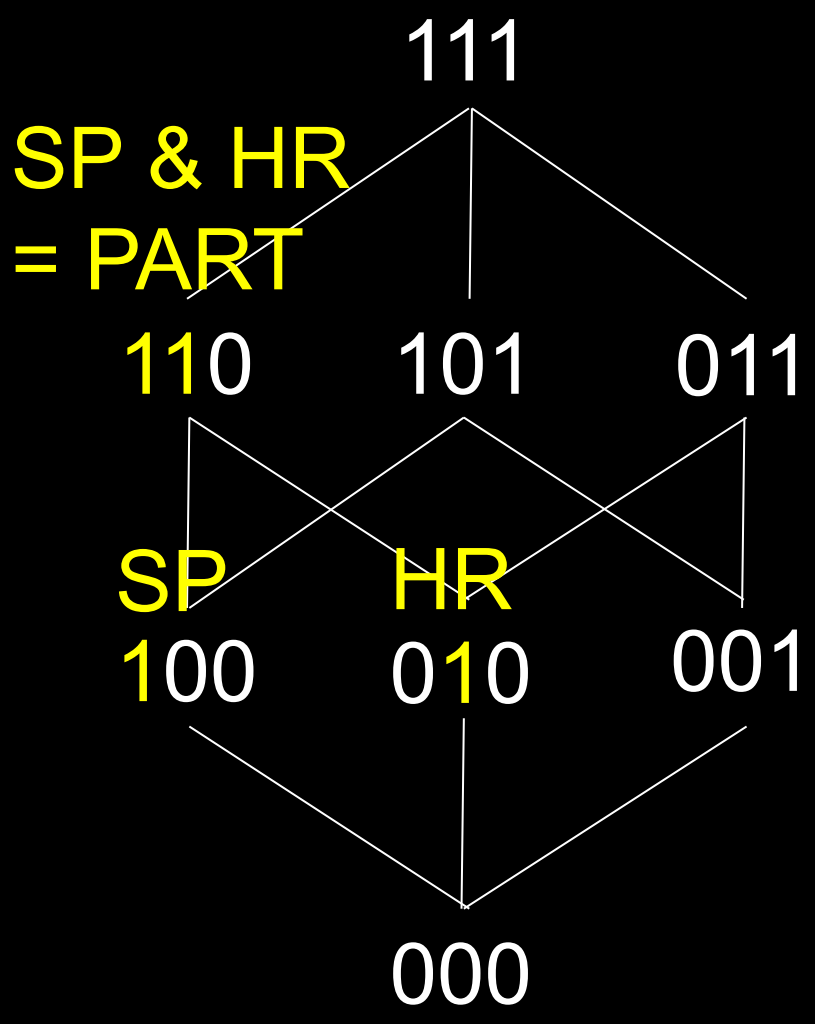
Level 2

Level 1

Bottom


3rd person
111
Universe
110
101
011
Level 2
NON-PART
100
010
001
Level 1
000
Bottom

