VALENCY ADJUSTING STRATEGIES IN RAGA, A LANGUAGE OF VANUATU

Hannah Vari-Bogiri: School of Language, Arts and Media, University of the South Pacific <bogiri_h@vanuatu.usp.ac.fj>

Abstract
Languages have various ways of adjusting valency by either, increasing, decreasing or simply rearranging the syntactic valence of clauses. This paper focuses on the various valency adjusting strategies in Raga. Raga, genetically, is a member of the North–Central Vanuatu subgroup of the Oceanic languages in Vanuatu, a multilingual country with over a hundred indigenous languages. Raga is considered as one of the biggest languages of Vanuatu with around seven thousand speakers. Data for this study was collected during a fieldtrip and observations on the northern part of Pentecost where Raga is spoken as well as in Port Vila. The analysis shows that Raga follows a SVO constituent order and it is a nominative accusative language by distinguishing the subjects of both transitive and intransitive verbs from the object of the transitive verbs. Although much has been written on Raga, little has been written on its valency adjusting devices and therefore the purpose of this paper is to focus on the valency adjusting strategies. Analysis shows that Raga applies a range of structures as a means of adjusting the grammatical relations and semantic roles of verbs to their arguments. Like other Oceanic and Vanuatu languages, valency increasing and valency decreasing devices are common in Raga and both these valency adjusting devices mostly occur morphologically through the morphological fusion between the predicate of cause and that of effect. Causative as well as transitive clitics with an applicative role are two strategies, through which Raga verbs increase their valence. On the other hand, valency decreasing strategies in Raga comprise de-transitiviser,
anti-causative, and verb reduplication. These valency increasing and decreasing devices play a very important role in modifying the syntactic and semantic relationships that exist between the verbs and their arguments in Raga.

1. Introduction

Raga, genetically, is a member of the proto North–Central Vanuatu (NCV) subgroup of the Oceanic languages in Vanuatu, a multilingual country with over a hundred indigenous languages. Raga language has been widely documented by various writers for religious as well as for secular reasons such as its descriptive grammar (Patterson 1860, Codrington 1885, Walsh 1966, Walsh & Lini 1981 & Vari-Bogiri 2011), its phonology (Walsh 1962; 1982), its lexicon (Hardacre 1924, Yosioko & Leona 1992, Leona & Pond 2000) or its genetic classification (Codrington 1885, Grace, 1955, Tryon, 1976, Clark 1985, 2009, Lynch 1995). These studies, with other modern grammar of Vanuatu languages within the North–Central Vanuatu subgroup, a notional group to which Raga belongs (Walsh 1966, Crowley 1982, Early 1994, Jauncey 1997, Hyslop 2001, Francois 2002, Thieberger 2006 and Vari-Bogiri 2011), all contributed to giving insights into the analysis of this study. Raga is considered as one of the biggest languages of Vanuatu with around seven thousand speakers. Data for this study was collected during a fieldtrip and observations on the northern part of Pentecost where Raga is spoken as well as in Port Vila.

Despite the wide range of documentation in Raga thus far, it still lacks the full explanation and exemplification of the range of its valency adjusting devices. Therefore, this paper focuses on the range of valency adjusting devices and their syntactic and semantic roles within the Raga language of Vanuatu.

1.1 Simple Declarative clause in Raga

Raga, typologically, is a left-headed language not only because it is a SV(O) language and uses prepositions to express peripheral arguments, but because it has the head to the left of the modifier, in terms of nominal heads and modifiers as well as verbs and adverbial modifiers. Core and non-core/oblique elements of a clause are coded differently in Raga. Clauses with the verbal predicate at the core follow the SV/AVO order while the non-core/oblique elements of a clause are expressed through prepositions. Verbal predicate at
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the nucleus always begin with the NP, which is the subject, followed by the obligatory subject marker and TAM category, then followed by the verb VP. Examples (1)–(3) show that the nominal subject can be optional, but the pre-verbal subject marker and TAM categories, illustrated by \textit{vi} (1) \textit{mwa} (2) and \textit{nu} (3) are obligatory parts of the nucleus with the verbal predicate as indicated by brackets. Moreover, the verbal predicate in the nucleus layer, which is a VP, can consist of just the verb (1)–(2) or the verb and adverb as its modifier (3). The adverbial modifier is an optional component within the nucleus.

1. \textit{Virana} \text{[vi} \text{mabu].}
   \begin{tabular}{ll}
   Virana & 3SG.FUT rest \\
   \end{tabular}
   \text{‘Virana will rest.’}

2. \textit{[Mwa} \text{Mana].}
   \begin{tabular}{ll}
   1SG.CONT laugh \\
   \end{tabular}
   \text{‘S/he is laughing.’}

3. \textit{Tua-ra} \text{[nu} \text{avo lolhoro].}
   \begin{tabular}{llll}
   friend-3PL.PSS 3SG.PERF speak angry \\
   \end{tabular}
   \text{‘Their friend spoke angrily.’}

According to Foley and Valin (1985:301), the core arguments are the actor and the undergoer for any simple transitive verb. Like most Vanuatu languages, the basic constituents of the verbal clause in Raga follow the SV/A VO clause constituent order. This constituent order is not only found in many Vanuatu languages, but it is also noted by Lynch et al. (2002 :49), when making reference to the typological overview of the clause constituent order within the Oceanic subgroup, to be the most widely distributed pattern as well as being found in the genetically most diverse sample of languages.

