

Malagasy pronouns: inside and out

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1 Introduction

(1) Nominal proform paradigm

PERSON/NUMBER	FREE-STANDING		AFFIXAL
	NOM	ACC	GEN
1SG	izaho/aho	ahy	-(k)o
2SG	ianao	anao	-(n)ao
3	izy	azy	-ny
1PL.EXCL	izahay	anay	(n)ay
1PL.INCL	isika	antsika	(n)tsika
2PL	ianareo	anareo	(n)areo
3PL	izy ireo	azy ireo	izy ireo

Roadmap:

- Internal make-up of pronouns
 - From locatives to demonstratives
 - from demonstratives to pronouns
- Pronouns and case
 - From nominative to accusative
 - From accusative to genitive
- Genitive as movement external to DP
 - Augmented Pronoun constructions: *we women*
- Conclusion

2 Inside pronouns: movement to D

(2) LOCATIVES

Visibility (*e/a*) + Distance (*t/ts/r/n/∅*) + Boundedness (*o/y*¹)

	proximal (<i>t</i>)		medial (<i>ts</i>)	distal (<i>r</i>)		neutral (<i>n/∅</i>)	
	-bound	+bound	-bound	-bound	+bound	-bound	+bound
vis	ety e-t-y	eto e-t-o	etsy e-ts-y	ery e-r-y	eroa e-r- <i>oa</i> ?	eny e-n-y	eo e-∅-o
invis	aty a-t-y	ato a-t-o	atsy a-ts-y	ary a-r-y	aroa a-r- <i>oa</i> ?	any a-n-y	ao a-∅-o

(3) DEMONSTRATIVES (sg)

Det(*i*) + Visibility (*∅/za*) + Distance + Boundedness

	proximal		medial	distal		neutral	
	-bound	+bound	-bound	-bound	+bound	-bound	+bound
vis	ity i-t-y	ito i-t-o	itsy i-ts-y	iry i-r-y	iroa i-r- <i>oa</i> ?	iny i-n-y	io i-∅-o
nonvis	izaty i-za-t-y	izato i-za-t-o	izatsy i-za-ts-y	izary i-za-r-y	izaroa i-za-r- <i>oa</i> ?	izany i-za-n-y	izao i-za-∅-o

(4) DEMONSTRATIVES (pl)

Det + Visibility + **Num** (*re*) + Distance + Boundedness

	proximal		medial	distal		neutral	
	-bound	+bound	-bound	-bound	+bound	-bound	+bound
—	ireto i-re-t-o	iretsy i-re-ts-y	irery i-re-r-y	ireroa i-re-r- <i>oa</i> ?	ireny i-re-n-y	ireo i-re-∅-o	
izarety i-za-re-t-y	izareto i-za-re-t-o	izaretsy i-za-re-ts-y	izarery i-za-re-r-y	izareroa i-za-re-r- <i>oa</i> ?	izareny i-za-re-n-y	izareo i-za-re-∅-o	

(5) LOCATIVES/DEMONSTRATIVES/PRONOUNS

– with some remaining questions)²

TYPE	Det	X	Val	Num	Distance	Base
Loc	—	—	a/e	—	t/ts/r/n/∅	o/y
Dem	i	z	a/∅	re	t/ts/r/n/∅	o/y
Pron	i	z	ana/aha	re	—	o/y

¹Orthographically, /i/ becomes *y* word finally.

²The X is probably epenthetic (see e.g., Adelaar and Kikusawa 2014).

