

Alternating Person Indexing in Kamang

Katherine Walker & Eva van Lier
ICCG11 – Antwerp – August 2021



UNIVERSITY OF AMSTERDAM



NWO project:
Exceptions rule!
*Lexical conditions on
grammatical structure*



Joint work with:

Antoinette Schapper & George Saad
Fieldwork, corpus consultation

Clemens Meyer
Corpus annotation

Pegah Faghiri
Statistical analysis

Contents

1. Introduction to Kamang
 - Language background
 - Person indexing – key features
2. Our study: alternating person indexing in Kamang discourse
 - Earlier work
 - Methods
 - Results
 - Summary / Conclusions / Outlook

Kamang and the Timor-Alor-Pantar family



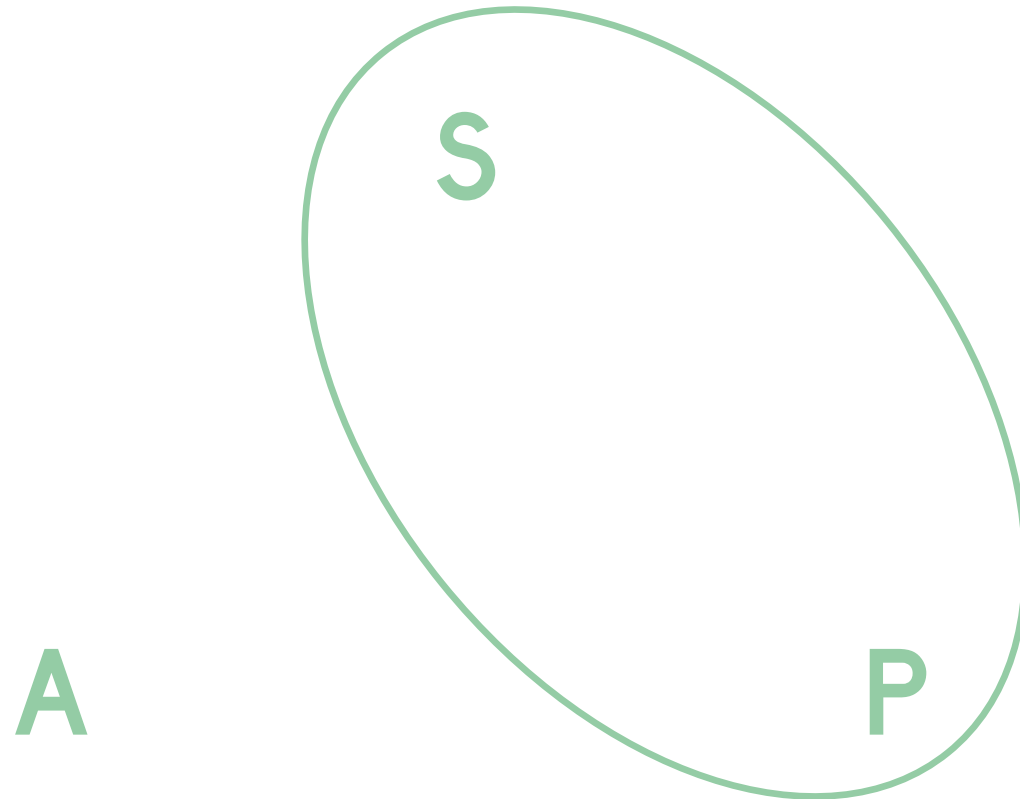
Timor-Alor-Pantar =
Family of ca. 30 Papuan
languages

Kamang: ca. 6000 speakers

Person indexing in Kamang – key features

- **Alignment:** person/number/clusivity indexing of S/P vs. A
- **Lexical constraint:** some verbs always index their S/P argument, others **alternate**
 - Which factors regulate this alternation?
- Indexing strategy: **three distinct prefix series** (/e/, /o/, /a/)

Alignment of person indexing in Kamang



Alternating person indexing in Kamang

S

ge-tak

'3rd run(s)'

∅-tak

'3rd/2nd/1st run(s)'

P

ga-faafa

'search.for [someone]'

∅-faafa

'search.for [something]'

Lexical constraint: **alternating** vs. non-alternating verbs

Verb class: Alternating

Marking: Flexible

(a) *koo* *ge-dum=a* *ga-faafa*
continuously 3.POSS-child=SPEC 3./a/-search.for
'(She) kept looking for her child.'

(b) *male* *uh* *ok* *taweng* *te-bini* *∅-faafa*
woman CLF two in.turns DIST-lice ∅-search.for
'Two women search for each other's lice in turns.'

Lexical constraint: alternating vs. non-alternating verbs

Verb class: non-alternating

Marking: fixed

(a) Leon na-tak-si

Leon 1SG./a/-see-IPFV

‘Leon sees me.’