Clauses with the verbal predicate at the core follow the SV/A VO order and always begin with the NP, which is the subject, followed by the obligatory subject marker and TAM category, then followed by the VP, including the object. The VP constituent include zero transitivisers for certain transitive verbs (6), or the transitiviser \textit{-ni} (7)–(8) and its allomorphs with an applicative functions \textit{-hi} (9) and \textit{-v} \sim \textit{-vi} (10) as well as adverbial modifiers which can be optional (11). Note that \textit{-ni} is a transitiviser that can introduce undergoer objects or more peripheral objects. Semantically, \textit{-ni} functions as a transitiviser by having a direct transitive action on the object (7), as well as an applicative
with an indirect transitive notion such as having an action being done to or at an object (8).

Like many Oceanic languages, Raga depicts a nominative-accusative pattern in its formal marking of the core syntactic roles. This means that it uses a similar coding system for subjects of both transitive and intransitive verbs while a different coding system is used for direct objects of transitive verbs. The distinction between the subjects and the objects is marked by word order. So, in both (4) and (5), the subjects of both intransitive and transitive verbs are pre-verbal while the object (5) is post-verbal. Moreover, the third person singular subject is coded the same way as \textit{mwa} in both the subject of the intransitive verb \textit{mana} (4) as well as the subject of its transitive form as laughing at someone (5) while the third person singular object is coded differently as \textit{–a} (5).

4. \textit{Nitu-na} \textit{mwa} \textit{mana}  
Child-3SG.POSS 3SG.CONT laugh  
‘Her child is laughing.’

5 \textit{Nitu-na} \textit{mwa} \textit{manu-hi-a}  
Child-3SG.POSS 3SG.CONT Laugh-APP-3SG.O  
‘Her child is laughing at him/her/it.’

6. \textit{Mua} \textit{mwa} \textit{batu-a.}  
mother 3SG.CONT weave-3SG.O  
‘Mother is weaving it.’

7. \textit{Tua-ra} \textit{nu} \textit{surai-ni-ra.}  
friend-3PL.POSS 3SG.PERF steal-TR-3PL.O  
‘Their friend stole them.’

8. \textit{Vwiriu} \textit{bila-n} \textit{bena} \textit{Nono} \textit{nu} \textit{batoi-ni-ra.}  
dog CL-CST uncle Nono 3SG.PERF bark-APP-3PL.O  
‘Uncle Nono’s dog barked at them.’

9. \textit{Ira} \textit{vavine} \textit{ra-n} \textit{manu-hi-au.}  
pl female 3PL-PERF laugh-APP-1SG.O  
‘The females/women laughed at me.’
10. [Ra-m  lodo-vi-a.]
   3PL-CONT  spit-APP-3SG.O
   ‘They spit at him/her/it.’

11. [Nitu-ra  nu  gan  vilvile-ni-a.]
    child-3PL.Poss  3SG.PERF  eat  quick-TR-3SG.O
    ‘Their child ate it up quickly.’

The non-core or oblique forms part of the outermost peripheral layer of the clause and can be optional. In Raga, like other SVO languages, peripheral arguments are expressed by means of a range of prepositional expressions which have a grammatical relation either between the VP in the core and a NP within the periphery (12) or a NP within the core and another NP within the periphery (13)–(14). Oblique constituents express a range of semantic arguments such as locative (12), goal (13), instrument (14) and others. However, the prepositional component of the periphery is optional as it can be applied to show various semantic relations (12)–(14), but sometimes the preposition is not applied when the periphery includes adverbs of time such as garigi ‘today’ (15). Refer to Table 1 for the tripartite divisions of clausal layers and possible components

   [       CORE       ] + [ NON-CORE/OBLIQUE]
   [VP]   [ + [PREP  +  NP]

12. [Ira  natu-ri-rigi  ra-m  mosomoso]  [la  sara-n  bolo].
    pl  child-REDUP-small  3PL-CONT  play  LOC  field-CST  ball
    ‘The children are playing in the football field.’

13. [Tama-ra  mwa  lai  malogu]  [vai  An-tahi].
    father-3PL.Poss  3SG.CONT  take  kava  GOAL  LOC-sea
    ‘Their father took the kava to Antahi (the village by the sea).’

14. [Ratahi-ra  mwa  bwaga  manuga-na]  [gin  wai  aruaru].
    mother-3PL.Poss  3SG.CONT  wash  sore-3SG.Poss  INST  water  hot
    ‘Their mother washed her sore with hot/warm water.’
15. [Ra-v  gel malogu] [garigi.]
3PL-FUT  dig  kava  today
‘They will dig the kava today.’