Inclusive

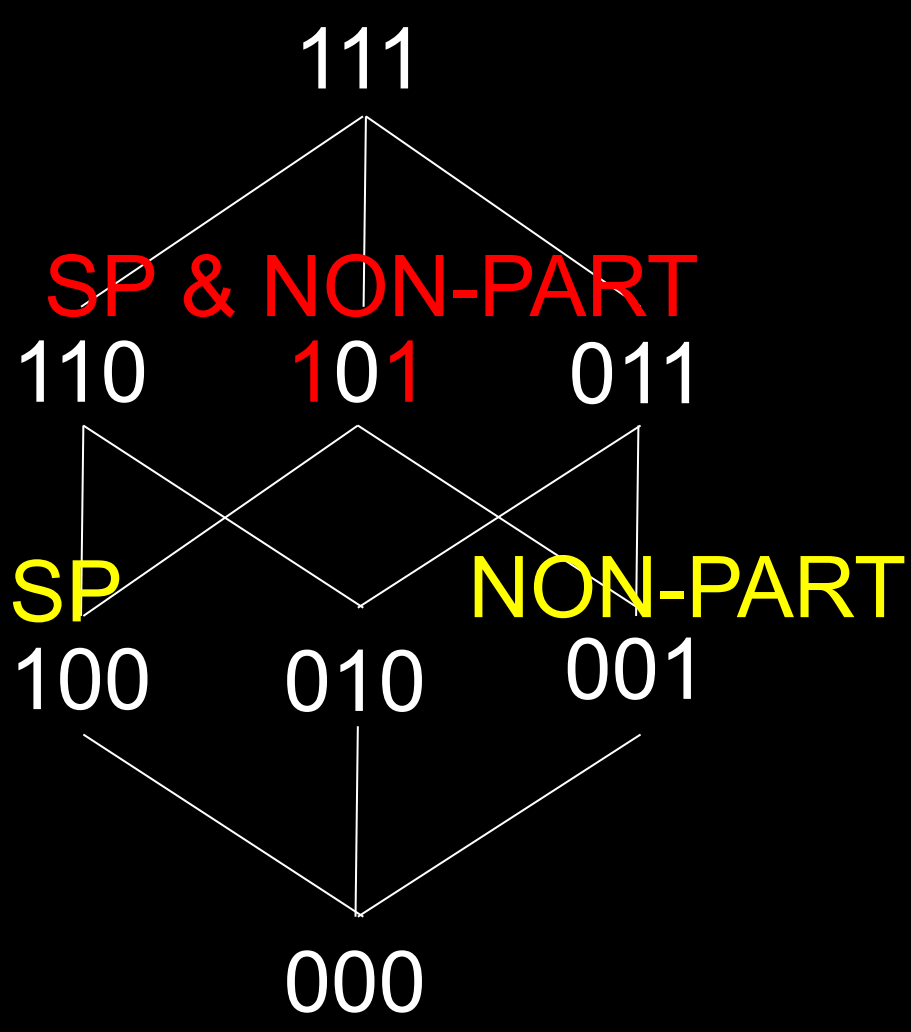


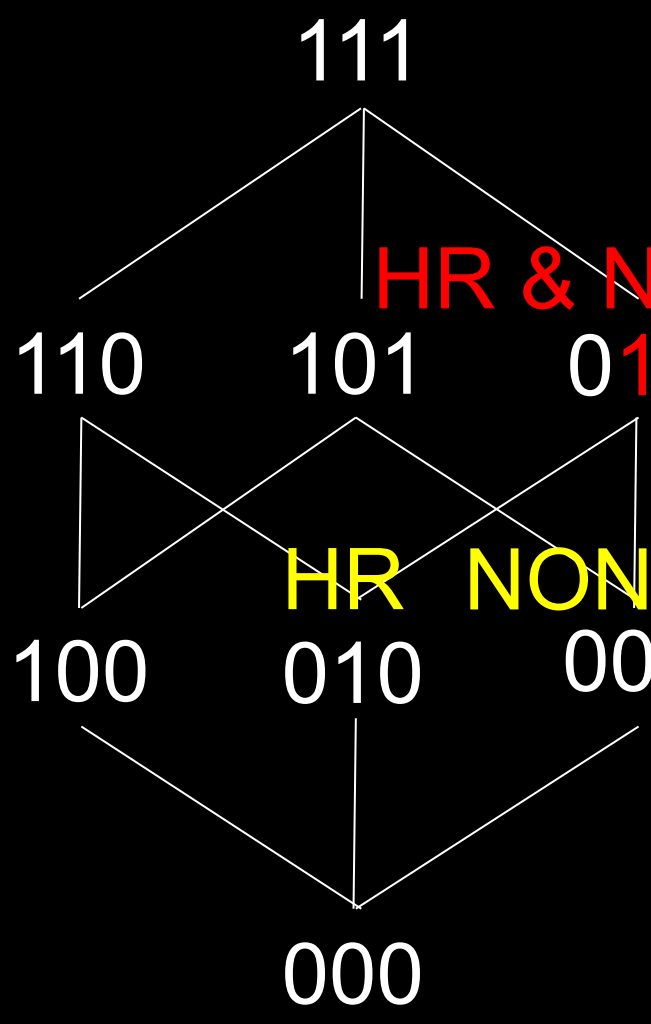
Universe

Level 2

Level 1

Bottom


111
Universe
SP & NON-PART
110
101
011
Level 2
SP
NON-PART
100
010
001
Level 1
000
Bottom

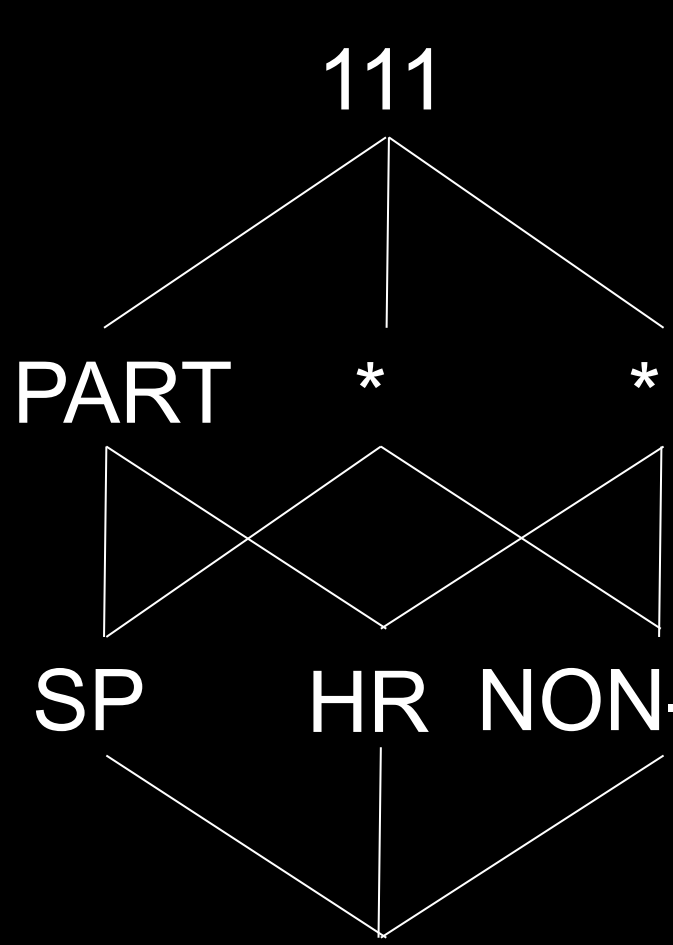


Universe

Level 2

Level 1

Bottom



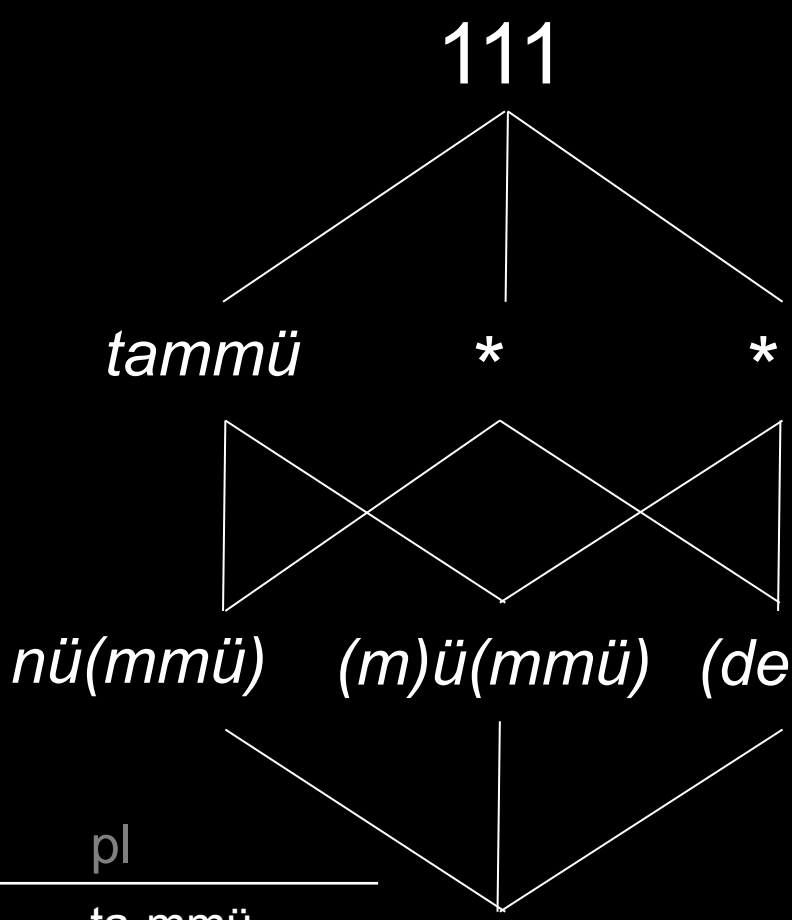
Universe

Level 2

Level 1

Bottom

E.g. Tümpisa Shoshone



Universe

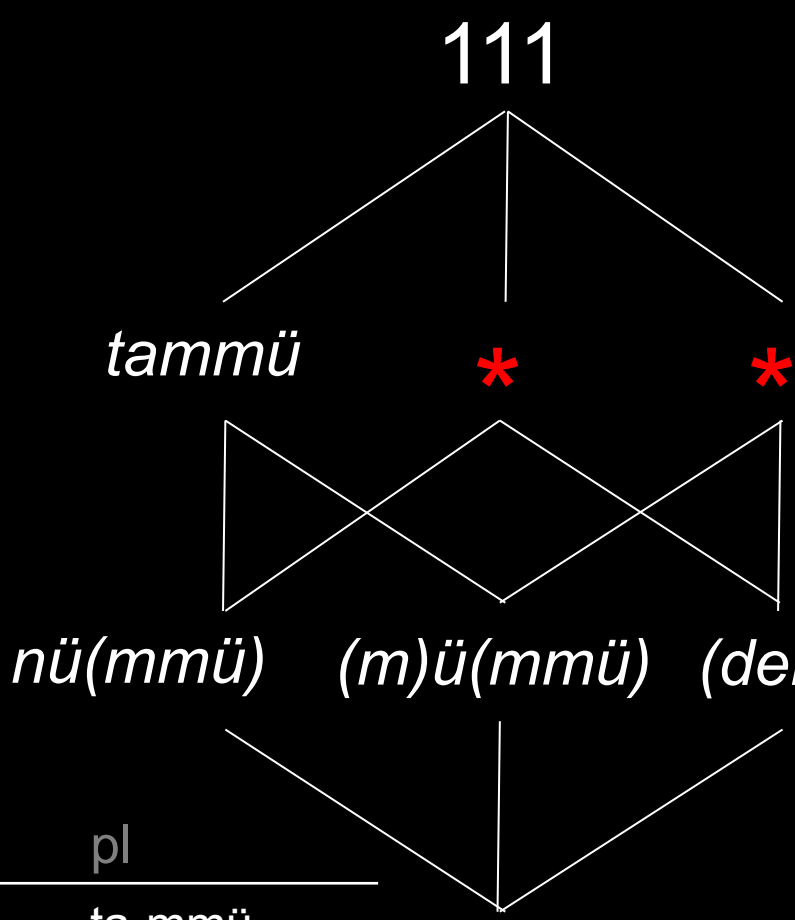
Level 2

Level 1

Bottom

	sg	pl
INCL		ta-mmü
1	nü	nü-mmü
2	ü	mü-mmü
3	(Demonstratives)	

E.g. Tümpisa Shoshone



Universe

Level 2

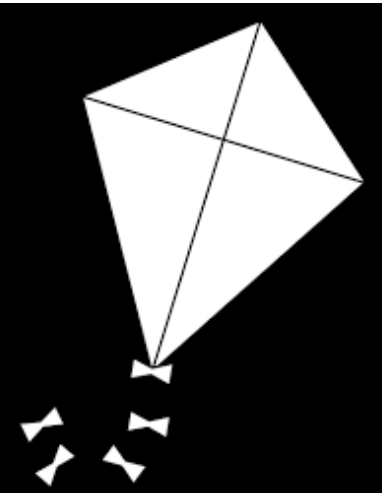
Level 1

Bottom

	sg	pl
INCL		ta-mmü
1	nü	nü-mmü
2	ü	mü-mmü
3	(Demonstratives)	

Question:
Why are other combinations of the atoms of person unlexicalised?

Solution:
The Concept Formation Constraint in the kite framework



2. Concept Formation Constraint

2.1. The Kite Framework
2.2. Claim
2.3. A Mereology
2.4. Deriving the Person Kite
2.5. The Unlexicalised Combinations

2.1. The Kite Framework

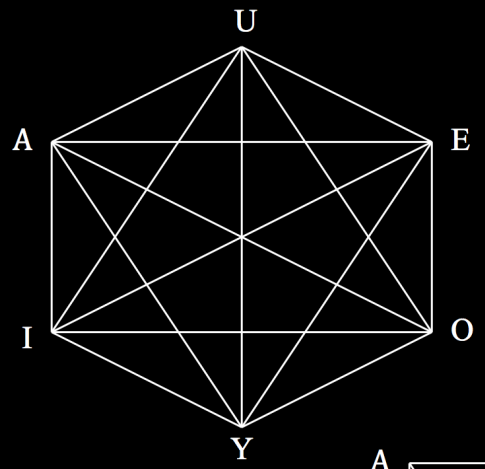
Lexicalisation in certain closed lexical fields is restricted by a concept formation constraint (Jaspers 2012, Seuren & Jaspers 2014):

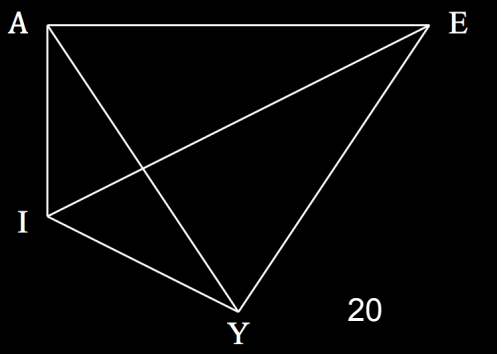
- Logical hexagon

  (Jacoby, Sesmat, Blanché)

