



A functional perspective on word order variation in noun phrases:

A case study of an Australian language

Flexible **N+DEM**, **N+POSS** and N+ADJ order in Jaminjung-Ngaliwurru

- (1) <En> **thanthu-ni** <swing>, **mama ngarrgina** ngagaj bag gana
 and DEM-ERG swing uncle 1SG.POSS back break 3SG>3SG:chop.PST
gaburrgad! **Ngarrgina** **mama**, <W., that little boy, >, ...
 yesterday 1SG.POSS uncle < ... >

‘And that swing hit my “uncle” (a child) in the back "breaking" it, yesterday.
 My “uncle”, W., that little boy, with curly hair.’

- (2) **Wirib=biya thanthiya** yarrajgu ga-yu barlb <intit>?
 dog=SEQ DEM afraid 3SG-be.PRS stuck.flat TAG

‘That dog there is afraid, flat on the ground, right?’

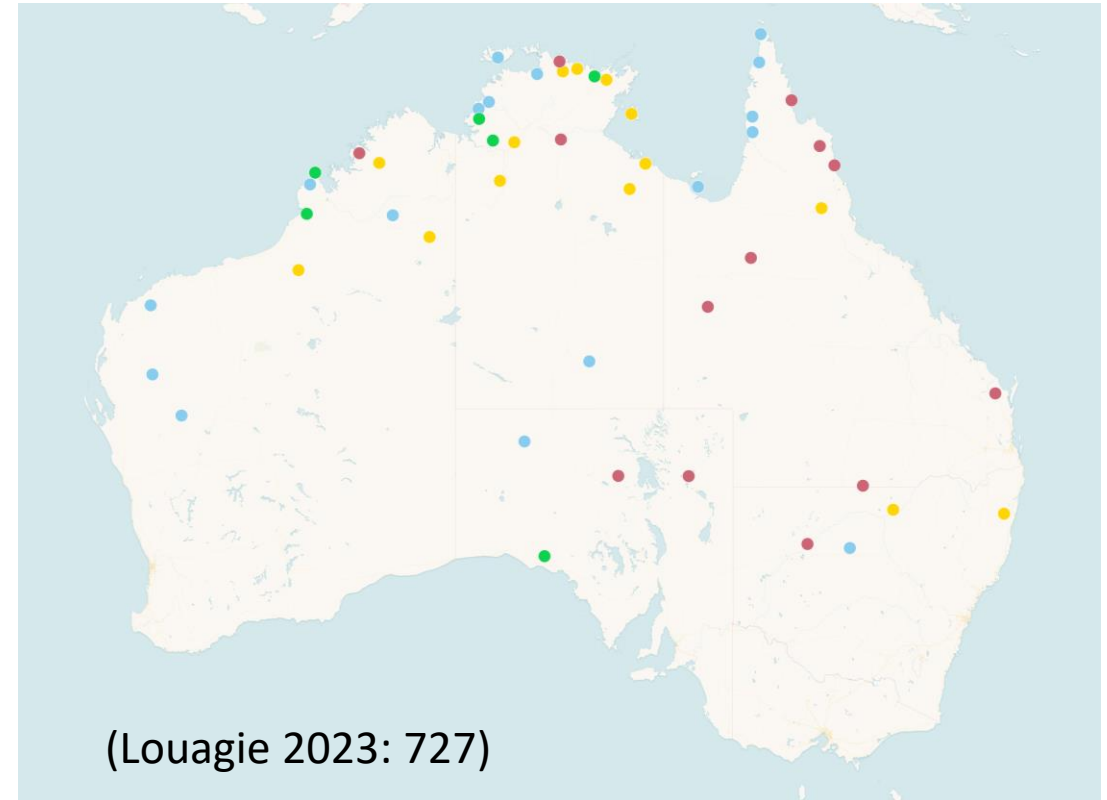
- (3) ... **langiny** **wuju** ... **gujugu-g** **langiny**
 wood small big-LOC wood

‘[They put it on top –] the small branch, on the big branch.’

