LEXICAL DECOMPOSITION AND LOCATIVE PREDICATES IN BONGGI

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1 Introduction[1]

The purpose of this paper is twofold: 1) to propose an alternative analysis of locative predicates within the theoretical framework of Role and Reference Grammar (RRG); and 2) to provide a semantically based classification of Bonggi locative predicates including both verbs of location and change of location.[2] These two purposes are interconnected in that the proposed alternative analysis is illustrated via the classification of locative predicates.

Within the theory of RRG, locative predicates have traditionally been treated as having two arguments (the located entity and the location), e.g. Foley & Van Valin (1984:53), Jolly (1993:277), Van Valin (1993a:39) and Van Valin & LaPolla (1997:115). Although these predicates have a semantic valency of two, they have a syntactic valency of one in a large number of languages. In order to account for the discrepancy between semantic and syntactic valency, locative predicates have been treated as exceptions in terms of valency correlation within RRG. In the analysis presented here, the location is treated as a predicate, not a referring expression, and therefore these verbs are necessarily intransitive and not exceptions in terms of valency correlation (cf. Van Valin & LaPolla 1997:156).

§2 introduces some key concepts in RRG. §3, the heart of this paper, provides a semantically based classification of Bonggi locative predicates. §4 discusses the advantage of the proposed analysis over previous RRG analyses of locative predicates.

2 Overview of RRG[3]

Predicates are classified into different *Aktionsart* types on the basis of a series of tests which have cross-linguistic validity (Van Valin & LaPolla 1997:93ff.). The tests I use to determine *Aktionsart* types in Bonggi are given in Table 1 (cf. Table 3.1 in Van Valin & LaPolla 1997:94).

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[2] Bonggi is a Western Austronesian language spoken by approximately 1,400 people on Banggi and Balambangan islands in the Kudat District of Sabah, Malaysia.

[3] The reader is referred to Van Valin (1993b) and Van Valin & LaPolla (1997) for elaboration of the theory.

Mark Alves, Paul Sidwell & David Gil, eds. *SEALSVIII: papers from the 8th meeting of the Southeast Asian Linguistics Society (1998)*. Canberra, Pacific Linguistics, 2007, pp.25-43.

Table 1: *Tests for determining* ***Aktionsart*** *type in Bonggi*

Criterion	States	Achieve-ments	Accompl-ishments	Activities	Active accomplishments
1 Occurs with adverb *kosog* 'vigorously'	No	No	No	Yes	Yes
2 Occurs with adverb *peladn-peladn* 'slowly'	No	No	Yes	Yes	Yes
3 Occurs with X for an hour	Yes	No	irrelevant	Yes	irrelevant
4 Occurs with X in an hour	No	No	Yes	No	Yes

A nonverbal locative clause whose predicate is a prepositional phrase is illustrated in (1). The Bonggi clause in (1) differs from its English translation in that there is no copula verb in Bonggi. The absence of a copula verb accounts for the nonverbal nature of such clauses.

(1) *Sia* *di bali* *nya.*
3s.NOM at house 3s.GEN
'**He** is at his house.'[4]

RRG takes the position that clause structure is layered. Table 2 illustrates the relationships between semantic elements and syntactic units involved in the layered structure of the clause (Van Valin & LaPolla 1997:27). The layered structure for (1) is represented by the tree in Figure 1. The clause in Figure 1 consists of the core which contains the nucleus and the argument (*sia* '3s.NOM') of the predicate. The predicate in (1) is a prepositional phrase. Predicative prepositional phrases have a layered structure similar to clauses (Van Valin & LaPolla 1997:53).

Table 2: *The layered structure of the clause*

SEMANTIC ELEMENT(S)	SYNTACTIC UNIT
Predicate	Nucleus
Argument in semantic representation of predicate	Core argument
Non-arguments	Periphery
Predicate + arguments	Core
Predicate + arguments + non-arguments	Clause (= Core + Periphery)

[4] Abbreviations used: ACC accusative, ACH achievement, ACL accomplishment, ACT actor, ACY activity, ARG argument, CAU causative, GEN genitive, INGR ingressive, IRR irrealis, LS logical structure, [MR1] one macrorole, NOM nominative, NP noun phrase, NUC nucleus, P preposition, PP prepositional phrase, pred predicate, PRF perfective aspect, PSA privileged syntactic argument, REAL realis, RRG Role and Reference Grammar, s singular, SR semantic representation and ST stative. The PSA in Bonggi occurs in the English free translation in **bold**. Underlying forms are enclosed in brackets following verbs. The symbols ← and ↔ mean 'assigned/linked.'

