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# Differential object marking and reference tracking in Christian Urmi (Northeastern Neo-Aramaic): Project overview and preliminary results

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# Outline

- Introduction
  - The project
  - Christian Urmi and other NENA
  - (Potential) data sources
- Object expression in C. Urmi: basic facts
- Differential object indexing: preliminary results
- From DOM to reference tracking: a proposed shift of perspective
- Summary

# Introduction

# The project

- “Differential object marking and reference tracking in the Northeastern Neo-Aramaic dialect of Christian Urmi”, DFG Middle East collaboration
  - Israeli partner – Alena Witzlack-Makarevich

- Goal – a corpus-based investigation of DOM in C. Urmi (and other NENA) which combines a traditional view of DOM with a reference-tracking/discourse-structure perspective
  - Trying to find new insights and questions in a long- and well-studied topic

# Northeastern Neo-Aramaic

- Afroasiatic > Semitic > Aramaic > North-Eastern Neo-Aramaic (NENA) > Assyrian Neo-Aramaic > Christian Urmi

- Map: NENA villages at the beginning of the 20th c. (Gutman 2018, 15)

# Christian Urmi dialect

- C. Urmi is the most prestigious and wide-spread C. NENA dialect
- Still spoken in Iran and in diaspora, i.a. in the Caucasus
- Khan, Geoffrey. 2016. The Neo-Aramaic Dialect of the Assyrian Christians of Urmi. 4 vol. Leiden / Boston: Brill.

# (Potential) data for the project

- Field corpus – Ovsjannikova, Maria, Kirill Kozhanov, Natalia Logvinova, Alexey Lyavdansky, Alina Russkikh, Sergey Say, Varvara Shuvalova, Elena Shvedova, and Elizaveta Zabelina. 2022–. Corpus of NENA varieties spoken in Russia. Available online at https://nena-dict.ru/corpus.
  - Corpus of texts in C. Urmi and other NENA dialects spoken in the Caucasus collected in the village of Urmiya in Russia and in the village of Verin Dvin in Armenia in 2019–2022
- Published corpus – texts published in Khan (2016)
- Written corpus – Christian Urmi Corpus available at https://neo-aramaic.web-corpora.net/ – texts in the New Alphabet published in the Soviet Union in the 1920-30s (Lyavdansky, in press), see the

# Object expression in C. Urmi: basic facts

# C. Urmi (and other NENA): typological profile

- No morphological case
- Flexible word order, mainly SOV / SVO
- Mixed (head/dependent) marking
  - Obligatory subject agreement, optional object agreement
  - Prepositions
- Non-finite forms are rare

# Direct object expression

- Indexing only

(1) *səpríta* *ərbíta* *máy-o=la,* ***yáv-o=la***
birdie(F) sheep(F) bring.PROG-P.3F=3F give.PROG-P.3F=3F
*ka mar* *+xlúyla*
to master(M) wedding(M)
'The birdie brings the sheep, gives it to the host of the wedding'.

- Bare NP and indexing

(2) *+ávva* ***an*** ***árbə*** ***bəškal-é=lə*** *bərrášš=ələ*
DEM2.M DEM4.PL sheep(M).PL take.PROG-P.3PL=3M go.PROG=3M
'He takes these sheep and goes'.

- Bare NP without indexing

(3) *xá-dana* *+bukráči* ***árbə*** ***+marrúvv=əl***
one shepherd(M) sheep(M).PL graze.PROG=3M
'A shepherd is grazing sheep'.

- NPs flagged by the preposition *ka* – never indexed

(4) *+murráš-lə* *ka* *axún-u* *+gúra*
wake.PST-LS.3M to brother(M)-P.3M big.M
'He woke up his elder brother'.

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Differential Object Flagging

# Direct object expression

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'He woke up his elder brother'.

Differential Object Indexing

# Indexing: stem-sensitivity

- Several sets of indexes selected depending on the stem type

| | subject (S, A): obligatory | direct object (O): optional |
|---|---|---|
| infect (PRS) | S-suffixes (SS) | L-suffixes (LS) |
| preterite (PST) | L-suffixes (LS) | S-suffixes(SS) |
| progressive (PROG) | copular clitics (1M, 1F etc.) | possessive markers (P) |
| resultative (RES) | | |
| imperative (IMP) | imperative subject suffixes | L-suffixes (LS) |

- The distribution of S- and L-suffixes is sometimes (mis-)interpreted as ergativity, but at least in C. Urmi the alignment is consistently nom-acc in each of the subparadigms

# Indexing: stem-sensitivity

| | | |
|---|---|---|
| infect (PRS) | +*bət-kaṭl-a-li*<br>FUT-kill.PRS-SS.3F-LS.1SG | 'She will kill me.' |
| preterite (PST) | +*kṭəl-a-li*<br>kill.PST-SS.3F-LS.1SG | 'I killed her.' |
| progressive (PROG) | +*bəkṭal-u=la*<br>kill.PROG-P.3M=3F | 'She kills him.' |
| imperative (IMP) | +*kṭul-un-lə*<br>kill.IMP-PL-LS.3M | 'Kill (pl.) him.' |

- Agreement marker type, stem type, temporal reference as potential factors to be checked for association with object expression strategies

# Object expression and animacy

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| SAP | yes | no? | no? | yes |
| human | yes | yes | yes | yes |
| animate non-human | yes | yes | yes | yes? |
| inanimate | yes | yes | yes | no |

- Objects marked by *ka* are as a rule not indexed

# Object expression and animacy

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| SAP | yes | no? | no? | yes |
| human | yes | yes | yes | yes |
| animate non-human | yes | yes | yes | yes? |
| inanimate | yes | yes | yes | no |

Domain of variation for DOF

# Object expression and animacy

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|---|---|---|---|---|
| SAP | yes | no? | no? | yes |
| human | yes | yes | yes | yes |
| animate non-human | yes | yes | yes | yes? |
| inanimate | yes | yes | yes | no |

DOI

- **Definiteness** as the main trigger for object indexing and for object flagging in C. Urmi (Khan 2016: 251–256) and other NENA (Coghill 2014)

# Expression of Recipients (as compared to Os)

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| Direct object (O) | yes | yes | yes | yes |
| Recipient | yes | no | no | yes |

- Index stacking and constructions with two *ka*-groups are not allowed
- O/T and R can be rivals for indexing (and for flagging)

# Ditransitive constructions: examples

- No indexing, T is expressed as a bare NP, R is marked with *ka*

(4) *ka savún-i* *yúvv=əva* *xa* *súra* *kə́nna*
to grandfather(M)-P.1SG give.RES.PL=3.RETR one small.M den(F)
'They gave a small den to my grandfather.'