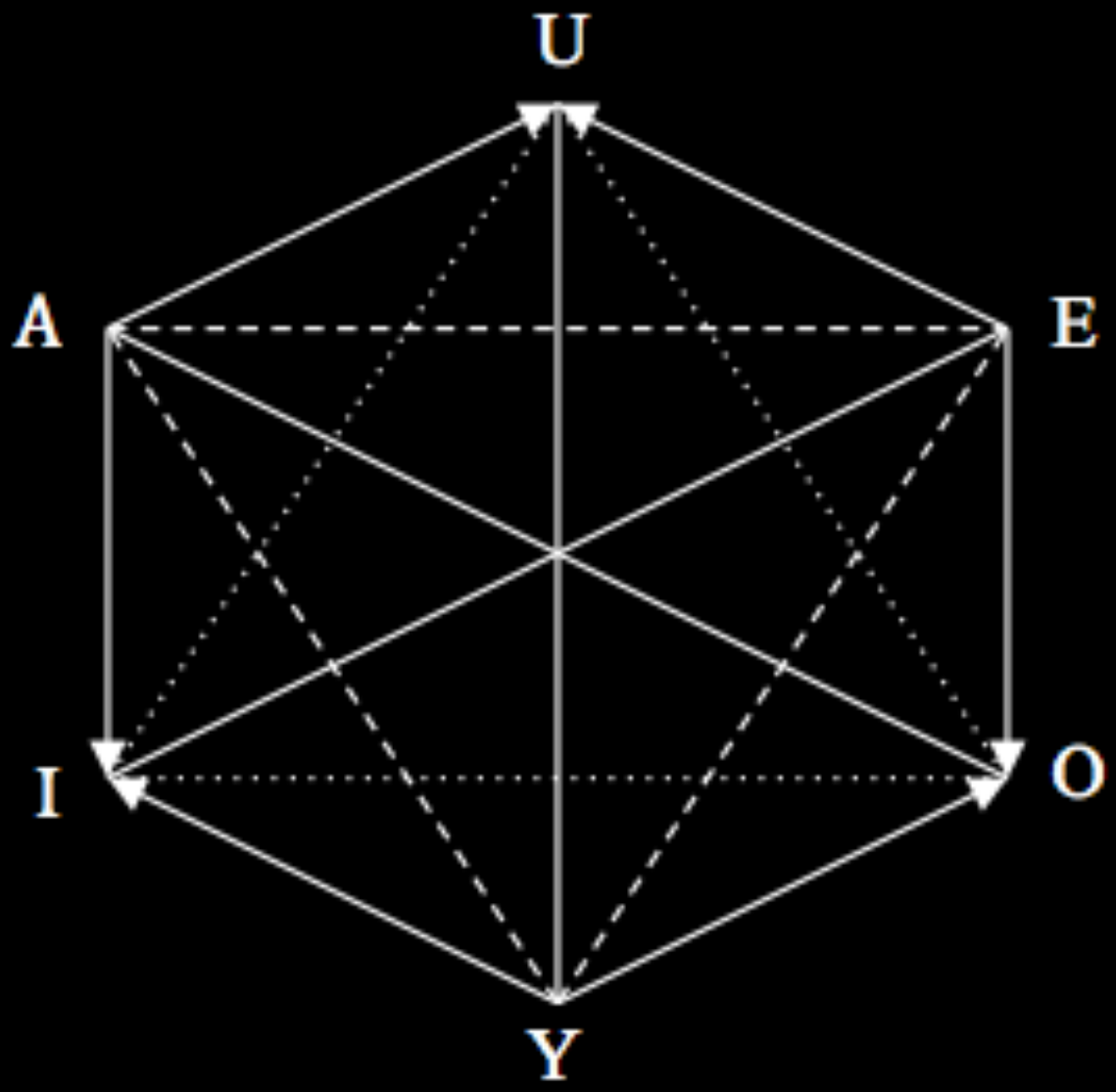
  O and U
  never lexicalised

- Result: kite structure

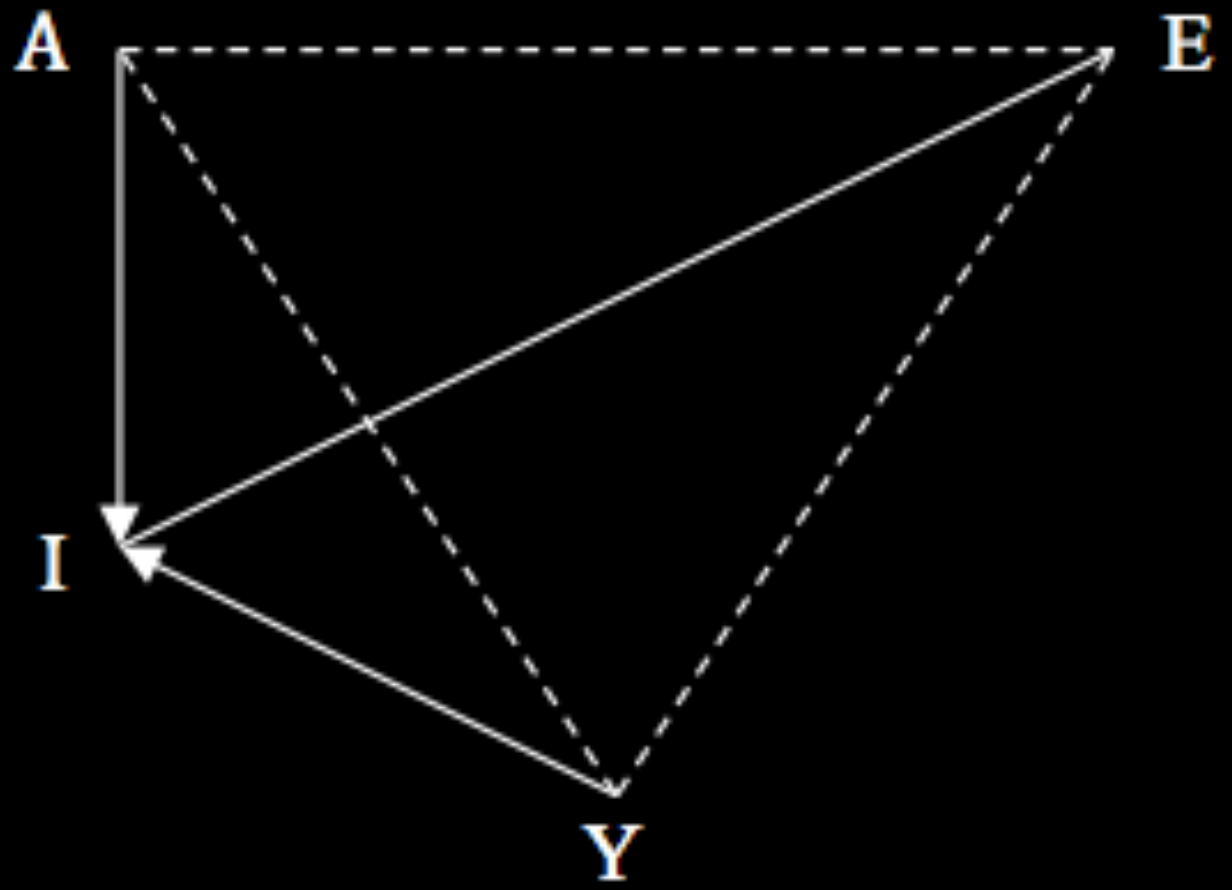




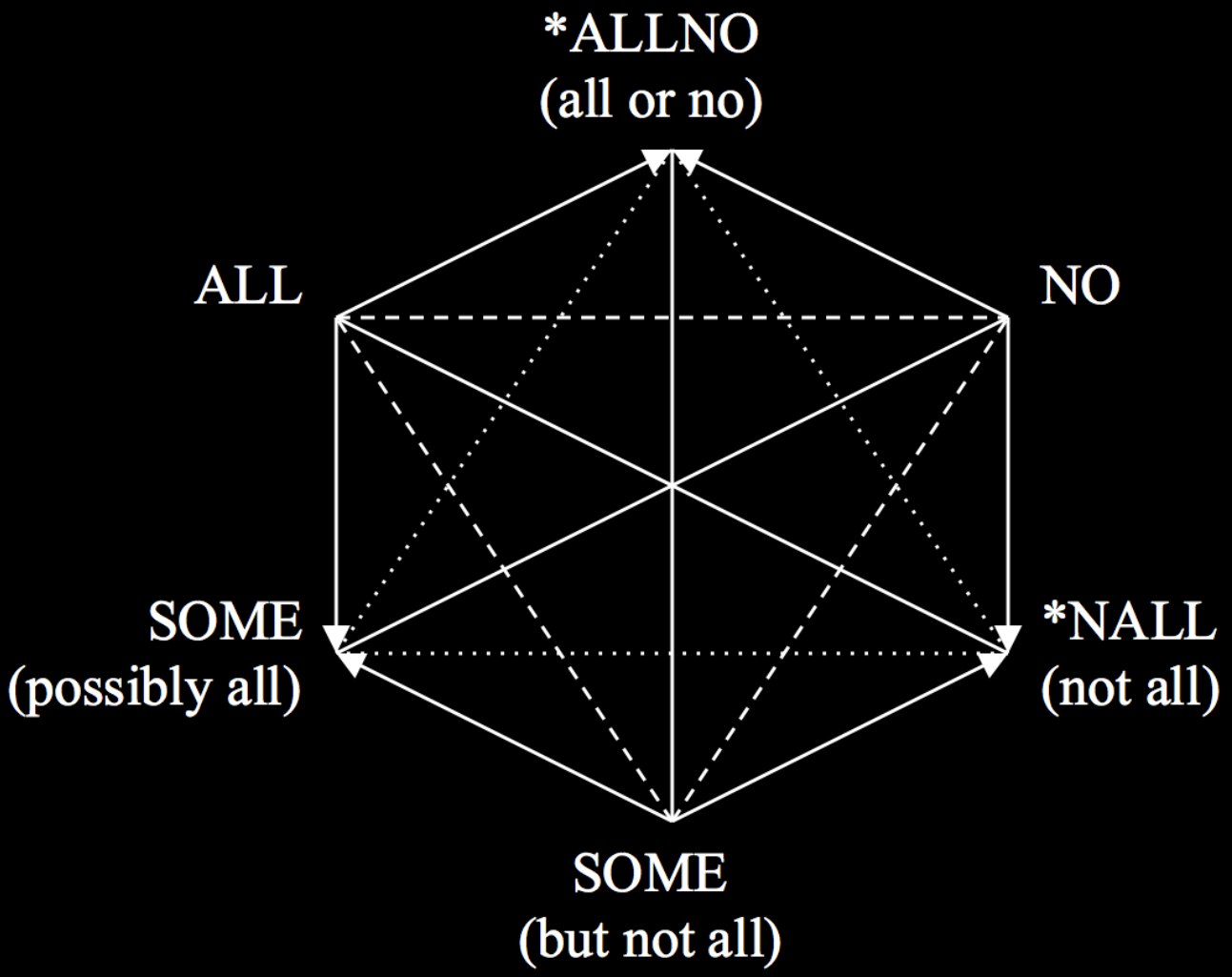
The Hexagon

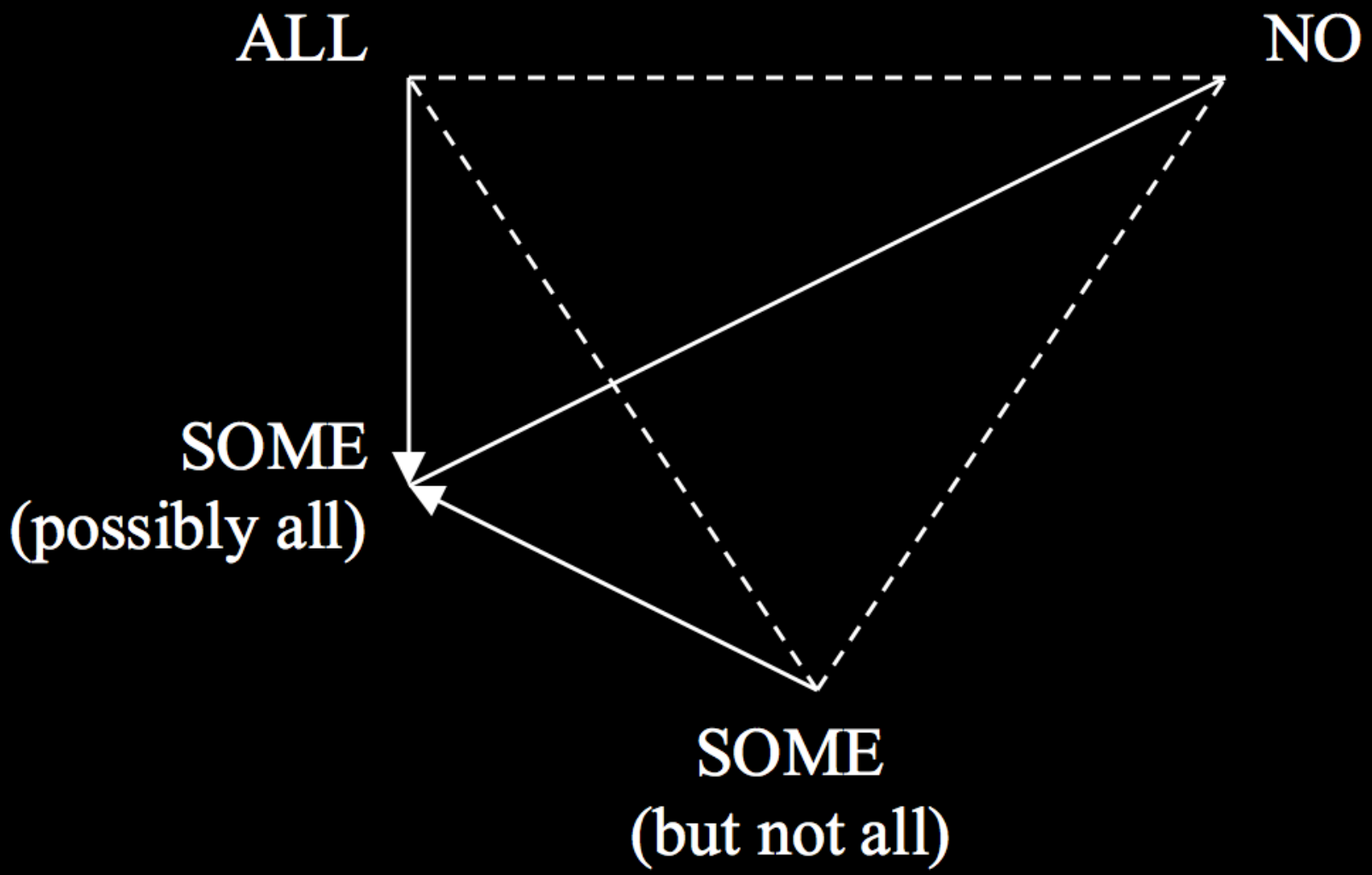


The Kite



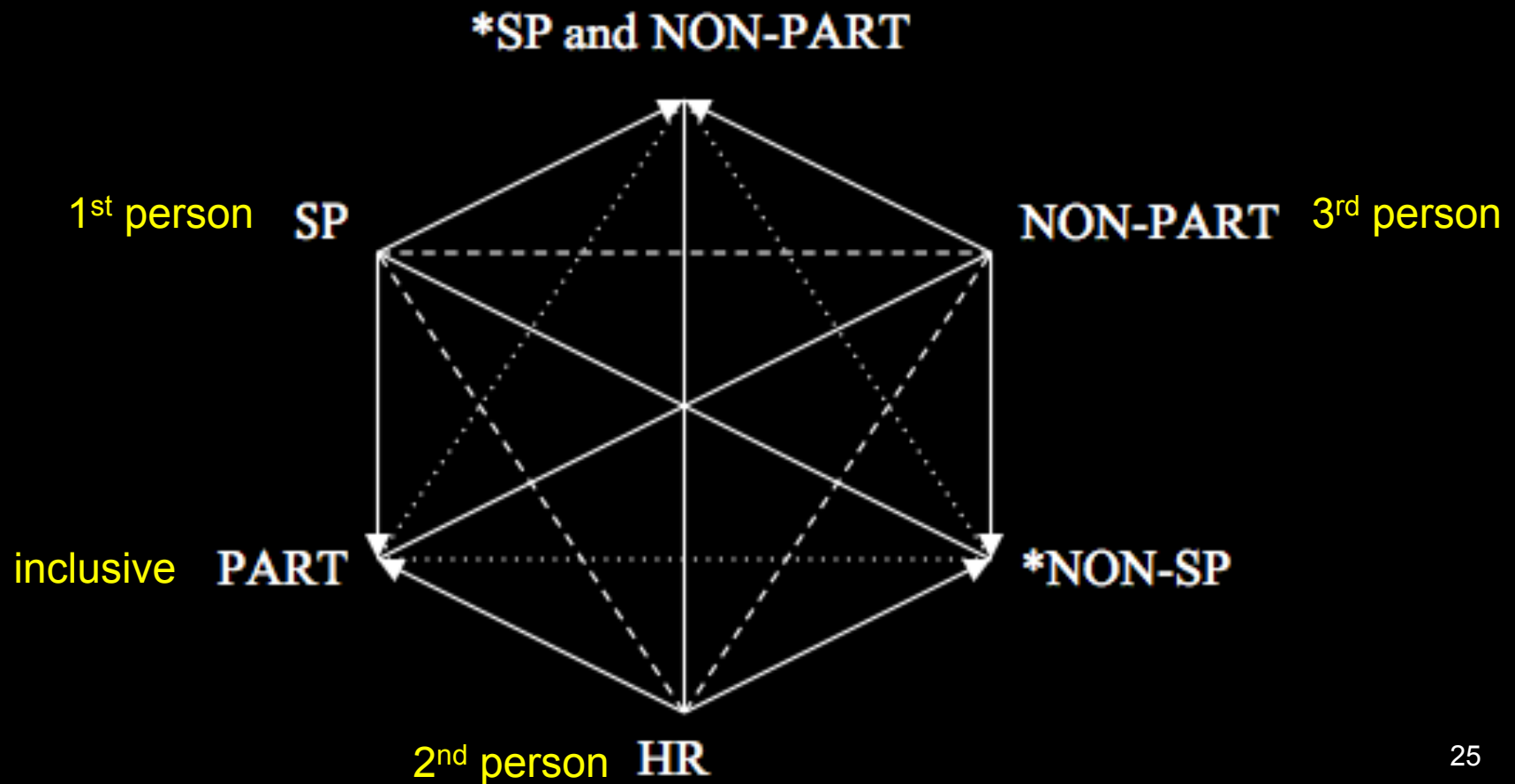
Propositional Logic Quantifiers

