1. Introduction.

The main purpose of this paper is to show how specifically Kayne’s 1981 notion of Binary Branching supplemented with the process of Incorporation makes the acquisition of complex structures found in languages such as Malagasy more transparent. In particular, it will be shown in some detail with numerous illustrative Malagasy examples how we can decide whether a given constituent of a sequence is an argument of a complex verb or a mere adjunct --where relevant a few examples from Malagasy taken from the literature will be reviewed/revised in light of the processes alluded to above. Such examples will include, but will not be restricted to causative constructions and motion verbs.

This paper is organized as follows: Section 2 will present the concept of Binary Branching, refer to some crucial basic assumptions and succinctly introduce Malagasy tense/aspect before describing how Incorporation as a process works in this language. Section 3 will then show how Binary Branching will apply to Malagasy data involving di-transitive verbs, motion verbs, lexical causative verbs like ‘kill’ and periphrastic causatives. Section 4 will finally critically review analyses of similar Malagasy data recently made available, specifically Ileana (2000) and Keenan (1999).

2.1 Binary Branching.

R. Kayne (1981) in his article entitled ‘Unambiguous Paths’ proposes the diagram shown in B. below as the relevant one for representing the predicate found in sentence (1), and not the tree seen in A:
Indeed in the tree shown in A, we have the predicate going into three different branches made up of ‘gave’, ‘Mary’ and ‘a book’ respectively; whereas in the one in B, we only have two branches in that the noun phrase, i.e. for short, NP ‘Mary’ and the NP ‘a book’ form a constituent labelled SC or Small Clause with the consequence that at all levels of analysis branching always remains binary.

The construction illustrated in (2) supports the kind of Binary Branching analysis thus proposed since the NP ‘Mary’ and the NP ‘a genius’ form a Small Clause, i.e. not comprising a verb; whereas the sentence in (3) may initially pose a difficulty for such an analysis: In (3) it is well-known that traditionally the verb ‘persuade’ subcategorizes for an NP ‘John’ as well as an embedded S ‘to leave’. We will address this specific issue below, suggesting that in Malagasy even this type of predicate is optimally analyzed as involving Binary Branching.

2.2 Crucial Assumptions.

Along with Chomsky (1981), we will assume that the head of a Malagasy clause can be either the inflections for tense, as in (4) and (5) below or those for aspect, as in (6). As a direct result of such an assumption and in conformity with Pollock (1989), it will become evident that certain types of Malagasy clause will have tense as their head, as in (4) and (5) whereas other types of clause will have aspect as their head, as in (6).
2.3 Malagasy Tense/Aspect.

In Malagasy, there exist two main types of clause - see Rajaona (1972) for detail - depending on whether the predicate inside the clause is verbal or nonverbal in nature. A Malagasy predicate is verbal when it can combine with a tense-marker such as the prefix $n$- for past, $m$- for present and $h$- for future when the verb is in the active voice; when the verb is in the passive voice, then the relevant prefixes are $n_o$ for past tense, $\phi$ for present tense and $h_o$ for future tense. For additional relevant examples, consult Randriamasimanana (forthcoming). As suggested in Randriamasimanana (1999b: 518-524) and as explained in Randriamasimanana (19986: 29-74), one atomic feature, i.e. ‘Control’ plays a crucial role in determining whether a given predicate will combine with either a tense-marker only or an aspect-marker only. Tense and aspect as used here refer to notions as defined in Comrie (1985, 1976 respectively).

Below in (4) and (5), we have illustrative examples where the predicates are accompanied by a positive value for the feature Control and where the predicate can take a tense-marker, in both cases, the past tense-marker $n$- since the verbs are in the active voice.

(4) $N$-andidy mofo i Paoly.  
Past-cut bread art Paul  
‘Paul cut bread.’

(5) $N$-andeha i Paoly.  
Past-go art Paul  
‘Paul went to Antsirabe.’

