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Malagasy voices

Edward Keenan, Baholisoa Ralalaoherivony & Jeannot Fils Ranaivoson*

Abstract. We compare the voice system of Malagasy with those discussed in recent typologies (Zúñiga & Kittilä 2019; Legate 2021). Malagasy is a special case of a Philippine-type language (Shibatani 1988; Foley 2008; Himmelmann 2008; Kaufman 2009; Chen & McDonnell 2019) and presents their typically rich voice morphology. Some typological features of note are:

1. Malagasy has several voices, both active and non-active, built with overt affixes, not auxiliary verbs. Active verbs are not less marked than non-actives.
2. Voice is selected by some lexical items.
3. Some voices compose, yielding verbs with multiple voice affixes. Favored and forbidden compositions support several typological generalizations.
4. Voiced Predicate Phrases feed structure building operations: relative clause formation, nominalizations, imperatives, subject deletion, incorporation, coordination... In sum: *Malagasy syntax rides on its voice system*.

Keywords. Malagasy, voice, active, passive, reciprocal, causative, imperative, applicative, circumstantial

1. Introduction. We treat voices as functions iteratively deriving predicates, starting with roots, rather than manipulating arguments (case, position) directly. The latter perspective is taken by Legate (2021) and Zúñiga & Kittilä (2019), who define “canonical” (Legate 2021) or “prototypical” (Zúñiga & Kittilä 2019) passives in terms of their relation to actives. E.g., Legate’s (2021) passive demotes an agent and promotes a theme (perforce relative to an assumed active). Zúñiga & Kittilä’s (2019: 83) passive is extensionally comparable. In both, the presence of verbal morphology (“marking”) in the passive is required independently of the argument manipulations. In Relational Grammar terms, it is a “side effect”. For them, English passives like *The cat was seen by Tim* are “canonical”/“prototypical”. Pause.

Our perspective is different. We take the task of a typology of a structure type X to specify the possible realizations of X. UG should look the same no matter what languages you start with. Philippine-type voice systems are obviously richer than those of Common European and should better serve as a starting point for typological study. Usually no language will instantiate all possibilities for a given X, as language-specific constraints preempt what is universally possible.¹ E.g., Malagasy lacks the impersonal passives of Irish (McCloskey 2010) and N. Europe (Cabredo-Hoferr 2017).

In Malagasy, verbal morphology is central, not a side effect: it has a syntactic and a semantic role – building and interpreting predicates. Different voices of a verb are derived in parallel

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¹ Malagasy needs no constraint blocking extraction from single branches of coordinate structures, as independently only subjects extract and they never meet that condition (Keenan 1972).

from a common source. To a nontrivial extent, these derivational operations feed each other (compose), creating complex voices.

2. Core voice paradigm. A core voice paradigm built from the root *tólotra* ‘offer’ is given in (1). The roots *róso* ‘serve’, *tóro* ‘indicate’, *léfa* ‘send’, *tóraka* ‘throw’ enter the same paradigm (but *omé* ‘give’, *seho* ‘show’ and *tondro* ‘point out’ differ).²

- (1) a. [P₁ n.an.ólotra ny vary ny vahiny t.amin’io lovia io] RasoaNOM
 PST.AV.offer the rice the guest PST.on’tthatdish that Rasoa
 ‘Rasoa offered (was offering) the rice to the guest on that dish’
- b. [P₁ n.a.tólo-dRasoa_{GEN} ny vahiny t.amin’io lovia io] [ny vary]_{NOM}
 PST.PV₁.offer-Rasoa the guest PST.on’tthat dish that the rice
 ‘The rice was (being) offered to the guest on that dish by Rasoa’
- c. [P₁ no.tolóR.an-dRasoa_{GEN} ny vary t.amin’io lovia io] [ny vahiny]_{NOM}
 PST.offer.pv₂-Rasoa the rice PST.on’tthat dish that the guest
 ‘The guest was (being) offered the rice by Rasoa on that dish’
- d. [P₁ n.an.ólór.an-dRasoa_{GEN} ny vary ny vahiny] [io lovia io]_{NOM}
 PST.AV.offer.CV-Rasoa the rice the guest that dish that
 ‘That dish was (being) used to offer the rice to the guest by Rasoa’

Semantically, (1a-d) have the same truth conditions, like actives and passives in English. The truth of any guarantees the truth of all. A DP in (1a) has the same semantic role in all of (1b-d).

Non-obviously, (1a-d) all are atelic (Paul et al. 2020), as in (23a,b), in the sense that the action expressed by the verb may not culminate, whence the English progressives in translations (which overemphasizes the ongoing-ness of the activity, not emphasized in the Malagasy, which has its own progressive idiom).

A second similarity among (1a-d) is that all have imperative forms (2a-d). Suffixing shifts root stress rightward.

- (2) a. [P₁ man.ólóra ny vary ny vahiny amin’io lovia io] (ianao)
 AV.offer.IMP the rice the guest on’tthat dish that 2_SNOM
 ‘Offer the rice to the guest on that dish’
- b. [P₁ a.tolóry ny vahiny amin’io lovia io] [ny vary]_{NOM}
 PV₁.offer.IMP the guest on’tthat dish that the rice
 ‘Offer the rice to the guest on that dish’
- c. [P₁ tolóry ny vary amin’io lovia io] [ny vahiny]_{NOM}
 offer.pv₂.IMP the rice on’tthat dish that the guest
 ‘Offer the guest the rice on that dish’
- d. [P₁ an.ólóry ny vary ny vahiny] [io lovia io]_{NOM}
 AV.offer.CV.IMP the rice the guest that dish that
 ‘Use that dish to offer the rice to the guest’

Morphosyntactically, (1a-d) consist of a verb-initial Predicate Phrase, noted P1 theory neutrally, headed by a tensed verb, followed by an argument whose semantic role correlates with the

² Examples are in standard orthography, save an occasional period to mark a morpheme boundary or an acute accent to mark stress. Abbreviations: AV = active voice; PV = passive voice, CV = circumstantial voice, NOM = nominative, ACC = accusative, GEN = genitive; REL = relativizer, RT = root, TR = transitive; 1S = first person singular, etc.