Nominal expressions in Australian languages

Rich diversity in structural possibilities

- rigid or flexible order, for some or all types of modifiers
- one or multiple options for locus of relational case marking
- discontinuity may or may not be allowed



- mostly rigid
- mostly loose & non-phrasal
- mostly flexible, but phrasal (JAMINJUNG)
- category-specific construction types

(e.g. Blake 1987: 78–91; McGregor 1989, 1997; Schultze-Berndt & Simard 2012; Nordlinger 2014: 227-232, 237-241; Louagie & Verstraete 2016; Mushin 2020; Kapitonov 2021; Louagie 2023; Wilmoth 2023)

Jaminjung-Ngaliwurru

- flexible order for almost all modifiers
 - case marking:
 - Mostly: once in variable position (head/modifier, initial/final)
 - Rarely: on each element
 - discontinuity (Schultze-Berndt & Simard 2012)
- Which factors motivate the use of one or the other structural possibility?
- 1) Are positions in NP mapped to functions?
 - 2) Formal or functional correlates?

Overview

1. Jaminjung-Ngaliwurru & data
2. Unified analysis in terms of functional positions?
3. Other formal and functional factors
4. Summary and conclusion

1. Jaminjung-Ngaliwurru & data

Jaminjung-Ngaliwurru

- two closely related named varieties
- Mirndi family (western branch)
- Victoria River District, Northern Territory, Australia
- very few speakers, mostly elderly



Map produced by the ARC-funded project DP0984419 'Safeguarding small languages', University of Melbourne

Data

Subset of glossed and translated fieldwork corpus (Schultze-Berndt et al. 2017)

61 files; (mostly personal) narratives, procedural texts, picture/video descriptions...

Manually extracted and annotated all multi-word NEs (**n= 508**)

- Only 6% (n=30) consist of more than 2 words
- Only 5% (n=25) are discontinuous (cf. Schultze-Berndt & Simard 2012)
- Includes NEs with Kriol nominal heads (n=70)
- Excludes NEs with Kriol modifiers (n=58) > separate dataset

→ **Focus on contiguous, 2-word NEs (n=455)**

2. Unified analysis: functional positions?

Functional NP analysis

Function motivates structure

→ correlate word order with different functions of modifiers

(4) English (Davidse & Breban 2019: 336, 342, 343)

a. *red wine* (**a very red wine*)

(sub)classifier

b. [*she had*] *very red lips*

qualifier (or 'epithet')

c. *a brave military man*

Fixed order: qualifier – classifier – N

(5) Gooniyandi (Bunuban; McGregor 1990: 253)

(Deictic) (Quantifier) (Classifier) Entity (Qualifier)

In the sense of Halliday, Langacker, McGregor, Davidse
(e.g. McGregor 1990, 2011; Dench 1994; Evans 1995; Hill
2018; Davidse & Breban 2019; Louagie 2017, 2020)

Applying this to Jaminjung data

Biggest challenge: elusiveness of clear criteria

e.g. qualifying vs. (sub-)classifying modifiers

(Davidse & Breban 2019)

- gradability: not applicable to J.-Ng.
- non-referentiality of modifiers: difficult to establish

(6) <det olman bin rekon i >.. minyga ngih .. **barndal gulban**
that old.man AUX.PST reckon 3SG what's.it TAG strong ground

‘That old man thought it was **hard ground**,’ (... but he got bogged up to his chest.)

(7) [Context: a white person came to take children away from their families:]

jarlig-gina **mangurn** <intit>
child-POSS/PURP white.person TAG

‘a white person “for the children”’ (lit. ‘a children’s person’)

Applying this to Jaminjung data

Biggest challenge: elusiveness of clear criteria

e.g.

(McGregor 1990)

- **DEM as determiner** = identifying function
- **DEM as qualifier** = pointing, attributing location

(8) *Thanthiya-ngunyi=biya yagbali lag gani-ma yina-wula=wung wagurra.*
DEM-ABL=SEQ place split 3SG>3SG-hit.PST DIST-DIR=RESTR rock

‘From **that place** / **the place there** he (dreamtime being) split it that way, the rock.’