(6)a. $\phi$-any Antsirabe i Paoly.  
Nonperf-at Antsirabe art Paul  
‘Paul is at Antsirabe.’

b. $T$-any Antsirabe i Paoly.  
Perf-at Antsirabe art Paul  
Either ‘Paul was at Antsirabe’ or ‘P. went to A.’

(7) $N$-andeha t-any Antsirabe i Paoly.  
Past-go perf-at/to Antsirabe art paul  
‘Paul went to Antsirabe.’

Randriamasimanana (1999b:510-511)
On the other hand, (6).a shows a predicate characterized by a negative value for the feature Control since the sentence can only have a location meaning. Yet, when the sequence in (6).b merges with (5), as is quite obvious in (7), only the motion verb interpretation is possible for the perfective aspect-marker indicated by the prefix *t*- on the preposition ‘any’ inside the lower clause: As indicated in (6).b, the perfective aspect-marker allows an ambiguous interpretation for this nonverbal sentence in isolation. However, when a merger occurs between (5) and (6).b, only the motion verb interpretation of the lower clause is possible: This suggests that in Malagasy, where complex motion verbs are concerned, incorporation of the lower nonverbal clause shown in (6).b can only take place if and only if the embedded predicate contains a positive value for the atomic feature Control, thereby allowing the newly added constituent to become an argument of the higher motion verb shown in (5), which itself already contains the same feature with a positive value for it.

2.4 Incorporation in Atayal.

In her analysis of the circumstantial voice found in Atayal, a Malayo-Polynesian language found on Taiwan, Huang (1993) notes a distinction between the meaning accompanying an argument of the verb as opposed to that accompanying a mere adjunct to the verb.

(8)a. wan-nya? lah-an turi hupaw-nya?
    asp-3S.G leave-AN  car  purse-3S.G
    Argument
    ‘He left his purse in the car.’ (on purpose)

b. wan-nya? s-?alah turi hupaw-nya?
    asp-3S.G S-leave  car  purse-3S.G
    Adjunct
    ‘He left his purse in the car.’ (by accident)
    Huang 1993: 24

Thus, in (8).a the constituent for ‘purse’ is an argument of the verb as is morphologically indicated by the -AN form
of passive in this language, accompanied by the meaning ‘on purpose’; by contrast, in (8).b, the same constituent is a mere adjunct as indicated by the S-form of passive, accompanied by a feature meaning ‘by accident’.

2.5 Incorporation in Malagasy.

The kind of data dealt with above suggests that atomic features such as Control may play a crucial role in determining the argument or adjunct status of a given constituent in at least some Austronesian languages. The above intuition is confirmed by the following Malagasy data from Keenan (1976: 269):

(9)a. Amin’ity savony ity no m-anasa lamba Rasoa
with this soap this cleft wash clothes Rasoa
‘It is with this soap that Rasoa is washing clothes.’ (Intended reading)

b. M-anasa lamba Rasoa // ø-amin’ity savony ity!
pres-wash clothes Rasoa // with this soap this
[- CONTROL ] Adjunct
‘Rasoa, (go) wash clothes// with this soap. (But NOT that other soap!)’

(10) Ity savony ity no ø-anasan-dRasoa lamba.
this soap this part pres-wash-passive-by R clothes
Argument part [+ CONTROL ] Passive
‘It is with this soap that Rasoa is washing clothes.’
(Corrected Malagasy sentence)

In sentence (9).a, we have a fronted adjunct, i.e. ‘amin’ity savony ity’ ‘with this soap’ and the verb ‘m-anasa’ ‘pres-wash’ remains in the active voice and where the reading intended by the author was ‘It is with this soap that Rasoa is washing clothes.’ Now the verb as used in (9).a has a negative value for the feature Control, hence [- Control] and as a direct result, the constituent ‘amin’ity savony ity’ ‘with this soap’ is analyzed as a mere adjunct, with the
attendant consequence that the meaning of sentence \((9).a\) is not the intended reading, but rather something totally different, i.e. ‘Rasoa, (go) wash clothes//with this soap (But NOT that other soap!).’ The intended reading in Malagasy, which is aimed for in \((9).a\), can only be realized as \((10)\), with the verb ‘m-anasa’ ‘pres-wash’ comprising a positive value for the feature Control, hence \([ + \text{Control}]\) and therefore, when the general preposition ‘amin(a) is dropped and the remaining constituent ‘ity savony ity’ ‘the soap’ is fronted the verb must undergo passivization; otherwise an irretrievably ungrammatical sentence ensues.