choice of root+affix. Predicates do not agree with arguments in person, number, or gender in Malagasy. But all the verbs in (1) carry a voice affix, as do verbs in general. And generative work – Keenan (1995), Keenan & Polinsky (1998), Paul (2004), Pearson (2005), and Potsdam (2006) – agrees with our locus of the major constituent break in (1): the polar question particle *ve* occurs at the right edge of P1, many constituents frame the P1: Negation ... NPIs (*tsy ... akory/velively* ‘at all’, *intsony* ‘any longer’); *na (dia) ... aza* ‘even ... though’. And P1s, all voices and tenses combine with *ny* ‘the’, *ilay* ‘the (aforementioned)’, the free relative marker *izay* and demonstratives to form DPs (Ntelitheos 2012):

- (3) ireo [P1 no.tolór.an-dRaso_{GEN} vary t.amin’io lovia io] ireo (< 1c)
 those PST.offer.PV₂-Raso_a rice PST.on’t_{hat} dish that those
 ‘Those offered rice by Raso_a on that dish’

And relative clauses are base-generated as [_{NP} N+(*izay*)+P1], denoting the Ns that the P1 holds of with no need to treat the P1 as a reduced clause. From (1b):

- (4) ny vary (izay) [P1 n.a.tólo-dRaso_{GEN} ny vahiny tamin’io lovia io]
 the rice REL PST.PV₁.offer-Raso_a the guest PST.prep’t_{hat} dish that
 ‘The rice that was offered by Raso_a to the guest on that dish’

The relativizer *izay* is a demonstrative, not an interrogative word. It is morphologically invariable, does not mark case, and is usually absent.

Also, according to Potsdam & Polinsky (2007), P1 sisters may be absent in complement and subordinate clauses, understood as bound by the P1 sister of the main clause:

- (5) Tsy n.an.atrika ny lanonana Rabe fa n.arary
 not PST.AV.attend the celebration Rabe because PST.sick
 ‘Rabe_i didn’t attend the celebration because (he_i) was sick’

In all cases in (1), the P1 sister is replaceable with an unmarked (nominative) pronoun, *izy*, distinct from accusative *azy* and genitive *-ny* (see Appendix). Our case notation in (1) only refers to pronominal replacements. Non-pronominal arguments are not overtly marked nominative or genitive. (Some, but not all, non-pronominal definite objects are overtly marked accusative, with *an*.)

Given these properties, we refer to the P1 sister as the *subject* of the P1 (some prefer *trigger*). Definite DPs occur naturally as subjects in all voices. These include independent pronouns, proper nouns, ones of the form Det+NP, for Det = *ny* ‘the’, *ilay* ‘that, previously identified’, the free relativizer *izay*, one of seven demonstratives (14 with plurals; demonstratives frame the NP), and their conjunctions. But articleless (indefinite) NPs do not occur as subjects. In (1a), it is natural to drop the *ny* from the object *ny vary* ‘the rice’ rendering it indefinite, but dropping it from the subject in (1b) is ungrammatical.

The only morphosyntactic items that distinguish each sentence in (1) from all the others are the verbal morphology we have glossed as voice – active, passive_{1,2} and circumstantial. So each verb has a distinct affix. The ones we call *active* are not morphologically less marked than others, unlike in Common European. The sole function of the voice affixes is to mark voice, in distinction to English, where “passive” morphology marks past participle, and agent phrases occur in intransitive gerunds: e.g., *The university forbids talking by students during exams*, ...

3. Generalizing. Symmetrical voice affix patterns are not unique to Philippine-type languages. In Semitic (6), we find active and passive verbs derived by different vowel patterns in a fixed root. And in Latin (7), different person/number endings on a given verbal root yield active and passive verbs.

- (6) Arabic (root: p-t-h ‘open’)
- | | | | | | | |
|----|---------------------------|----------|----------|----|-----------------------|------------|
| a. | ar-rajul | fatah | al-bab | b. | al-bab | futiha |
| | the-man | open.PST | the-door | | the-door | was.opened |
| | ‘The man opened the door’ | | | | ‘The door was opened’ | |
- Hebrew (root: p-t-x ‘open’)
- | | | | | | | | | | |
|----|-----------------------|----------|-----|----------|----|------------------------------|------------|---------|-----|
| c. | dan | patax | et | ha-delet | d. | ha-delet | niftexa | al.yede | dan |
| | Dan | open.PST | ACC | the-door | | the-door | was.opened | by | Dan |
| | ‘Dan opened the door’ | | | | | ‘The door was opened by Dan’ | | | |
- (7) Latin (*amare* ‘love’)
- | | | | | | | |
|----------|------|--------|--------|--------|---------|---------|
| | 1S | 2S | 3S | 1PL | 2PL | 3PL |
| Active: | amo | amas | amat | amamus | amatis | amant |
| Passive: | amor | amaris | amatur | amamur | amamini | amantur |

Independently generating actives and passives does raise a semantic issue: how to account for them having the same meaning. Below we show how.

Voice affixes in Malagasy have a syntactic role and a semantic interpretation. We use *man* for the active affix (8a) and (9a) and *ina* (*ana*) for the passive (8b) and (9b). We exemplify this in (10) with the root *enjika* ‘chase’, deriving active *manenjika* ‘chases’ and passive *enjehina* ‘is chased’. ‘r’ ranges over roots, *Pat* and *Agt* patient and agent semantic roles:

- (8) a. syntax: $\text{man}(r_{\{\text{pat,agt}\}}) = [[\text{man}+r, \text{DP}_{\text{ACC}}] \text{DP}_{\text{NOM}}]$
 semantics: $[\text{man}(r_{\{\text{pat,agt}\}})](y)(x) = \text{True iff Event}(r) \wedge \text{Pat}(y,r) \wedge \text{Agt}(x,r)$
- b. syntax: $\text{ina}(r_{\{\text{pat,agt}\}}) = [[r+\text{ina}, \text{DP}_{\text{GEN}}] \text{DP}_{\text{NOM}}]$
 semantics: $[\text{ina}(r_{\{\text{pat,agt}\}})](y)(x) = \text{True iff Event}(r) \wedge \text{Agt}(y,r) \wedge \text{Pat}(x,r)$
- (9) a. $[[\text{man}(\text{enjika}) y]x] = \text{True iff Event}(\text{enjika}) \wedge \text{Pat}(y,\text{enjika}) \wedge \text{Agt}(x,\text{enjika})$
 b. $[[\text{ina}(\text{enjika}) x]y] = \text{True iff Event}(\text{enjika}) \wedge \text{Agt}(x,\text{enjika}) \wedge \text{Pat}(y,\text{enjika})$
- (10) a. [Manenjika an-dRaso] Rabe_{NOM} b. [Enjehin-dRabe_{GEN} Raso_{NOM}
 AV.chase ACC-Raso Rabe chase.PV₂-Rabe Raso
 ‘Rabe is chasing Raso’ ‘Raso is being chased by Rabe’

So (10a) is true iff *enjika* ‘chase’ denotes an event, *azy* is its patient and Rabe its agent. Similarly for (10b), differing only by order of conjuncts, which yields their logical equivalence. Keenan (2008) is a more extensive treatment. We turn now to the syntax and morphology of voice in Malagasy.

