Davies, William. 1986. *Choctaw Verb Agreement and Universal Grammar.* Dordrecht: Kluwer.

Dixon, R. M. W. 1972. *The Dyirbal Language of North Queensland.* Cambridge Studies in Linguistics 9. Cambridge: Cambridge University Press.

Gerdts, Donna. B. 1993a. Mapping Transitive Voice in Halkomelem. *BLS* 19S.22–33.

Gerdts, Donna. B. 1993b. Mapping Halkomelem Grammatical Relations. *Linguistics* 31.591–621.

Harris, Alice. *Georgian Syntax.* Cambridge: Cambridge University Press.

Hewitt, B. G. 1989. *Abkhaz.* New York: Routledge.

Kathman, David. 1993. Expletive Verb Marking in Abkhaz. Paper presented at the 19th Annual Meeting of the Berkeley Linguistics Society.

Kathman, David. 1994. The Morphosyntax of Verb Agreement. Ph.D dissertation, University of Chicago.

Simpson, Jane, and Joan Bresnan. 1983. Control and Obviation in Warlpiri. *Natural Language and Linguistic Theory* 1.49–64.

Spruit, Arie. 1986. Abkhaz Studies. Doctoral dissertation, Rijksuniversiteit of Leiden.

Van Valin, Robert D., Jr. 1990. Semantic Parameters of Split Intransitivity. *Language* 66.221–260.

Vogt, Hans. 1971. *Grammaire de la langue georgienne.* Oslo: Universitetsforleget.

In Grammatical Relations

Clifford Burgess, Katarzyna Dziwirek, & Donna Gerdts (eds)

CSLI Stanford, CA 1995

Predicate-Argument Structure in Malagasy

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1. Introduction

In **2** we show that Malagasy, although highly configurational, compares with Philippine languages like Tagalog and Cebuano with regard to the richness of its voice system and the split of "subject properties" between active and non-active Agent Phrases. These results are consistent with the point of view in Manaster-Ramer (1992), Guilfoyle, Hung and Travis (1992) and Voskuil (1993) but modify somewhat those in Keenan (1976).

In **3** we study non-active Ss in Malagasy, defending a predicate level analysis (Mulder and Schwartz 1981, Bach 1980, Keenan 1980, Keenan & Timberlake 1985a,b and Dukes 1993) over a clause level advancement analysis (Bell 1983, Payne 1982, Gerdts 1988 and De Guzman 1988 for Philippine languages).

2. Western Austronesian Clause Structure

We define a language L to be a WESTERN AUSTRONESIAN TYPE (= WA Type) language if there is a structural way of identifying an NP in each basic clause of L which satisfies (1a,b) below, where we write NP(S) for the NP identified[1] in S:

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[1]To say that there is a structural way of identifying an NP (occurrence) in each basic clause is to say that there is a *structure dependent* function, here noted **NP**, which maps each basic clause to an NP occurring in it. A function F is *structure dependent* iff whenever S and S' are isomorphic (= have the same structure, whatever it is) then the value of F at S must be the isomorphic image of its value at S'. For example, suppose that a complex expression ABC is isomorphic to A'B'C' by a function which maps A to A', B to B' and C to C'. Then if a structure dependent F maps ABC to B then F must map A'B'C' to B'. See Keenan & Stabler (1991). In some languages a syntactic isomorphism (technically *automorphism*) must

(1) a.   the verbal morphology covaries with the semantic role of NP(S) and

    b.   many syntactic and interpretative processes, such as relativization, apply only to NP(S).

WA Type languages include Malagasy (Madagascar), the Philippine languages (Tagalog, Cebuano, etc.), Toba Batak (Sumatra; Schachter 1984) and Kimaragang Dusun (Sabah (= N.Borneo); Kroeger 1988). (2) from Cebuano (Bell 1983) is illustrative. NP(S) is marked *ang-* (*si-* if a proper noun, *ako, ka, siya...* if a pronoun).

(2) a.   Mag+luto' ang   babaye ug bugas   sa kulon
          act+cook nom   woman obl rice   obl ricepot

    'The woman will cook rice in the ricepot.'

    b.   Luto'+on sa babaye ang   bugas sa kulon
          cook +obj gen woman nom   rice   obl ricepot

    'The rice will be cooked in the ricepot by the woman.'

    c.   Luto'+an sa babaye ang   kulon ug bugas
          cook +loc gen woman nom   ricepot obl rice

    'The ricepot will be cooked rice in by the woman.'

The markings *ang-, sa-, ug-* on a given NP in (2) vary but its semantic role (Agent, Location, etc.) is invariant. The verb root *luto'* 'cook' is also constant, but its voice morphology (*mag-,-on, ...*) varies with the choice of *ang* marked NP. Cebuano has four verbal "voice" forms: the *i*-form, not illustrated, is a catch-all voice, used when the *ang-* NP bears e.g. an instrumental, temporal, or (sometimes) benefactive relation to the verb. The *ang-* NP in these Ss is interpreted as definite. NP(S) in WA Type Ls is typically required to satisfy some sort of definiteness requirement. See Bell (1978).

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preserve certain morphemes, that is, map them to themselves, just as they must preserve hierarchical structure. Case marking on NPs is typical. So identifying an NP in terms of its case markings or lexical identity may be just as "structural" as identifying an expression in terms of its hierarchical position in a derivation tree.

Regarding (1b), only the *ang-* NP may be relativized (Bell 1983:156). Relative clauses (RCs) in Cebuano have the form '...N *nga* S*, where S* is an S with its *ang-* NP missing. The head N is interpreted as bearing to the verb of S* whatever semantic role its *ang-* NP would have. Thus it is the verbal morphology (and not the invariable "linker" *nga*) which determines the role of the head N in the RC. So the S* for "the rice that the woman cooked", must be built from (2b). If it was built from (2a), that is, (2a) less its *ang* NP, it could only mean "the rice that cooked rice in a ricepot", violating the selection restrictions of the verb *magluto*.

Similarly limited to *ang* NPs is hosting Possessor Ascension (Bell 1983:193), Raising from Complement Clauses (Shibatani 1983:122) and, largely, launching floating quantifiers (Bell 1983:154). These same phenomena are among those limited to NP(S) in Tagalog (Schachter 1976, 1977, Kroeger 1993).

But properties like anteceding reflexives and controlling missing arguments of complement verbs, are not vested in NP(S) in Cebuano (or Tagalog). An antecedent of a reflexive in Cebuano (Bell 1983:161) is the NP which bears the same semantic role to the verb as does the *ang* NP when the verb is in the *mag-* (= "active" Bell p.205) form.[2] We adapt Schachter's term ACTORS for NPs identified in this partially semantic way.[3] Extensionally it is the *ang* NPs of active Vs and the *ni/sa* (= genitive) NPs of non-actives which antecede reflexives. Similarly it is the Actor NPs of "promise" verbs which control the missing argument of their verbal complement. In Tagalog (Schachter, Kroeger op cit) additional properties like expressing the addressee of imperatives are associated with Actors as opposed to NP(S).

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[2]I am being a bit pedantic here to stress that the terms "active", etc. are just cover terms for the morphologies given; they do not presuppose any similarity with clauses in, e.g., English, which are also called "active".

[3]So contrary to Schachter's usage, the *Actor* NP in a clause is simply whatever NP bears the same semantic role to the verb as the *ang* NP does to the active (= *mag-*) verb. Our usage does not imply that there is some common semantic or pragmatic factor that all verbs assign to their NP(S). So our claims remain true even if Cebuano presents some verbs which select arguments with "weird" or heretofore unheard of semantic roles.

2.1 An Advancement/Demotion Analysis

Within a Relational Grammar (RG) framework, Bell provides an analysis of Cebuano which accounts for the array of facts above in terms of ADVANCEMENT RULES, thought of as conditions which allow representations of a certain sort. See Bell (1983:148–52) and Perlmutter and Postal (1983) for clear statements of the theoretical background assumed.

In sketch form, the structure of a basic clause in RG terms can be given by a finite matrix, the rows of which are called *strata*, while the columns represent relations that expressions bear to the clause. So the (i,j)th entry gives the relation that expression j bears to the clause in stratum i. The relations we are concerned with here are Predicate, the *Term* relations: Subject (1), Direct Object (2), Indirect Object (3); various non-terms relations like Benefactive, Instrument, Locative, and so forth. For each term relation n the Cho(n) relation discussed below.

In building a RN (relational network) for a basic clause it appears (Perlmutter and Postal 1984) that, despite a little latitude (Rosen 1984), the assignment of relations borne by expressions at the initial stratum is determined semantically — the Universal Alignment Hypothesis (UA). For non-term relations like Ben, Loc, Inst, etc. the assignment is perhaps transparent (though just how many locative relations we should distinguish is not obvious). For term relations the assignment is less obvious, but following "tradition", highly Agentive NPs will be 1s, Recipients with verbs of transmission will be 3s, etc.

RG constrains the allowable transitions from one stratum to the next. Advancement transitions sanction the reassignment of an expression at position n on the hierarchy $1 > 2 > 3 >$ non-term at a stratum i to a higher position n' stratum i+1. An n at stratum i is then demoted (=assigned the Cho(n) relation) at stratum i+1. Cho(n)s are not present in initial strata. The advancements Bell posits for Cebuano are:
$2 \rightarrow 1$, $3 \rightarrow 1$, Loc $\rightarrow 1$, Ben $\rightarrow 3$, and $x \rightarrow 1$, all non-terms $x \neq$ Cho(n), any n. Representing *Joe cooked rice in the pot* by (3) and *Rice was cooked in the pot by Joe* by (4) and ordering strata top down, (4) says that *rice* bears the 2 relation to the clause at stratum 1 and the 1 relation at stratum 2.

(3)	P	1	2	Loc
	cook	Joe	rice	in the pot

(4)	P	1	2	Loc
	P	Î	1	Loc
	cook	Joe	rice	in the pot

The RNs for (2b) and (2c) in Cebuano extend that for (2a) in the same way that (4) extends (3): the initial stratum of (4) is the same as the only stratum of (3). So in (2c) the locative changes relation, becoming a 1 in the final stratum, demoting 'Joe' to Cho(1) as in (4). In these terms the 'split subject' facts can be stated as follows:

(5)   a.   Only final 1's relativize, launch quantifiers, raise from their clause, and host Possessor Ascension.

        b.   Antecedence of reflexives and control of missing arguments is determined at the initial stratum and preserved by advancement operations.