(b) ge-kere ga-tak-si naa

3.POSS-shirt 3./a/-see-IPFV NEG

‘[he] didn’t see his shirt.’

Indexing strategy: prefix series

	/a/-series	/o/-series	/e/-series
1SG	<i>na-</i>	<i>no-</i>	<i>ne-</i>
2SG	<i>a-</i>	<i>o-</i>	<i>e-</i>
3	<i>ga-</i>	<i>wo-</i>	<i>ge-</i>
CMN	<i>ta-</i>	<i>to-</i>	<i>te-</i>
1PL.EXCL	<i>ni-</i>	<i>nio-</i>	<i>ni-</i>
1PL.INCL	<i>si-</i>	<i>sio-</i>	<i>si-</i>
2PL	<i>i-</i>	<i>io-</i>	<i>i-</i>

vs. \emptyset ("ZERO")

Our study

Which factors play a role in choosing which prefix-series or zero marking on **alternating** verbs in Kamang?

Earlier work: Fedden et al. 2013, 2014

- Video elicitation (2013), supplemented with corpus data (2014) →
- Relevant factors involved in alternation:
 - Argument role (S vs. P)
 - Animacy
 - Prefix series
 - Event-related factors: affectedness, volitionality, telicity
- Limitations
 - Conflicting results, esp. importance of animacy?
 - Discourse factors??

Method: quantitative corpus study

- Approx. 1 hour of spoken Kamang
 - 10 narrative monologues by 3 speakers (male, 44–86), recorded 2010/11, 2020
- Transcribed and annotated with
 - GRAID = Grammatical Relations and Animacy in Discourse (Haig & Schnell 2014)
 - RefIND (Schiborr et al. 2018): tracking of discourse referents
 - MultiCAST project: <https://multicast.aspra.uni-bamberg.de/>

Corpus annotation / argument variables

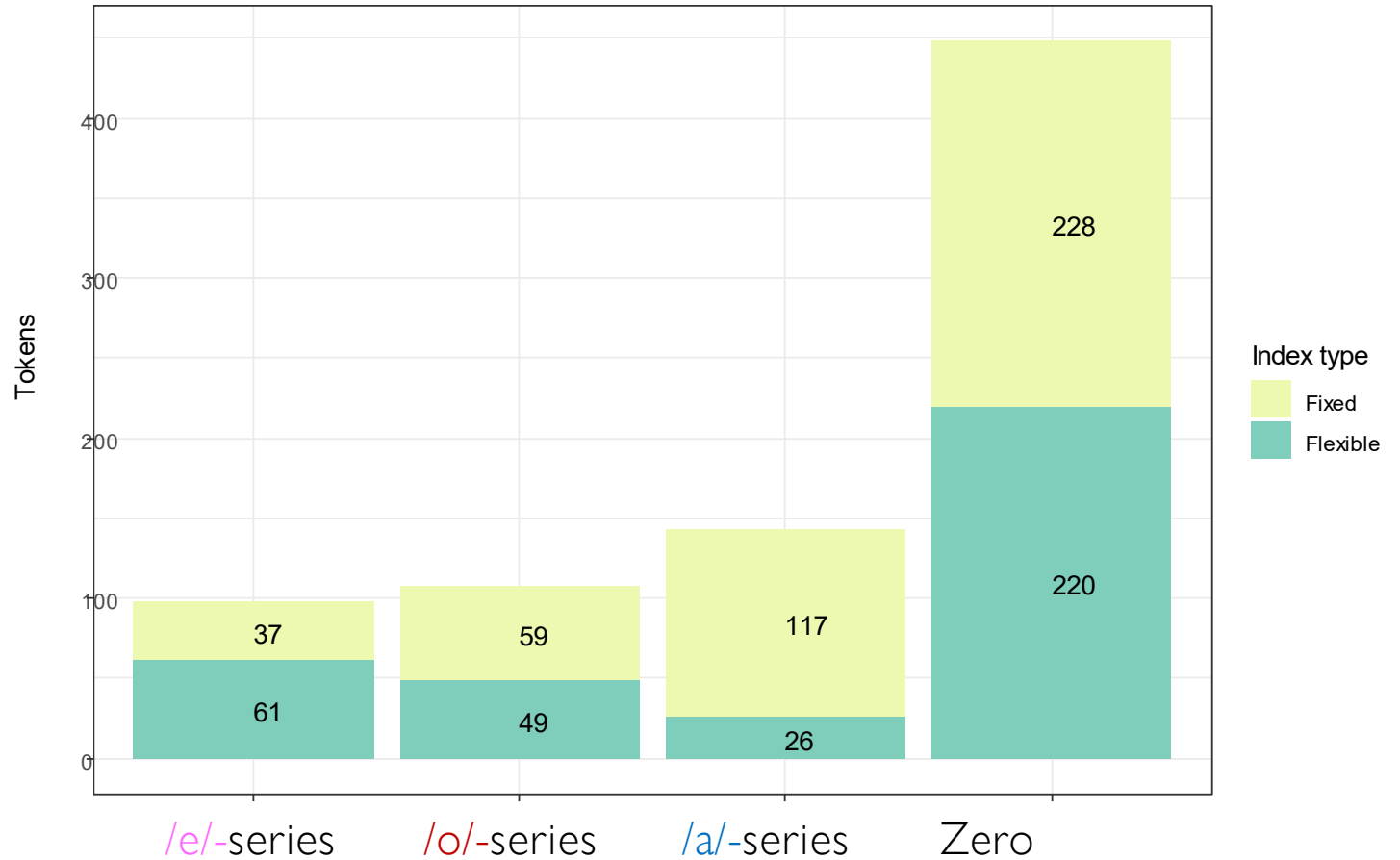
- Role: S, A, P
- Animacy: 1, 2, human, animate, inanimate
- Form:
 - Independent: NP, pronoun, null
 - Indexing strategy: prefix series, zero
- numeric ID for referent tracking