(9) (imagined dialogue)

Yeah warlba-warlbag ba-ngu=mindag ngayin thanthu!
oh RDP-pick.up.soft.thing IMP-get/handle=12DU.OBL meat/animal DEM

‘Yes, pick up **that (cooked) animal** / **the animal there** for you and me!’

Applying this to Jaminjung data

→ Even if we identify functions, they do not have a fixed position

(10) *Nganthan thawaya bunthu-yu **buj-mawu** mangarra?*
what eating 3DU-be.PRS bush-HABIT plant.food

subclassifier – N

‘What are they (two) eating, bush food?’

(11) ... ***mangarra** **buj-mawu** garrb-mayan.*
plant.food bush-HABIT gather-ITER

N – subclassifier

‘[We just kept on walking,] picking up bush food.’

At least one fixed construction

Generic-specific

	Gen	Spec	
(12) <i>Nambijin ...</i>	<i>mangarra</i>	<i>guruwuny</i>	<i>nginju=marlang</i>
<subsection>	plant.food	boab.tree	PROX=GIVEN
'Nambijin, this is a bottlenut plant .'			

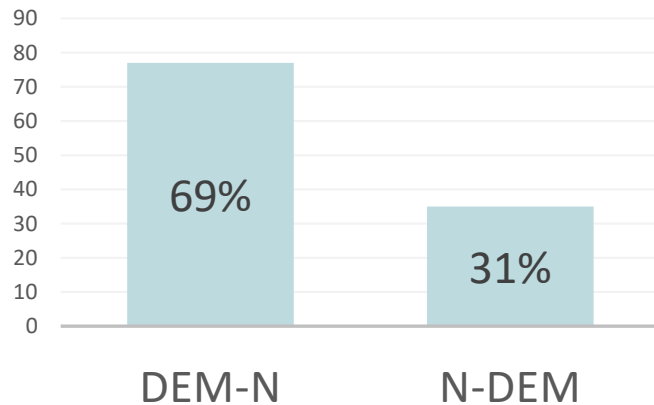
Counter-example: specific contexts, e.g. repetition / clarification for (13)

(13) <i>gagawuli=gun</i>	<i>mangarra ...</i>	<i>burr-arra-ny</i>	<i>basket-gi</i>	<i>bagu-bagurr</i>
long.yam=CONTR	plant.food	3PL>3SG-put-PST	basket-LOC	RDP-inside.open.container
'It's a long yam plant , they put it in the basket, inside.'				

3. Other formal and functional factors

Demonstratives + N order

N + DEM (n=112)



SEMANTICS	adnom/pron	locative
PROXIMAL	<i>(ngi)yinJu</i>	<i>ngiya</i>
NEUTRAL	<i>JanJu</i>	<i>JanJiya</i>
[DISTAL]	<i>yina</i>	<i>yinaya</i>

Compare in Australia (Louagie 2020)

- Large majority flexible order
- Overall preference: DEM-N order

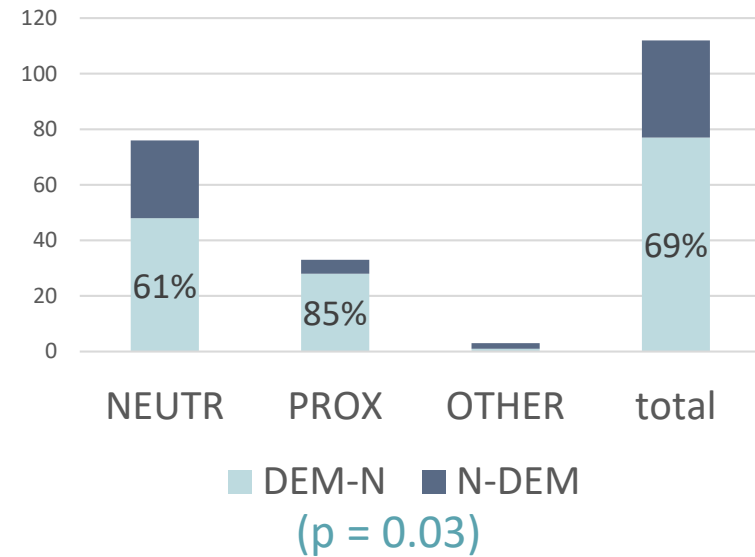
Demonstratives

Factors investigated (highlighted: significant for J.-Ng.):