(6) Table of (nominative) pronominal morphemes³

Pronoun	D	X	Val	Num	Boundedness
1SG	i	z	ah	∅	o
1PL.EXCL	i	z	ah(a)	∅	y
1PL.INCL	i	sika			
2SG	i	∅	ana	∅	o
2PL	i	∅	ana	re	o
3	i	z	∅	∅	y

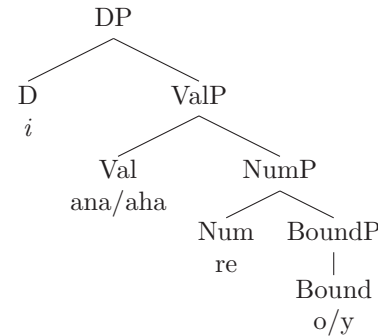
- Why it is tempting to do this break-down
 - In nominative, all contain Det *i*
 - Plural morpheme is *re*
 - Most end with *o* or *y* (Bounded morpheme)
 - *z* looks like the epenthetic *z* in the demonstratives
 - 1PL.INCL (and not 1PL.EXCL) is suppletive (see Moskal 2018)
- Some rough thoughts
 - Boundedness
 - * *-o*: (bounded) participant (problem with 1SG.ACC/GEN)
 - * *-y*: (unbounded) other
 - Value
 - * *-(a)h(a)*: Speaker
 - * *-(a)na*: Hearer

(7) Pronouns (plural only relevant for second person (Adelaar and Kikusawa (2014))

Demonstrative Pronoun	Visibility Speaker/Hearer	Num	Boundedness Participant/Other
1SG	Speaker		Participant
1PL.EXCL	Speaker		Other
1PL.INCL			
2SG	Hearer		Participant
2PL	Hearer	Plural	Participant
3			Other

³Adelaar and Kikusawa (2014), reconstructing Proto-Malagasy pronouns through a comparison from regional and historical sources, come to very different conclusions about the break down of these forms. The question is how much of their historical conclusions can tell us about the synchronic grammar.

(8) The Structure



3 Pronouns and Case

(9) First pass: Looking at 2nd.pl

2ND.PL	D	X	Val	Num	Pers
NOMINATIVE	i	-	ana	re	o
ACCUSATIVE	-	-	ana	re	o
GENITIVE	-	-	na	re	o

Question: Is *i-* added to mark NOM case?

Answer: No, ACC case is a **reduction** of structure internal to the DP

Looking ahead:

- ACC shows DOM effects on DP;
- GEN shows effects of head movement

Conclusion: There is no true morphological case in Malagasy

3.1 A red herring: morphology IS Case

Why it isn't Case per se:

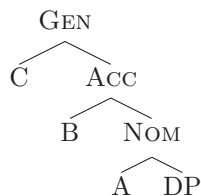
- Malagasy pronouns would go against the Case hierarchy (Blake 1994; Caha 2009)

(10) Blake's hierarchy (Blake 1994: Ch5 – taken from Caha)
Nominative > Accusative > Ergative > Genitive > ...

→ from less complex to more complex

“If a language has a case listed on the hierarchy, it will usually have at least one case from each position to the left.”

- (11) Also Caha 2009: p24 (NOM is the least complex, GEN the most complex)



- Malagasy would be unusual: NOM is larger than ACC and GEN
- But note that Acc and Det (*i-*) in complementary distribution (Bernstein, Ordóñez, and Francesc 2019)

3.2 Accusative Case is Differential Object Marking: DOM

- *an-* is a DOM marker in Malagasy: with proper names, pronouns, and optionally with demonstratives (no case distinction in (12a) and (12b), but DOM in (12c) and (12d), and optionally in (12e))

- (12) a. mahita ny zandriko ny raiko
 PRS.AT.see DET brother.1SG DET father.1SG
 ‘My father sees my younger brother.’ [adapted from Rajaona 1972: 47]
- b. mahita ny raiko ny zandriko
 PRS.AT.see DET father.1SG DET brother.1SG
 ‘My younger brother sees my father.’
- c. mahita **an-**dRabe Rasoa
 PRS.AT.see DOM-Rabe Rasoa
 ‘Rasoa sees Rabe.’
- d. mahita **an-**dRasoa Rabe
 AT.see DOM-Rasoa Rabe
 ‘Rabe sees Rasoa.’
- e. mahita (**an**) io trano io aho
 PRS.AT.see (DOM) DEM house DEM 1SG
- f. ‘I see that house.’ [Rajaona 1972: 684]