Results (i): overall frequencies

- 164 verb types
 - 39 alternating: 24%
- 797 verb tokens
 - 380 index P: 48%
 - 417 index S: 52%

Results (i): overall frequencies

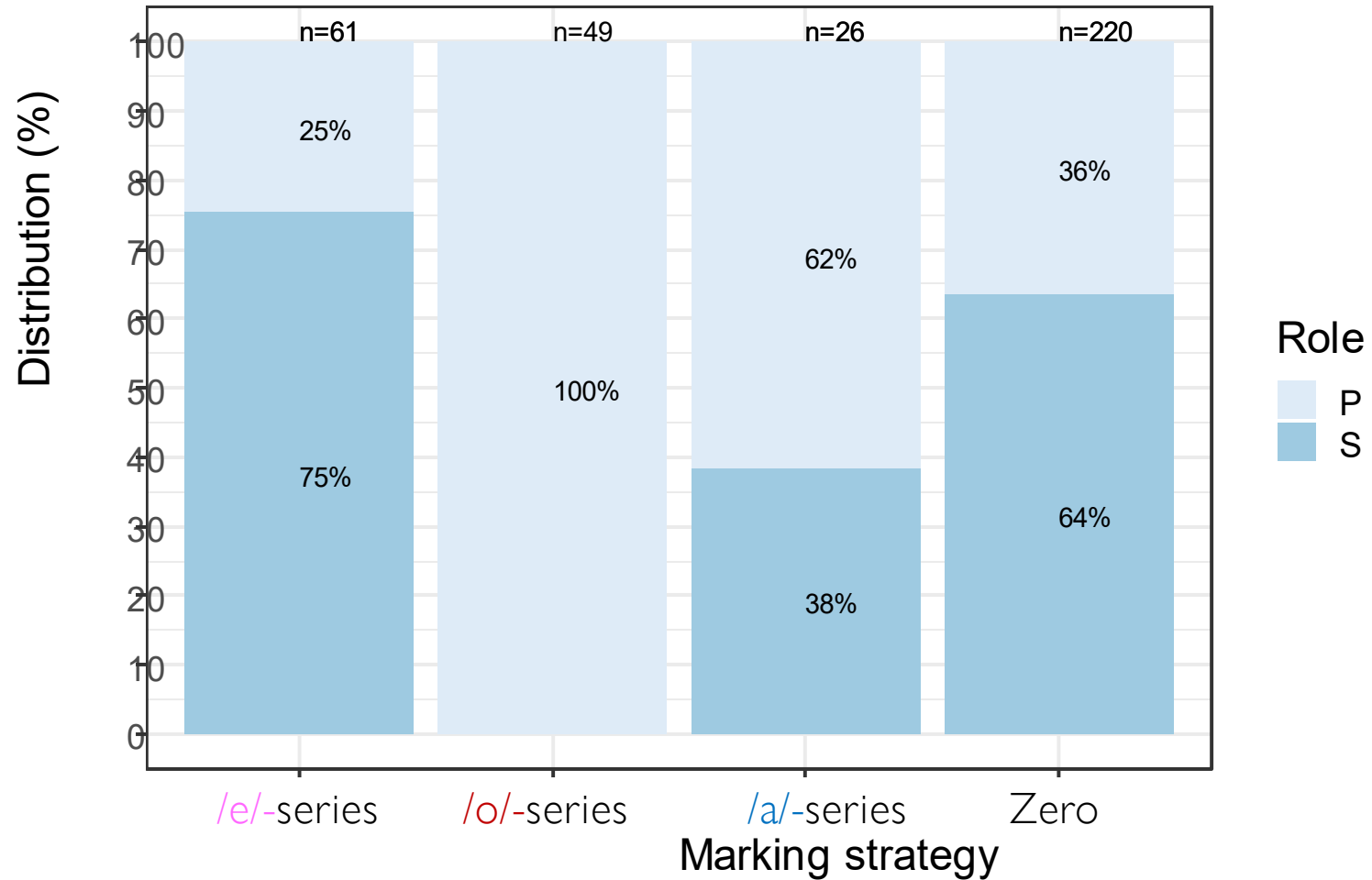
- 164 verb types
 - 39 alternating: 24%
- 797 verb tokens
 - 380 index P: 48%
 - 417 index S: 52%