- Either R (5) or T (6) are indexed, T can be additionally expressed by a bare NP (5)

(5) *ítar* *+táma* *káša* *ət* *+úmra* *yúvv-u=va* *dúca*
then there priest(M) REL church(M) give.RES.M-P.3M=3.RETR place(F)
'Then there the priest of the church gave him a place.'

(6) *átən* *gárəc* *+sáz* *yavv-ə́t-ta* *ka* *dí*
thou necessary saz(F) give.PRS-SS.2M-LS.3F to OBL.PRON.1SG
'You must give me the saz.'

# Specific research questions

- DOI
- DOF
- R and O/T expression in ditransitives
- Expression of SAP
- …

# Differential object indexing: preliminary results

# Data

- C. Urmi texts from the field corpus
- Transitive and ditransitive clauses – appr. 750
- Annotated for
  - expression of core participants
  - animacy of direct object
  - activation status
  - semantic group of object
  - word order, etc.

- 64 examples where object indexing is formally blocked (zero index, R indexed) are excluded

# Direct object expression: distribution

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| N | 200 | 256 | 217 | 24 |

# Direct object expression and animacy

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| SAP | 32 | 0 | 0 | 10 |
| human (NP or pro) | **71 (44%)** | 61 (38%) | 16 (10%) | 14 (8%) |
| animals (NP or pro) | 19 (31%) | **31 (51%)** | 11 (18%) | 0 |
| inanimate (NP or pro) | 78 (19%) | 164 (37%) | **190 (44%)** | * |
| N | 200 | 256 | 217 | 24 |

- Humans are mostly expressed by indexes, animals – by indexed NPs, inanimates – by NPs without an index ($\chi 2$, df = 4, $p < 0.001$)
- Can be explained by differences in discourse continuity: human referents tend to figure as protagonists, see, e.g., Haig & Schnell (2016), – to be checked quantitatively

# Direct object expression: activation status

- **Discourse status** of the direct object – based on whether the referent of the object was mentioned in the preceding discourse

- Three statuses, cf. (Lambrecht 1994, 93-101)
  - given: mentioned in the immediately preceding clause
  - accessible: mentioned earlier than in the previous clause
  - new

- Situationally-accessible, or inferable DOs were not included in the category of accessible, briefly discussed below

# Direct object expression: referent activation status

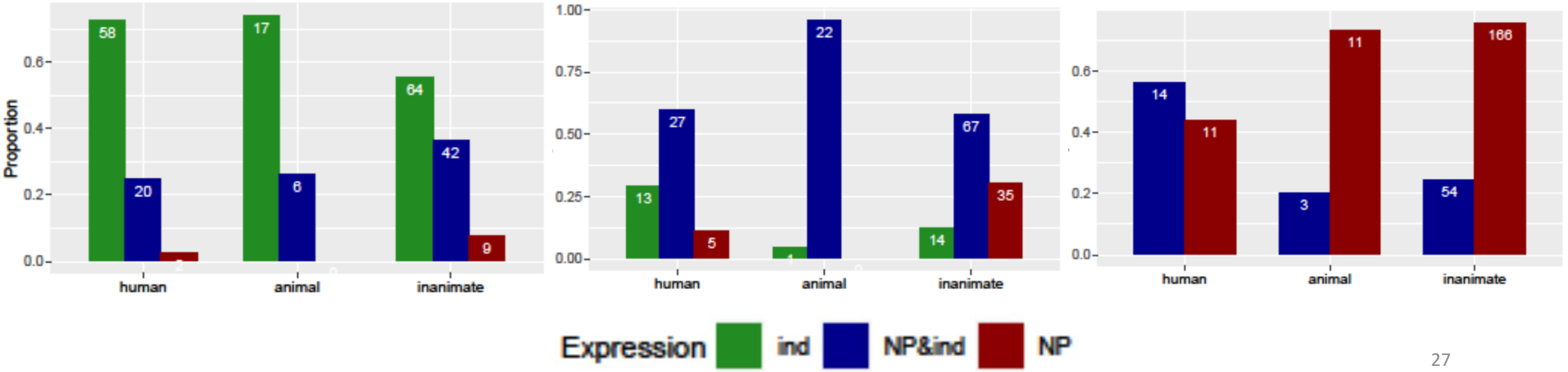
| | indexing only | bare NP + indexing | bare NP + no indexing |
|---|---|---|---|
| given | **139 (63%)** | 72 (33%) | 10 (4%) |
| accessible | 28 (15%) | **116 (62%)** | 42 (23%) |
| new | 1 | 72 (27%) | **188 (73%)** |

- As expected, given referents are mostly expressed by indexes, accessible referents – by indexed NPs, new referents – by NPs without an index ($\chi 2$, df = 4, $p < 0.001$)
- Topicality as the major factor conditioning DOI cross-linguistically (Schikowski, Iemmolo 2015)

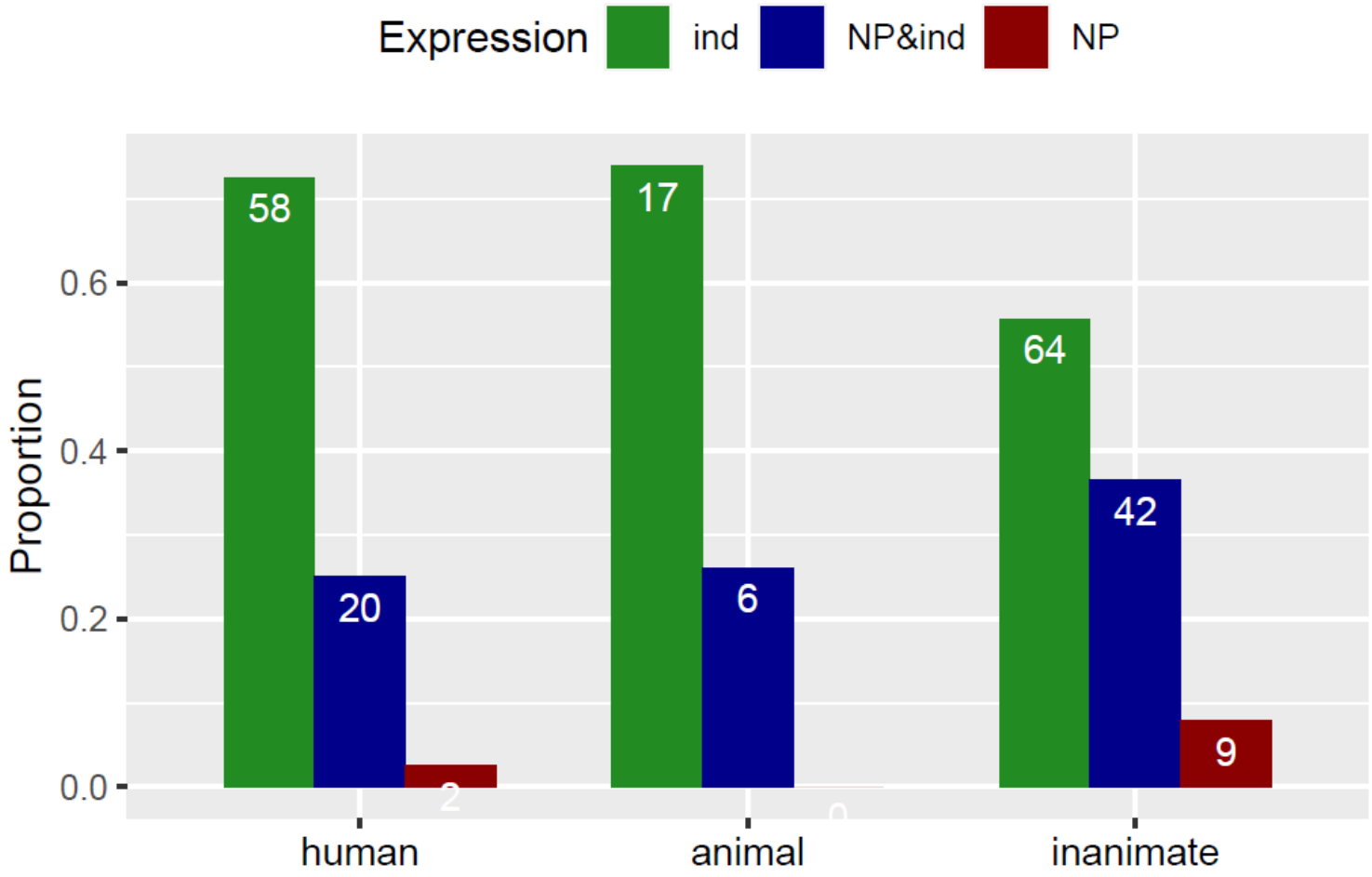
# Animacy and activation status: interaction