Note that the RNs in (3) and (4) do not express the voice (*mag-*,...) marking on the verb or the case marking on the NPs. Bell (1983:184–5) explicitly gives the additional, feature assigning, rules. (And of course to properly generate clauses, rules spelling out the actual morphology would be needed). Informally:

(6)   Mark the verb +*active* if no transition to 1 was used, mark it +*objective* if a $2 \rightarrow 1$ was used, +*locative* if $3 \rightarrow 1$ or Loc $\rightarrow 1$ was used, and +*inst* if any other advancement rule was used. Thus,

        a.   The voice morphology on the verb is determined as a function of the Advancements that have taken place.

        b.   The case marking on NPs is determined as a function of the final grammatical relations they bear.

2.2 Malagasy Clause Structure

Malagasy is a WA Type language with a split in subject properties comparable to (but not identical with) that seen in the Philippine case. Compare (7) and (8) with Cebuano (2). Glosses on the verbal morphology and the constituent bracketing anticipate usage defined later.

(7)   a.   [N+an+tolotra (Nanolotra) vary (hoan)'   ny
             past+act+present   rice (to)'   the

             vahiny   t+amin'ny   lovia   vaovao] aho[4,5]
             guest   past+on'the   dishes   new   1sg(nom)

             'I presented rice to the guests on the new dishes.'

   b.   [N+a+tolotra+ko (Natolotro)   (hoan)'   nyvahiny
             past+pass$_1$+present-1sg(gen)   (to)'   theguests

             t+amin'ny   lovia   vaovao] nyvary
             past+with'the   dishes   new   therice

             'The rice was presented by me to the guests on the new dishes.'

   c.   [No+tolotra+ana+ko (Notolorako) vary   t+amin'ny
             past+offer+pass$_2$-1sg(gen)   rice   past+with'the

             lovia   vaovao]   ny   vahiny
             dishes   new   the   guests

             'The guests were presented rice on the new dishes by me.'

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[4] I use standard orthography (except for the use of +). The orthography–phonology correspondence is direct: o = /u/, j = /dz/, and word final -y = word internal -i = /i/. Stress is phonemic and with some exceptions penultimate except in words ending in "weak" syllables -*ka*, -*na*, -*tra* where it is antepenultimate.

[5] Most of my textual examples do not use the preposition. Malzac (1926) asserts its optionality for several other ditransitive verbs, and the double accusative paradigm is well established in Malagasy, both for *manome* 'give' and causatives of transitives. Either can be NP(S) with the passive -*ina* morphology.

   d.   [N+an+tolotra+(C)ana+ko (Nanolorako) vary (hoan)'
             past+act+present+circ-1sg(gen)   rice (to)'

             ny   vahiny] ny   lovia   vaovao
             the   guests   the   dishes   new

             'The new dishes were presented rice on to the guests by me.'

As in (2) the semantic role of each NP (PP) in (7a) is the same in (7b-d). NP(S), the NP whose semantic role covaries with the verbal morphology, is the last NP. (Sometimes PPs and S-level adverbials follow this NP, but other argument NPs do not). The correlation is given by: AGENT – *an-* in (7a), THEME – *a-* in (7b), RECIPIENT – -*ana* in (7c) and INSTRUMENT – *an-* ...-(*C*)*ana* in (7d). Rajemisa-Raolison (1971) cites 12 oblique semantic roles compatible with the morphology in (7d): BENEFACTIVE, CAUSE, REASON, PRICE, LOCATION, TEMPORAL, etc. In (8) it is *i-* which correlates with AGENT, -*ina* with THEME and *i-*...-*ina* with OBLIQUE, in this case BENEFACTIVE or CAUSE are natural.

(8)   a.   [N+i+vidy   ity   lobaka   ity
             past+act+buy   this   shirt   this

             hoan-dRasoa]   Rabe
             for-Rasoa   Rabe

             'Rabe bought this shirt for Rasoa.'

   b.   [No+vidi+ina+Rabe (=novidin-dRabe)   hoan-dRasoa]
             past+buy+pass+Rabe   for-Rasoa

             ity   lobaka   ity
             this   shirt   this

             'This shirt was bought for Rasoa by Rabe.'

    c.   [N+i+vidi+ana+dRabe (= nividianan-dRabe) ity
             past+buy+circ+Rabe   this

lobaka	ity]	Rasoa
shirt	this	Rasoa

'Rasoa was bought this shirt by Rabe.'

2.2.1 Constituency

There is massive evidence that the bracketed strings in (7) and (8) form a constituent, one we shall theory neutrally call PREDPH (=PREDICATE PHRASE). Thus, in addition to position (and pronoun form) NP(S) in Malagasy can be identified as the NP sister to the PredPh. Despite theoretical differences, all those who have considered the issue of phrasal constituency (Keenan 1972, 1976, 1993; Randriamasimanana 1986; Guilfoyle, Hung and Travis 1989; Voskuil 1993); Dukes 1993; Law, this volume) agree that in (7) and (8) the bracketed strings are a constituent (though they may disagree as to its category). We note just some of the evidence which bears on our later claims.

2.2.2 Evidence from Quantifier and Particle Placement

The placement of the universal quantifiers *avokoa* and *daholo*, the yes-no question particle and negative polarity items all involve identifying the right PredPh boundary.

(9)
M+i+jery	ny	mpianatra	daholo	ny
pres+act+watch	the	student	all	the

mpampianatra	(rehetra)
teacher	all

'All the teachers watched the student(s).'
(*The teacher(s) watched all the students.)

Daholo and *avokoa* (which may replace *daholo* in (9)), occur only at the right edge of the PredPh and do not form a constituent with the following NP. They cooccur with the N level quantifier *rehetra* but may not replace it. Nor may they precede *ny mpianatra* 'the student(s)' in (9). Thus placing these quantifiers requires identifying the Pred-Ph boundary but does not motivate a rule of Quantifier Float. But interpretatively they only pertain to

the relation between the PredPh and NP(S), as with the "floated" quantifiers in Cebuano and Tagalog.

The yes-no question particle *ve* (*va*) separates the Pred-Ph and NP(S):

(10) a.
M+i+vidy	mofo	eto	ve	izy	ireo?
Pres+act+buy	bread	here	?	they	(nom)

'Do they buy bread here?'

      b.   *Mividy ve mofo eto izy ireo?
             *Mividy mofo ve eto izy ireo?

      c.
No+sasa+ana+Rasoa (= nosasan-dRasoa)	ve	ireto
past+wash+pass2+Rasoa	?	those

akanjo	ireto?
clothes	those

'Have those clothes been washed by Rasoa?'

      d.
An+sasa+ana+Rasoa (= anasan-dRasoa)	lamba	ve
act+wash+circ+Rasoa	clothes	?

ity	savony	ity?
this	soap	this

'Is this soap used by Rasoa to wash clothes?'

Negative expressions such as *not...even, no...longer, not...at all* frame the Pred-Ph:

(11)
Tsy	h(o)+amp+i+asa+ina+nay (hampiasainay)	intsony
not	fut+cause+act+work+pass+us(excl)	longer

ireto	fanaka	ireto
these	furniture	these

'These pieces of furniture will no longer be used by us.'

2.2.3 Evidence From Relative Clauses, Embedded Questions, Raising Contexts and Nominalizations

PredPhs (regardless of verbal morphology) constitute a semantic unit: They are interpreted as properties which (possibly abstract) objects may have (or fail to have): the property expressed by the PredPh in (7a) holds of an object x iff x offered rice to the guests on the new dishes; that in (7b) holds of an object y iff y was presented by Rabe to the guests on the new dishes, etc. And PredPhs recur with this property denoting meaning in a very wide range of syntactic contexts besides that which defines them as PredPhs.

2.2.3.1 Relative Clauses

Relative clauses (RCs) are of the form **Det + N + (izay) + PredPh + (Det)**. *Izay* is the optional morphologically constant complementizer (≈ Cebuano *nga*). Deriving RCs from full Ss after *izay* we see that only NP(S) in Malagasy is relativizable. The parallel with the Philippine case is exact. Thus,

(12) a.
ny   olona   (izay)   n+i+vidy   ny   mofo
the   person   that   past+act+buy   the   bread

hoan'ny zaza
for'the child

'The person that bought the bread for the child.'

b.
ny   mofo   (izay)   no+vidi+n-dRabe
the   bread   that   past+buy+pass-Rabe

hoan'ny zaza
for'the child

'The bread that was bought by Rabe for the child.'

c.
ny   zaza   (izay)   n+ividi+anan-dRabe
the   child   that   past+buy+circ-Rabe

ny   mofo
the   bread

'The child that was bought the bread for by Rabe.'

d.
*ny   zaza   (izay)   no+vidi+n-dRabe
the   child   that   past+buy+pass-Rabe

ny   mofo
the   bread

Replacing the verb in any of the relatives with those of any of the others forces a reinterpretation and usually ungrammaticality. (12d) results from (12c) by replacing the +circ verb with the one of (12b), uninterpretable since *ny mofo* 'the bread' lacks a semantic role, the child being understood to be what is bought.

2.2.3.2 Embedded Questions

Embedded questions are of the form [*izay* + (N) + PredPh]. Relevant examples are in (13).

(13) a.
Tsy   fantatro   izay   [$_{PredPh}$ nividy   mofo
not   known+1sg   comp   bought   bread

hoan'ny zaza]
for'the child

'Who bought bread for the child isn't known by me.'

b.
Tsy   fantatro   izay   [novidin-dRabe
not   known+1sg   comp   pst+buy+pass-Rabe

hoan'ny zaza]
for'the child

'What was bought by Rabe for the child isn't known by me.'

c. Tsy fantatro   izay zaza [nividianan-dRabe   mofo]
    not known+1sg comp child pst+buy+circ-Rabe   bread

   *'For/because of which child Rabe bought bread isn't known
   by me.'*

2.2.3.3 Raising to Object Contexts

Samples of these constructions, [V + NP$_{acc}$ + ho + PredPh + NP$_{nom}$], are shown in (14).