Table 1: Tripartite divisions of clausal layers and possible components

<table>
<thead>
<tr>
<th>CLAUSAL LAYERS</th>
<th>SUBJECT MARKER AND TAM</th>
<th>MODIFIER</th>
<th>TRANSITIVISER OR APPLICATIVE</th>
<th>OBJECT</th>
<th>PREPOSITIONAL PHRASE (PP) &amp; ADVERB OF TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nucleus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Periphery</td>
<td></td>
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<td>✓</td>
</tr>
</tbody>
</table>

1.2 Valency Devices
There are a range of valency adjusting devices and their syntactic and semantic roles in Raga. The distinction between the semantic and syntactic valence is clearly defined by Payne (1997:170–171). Semantic valence refers to the number of participants that must be “on stage” by the verb. For example, the verb ‘drink’ could have a semantic valence of two in its transitive form where there is the drinker or the person who does the drinking as well as the fluid that is being drunk. Grammatical or syntactic valence refers to the number of arguments in any given clause. So, for example, the syntactic valence of the verb drink could be the nominal elements of the agent and the object. Valency adjusting strategies in this case would mean the morpho-syntactic re-arrangements that adjust the syntactic valence of a clause. Payne (1997:172) notes that languages have various ways of adjusting valency such as increasing, decreasing, or rearranging the syntactic valence of clauses. While on the one hand, increasing the valence entails the upgrading of a peripheral participant to centre stage, on the other hand, decreasing the valence involves either the movement of a centred participant to the periphery or its total elimination from the scene. The valence of the verb changes according to the number and role of the arguments or participants.
2. A-type and O/U-type verbs

A-type and O/U-type verbs have distinct roles in the valency rearrangement strategy. The distinction between the A-type and O-type/U-type verbs was referred to by Dixon, 1988, Hyslop, 2001, and Ross, 2004, in their roles in the valency rearrangement process. Ross (2004) noted that typical Oceanic languages have a myriad of valency-changing morphemes which interact with A-type and U-type verbs in various ways to shift semantic roles from subject to object or vice versa and these shifts are mainly lexical derivational. They are regarded as two verb classes due to the semantic roles of their subject and object arguments in their intransitive and transitive forms. Ross (2004:504) refers to the A-verbs as the Actor verbs because the Actor is subject of both the intransitive (16) and its transitive form (17). So, in (16) and (17), the verb \textit{vas-vasogo} ‘reading’ is an example of an A-verb because in both its intransitive and transitive form, the semantic function of the subject, \textit{nitu-na} ‘her child’ remains the actor. Further reference to the employment of A-verbs in their roles as valency decreasing device is discussed in 4.3. Ross (ibid) further refers to the U-verbs as the undergoer verbs because the subject of the verb is the undergoer, not the actor. Although the subject shifts from the object slot to the subject slot during valency change, semantically, the object still retains its semantic function as an undergoer. In Raga, examples of these U-verbs are mostly causative verbs which, in their de-transitivised forms, occur with the anti-causative prefix \textit{ma-} as illustrated in (19). The verb \textit{bora} \sim \textit{vora} ‘break’ is an example of a U-verb because in its intransitive form (19) although syntactically, \textit{pletei vwate} ‘a plate’ has shifted from the object slot (18) to the subject slot (19), semantically, it still retains its function as an undergoer and not actor. The use of U-verbs are further discussed in 4.1. In their transitivised form, the agent is the causer and the object is the patient or the undergoer which has undergone some kind of change as a result of the action of the causer.

16. \textit{Nitu-na} \hspace{1cm} \textit{mwa} \hspace{1cm} \textit{vas-vasogo}
Child-3SG.POSS \hspace{1cm} 3SG.CONT \hspace{1cm} REDUP-read

‘Her child is reading.’
3. Valency increasing devices

The valence of verbs increases through several strategies, modifying the syntactic and semantic relationship that exists between the verbs and their arguments. The distinction between the semantic and syntactic valence is clearly defined by Payne (1997:170–171). Semantic valence refers to the number of participants by the verb. For example, the verb ‘drink’ could have a semantic valence of two in its transitive form where there is the drinker or the person who does the drinking as well as the fluid that is being drunk. Grammatical or syntactic valence refers to the number of arguments in any given clause. So, for example, the syntactic valence of the verb drink could be the nominal elements of the agent and the object. Valency adjusting strategies in this case would mean the morpho-syntactic re-arrangements that adjust the syntactic valence of a clause. Payne (1997:172) notes that languages have various ways of adjusting valency such as increasing, decreasing, or rearranging the syntactic valence of clauses. While on the one hand, increasing the valence entails the upgrading of a peripheral participant to centre stage, on the other hand, decreasing the valence involves either the movement of a centred participant to the periphery or its total elimination from the scene. The valence of the verb changes according to the number and role of the arguments or participants. In Raga, these strategies occur either morphologically or at the syntactic level and are categorised as causative (3.1) and as transitive clitics with an applicative role (3.2).
3.1 Causatives

One of the valence increasing strategies which can derive a transitive verb from an intransitive verb or a bi-transitive verb from a transitive one is through causatives. Payne (1997:176) states that causative predicates always involve one more argument than the caused predicate. Causatives increase the valency by introducing a new participant or actor into the argument.

In a typical causative construction, Jae Jung Song (2001) states that the causer’s action is expressed by the predicate of cause while the causee’s action by the predicate of effect. In the causative construction, the cause NP, who is the new participant, is now the grammatical subject of the whole causative sentence and the predicate of cause the main verb of the sentence. While the causer NP and the predicate of cause have been elevated to the foreground, on the other hand, the causee NP and the predicate of effect are ‘backgrounded’ as they do not occupy a prominent position in the sentence as do the causer. According to Elson and Pickett (1983:103), Comrie (1985:331) and Payne (1997:176), causatives can occur at three different levels categorised as lexical, morphological and syntactic. While at the lexical level the causing and the caused events are encoded in a single lexical item, in the morphological causatives, the two events are encoded in a single verb complex with a causative morpheme.