- Is animacy still a significant factor, if activation status is taken into account?

- Given
- Accessible
- New

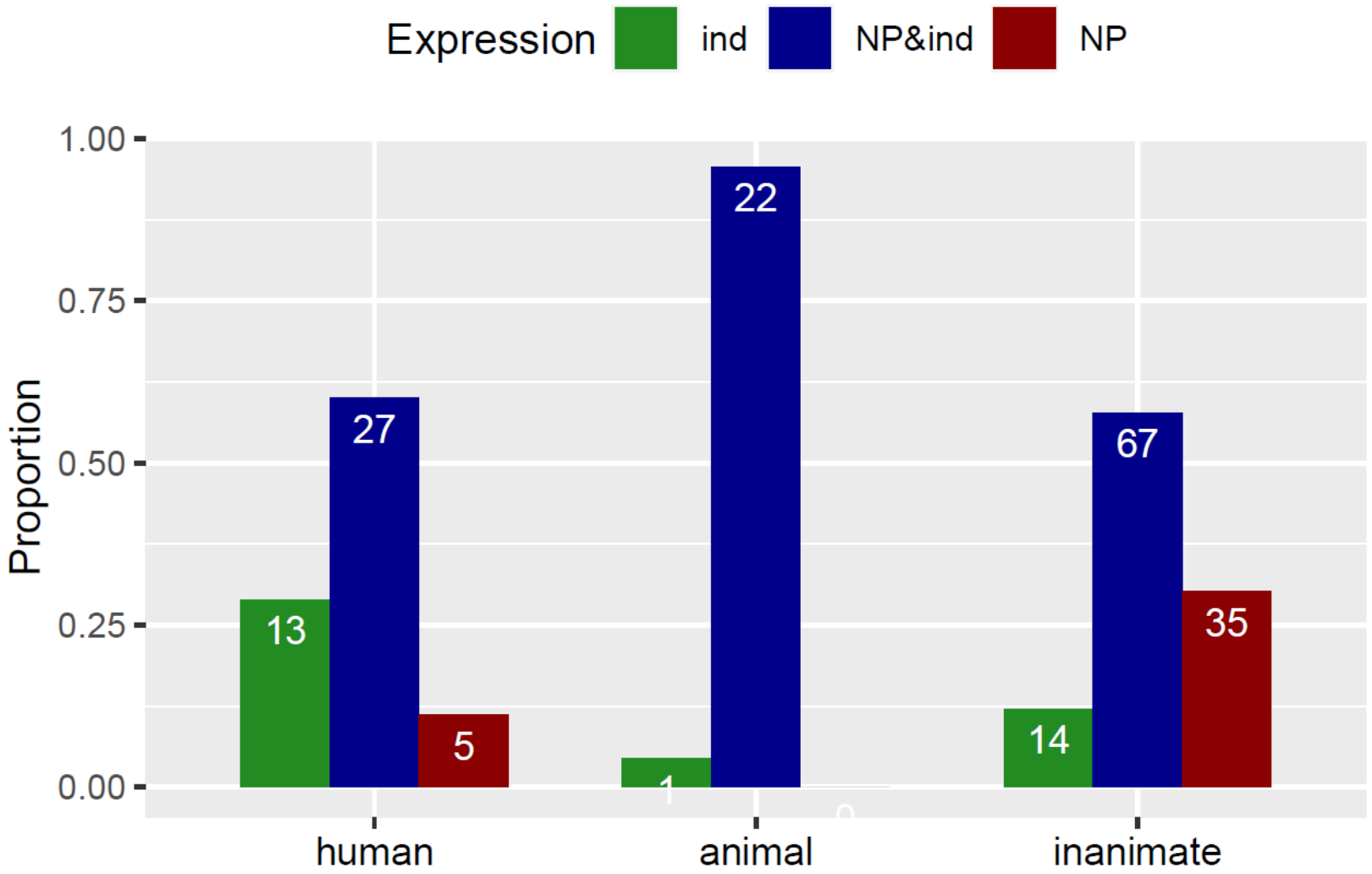


# Given direct objects



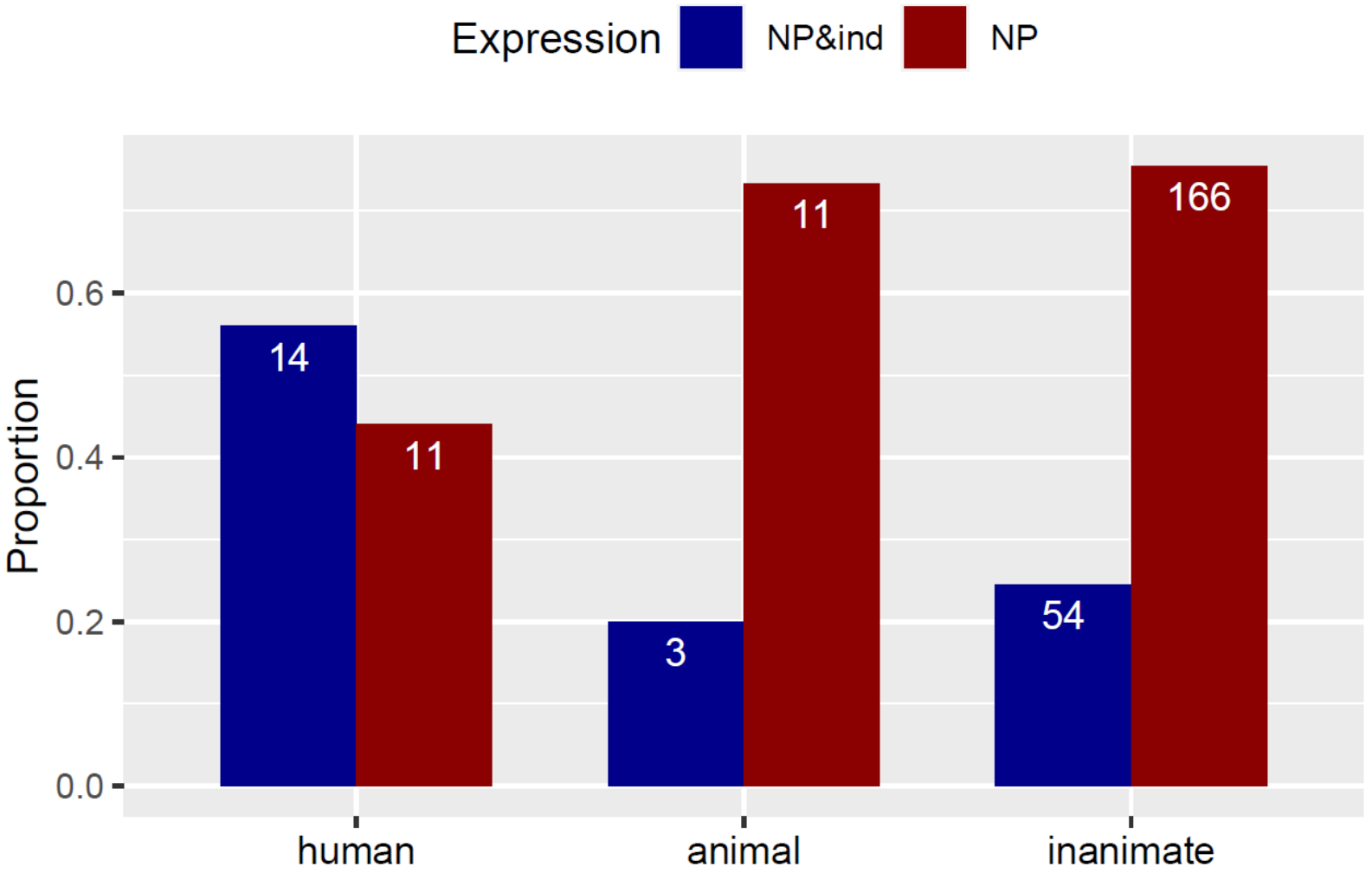

- Given inanimates are more often expressed by an NP with indexing or by an NP without indexing than humans and animals

# Accessible direct objects




- Humans have a higher proportion of index only expression
- Inanimates have a higher proportion of expression by NP only than animals