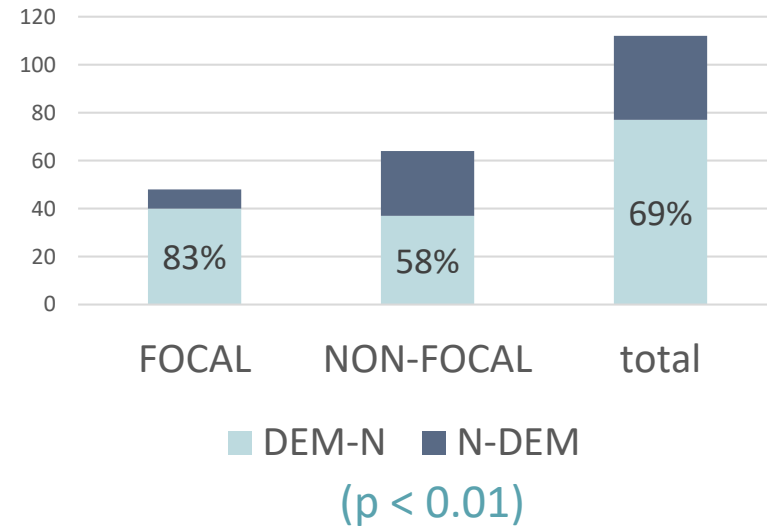
- DEM form/semantics (Cinque 2020)
 - **neutral vs. proximal**
 - adnominal vs. locative
- Endo- vs. exophoric (Cinque 2020)
- **Referent accessibility** (Merlan 1994, Wardaman)
- **Information structure**
- Position of NE in clause: pre-V, post-V, separate
- Type of nominal head

Demonstrative positions: significant factors

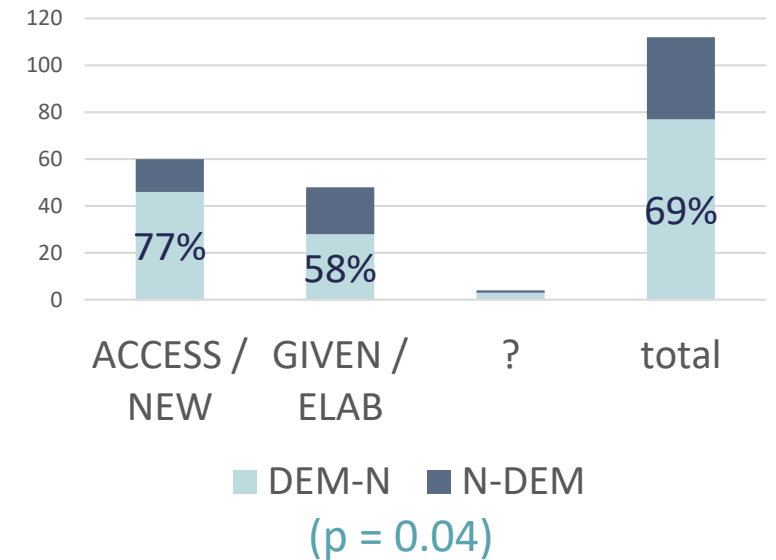
Semantics



Information structure



Referent accessibility



Preference for DEM in initial position **significantly less strong**
for resumed / reintroduced referents

Demonstratives

In line with tendencies:

(11) [context: returning to toy scene description after digression]

Warnaja *ga-jga-ny* [*wirib* *janju?*]_{BACKGROUND, GIVEN}
where:DIR 3SG-go-PST dog DEM