Results (ii): Factors involved in alternation

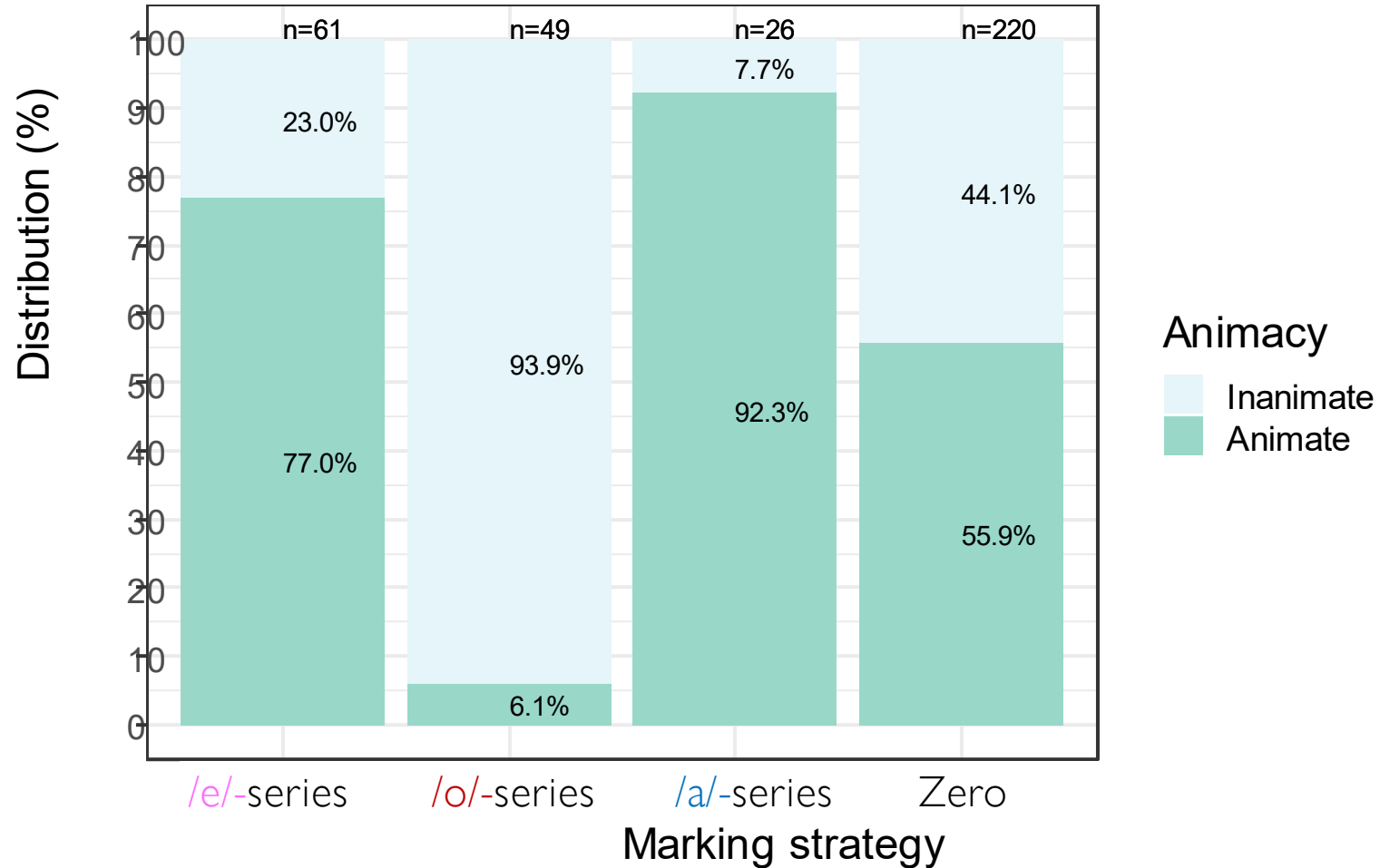
- Argument role and animacy
- Discourse factors