- Cf. identifiability of referents in Schikowski 2013

# New direct objects




- New human referents show a higher proportion of NP + index expression
- Indexed new direct objects are not marginal

# Direct object expression: preliminary summary

- As expected, object indexing in C. Urmi can be ultimately related to topicality and discourse salience
  - Discourse activation status
  - Animacy

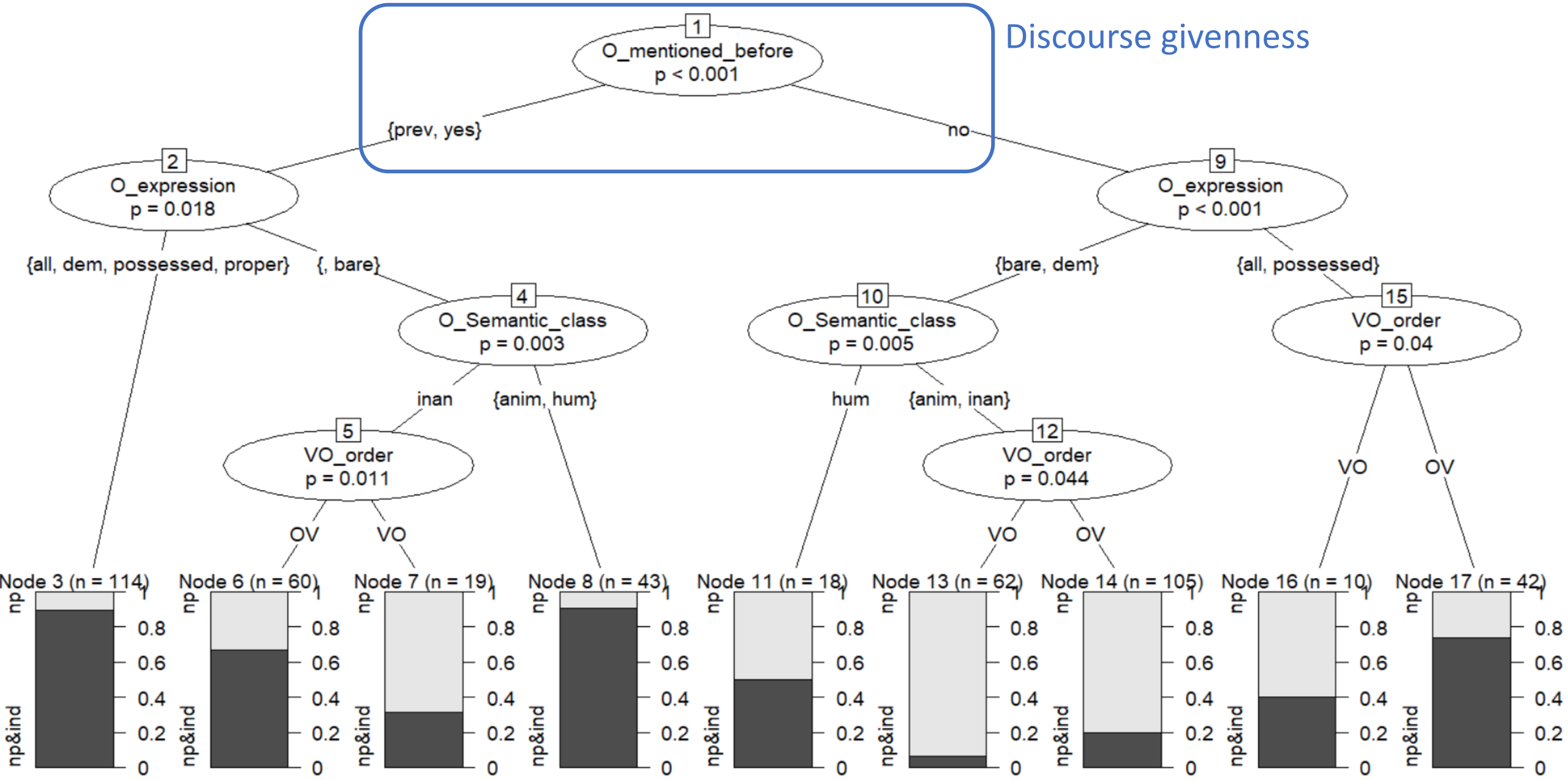
- Importantly, the cases when indexing is used without an overt NP also naturally fit in this system