The analysis just proposed is supported by the following data taken from Rabenilaina (1985).

\[(11) \quad \text{Eo amin’ny tarehi-n’i Soa no m-irofotra ny mony.} \]
\[
\text{On the face-of art Soa part pres-explode the pimples} \quad [ - \text{CONTROL} ] \\
\text{Adjunct} \\
\text{Active voice} \\
\text{‘C’est sur le visage de Soa que font irruption les boutons.’ English: ‘It is on Soa’s face that the pimples explode.’}
\]

\[(12)a. \quad \text{M-androtsaka ny rano ao an-tsinibe i Soa.} \]
\[
\text{pres-pour the water into the big.jar art Soa} \quad [ + \text{CONTROL} ] \quad \text{Argument} \\
\text{‘Soa verse l’eau dans la jarre.’ English: ‘Soa pours the water into the big jar.’} \\
\text{Rabenilaina 1985: 40}
\]

\[b. \quad *\text{Ao an-tsinibe no m-androtsaka ny rano i Soa.} \]
\[
\text{into the big.jar part pres-pour the water art Soa} \quad [ + \text{CONTROL} ] \quad \text{Active Voice} \\
\text{‘It is into the big jar that Soa pours the water.’}
\]

In \((11)\) we have a sentence where the verb ‘m-irofotra’ ‘pres-explode’ has a negative value for the feature Control, hence \([- \text{Control}]\) and as a result, the preposition phrase ‘eo
amin’ny tarehin’i Soa’ can only be an adjunct to the verb and not an argument; when the preposition phrase is fronted, nothing happens to the verb, which remains in the active voice, as shown in (11). By contrast, in (12)a., the verb ‘m-androtsaka’ ‘pres-pour’ does take a positive value for the feature Control since it simply cannot receive a stative kind of reading, hence \(+\text{Control}\) and as a result of this, the preposition phrase ‘ao an-tsinibe’ ‘in the big jar’ has to be an argument of the verb ‘m-androtsaka’: If the preposition phrase is fronted and if the verb does not undergo passive, an irretrievably ungrammatical sentence ensues, as shown in (12)b.

3.1 Di-transitive Verbs.

Malagasy di-transitive verbs involving verbs like ‘m-anome’ ‘give’, as illustrated in (13) are best analyzed as involving a Small Clause of the kind shown in (14) so that the relevant tree diagram would have to be something like the one drawn on Figure D and not the one represented on Figure C. below:

(13) N-anome an’i Koto ilay vola i Jaona
     ‘pst-give ?DO K. art. money art. John’
     ‘John gave (little) Koto the money.’

(14) An’i Koto ilay vola.= Small Clause (SC)
     Predicate article money
     ‘The money belongs to (little) Koto.’

Indeed, the representation in Figure C. makes the claim that the Malagasy particle ‘an’ is a case-marker emanating from
the verb ‘n-anome’ ‘past-give’ in sentence (13) and gets assigned to the first noun phrase in the sequence, i.e. ‘Koto’. However, the other noun phrase, ‘ilay vola’ does not receive any case-marking at all even though it too is not a grammatical subject and is also dependent on the verb ‘n-anome’ ‘past-give’. So, if one noun phrase dependent on the head verb receives case from the verb, why should not the other one get the same treatment? This difference remains a mystery with a tree diagram representation like Figure C since it is possible to permute the position of ‘an’i Koto’ ‘DO-art-Koto’ with that of ‘ilay vola’ ‘the (previous mention) money’ to yield the following:

(13’) N-anome ilay vola an’i Koto i Jaona
   ‘pst-give the money DO?-art Koto art. John’
   ‘John gave (little) Koto the money.’