4. Active voices. Verbs (and affixes) that assign agent to their P1 sisters will be called *active*. So *an-* in (1a) is active, as is the tensed verb *nanolotra*. *an-* verbs will be called active even if their P1 sisters are not agents. The two major Level 1 active affixes that combine directly with roots are *an-* and *i-*: *mikapoka* ‘beat’, *mividy* ‘buy’, etc. Both affixes build transitive and intransitive verbs, though *an-* favors transitives (some intransitives are: *mandeha* ‘goes’, *manidina* ‘flies’, *mangetaheta* ‘is thirsty’, *manavy* ‘is feverish’). Prefixes do not induce stress shift. If a root accepts both *an-* and *i-*, the *an-* one usually has greater valency.

We treat present tense marking as zero, all voices. Active present tense verbs occur with an initial *m-*, also present in imperatives and citation forms, but not in voices derived from actives. Following Pearson (2005) and Builles (1998), we treat *m-* as specifically active morphology.

4.1. LEVEL 2 ACTIVE AFFIXES. Level 2 active affixes are semantically interpreted derivational affixes that derive active verbs from active verbs. All are prefixes. We consider two: *amp-* ‘causative’ and *if-* ‘reciprocal’. From the root *zaitra*, we form active *manjaitra* ‘sew,’ transitive and causative (11a). The initial *m-* and imperative *-a* in (11b) show it to be active.

- (11) a. m.amp.an.jáitra akanjo_{ACC} an-dRabe_{ACC} aho_{NOM}
 AV.PRES.CAUSE.AV.sew clothes ACC-Rabe I
 ‘I am making Rabe sew clothes’
 b. mamp.an.jáir.a akanjo_{ACC} azy!
 AV.CAUSE.AV.sew.IMP clothes him
 ‘Make him sew clothes’

Note that *akanjo*, the object of *manjaitra* ‘sew’, is accusative, as is its agent *Rabe*. *amp-* also applies to *i-* verbs (12a) and to ditransitives like ‘give’ (13).

- (12) a. mi.homehy ny ankizy_{NOM} b. m.amp.i.homehy ny ankizy_{ACC} Rabe_{NOM}
 AV.laugh the children AV.CAUSE.AV.laugh the children Rabe
 ‘The children are laughing’ ‘Rabe is making the children laugh’
 (13) a. N.an.ome vola azy aho
 PST.AV.give money him I
 ‘I gave him money’
 b. N.amp.an.ome vola an-dRabe ahy izy
 PST.CAUSE.AV.give money ACC-Rabe me he
 ‘He made me give Rabe money’

(13b) has three accusatives. And in all cases causative *amp-*³ occurs farther from the root than the level 1 *an-* and *i-*.

Turning to reciprocals, Malagasy has no reciprocal pronouns, and reciprocalization is done solely by verbal affixation (14)–(15). The root for ‘write’ below is *soratra*.

- (14) a. m.an.oratra taratasy izy ireo
 PST.AV.write letter 3 DEM.PL
 ‘They write letters’
 b. m.if.an.oratra taratasy ve Rabe sy Rasoa
 PST.REC.AV.write letter ? Rabe and Rasoa
 ‘Do Rabe and Rasoa write letters to e.o.?’
 (15) mif.an.orát.a taratasy (ianareo)!
 AV.REC.AV.write.IMP letters 2PL.NOM
 ‘Write each other letters!’

The polar question particle *ve* occurs right after *taratasy*, the P1 sister relativizes (not shown), and imperatives take active *-a* and initial *m-* (15).

³ Travis (2000) notes that *amp-* decomposes to *an+f-*.

4.2. FAVORED COMPOSITIONS. When treating voices as functions deriving predicates from predicates, it is natural to ask which functions compose. Cause composes with Reciprocal (= Reciprocal feeds Causative), noted Cause◦Rec. So (Cause◦Rec)(-*anoratra*) = Cause(-*ifanoratra*) = -*ampifanoratra*, as in (16).

- (16) n.amp.if.an.oratra taratasy an-dRabe sy Rasoa ianao
 PST.CAUSE.REC.AV.write letter ACC-Rabe and Rasoa 2_{SNOM}
 ‘You made Rabe and Rasoa write letters to each other’

We can also reciprocalize a causative, Rec◦Cause (17c) (Rahajarizafy 1960):

- (17) a. m.if.an.ome vola Rabe sy Rasoa
 AV.REC.AV.give money Rabe and Rasoa
 ‘Rabe and Rasoa give e.o. money’
 b. m.amp.if.an.ome vola an-Rabe sy Rasoa aho (Cause◦Rec)
 AV.CAUSE.REC.AV.give money ACC-Rabe and Rasoa 1_{SNOM}
 ‘I make Rabe and Rasoa give e.o. money’
 c. m.if.amp.an.ome vola Rabe sy Rasoa (Rec◦Cause)
 AV.REC.CAUSE.AV.give money Rabe and Rasoa
 ‘Rabe and Rasoa have e.o. given money (agents unspecified)’

Reciprocals of causatives seem more difficult to understand than causatives of reciprocals (Andrianierenana 1996). One confound is that *if-* composes only with active verbs headed by *an-* and *amp-*. In such cases *if-* adds a vacuous *amp-*:

- (18) a. n.i.arahaba azy Rabe b. n.ifamp.i.arahaba Rabe sy Rasoa
 PST.AV.greet 3ACC Rabe PST.REC.AV.greet Rabe and Rasoa
 ‘Rabe greeted him/her’ ‘Rabe and Rasoa greeted each other’

Can either Reciprocal or Cause compose with itself? The first case is a clear no. From the root *seho* ‘show’ we form active *maneho* ‘shows’, but:

- (19) a. m.if.an.eho fitiavana izy ireo
 AV.REC.AV.show love 3 DEM.PL
 ‘They show each other love’
 b. *m.ifamp.if.an.eho izy ireo
 AV.REC.REC.AV.show 3 DEM.PL
 ‘They show each other to e.o.’

Iterating causatives is also out, but more interestingly. Speakers understand them but don’t use them. Their phonology and compositional interpretation are natural. Consultants ponder our examples, then reject them. Still, Dez (1980) cites: *mizara* ‘divides into parts’ ⇒ *mampampifampizara*.