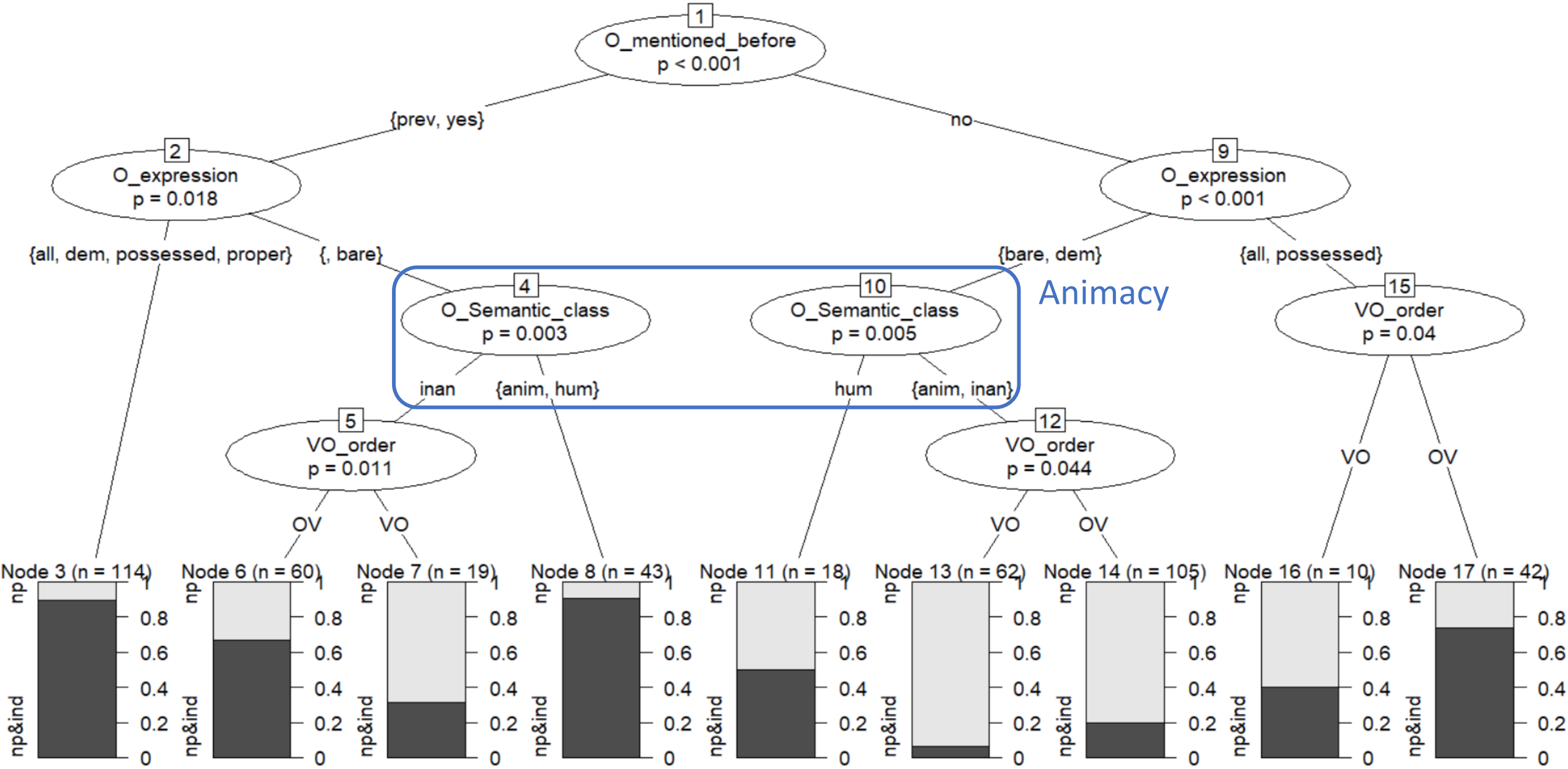
# DOI in the domain of variation

- Subset of examples with expressed object NP – 473 examples
  - Indexed – 256, without indexing – 217
- Annotated for
  - Animacy
  - Discourse activation status

  } as discussed above
  - Expression of O: bare, with a possessive marker, with a demonstrative, ‘all’, proper name
  - Word order
    - Position relative to the verb: OV, VO
    - Presence of other groups after the verb: yes, no
- The presence of indexing is modelled using conditional inference trees, R package *party* (Hothorn et al. 2006a, 2006b)