The possibility of (13’) suggests that adjacency to the head verb ‘n-anome’ ‘past-give’ does not play a role at all in this instance of putative case-assignment.

On the other hand, with Figure D the major claim is that the sequence ‘an’i Koto ilay vola’ is a constituent in its own right and since it does not contain a verb, it is deemed to be a nonverbal clause or a Small Clause: It happens that the sequence shown in (14) does exist in Malagasy and means something like ‘the (previously mentioned) money belongs to (little) Koto.’ A permutation of the two relevant noun phrases as in (13’) does not in any way affect Binary Branching.

3.2 Motion Verbs.

What follows is an application of our Binary Branching type of analysis to clauses containing motion verbs. A Binary Branching type of analysis, as depicted on Figure F, captures native speaker intuitions; whereas the one in E. does not.

(15) N-andeha t-any Antsirabe i Paoly.
   Past-go perf-to Antsirabe art Paul
   ‘Paul went to Antsirabe.’

Randriamasimanana (1999.b: 510)
Figure E represents an analysis where the preposition 't-any' 'perf-to/at' is analyzed as a mere preposition dependent on the head verb 'n-andeha' 'past-go'. Note that there is no obvious way of accounting for the perfective aspect-marker 't-' in this analysis. Also note that the embedded structure 't-any Antsirabe i Paoly' will have an overt grammatical subject, i.e. Paul. By contrast, Figure F embodying a Binary Branching analysis makes the claim that (a) there is a perfective aspect-marker 't-' on the predicate 't-any' and that (b) this aspect-marker is the head of the corresponding Small Clause. As a direct consequence of this second point, the Small Clause has a null grammatical subject. See Randriamasimanana (forthcoming) for a justification of the distribution of null subjects in Malagasy.

Furthermore, the possibility of sentence (16) with the verb ‘n-ank-any’ ‘past-move-to’ suggests that there has to be another clause besides the main one containing the verb ‘n-andeha’ ‘past-go’. We claim that in this instance, the other structure in (17) is a Small Clause. The only difference between (15) and (16) is that whereas in the first, the other structure is embedded under the higher verb, i.e.
is an argument of the higher verb; in the second sequence, the other structure in (16) is a mere adjunct as clearly indicated by the verbal prefix ‘n-’, which is undoubtedly a tense-marker similar to the tense-marker showing up on the main verb. As argued for in Randriamasimanana (1999.b: 522-526), when we have a configuration whereby another verb has exactly the same tense-marker as a main verb, it is more than likely that the second verb is part of an adjunct structure attached to the main clause.

Sentence (17) with a nonverbal predicate and a perfective aspect-marker shows that the latter plays a crucial role in the semantic interpretation of the sequence, i.e. the sentence is ambiguous between two different meanings, either ‘Paul was at Antsirabe’ or something like ‘Paul went to Antsirabe.’ Since the aspectual marker plays such a vital role, it will need to be accounted for on our tree representation, which Figure E clearly fails to do while Figure F aptly captures the relevant phenomenon.

3.4 Malagasy Lexical Causative Verbs Like ‘Kill’.

As argued for in Randriamasimanana (1999.b) and Randriamasimanana (forthcoming), in order to account for the possibility of sequences like the following shown in (18), there is a need to represent each verb within the sentence in terms of two different layers made up of a higher V and a lower V. Such an analysis is required by the literal meaning of the Malagasy sentence and is fully compatible with our Binary Branching framework:

(18) N-amono tsy n-aha-faty i Paoly.
    Past-kill not past-cause-dead art. Paul
    Lit: ‘Paul killed but did not cause (someone) to die.’
    i.e. freely translated into English: ‘Paul tried to kill
    (someone), but did not manage to.’
    Randriamasimanana (1999.b: 513)

Thus, the first verb ‘n-amono’ ‘past-kill’ will be decomposed into a higher V ‘anao’ ‘do’ compressed into ‘an’ and labelled as V.1P (short for ‘projection of V.1’) and referring to the inception of the activity described by the verb
while the lower V will be the root ‘vono’ ‘kill’, which will be part of a Small Clause with a null subject and labelled as ‘V.2P (short for ‘projection of V.2’).