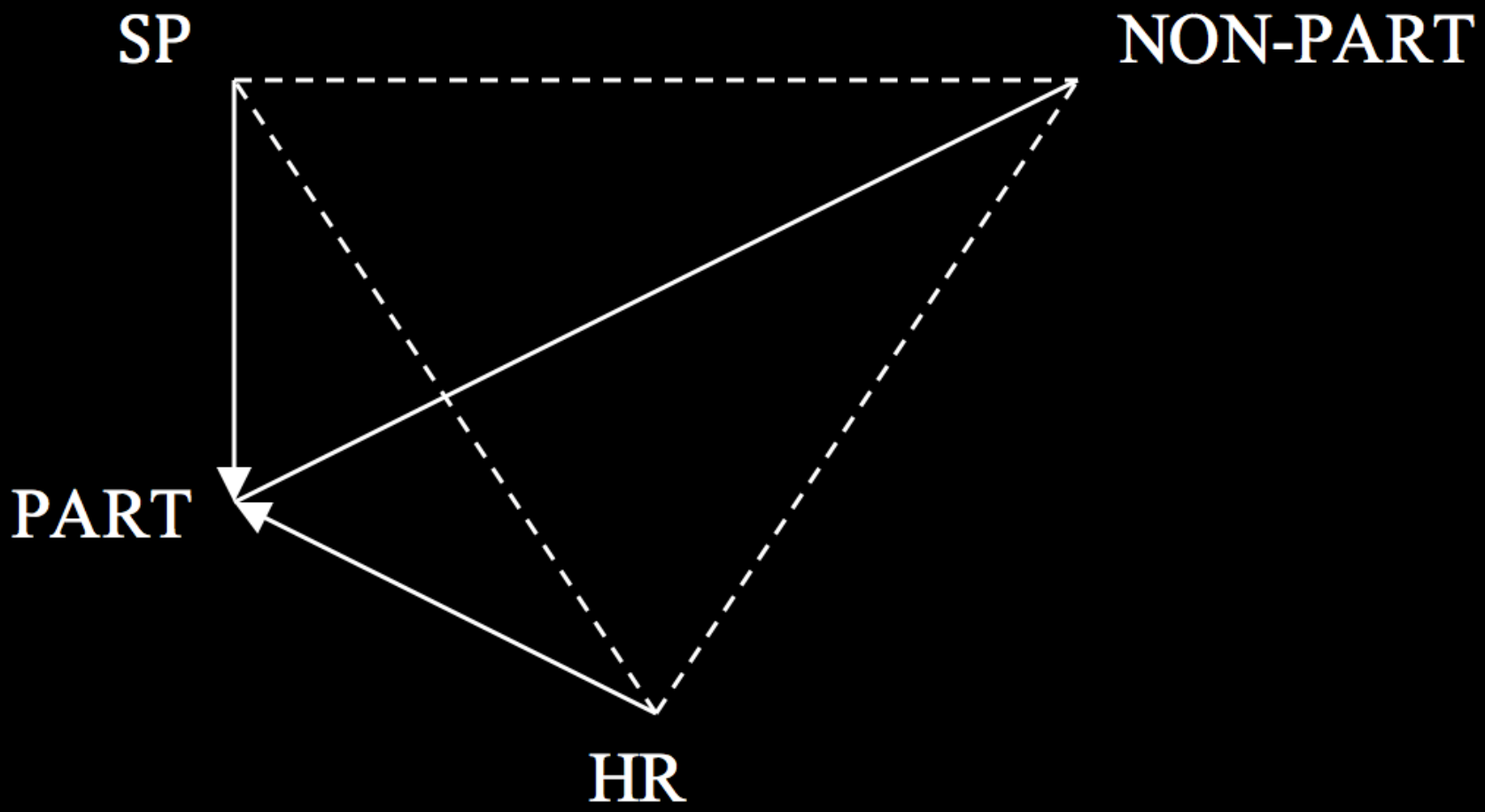



ALL
NO
SOME
(possibly all)
SOME
(but not all)

2.2. Claim

Person deixis: corresponding limitations on concept formation

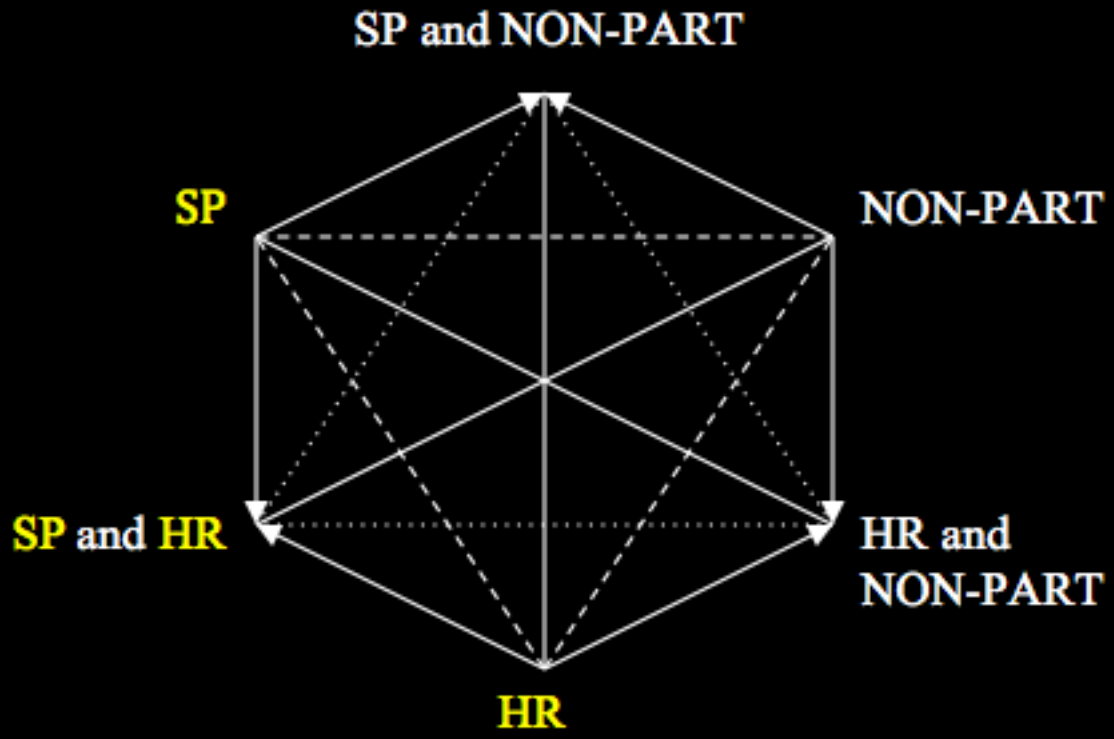



SP
NON-PART
PART
HR

2.3. Mereology

Mereology = theory of parthood relations
(Jaspers 2012, Varzi 2016)