While Payne indicates the third category as periphrastic, Comrie and Elson and Pickett refer to it as syntactic through which a causative situation can be expressed using a verb ‘to cause’ or ‘to make’. When making reference to the typology of causative constructions, Jae Jung Song (2001:260) identified three ideal parameters for morphological fusion between the predicate of cause and that of effect and these include the isolating or analytical, agglutinating and finally fusional or inflectional. From these parameters of fusion, comes the morphological, lexical, and syntactic causative types. Causative is an active valency increasing strategy in Raga, and since Raga is an Oceanic language, and like most Oceanic languages, morphological causatives plays a much more important role in which the predicate of cause is in the form of a derivational morpheme or an affix (either prefix or suffix) such as $ba- \sim va^{-1}$ (3.1.1), while lol is a causative at the syntactic level (3.1.2).

3.1.1 $ba- \sim va$ - causative at the morphological level

The pre-verbal inflectional prefix $ba- \sim va$ is a morphological causative that changes the behaviour of the verb while at the same time modifying the
semantic orientation of the verb to its arguments. Semantically, the pre-verbal prefix \( ba- \sim va- \), according to Lynch et al. 2002:83, is a reflex of POc*\( pa-/\*paka-\) ‘causative’. According to Lynch (1995:144) POc *\( paka-\) expresses the notion that the subject makes or causes the action of the verb to happen. In so doing, it has a causative effect on the verb and thus increases its valence with an introduced agent which is coded as the grammatical subject of the whole causative sentence. According to Comrie (1981:167–168), the morphological causative normally has a valency one higher than that of the corresponding non-causative, since in addition to the argument of that non-causative predicate, there is also the causer. Examples in Raga show that with the morphological causative \( ba- \sim va-\), valency increases both from intransitive with one argument to transitive with two arguments (20)–(21) and also from a transitive with two arguments (22) to di-transitive with three arguments (23). Firstly, the stative verb \( rahu\) ‘to be alive’(20) increases its valency through the morphological causative \( ba- \sim va-\) through which the number of arguments increase from one to two (21). Although with this stative verb, the actor \( nitu-na\) ‘his/her child’ in (20) has shifted from the subject slot to the object slot (21), in both cases (20 & 21), it maintains the semantic function of an undergoer and is an example of an O-type verb. In the next example, the transitive verb \( gan\) ‘eat’ increases its valency, through the morphological causative \( ba- \sim va-\), by increasing its arguments from two (22) to three (23). For example, \( nitu-na\) ‘his/her child’ who was an actor and whose action was voluntarily in (22) is now demoted to an experiencer or undergoer in (23) experiencing the action of an introduced participant \( ratahi-na\) ‘his/her mother’. In this example, the action of eating is no longer voluntary but is being caused to happen by another participant. While in (22) the verb \( gan\) ‘to eat’ has only two arguments — actor and the object, in (23), with the causative prefix \( ba- \sim va-\), the number of arguments has increased to three, comprising the agent, the patient and the indirect object. In (22), \( damu\) ‘yam’ is part of the core argument, while in (23), it has been demoted to a non-core or an optional argument.

20. \[ \text{Nitu-na} \quad mwa \quad rahu. \]
\[ \text{child-3SG.Poss} \quad 3\text{SG-CONT} \quad \text{life} \]

‘His/her child is alive’
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   3SG-PERF CAUSE-live child-3SG.POSS
   ‘They saved his child.’

22. *Nitu-na* mwa gan *damu.*
   child-3SG.POSS 3SG.CONT eat yam
   ‘His/her child is eating yam.’

23. *Mwa* ba-gan *nitu-na* gin *damu.*
   3SG.CONT CAUSE-eat child-3SG.POSS INST yam
   ‘S/he is feeding his/her child with yam.’

3.1.2 *lol* causative at the syntactic level

A way in which Raga marks causative at the syntactic level is with the verb *lol* ‘to make’ where another noun normally occurs between *lol* as the cause predicate and the other verb as the effect predicate. When the verb *lol* is introduced into a clause with an intransitive predicate, it modifies the semantic orientation of the intransitive predicate to a transitive predicate by introducing an agent. With the introduction of the causative *lol* ‘to make’ or ‘to cause to happen’, the following intransitive verbs *dei* ‘cry’(24), *maturu* ‘sleep’(25), *hovi* ‘fall’ (26) and the stative verb *haro* ‘to be sick’(27) derive their transitive form by increasing the number of arguments from one to two. In (24) – (26), the noun, with the grammatical role of patient or undergoer, that occurs between the verb *lol* and the cause predicate takes the form of a full NP. However, in (27), the patient or the undergoer takes the form of third person singular pronominal object –*a*, indicating that the context or the pronominal object is known to both the addressor and the addressee or the speaker and the listener.

24. *Ra-n* *lol* tua-ra *mwa* *dei.*
   3SG-PERF make friend-3PL.POSS 3SG.CONT cry
   ‘They made their friend cry.’