(14) a. Mihevitra an-dRasoa ho [$_{PredPh}$ n+i+vidy
          thinks   acc-Rasoa as   past+act+buy

          akanjo   hoan'ny   zaza] Rabe
          clothes   for'the   child Rabe

   'Rabe thinks Rasoa to have bought clothes for the child.'

      b. Mihevitra ny   akanjo ho   [no+vidi+n-dRasoa
          thinks   the   clothes as   past+buy+pass-Rasoa

          hoan'ny   zaza] Rabe
          for'the   child Rabe

   *'Rabe thinks the clothes as having been bought for the child
   by Rasoa.'*

      c. Mihevitra ny   zaza   ho   [n+ividi+anan-dRasoa
          thinks   the   child   as   past+buy+circ-Rasoa

          akanjo]   Rabe
          clothes   Rabe

   *'Rabe thinks the children as having been bought clothes for
   by Rasoa.'*

   d. *Mihevitra ny   akanjo ho   [n+i+vidy   hoan'ny
       thinks   the   clothes as   past+act+buyfor'the

       zaza   Rasoa]   Rabe
       child   Rasoa   Rabe

Deriving (14a-d) by NP raising from an "S" following *ho* we see that just NP(S) raises; (14d) is uninterpretable.

2.2.3.4 Tensed Nominalizations

[Det + PredPh + (Det)] constructions are displayed in (15).

(15) a. Zava-dratsy   sy   maha+menatra   ny
          thing-bad   and   cause+shame   the

          m+an+galatra omby
          pres+act+steal cow

   'Stealing cows is shameful and a bad thing.'

      b. Tsy tia+n-dRakoto   ny n+a+tao+nao   azy
          not like+pass-Rakoto   the past+pass+do+2sg(gen)3acc

   'Rakoto didn't like what you did to him.'

      c. izy   no   nitantara ny   nitondran'   ny
          she   foc   relate   the   past+carry+circ'   the

          jirika   sy   ny namonjen-dRainilaimanga   azy
          brigand   and   the past+save+circ-Rainilaimanga   her

   *'It was she who recounted the carrying-off by the brigand
   and the saving by Rainilaimanga of her.'* [IKM.47]

    d.

Faly	amin'	izao	h+ananan'i	Soa
happy	about'	this	fut+have(circ)'art	Soa

tokantrano	izao	izahay	mivady
household	this	we(excl)	spouses

'We (husband and wife) are happy about Soa's future founding a household (=getting married).' [PM]

A **regularity** is observed: Determiners and NP(S)s are in complementary distribution. A PredPh combines with a Det to make an NP or with an NP(S) to make an S.

Note that non-verbal PredPhs like predicate nominals enter these same paradigms:

(16) a.

Mp+i+solo	ahy	izy
er+act+replace	1sg(acc)	3(nom)

'He is my replacement.'

    b.

ny	vehivavy	izay	mpampianatra
the	woman	that	teacher

t+any	Betafo
past+there	Betafo

'The woman who was a teacher in Betafo.'

    c.

Nihevitra	azy	ho	mpamboly	ve	ianao?
thought	him	as	planter	?	you(nom)?

'Did you think he was a planter?'

    d.

ny	mpianatra	any
the	students	there

2.2.4 Summary

(9) – (16) establish the constituency of the PredPh and show that NP(S) in Malagasy shares crucial properties with NP(S) in Cebuano/Tagalog. Relativization and Raising are limited to NP(S) and predicate level quantifiers are interpreted only as quantifying over NP(S).

(NP(S) also hosts Possessor Ascension in Malagasy, but recent observations suggest other NPs also do, though not Actors different from NP(S)s).

2.3 Case

Like its Philippine cousins, Malagasy pronouns distinguish three cases:

(17)

Singular:	1	2	3	
nom	aho	(h)ianao	izy	
acc	ahy	anao	azy	
gen	-ko	-nao	-ny	

Plural:	1 excl	1 incl	2	3
nom	izahay	isika	(h)ianareo	izy
acc	anay	antsika	anareo	azy
gen	-nay	-tsika	-nareo	-ny

A plural interpretation in 3rd person may be forced by augmenting them with an overtly plural demonstrative like *ireo* or a kin term like *mivady* in *izy mivady* 'they husband & wife'. There are other, familiar, 2nd person forms like *ialahy* and *ise*. Pronouns in the **gen** series, like their full NP counterparts, are always bound to a host. Except for the monosyllabic *-ko* and *-ny* they may carry stress (phonemic in Malagasy) and so are not in general clitics. Case marking on full NPs in Malagasy is less explicit than in Cebuano/Tagalog. But pronouns occur where the corresponding full NPs do, whence pronominal replacement is a test for the case of an NP.

2.3.1 Nominative

This is the case of NP(S). It has no distinctive markings other than the pronoun forms. Equally, Predicate nominals, (16a), adjectives and PPs combine solely with nominative NPs to form Ss. **nom** is never selected by Vs in forming PredPhs or by Ns or As in forming NPs and APs. In general it is structurally assigned rather than *selected* by heads (though two Preps select **nom** NPs: *noho* 'than, because of', and *afa-tsy* 'except', lit: 'free-not').

2.3.2 Accusative

Accusative case is distinguished by its pronoun series (**acc**). In addition proper nouns, some kin terms and, optionally, demonstratives are overtly marked accusative with *an-*. **acc** is selected by many Vs, (7a) and (8a), some Ns (below), a few Ps (*tahaka azy* 'like him') and a few as (*feno azy* 'full (of) it'). The definite article *ny* plus NP$_{acc}$ translates predicate possessives (*ny ahy* 'the me' = 'mine', as in *Mine is black, yours is white*).

2.3.3 Genitive

Genitive is the master case in Malagasy. It is the dominant case selected by Ns, As, and Ps. Vs divide on the issue. Vs which cannot take an argument in the genitive, as in (7a) and (8a), will be called **active** and those which can **non-active**, e.g. (7b,c,d) and (8b,c). Formally, genitive NPs are morphologically bound to their hosts by a complex process I call *n-bonding*, which we exemplify without defining (for lack of space).

2.3.3.1 n-bonding

This process combines a host H and an NP$_{gen}$ α to form an expression **nbond(H,α)** whose category depends on that of H. For example, if H is a Prep then the category of **nbond(H,α)** is PP. The precise form of **nbond(H,α)** depends on whether H is "weak" (= ends in *-na*, *-ka*, *-tra*, stressed on the antepenult) or not. Weak endings are dropped or modified according to whether NP$_{gen}$ is a pronoun, an augmented pronoun, a coordinate NP, or a full NP beginning with a vowel, the proper noun articles *Ra*-or *i*-, or the definite article *ny*. If H is not weak, a segment *-n-* is inserted between it and a non-pronominal NP$_{gen}$. NP$_{gen}$'s occur as Possessors of Ns, (18a), complements of transitive N's, (19), objects of most prepositions, (20), complements of most adjectives, (21), and Actor NPs with non-active predicates: (18b), (15b), (10c), (8b,c), (7b,c,d). (*nr* ⇒ *ndr* is phonologically regular in Malagasy).

(18) a. trano ity   trano+ n+Rabe (=tranon-dRabe) ity
          house this   house+ gen+Rabe   this

'*this house of Rabe's*'

      b. a+roso+n+Rabe (aroson-dRabe)
          pass+serve+gen+Rabe

'*served by Rabe*'

Note that Possessor's do not compete for position with Dets. They do compete somewhat with Adjectives modifying the head, and their joint presence is often felt as awkward even when acceptable. Adjectives may always follow and sometimes (e.g. inherent property Adjectives; Jan Voskuil p.c.) precede NP$_{gen}$:

(19) a. ny   trano+n-dRabe fotsy
          the house+gen-R   white

      b. ny   trano   fotsi+n-dRabe
          the house   white+gen-R

      c. ny   mpiasa+n-dRabetezitra
          the worker+gen-R angry

      d. *ny mpiasa tezi-dRabe
          the worker angry+gen-R

In (20) we see both lexical Ns (*tahotra* 'fear' and *alahelo* 'sadness') and the derived N *fitiavana* 'love' (with *f-* replacing the tense marker) selecting two complements, **gen** and **acc** ones.

(20) a. ny   taho-dRabe
          the fear+gen+Rabe

'*the fear Rabe has*'

      b. ny   tahotra an-dRabe
          the fear   acc-Rabe

'*the fear of unspec.for Rabe*'

c.   ny   taho-dRabe   azy
        the   fear+gen+Rabe+3sg(acc)

'Rabe's fear of him.'

d.   ny   alahelo+n-dRazay   an-drai+ny
        the   sadness+gen-R.   acc-father+her

'Razay's sadness for her father'

e.   ny   f+i+tia+van'ny   zaza   azy
        the   nom+act+love+circ+gen'the child him

'the child's love of him'

Most prepositions (Rajemisa-Raolison (1971) lists 30+) select a genitive NP complement.

(21) a.   amina
          'with'

b.   ami+ko
       'with me'

c.   amin-dRabe
       'with Rabe'

d.   amin'ny zaza
       'with the child'

e.   imason'ny vahoaka
       'in view of the populace'

f.   hatry ny ela
       'since the long time'

Also directional and measure expressions take **gen** complements: *roa kilometra atsimo+n'ny tanantsika* 'two kilometers to the South of our village'; *ny haben'ny trano* 'the size of the house'. And adjectives productively take **gen** complements usually with an Agent or Cause interpretation, but sometimes with an Experiencer one:

(22) a.   *maty* 'dead'
          matin'ny jirika 'killed by the brigands';

b.   *jamba* 'blind'
       jamban'ny vola 'blinded by money';

c.   *marary* 'sick'
       mararin'ny tazo 'sick from the fever;

d.   *sasatra* 'tired'
       sasatry ny dia 'tired from the trip';

e.   *mamy* 'sweet'
       mamiko 'sweet to me'.

2.3.4 Summary

Statistical counts of the distribution of NPs in the various cases support the grammaticality facts above.[6] In a text count based on two newspaper articles and three random selections from novels/short stories, there were a total of 1,237 NPs. Their case distribution is given in the table below and compared with a sample from English (also two newspaper articles and page selections from 3 novels) are given for comparison:

	number of NPs	nom	acc	gen
Malagasy	1,237	33.6%	23.0%	43.4%
English	1,345	38.9%	47.1%	14.1%

Table 1

Genitive is the most widely occurring in Malagasy, compared with accusative in English, nominative falling in second place in the two

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[6]Tensed S complements, predicate nominals and appositives were not counted. Pronoun replacement was the major criterion for deciding the case of an NP. *of the town* was counted as genitive in *the mayor of the town*. The OPrep in strongly locative or temporal PPs, as in *John was ready in five minutes*, was not counted accusative. A conjunction of two NPs was counted twice (not three times). In Malagasy if the second was animate it was counted nominative since that is the "default" case it would have on pronoun replacement.

languages. Clearly the dominant expression of the Predicate + Argument relation in English is the Verb + Object one, whereas it is the Head + Possessor one in Malagasy.