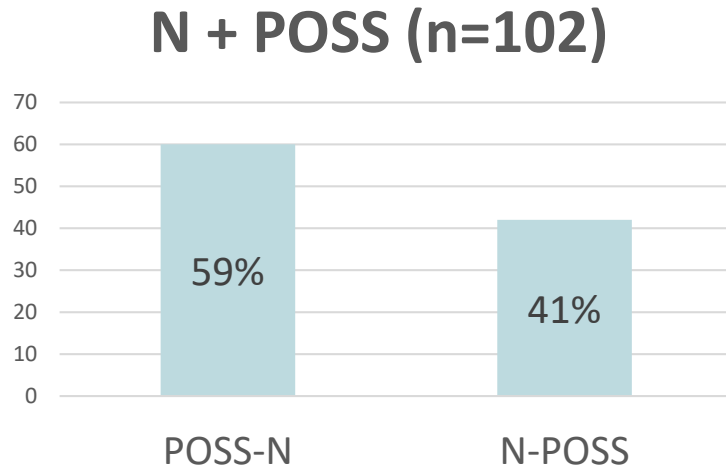
‘Where did **that dog** go now?’

Not in line:

(12) *yirri-uga,* *yirriny-guga=biyang,* [*jurlu-g* *ngiyinaya.*]_{AFTERTHOUGHT, NEW}
13PL>3SG-take.PST 13PL>13DU-take.PST=SEQ hill-LOC DIST.LOC

‘We took her, we took the two, **on the hill over there.**’

Possessive pronoun + N order

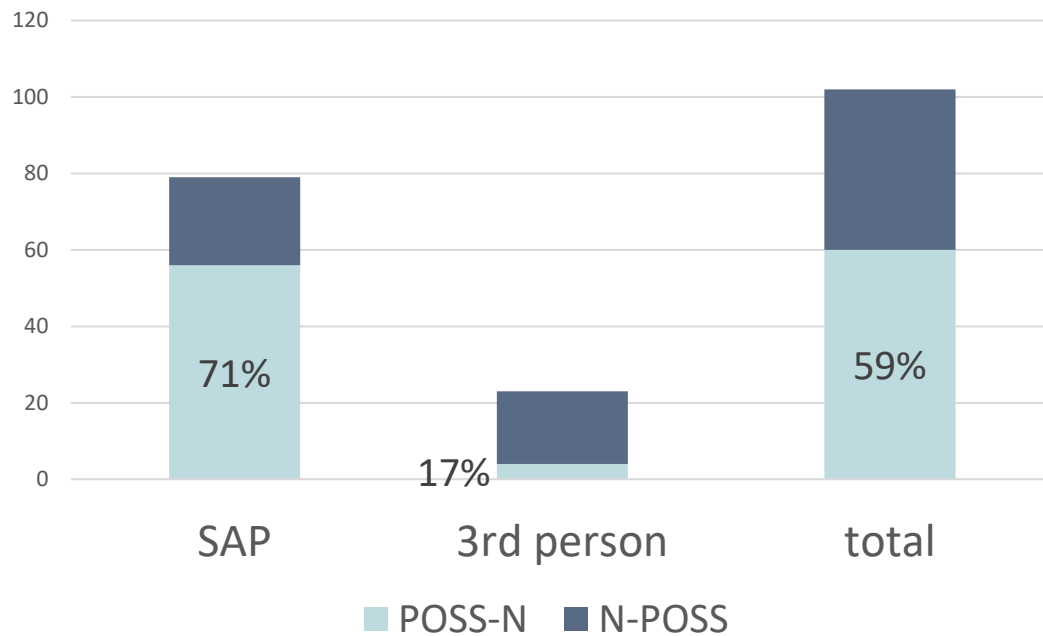


Compare in Australia (Louagie 2020)

- Large majority flexible order
- Overall: slight preference for POSS-N order

Possessive pronouns

POSS position & person



($p < 0.000004$)

Other factors?