25. *Vi* *lol* *nitu-na* *vi* *maturu.*
   3SG.FUT make child-3SG.POSS 3SG.FUT sleep
   ‘She will put her child to sleep.’
26. Tua-ra mwa lol ga-n damu mwa hovi.
   friend-3PL.POSS 3SG.CONT make CL-3SG.POSS yam 3SG.CONT fall
   ‘Their friend dropped his/her yam (that s/he was going to eat).’

27. Ige mwa lol-i-a mwa haro.
   fish 3SG.CONT make-3SG.O 3SG.CONT sick
   ‘The fish caused him/her to be sick.’

3.2 Transitive clitics with an applicative role

The transitive clitics in Raga that function as applicative modify the semantic orientation of an intransitive predicate to a transitive predicate, consequently increasing its argument or valency by introducing an applied object. While transitive marking on a transitive verb is used to indicate that it has an object with the semantic function of an undergoer, transitive marking with a semantic role of an applicative allows intransitive verbs to increase their arguments by introducing peripheral object or an applied object with actions being done on, at or for a reason. These transitive clitics with an applicative function can only introduce objects as an applied object as well as a peripheral argument, expressed as an oblique. Payne (1997:186) describes applicative as a valence increasing operation that brings a peripheral participant onto centre stage by making it into a direct object. Lynch (1998:140) refers to applicative as another transitive suffix which is a reflex of POc*-aki /*-akini and whose function is to refer to the instrument with which an action is carried out, the reason for performing an action or for some other indirect transitive notion. The Raga transitive clitics -ni- (3.2.1), -hi- (3.2.2), and -vi-~v- (3.2.3) would be considered as the Proto Oceanic ‘long’ transitive suffix reflecting the POc*-akini which according to (Pawley 1973; Evans 2001; Pawley 2001:197) derives transitive verbs from intransitive verbs with direct objects standing in such semantic relations as instrument, concomitant and cause.

3.2.1 -ni-

In Raga, the transitive clitic -ni- functions both as a transitiviser as well as an applicative. The clitic-ni- only applies if the object, as the undergoer, is a pronominal object as illustrated in (28)–(29). However, if the object, whose grammatical role is an undergoer, is in the form of a full NP, then the –ni- does not apply, as illustrated in (30)–(31). Therefore, the use of the transitive clitic –ni is grammatically correct in (31) while it is ungrammatical in (*32), because it cannot accept an object in the form of a full NP. This transitive clitic
-ni can also function as an applicative because it derives a transitive verb from an intransitive verb (see Table 2) by introducing an argument in the object slot with various semantic functions of a goal, content, cause, or a benefactor.

It is difficult to clearly distinguish the semantic role labels of the added arguments (Table 2) like the verbs to talk about something, to bark at something, to gossip about something, to be angry at someone or to be afraid of something. The thing that is talked about, or barked at, gossiped about, or afraid of could possibly be considered as a content, a goal, a cause or a benefactive, which is what is used in this case (Table 2). The following intransitive verbs *matagu ‘afraid’ (30), *bato ‘bark’ (31), *uloï ‘shout’ and (32) derive their transitive form through the transitive clitic -ni- with an applicative role.

   PL. child-REDUP-small 3PL-CONT afraid-APP -3SG.O
   ‘The children are afraid of it/him/her.’

29. *Vwiriu* mwa batoi-ni-ra i
    Dog 3SG.CONT bark- APP-3PL.O and
    vuvuri tama-ra mwa batoi-ni-ra.
    SEQ father-3PL.POSS 3SG.CONT growl-APP-3PL.O
    ‘The dog barked at them and then their father growled at them.’

    father-3PL.POSS 3SG.CONT angry mother- Poss-3PL.POSS
    ‘Their father is angry with their mother.’

31. Tuana-ra mwa matagu bila-ra vwiriu
    FRIEND-3PL.POSS 3SG.CONT afraid Poss-3PL.POSS dog
    ‘Their friend is afraid of their dog.’

*32. Tuana-ra mwa matagu-ni bila-ra vwiriu
    FRIEND-3PL.POSS 3SG.CONT afraid-APP Poss-3PL.POSS dog
    ‘Their friend is afraid of their dog.’
Table 2: Clitic -ni- with various semantic functions

<table>
<thead>
<tr>
<th>VERB</th>
<th>GLOSS</th>
<th>TRANSITIVISED FORM</th>
<th>GLOSS</th>
<th>SEMANTIC FUNCTION OF THE ADDED ARGUMENT</th>
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</thead>
<tbody>
<tr>
<td>avo</td>
<td>'speak/talk</td>
<td>avoi-ni-a</td>
<td>'talk about him/her/it'</td>
<td>content</td>
</tr>
<tr>
<td>bato</td>
<td>'bark'</td>
<td>batoi-ni-a</td>
<td>'bark at him/her/it'</td>
<td>goal</td>
</tr>
<tr>
<td>huña</td>
<td>'gossip'</td>
<td>huñai-ni-a</td>
<td>'gossip about him/her/it'</td>
<td>cause</td>
</tr>
<tr>
<td>lolhoro</td>
<td>'angry'</td>
<td>lolhoroi-ni-a</td>
<td>'angry with him/her/it'</td>
<td>benefactive</td>
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<tr>
<td>matagu</td>
<td>'afraid'</td>
<td>matagu-ni-a</td>
<td>'afraid of him/her/it'</td>
<td>cause</td>
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</tbody>
</table>

3.2.2  -hi-

The clitic -hi- is similar to the transitive clitic -ni- in its role of inflecting a transitive verb from an intransitive one. It is also similar in its role as a valency increasing device, through which the number of arguments increase form a monovalent to a bivalent comprising the agent and the object with a semantic function of either a goal, a source or benefactive.