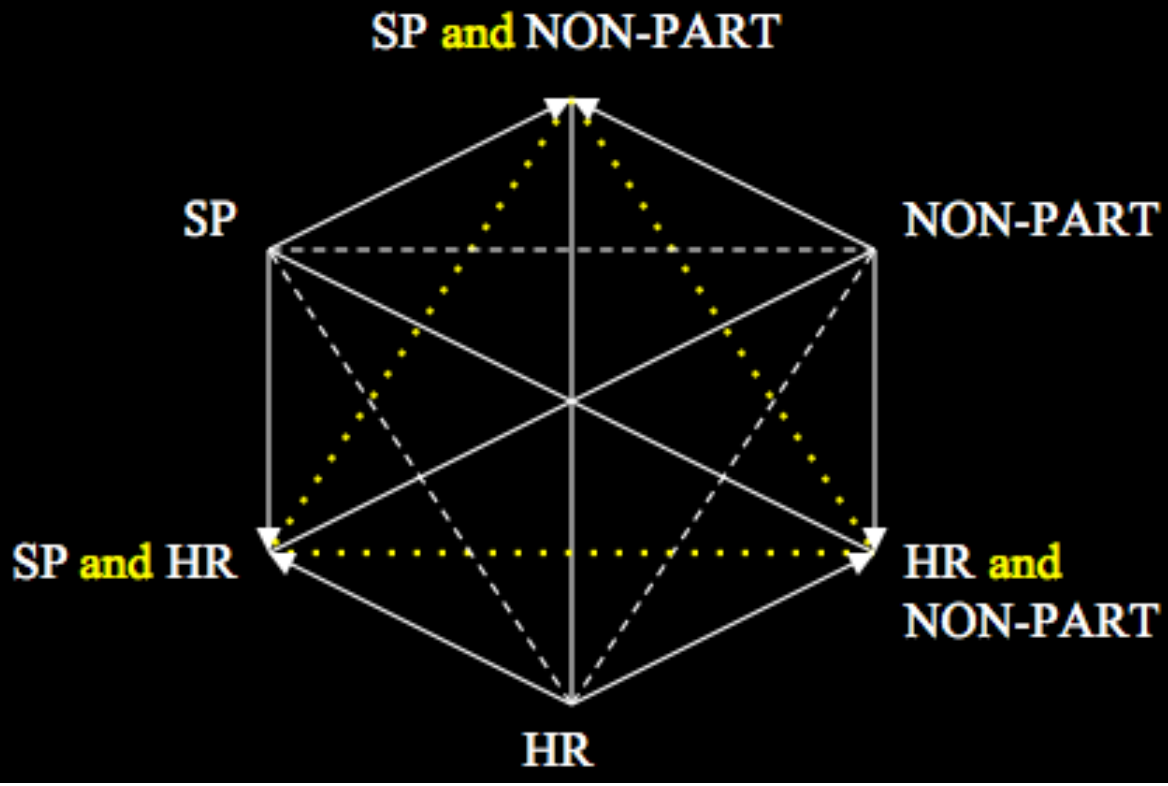
- SP and HR are proper parts of PART
- PART = mereological sum of SP and HR



Logical systems: vs. Mereologies:

- Quantifiers
- Entailment relations
- I-O-U: disjunction

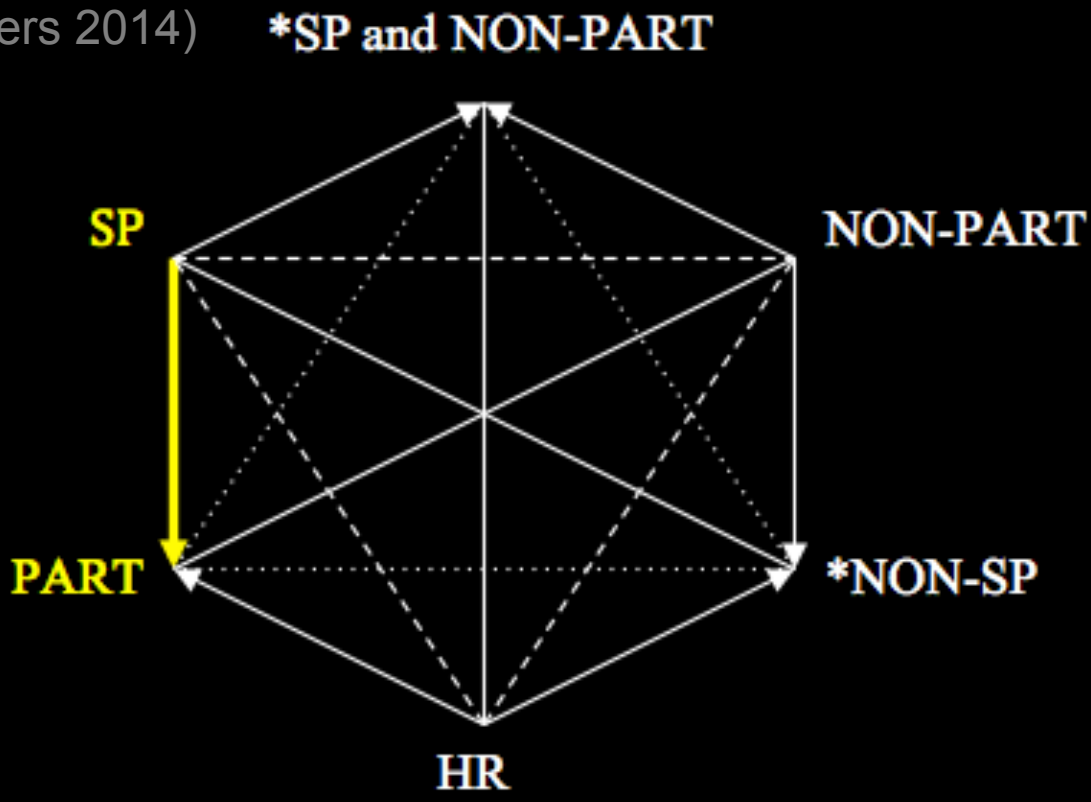
- Person
- Proper parthood rels
- I-O-U: mereological sum



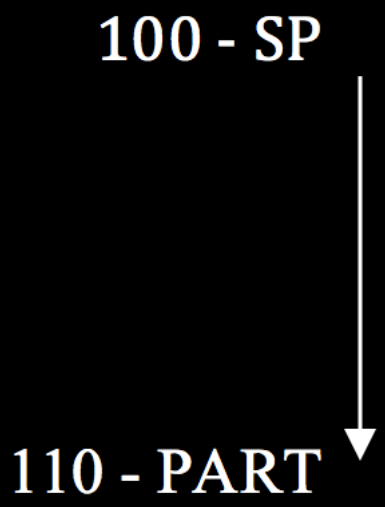
2.4. Deriving the Person Kite

Mereology:

Kite follows from a single proper parthood rel
(Seuren & Jaspers 2014)

