

# A ROLE & REFERENCE GRAMMAR ACCOUNT OF BONGGI *-an*

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In Bonggi, a Western Austronesian language of Sabah, Malaysia, the suffix *-an* occurs in three different verbal constructions: internal experience states as in (1); adversative constructions as in (2); and benefactive constructions as in (3).

- (1) *Rimig-adn*    *ou*                      *na*.<sup>2</sup>  
    *ramig-an*    *ou*                      *na*  
    cold-INTEXP 1SG.NOM    now<sup>3</sup>  
    'I am feeling cold.'<sup>4</sup>
- (2) *I-puda-adn*                      *ou*                      *lampu*.<sup>5</sup>  
    *in-puda?-an*                      *ou*                      *lampu*  
    REAL-extinguish-ADVER 1SG.NOM lamp  
    'The light went out on me.'
- (3) *Ou*            *biri-adn*    *nya*            *siidn*.  
    *ou*            *bori-an*    *nya*            *siin*  
    1SG.NOM give-BEN 3SG.GEN money  
    'I will be given money by him.'

This paper is concerned with the meaning of *-an* in (1), (2) and (3). Should *-an* be split into three different meanings, or are there three context-dependent usages that can be joined in a single, basic, abstract meaning?

Linguists working in related languages have answered this question in different ways. Hurlbut splits Eastern Kadazan *-an* into four homonyms: *-an*<sub>1</sub>, *-an*<sub>2</sub>, *-an*<sub>3</sub> and *-an*<sub>4</sub> (1988:22). Prentice (1980:194) refrains from taking either position by deliberately using the vague term 'associative' to account for overlapping semantic functions of *-an* in Timugon. In his diachronic work, Dahl (1976:119) glosses Proto-Austronesian *\*-an* as 'referent focus'. Similarly, Wolff (1973 and 1996) glosses Proto-Austronesian *\*-an* as 'locative passive'; however, Blust (1996) argues that Proto-Austronesian *\*-an* 'locative' cannot readily be classified as locative under any universal definition of the term.<sup>6</sup>

Are there objective principles for deciding whether different usages of *-an* (or, for that matter, any morpheme) are distinct or not? This problem is approached here from the perspective of Role & Reference Grammar (RRG). §1 provides a brief introduction to RRG, whereas §2, §3 and §4 offer semantic

analyses of the usages of *-an* in (1), (2) and (3). §5 shows that *-an* has a single, general invariant meaning in Bonggi.

## 1. Introduction to RRG

In RRG, lexical representation is based on the classification of predicates into *Aktionsart* classes. Vendler (1967) devised a universal four-way semantic distinction between: 1) states, 2) accomplishments, 3) achievements and 4) activities.<sup>7</sup> These four *Aktionsart* classes correspond to major verb classes which are encoded in the verbal morphology of Bonggi.

**States** are static situations with no activity as in (4).

- (4) *Sia*            *ng-korikng*.<sup>8</sup>  
       sia            m-korin  
       3SG.NOM AT.ST-dry  
       'It is dry.'

**Accomplishments** are nonpunctual changes of state which have an endpoint as in (5).

- (5) *Sia*            *k-i-m-orikng*.<sup>9</sup>  
       sia            -in--om-korin  
       3SG.NOM -REAL--ACL-dry  
       'It became dry.'

**Achievements** are punctual changes of state which have an endpoint as in (6).

- (6) *Sia*            *i-puda?*  
       sia            -in-puda?  
       3SG.NOM REAL-extinguish  
       'It extinguished.'

**Activities** involve a participant doing something and have no clear endpoint as in (7).

- (7) *Sia*            *l-i-m-ompud*.  
       sia            -in--om-lompud  
       3SG.NOM REAL-ACY-ran  
       'She ran.'

In RRG the relationship between a predicate and its arguments is expressed by **logical structures** (LSs). LSs provide a formal semantic representation for each verb and they consist of predicates, their arguments and a small set of operators (Van Valin 1990:223). Distinctions among the four basic *Aktionsart* classes are formally represented in Table 1.