Argument role in alternation



Tokens = 356

Animacy in alternation



Tokens = 356

Beyond argument role & animacy

- Highly correlated ($p < 0.001$): S animate, P inanimate
- Animate P is more frequently indexed than inanimate P
 - cf. cross-linguistic tendency to mark the “unexpected”, but
 - inanimate P is still indexed ca. 45%
 - animate P is zero-marked ca. 30%
- Animate S is **also** more frequently indexed (ca. 30%) than inanimate S (ca. 20%)
 - functional explanation does **not** apply
 - no significant difference between animate/inanimate
 - overall S is most often zero-marked
- Other factor(s) must play a role → Discourse:
 - Co-occurrence with independent arguments
 - Topicality

Beyond argument role and animacy

- Logistic regression modelling (nnet package R)
 - Multinomial model with a 4-level response variable
 - zero as the baseline
 - two grouping factors to capture verbal bias

Zero

/e/-series

/o/-series

/a/-series

Beyond argument role and animacy

- Logistic regression modelling (nnet package R)
 - Multinomial model with a 4-level response variable
 - zero as the baseline
 - two grouping factors to capture verbal bias

Zero

/e/-series

/o/-series

/a/-series

Argument role profiles:

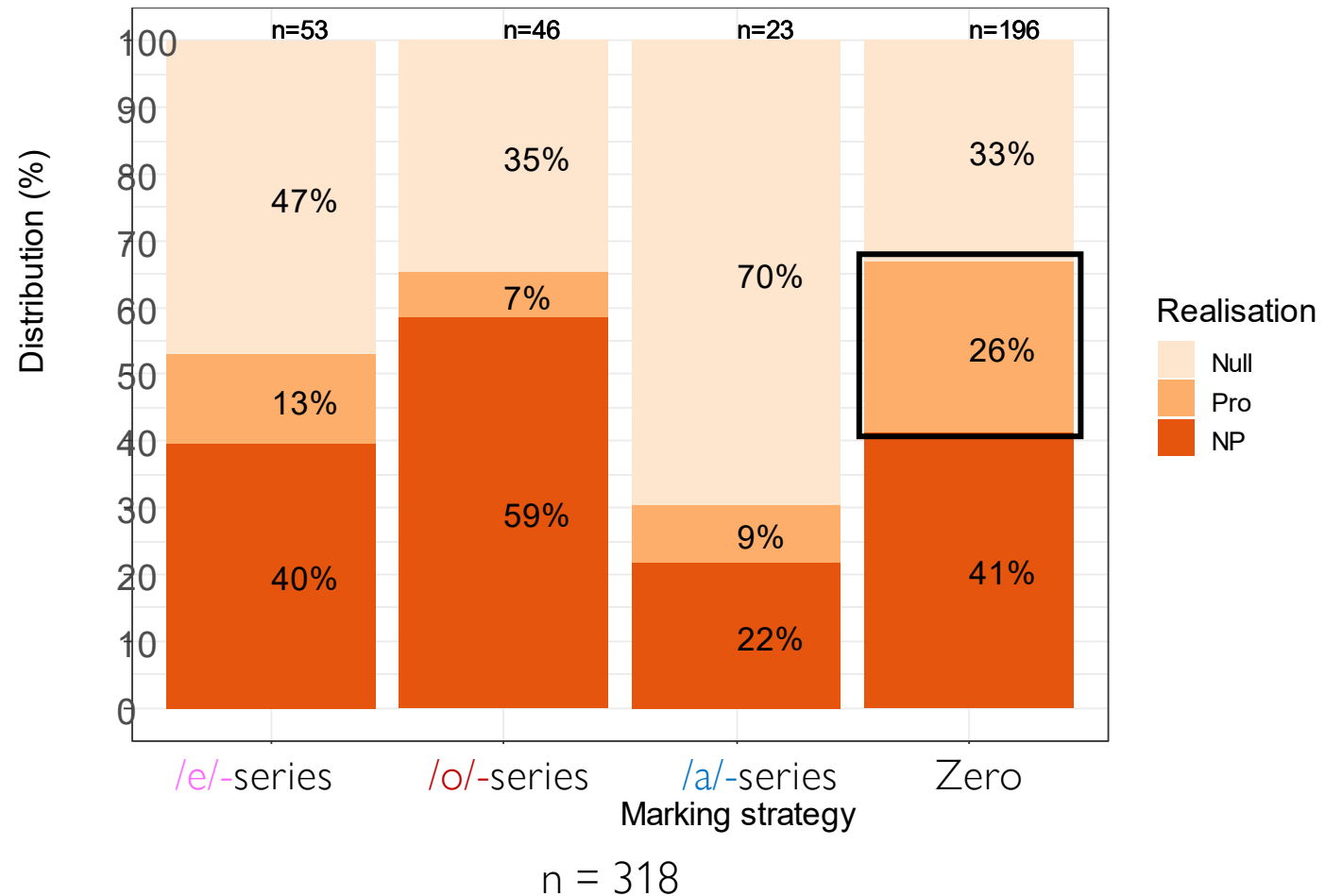
- S
- P
- split S/P

Animacy profiles:

- animate
- inanimate
- split animate/inanimate

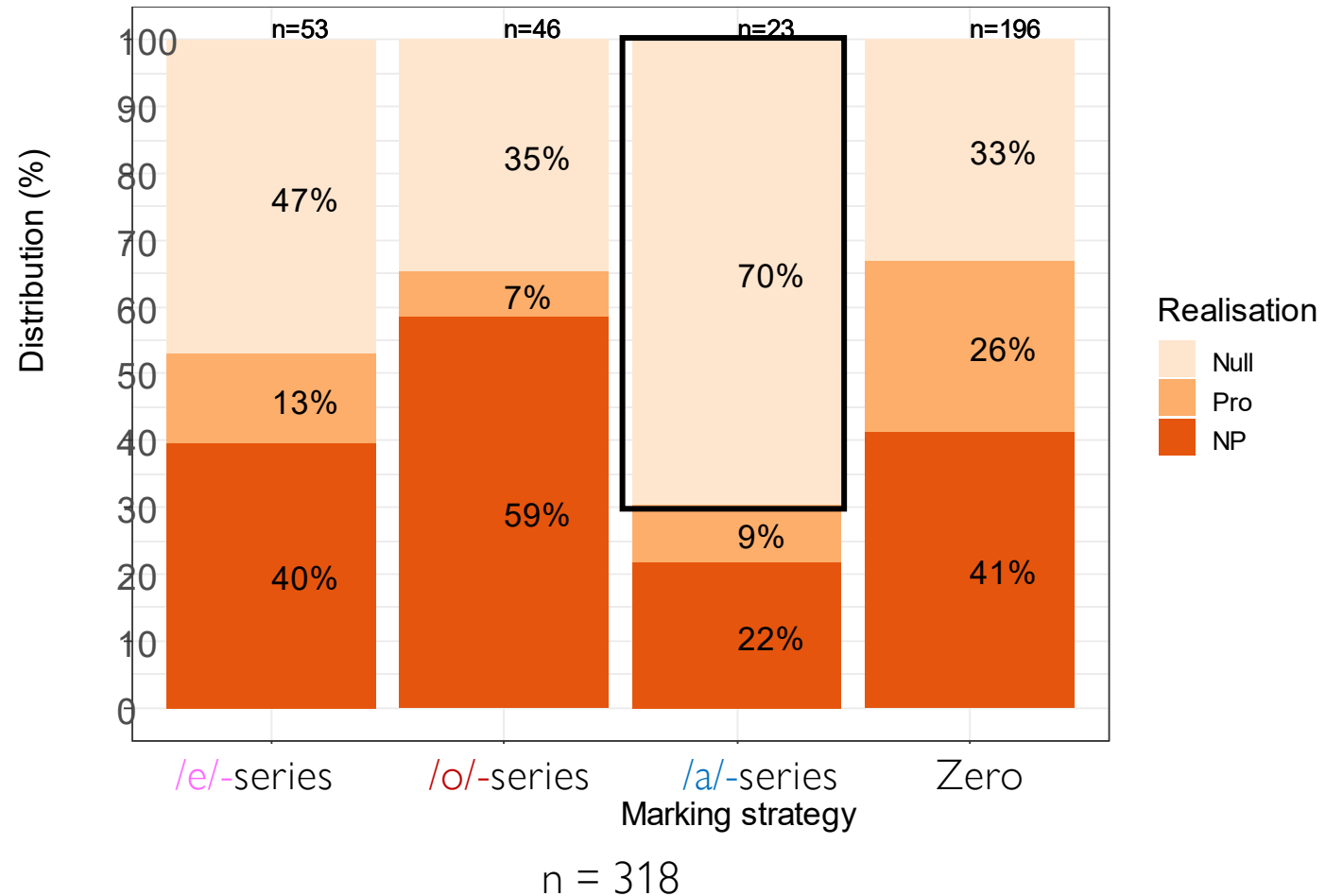
Discourse factors: Co-occurrence with independent arguments