2.4 Voice

We defined NON-ACTIVE (ACTIVE) Vs as ones which may (may not) take a genitive argument. By extension, affixes which form (non-)active Vs will also be called (non-)active. Other morphology distinguishes active from non-active Vs: Only active Vs mark present tense with *m-*; non-actives use ∅-. And only actives form agent nominalizations with *mp-* replacing the tense marker. In Malagasy, grammars active affixes are accompanied with the present tense *m-*, as Vs in Malagasy never occur untensed (as with English infinitives, gerunds or participles).

Active affixes are all prefixes: PRIMARY ones such as *i-* and *an-* (and a few others) build active Vs from roots. SECONDARY ones like *amp-* 'cause', *if-* 'reciprocal' and *aha-* 'abilitative/cause' prefix to other active prefixes. Tense marking prefixes to secondary affixes if present, otherwise to primary ones. There are two TERTIARY active prefixes, *iha-* 'become' and *iaraka* 'do/be together'. They combine with tensed active Vs forming tensed active Vs and carry their own tense markers. So such Vs are marked twice for tense.

Non-active morphology consists of CIRCUMSTANTIAL and OTHER. To form a circumstantial V add the suffix *-(C)ana* to an active verb, sometimes with reduplication of the syllable *-na*, shifting stress one syllable to the right (for Vs not stressed on their final syllable). The choice C of consonant is determined by the root, many roots not taking any. All other non-active morphology will be called PASSIVE, although the class is not morphologically or relationally uniform. The passive prefixes are *a-*, *voa-* and *tafa-*; suffixes are *-ina* and *-ana*. All these morphologies are similar to the active in that they combine directly with roots to form verbs. Thus in distinction to the circumstantial morphology they do not in general cooccur with active morphology.[7]

We observe finally that the semantic role assigned to the NP(S) of an active V is the same as that assigned to the genitive NP of any non-active

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[7]There are two exceptions to this claim. First a very few suffix passives, clearly recognized as exceptional in descriptive grammars, are built on the active form: *(m)angataka* 'ask', *angatahina* 'be asked'. By contrast, causatives are productively passivized, as in (11) built from the active *h+amp+i+asa* = *hampiasa* 'will use'.

form of that V. This role is Agent if the V takes one (but of course many do not).

2.5 Split Subjects in Malagasy

We first note a definiteness requirement (23) on NP(S) in Malagasy which differentiates it from Cebuano and Tagalog. Then we see that like those languages, control of missing arguments and antecedence of anaphors are vested in Actors rather than NP(S).

Bare Ns in Malagasy do not occur as NP(S), even with a cardinality quantifier.

(23)	a.	*Nijery	azy	olona	maro
		watched	him	people	many

'Many people were watching him.'

	b.	Nojeren'	olona	maro	izy
		watched+pass'	people	many	he

'He was being watched by many people.'

	c.	Nijery	azy	ny	olona maro
		watched	him	the	people many

'Many people were watching him.'

	d.	Nisy	olona	maro	nijery azy
		Existed	people	many	watch him

'There were many people watching him.'

So a semantically indefinite NP(S) must be overtly marked definite (23c) in distinction to Cebuano and Tagalog.

2.6   Reflexive & Reciprocal Antecedence in Malagasy

Reciprocals, expressed as verbal affixes, and bare N reflexives are locally anteceded by Actors: noms of active Vs, gens of non-active Vs.

(24) a.   N+if+an+soratra (= Nifanoratra)   taratasy
               past+rec+act+write   letters

               Rabe   sy   Rasoa
               Rabe   and   Rasoa

               'Rabe and Rasoa wrote letters to each other.'

     b.   N+if+an+soratra+ana+Rabe   sy
               past+rec+act+write+circ Rabe   and

               Rasoa (=nifanoratan-dRabe sy Rasoa) ireto
               Rasoa   these

               taratasy   ireto
               letters   these

               'These letters were written to each other by Rabe and Rasoa.'

     c.   ireto taratasy (izay) nifanoratan-dRabe
               those letters   (that) wrote+to+each+other+by+Rabe

               sy   Rasoa   ireto
               and   Rasoa   those

               'Those letters that were written to each other by Rabe and Rasoa.'

In (24a) NP(S) *Rabe sy Rasoa* antecedes the reciprocal affixes on the verb, but in (24b) it is the genitive Agent Phrase which is the semantic antecedent. The NP(S) in (24b) is 'those letters'. It is replaceable by a nominative pronoun, takes question particles in front of it, and relativizes as in (24c).

(25) a.   M+an+vono (=mamono)   tena$_i$ hoan'ny zanaka
              pres+act+kill   self   for'the   children

              ny   ray aman-dreny   rehetra$_i$
              the   parents   all

              'All parents kill themselves for the children.'

     b.   Amonoan'ny ray aman-dreny rehetra$_i$ tena$_i$
              kill+circ'the parents   all   self

              ny   zanaka$_j$ (j ≠ i)
              the   children

              Same meaning as (24a).

In the active (25a) NP(S) 'all parents' antecedes the reflexive *tena* 'self'. But in (25b), (Manaster-Ramer (1992)), the antecedent is the genitive Agent. NP(S) is *ny zanaka* 'the children' which bears a benefactive relation to the circumstantial predicate and cannot be interpreted as antecedent. The Patient here just happens to be reflexive. It could be replaced by any (animate) accusative NP. Here are a few other examples which show non-nominative Actor antecedence in somewhat different contexts.

(26)   ny   antony izay tsy
        the   reason that not

        Ø+an+haja+ana+Rabe (=anajan-dRabe$_i$)   self
        pres+act+respect+circ+Rabe   tena$_i$

        'The reason that Rabe does not respect himself.'

(27) a.   M+an+doka   tena$_i$ ny mpianatra tsirairay
              pres+act+flatter self   the student   each

              'Each student flatters himself.'

b.
Fatatra	loatra	ny	f+an+doka+n'ny
extreme	too	the	nom+act+flatter+circ'the

mpianatra	tsirairay$_i$	tena$_i$
student	each	self

'Each student's flattering himself was too extreme.'

These examples are comparable to the Philippine anaphora pattern. But (23) blocks the simplest cases:[8]

_____

[8]But more must be said to account for the pattern below:

i. a.
?Novonoin-dRabe	ny	tena+ny
kill+pass-Rabe	the	self+his

b.
??Novonoin'ny	miaramila	rehetra	ny	tena+ny
kill+pass' the	soldiers	all	the	self+their

NP(S) *ny tena+ny* 'the self+his' is definite. (i.a) is less natural than the active (24a) but not ungrammatical. See Randriamasimanana (1986). (i.b) with a quantified antecedent is less good than (i.a). But in contrastive contexts like (ii) the definite reflexive seems good (but more extensive consultant work is needed here):

ii.
Derain'ny	olona	rehetra$_i$	ny	ray
praise+pass'the	person	all	the	father

aman-dreni+ny$_i$	sy	ny	tena+ny$_i$
and-mother+his	and	the	self+his

'His$_i$ parents and himself$_i$ are praised by each person$_i$.'

The judgmental problems here concern the binding relation, not absolute grammaticality. NPs of the form *ny tena +NP[gen]* 'the self of NP' are used emphatically and need not be bound:

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(28) a.
Namono	tena	Rabe
killed(act)	self	Rabe

'Rabe killed himself.'

b.
*Novonoin-dRabe	tena
killed(pass)-Rabe	self

2.7 Control

Control in Malagasy is studied in Law (this volume). Here we just illustrate that, like anteceding anaphors, control is vested in NP$_{nom}$s of active Vs and NP$_{gen}$s of non-active ones.

(29) a.
N+i+tsahatra	n+an+doko (nitsaha-nandoko)
past+act+stop	past+act+paint

ny	trano	Rabe
the	house	Rabe

'Rabe stopped painting the house.'

_____

iii.
Ekena	fa	ho	soa	tokoa	raha	tonga	mamangy
agreed	that	fut	good	very	if	arrive	visit

any	Sahavato	ny	tenan'ny	Profesora		Zafy	Albert
there	Sahavato	the	self'the	Prof.		Zafy	Albert

'To be sure it would be very good if Prof. Zafy Albert himself comes visit Sahavato.' [LK 20/10/92]

iv.
A^{toa}Bill	Clinton	no	nofidiny
Mr. Bill	Clinton	foc	chosen+by+them

'It was Bill Clinton who was chosen by them.'

Miarahaba	azy	ny	tenako
Congratulate	him	the	self+my

'My humble self (Ross Perot) congratulates him.' [LK 12/13/92]

b. N+a+tsaha-dRabe   no+loko+ina   ny   trano
    past+pass+stop-Rabe   past+paint+pass the   house

'The house was stopped being painted by Rabe.'

In both Ss *Rabe* controls the missing argument of 'paint'. *ny trano* 'the house' is clearly NP(S) in (29b). For example it takes questions particles, (30a) and relativizes (30b):

(30) a.   Natsaha-dRabe   nolokoina   ve   nytrano?

'Was the house stopped being painted by Rabe?'

b.   ny   trano   izay   natsaha-dRabe   nolokoina

'the house that was stopped being painted by Rabe.'

A related paradigm is given in (31) where 'paint the house' is nominalized, taking the definite article *ny*, and behaving grammatically as an argument of 'stop'. In particular it occurs as NP(S) in the passive, (31b), from which *ny* cannot be omitted preserving grammaticality:

(31) a.   N+i+tsahatra   ny   n+an+doko
          past+act+stop   the   past+act+paint

          ny   trano   Rabe
          the   house   Rabe

'Rabe stopped painting the house.' = (29a)

b.   N+a+tsaha-dRabe   ny   n+an+doko
     past+pass+stop-Rabe the   past+act+paint

     ny   trano
     the   house

Same meaning as (31a).