Table 1: LSs for basic *Aktionsart* classes

<i>Aktionsart</i> class	Logical structure
State	<b>predicate'</b> (x) or <b>predicate'</b> (x, y)
Accomplishment	BECOME <b>predicate'</b> (x) or BECOME <b>predicate'</b> (x, y)
Achievement	INGR <b>predicate'</b> (x) or INGR <b>predicate'</b> (x, y)
Activity	<b>do'</b> (x, [ <b>predicate'</b> (x)]) or <b>do'</b> (x, [ <b>predicate'</b> (x, y)])

In Table 1, the variables 'x' and 'y' represent arguments of the predicate. Each of the four *Aktionsart* classes has two possible LSs depending on whether the verb has one or two arguments. For example, single argument stative verbs have a generic LS **predicate'** (x), whereas two argument stative verbs have a generic LS **predicate'** (x, y).

Not only is each verb given a formal representation or LS, but also each clause can also be given a formal representation. For example, (4) is a single argument attributive stative clause whose verb has the LS: **be'** (x, [**dry'**]), which corresponds to the generic LS for two-place stative verbs in Table 1: **predicate'** (x, y). Attributive statives have two argument positions (x and y), but the second argument position is filled by a predicate. The clause specific semantic representation (SR) for (4) is: **be'** (3SG, [**dry'**]).

(5) is an accomplishment with an underlying attributive state. (8a) is the generic LS for such verbs. (8b) is the LS for the verb *kimorikng* 'became dry' in (5), whereas (8c) is the SR for (5).

(8)a. LS for accomplishments with underlying

attributive state: BECOME **be'** (x, [**pred'**])

b. LS for *kimorikng* 'became dry': BECOME **be'** (x, [**dry'**])

c. SR for (5): BECOME **be'** (3SG, [**dry'**])

(6) is an achievement with an underlying condition state. (9a) is the generic LS for such verbs. (9b) is the LS for the verb *ipuda?* 'extinguished', whereas (9c) is the SR for (6).

- (9) a. LS for achievements with  
underlying condition state: INGR **pred'** (x)  
b. LS for *ipuda?* 'extinguished': INGR **extinguish'** (x)  
c. SR for (6): INGR **extinguish'** (3SG)

(7) is an activity. (10a) is the generic LS for such verbs. (10b) is the LS for the verb *limompud* 'ran', whereas (10c) is the SR for (7).

- (10) a. LS for one-place activities: **do'** (x, [**pred'** (x)])  
b. LS for *limompud* 'ran': **do'** (x, [**run'** (x)])  
c. SR for (7): **do'** (3SG, [**run'** (3SG)])

The four basic *Aktionsart* classes describe basic states of affairs (SAs); however, states of affairs can also be induced. Induced SAs are complex in that one SA brings about another. For example, in (11) an activity (a person doing something) induces an accomplishment (coconut becoming dry).

- (11) *Sia ng-orikng piasu.*<sup>10</sup>  
sia η-korɪŋ piasu  
3SG.NOM ISA.ACT-dry coconut  
'She dries coconuts.'

The LS for induced SAs is  $\alpha$  CAUSE  $\beta$ , where  $\alpha$  is a causal state of affairs which induces another SA  $\beta$ . The logical operator CAUSE expresses a causal relationship between two states of affairs. The generic LS for induced accomplishments with an underlying attributive state is provided in (12a). The LS for the verb *ngorikng* 'to dry something' is shown in (12b). The clause specific semantic representation for (11) is provided in (12c).<sup>11</sup>

- (12) a. LS for induced accomplishment:  
**do'** (x, [**pred'** (x)]) CAUSE [BECOME **be'** (y, [**pred'**])]  
b. LS for *ngorikng* 'to dry something':  
**do'** (x,  $\emptyset$ ) CAUSE [BECOME **be'** (y, [**dry'**])]  
c. SR for (11): **do'** (3SG,  $\emptyset$ ) CAUSE  
[BECOME **be'** (*piasu*, [**dry'**])]