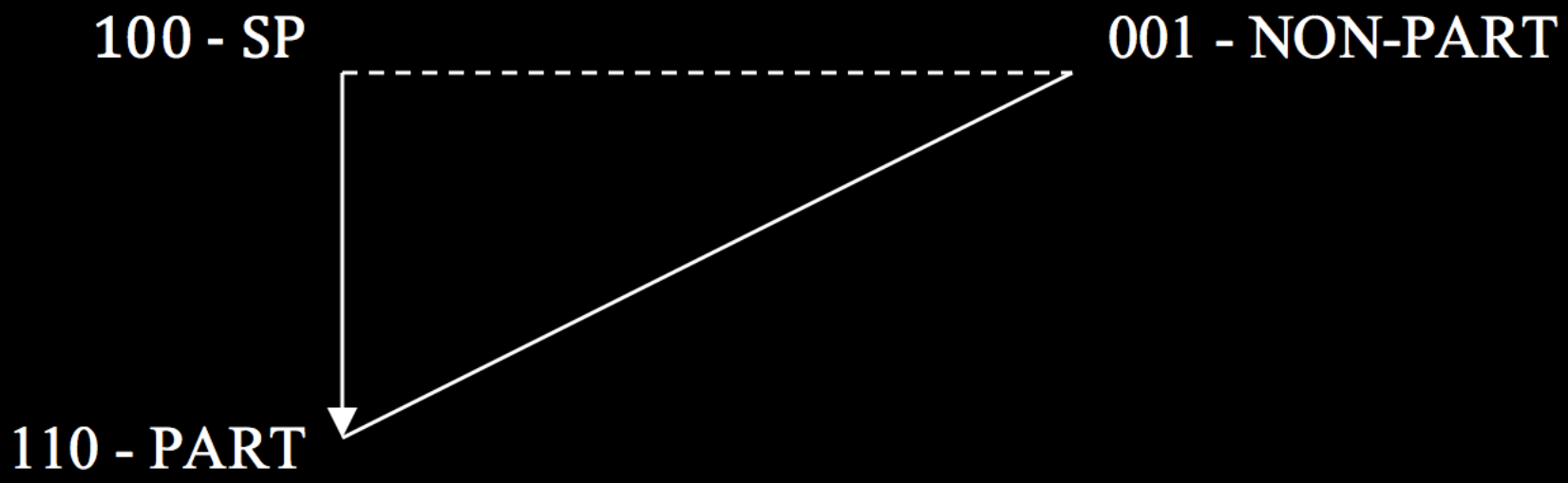


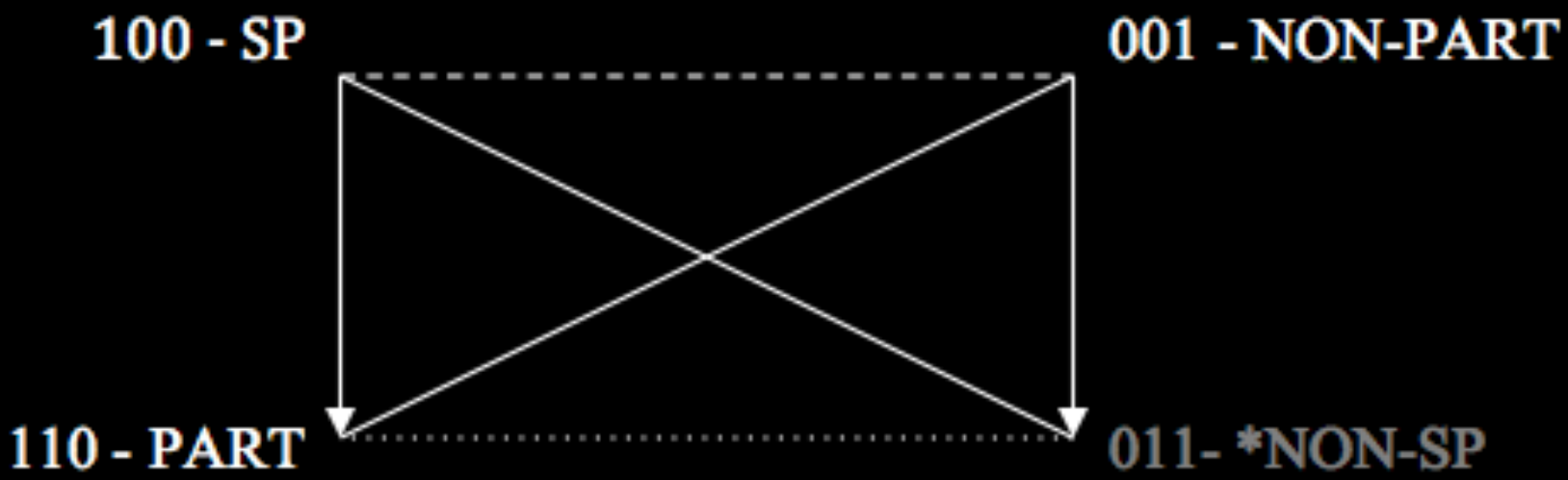
Proper Parthood

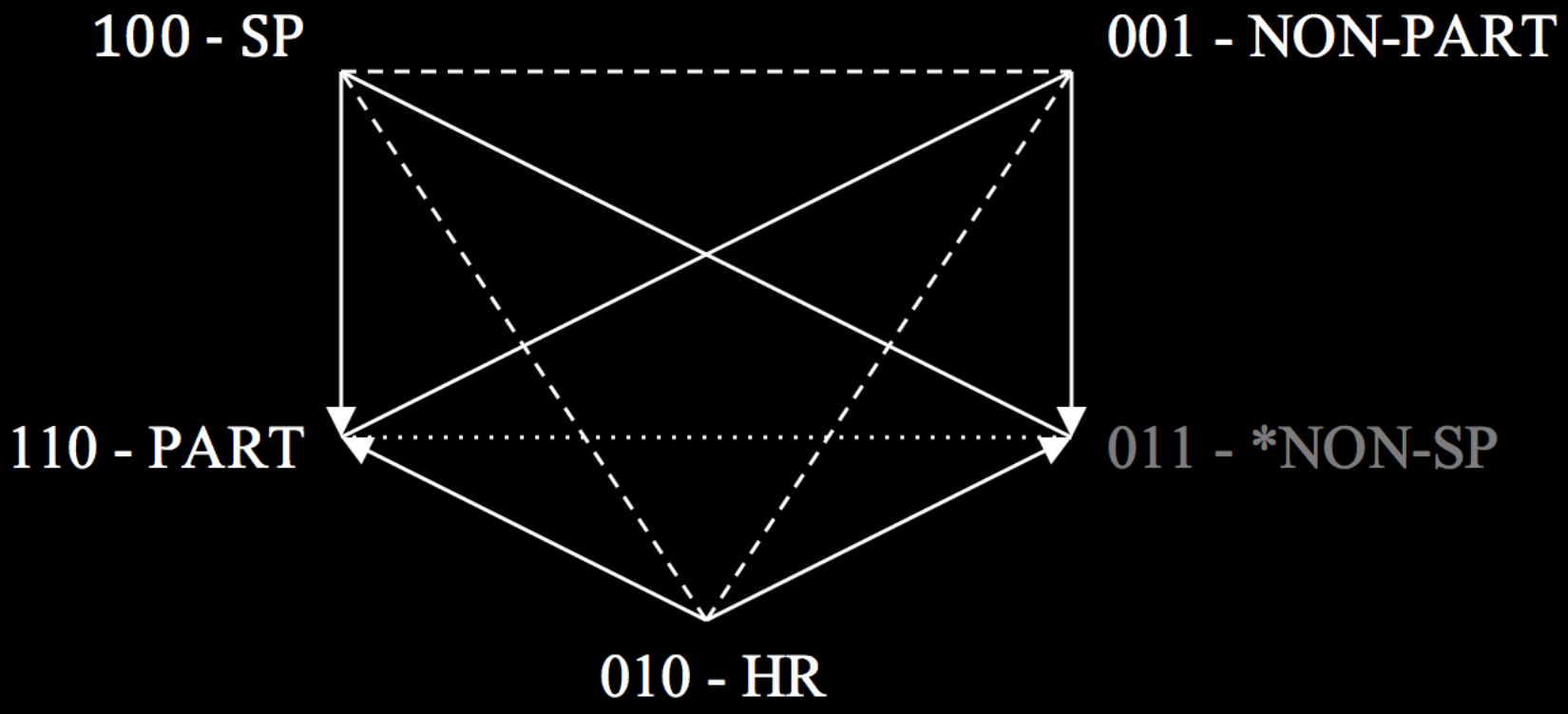


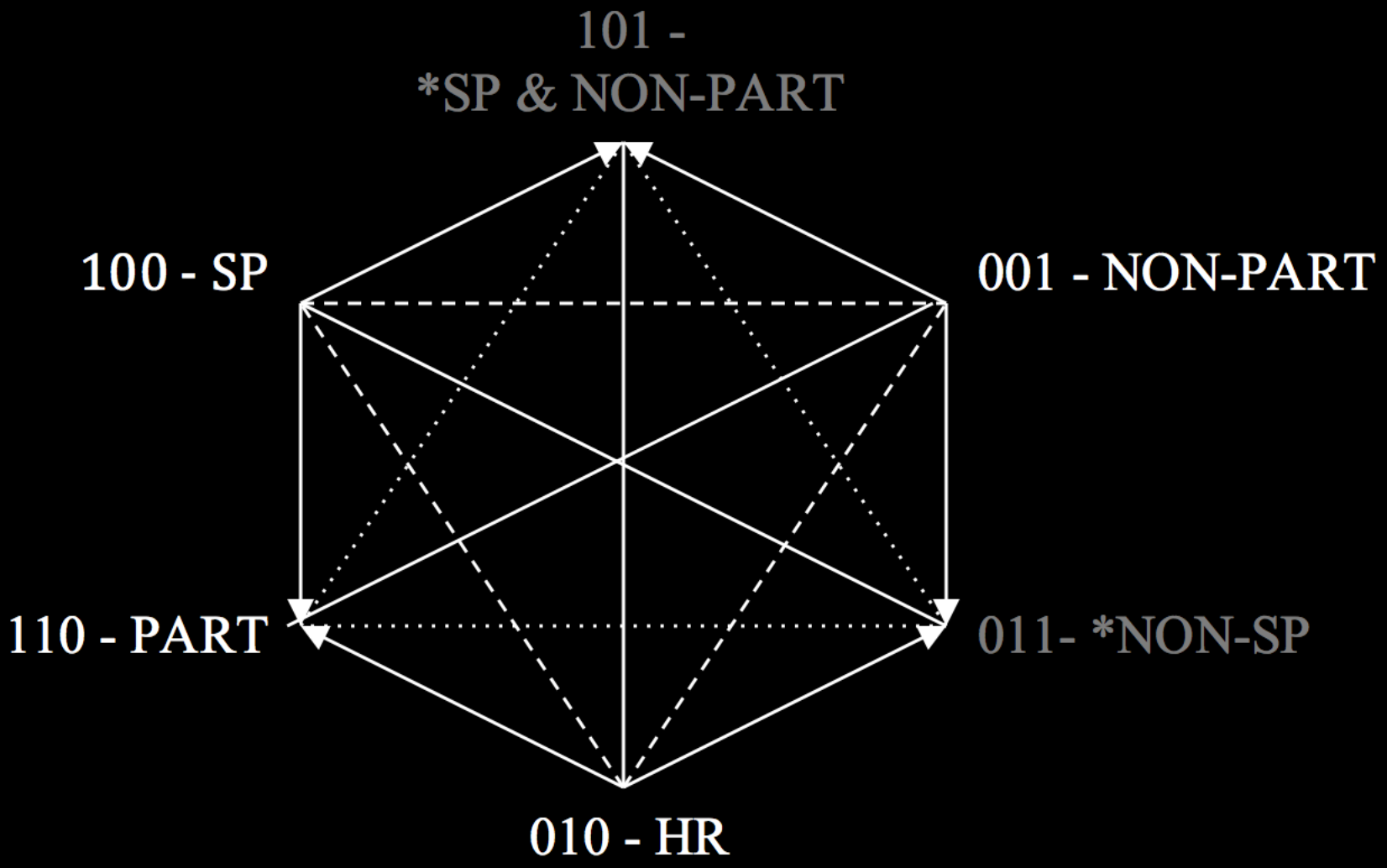
Contradiction

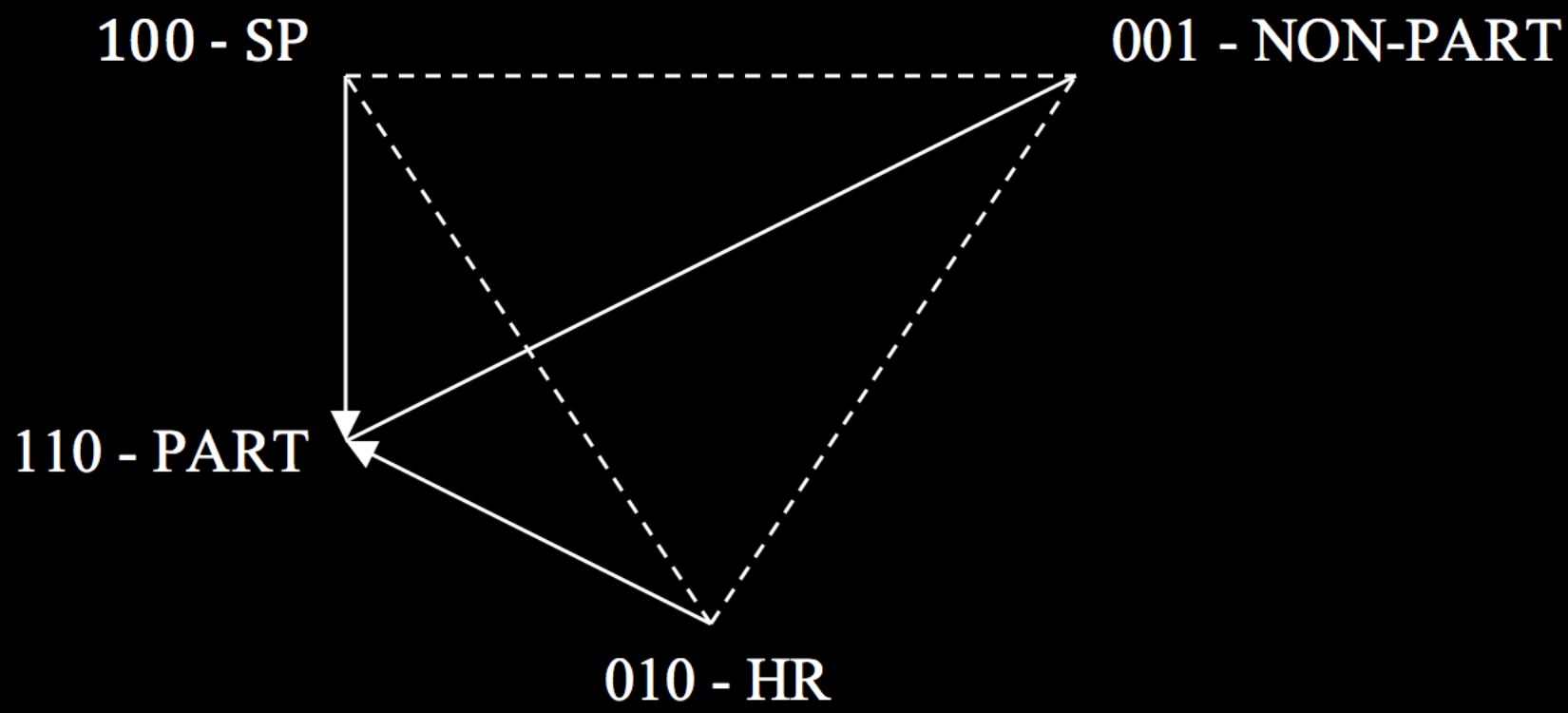
Contrariety




100 - SP
001 - NON-PART
110 - PART
011- *NON-SP


100 - SP
001 - NON-PART
110 - PART
011 - *NON-SP
010 - HR


101 -
*SP & NON-PART
100 - SP
001 - NON-PART
110 - PART
011- *NON-SP
010 - HR