The causative pause here correlates with an observation about iterating voice operations in Bantu (Hyman 2024, this volume). Iterating applicatives is well attested. Idiata (2003) cites verbs with three instances of the same applicative in Isangu. Hyman cites Runyankore, and Mathangwane (2001)⁴ presents a thorough inventory of voice compositions in Ikalanga. The link with causatives: both are valency-increasing.

⁴ Thanks to Larry Hyman for making this reference available to us.

A further property distinguishing actives from non-actives is their very productive nominalizability (Ntelitheos 2012). We just note Agent nominals, which are formed by prefixing active verbs (less initial *m-*) with *mp-* (= /p/). So *m.ianatra* ‘studies’ ⇒ *mpianatra* ‘student’; *m.am-pianatra* ‘teaches’ ⇒ *mp.ampianatra* ‘teacher’. The scope of *mp* is the whole PredP: *iray tanana izahay* ‘one village we’ ⇒ *mpiray tanana* ‘people from the same village’. ‘My teacher’ is *ny mpampianatra ahy* with *ahy* accusative, ‘the one who teaches me’. *ny mpampianatro* ‘my teacher’ with ‘my’, a possessor, would be a teacher I somehow possess (maybe one I hired as opposed to one you hired). *mp-* prefixes reciprocal verbs as well: *m.if.aninana* ‘competes with e.o.’ ⇒ *mpifaninana* ‘competitors’. See Keenan & Ralalaoherivony (2020).

- (20) ireny mp.ifanoratra taratasy (tany Ambositra) ireny
 those mp.REC.AV.write letter PST.there Ambositra those
 ‘Those people who wrote letters to each other in Ambositra’

5. Non-active voices. Non-active voices in (1) share two properties not shared by actives (aside from not interpreting P1 sisters as agents and not using an initial *m-* in present tense). First: their imperatives all take the same ending *o/y* in distinction to active *-a*. So morphologically, the non-actives pattern together to the exclusion of the active. (Other non-active voices lack imperatives.)

The second is that the agent is presented as an optional possessor bound to the verb. Shibatani (1988) notes text counts for Cebuano showing that agents occur overtly in passives about 85% of the time, contrasted with English at less than 20%. Keenan & Manorohanta (2001), averaging novels and newspapers, cite 50% for Malagasy. This is too high a percentage to say that non-actives require agents.

This correlates with the frequent observation that non-active predicates in Malagasy occur in many environments where the use of passive in English would be unnatural. To cite but one well-documented case, Hyams et al. (2006) show that in early Malagasy child speech, imperative predicates are almost entirely passive. Such imperatives are virtually non-existent in English⁵ and have not played much of a role in syntactic typology. But they are a very prominent part of what the child learner hears.

We turn now to the non-active voice morphemes in (1) and then four other passives. First, subjects of *a-* prefix passives are sometimes called *instruments* (Dez 1980). If I point (*manondro*) to a house with my cane, the house would be the subject of the suffix passive, *tondroina*, and my cane would be the subject of the *a-* passive, *atondro*. But the *a-* subjects in (1) are not instruments. We feel the best cover term for *a-* passive subjects is simply *intermediary* in an action.

As elsewhere, lexical affixation presents many idiosyncrasies. Some roots have only *a-* prefix passives: *manao* ‘does, makes’/*atao* ‘is done/made’; *miditra* ‘enters’/*aiditra* ‘is entered’, *seho* ‘shows’/*aseho* ‘is shown’. Many more have only suffix passives. There is some active/passive suppletion: *mitondra* ‘carries’/*entina* ‘is carried’, *maka* ‘takes’/*alaina* ‘is taken’. Sometimes the last consonant of the root undergoes synchronically unexpected changes: *tifitra* ‘shoot’ ⇒ *tifirina* ‘is shot’.

More importantly, many roots are arguably (Erwin 1996) consonant-final but drop the consonant if not supported by a vowel-initial suffix: from the root *fono(s)* ‘wrap’, we form active *mamono* and passive *fonosina*, whereas from *vono* ‘strike, kill’, we have active *mamono*, but

⁵ But note: *Please be seated; Don't be fooled by that sweet talkin' linguist in the back row!*

passive *vonoina*, so *-ina* does not derive passives from actives, but from the roots from which actives are also derived.

Of the suffix passives, the verbs in (1) use *-ana*, but the more usual passive suffix is *-ina*. Stark (1969) lists 152 common verbs with passives: 92 suffix *-ina*, 44 *-ana*, 9 in *-ena*, and 7 irregular. Even ditransitive *tondro* ‘point out’ takes *-ina*. With *ome* ‘give’, *omena* is used for both theme and recipient subjects, a double subject pattern used productively for the passives of causatives of transitive verbs (see below).

There are no cases in Stark (1969) where *-ina* and *-ana* suffix the same root to yield verbs selecting subjects with different semantic roles, so we regard them as allomorphs, consistent with traditional Malagasy grammar, and use INA for the suffixing passive function, whose value is conditioned by the root. This also avoids exaggerating our case for multiple voices in Malagasy.

There are four passives in addition to the A- prefix and -INA suffix ones. The first is infixation of *-in-/-on-* after the initial consonant of a root: *tolotra* ⇒ *tonolotra* ‘offered’. We ignore this form as its usage is rare, though well attested in dictionary entries and in Tagalog, Kimaragang Dusun (Kroeger 1988), and Chamorro (Chung 2020), which supports Malagasy as of the Philippine type.

Second and third are two prefixes *tafa-* and *voa-*, both telic in that in relevant forms, both are conjugated like A and INA passives with possessive agents. Like root predicates in general, neither marks present or past, and both take *ho* in the future. Sometimes *tafa-* just forms an intransitive, not specifically passive, verb. *voa-* is widely used with a consistent resultative sense:

- (21) Izany no voa.laza.ko anao
 that FOC VOA.say.1_{GEN} 2_{ACC}
 ‘That’s what I told you’

Lastly, and prominent in daily speech, are root passives. They lack derivational passive morphology, but take their arguments in the non-active format – agent phrases as verbal possessors, non-agents as subjects. They are telic, don’t mark present/past and use *ho* for future. They accept active prefixes and (!) passive suffixes. Here are a few, given as: <root, prefix active, suffix passive>.