*Aktionsart* distinctions are fundamental features of the verbal system in all languages (Van Valin & LaPolla 1997:99). Predicates are classified into different *Aktionsart* classes on the basis of a series of tests which have cross-linguistic validity (Van Valin & LaPolla 1997:93ff.). Some languages, including Bonggi, mark these verb classes overtly with some type of

morphological marker. Thus, the same root can occur with several different affixes which signal different *Aktionsart* classes as seen in Table 2.

Table 2: *Aktionsart* classes associated with root *koring* 'dry'

Surface	Underlying	Meaning	LS	Class
<i>ng-korikng</i>	<i>m-</i> + <i>koriŋ</i>	'AT.ST-dry'	<b>be'</b> (y, [dry'])	state
<i>k-om-oriikng</i>	<i>-om-</i> + <i>koriŋ</i>	'ACL-dry'	BECOME <b>be'</b> (y, [dry'])	accomplishment
<i>ng-oriikng</i>	<i>ŋ-</i> + <i>koriŋ</i>	'ISA.ACT-dry'	<b>do'</b> (x, Ø) CAUSE [BECOME <b>be'</b> (y, [dry'])]	induced accomplishment
<i>kiring-in</i>	<i>koriŋ</i> + <i>-on</i>	'dry-ISA.UND'	<b>do'</b> (x, Ø) CAUSE [BECOME <b>be'</b> (y, [dry'])]	induced accomplishment

In Table 2, the surface forms *ng-oriikng* 'ISA.ACT-dry' and *kiring-in* 'dry-ISA.UND' share the same logical structure: **do'** (x, Ø) CAUSE [BECOME **be'** (y, [dry'])]. Both of these verbs refer to an induced state of affairs in which an activity causes an accomplishment. The difference in form reflects the choice that speakers have in deciding which of the two arguments (x or y) should be the privileged syntactic argument (PSA).

RRG makes reference to only two semantic roles **actor** and **undergoer**. Actor and undergoer are semantic macroroles. They correspond to the two primary arguments in a prototypical transitive construction. Either actor or undergoer may be the single argument of an intransitive verb (Van Valin 1993:43). Actor refers to the entity which instigates, controls or effects the action expressed by the verb. Undergoer indicates the entity affected by the action or state expressed by the verb. The principles for determining the number and nature of macroroles are shown in (13) (cf. Van Valin 1990:227; Van Valin 1993:47; Van Valin & LaPolla 1997:152).

(13) DEFAULT MACROROLE ASSIGNMENT PRINCIPLES:

- a. Number: the number of macroroles a verb takes is less than or equal to the number of arguments in its LS.

1. If a verb has two or more arguments in its LS, it will take two macroroles.
  2. If a verb has one argument in its LS, it will take one macrorole.
- b. Nature: for verbs which take one macrorole,
1. If the verb has an activity predicate in its LS, the macrorole is actor.
  2. If the verb has no activity predicate in its LS, the macrorole is undergoer.

According to principle 13.a.1, the verb in (11) has two macroroles since its LS in (12b) has two arguments (x and y). By principle 13.a.2, the verbs in (4), (5), (6) and (7) have one macrorole since their LSs (e.g. (8b), (9b) and (10b)) only have one argument (x). Similarly, by principle 13.b.1, the single macrorole in (7) is an actor since the LS in (10b) contains the activity predicate *do'*. By principle 13.b.2, the single macrorole in (4), (5) and (6) is an undergoer since their LSs do not contain an activity predicate.

After the number and nature of macroroles have been determined according to (13), argument positions in the LS are mapped to macroroles following the hierarchy in (14) (Van Valin & LaPolla 1997:146). If there is an actor macrorole then the left-most argument on the lower portion of the hierarchy is the actor; if there is an undergoer macrorole then in the default case, the right-most argument is the undergoer.