NOT

- Number of possessor
- Type of possession
- Information structure
- Accessibility (PM or PR)
- Position or role in clause
- Speaker
- Structural priming?

**Strong preference for POSS in initial position *only* for speech act participants
(1st / 2nd person possessive pronouns)**

Possessive pronouns

In line with tendencies

(13) *Ya, durd-bina nga-w-ijga=nu ngarrgina jalig*
yes hold.one-ALL 1MIN-POT-go=3MIN.OBL 1MIN.POSS child
'Yes, I'm going to pick her up, my child.'

(14) *Wala gani-ma=biyang nayibi nuwina-wu*
knock.back 3MIN>3MIN-hit.PST=SEQ man's.daughter 3MIN:POSS-DAT
'He knocked him back for his daughters'

??? Underlying motivation ???

Similarly in
~ Umpila (Hill 2018: 149-154): 1 vs. 2-3
~ Pitjantjatjara (Wilmoth 2023: 221-222): 1-2 vs. 3
but also unexplained

Possessive pronouns

Counter-example:

(15) Context: re-enacted dialogue within narrative
[‘we were there and Nangari appeared on us’]

mindajgina=biyang *bos*, *mindajgina* *gunjumarra*, <olrait>, (..)
12DU:POSS=SEQ boss 12DU:POSS boss allright

‘our boss .. all right,’

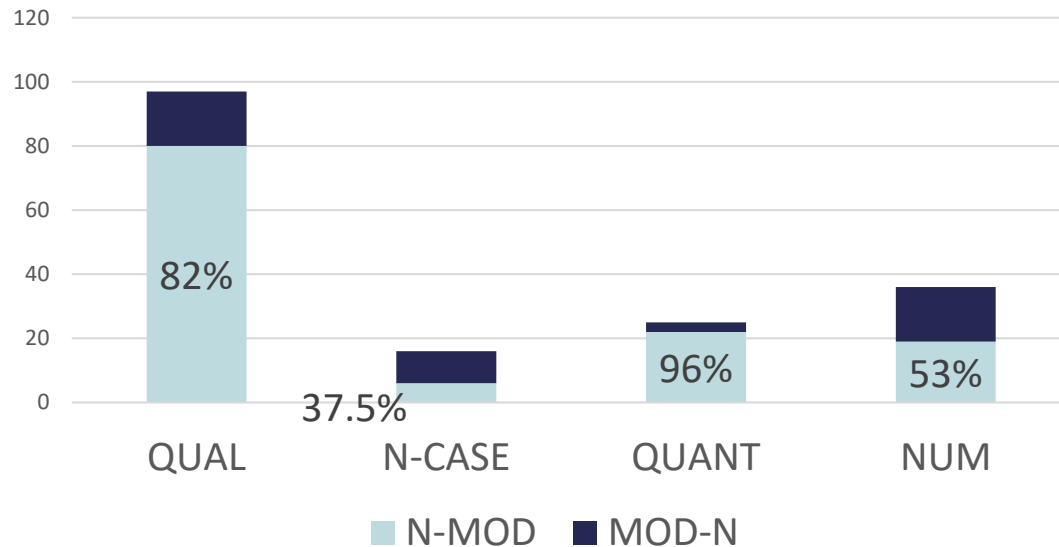
“Ah **Nangari** **mindajgina=gurra!**”

ah <subsection> 12DU:POSS=TAG

“Ah, OUR Nangari, right?!”

Explanation?

Qualifiers, case-marked nouns, quantifiers + N



Almost *all* examples: focal

Hypothesis:

post-head = neutral order

pre-head = contrastive

Compare in Australia (Louagie 2020)

- Overall: flexible or N-ADJ order
- Majority in north(-west): flexible order

~ Kunbarlang (Kapitonov 2021), Bardi (Bowern 2012) ...

Qualifier + N order

N – QUAL: neutral order

(16) *gugu laman-mina buny-ijga-ny*

water deep-ALL 3DU-go-PST

‘[They turned into fish then,] the two went into the deep water.’