- | | | |
|------|--|---|
| (22) | <i>hear</i> : heno, miheno, henoina | <i>reached</i> : takatra, manakatra, takarina |
| | <i>defeated</i> : resy, mandresy, resena | <i>broken</i> : vaky, mamaky, vakina |
| | <i>forgotten</i> : hadino, manadino, hadinoina | <i>caught</i> : tratra, mahatratra, tratarina |
| | <i>split</i> : tapaka, manapaka, tapahina | <i>destroyed</i> : rava, mandrava, ravana |

We have noted another 11 cases, so these are not just lexical exceptions. Examples (23a-b) illustrate atelic *-ina* vs. telic root passive (23a) and *voa-* passive (23b).

- (23) a. Notakariko ilay baoritra ery ambony ery fa tsy takatro
 PST.reach.PV2.1_{GEN} that box LOC high LOC but not RT:PV.reach.1_{GEN}
 ‘I reached for that box but didn’t reach it’
- b. Nobatainy ilay gony misy vary nefa tsy voa.batany
 PST.raise.PV2.3_{GEN} that sack with rice but not VOA-raise.3_{GEN}
 ‘He was lifting up that sack of rice but couldn’t lift it’

5.1. FAVORED AND FORBIDDEN COMPOSITIONS. For F and G semantically interpreted derivational operations such as -INA (Passive) and AMP- (Causative), we have been writing F◦G to say that G derives a predicate and then F applies to the result. Now consider the INA passive (24a):

- (24) a. Tolorana vary ny vahiny offer.PV₂ rice the guest
 'The guest was offered rice'
 b. *Atolorona ny vary PV₁.offer.PV₂ the rice
 'The rice was offered'

Why can we not apply the A- passive, yielding (24b)? (24b) would make sense: *The rice is offered (to someone) (by someone)* and is phonologically fine.

Here are some *candidate* conditions on voice composition (voices understood as semantically interpreted morphological operations, as here).

- | (25) Candidate Composition Constraints (CC) | Favored Compositions (FC) |
|---|---------------------------|
| 1. a. For F a Passive, *(F◦F) | 1. Pass◦Cause |
| b. For F Reciprocal, *(F◦F) | |
| 2. For F,G, Passive, *(F◦G) | |
| 3. For F,G valency decreasing, *(F◦G) | |

The Favored column means that if a language has a morphological causative and passive, then you can always passivize some causatives. The converse may fail (as in Malagasy). Legate et al. (2020) argue that CC₁ holds for Turkish, Lithuanian and Sanskrit, contra claims made in the literature. Malagasy satisfies CC₂ as none of VOA, A, or INA passives compose with any other of them. So CC₂ predicts (24b) and CC_{1a}. CC₃ fails in Malagasy, as Reciprocal is valency-decreasing, but verbs with two objects allow reciprocals to passivize (26b). Some work that blocks passivizing reciprocals probably hasn't considered reciprocals with two objects.

- (26) a. n.if.an.oratra taratasy Rabe sy Rasoa
 PST.REC.AV.wrote letters Rabe and Rasoa
 'Rabe and Rasoa wrote letters to each other'
 b. n.if.an.orat.an-dRabe sy Rasoa ireny taratasy ireny
 PST.REC.AV.write.CV-Rabe and Rasoa those letter those
 'Those letters were written to each other by Rabe and Rasoa'
 c. ireny taratasy (izay) nifanoratan-dRabe sy Rasoa ireny
 those letter that written.to.e.o.-Rabe and Rasoa those
 'Those letters that were written to each other by Rabe and Rasoa'

An additional constraint: the A and INA passives are recursion-final:

- (27) **Def:** A voice operator G is *recursion final* iff for all voice operators F, *(F◦G).

So once A- or -INA has applied, no further voice operations are viable. Just how general is it that passives are recursion-final? Aissen (1974) supports that in Turkish passives cannot be causativized. They seem marginal in Japanese (Ishizuka 2012).

For the most part, they are recursion-final in Bantu, but Hyman (2024, this volume) cites a counterexample in Chichewa, where Passive and Reciprocal can apply in either order, having however the same meaning. But a telling counterexample is Chamorro, where Chung (2020: 262–270)⁶ shows that causatives apply to intransitive verbs quite generally, including both passives and antipassives. And in Malagasy, one prefix, *maha-*, combines with a frightening range of expression types (adverbials, pronouns, ...) and needs further study with respect to *voa-* passives.

⁶ Thanks to a reviewer for pointing this out.

Let us summarize in a Composition Table some of the main generalizations we have made about Malagasy:

	Passive	Causative	Reciprocal
	INA	AMP	IF
INA	*	+	+
AMP	*	*?	+
IF	*	+	*

Table 1. Malagasy voice composition

Table 1 implies that -INA is recursion-final (with respect to the voices in the table). Nothing composes with it. And it implies that the listed functions do not iterate. On the positive side, we see INA passive composes with AMP causatives, which in turn compose with reciprocal IF. Indeed all three compose: $INA \circ AMP \circ IF$. And the following generalizations merit (and need) further study:

- (28) a. Valency-increasing operators (Causative, Applicative) are easier to iterate than valency-decreasing ones (Reciprocal, (Anti)Passive)
 b. Voice morphemes are spelled out as the operations apply (modulo templates)
 c. Voice-sensitive morphemes are governed by the last voice operation to apply.

From (28c), (29a) is a passive of a causative, and (29b) is its correctly predicted imperative.

- (29) a. Amp.an.jaír.ina ny akanjo_{NOM} b. ampanjaíro ny akanjo_{NOM}
 CAUS.AV.sew.PV the clothes CAUS.AV.sew.PV.IMP the clothes
 ‘The clothes are (being) sewn’ ‘Sew the clothes!’

English speakers need an ethnocentric moment to adapt to nominative subjects in imperatives. An example that struck the first author is from the root *vónjy* ‘save’. The active indicative is *mamónjy*, imperative: *mamonjé*; the passive is *vonjéna*, imperative *vonjéo*. If you fall off the boat and need to be saved you had best shout *Vonjeo aho!* with nominative I. Transitive imperatives are commonly passive. Intransitive *an-* ones use active: *mandróso* ‘advances’ \Rightarrow *mandrosóa* ‘Come in!’ For further work on Malagasy imperatives, see Aziz (2024).

Returning now to causatives of transitives, we see that the INA passive may take either the causee or the object of the embedded verb as subject.