**(14) Actor-Undergoer Hierarchy**

ACTOR

UNDERGOER

—————→

←—————

Arg of *DO*   1st arg of   1st arg of   2nd arg of   Arg of state  
                   *do' (x,...*   *pred' (x, y)*   *pred' (x, y)*   *pred' (x)*

[→ = increasing markedness of realization of argument  
 as macrorole]

**2. *-an* 'internal experience state'**

Internal experience statives (INTEXP) pertain to internal sensations. They are marked by *-an* as in (1), repeated here as (15).



- (20) *I-puda-adn*                      *ou*                      *lampu.*  
       in-puda?-an                      ou                      lampu  
       REAL-extinguish-ADVER 1SG.NOM lamp  
       'The light went out on me.'

Adversatives are syntactically and semantically marked. Syntactically, they have an extra noun phrase. For example, the adversative construction in (20) has an extra noun phrase in contrast to the non-adversative construction in (19). Semantically, the PSA in adversative constructions is usually adversely affected as in (20).

(21a) is the LS for achievements with an underlying condition stative (cf. (9a)). (21b) is the LS for *i-puda?* 'REAL-extinguished' (cf. (9b)), whereas (21c) is the SR for (19) (cf. (9c)). Achievements with an underlying condition stative have only one argument (e.g. *lampu* 'lamp' in (19)); therefore, they have only one macrorole. By principle 13.b.2, the single macrorole in (21c) is an undergoer since the LS does not contain an activity predicate.

- (21) a. LS for achievements with  
           underlying condition state: INGR **pred'** (x)  
       b. LS for *ipuda?* 'extinguished': INGR **extinguish'** (x)  
       c. SR for (19): INGR **extinguish'** (*lampu*)

Most adversatives in Bonggi are achievements. The verbs in (19) and (20) are both achievements whose LS contains an underlying condition state. (22) is the generic LS for adversative achievements with an underlying condition state. In (22), the achievement is embedded in an internal experience stative.

- (22) LS for adversative achievements with  
       an underlying condition state: **feel'** (x, [INGR **pred'** (y)])

Internal experience statives have two argument positions (x and y), but the second argument position is filled by a predicate; e.g., [INGR **pred'** (y)] in (22) (cf. §2). Only the first argument (x) is available to take a macrorole. Since the second argument position in (22) is filled by a predicate, it cannot function as an argument. In (22), 'y' is an argument of the embedded predicate (i.e., **pred'**), not an argument of **feel'**.

According to principle 13.a.2, (22) has one macrorole since it only has one argument (x) in the LS. In RRG, transitivity is defined in terms of the number of macroroles that a predicate takes. Transitive verbs have two macroroles, whereas intransitive verbs have one macrorole. The LS in (22) shows that



adversatives have one macrorole. All accounts of adversatives treat them as intransitive clauses; i.e., clauses with one macrorole in RRG terms.<sup>12</sup> The SR for (20) is shown in (23) (cf. the SR for (19) in (21c)).

(23) SR for (20): **feel'** (1SG, [INGR **extinguish'** (*lampu*)])

The nature of the single macrorole in adversative constructions is predictable from 13.b.2. Since there is no activity predicate in (23), the single macrorole is an undergoer. Thus, 'x' in (22), more specifically 1SG in (23), is an undergoer. Since the undergoer in (20) is the only possible candidate for PSA, it is assigned the syntactic status of PSA. According to Bonggi case marking rules, the PSA takes nominative case. Because personal pronouns are case marked, '1SG' receives nominative case and the correct form is *ou* '1SG.NOM' as in (20).

As seen in Table 3, many Bonggi adversatives are derived from achievement verbs with an underlying condition stative.