## Discourse givenness




1
O_mentioned_before
p < 0.001
{prev, yes}
no
2
O_expression
p = 0.018
9
O_expression
p < 0.001
{all, dem, possessed, proper}
{, bare}
{bare, dem}
{all, possessed}
4
O_Semantic_class
p = 0.003
10
O_Semantic_class
p = 0.005
15
VO_order
p = 0.04
Animacy
inan
{anim, hum}
hum
{anim, inan}
5
VO_order
p = 0.011
12
VO_order
p = 0.044
OV
VO
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OV
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OV
Node 3 (n = 114)
Node 6 (n = 60)
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Node 16 (n = 10)
Node 17 (n = 42)
np
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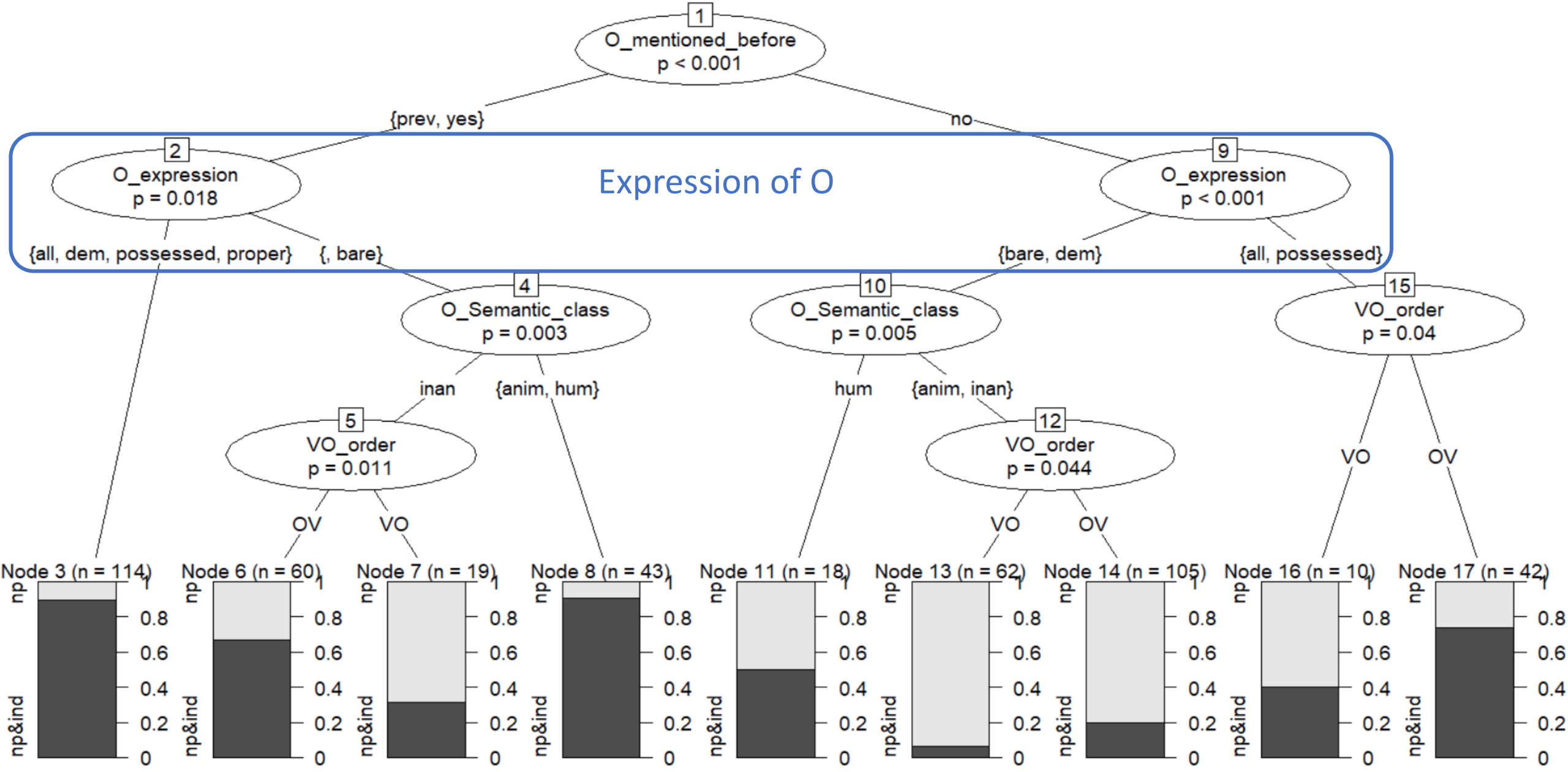
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Expression of O
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# DO expression: distribution

| O expression | N |
|---|---|
| Bare | 301 |
| With a possessive marker | 103 |
| With a demonstrative pronoun | 33 |
| (With) ‘all’ | 32 |
| Proper name | 3 |

- The most frequent types are bare and with a possessive marker

# DO activation status and expression

| DO activation status and expression | indexing | no indexing |
|---|---|---|
| Given DOs | | |
| Formally definite | 41 (0.9) | 4 (0.1) |
| Bare | 29 (0.8) | 6 (0.2) |
| Accessible DOs | | |
| Formally definite | 61 (0.9) | 8 (0.1) |
| Bare | 56 (0.7) | 30 (0.3) |
| New DOs | | |
| Formally definite | 37 (0.7) | 20 (0.3) |
| Bare | 32 (0.2) | 148 (0.8) |

# DO expression and definiteness

- The expression types associated with indexing are obviously related to definiteness: possessive marking, demonstratives, proper names
- Interestingly, the variable of O-expression is significant within the group of Os that are already established in discourse

- Within the new Os, the effect of O expression can arguably be associated with situationally accessible, or inferable Os

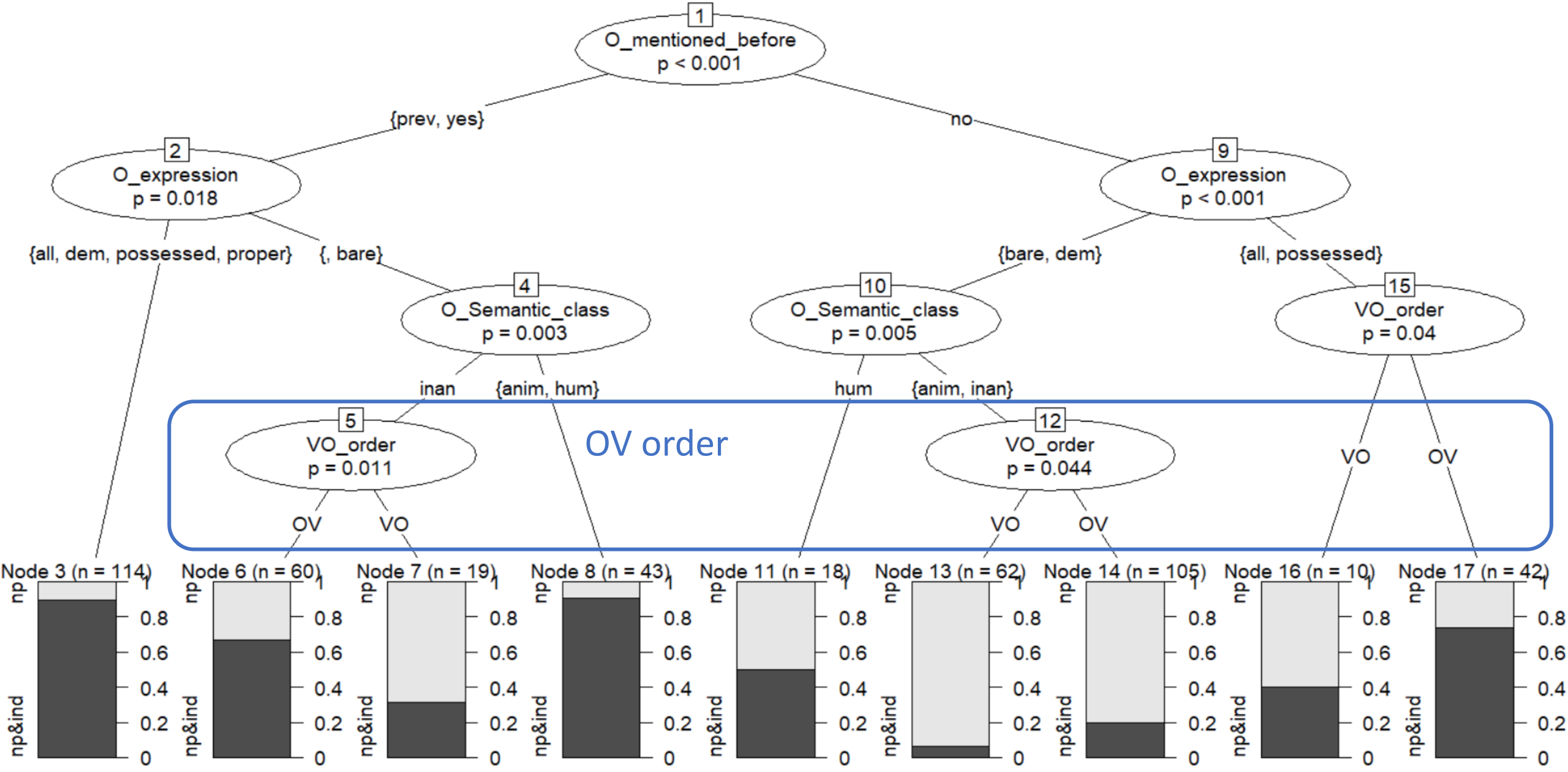
# What are inferables and how to identify them?