- (13) Nominative vs. accusative

PERSON/NUMBER	NOM	ACC
1SG	izaho/aho	ahy
2SG	ianao	anao
3	izy	azy
1PL.EXCL	izahay	anay
1PL.INCL	isika	antsika
2PL	ianareo	anareo
3PL	izy ireo	azy ireo

- **Observation:** Nominative *i* vs. Accusative *a(n)*
- Most clearly seen in: *i-sika* vs. *an-tsika*

- (14) The phonology explains *t*: and accusative morpheme is *an-* (see also Adelaar and Kikusawa 2014)

- a. *i-sika*: *an-(t)sika*
 b. *sisina* ‘edge’: *antsisina* ‘at (*an-*) the edge’

- (15) Second pass: Accusative Case as DOM (replacing D)

	DOM	Val	Num	Person
1SG	ahy			
1PL.INCL	an	a		y
1PL.EXCL	an	sika		
2SG	an	a		o
2PL	an	a	re	o
3SG	azy			

3.3 DOM replaces D1 (outer Determiner)

Interaction of DOM and Det: Bernstein, Ordóñez, and Francesc 2019

- (16) [_{DP1} D1/DOM [_{DP2} D2 [NP]]]

- DP1: ‘strong’⁴ [+particularized]⁵ ‘the soldiers’
 – no DOM with article (see Jones 1999)
- DP2: ‘weak’ [-particularized] ‘the king’
 – DOM is permitted with article

⁴Term used in Schwarz (2013).

⁵Term used in Ledgeway (2012).

- DOM is obligatory when DP1 is missing

(17) Balearic Catalan: has different D1 and D2

D1: *sa* vs. D2: *la*

- a. **Sa** muntanya que veus és molt alta.
 the.F mountain that see.2PSG is very tall
 ‘The mountain that you see is very tall.’
- b. Anem a **la** muntanya.
 go.1PPL to the.F mountain
 ‘Let’s go to the mountain.’

(18) Can stack D1 and D2

es l’amo, es l’avi (s- + l-)
 ‘the mister’, ‘the grandfather’

(19) Sardinian: has same D1 and D2

- a. **su** cane
 the.M dog
 ‘the dog’
- b. **Su** sole nk’issiat.
 the.M sun rose
 ‘The sun was rising.’

(20) Sardinian: DOM only occurs with D2 (i.e. cannot occur with D1):
 (the set of nominals that take D2 in Balearic Catalan require DOM in Sardinian)

- a. Appu vistu **a** su re/ su duttore/ su mere.
 have.1PSG seen a the.M(D2) king/ the.M doctor/ the.M boss
 ‘I have seen the king/ the doctor/ the boss.’
- b. Appu vistu (*a) **su** frate de Juanne.
 have.1PSG seen (*a) the.M(D1) brother of Juanne
 ‘I have seen Juanne’s brother.’

- **Conclusion:** DOM fills in for an empty D1
- **Question:** Could DOM ever compete for D1?
- **Response:** No – D1 needed in nominals for semantic reasons
- **Puzzle:** DOM replaces D1 in Malagasy pronouns – not expected...
 – Pronouns fit the semantics for DOM (inherently particularized)

- Particularization is done by person features therefore D1 not required

• **Answer?**

- Malagasy pronouns have D1 borrowed from Demonstratives
- Demonstratives require D1 to particularize locatives
- The conflict is a D1 (particularized) on a pronoun (already particularized via person)

• **Note:**

- Malagasy **does** have a D2
- This is used (as expected with Proper Names)
- And, as expected, it co-occurs with the DOM (as in Romance)

(21) Mahita an’iBaholy aho.
 PRES.AT.see DOM-D2-Baholy 1SG.NOM
 ‘I see Baholy.’