The applicative clitic -hi- modifies the semantic orientation of an intransitive verb to transitive by introducing an object, thus increasing its valence. This applicative clitic reflects the Proto Oceanic applicative *-aki(ni) which according to Lynch et al. (2002:44) the object of which could be an argument within the oblique such as a location, a goal, an instrument or a cause. The verbs listed from (32)–(33) and in (Table 3) show that the actions are being done to, at or on the patient as well as for a reason, illustrating various semantic functions. The intransitive verb tañi ‘cry for’ or ‘to weep for’ increases its valence with the applicative clitic -hi- (32), introducing an argument with a semantic role of a goal within the oblique. While tañi uses the applicative -hi- to increases it valence, the intransitive verb dei ‘cry’ increases its valency with huri ‘for’. The intransitive verb mana ‘laugh’ increases its valence with the applicative clitic -hi- (33), allowing the addition of an argument in the object slot with a benefactive role. Both the intransitive verbs mere ‘to urinate’ and datavis ‘to defecate’ (34) also derive their transitive form through the applicative clitic -hi- which allows another argument with a semantic role of goal.
32. **Ra-n tan-hi hano.**
3PL-PERF weep-APP what
‘What are they crying for?’

33. **Garivi mwa manu-hi bwat-mahu-n guita.**
rat 3SG.CONT laugh-APP head-bald-CST octopus
‘The rat laughed at the octopus’ bald head.’

34. **Nitu-ra mwa me-mere-hi-a.**
child-3PL.POSS 3SG.CONT REDUP-urine-APP-3SG.O
i mwa da-davis-hi-a.
and 3SG.CONT REDUP-defecate-APP-3SG.O
‘Their child urinated on and defecated on itself.’

<table>
<thead>
<tr>
<th>Table 3: Clitic -hi- with various semantic functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTRANSITIVE</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>mana</td>
</tr>
<tr>
<td>gagaru</td>
</tr>
<tr>
<td>mere</td>
</tr>
<tr>
<td>tan¨i/dei</td>
</tr>
<tr>
<td>dadavis</td>
</tr>
</tbody>
</table>

3.2.3 **-vi-~~-v-**
The intransitive verb *lodo ‘spit’ increases its valence with the applicative clitic -vi-~~-v- which implies an added argument in the object slot with a semantic function of a goal, showing that the action is being done on an object. If the added argument is a noun, then the clitic -v- is employed (35), while a pronominal object accepts the clitic -vi-(36). However, it is important to note that this strategy is infrequent compared to the others.
35. **Mwa** lodo-**v** bwalage-na.  
3SG.CONT spit-APP leg-3SG.POSS  
‘S/he spits on his/her leg.’

36. **Mwa** lodo-**vi-ra.  
3SG.CONT spit-APP-3PL.O  
‘S/he spits on them.’

4. **Valency decreasing devices**

The valence of verbs in Raga decreases through several strategies, modifying the syntactic and semantic relationship that exists between the verbs towards their arguments. These strategies either occur morphologically or at the syntactic level.

4.1 **ma-** de-transitiviser and anti-causative

4.2 **bi-** verb reduplication reciprocal

4.3 verb reduplication de-transitiviser

4.1 **ma-** de-transitiviser and anti-causative
The Raga detransitiviser ma- reflects the Proto-Oceanic prefix *ma-* which is also reflected in other modern Oceanic languages as a common (semi) productive valency-decreasing prefix (Evans & Ross, 2001:270). The role of ma- as a valency-decreasing prefix is found in some North New Guinea languages (eg. Bariai, Manam and Kairiru) as well as in the Arosi language of Southeast Solomonic and the New Caledonian language Xarracùù. (Evans & Ross, 2001:271). The Formosan language of Kavalan also depicts this pre-verbal particle ma- as common in anti-causatives (Huang & Sung 2008:167). The detransitivising effect on verbs of the derivational prefix ma- has also been identified in other modern grammars of Vanuatu languages such as Paamese (Crowley 1982), Lewo (Early 1994), Tamambo (Jauncey 1997), the Lolovoli dialect of Northeast Ambae (Hyslop 2001), and Araki (François 2002) and Raga Vari-Bogiri, 2011). In Raga, the prefix ma- preposed to verbs has an anti-causative effect by eliminating the agent (A) and promoting the object of a transitive predicate (O) to the subject of the intransitive clause (S).
slot. The transitive verbs that undergo this morphological process to derive their intransitive form are categorised as O-type verbs (Dixon, 1988, Hyslop, 2001) or U-verbs (Ross, 2004) because although the object of the transitive predicate has now moved to the subject/agent slot in its intransitive form, it still maintains the semantic function of an undergoer or the case-role of patient.