- Cross-linguistically, objects of some semantic classes tend to get indexed even if discourse-new: body parts, parts of whole (‘gate’, ‘door’, ‘keys’), cf. Khanty data discussed by Nikolaeva (2001)
- Still, it is problematic to identify inferables in an unambiguous way and in C. Urmi, a considerable proportion of indexed discourse-new objects can hardly be viewed as inferable
  - Possessive marking as a formal trigger of indexing?
  - No evidence of the use of possessive markers to mark definiteness as such

(6) *+kəryanə xàčč̣=əva gu Urmi +avun* ***cul məndi varak-é bəctav-é=va***

literate.PL some=3.RETR in Urmi DEM4.M every thing(M) paper(M)-P.3PL write.PROG-P.3PL=3.RETR

‘There were few literate people in Urmiya, he wrote all kinds of their papers’.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0.6
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0

# Word order in C. Urmi transitive clauses

- Khan 2016, vol. 2: 335-343
  - the default position for DO in C. Urmi is after the verb (7);
  - OV (8) is frequent, but marked, various conditions: “cohesion with what precedes”, object as aboutness topic, contrastive focus, result of calquing from Iranian languages

(7) *ína* *nanúnt-i* ***škə́lla*** ***+bálta***
but grandmother(F)-P.1SG take.PST-LS.3F axe(F)
‘But my grandmother took an axe.’

(8) *səpríta* ***láxma*** ***bəškál-u=la*** *práx=əla*
birdie(F) bread(M) take.PROG-P.3M=3F fly.PROG=3F
‘The birdie takes the bread and flies away.’

- Noorlander et al. 2025
  - ca. 80% of DOs in C. Urmi are preverbal, especially pronouns, definite and indexed NPs
  - shift from VO to OV in Aramaic: under contact with OV-languages & driven by internal grammatical forces

# DO position and its discourse activation status

| | OV | VO |
|---|---|---|
| given | 53 (64%) | 30 (36%) |
| accessible | 123 (74%) | 33 (26%) |
| new | 158 (70%) | 78 (30%) |
| Total | 335 (71%) | 138 (29%) |

- OV is generally more frequent (71%)
- No straightforward association between word order and givenness, somewhat higher proportion of OV with accessible DOs
- Can it be because discourse activation only partially covers definites?

# DO: Discourse activation, expression and position

| DO activation status and expression | OV | VO |
|---|---|---|
| Given DOs | | |
| Formally definite | 32 (0.7) | 13 (0.3) |
| Bare | 21 (0.6) | 14 (0.4) |
| Accessible DOs | | |
| Formally definite | 50 (0.7) | 19 (0.3) |
| Bare | 73 (0.85) | 13 (0.15) |
| New DOs | | |
| Formally definite | 46 (0.8) | 11 (0.2) |
| Bare | 113 (0.63) | 67 (0.37) |

# DO: Discourse activation, expression and position

| DO activation status and expression | OV | |
|---|---|---|
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| Accessible DOs | | |
| Formally definite | 50 (0.7) | 19 (0.3) |
| Bare | 73 (0.85) | 13 (0.15) |
| New DOs | | |
| Formally definite | 46 (0.8) | 11 (0.2) |
| Bare | 113 (0.63) | 67 (0.37) |

- No consistent evidence for the association between discourse activation or definiteness and preverbal position
- The highest proportions of OV
  - Bare accessible DOs ($p = 0.09$)
  - Definite discourse-new DOs ($p = 0.02$)

# Position of DO and indexing

- OV-order is associated with indexing as such, and much less with definiteness
- The association of OV with DOs with weaker definiteness

# DO position and postverbal groups

| Postverbal groups | OV | VO |
|---|---|---|
| no | 280 (68%) | 131 (32%) |
| yes | 55 (89%) | 7 (11%) |

- OV is more frequent when there are other groups (R, A, goals) after the verb ($\chi^2$, df = 1, $p < 0.002$)

(9) *+xárta madrása škíl-u=lə gu ídu*
finally school(F) take.RES.M-P.3M=3M in hand(F)-P.3M
'Then he took over the school.'

# Postverbal groups: controlling for definiteness of O

| | Postverbal groups | |
|---|---|---|
| Discourse activation | no | yes |
| given | 65 (81%) | 15 (19%) |
| accessible | 128 (82%) | 28 (18%) |
| new | 218 (92%) | 19 (8%) |

- Postverbal groups are more frequently attested in clauses with activated (given or accessible) DOs ($\chi^2$, df = 2, $p < 0.005$)
- No association found between formal properties (definiteness) and postverbal material

# Indexing and postverbal groups

- Only the subset of OV clauses

| DO activation and postverbal material | no indexing | indexing |
|---|---|---|
| Given DOs | | |
| Postverbal material: yes | 0 | 11 |
| Postverbal material: no | 5 | 37 |
| Accessible DOs | | |
| Postverbal material: yes | 3 | 24 (0.9) |
| Postverbal material: no | 23 | 73 (0.8) |
| New DOs | | |
| Postverbal material: yes | 7 | 10 (0.6) |
| Postverbal material: no | 93 | 49 (0.4) |

# Indexing and postverbal groups

- Only the subset of OV clauses

| DO activation and postverbal material | no in | |
|---|---|---|
| Given DOs | | |
| Postverbal material: yes | | |
| Postverbal material: no | | |
| Accessible DOs | | |
| Postverbal material: yes | 3 | 24 (0.9) |
| Postverbal material: no | 23 | 73 (0.8) |
| New DOs | | |
| Postverbal material: yes | 7 | 10 (0.6) |
| Postverbal material: no | 93 | 49 (0.4) |