Likewise, the second verb will be made up of a higher V ‘aha’ ‘cause’ or V.1P and a lower V ‘faty’, labelled V.2P, which again can be part of a Small Clause without an overt subject.

Our representation for each verb found in (18) will be as shown on the figures below: where each higher verb V.1 has its own projection in terms of the strict subcategorization level V’ (V-prime or alternatively, V-with-one-bar) as well as a maximal projection V.1P. We adopt the same two-layer system for the lower verb V.2.

In each case, the lower Specifier for the lower V.2P is empty since semantically what is being referred to here is the equivalent of the English ‘they’, ‘people’(in general) or French ‘on’. As for the Specifier for the higher V.1P, in the case of the main verb, it is ‘i Paoly’ ‘Paul’ and in that of the second verb, it is a coreferential empty subject since the second verb happens to be an adjunct to the first structure (as clearly indicated by the appearance of the same tense-marker ‘n-‘ for past tense).

It is to be noted that no attempt is made in this short article to represent any function word projection.

Figure G. Figure H

(18) N-amono = n+an(ao) + vono. N-ahafaty = n+aha +faty
3.5 Persuade-type of Periphrastic Causatives.

Given our analysis of Malagasy verbs into a higher predicate V.1 and a lower predicate V.2 along lines sketched above and given the privileged relationship obtaining between the head of the sentence, i.e. the inflections for tense and aspect as explained in Randriamasimanana (forthcoming) and its specifier, it follows that in Malagasy the normal way of reporting the idea of ‘persuading’ or ‘forcing someone to do something’ is as follows:

(19) N-atao-n’i Mary izay n-an-dehan-an’ i Jaona.
Pst-pass-do-by art Mary Comp past-circ-go-by art. J
‘Was done by Mary what caused John to go.’

(20) No-tere-n’i Paoly [h-andeha …] i Jeanne.
Pst+pass+force-by art P. [ fut-go Null su] art. J.
‘Jeanne was forced by Paul to go.’

Where in each case, the matrix verb is in the passive voice. One main reason why the passive voice is required in both (19) and (20) has something to do with the fact that the speaker wishes to refer to the outcome of the activity described by the main verb and not just to its inception—which would be the case if the active voice was used, a case in point being sentence (21) with the verb in the active voice.

A typical situation where it would make sense in Malagasy to use the active voice is where a request is used as a performative utterance—in the sense of Austin (1955, reprinted in 1975):

(21) M-angataka anao aho [h-itondra ity any amin-dR…] 
Pres-ask you I [fut-take this to Rama EC]
"I am asking you to take this to Rama."

Randriamasimanana (1998: 307)

The active voice construction corresponding to (20) above is as shown in (22) below with the relevant embedded structure in (23):

(22) M-angataka anao h-itondra ity any amin-dR…
Pres-ask you I [fut-take this to Rama EC]
"I am asking you to take this to Rama."

Randriamasimanana (1998: 307)
(22) N-anery an’ i Jeanne h-andeha i Paoly.
‘Paul forced Jeanne to go.’

(23) H-andeha i Jeanne.
Fut-go art. Jeanne
‘Jeanne will go.’

Where indeed it looks as though ‘n-anery’ ‘past-force’
strictly subcategorizes for an NP here ‘i Jeanne’ and an
embedded clause since the initial direct object noun phrase
can be promoted to grammatical subject of the matrix verb,
as seen in (20). At this stage, one crucial question we need
to address is whether the subordinate structure should be
the one shown in (24) or that proposed in (25):

(24) H-andeha Empty.
Fut-go Subject
‘…..will go.’
(25) I Jeanne h-andeha.
Art Jeanne fut-go
‘Jeanne will go.’