Rabe is the painter in both (31a,b). NP(S) in (31b) is *ny nandoko ny trano* – it takes question particles and clefts:

(32) a.   Natsaha-dRabe ve   ny nandoko ny trano?

'Has Rabe stopped painting the house?'

b.   Ny   n+an+doko   ny   trano
     the   past+act+paint   the   house

     no   natsaha-dRabe
     foc   was+stopped+by+Rabe

'It was painting the house which was stopped (being done) by Rabe.'

Observe that genitive NPs of predicate nominals also control into such NP(S)s:

(33) a.   Adidy+n+ny (=Adidin'ny)   tsirairay   ny
          duty+gen+the   each   the

          m+an+aja   ireny fananam-pokonolona   ireny
          pres+act+respect those goods of the collectivitythose

'Respecting the possessions of the group is everyone's duty.'
[T3]

b.   Anjara+n'ny hafa   ny   m+an+angana
     role+gen'the others the   pres+act+pick

     amim-   pitiavana ny   potiky   ny
     up with-   love   the   pieces+gen the

     maha-olona ao   amin'ny zazavavi+
     personality there   from'the young women+

     n'izao   tontolo   izao [E]
     gen'this   world   this

'It is the role of others to pick up with love the pieces of the personality chez the "young women of this world".'

3. Predicate Building vs. Advancement

Here I pursue a Predicate Building (PB) approach, one that addresses what I consider to be some conceptual and empirical shortcomings of the RG one.

Conceptually, non-active Ss (RMs) in RG extend active ones by changing the relations that NPs bear to the Clause. So we may expect non-actives to differ from their actives in NP-level markings and clause level markings. But only the former is instantiated, e.g., no language forms passives by putting a particle at the beginning or end of an active S, or by modifying the intonation contour of the active, though Yes-No Question Formation, a properly clause level operation, routinely uses these options (Keenan 1985).

But most importantly, RG does not lead us to expect differences in the morphology of active and non-active verbs since the relation the verb bears to the clause is unchanged under advancements. We can, as Bell (1978,1983) does for Cebuano, observe correlations between verbal inflection and advancements, but the degree to which Cebuano satisfies the empirically non-trivial laws of RG would not change if verbs did not inflect at all for voice.

Furthermore, RG builds in a syntactic asymmetry between actives and non-actives (the latter extending the former) which seems to me not present in WA Type languages. We might expect that the more complex (non-active) forms would have a more restricted distribution. But by a variety of criteria the Malagasy (and I believe the Philippine) data do not conform to this expectation. I cite three instances of this disconformity.

3.1 Active/Passive Symmetries in Malagasy

First, as with Tagalog (Schachter, Kroeger) the major voice categories in Malagasy — actives, prefix passives, suffix passives, circumstantials — have their own imperative forms.

For example, the verbs in (7) [in order] have the following imperatives: *manolora* (act), *atolory, tolory, anolory*. So Imperative Formation treats all four types of verbs alike, rather than restricting its application to active verbs, which is largely the case in English. (But NB: *voa-* and *tafa-* passives lack imperative forms).

Second, genitive Actors present a frequency spectrum characteristic of core arguments, not classical chomeurs.

In German only 17.6% of passives present Agent Phrases (Stein 1979). The figures for English run from 13% to 20% (Svartvik 1966, Duskova 1971, Givon 1979). By contrast K&M (Keenan and Manorohanta,

in prep) show that 60% of non-actives in Malagasy present overt Agent Phrases (a percentage comparable to that found by Shibatani (1988) for Cebuano). And this percentage is inaccurately low since many overtly agentless passives have their missing Agent controlled. Contexts like (29b) are common. Another case is the first conjunct in (34a,b), counted by K&M as agentless but whose Agent is clearly understood to be that of the second conjunct.

(34) a. A+tao+ko   fa   voa+jery sy
          pass+do+1sg(gen) that   pass+see and

          voa+dinika+nao (=voadinikao) tsara ireo
          pass+examine+2sg(gen)   good those

          sary   teo
          pictures there

          'I think that those pictures there have been seen (by you) and examined well by you.' [VR]

      b. araka   izao   ahitana   sy   a hafantaranareo
          according that   see+circ and   know+circ+2pl

          ahy   izao
          me   that

          'according to that which is seen and understood by you of me.' [VR.43]

Third, empirically, voice morphology in Malagasy is not definable as a function of the advancement (or even revaluation) history of the clause. I touch here on two problems; the first has two parts.

3.1.1 Anomalies in Malagasy Active/Passive Morphology

(i)   Active morphology which varies in the absence of revaluations (and so advancements in particular), cannot, therefore, be given as a function of revaluation history.

(ii) In basic cases, active and passive morphology are in complementary distribution, so neither is built from the

other. But circumstantial morphology is added to active morphology.

With respect to (i), we have already seen active Vs built from *i-* and *an-* (there are two other primary active morphologies and a very few active roots). In basically all cases the Ss they build present no argument changing operations. Note that many *i-* verbs are transitive (and thus not unaccusastive): *mikapoka* 'beats', *mifidy* 'chooses', *miorina* 'builds'. And many *an-* verbs are intransitive — *mandainga* 'tell lies', *mandihy* 'dance', *mandeha* 'go', *mangovitra* 'shudder', *mandrivotra* 'be windy' — so *an-* cannot be identified as a causative operator.

The more positive point here is that the argument structure (number, case marking, and semantic role of the arguments) of an active V is predictable from the voice morphology plus root and so must be handled independently of revaluation history. And doing this explicitly is just the Predicate Building approach.

As far as (ii) goes, many examples show that affixal active and passive verbs are each built by directly affixing the root. Neither is derived by affixing the other, even though the most widespread passive affixes *-ina* and *-ana*, being suffixes, do not compete for position with the active prefixes. So active and passive Vs are morphologically independent. But in RG active and (anti-)passives clauses are not: the RN for the latter includes that for the former. So active and (anti-) passive Vs have the same quantity of voice morphology but differ in number of advancements (0 vs.1). Again voice morphology is not correlated with revaluation history.

Passive versus circumstantial Vs present the opposite problem. The Ss they build exhibit one advancement each in RG. But the circumstantial V retains the active morphology and thus has two voice affixes, while the passive only has one. Again the presence of voice morphology fails to correlate with advancement history.[9] Note that circumstantial Vs are not blindly derived from actives, they must see their internal structure. First, whether to reduplicate *na* and which initial consonant (if any) to use depends on the root, not the active prefix:

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[9]Morphology - advancement mismatches also occur in Cebuano. For each aspect (durative, volitional, potential) in the Realis Mode, the locative morphology suffixes *-an* to the objective form of the verb (Bell 1983:205).

(35)	root	active (pres)	circ (pres)
	tao 'do'	manao	anaovana
	ome 'give'	manome	anomezana
	lefa 'send'	mandefa	andefasana
	didy 'cut'	mandidy	andidiana
	leha 'go'	mandeha	andehana*na*

And second, active Vs built from tertiary affixes — ones that go outside the tense marker — do not have circumstantial forms. Contrast second order *(m)aha* 'cause/abilitative' with third order *(m)iha* 'inchoative':

(36) a. tsara mahatsara(act) ahatsarana (circ)
         good   make good   circ. of making good

     b. mihatsara (act) *ihatsarana (circ)
         become good   circ. of becoming good

Similarly from *vizana* 'tired' we have *ahavizanana* 'circumstance of tiring' but *ihavizanana* 'circ. of becoming tired'. Thus circumstantial verb formation must also be able to see the active prefix as well as the root.

3.1.2 Advancement Morphology

The second problem concerns advancements. The advancements n → 1, n = 2, 3, Inst, have no consistent morphological correlate, and the common morphologies correlate with two or more advancements. We have seen cases of passive 2 → 1 correlated with *a-*, *-ina* and even *-ana* (9c), and *voa-* (34). And there are at least two cases where passive 2 → 1 correlates with circumstantial morphology.

First, 2 to 1 advancement with reciprocal verbs triggers circumstantial morphology, as in (24c). Second, there are several roots which do not take passive affixes but use a circumstantial form instead:

(37) a. M+i+anatra   teny   vahiny   Rabe
         pres+act+study languages foreign Rabe

     'Rabe studies foreign languages.'

b.
ny	teny	vahiny	izay	i+anar+an-dRabe
the	languages	foreign	that	act+study+circ-Rabe

'The foreign languages that are studied by Rabe.'

Second, many passive Vs in Malagasy are simply roots, as *haino* 'be listened to' in (38). The active V in (38b) is built by prefixing *i-* to the passive, so the morphological inclusion relation is the opposite of the syntactic one on an RG analysis.

(38) a.
Haino+ko	izy
listen-to+1sg(gen)	he(nom)

'He is being listened to by me.'

b.
M+i+haino	azy	aho
pres+act+listen	him(acc)	1sg(nom)

'I am listening to him.'

Keenan & Manorohanta (in prep.) found that 30% of the 1,829 occurrences of passives in their sample were root passives, with meanings like 'understood', 'captured', 'seen', 'heard', 'listened to', 'sent', 'damaged', 'cured', 'sought', 'caught', 'broken', 'perceived from afar', 'defeated', 'is able to'. (But affixal passives outnumber root passives by about 10 to 1 when number of distinct verbs as opposed to occurrences of verbs is considered).

Equally, most verbs in Malagasy are built from roots plus affixes and the semantic interpretation of such verbs is expected to be some function of those of the root and the affixes used (compositionality being the only means we have of accounting for how we understand novel utterances. We understand what their parts mean and how things built in that way take their interpretation as a function of their parts). And this says that we should interpret the verb in (38b) as a function of its root, *haino*, which is a passive form. One might consider taking (38a) as basic and deriving (38b) by an Antipassive rule. But then by UA the genitive NP should be the 1 and the nominative the 2, vitiating the Malagasy particular generalizations that only final 1's relativize, final 1's are drawn from the **nom** pronominal series, etc.

Thus many morphologies, including none at all, correlate with passive 2 → 1. Moreover many roots accept 3 or even 4 of these morphologies. So choosing among them involves more than simply knowing

which advancements have taken place. Here is one rather widespread paradigm.