Table 3: 'Adversatives' derived from achievements with an underlying condition stative

Meaning of achievement	<i>mo-</i> 'IRREALIS'	<i>in-</i> 'REALIS'
'spilt'	<i>m-bus-adn</i>	<i>i-bus-adn</i>
'extinguished'	<i>m-puda-adn</i>	<i>i-puda-adn</i>
'dead'	<i>m-piti-adn</i>	<i>i-piti-adn</i>
'split.open'	<i>mu-guab-adn</i>	<i>i-guab-adn</i>
'uncovered'	<i>me-kehas-adn</i>	<i>i-kehas-adn</i>
'snapped.off'	<i>mo-kotop-odn</i>	<i>i-kotop-odn</i>
'snap'	<i>mu-luput-adn</i>	<i>i-luput-adn</i>
'broken.loose'	<i>mu-rupus-adn</i>	<i>i-rupus-adn</i>
'naked'	<i>me-lebas-adn</i>	<i>i-lebas-adn</i>
'miscarry'	<i>m-ega-adn</i>	<i>n-ega-adn</i>
'befallen'	<i>me-desadn</i>	<i>n-desadn</i>
'pinched'	<i>mi-sipit-adn</i>	<i>n-sipit-adn</i>
'trapped'	<i>mu-sulung-an</i>	<i>n-sulung-an</i>
'disgusted.with'	<i>mu-suma-an</i>	<i>n-suma-an</i>
'stuck'	<i>me-tenda-adn</i>	<i>n-tenda-adn</i>
'punctured'	<i>me-tedah-adn</i>	<i>n-tedah-adn</i>
'astray'	<i>me-tirn-an</i>	<i>n-tirn-an</i>
'capsized'	<i>mo-togob-odn</i>	<i>n-togob-odn</i>
'burnt'	<i>mu-tung-an</i>	<i>n-tung-an</i>

When compared with regular achievements, adversatives have an extra syntactic argument. While syntactic valency is increased for adversatives, semantic valency is not increased since adversatives have only one macrorole.

#### 4. *-an* 'benefactive'

Whereas internal experience states (§2) and adversative constructions (§3) have only one macrorole, the *-an* marked verbs described in this section have two macroroles. In RRG, verbs with two macroroles are transitive while verbs with one macrorole are intransitive.

One verb that is commonly used to discuss transitive *-an* marked constructions in Western Austronesian languages is 'give' as in (24). Transfer verbs involve change of possession in which one SA  $\alpha$  induces another SA  $\beta$ . The second SA is an accomplishment with an underlying possessive state. (25a) is the LS for induced accomplishments (cf. (12a)). (25b) is the LS for induced accomplishments with an underlying possessive state. (25c) is the LS for *mori* 'give' which is a member of this verb class. (25d) is the SR for (24).

- (24) *Sia m-ori siidn di diaadn.*  
       sia        $\eta$ -bori       siin   di       diaan  
       3SG.NOM ISA.ACT-give money to.DAT 1SG.NONACT  
       'He will give money to me.'

- (25) a. LS for induced accomplishment:

**do'** (x, [**pred'** (x)]) CAUSE [BECOME **pred'** (y, z)]

- b. LS for induced accomplishment with an underlying possessive state:

**do'** (x, [**pred'** (x)]) CAUSE [BECOME **have'** (y, z)]

- c. LS for *bori* 'to give something':

**do'** (x,  $\emptyset$ ) CAUSE [BECOME **have'** (y, z)]

- d. SR for (24):

**do'** (3SG,  $\emptyset$ ) CAUSE [BECOME **have'** (1SG, *siidn*)]

The  $\alpha$  portion of the LS in (25a) is an activity, while the  $\beta$  portion is an accomplishment. The second argument position in the  $\alpha$  portion of the SR in (25d) is  $\emptyset$  (i.e., not specified) since the causing activity is not specified.