One piece of evidence suggesting that in Malagasy
the specifier of an embedded projection should precede the
head verb comes from constructions like the following:

(26) M-ihevitra azy ho m-ahay --- i Paoly.
pres-think him comp pres-intelligent --- deic Paul
“Paul considers himself intelligent.”
Randriamasimanana (1997: 491)

Where precisely the predicate ‘m-ahay’ ‘pres-intelligent’
has its specifier to its left, i.e. ‘azy’ ‘him/her.’ There is ab-
solutely no doubt that the pronoun ‘azy’ ‘him/her’ belongs
in the embedded structure and not in the matrix clause since
it is coreferential with the matrix subject ‘i Paoly’ ‘Paul.’
Yet presumably it is assigned direct object case exception-
ally from the higher verb ‘m-ihevitra.’

Furthermore, there is some evidence to show that the
noun phrase ‘i Jeanne’ in (20) actually initially appears in
the embedded clause. Indeed, to obtain a ‘persuasive’-type of meaning sentence (20) can be roughly paraphrased into something like the following:

(27) N-atao-n-’ i Paoly izay n-an-dehaha-n-an’i Jeanne.
    Pst-be-done-by art P. comp past-circ-go-by art Jeanne
    Literally: ‘Was-caused-by Paul the leaving by Jane.’
    ‘Paul did so that Jeanne left.’

Where the NP ‘i Jeanne’ shows up inside the embedded clause ‘izay n-an-deha-n-an’i Jeanne,’ serving as the sentential subject for the passive matrix verb ‘n-atao-n…’.

Last but not least, note that the Malagasy WH-word ‘izay’ which in (27) has ultimately landed in the complementizer position was a grammatical subject, which has shifted from the right-hand side of the predicate to its left after the oblique constituent it represented had originally been incorporated into the predicate and subsequently, promoted to grammatical subject, i.e. at first, showing up in the specifier position to the right of the predicate.

4.1 Ileana (2000) & Incorporation.

The following Malagasy data were presented in Ileana (2000) and analyzed in the terms specified under the word-for-word gloss provided:

(28)a. Actor Topic: agent is subject
    \[ N-anapaka ity hazo ity t-amin’ ny antsy i Sahondra. \]
    \[ Pst-AT-cut this tree \text{ pst-P-den-det knife art S.} \]
    ‘Sahondra cut this tree with the knife.’

b. Theme Topic: theme is subject
    \[ No-tapahin’i Sahondra t-amin’ ny antsy ity hazo ity. \]
    \[ Pst-TT-cut-gen-S. \text{ pst-P-gen-det knife this tree this} \]
    ‘This tree was cut by Sahondra with the knife.’

c. Circumstantial Topic: something else is subject
    \[ N-anapahan’i Sahondra ity hazo ity \text{ ny antsy.} \]
    \[ Pst-CT-cut-gen-Sahondra this tree this Det knife \]
    ‘The knife was used by Sahondra to cut the tree.’
First, relative to the Malagasy sentences in (28), the possibility of (28)c., where the oblique NP ‘ny antsy’ ‘the knife’ has been promoted to grammatical subject suggests that at some stage in the derivation, ‘ny antsy’ has been incorporated, i.e. it has changed its status from being a mere adjunct to becoming an argument of the verb ‘n-anapaka’ ‘past-cut.’ This is plausible since the verb ‘n-anapaka’ as used in (28a.) will definitely contain a positive value for the atomic feature Control. But, if as shown in Randriamisananana (1999b:522-526), there is a clear-cut distinction between an adjunct and that of an argument, then the $t$- of ‘t-amin’ in (28) should be analyzed not as a past tense-marker, but rather as a perfective aspect-marker: Indeed the configuration past tense-marker on the verb ‘n-anapaka’ and past tense-marker on the preposition is equivalent to claiming an adjunct status for the relevant preposition phrase! This is probably the author’s intent with example (29), where we have exactly the same configuration. Unfortunately, he verb ‘n-anapaka’ ‘past-cut’ as used in (29) does contain the same positive value for the atomic feature Control and therefore, the preposition phrase automatically gets incorporated into the verb ‘n-anapaka’ ‘past-cut’ and cannot as claimed be or remain a mere adjunct. In other words, sentence (29) is irretrievably ungrammatical and the morpheme $t$- on the preposition has to be analyzed once again as a perfective aspect-marker, not as a tense-marker.