- Zero-marking is significantly more likely than any prefix to co-occur with an independent pronoun



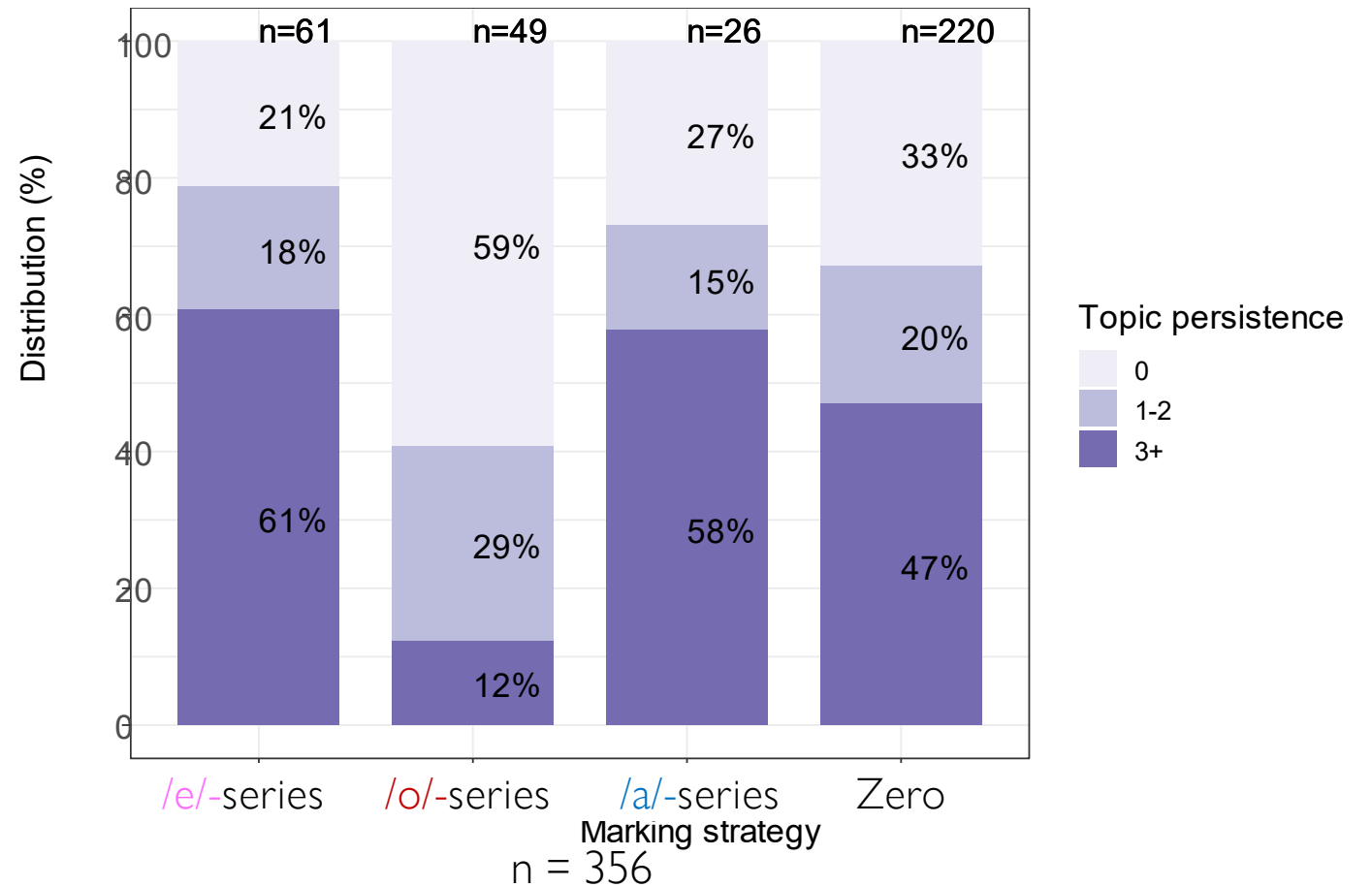
Discourse factors: Co-occurrence with independent arguments

- Zero-marking co-occurs with an independent pronoun significantly more often than any prefix
- /a/-series co-occurs with null independent argument significantly more often than other strategies (zero and e/o-series)



Discourse factors: Topicality*

- All prefix-series differ significantly from Zero
- /o/-series prefers low-topical argument
- /e/-series and /a/-series prefer high-topical argument



* Topic Persistence = How many times the referent occurs in the next 10 clauses (Givón 1994; Payne 1994)