(39) a.
m+i+kapoka	ny	alika	amin'ity
pres+act+beat	the	dog	with'this

langilangy	ity	Rabe
stick	this	Rabe

'Rabe beats the dog with this stick.'

b.
No+kapoh+in-dRabe	ny	alika
past+beat+pass-Rabe	the	dog

'The dog was beaten by Rabe.'

c.
ny	langilangy	(izay)	n+a+kapoka	ny	alika
the	stick	(that)	past+pass+beat	the	dog

'The stick that the dog was beaten with.'

In (39b) *-ina* correlates with 2 → 1 as in (8b). But that *a-* marks Inst → 1 in (39c) is surprising. In many other cases, (7d) and (40), Inst → 1 triggers circumstantial morphology:

(40) a.
manasa	lamba	amin'ity	savony ity	aho
wash(act)	clothes	with'this	soap this	I

'I wash clothes with this soap.'

b.
an+sasa+ana+ko (=anasako)	lamba	ity savony ity
act+wash+circ+1sg(gen)	clothes	this soap this

'This soap is washed clothes with by me.'

But in fact the example in (39c) is typical. Dez (1980) even calls the *a*-voice "Instrumental". My own judgment is that it is best to think of NP(S) in an *a-* clause as a kind of "intermediary" in an action. That will be the Theme with a verb of transmission but in many other cases an Instrument. Roots like *sasa* in (39) which don't take *a-* use the circumstantial form when the instrument is NP(S).

Finally, there are other cases where a given morphology correlates with more than one type of advancement: In (7c) passive -*ana* licensed 3 → 1, but in (9c) and several other cases it correlates with 2 → 1. Also circumstantial morphology sometimes licenses 3 → 1:

(41) a. N+i+laza   izany   t+amin-dRabe aho
          past+act+say   that   past+to-Rabe 1sg(nom)

          '*I told that to Rabe.*'

      b. N+i+laza+ana+ko (=nilazako) izany   Rabe
          past+act+say+circ+1sg(gen)   that   Rabe

          '*Rabe was told that by me.*'

These and other data show that overall we have little predictability of the verbal morphology merely given the advancement history of a clause. So to generate verbal clauses we need independent access to the verb root and morphology. But given that alone we have excellent predictability (see fn. 5) of the argument structure of the clause; viz. given the verbal morphology and root we can generate the range of nuclear clauses intended to be accounted for by active clauses + advancements in RG, so it seems to me that the independent apparatus of advancement rules is unnecessary. This, at least, is the Predicate Building approach taken here.

3.2 A Predicate Building [PB] Analysis of Voice in Malagasy

PB does not posit any direct syntactic relation among e.g. the Ss in (7). They are similar in that all are formed by combining a PredPh with an NP_{nom}. Their differences all lie within the PredPh. PB treats the voice morphology as functions which build PredPhs, beginning with roots. So we give the form and interpretation of a PredPh as a function of that of the root it is derived from. In general (Keenan 1980) the only semantic relations which obtain between active and non-active Ss are those determined by their PredPhs. Here we show that antecedence of reflexives by NP(S) in actives and NP_{gen} in non-actives falls out of the semantics we give for PredPhs without reference to the notion of subject (at any level).

Syntactically, we treat active transitive verbs like *mividy* 'buys' (ignoring tense, always) as expressions which combine first with an accusative NP, NP_{acc} to form a PredPh, which in turn combines with an NP_{nom} to form an S. Extending standard subcategorization notation to include subjects and writing it on a single line we note this category as

$S[NP_{nom},NP_{acc}]$. So the thing it combines with first to form a constituent is written on the right, and the constituent structure of *nividy azy izy* 'He bought it' is given by [[*nividy azy*] *izy*]. 'PredPh' itself now just abbreviates $S[NP_{nom}]$, the category of expressions which combine with nominative NPs to yield Ss. Passive *vidina* 'is bought' has category $S[NP_{nom},NP_{gen}]$ as it combines first with a genitive NP to form a PredPh. And circumstantial *ividianana* in (8c) has category $S[NP_{nom},NP_{acc},NP_{gen}]$. As a cover term we write P_n, *n-place predicate*, for expressions which combine with n NPs in appropriate cases to form an S.

The P_3 category of circumstantial *ividianana* 'is bought for by' already makes a somewhat surprising prediction: combining it with an NP_{gen} yields an expression of category $S[NP_{nom},NP_{acc}]$, ordinary transitive verbs. We expect then to be able to coordinate active transitive Vs and agented circumstantial forms of transitive Vs, and we can. ((42c) is adapted from a first grade reader!)

(42) a. Nividianako   ilay   boky ianao
          bought(circ)+1sg(gen)   that   book you

          '*You were bought that book by me.*'

      b. Namaky   ilay   boky ianao
          read(act)   that   book you

          '*You read that book.*'

      c. Nividianako   sy   namaky
          bought(circ)1sg(gen)   and   read(act)

          ilay   boky   ianao
          that   book   you

          '*You [[were bought+for by me and read] that book.]*'

(43) a. Nanondroako   ilay   toerana ianao
          past+point+out(circ)+1sg(gen) that   place   you

          '*You were indicated that place by me.*'

b. Nanondroako | sy | nijery
past+point+out(circ)+1sg(gen) | and | saw(act)

ilay | toerana | ianao
that | place | you

'You [[were indicated by me and saw] that place.]'

Semantically we interpret P_ns as n-ary relations, R_ns. R_1s, one place relations, are functions mapping objects (possibly quite abstract ones) from the domain D of discourse into {True,False}. R_2s are functions mapping objects to R_1s and R_3s are functions mapping objects to R_2s. So we represent "a bought b" compositionally in Malagasy as **nividy**(b)(a). (Bracketing is always to the left: F(y)(x) means (F(y))(x) – F is a one place function whose value at y is a function taking x as argument. We interpret common nouns as sets of objects.

NPs are interpreted as generalized quantifiers (GQs), enriched shortly to account for semantic roles like AGENT. GQs are functions mapping n+1 ary relations to n-ary ones. In fact here we can restrict NP_{nom}s to just take P_1s as arguments, mapping them into {T,F}. For example (every boy) maps laugh to T iff **laugh**(b) = T, all b ∈ **boy**. (We write denotations over a given domain D in boldface. (**exactly two boys**)(**laugh**) = T iff {b ∈ **boy**|**laugh**(b) = **T**} has exactly two members.

We classically think of a proper noun like *Mary* as directly denoting an object, say m, in the domain D, and an S like *Mary laughed* would have the truth value **laugh**(m). But to interpret NPs like *neither Mary nor Sue*, *Mary and some student*, *everyone but Mary*, etc. we treat proper nouns as GQs, ones called *individuals*. Given an object m ∈ D, the *individual* I_m *generated by* m is that GQ mapping each P_1 function **p** to whatever truth value **p** maps m to. A function F from P_1 denotations into {T,F} is an *individual* iff F = I_m for some m ∈ D. We interpret proper nouns as individuals, obtaining the same truth values as the classical approach in simple cases but yielding correct interpretations for complex NPs built from proper nouns as well.

NP_{acc}s and NP_{gen}s can be restricted to map R_2s to R_1s and R_3s to R_2s. E.g. accusative **an-dRabe** maps an R_2 like see to that R_1 true of an object d iff 'd sees Rabe', i.e. iff **see**(r)(d) = **T**. (**every boy**)$_{acc}$(**see**)(d) = T iff for each b ∈ **boy**, **see**(b)(d) = **T**, that is iff 'd sees every boy'.

Generally we are not concerned here with which functions a given NP denotes, the one exception being the reflexive pronoun *tena*. It combines with P_2s to form P_1s and denotes that function **self** mapping each

binary relation F to that unary relation **self**(F) which maps each object d ∈ D to the truth value F(d)(d). Thus the compositional representation for 'Rabe praises himself' is as in (44). It is true iff (**praise Rabe**) is true of Rabe.

(44)
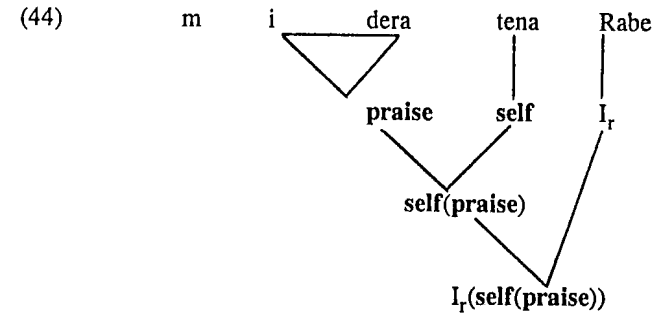
(def of individual) | = **T** | iff **self**(**praise**)(r) = **T**

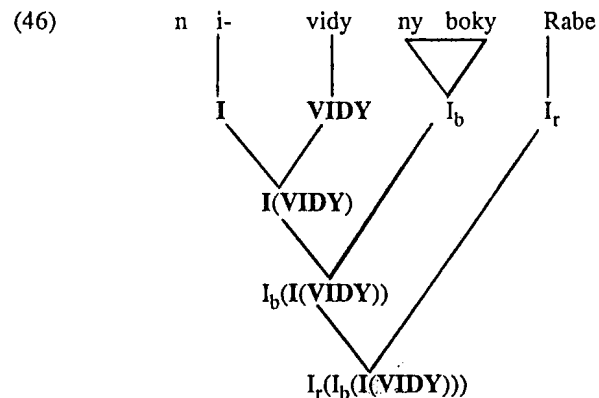(def self) | | iff **praise**(r)(r) = **T**

3.2.1 Roots and Affixes

We illustrate the analysis for one active, one passive, and one circumstantial case. See Rajaona (1972) and Rabenilaina (1993) and Abinal et Malzac (1976) for empirically extensive studies. Consider the active S *nividy ny boky Rabe* 'Rabe bought the book'. *nividy ny boky* 'bought the book' is a P_1 of category S[NP_{nom}]. Semantically it is true or false of objects like Rabe. The P_2 *nividy* 'buy' has category S[NP_{nom},NP_{acc}]. The active morphology *i-* combines with the root *vidy* to form a P_2, so semantically it can denote a function I which maps root denotations to R_2s, possible P_2 denotations. We represent the denotation of the root *vidy* as a set **VIDY** of ordered pairs. I maps this set to a P_2 function which places semantic role conditions on its arguments. Specifically, for R any set of pairs (such as **VIDY**), and x and y elements of D,

(45) I(R)(y)(x) = **True** iff THEME(y,R) & AGENT(x,R) & R(x,y)

So THEME, AGENT, etc. are relations between objects and relations denoted by roots. THEME(y,R) says that y bears the THEME relation to R. *i-* only combines with roots so the domain of I may be given by listing. It may contain relations with semantic roles different from {AG,TH}. For

each distinct sort of argument, conditions analogous to those in (45) must be given. A compositional representation for 'Rabe bought the book' is:

(46)

$$I(VIDY)(b)(r)$$ tree diagram with nodes: n, i-, vidy, ny boky, Rabe; I, VIDY, I_b, I_r; $I(VIDY)$; $I_b(I(VIDY))$; $I_r(I_b(I(VIDY)))$

(def individual) $= I(VIDY)(b)(r)$

(by (45)) $= \text{True iff THEME(b,VIDY) \&}$
                $\text{AGENT(r,VIDY) \& VIDY(r,b)}$

3.2.2 The Role of Voice Morphology

Like *i-*, the role of voice morphology is to build argument structure:

(47)   **Syntactically,** voice morphology builds predicates, determining the number and case of the NPs they combine with. **Semantically,** voice morphology assigns semantic roles to the arguments of the relation which interpret the predicates it builds.