The introduction of ma-as a detransitiviser, decreases the valency of the predicate. The examples show the following seven verbs salili ‘pour’/‘spill’ (37)–(38), bora ~ vora ‘break’ or ‘shatter’ (39)–(40), hera ‘tear’ (41)–(42), salañai‘pull down’ (43)–(44) and sesera ‘disclose’, ‘expose’ (45)–(46) and havañi ‘open’ (47)–(48) and dadañi ‘pour/spill’ (49)–(50) with the similar meaning as salili, to be among some of the verbs that use the prefix ma- as a detransitiviser, decreasing the valency of the predicate from two arguments to one.

In their transitivised form, the agent is the causer and the object is the patient or the undergoer which has undergone some kind of change as a result of the action of the causer.

Ross (2004) quotes Dixon (1988:205) that in Bouma Fijian, U-verbs are mostly verbs of affect like ‘crush’, ‘bend’, ‘fold’, ‘squeeze’, ‘tie up’. However, in their de-transitivised forms, these verbs in Raga occurring with the anti-causative prefix ma- refer to process with similar semantic functions as the ones identified in Samoan and Tamambo. In Samoa, according to Mosel and Hovdhaugen (1992:737–738) and Evans & Ross (2001) the occurrence of ma- with verbs indicate a semantic function of ‘destructions’, while in Tamambo these verbs denote processes whereby the object loses its physical unity (Jauncey 1997:135; Evans & Ross 2001:271). Likewise, in Raga, most of these verbs identified with the prefix –ma, show that the objects or patients in their intransitive forms have undergone some physical changes.

37. Nu salil ma-n ti.
   3SG.PERF spill CL-3SG.POSS tea
   ‘S/he spilt his/her tea.’

38. Ma-n ti nu ma-salili.
   CL-3SG.POSS tea 3SG.PERF ANTICAUS-spill
   ‘His/her tea spilled.’
39. **Virana** *nu* **lol** *bora* **peleti** *vwate.*

Virana 3SG.PERF make break plate ART

‘Virana broke a plate.’

40. **Peleti** *vwate* *nu* **ma-vora.**

plate ART 3SG.PERF ANTICAUS-break

‘A plate broke.’

41. **Nu** *hera* **gaisaga-na.**

3SG.PERF tear dress-3SG.POSS

‘She tore her dress.’

42. **Gaisaga-na** *nu* **ma-hera.**

dress-3SG.POSS 3SG.PERF ANTICAUS-tear

‘Her dress is torn.’

43. **Ra-n** *salañai* **imwa-ra.**

3PL-PERF pull down house-3PL.POSS

‘They pulled down their house.’

44. **Imwa-ra** *nu* **ma-salañai.**

house-3PL.POSS 3SG.PERF ANTICAUS-fall apart

‘Their house fell apart.’

45. **Ra-m** *se-sera* **no-n** **daldale-ana.**

3PL-CONT REDUP-expose CL-3SG.POSS crazy-NOM

‘They exposed his/her stupidity.’

46. **No-n** **daldale-ana** *mwa* **ma-sera-sera.**

CL-3SG.POSS crazy-NOM 3SG.CONT ANTICAUS-REDUP-expose

‘His/her stupidity was exposed.’

47. **Ra-n** *havañ* **gatava.**

3PL-PERF open door

‘They opened the door.’
48. *Gatava-*n sitoa mwa *ma-*havañi.
    door-CST store 3SG.CONT ANTICAUS-open
    ‘The door of the shop is opened.’

49. *Go-*v *dadañi* wai *la* pankeni.
    2SG-FUT pour water LOC cup
    ‘You will pour water in the cup.’

50. *Wai* mwa *ma-*dadañi *la bata.*
    water 3SG.CONT ANTICAUS-spill LOC bed
    ‘The water is spilt on the bed.’

Verbs that prototypically end with a vowel can sometimes have these vowels deleted before a noun. In the following examples, the verbs *salili* ‘spill’ (37)–(38), *havañi* ‘to open’(47)–(48), *dadañi* ‘to pour’(49)–(50) drop the last vowel when followed by a noun.

4.2 *bi-* + verb reduplication *reciprocals*

Another valence decreasing strategy which changes the behaviour of the verb as well as its semantic relationship with the arguments is through the pre-verbal prefix *bi- ~ vi-*. With the addition of the prefix *bi-*, the verb automatically reduplicates whether partially or completely, causing the action of the arguments to be understood as reciprocal. The transitive verb *habwe* ‘find’ takes two arguments in the nucleus (51) while the valence decreases through the morphological process which comprises the prefix *bi-* with the verb reduplication (52). The same strategy is used in (53)–(54) with the verb *liñi* ‘to leave’.

51. *Tagaro* *nu* *habwe* tasala-na *la* *hala.*
    Tagaro 3SG.PERF find wife-3SG.POSS LOC road
    ‘Tagaro met his wife on the way.’

52. *Ra-*n *bi-habwe-habwe* *la* *hala.*
    3PL-PERF RECIPI-REDUP-find LOC road
    ‘They met each other on the way.’
53. *Nu liiŋ tua-na la sara-n wağa-gaga.*  
3SG-PERF leave friend-3SG.POSS LOC field-CST vessel-fly  
‘S/he left his/her friend at the airport.’