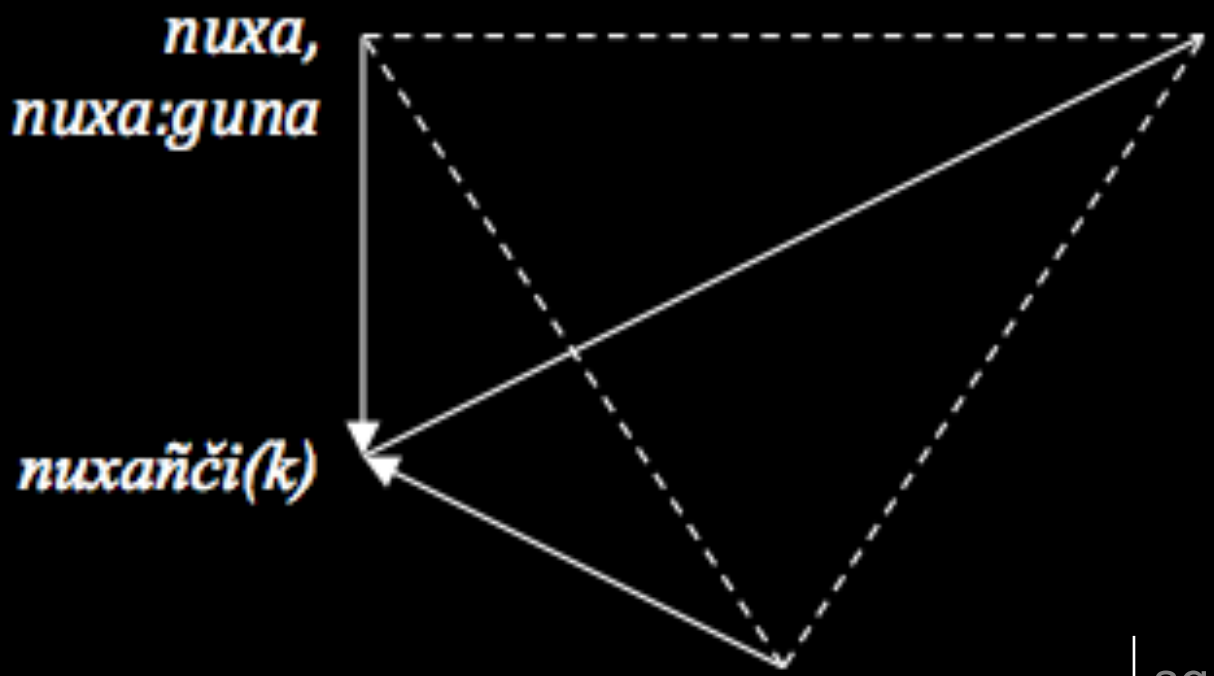

100 - SP
001 - NON-PART
110 - PART
010 - HR

The kite: *inclusive* as only complex person

Other combinations: predicted by kite to be unlexicalised

Quechua

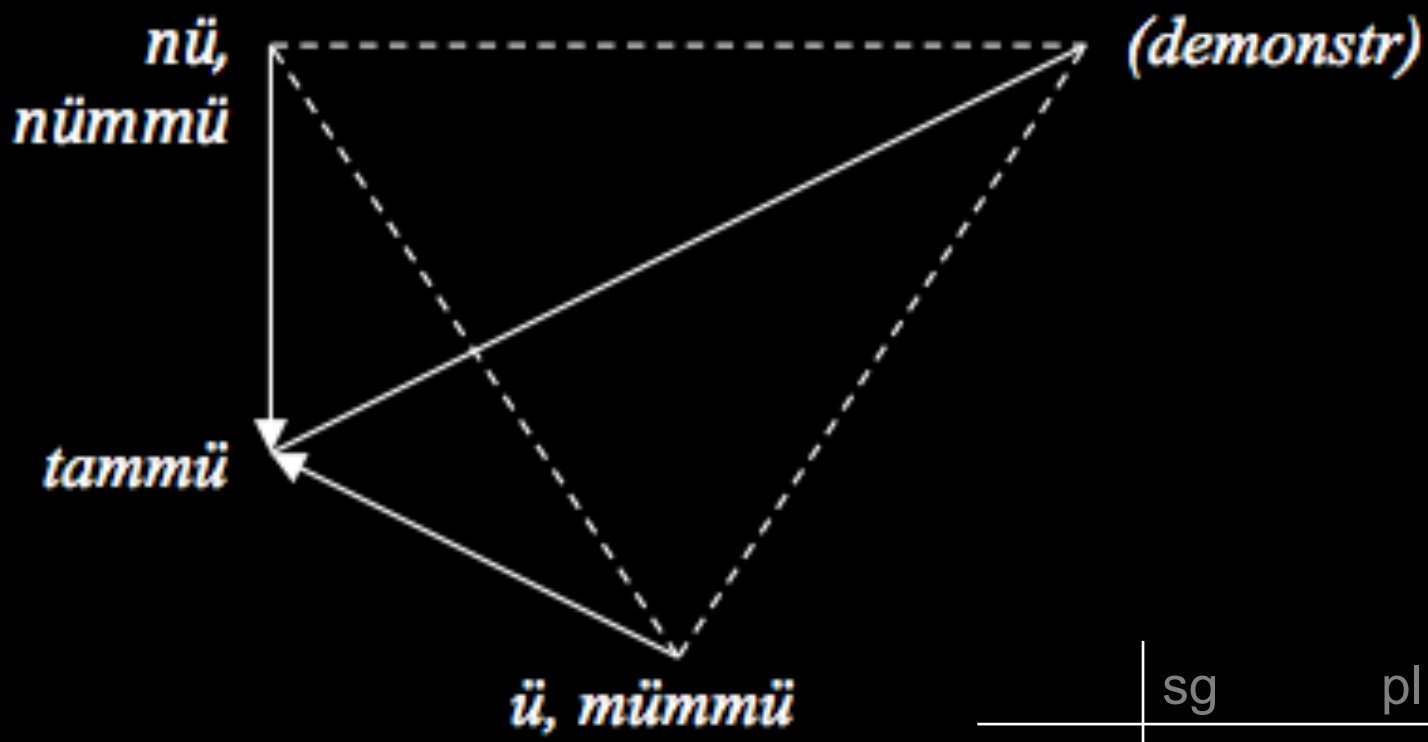
(Adelaar 1977)



	sg	pl
INCL		nuxa-ñči(k)
1	nuxa	nuxa:-guna
2	xam	xam-guna
3	pay	pay-guna

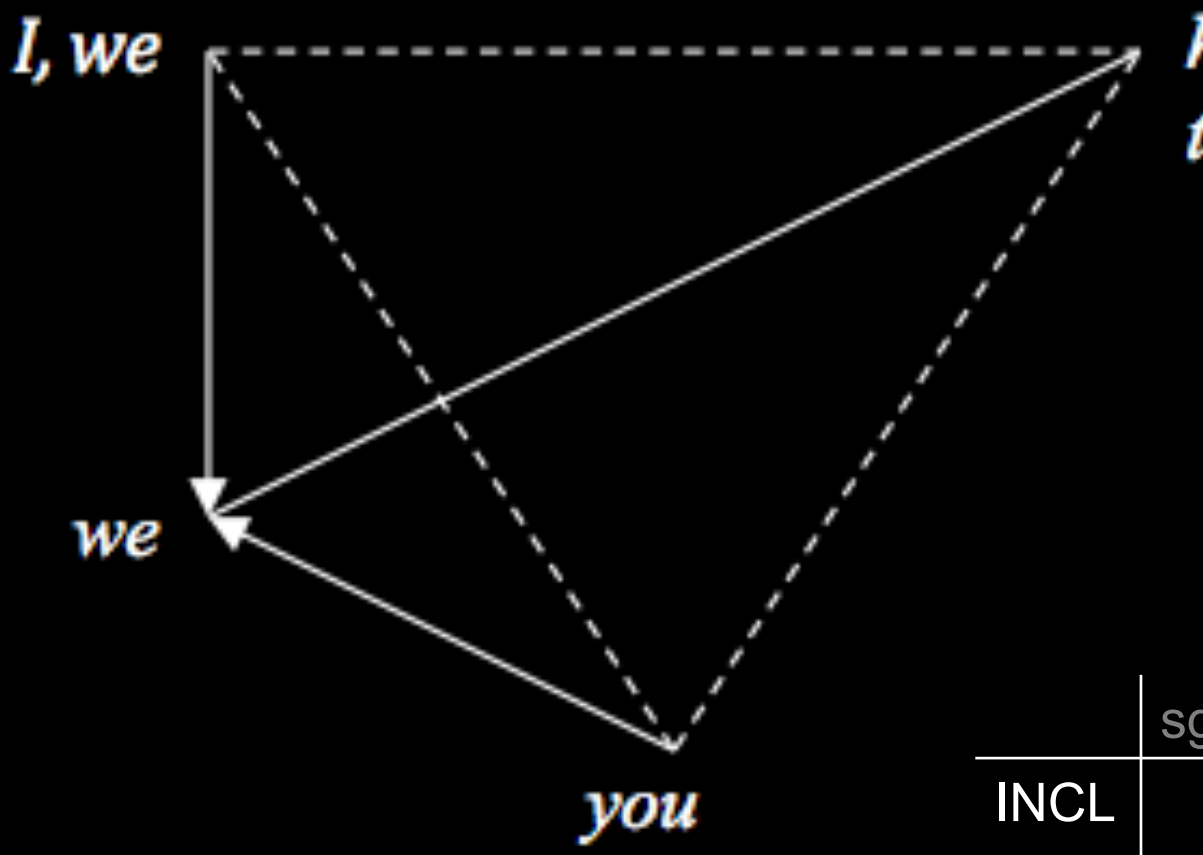
Tümpisa Shoshone

(Dayley 1989)



	sg	pl
INCL		ta-mmü
1	nü	nü-mmü
2	ü	mü-mmü
3	(Demonstratives)	