Note that it is the compositional interpretation which associates NP denotations with the arguments of the verb, the verbal morphology just tells us what semantic roles those arguments have.

Now consider the passive morphology *-ina*. It combines with the root *vidy* to form *vidina* of category $S[NP_{nom}, NP_{gen}]$. The argument of **INA** is, as with **I**, the root denotation **VIDY**. So both active and passive morphology are functions on the same roots rather than the passive being a function of the active. The value of **INA** is given generally for arguments of this type in (48) and compositional interpretation illustrated in (49):

(48) $INA(R)(a)(b) = \text{True iff AGENT(a,R) \& THEME(b,R) \& R(a,b)}$

(49)   no-   vidy   -in-   dRabe   ny boky

tree diagram with nodes: VIDY, INA, I_r, I_b; $INA(VIDY)$; $I_r(INA(VIDY))$; $I_b(I_r(INA(VIDY)))$
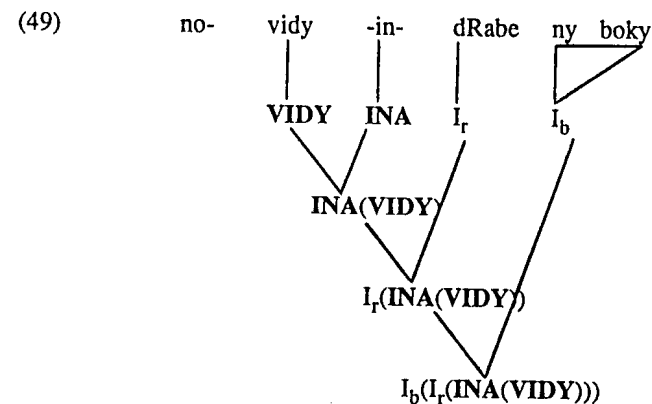
(def individual) $= INA(VIDY)(r)(b)$

(by (47)) $= \text{True iff AGENT(r,VIDY) \&}$
                $\text{THEME(b,VIDY) \& VIDY(r,b)}$

The last lines in (46) and (49) are logically equivalent, differing only by order of conjuncts. The equivalence falls out of the independently assigned interpretations to roots, affixes, and the NPs rather than any syntactic relation between the Ss themselves. Keenan (1980) notes that actives and agented passives typically fail to be paraphrases when the arguments are not of the individual sort. *No editor read every poem* is not logically equivalent to *Every poem was read by no editor.*

The reflexive pronoun *tena* has category NP_{acc} and so combines with P_2s $(= S[NP_{nom}, NP_{acc}])$ to form P_1s $(= S[NP_{nom}])$ but will not combine with P_1s (It is not an NP_{nom}). Keenan (to appear) provides a syntax and semantics for the Batak reflexive which, like those of Cebuano and Tagalog, does combine with P_1s.

3.2.3 Circumstantial Verbs

We treat predicate level PPs as Predicate Modifiers (PredMods). They denote restricting functions mapping R_1s, P_1 denotations, to R_1s. So *sing in the park* denotes **(IN THE PARK)(SING)**. (F is *restricting* iff for each P_1 denotation **P** and each object b, $F(P)(b) = T$ implies $P(b) = T$). PredMods in English are in general restricting: If Joe sang in the park, he sang; if he bought a shirt for Sue, he bought a shirt. Preps themselves denote functions mapping NP denotations to PredMod denotations. Call this
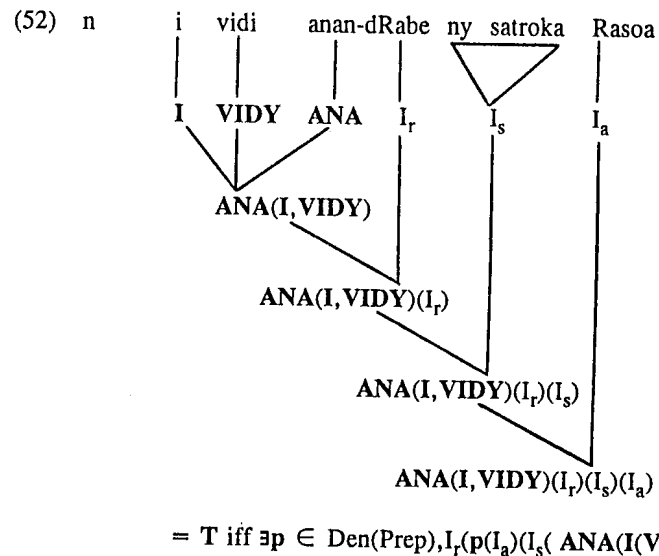
set of functions Den(Prep). Observe the compositional interpretation of (50) 'Rabe bought the hat for Rasoa':

(50) N

$$I_r(h(I_a)(I_s(I(VIDY))))$$
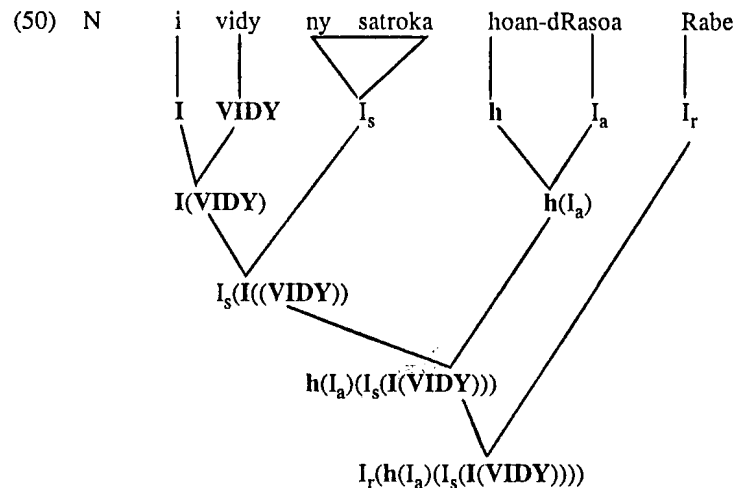
Consider the circumstantial form *ividianana* 'is bought for by'. Syntactically circumstantial *-ana* maps the pair (*i-*, *vidy*) to *ividanana* of category $S[NP_{nom}, NP_{acc}, NP_{gen}]$. So *-ana* sees both the prefix and the root, (35). The denotation ANA of *-ana* is given in (51). F, G, and H range over GQs and ACT is any active prefix denotation:

(51) $ANA(ACT,R)(F)(G)(H) =$ **True** iff $\exists p \in$ Den(Prep), $F(p(H)(G(ACT(R)))) = T$

(52) gives the compositional interpretation of the circumstantial 'Rasoa was bought the shirt for by Rabe'. It differs from (50) only in quantifying over the Prep denotation where (50) has **h**. So (50) entails (52) but not conversely. In (52) we just know that Rasoa stands in some Prep type relation to the buying of the hat, but we don't know which relation. And this is empirically correct, Rasoa could have been the cause or even the instrument of the buying in (52) but not in (50). So contra Bell (1983) and Guilfoyle, Hung and Travis (1992), (52) is not ambiguous but merely unspecified as to which relation Rasoa bears to the action of Rabe's buying.

(52) n

$$ANA(I,VIDY)(I_r)(I_s)(I_a)$$

$$= T \text{ iff } \exists p \in \text{Den(Prep)}, I_r(p(I_a)(I_s(\text{ANA}(I(\text{VIDY})))) = T$$

So the syntax and semantics of the circumstantial suffix has been given with enough adequacy to capture the basic semantic relation between Ss like (50) and their circumstantial correspondents (52). And coupled with the independently given semantics for *tena* it predicts **nom** NP antecedence for reflexives in actives (53) and **gen** NP antecedence in circumstantials, (54). Here the child is I_z and Rabe is I_r:

(53) a.   M+an+vono (mamono) tena hoan'ny zanaka Rabe
            pres+act=kill   self for'the child Rabe

        'Rabe kills himself for the child.'

    b. $I_r(h(I_z)(self(AN(VONO))))$

(def individual) $= (h(I_z)(self(AN(VONO))))(r)$

($h(I_z)$ is restricting) $\Rightarrow self(AN(VONO))(r)$ *'Rabe kills himself.'*

(54) a.   an+vono+ana+Rabe (= amonoan-dRabe) tena
             act+kill+circ+Rabe   self

           ny   zanaka
           the   child

           Same meaning as (53a)

b. $\text{ANA}(\text{AN},\text{VONO})(I_r)(\text{self})(I_z)$

           $= T \text{ iff } \exists p \in \text{Den(Prep)}, I_r(p(I_z)(\text{self}(\text{AN}(\text{VONO})))) = T$

(def individual)   iff $\exists p \in \text{Den(Prep)}, (p(I_z)(\text{self}(\text{AN}(\text{VONO}))))(r) = T$

$(p(I_a) \text{ is restricting}) \Rightarrow \text{self}(\text{AN}(\text{VONO}))(r)$ *'Rabe kills himself.'*

For reasons of space this will have to suffice to show what a Predicate Building approach looks like. We conclude by resuming some of the advantages of a PB approach.

3.3   Summary

First, verbal morphology has a non-trivial role: it determines the argument structure of predicates (47).