In Keenan (1999: 34), the following example is proposed:

(30) Nanolotra vary ho an'ny vahiny t-amin'ny lovia
Past-hand rice to the guest past-with the dish
vaovao aho
new I
The intended meaning for (30) is: ‘I presented rice to the guest on the new dishes.’ However, as pointed out in Randriamasimanana (forthcoming) the Malagasy sentence in (30) means something entirely different, i.e. ‘I presented rice (which was destined) for the guest on the new dishes’ with a relative clause kind of meaning.

The source of the problem which arises in (30) is the tree representation with three different branches as shown on Figure I below for di-transitive verbs as opposed to a diagram like J, which respects Binary Branching:

I. *  
   V NP NP  
   |   |   |
   N-anolotra vary ny vahiny. N-anolotra ny vahiny vary

J.  
   V SC  
   |   |
   NP NP

Starting from Figure I -as can be inferred from application of his theory by Paul Law (1997: 168-171)- Keenan (1999) assumes that the verb ‘n-anolotra’ ‘past-hand’ assigns case-marking ‘ho..an’ to the second noun phrase ‘ny vahiny’ ‘the guest’. However, as already noted, the sentence now has a totally different meaning!

In fact, as explained in Randriamasimanana (forthcoming) in order to convey the intended meaning, a native speaker will say either of the following:

(31)  
N-anolotra [ vary ny vahiny] [t-amin’ny lovia  
Past-hand rice the guest past-prep the dish  
vaovao ø] aho.  
new ø₁ I

(32)  
N-anolotra [ ny vahiny vary] [t-amin’ny lovia  
Past-hand the guest rice past-prep the dish  
vaovao ø] aho  
new ø₁ I

‘I presented rice to the guest on the new dishes.’
Both (31) and (32) mean: ‘I presented rice to the guest on the new dishes.’ In (31), we have two Small Clauses, the first with a nonverbal predicate ny vahiny ‘the guest’; the second, with a prepositional predicate comprising a past tense-marker t- indicating that this constituent is a mere adjunct to the higher verb. In (32), we also have the inverse word order within the first Small Clause.

It appears then that the particle ‘ho’ has to be taken out of sentence (30) in order for it to have the intended meaning. In order to justify why particle ‘ho’ has to be left out from our sequence, we have to adopt a Binary Branching analysis as shown on Figure J for constructions like (30) instead of the misleading representation embodied on Figure I.

5. **Conclusions.**

It looks as though Malagasy verbs including lexical causatives like ‘to kill’ have to be analyzed in terms of two distinct layers and that one major difference between this type of construction and, for instance, the ‘persuade’-type resides in the amount of material intervening between the higher verb and the lower verb. Otherwise, all major structures – whether they involve lexical causative verbs, matrix motion verbs or force-type verbs are not only amenable to Binary Branching; but the semantic interpretation of lexical causatives like ‘kill’ indeed requires such an analysis.

Furthermore, Binary Branching helps account for the ungrammaticality of sentences like (30) in the intended reading, whereas the positive value for the feature Control associated with the higher verb in (29) explains why this sequence is irretrievably ungrammatical: It is true that Keenan (1976: 269) proposed a so-called ‘Bodyguard Condition,’ but we have seen with respect to sentence (9)a. that the real issue relates to the distinction between argument and adjunct, on the one hand and the process of incorporation, on the other hand.
References


Chomsky, N. 1981. Lectures on Government and Binding. The Pisa lectures. Foris