English

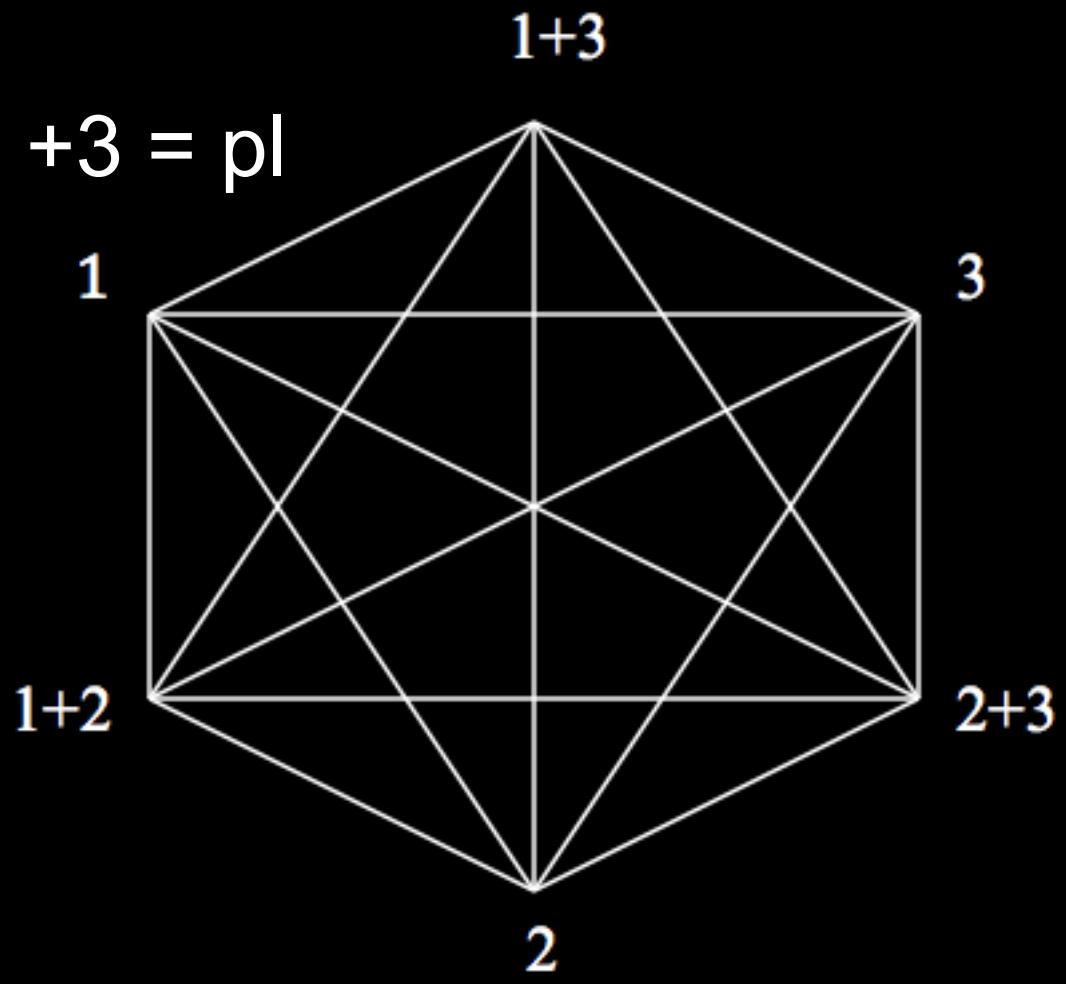


	sg	pl
INCL		we
1	I	we
2	you	you
3	he, she, it	they

2.5. The Unlexicalised Combinations: O & U

Crucially: 3rd ≠ pl

- Many analyses: +3 = pl
  e.g:
  - 3sg = 3
  - 3pl = 3+3
  - 2sg = 2
  - 2pl = 2+3
- O & U are lexicalised



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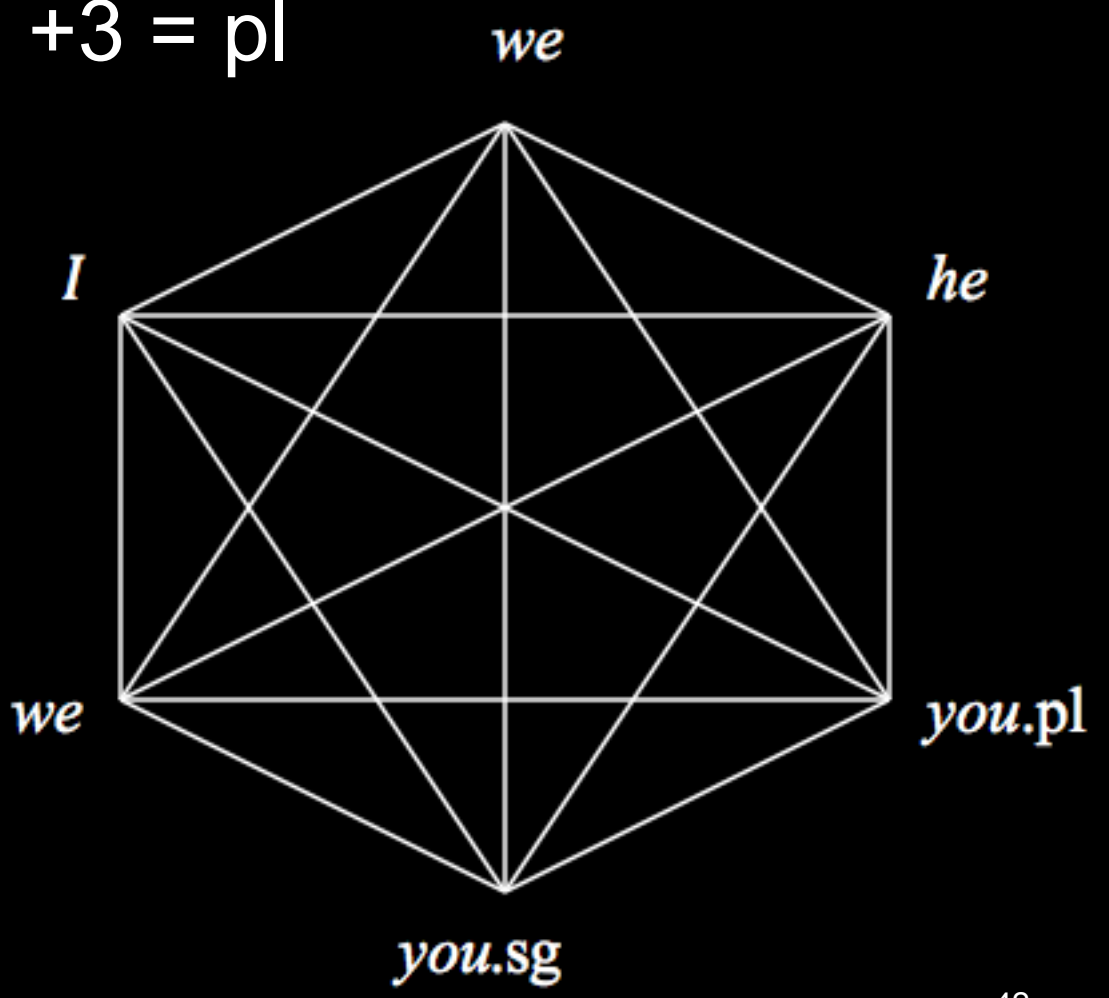
  - 2pl = 2+3
- O & U are lexicalised



- Semantically:
  - 1st, 2nd, 3rd person: inherently deictic (Béjar 2003)
  - pl: never defined as deictic (e.g. Harbour 2008, Corbett 2004)

- Morphologically:
  - IF 3rd = pl THEN expectation:
    lgs with same morpheme for pl as for 3rd

	sg	pl
incl		α-δ
1	β	β-δ
2	γ	γ-δ
3	δ	δ

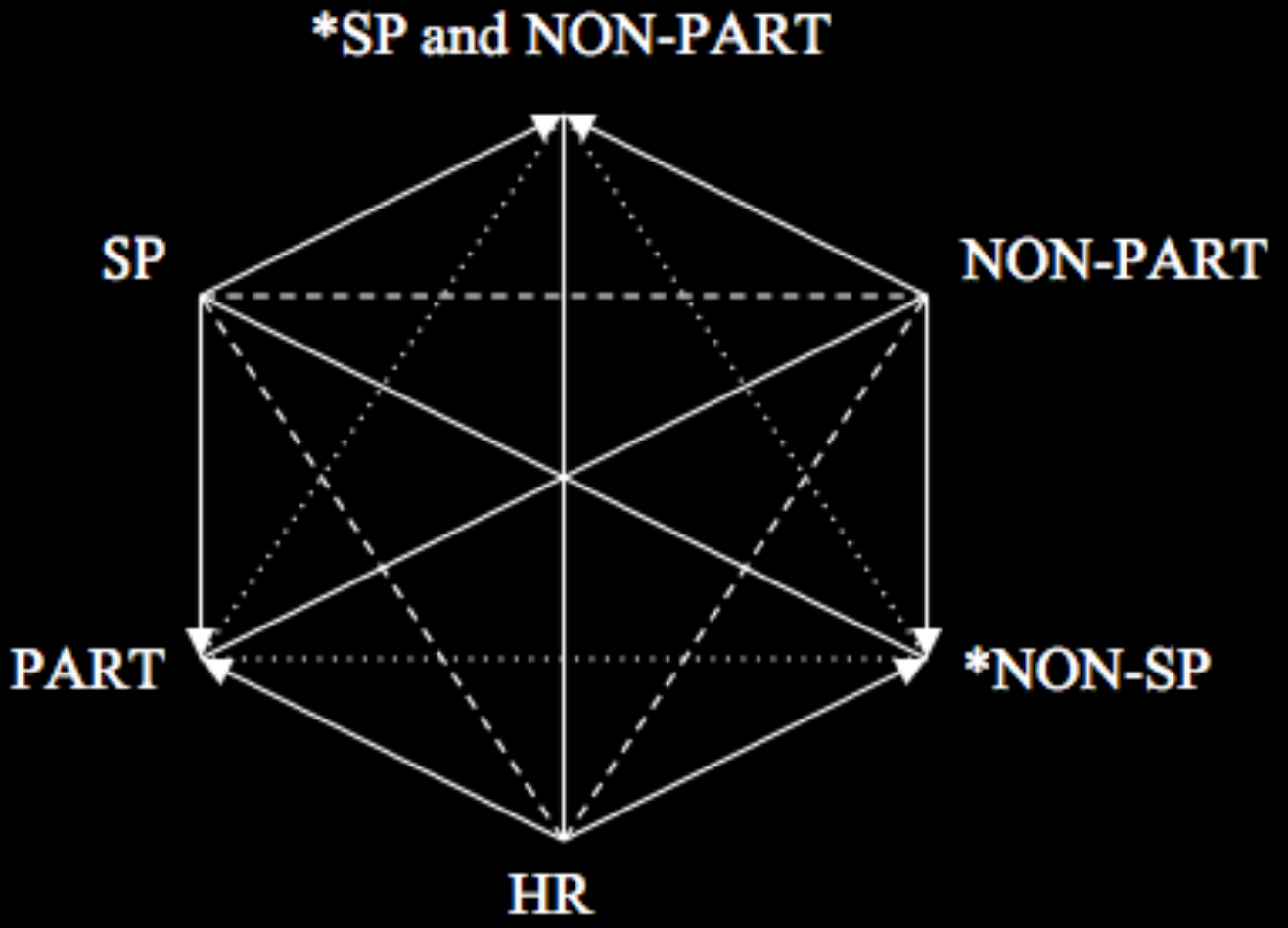
Tümpisa Shoshone

INCL		ta-mmü
1	nü	nü-mmü
2	ü	mü-mmü
3	(Demonstratives)	

  - IF 3rd = pl THEN expectation:
    no 3rd pl needed
    - 2+3 ≠ hr + 1 other
    - 2+3 = hr + 1 or more others
    - +3 = +3 / +3 + 3’ / +3 +3’ +3” / ...
    - 3 = 3 / 3+3’ / 3+3’+3” / ...

- Conclusion:
  - 3rd person: non-participant
  - Plural: + associates

Unlexicalised O & U



3. Conclusion

- The Concept Formation Constraint can be applied to person

Resulting in:

- Inclusive is the only complex person
  ➔ Mereological sum in I-corner

Questions?