QUAL - N: contrastive qualifier

(17) [Context: You all were in the white (boat), weren’t you?]

yirri=biyang gujugu-g dinggi

1PL.EXCL=SEQ big-LOC dinghy

‘We (on the other hand were) in the BIG dinghy.’

(18) *det ol-man bin rekon i.. minyga ngih .. barndal gulban*

that old-man AUX.PST reckon 3SG what's.it TAG strong ground

‘That old man thought it was hard ground.’

Modifying case-marked noun + N order

N – N-case: neutral

(19) [Context: the two of us just kept on walking,]

... *mangarra buj-mawu* *garrb-mayan*
plant_food bush-HABIT gather-ITER

‘... picking up bush food’

N-case - N: contrastive

(20) [describing unfamiliar pictures to outsider]

Nganthan *thawaya bunthu-yu,* *buj-mawu* *mangarra?*
what eating 3DU-be.PRS bush-HABIT plant_food

‘What are they (two) eating, bush food?’

Numeral + N order

N – NUM: neutral

(21) [describing new picture]

Ah **wirib-ni murrgun** motika yurl burr-angga-m
ah dog-ERG three car pursue 3PL>3SG-get/handle-PRS

‘Ah **three dogs** are chasing the car’

NUM - N: contrastive

(22) [A: We put all the things in the trailer.]

Jirrama motika yurr-uga?
two car 12PL>3SG-take.PST

B: ‘Was it **TWO cars** that we took?’

Summary & conclusion

Explaining word order choices?

Information structure

- focal vs. non-focal
- neutral vs. contrastive

Referent accessibility

Semantic-syntactic factors

- semantics of DEM
- person of POSS

No evidence:

- Function of modifier
- Position in clause | type of noun | argument or nominal predicate ...
- Structural priming → rather reverse effect? [anecdotal]
- ? Phonology / rhythm / style [how to investigate?]
- ? Speaker characteristics [few speakers, same generation, mostly women]
- ? Code switching: no effect for Kriol N; unclear for Kriol modifier

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A few notes on case marking

Case on one element

= main pattern (92%, n = 90), with:

- **modifier (non-N) marking** (whatever position of modifier)
 - only 8 exceptions for NPs with ADJ, ADN_N, QUANT, POSS.PRON
 - but less straightforward for NPs with DEM (about 50-50)
- or: **right-edge-marking, and preceding modifier attracts case** (contrastive uses)?
 - makes sense with qualifiers/quantifiers and DEM; less so with POSS
 - Kriol examples have right-edge marking

<tu shi:t>-di ‘two sheets (inst)’, *<nogud ai>-ni* ‘with my bad eyes’

- Right-edge case marking as default: 26/100 languages (Louagie 2020)
- Modifier marking: only 1/100 languages (Louagie 2020)
- Case on most salient constituent of NP in Gooniyandi (McGregor 1990)

Case on both elements

Rare; new episode in discourse,
or local highlighting?

- ~ Gooniyandi (McGregor 1989); also: Nyulnyul, Wirangu, Diyari, Muruwari ...
- give equal prominence to each element, e.g. in contexts invoking presuppositions or involving a contrast
 - “emphasis”

(25) (Start of yam digging video - this is an "egg", Nangari!)

<i>birdij</i>	<i>ganarrany, ..</i>	<i>Namij-ni</i>	<i>wurdu-ni</i>
find	3MIN>3MIN-put-PST	<subsection>-ERG	small-ERG

‘the little Namij found it’

(26) (Preceding context: house was on fire while speaker was away; everything was burnt...)

<i>mindajgina-ni=biyang</i>	<i>jarlig-ni, Nangari-ni</i>	...	<i>baaj</i>	<i>dalag</i>	<i>gana-rra-ny</i>
1+2:POSS-ERG=SEQ	child-ERG	<subsection>-ERG	speech	send	3MIN>3MIN-put-PST

‘our child, Nangari, she sent the message (to us).’