- (30) a. [Mampianatra teny gasy ahy] Rabe
 CAUSE.AV.study language malagasy 1_{SACC} Rabe
 ‘Rabe teaches me Malagasy’
 b. [Amp.i.anar.in-dRabe ahy] ny teny gasy
 CAUSE.AV.study.PV₂-Rabe_{GEN} 1_{SACC} the language malagasy
 ‘Malagasy is taught (to) me by Rabe’
 c. [Ampianarin-dRabe teny gasy] aho
 CAUSE.AV.study.PV-Rabe_{GEN} language malagasy 1_{SNOM}
 ‘I am taught Malagasy by Rabe’

Verbs once INA passivized no longer causativize or reciprocalize. From *sása* form active *manása* ‘washes’, causative *mampanása*, passive *ampanasáina*, but **mampanasáina*. This last would causativize a passive verb and thus be an active causative, prefixing *m-* in present tense. In past (or future), the shape of passivizing a causative and causativizing a passive would look the

same: *nampanasaina*. But semantically, this form has only the passive of a causative reading (31b):

- (31) a. Nampanasa lamba an-dRabe Rasoa
 PST.CAUSE.AV.wash clothes ACC-Rabe Rasoa
 ‘Rasoa made Rabe wash clothes’
 b. n.amp.an.asa.an-dRasoa lamba Rabe
 PST.CAUSE.AV.wash.PV₂-Rasoa clothes Rabe
 ‘Rabe was made to wash clothes by Rasoa’
 *‘Rabe [made [washed-by-Rasoa]] clothes’

6. Circumstantial voices. Circumstantial voices (Rajaona 1972) are a family of voices exemplified in (1d).⁷ They consist of a possibly complex active prefix+root+*ana* (not *ina*). The active prefix does not include the initial *m-* distinctive of actives. Formation of CV forms is very regular, mostly not exhibiting the lexical irregularities mentioned for the other voices. (1d) has an instrumental subject and (32b) a locative. Relative clauses on nouns denoting oblique notions are virtually always in CV voice (32c).

- (32) a. mi.toetra amin’ity trano ity izy
 AV.reside PREP’this house this he
 ‘He lives in this house’
 b. i.toer.a.ny ity trano ity
 AV.reside.CV.3_{GEN} this house this
 ‘lit: this house is lived in by him’
 c. ny antony nanaovan-dRabe izany
 the reason PST.do.CV-Rabe that
 ‘The reason Rabe did that’

Rajemisa-Raolison (1971) lists 10 semantic roles subjects of CV verbs may take, six of which are obligatorily focused, as with *no* in (33). He presents three other structure types that select CV voice.

- (33) Rahampitso / Rahoviana no handehanantsika (?)
 tomorrow / when? FOC FUT.AV.go.CV.1PL.INCL
 ‘It is tomorrow that we go/When are we going?’

This voice may seem like a luxury, but given its syntactic role – feeding extraction and deletions, modifying nouns as relative clauses – it is widely used. To refer to the town in which Rakoto teaches, the CV form of the verb is required:

- (34) ny tanàna (izay) ampianaran-dRakoto
 the town REL CAUSE.AV.learn.CV-Rakoto_{GEN}
 ‘The town where Rakoto teaches’

Given that CV morphology is obviously built on the AV one, one might be tempted to treat it as a composition of the INA passive (*-ana* form) with AV voice (Guilfoyle et al. 1992). This may be historically correct, but synchronically we think it best to treat the compound morphology as its own voice, for many reasons. (1), as noted, the active part does not use the distinctively active

⁷ We only have space for a few examples.

m-. (2), the agent nominalizer *mp-* prefixes only actives (including causatives and reciprocals) but not CV ones. We have CV *ifanampiana* ‘helping e.o.’ but **mpifanampiana* ‘mutual aiders’. (3), CV forms have imperatives not plausibly treated as applying an active prefix to a passive imperative, as that would create an active imperative in *-a*, which is not what we observe. (4), the CV form is used as a passive with several verbs (e.g., *mianatra* ‘studies’, *mamboly* ‘plants’) that lack an INA passive. (5), if we just passivize the active form, we fail to capture cases where the CV affix must see the root, not just the active. Recall that active *mamono* is derived from two different roots, *fono(s)* and *vono*, and is, as expected, ambiguous, meaning ‘wraps’ or ‘hits/kills’. But they have distinct CV (and PV) forms *amonosana* vs. *amonoana*. Similarly *foha* ‘awaken’ and *voha* ‘open’ yield the same actives *mamoha*, but distinct CV forms: *amohazana* and *amohana*, respectively. So in general, CV *-ana* must be able to see the root, not just the active form.

Finally, though CV forms may seem esoteric, their *f-*nominalizations are very widely used. (Ntelitheos 2012). They express “purpose modifiers”: bedroom, bathroom, and kitchen, are a room (*efitra*) for bathing *fandroana*, sleeping *fatoriana*, or eating *fihinanana* using *f-*nominals of CV verbs. So they are found with many abstract nouns – (car) traffic *fi famoivoizana*, communication *fi faneraserana*, and instruction *fampianarana*. And CV verbs are very actively used when non-subcategorized arguments of a predicates are at issue. *Why don't you get along? Inona no tsy nifankahazoanareo?* And of course just referring to states or activities expressed by Predicate Phrases: a few examples, the first from a newspaper:

- (35) Ho.tohizana ny f.if.an.olor.a.ntsika fanomezana isan-taona
 FUT.continue.PV the NOM.REC.AV.offer.CV.1PLGEN NOM.AV.give.CV each-year
 ‘Our giving of gifts to each other each year will be continued’
- (36) ny fampianarana ny teny anglisy any an-tsekolinay
 the NOM.caus.AV.learn.CV the language English there LOC-school.our
 ‘The English language instruction in our school’
- (37) Mampalahelo ny tsy fitiavan-dRabe an-dRaso
 makes.sad the not NOM.AV.love.CV-Rabe ACC-Raso
 ‘Rabe’s not loving Raso is sad’
- (38) Iza no miandraikitra [ny [[fikarakarana sy fanamboarana] azy]]?
 who FOC is.responsible the NOM.AV.care.CV and NOM.AV.repair.CV 3ACC
 ‘Who is responsible for the care and maintenance of them?’

CV nominalizations of transitive verbs preserve their transitivity, as they target non-subcategorized constituents. Coordinating such will take a single direct object, as here. They also provide a context where *-ina* and *-ana* contrast.