According to principle 13.a.1, the verb *bori* 'give' has two macroroles since its LS in (25c) has three arguments: 'x', 'y' and 'z'. According to (14), 'x' in (25c) is linked to actor since 'x' is the argument of **do'** and 'Arg of **do'** (x,...' is leftmost on

the cline in (14). Furthermore, according to (14), either 'y' or 'z' in (25c) can be an undergoer. In (24) 'z' (*siidn* 'money') is linked to undergoer. This is the unmarked choice for undergoer since 'z' is the second argument in the LS configuration BECOME **have**' (y, z) and '2<sup>nd</sup> arg of **pred**' (y, z)' is rightmost on the cline in (14).

Dative-shift constructions have three direct core arguments, but only two macroroles. (26) is a dative-shift clause whose actor is *sia* '3SG.NOM' and undergoer is *diaadn* '1SG.NONACT'.

- (26) *Sia m-ori diaadn siidn.*  
       *sia       ŋ-bori       diaan       siin*  
       3SG.NOM ISA.ACT-give 1SG.NONACT money  
       '**He** will give me money.'

In (27) and (28) (cf. (3)), the undergoer is the PSA. Sentences (24), (26), (27) and (28) share the SR in (25d), but differ in terms of the linking between syntax and semantics.

- (27) *Siidn biri-idn nya di diaadn.*  
       *siin   bori-on   nya   di   diaan*  
       money give-ISA.UND 3SG.GEN to.DAT 1SG.NONACT  
       '**Money** will be given to me by him.'

- (28) *Ou biri-adn nya siidn.*  
       *ou       bori-an       nya       siin*  
       1SG.NOM give-ISA.MRKD.UND 3SG.GEN money  
       '**I** will be given money by him.'

In (27) the verb *bori* 'give' is suffixed with *-on* 'ISA.UND' indicating an induced SA in which the PSA (i.e., *siidn* 'money') is an unmarked undergoer in terms of the hierarchy in (14).<sup>13</sup> In (28) the same verb is suffixed with *-an* 'ISA.MRKD.UND' indicating an induced SA in which the PSA (i.e., *ou* '1SG') is a marked undergoer in terms of the hierarchy in (14).<sup>14</sup> Direct passives involve the unmarked choice for undergoer (i.e., 2<sup>nd</sup> arg of **pred**' (y, z)), whereas 'locative' passives involve the marked choice for undergoer (i.e., 1<sup>st</sup> arg of **pred**' (y, z)). In irrealis modality both direct passives (e.g. (27)) and local passives (e.g. (28)) are morphologically marked; however, in realis modality only 'locative' passives are morphologically marked for undergoer.

In (27) the 'z' argument (i.e., *siidn* 'money'), not the 'y' argument (i.e., '1SG'), is the undergoer. The 'y' argument (i.e., '1SG') receives dative case in (27) since it is a non-macrorole argument. The preposition *di* 'to.DAT' marks the 'y' argument in the LS configuration ...BECOME **have**' (y, z) when the 'y'

argument is not the undergoer. Notice, however, that when the 'z' argument is not the undergoer as in (28), there is no overt dative case marker. That is, the marked choice for undergoer receives dative case when it is not the undergoer, whereas the unmarked choice for undergoer never receives dative case when it is not the undergoer.

## 5. Conclusion

We return now to the question posed at the beginning of this paper. Do the verbal constructions that are morphologically marked by the suffix *-an* in Bonggi have three different meanings or is there a general invariant meaning?

Philippine-type Western Austronesian verbs take affixes that signal a relationship between the verb and one noun phrase in the clause. Many linguists claim that the primary function of affixes such as *-an* is to signal the thematic role of the NP that is indexed by the verb. In the standard analysis, *-an* attaches to verbs when the PSA is semantically 'locative', 'beneficiary' or 'recipient'. No reference has been made to thematic roles in this paper. In current RRG, thematic roles are merely mnemonics for argument positions in logical structure (Van Valin & LaPolla 1997:128).

Table 4 summarizes the features of the three *-an* marked verb classes that have been described.