Summary / conclusions / outlook

- Importance of lexical stipulation: non-alternating vs. alternating verbs
- Alternation: different prefix-series respond differently to different factors:
 - /a/-series: animate, topical, non-overt S/P arguments
 - /e/-series: topical, non-pronominal S arguments (which are mostly animate)
 - /o/-series: inanimate, non-topical, non-pronominal P arguments
- Methodological challenges:
 - Corpus study on a “small” language
 - Corpus data vs. experiments/elicitation
 - esp. telicity, affectedness
 - Regression modelling vs. other methods
 - vs. e.g. conditional inference trees

References

- Fedden, Sebastian, Dunstan Brown, Greville Corbett, Gary Holton, Marian Klamer, Laura C. Robinson & Antoinette Schapper. *Conditions on pronominal marking in the Alor-Pantar languages*. *Linguistics* 2013; 51(1): 33 – 74.
- Fedden, Sebastian, Dunstan Brown, František Kratochvíl, Laura C. Robinson, and Antoinette Schapper. 2014. 'Variation in Pronominal Indexing: Lexical Stipulation vs. Referential Properties in Alor-Pantar Languages'. *Studies in Language* 38(1):44–79.
- Haig, Geoffrey & Schnell, Stefan. 2014. Annotations using GRAID (Grammatical Relations and Animacy in Discourse).
- Givón, Talmy. 1994. *Voice and Inversion*. Amsterdam: John Benjamins.
- Payne, Thomas E. 1994. 'The Pragmatics of Voice in a Philippine Language'. In Talmy Givón (ed), *Voice and Inversion*, 318–64. Amsterdam & Philadelphia: John Benjamins.
- Schapper, Antoinette. 2014a. Introduction. In A. Schapper (ed) *The Papuan Languages of Timor, Alor and Pantar: Volume 1*. Boston & Berlin: De Gruyter.
- Schapper, Antoinette. 2014b. Kamang. In A. Schapper (ed) *The Papuan Languages of Timor, Alor and Pantar: Volume 1*. Boston & Berlin: De Gruyter.
- Schiborr, Nils N. & Schnell, Stefan & Thiele, Hanna. 2018. RefIND — Referent Indexing in Natural-language Discourse: Annotation guidelines. Version 1.1. University of Bamberg. (<https://multicast.aspra.uni-bamberg.de/#annotations>)

Telicity: S

- Aspect as proxy for telicity
- Aspect is not obligatory
 - Imperfective = atelic
 - Perfective = telic
 - Unmarked = ?

Aspect	Prefix		Zero	
	%	n=	%	n=
IPFV	20%	8	80%	32
PFV	8%	1	92%	11
unmarked	33%	47	67%	97
<i>Total</i>	29%	56	71%	140

(a) *anmante ingkoo sukuubo akmi mane mibo ga wooi silangbee*

anmante ingkoo sukuu=bo akmi mane mi=bo ga wo-oi
 but.then earlier hole=REL here village in=REL 3.AGT 3./o/-towards
 ‘but then earlier there was a hole in the village here that she used to go down into...’

∅-silang=bee
 ∅-descend=also

(b) *male saakka ilaisa yaa me sukuu wooi gesilanga*

male saak=a ilai-sa yaa me sukuu wo-oi
 female old=SPEC look-COMP go come hole 3./o/-towards
 ‘[she lay there hiding and] saw the old women go and descend into a hole’

ge-silang=a
 3./e/-descend=SPEC

Telicity: P

S

Aspect	Prefix		Zero	
	%	n=	%	n=
IPFV	20%	8	80%	32
PFV	8%	1	92%	11
unmarked	33%	47	67%	97
<i>Total</i>	29%	56	71%	140

P

Aspect	Prefix		Zero	
	%	n=	%	n=
IPFV	54%	20	46%	17
PFV	67%	10	33%	5
unmarked	46%	50	54%	58
<i>Total</i>	50	80	50	80

Telicity: P

Kamang	English	Perfective	Unmarked	Imperfective
<i>kuh</i>	'cover; close'	zero		/o/-series
<i>bulen</i>	'write (on)'	zero		/o/-series
<i>baila</i>	'buy'	/e/-series		zero
<i>balkei</i>	'sell'	/e/-series	-	/o/-series

- a. [when she turned around and came back to the sea,]

woi baai me kuhma.

woi	baai	me	ø-kuh-ma
stone	great	take	ø-close-PFV

'[the hole] was closed up with a big stone.'

- b. *ga yaa woi baai ang nok metsibo me see sukuu ang wokuh.*

ga	yaa	woi	baai	ang	nok	met-si=bo	me	sue	sukuu	ang	wo-kuh
3.AGT	go	stone	great	that	one	take-IPFV=REL	ME	arrive.IPFV	hole	that	3./o/-cover

'she took a big stone and came to the hole and stuffed it closed.'