- (39) a. nampanenjehin’ny fanjakana ny zandary ny dahalo
 PST.CAUSE.AV.chase.PV₂’the NOM.AV.rule.CV the gendarme the brigands
 ‘The brigands were caused by the government to be chased by the police’
- b. Andro alahady no nampanenjehan’ny fanjakana ny zandary ny dahalo
 day Sunday FOC PST.CAUSE.AV.chase.CV govt the police the brigands
 ‘On Sunday the brigands were made by the govt to be chased by the police’

Note too that the main verbs in (40a-b) differ just by passive vs. circumstantial, yet code a difference in scope, disambiguating their English translation:

- (40) a. Oviana_i no nolazain-dRabe_{GEN} fa nandehananao_i tany Antsirabe?
 when FOC PST.say.PV-Rabe that PST.AV.go.CV.2_{GEN} PST.there Antsirabe
 ‘When did Rabe say you were going to Antsirabe?’
 b. Oviana_i no nilazan_i-dRabe_{GEN} fa nandeha tany Antsirabe ianao
 when FOC PST.say.CV-Rabe that PST.AV.go PST.there Antsirabe 2_{NOM}
 ‘When did Rabe say you were going to Antsirabe?’

We note too that active verbs with causative and reciprocal morphology simultaneously can be put in the CV form:

- (41) Omaly hariva no nampifandakanao an-dRabe sy Rakoto
 yesterday evening FOC PST.CAUSE.REC.CV.kick.2_{GEN} ACC-Rabe and Rakoto
 ‘It was yesterday evening that you made Rabe and Rakoto kick e.o.’

We close this section by noting two further properties of voice structures that reveal their depth in Malagasy. First, PredPs in different voices coordinate, taking a single subject, supporting that Voice builds PredPs, not clauses.

- (42) a. [_{P1} Tia ahy sy tia.ko] Raso
 AV.likes me and like.PV₂.1_{GEN} Raso
 ‘Raso likes me and is liked by me’
 b. [[Nanondroako sy nijery] ilay vorona] ianao
 PST. AV.point-out.CV.1_{GEN} and PST.AV.watch that bird 2_{NOM}
 ‘You were pointed out by me and watched that bird’

And second, some functional expressions select voice: The lexical modal *azo* ‘can’ selects verbal complements, but only in non-active voices (Rajemisa-Raolison 1971: 118).

- (43) Azo.nao vak.ina / *mam.aky ity boky ity raha tianao
 can.2_{GEN} read.PV₂ / AV.read this book this if like.PV₂.2_{GEN}
 ‘This book can be read by you if liked by you’

Azo itself is a passive root meaning ‘receive’: *Tsy azoko ny teninao* ‘I don’t get your words’. But it doesn’t form a suffix passive, or an active with *an-* or *i-*. It does form an active *mahazo*, (44), which, itself, just selects active verbal complements.

- (44) Mahazo misotro / *sotroina divay izao ianareo
 AV.can AV.drink / drink.PV₂ wine now you.PL
 ‘You can drink wine now’

Similarly, verbs of intent and desire select future tense and +/- active on their complement verbs:

- (45) a. mi.kasa hamaky / *ho vakina io boky io aho
 AV.intends FUT.AV.read / FUT read.PV₂ that book that 1_{NOM}
 ‘I intend to read that book’
 b. kas.ai.ko hovakina / *hamaky io boky io
 intend.PV₂.1_{GEN} FUT.read.PV / FUT.AV.read that book that
 ‘That book is intended by me to be read (by me)’

And, more quickly, the lexical adjective *afaka* ‘free’ has a modal use *can*, where it selects active verbs: *Tsy afaka miverina ity fiarakodia ity* ‘This car can’t (go in) reverse’, and the verb/preposition *mandritra* semantically selects nouns denoting time periods. Verb-derived ones must be CV (Rajemisa-Raolison 1971: 152).

- (46) mandritra ny fivoriana /hianaransika
 during the NOM.AV.gather.CV/FUT.AV.learn.CV.1PL
 ‘During the meeting/our (future) studies’

7. Summary. We have seen that the voice system in Malagasy is rich and structured (though we have only sampled the CV voices). We have argued that voice is a way of deriving predicate phrases, not of manipulating NPs/DPs. In general, what distinguishes active from passive sentences lies in the predicate. Given a subject, we cannot tell if its predicate is active or passive. Given its predicate, we can predict much about its subjects.

We have also indicated, a bit, the functional load of voice in Malagasy grammar. Were Malagasy to lose its non-active voices, it would have to change how its imperatives, relative clauses (and extractions generally), control structures and coordinations are formed and/or interpreted. In contrast, were the use of passives in English forbidden tomorrow, no such changes would ensue. The voice system in Malagasy is *weight-bearing*. In English it is *decorative*. Nothing in its passives is unique to them.

In Malagasy tradition, proverbs are a source of knowledge and identity. We conclude with a recently “discovered” proverb that distinguishes English passives from Malagasy ones:

Akoho sy voromahery – manana elatra izy roa, iray ihany no manidina
 (*Chickens and eagles – both have wings, only one flies*)

References

- Aissen, Judith. 1974. Verb raising. *Linguistic Inquiry* 5(3). 325–366.
- Andrianierenana, Clément Luc. 1996. Morphological causatives in Malagasy. In M. Pearson & I. Paul (eds.), *The structure of Malagasy* (Vol. 1), 158–176. Los Angeles, CA: UCLA Dept of Linguistics.
- Aziz, Jake. 2024. Imperatives and the syntax-prosody interface in Malagasy. Manuscript. UCLA.
- Builles, Jean-Michel. 1988. La voix agento-stative en malgache. In *Etudes Océan Indien* (Vol. 9). Paris: INALCO.
- Cabredo-Hoferr, Patricia. 2017. Impersonal passives. In M. Everaert & H. van Riemsdijk (eds.), *The Blackwell companion to syntax*, 1–44. Hoboken, NJ: John Wiley & Sons.
- Chen, Victoria & Bradley McDonnell. 2019. Western Austronesian “voice”. *Annual Review of Linguistics* 5. 173–195.
- Chung, Sandra. 2020. *Chamorro grammar*. Santa Cruz, CA: UC Santa Cruz Linguistics Research Center. <https://doi.org/10.48330/E2159R>.
- Dez, Jacques. 1980. *Structures de la langue malgache: Éléments de grammaire à l'usage des francophones*. Paris: Publications Orientalistes de France.
- Erwin, Sean. 1996. Quantity and moras: An amicable separation. In M. Pearson & I. Paul (eds.), *The structure of Malagasy* (Vol. 1), 2–30. Los Angeles, CA: UCLA Dept of Linguistics.
- Foley, William. 2008. The place of Philippine languages in a typology of voice systems. In Peter K. Austin & Simon Musgrave (eds.), *Voice and grammatical relations in Austronesian languages*, 22–44. Stanford, CA: CSLI.