(22) a. Pronoun b. Proper Name



Conclusion
 It’s DOM that creates the effect of ‘accusative’ pronouns

4 Genitive Case is movement to T/D/p

- Is there movement within the DP?
- We argue that Genitive ‘Case’ is movement
- In certain constructions the lower copy of movement needs to be spelled out

4.1 Augmented pronoun construction (APC)

(23) Augmented pronouns in English (restricted)
 a. we linguists

- b. you linguists
- c. *they linguists

- (24) Malagasy APC (occurs with all pronouns: here in Nominative)
- a. Nahavita io raharaha io [*izaho vehivavy*]
 PST.AT.AIA.do DEM work DEM 1SG woman
 ‘I, a woman, did this work.’ 1SG APC
 - b. Nahavita io raharaha io [*ianao vehivavy*]
 PST.AT.AIA.do DEM work DEM 2SG woman
 ‘You, a woman, did this work.’ 2SG APC
 - c. Nahavita io raharaha io [*izy vehivavy io*]
 PST.AT.AIA.do DEM work DEM 3 woman DEM
 ‘She, a woman, did this work.’ 3SG APC
 - d. Nahavita io raharaha io [*izahay vehivavy*]
 PST.AT.AIA.do DEM work DEM 1PL.EXCL woman
 ‘We women did this work.’ 1PL APC
 - e. Nahavita io raharaha io [*ianareo vehivavy*]
 PST.AT.AIA.do DEM work DEM 2PL woman
 ‘You women did this work.’ 2PL APC

– There are three patterns for pronoun realization with genitive APCs

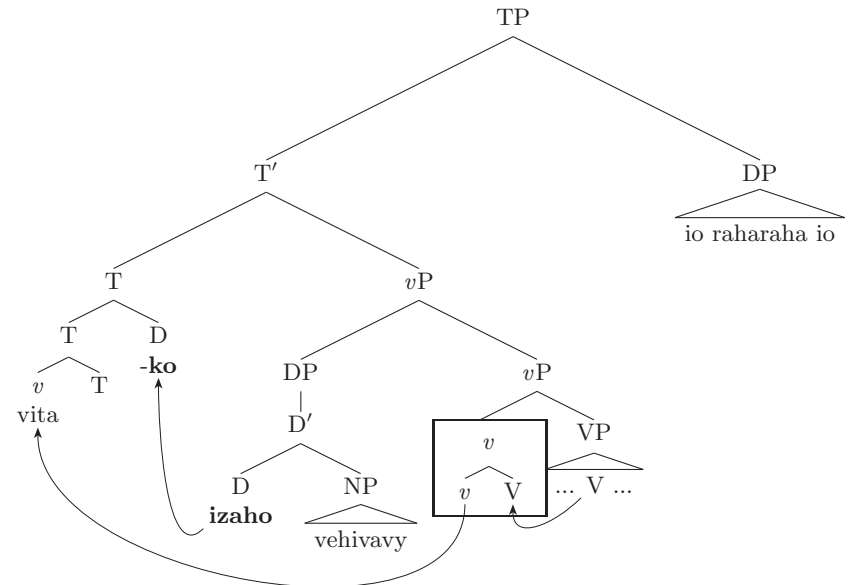
- (25) Genitive APC: HIGH – V-affix [\emptyset N] Subject
- a. Vitanay *vehivavy* io raharaha io.
 done.1PLEXCL.GEN woman DEM work DEM
 ‘Us women can do this work.’ HIGH
 - b. Vitanareo *vehivavy* io raharaha io.
 done.2PL.GEN woman DEM work DEM
 ‘You women can do this work.’ HIGH
- (26) Genitive APC: LOW – V- \emptyset [**pronoun** N] Subject
- a. Vitan’**izy** *vehivavy* io raharaha io.
 done 3.NOM woman DEM work DEM
 ‘She a woman can do this work.’ [Rajaona 1972: 679] LOW