- Higher proportion of indexing when postverbal groups are present (Cochran-Mantel-Haenszel test, $p < 0.02$)
- The difference is especially strong for new DOs
- This difference is not due to formal definiteness marking

# Direct object expression: summary (1)

- As expected, object indexing in C. Urmi is primarily associated with higher topicality and discourse salience
  - Discourse activation status
  - Animacy

- Importantly, the cases when indexing is used without an overt NP also naturally fit in this system
  - A step from the traditional analysis of DOI in the domain of variation

# Direct object expression: summary (2)

- Within the domain of DOI proper, further factors are found to be relevant
- Formal marking of definiteness, e.g. possessive markers
  - are not always used for obvious inferables
- VO order
  - OV has a stronger and more consistent association with indexing than with definiteness
  - Among definiteness categories, mostly attested for weakly definite NPs
  - Intricate interplay between indexing, WO, discourse activation, and formal marking
- Postverbal groups
  - Are associated with OV and, independently, within OV clauses, with a higher frequency of indexing for DO
- Indexing and OV as a discourse-management mechanism?
  - Avoidance of multiple groups after the verb? VP focus?

# From DOM to reference tracking: a proposed shift of perspective

# DOM from a discourse-based perspective

- Predicting the choice of **all** the available options for participant expression, given its semantic class

# A traditional view of DOI and DOF

- Predicting the choice of marking **within the domain of variation**

| | **indexing only** | **bare NP + indexing** | **bare NP + no indexing** | **preposition *ka* + no indexing** |
|---|---|---|---|---|
| SAP | yes | no? | no? | yes |
| human | yes | yes | yes | yes |
| animate non-human | yes | yes | yes | yes? |
| inanimate | yes | yes | yes | no |

DOF

DOI

# Discourse-based perspective

- Running narrative

‘The monster comes. She is sitting at the table, she says: “Monster, now you may eat everything you want." She feeds the monster very well, so that he would not be hungry. "Now I will tell you that I brought a man into my house. Now you will eat him or let him go. But he is a very good man, a good boy". The monster has become sated, he says: "Come on, call him, I will see, what he is".’

- The next event with an O-participant: ‘She calls the boy’.
  - Known: animacy of the participants, the idea of their salience in the preceding and in the following discourse, their role in the preceding clause
  - The boy is human and given

# Discourse and the choice of object expression

| | indexing only | bare NP + indexing | bare NP + no indexing | preposition *ka* + no indexing |
|---|---|---|---|---|
| SAP | yes | no? | no? | yes |
| human | yes | yes | yes | yes |
| animate non-human | yes | yes | yes | yes? |
| inanimate | yes | yes | yes | no |

- Expressing the participant with an index only is an available option
- If a definite NP is chosen: definiteness is the main trigger for **both** object indexing and object flagging in C. Urmi (Khan 2016: 251–256)

# Discourse-based perspective

- Running narrative

‘The monster comes. She is sitting at the table, she says: “Monster, now you may eat everything you want." She feeds the monster very well, so that he would not be hungry. "Now I will tell you that I brought a man into my house. Now you will eat him or let him go. But he is a very good man, a good boy". The dev has become sated, he says: "Come on, call him, I will see, what he is".’

- The O-participant is expressed by an indexed NP

(10) +avvó +bəkráy-u=la a yála
DEM3.M call.PROG-P.3M-LS.3F DEM1.SG boy(M)
‘She calls this boy.’

# Traditional vs. discourse-based perspective

- Thus, if we study strictly DOF or DOI in the domain of variation, we limit our analysis just to a subset of the choices actually available in discourse
- Regarding DOM among all the available options of expression for a certain participant type will help investigate the division of labor between DOF and DOI (at least for C. Urmi)
  - Schikowski, Iemmolo 2015: **indexing** in DOI systems functions as a reference-tracking device and is associated with **continuity**, while **flagging** in DOF systems tends to signal unexpected, semantically unusual objects, and is thus associated with **discontinuity**

# DOM from a discourse-based perspective

- Predicting the choice of all the available options for participant expression, given its semantic class
- Taking into account a wider range of parameters related to the expression and position of other participants in the clause

# Ditransitive constructions

- von Heusinger 2008 on Spanish; Kozhanov, Seržant, Bužarovska, in press, on Macedonian: when flagging devices for O and R coincide, flagging of O is less frequent in ditransitives
- R in C. Urmi can be expressed either by a flagged NP or by an index: the properties of R should be taken into account in the analysis of the choice of expression for O

(5) *ítar* *+táma* *káša* *ət* *+úmra* *yúvv-u=va* *dúca*

then there priest(M) REL church(M) give.RES.M-P.3M=3.RETR place(F)

'Then there the priest of the church gave him a place.'

(6) *átən* *gárəc* *+sáz* *yavv-át-ta* *ka* *dí*

thou necessary saz(F) give.PRS-SS.2M-LS.3F to OBL.PRON.1SG

'You must give me the saz.'

# DOM from a discourse-based perspective

- Predicting the choice of all the available options for participant expression, given its semantic class
- Taking into account a wider range of parameters related to the expression and position of other participants in the clause
- Identifying conditions for the certain combinations of clause properties encompassing participant expression and word order

# Word order

- As with R expression in ditransitives, we cannot say that word order is chosen either before of after object marking
- It is more reasonable to model the choice of the combination of object expression and WO as a whole
  - Indexed NP & OV
  - Indexed NP & VO…

# DOM from a discourse-based perspective

- Predicting the choice of all the available options for participant expression, given its semantic class
- Taking into account a wider range of parameters related to the expression and position of other participants in the clause
- Identifying conditions for the certain combinations of clause properties encompassing participant expression and word order

# C. Urmi (and other NENA): discourse structure

- Passive is virtually non-existent
- Predominantly finite structures in clause-combining and few obligatory (syntactic) zeroes
- C. Urmi narrative is basically a sequence of finite active clauses – the discourse is structured through the choice of referential expression type, object marking (agreement, flagging), and word order

# Disclaimers

- This perspective doesn’t deny the role of traditionally identified factors of DOM but puts them in a broader perspective looking at DOM as a part of discourse management mechanisms
- The specific ways and methods to explore and represent the whole picture are yet to be determined
- General approach: from small-scale findings and specific phenomena, such as DOI, word order, ditransitive constructions, etc., to a more overarching picture

# Summary

# Main findings and proposals

- DOM systems are similar in general makeup (definiteness, animacy), but different wrt minor factors at work, in case of C. Urmi
  - Formal properties of O: presence of possessive marking
  - Preverbal position of DO and the presence of other groups after the verb < discourse management

- Discourse-based perspective on DOM
  - encompassing a wider range of participant expression strategies beyond the strictly defined domain of DOI or DOF, depending on the semantic class of participant
  - taking into account a possible interaction with expression choice for other participants