- Guilfoyle, Eithne, Henrietta Hung & Lisa Travis. 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10. 375–414.
- Himmelman, Nikolaus P. 2008. Lexical categories and voice in Tagalog. In P.K. Austin & S. Musgrave (eds.), *Voice in grammatical relations in Austronesian languages*, 247–293. Chicago, IL: University of Chicago Press.
- Hyams, Nina, Dimitrios Ntelitheos & Cécile Manorohanta. 2006. The acquisition of the Malagasy voicing system: Implications for the adult grammar. *Natural Language and Linguistic Theory* 24. 1049–1092.
- Hyman, Larry. (2024, this volume). Bantu verb stem morphotactics revisited.
- Idiata, Daniel Franck. 2003. Voice through verbal extensions in Isangu system. In D. F. Idiata and G. Mba (eds.), *Studies on voice through verbal extensions in nine Bantu languages spoken in Cameroon, Gabon, DRC and Rwanda*, 65–81. München: LINCOM.
- Ishizuka, Tomoko. 2012. *The passive in Japanese*. Amsterdam: John Benjamins.
- Kaufman, Daniel. 2009. Austronesian typology and the nominalist hypothesis. In A. Adelaar & A. Pawley (eds.), *Historical linguistics and culture history: A festschrift for Bob Blust*, 187–215. Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Keenan, Edward L. 1972. Relative clause formation in Malagasy (and some related and some not so related languages). In Paul M. Peranteau, Judith N. Levi & Gloria C. Phares (eds.), *The Chicago which hunt: Papers from the Relative Clause Festival, April 13, 1972; A paravolume to papers from the eighth regional meeting*, 169–189. Chicago, IL: Chicago Linguistic Society.
- Keenan, Edward L. 1995. Predicate-argument structure in Malagasy. In C. S. Burgess, K. Dziwirek, and D. B. Gerdts (eds.), *Grammatical relations: Theoretical approaches to empirical issues*, 171–217. Stanford, CA: CSLI.
- Keenan, Edward L. 2008. Voice and relativization without movement in Malagasy. *Natural Language and Linguistic Theory* 26. 467–497.
- Keenan, Edward & Cécile Manorohanta. 2001. A quantitative study of voice in Malagasy. *Oceanic Linguistics* 40. 67–85.
- Keenan, Edward & M. Polinsky. 1998. Malagasy morphology. In A. Spencer & A. M. Zwicky (eds.), *The handbook of morphology*, 563–624. Hoboken, NJ: Blackwell.
- Keenan, Edward & Baholisoa Ralalaoherivony. 2020. Malagasy reciprocals: Lexical and syntactic. In Giada Palmieri, Yoad Winter & Joost Zwarts (eds.), *Cross-linguistic semantics of reciprocals, Utrecht University 2019*. Utrecht: Dept of Linguistics Utrecht University.
- Kroeger, Paul. 1988. Verbal focus in Kimaralang. In S. Lim, M. Soemarmo, K. Pumama, R. Blust (eds.), *Papers in Western Austronesian linguistics no. 3*, 217–240. Canberra: Dept. of Linguistics, Research School of Pacific Studies, The Australian National University.
- Legate, Julie Anne. 2021. Noncanonical passives: A typology of voices in an impoverished Universal Grammar. *Annual Review of Linguistics* 7. 157–176.
- Legate, Julie Anne, Faruk Akkus, Milena Šereikaitė & Don Ringe. 2020. On passives of passives. *Language* 96(4). 771–781.
- Mathangwane, Joyce. 2001. Suffix ordering in the Ikalanga verb stem: A case against The Repeated Morph Constraint. *South African Journal of African Languages* 21(3-4). 396–409.
- McCloskey, Jim. 2010. Impersonals in Irish and beyond. In D. B. Gerdts, J. C. Moore & M. Polinsky (eds.), *“Hypothesis A/Hypothesis B”: Linguistics explorations in honor of David M. Perlmutter*, 323–344. Cambridge, MA: MIT Press.

- Ntelitheos, Dimitrios. 2012. *Deriving nominals: A syntactic account of Malagasy nominalizations*. Leiden: Brill.
- Paul, Ileana. 2004. NP versus DP reflexives: Evidence from Malagasy. *Oceanic Linguistics* 43(1). 32–48.
- Paul, Ileana, Baholisoa Ralalaoherivony & Henriëtte de Swart. 2020. Culminating and non-culminating accomplishments in Malagasy. *Linguistics* 58(5). 1285–133.
- Pearson, Matthew. 2005. The Malagasy subject/topic as an A' element. *Natural Language and Linguistic Theory* 23. 381–457.
- Potsdam, Eric. 2006. More concealed pseudoclefts in Malagasy and the clausal typing hypothesis. *Lingua* 116. 2154–2182.
- Potsdam, Eric & Maria Polinsky. 2007. Missing complement clause subjects in Malagasy. *Oceanic Linguistics* 46(1). 277–303.
- Rahajarizafy, R. P. Antoine. 1960. *Essai sur la grammaire malgache*. Antanimena: Imprimerie Catholique, Antanimena Tananarive.
- Rajaona, Siméon 1972. *Structure du malgache: Etude des formes prédicatives*. Fianarantsoa: Librairie Ambozontany.
- Rajemisa-Raolison, Régis. 1971. *Grammaire malgache* (7ième edition). Fianarantsoa: Ambozontany.
- Shibatani, Masayoshi. 1988. Voice in Philippine languages. In M. Shibatani (Ed.), *Passive and voice*. Amsterdam: John Benjamins
- Stark, Elsie L. 1969. *Malagasy without moans*. Antananarivo: Trano Printy Loterana.
- Travis, Lisa. 2000. The I-syntax s-syntax boundary: Evidence from Austronesian. In Ileana Paul, Vivianne Phillips & Lisa Travis (eds.), *Formal issues in Austronesian linguistics*. The Hague: Kluwer.
- Zúñiga, Fernando & Seppo Kittilä. 2019. *Grammatical voice*. Cambridge, UK: Cambridge University Press.

Appendix

	1s	2s	3	1PL.EXCL	1PL.INCL	2PL
NOM	aho	ianao	izy	izahay	isika	ianareo
ACC	ahy	anao	azy	anay	antsika	anareo
GEN	-ko	-nao	-ny	-nay	-ntsika	-nareo

Table 2. Malagasy pronouns