Second, PB accounts for the syntactic and interpretative independence of actives and passives. But circumstantials are partially dependent on the actives. The interpretation of a circumstantial verb refers to the value of the active affix applied to the root, that is, to the interpretation of the active verb.

Third, with respect to lexical exceptions on a PB approach we must give the domains and values (= define) of the twenty odd voice functions *i-*, *an-*, *a-*, etc. The fact that the roots of transitive Vs like *mianatra* 'study' and *miorina* 'build' do not lie in the domains of any of the passive functions is unremarkable – many roots do not lie there. But on an RG (or other standard) approach these facts are "exceptions" to supposedly structure dependent rules. Similarly the existence of suppletive passive forms is unremarkable on a PB approach. For example, one might expect the passive of *mitondra* 'carry' to be *tondraina* or *atondra*, or *tondrana*, but in fact it is *entina*, an *-ina* form built from a different root. In RG the rules spelling out rules *mitondra*[+passive] will have to have an exception (as will several other verbs). On a PB approach *entina* is listed as a root passive in the

lexicon, its relation to *mitondra* being merely semantic, as in *buy* and *sell* in English. More could be said here, but the general point is clear.

References

Abinal, Frédéric G.P. & V. Malzac. 1987 [1888]. *Dictionnaire Malgache-Francais*. Ambozontany: Fianarantsoa.

Bach, Emmon. 1980. In Defense of Passive. *Linguistics and Philosophy* 3.297–341.

Bell, Sarah J. 1978. Two Differences in Definiteness in Cebuano and Tagalog. *Oceanic Linguistics* 17.1–9.

Bell, Sarah J. 1983. Advancements and Ascensions in Cebuano. *Studies in Relational Grammar 1*, ed. by David M. Perlmutter, 143–218. Chicago & London: University of Chicago Press.

De Guzman, Videa P. 1988. Ergative Analysis for Philippine Languages: An Analysis. *Studies in Austonesian Linguistics*, ed. by Richard McGinn, 323–345. Athens, OH: Ohio University Center for International Studies [Center for Southeast Asia Studies].

Dez, J. 1980. *Structures de la Langue Malgache*. Paris: P.O.F.2 rue de Lille.

Dukes, M. 1993. Variation in Western Austronesian Clause Structure. To appear in the Proceedings of SEALS III.

Duskova, L. 1972. On Some Functional and Stylistic Aspects of the Passive Voice in Present-Day English. *Philologica Pragensia* 15.117–143.

Gerdts, Donna B. 1988. Antipassives and Causatives in Ilokano: Evidence for an Ergative Analysis. *Studies in Austronesian Linguistics*, ed. by Richard McGinn,295–321. Athens, OH: Ohio University Center for International Studies [Center for Southeast Asia Studies]

Givón, Talmy. 1979. *On Understanding Grammar*. New York: Academic Press.

Guilfoyle, Eithne; Henrietta Hung & Lisa Travis. 1992. Spec of IP and Spec of VP: Two Subjects in Austronesian Languages. *NLLT* 10.375–414.

Keenan, Edward L. 1976. Remarkable Subjects in Malagasy. *Subject and Topic*, ed. by Charles N. Li, 247–301. New York: Academic Press.

Keenan, Edward L. 1980. Passive is Phrasal (not Sentential or Lexical). *Lexical Grammar*, ed. by Teun Hoekstra, Harry van der Hulst & Michael Moortgat, 181–213. Dordrecht: Foris.

Keenan, Edward L. 1985. Passive in the World's Languages. *Language Typology and Syntactic Description*; Volume I, Clause Structure, ed.

by Timothy Shopen, 243–281. Cambridge: Cambridge University Press.

Keenan, Edward L. 1993. Identifying Anaphors. to appear in *BLS 19*.

Keenan, Edward L. & Cecile Manorohanta. in preparation. A Quantitative Study of Voice in Malagasy. ms. UCLA.

Keenan, Edward L. & Edward P. Stabler. 1991. Language Invariants. *Proceedings of the Eighth Amsterdam Colloquium*, ed. by Paul Dekker & Martin Stokhof, 309–328. Amsterdam: University of Amsterdam Institute for Logic, Language and Computation.

Keenan, Edward L. & Alan Timberlake. 1985a. Predicate Formation Rules in Universal Grammar. *WCCFL 4*.

Keenan, Edward L. & Alan Timberlake. 1985b. Valency Affecting Rules in Extended Categorial Grammar. *Language Research 21*.415–434.

Kroeger, Paul. 1993. *Phrase Structure and Grammatical Relations in Tagalog*. Stanford, CA: CSLI.

Kroeger, Paul. 1988. Verbal Focus in Kimaragang. *Papers in Western Austronesian Linguistics 3*. Pacific Linguistics, A-78.

Law, Paul. 1994. On Grammatical Relations in Malagasy Control Structures. This volume.

Malzac, Victorin. 1926. *Grammaire Malgache*. Paris: Societe d'editions Geographiques, maritimes et Coloniales.

Manaster-Ramer, Alexis. 1992. Malagasy and the Topic/Subject Issue. *Oceanic Linguistics 31*.267–279.

Mulder, Jean & Arthur Schwartz. 1981. On the Subject of Advancements in the Philippine Languages. *Studies in Language 5*.227–268.

Payne, Thomas E. 1982. Role and Reference Related Subject Properties and Ergativity in Yup'ik Eskimo and Tagalog. *Studies in Language 6*.75–106.

Perlmutter, David M. (ed.) 1983. *Studies in Relational Grammar 1*. Chicago & London: University of Chicago Press.

Perlmutter, David M. & Paul M. Postal. 1983. Some Proposed Laws of Basic Clause Structure. *Studies in Relational Grammar 1*, ed. by David M. Perlmutter, 81–128. Chicago & London: University of Chicago Press.

Perlmutter, David M. & Paul Postal. 1984. The 1-Advancement Exclusiveness Law. *Studies in Relational Grammar 2*, ed. by David M. Perlmutter & Carol G. Rosen, 81–125. Chicago & London: University of Chicago Press.

Perlmutter, David M. & Carol G. Rosen (eds.) 1984. *Studies in Relational Grammar 2*. Chicago & London: University of Chicago Press.

Rabenilaina, R.B. 1993. *Le Verbe Malgache: Constructions transitives et intransitives*. Antananarivo: Centre d'Etudes et de Recherches sur le Malgache, Universite d'Antananarivo. (Revised version of *Lexique-grammaire du malgache. Constructions transitives et intransitives*. 1985. these de doctorat d'Etat, Universite Paris 7:D.R.L. et L.A.D.L.)

Rajaona, S. 1972. *Structure du malgache — Etude des formes predicatives*. Ambozontany: Fianarantsoa, Madagascar.

Rajemisa-Raolison, R. 1971. *Grammaire Malgache*. Enseignement Secondaire 6eme — 3eme. 7eme edition. Ambozontany: Fianarantsoa, Madagascar.

Randriamasimanana, Charles. 1986. *The Causatives of Malagasy*. Honolulu: University of Hawaii Press.

Rosen, Carol G. 1984. The Interface Between Semantic Roles and Initial Grammatical Relations. *Studies in Relational Grammar 2*, ed. by David M. Perlmutter and Carol G. Rosen, 38–77. Chicago & London: University of Chicago Press.

Schachter, Paul. 1976. The Subject in Philippine Languages: Topic, Actor, Actor-Topic, or None of the Above. *Subject and Topic*, ed. by Charles Li, 491–518. New York: Academic Press.

Schachter, Paul. 1977. Reference-Related and Role-Related Properties of Subjects. *Grammatical Relations*, ed. by Peter Cole & Jerrold M. Sadock, 279–306. New York: Academic Press. [*Syntax and Semantics 8*].

Schachter, Paul. 1984. Semantic-Role-Based Syntax in Toba Batak. *Studies in the Structure of Toba Batak*, ed. by Paul Schachter, 122–150. UCLA Occasional Papers in Linguistics No. 5. Los Angeles: UCLA Department of Linguistics.

Shibatani, Masayoshi. 1988. Voice in Philippine Languages. *Passive and Voice*, ed. by Masayoshi Shibatani, 85–142. Amsterdam and Philadelphia: John Benjamins.

Stein, Gabriele. 1979. *Studies in the Function of the Passive*. Tübingen: Gunter Narr Verlag.

Svartvik, Jan. 1966. *On Voice in the English Verb*. Berlin: Mouton.

Voskuil, Jan F. 1993. Abstract Case and Malagasy. ms. McGill University.

Source materials

[E]   *Etsy ho ahy ny Tananao.* 1988. Novel by Lucien Razanadrakoto. A.C.E.: Antananarivo, Madagascar.

[IKM]   *Ilay Kintana Mamirapiratra.* 1963. Novel by Philippe Rajohanesa. Imprimerie Lutherienne: Tananarive, Madagascar.

[LK]   *Lakroa.* Contemporary Malagasy newspaper.

[PM]   *Parler Malgache.* 1966. Short instruction manual widely used in Madagascar. By Prosper Rajaobelina. Imprimerie Lutherienne: Tananarive, Madagascar.

[T3]   *Fiarahamonina.* 1985-6. Third grade reader by Andre Rakotondranaivo.

[VR]   *Volavola Ranomaso.* 1957. Novel by Onja A. Benjamina Ranaivo. Imprimerie Lutherienne: Tananarive, Madagascar.

Excorporation and (Non)-1AEX

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In this paper, I will explore a syntactic approach to morphologically complex predicates, adhering to the spirit, though not the technical details, of the minimalist approach proposed by Chomsky (1992). After summarizing the major theoretical assumptions adopted, I will outline the content and motivations of what I will refer to as the Excorporation Approach to complex predicates in Japanese, which was originally proposed in Kitagawa (1986). I then proceed to extend this approach to the analysis of passivization in English, which will permit us to minimize artificial assumptions and mechanisms in accounting for the mysterious properties of this construction. Finally, I will attempt to capture under the Excorporation Approach certain typological distinctions among different languages regarding the compatibility of passive and other morphosyntactic constructions with different verb classes. In the process of this attempt, I will also reach the conclusion that the 1-Advancement Exclusiveness Law (Perlmutter and Postal (1984)) captures only a special case of a much larger generalization, and hence cannot be regarded as a universal principle of grammar.

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