Table 4: Features of *-an* marked verbs

	Internal experience state	Adversative	Benefactive
<i>Aktionsart</i> class	state	achievement	induced accomplishment
LS	feel' (x, [pred'])	feel' (x, [INGR pred' (y)])	do' (x, [pred' (x)]) CAUSE [BECOME have' (y, z)]
syntactic arguments	1	2	3
macroroles	1	1	2
PSA	undergoer	undergoer	marked undergoer

The feature that is common to all three classes in Table 4 is 'undergoer'. §4 provided evidence that *-an* is used for marked undergoers, whereas *-on* is used for unmarked undergoers. While benefactive constructions have two potential undergoers, adversative constructions and internal experience states have

only one possible undergoer. However, the notion of marked undergoer also applies to these two types of constructions. As pointed out in §3, adversative constructions are syntactically and semantically marked in that they contain two syntactic arguments but only one macrorole. The adversative constructions described in §3 are marked achievements in contrast to regular achievements. Similarly, the internal experience states described in §2 are marked stative verbs in contrast to attributive states such as *ng-korikng* 'AT.ST-dry' in (4) and Table 2. While I have found over 90 different roots that can occur as attributive states, less than half a dozen roots can occur as internal experience states. Furthermore, the latter are restricted to animate undergoers, whereas the former have no such restriction.

To summarize, the single, general invariant meaning associated with *-an* is 'marked undergoer'. While this meaning is general and abstract, my analysis is objective and replicable. It results from the consistent application of RRG decision principles. The abstract meaning 'marked undergoer' is part of the universal Actor-Undergoer Hierarchy in (14). Without the application of objective principles, one can find no clear answer to the question whether different usages of the same form are distinct or not. This paper has shown that by applying the principles of RRG which are both objective and replicable, one can determine the answer to seemingly intractable questions.

### Notes

<sup>1</sup> I would like to express my gratitude to Paul Kroeger for comments on an earlier version of this paper.

<sup>2</sup> High vowels spread left onto preceding non-high vowels when the root is suffixed. Final nasal consonants are preploded when preceded by a non-nasalized vowel.

<sup>3</sup> Abbreviations include: 1 first person, 3 third person, ACL accomplishment, ACT actor, ACY activity, ADVER adversative, AT attributive, BEN benefactive, DAT dative, GEN genitive, INTEXP internal experience, INGR ingressive, ISA induced state of affairs, LS logical structure, MRKD marked, NOM nominative, NONACT nonactor, pred predicate, PSA privileged syntactic argument, *REAL* *realis*, *SA* *state of affairs*, *SG* *singular*, *SR* *semantic representation*, ST state, UND undergoer.

<sup>4</sup> In the English free translation, the NP in bold is the privileged syntactic argument (PSA).

<sup>5</sup> Final glottal stops are deleted when a suffix is added.

<sup>6</sup> In Bonggi, *-an* has a locative meaning in a limited number of nominalized forms. The old 'locative' function of *-an* has been replaced by a relative clause construction.

<sup>7</sup> Van Valin & LaPolla (1997:100) propose a fifth class which they label active accomplishments. **Active accomplishments** refer to the accomplishment uses of activity verbs.

<sup>8</sup> The prefix *m-* is subject to nasal assimilation.

<sup>9</sup> When *-in-* is infixed before *-om-*, /o/ → Ø and /n/ → Ø. Thus, *-in-* is realized as /i/, while *-om-* is realized as /m/.

<sup>10</sup> The prefix /ŋ/ coalesces with the initial consonant of the root.

<sup>11</sup> In (12c) the second argument position in the  $\alpha$  portion of the semantic representation is Ø (i.e., not specified) since the causing activity is not specified (cf. Van Valin 1990:225).

<sup>12</sup> Van Valin (1993:87) reaches the same conclusion for Japanese. That is, Japanese adversatives are intransitive constructions with one macrorole.

<sup>13</sup> The suffix *-on* is realized as *-idn* due to vowel harmony and nasal preposion.

<sup>14</sup> The suffix *-an* is realized as *-adn* due to nasal preposion.

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