54. *Ra-n bi-liiŋ-liiŋ la sara-n wağa-gaga.*  
3PL-PERF RECIP-REDUP-leave LOC field-CST vessel-fly  
‘They left each other/took leave of each other at the airport.’

4.3 **Verb reduplication de-transitiviser**

Some transitive verbs undergo partial or complete reduplication with a range of meanings as well as function as a de-transitivising or valence decreasing strategy. The undergoer is eliminated through this reduplication process, modifying the semantic orientation of a bivalent predicate to a monovalent predicate. The verbs *ligo* ‘sew’ (55)–(56), *bwaga* ‘wash (clothes or dishes)’ (57)–(58), *basogo ~ vasogo* ‘read’ (59)–(60), and *garu* (61)–(62) are some transitive verbs which derive their intransitive form through reduplication process. While the verbs *ligo* and *baga*, derive their intransitive forms through full reduplication, the verbs *basogo ~ vasogo* (60) and *garu* (62) do so with partial reduplication of the first syllables. These transitive verbs are categorised as A-type verbs because although they derive their intransitive form through partial and complete reduplication, the semantic function of the subject in both forms still remains as actor.

However, intransitive verbs also reduplicate but with a semantic function of frequency. For example, *avo* ‘talk’ and *dei* ‘cry’ when reduplicated as *avo-avo* and *dei-dei* mean ‘chatterbox’ or ‘someone who always talks’ and ‘always cries’ respectively.

55. *Vi ligo gai-saga-na vaigougo.*  
3SG-FUT sew stick-wear-3SG.POSS tomorrow  
‘She will sew her dress tomorrow.’

56. *Vi ligo-ligo vaigougo.*  
3SG-FUT REDUP-sew tomorrow  
‘She will be sewing tomorrow.’

57. *Ra-n bwaga ira gai-saga bi-bili.*  
3PL-PERF wash PL stick-wear REDUP-mud  
‘They washed the dirty clothes.’
58. *Ra-n*  **bwaga-bwaga**  **huba.**
   3PL-PERF  REDUP-wash  already
   ‘They have already done the laundry.’

59. *Na-m*  **vasogo**  **avo-an**  **sabuga.**
   1SG-CONT  read  talk-NOM  sacred
   ‘I am reading the Bible.’

60. *Na-m*  **vas-vasogo.**
   1SG-CONT  REDUP-read
   ‘I am reading.’

61. *Tua-na*  **mwa**  **garu-hi**  **nitu-na.**
   friend-3SG.POSS  3SG.CONT  wash-APP  child-3SG
   ‘His/her friend washed his/her child.’

62. *Tua-na*  **mwa**  **ga-garu**
   friend-3SG.POSS  3SG.CONT  REDUP-wash
   ‘His/her friend is having his/her wash.’

5. **Summary of valency adjusting devices**

The different valence increasing and decreasing devices illustrate Raga as an Oceanic language, which mostly applies morphological causatives or derivational morphemes in modifying the semantic relationships of verbs towards their arguments, as summarised in Table 3.
Table 3: Summary of the valency adjusting devices and their semantic orientation to arguments

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>MARKING</th>
<th>FUNCTION</th>
<th>VALENCY (+) OR (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>causative (morphological)</td>
<td>ba- ~ va-</td>
<td>introduces an argument (agent)</td>
<td>+</td>
</tr>
<tr>
<td>causative (syntactic)</td>
<td>lol</td>
<td>introduces an argument (agent)</td>
<td>+</td>
</tr>
<tr>
<td>Transitiviser with an applicative nuance (morphological)</td>
<td>-ni-</td>
<td>introduces an argument (patient)</td>
<td>+</td>
</tr>
<tr>
<td>Transitiviser with an applicative role (morphological)</td>
<td>-hi-</td>
<td>introduces an argument (patient)</td>
<td>+</td>
</tr>
<tr>
<td>Transitiviser with an applicative role (morphological)</td>
<td>-v- ~ -vi-</td>
<td>introduces an argument (patient)</td>
<td>+</td>
</tr>
<tr>
<td>anti-causative (morphological)</td>
<td>ma-</td>
<td>de-transitivisation, which eliminates actor and promotes patient to agent</td>
<td>-</td>
</tr>
<tr>
<td>reduplication (morphological)</td>
<td>bi- + redup.</td>
<td>participants reciprocate action on or to each other, eliminates patient</td>
<td>-</td>
</tr>
<tr>
<td>reduplication (morphological)</td>
<td>verb reduplication (partial/complete)</td>
<td>de-transitivisation which eliminates undergoer/patient</td>
<td>-</td>
</tr>
</tbody>
</table>
List of abbreviations and notational conventions

The following abbreviations are used in glossing Raga morphemes

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>1, 2, 3</td>
<td>first, second, third person</td>
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<td>A</td>
<td>agent</td>
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<td>APP</td>
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<td>ART</td>
<td>article</td>
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<td>AVO</td>
<td>Agent Verb Object</td>
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<td>VP</td>
<td>verb phrase</td>
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<td>*</td>
<td>Ungrammatical</td>
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</tbody>
</table>

Notes

1 In Raga, ba- and va- are two allomorphs of the same morpheme occurring in complementary distribution under different conditions

References