- b. Mitentina 1 tapitrisa dolara ny lelavola tsy maintsy
 amount.to 1 million dollars DET amount must accomplish
 efain’**izy** *mivady*.
 3.NOM marry
 ‘The amount the spouses must pay comes to \$1million dollars.’
 LOW

- (27) Genitive APC: DOUBLE – V-affix [**pronoun** N] Subject
- a. Vitako **izaho** *vehivavy* io raharaha io.
 done.1SG.GEN 1SG.NOM woman DEM work DEM
 ‘I a woman can do this work.’ [Rajaona 1972: 679] DOUBLE

- Some consequences of movement
 - Can explain the presence of a copy
 - Can characterize variation (merge vs. movement)

- (28) D movement with a copy (adapted from Guilfoyle et al. (1992))



- In one variation of Malagasy (see Paul and Travis 2019)
 - 3rd person non-trigger agent pronoun doesn’t move (LOW in APC: see (26))

- In conservative Indonesian⁶
 - 3rd person non-trigger agent pronoun doesn't move
- (29) Indonesian non-trigger agent pronoun (Chung 1976:60)⁷
- Buku itu *saja* batja
book the I read
'I read the book.'
 - Mobil itu dapat *kita* perbaiki
car the can we repair
'We can repair the car.'
 - Buku itu sudah di-baca oleh-**nya**/oleh **dia**
book that already PASS-read by-3/by 3SG
'That book was already read by him/her.' Arka and Manning 1998 (24a)

- (30) Further phonological argument?
With 'weak' roots ending in *k/tr*, the initial consonant drops with 1st and 2nd but not third⁸

PERSON/NUMBER	GEN	<i>fantatra</i>	<i>apetraka</i>
1SG	-(k)o	fantat ro	apetrako
2SG	-(n)ao	fantat rao	apetrakao
3SG	-ny	fant any	apetr any
1PL.EXCL	-(n)ay	fantat ray	apetrakay
1PL.INCL	-(n)tsika	fantat sika	apetratsika
2PL	-(n)areo	fantat reao	apetrakareo

- (31) a. 2SG: fanta**tr** + **n**ao → fantat**rao** MOVEMENT
3SG: fanta **tr** + ny → fant**any** MERGER
b. 2SG: apetrak + **n**ao → apetrak**ao** MOVEMENT
3SG: apetra **k** + ny → apetra**ny** MERGER

- Proposal
 - Only 1st and 2nd pronouns move (Participant feature)
 - Explaining why 3rd cannot be HIGH (or DOUBLE)
 - 3rd person undergoes morphological merger
 - Explaining the different phonological effect on the initial conso-

⁶Although this may have been the historical situation, it does not accurately reflect .. the contemporary language.' (see Chung 1976:60)

⁷Orthography used in Chung kept.

⁸We leave 1PL.INCL aside.

- nant
 - Similar to (conservative) Indonesian
 - * Note: In compounding, *k/tr* delete before a consonant

- (32) 3rd person genitive \cong compound formation
- fantat**tr** + **ny** → fant**any** 'he knows'
 - sokit**tr** 'carving' + **nendra** 'smallpox' → soki-**nendra** 'pock-mark'
- A side note:
 - If the phonological distinction were to be lost,
 - we would expect that the HIGH vs. LOW distinction would be lost.
 - This may be the case – fantako/fantakao/apetrako/apetrakao are being used,
 - And the DOUBLE pattern (i.e. movement) is being generalized.
 - ... more work needs to be done.

Conclusion

It's head movement that creates the effect of 'genitive' pronouns

5 Conclusion

- What the internal properties tell us
 - A relationship with locatives via demonstratives
 - A location based person meaning
- What the external properties tell us
 - Affixation is movement
 - Genitive licensing can be done by movement or merge
- Where do the internal properties and outside properties overlap
 - External DOM affects the internal make-up

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