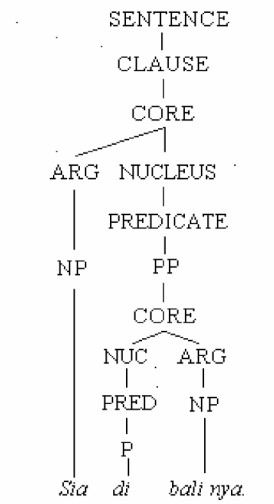

Figure 1: *Layered structure of the clause in (1)*

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). Semantic representations in RRG are based on Dowty's (1979) theory of verbal semantics in which verbs are classified into states, achievements, accomplishments and activities. Table 3 represents the logical structures for the four basic *Aktionsart* classes (cf. Table 3.3 in Van Valin & LaPolla 1997:102).

Table 3: *Logical Structures for basic* ***Aktionsart*** *classes*

Aktionsart type	Logical structure[5]
State	**predicate'** (x) or **predicate'** (x, y)
Achievement	INGR **predicate'** (x) or INGR **predicate'** (x, y)
Accomplishment	BECOME **predicate'** (x) or BECOME **predicate'** (x, y)
Activity	**do'** (x, [**predicate'** (x)]) or **do'** (x, [**predicate'** (x, y)])

Although verbal semantics is primarily concerned with the classification of verbs, nonverbal clauses such as (1) are also given a formal representation. The standard LS for locative statives is shown in (2a). The LS in (2a) indicates that locative stative predicates have the two-place abstract predicate **be-LOC'** (x, y) in their logical structure with 'x' and 'y' being the two arguments (cf. Jolly 1993:277; Van Valin & LaPolla 1997:115). The alternative analysis proposed in this paper is shown in (2b). Both LSs in (2) conform to the second LS for states in Table 3; i.e., **predicate'** (x, y). In (2b) the second argument position 'y' is filled by a predicate which means it cannot function as an argument. (2b) involves an embedded predicate; that is, **pred'** is embedded under **be'**.

[5] The conventions for LSs are as follows: predicates are represented in boldface followed by a prime (**pred'** is an abbreviation for **predicate'**); variables are filled by lexical items from the language being analyzed; and elements in small caps are modifiers of the predicate.

(2) a. LS for locative statives from Van Valin & LaPolla (1997:115): **be-LOC'** (x, y)
b. alternative LS analysis for locative statives: **be'** (x, [**pred'**])

Whereas the proposed LS in (2b) would be the LS for all locative statives, the semantic representation (SR) for (1) would be that shown in (3). In (1) the predicate is the prepositional phrase *di bali nya* 'at his house' and *sia* '3s.NOM' is the entity which is located at the site specified by the predicate.

(3) SR for (1): **be'** (3s, [**be-at'** (*bali* 3s)])[6]

Actor and **undergoer** are the two primary arguments of a transitive predicate, either one of which may be the single argument of an intransitive verb (Van Valin 1993a:43). "Actor and undergoer are generalizations across classes of specific argument positions in logical structure" (Van Valin & LaPolla 1997:142). The relationship between macroroles and argument positions in LS is captured in the Actor-Undergoer Hierarchy in (4) (Van Valin & LaPolla 1997:146). This double hierarchy states that the argument position that is leftmost on the cline will be the actor and the argument position that is rightmost will be the undergoer. This is the unmarked situation; marked assignments to undergoer are possible.

(4) **Actor-Undergoer Hierarchy**

ACTOR UNDERGOER

→

←

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

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

The number of macroroles a verb takes is either Ø, 1 or 2, and is largely predictable from the LS of the verb (Van Valin 1993a:46-47). Default principles for macrorole assignment are shown in (5).

(5) Default Macrorole Assignment Principles:
a. Number: the number of macroroles a verb takes is less than ornequal 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.

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6 (3) provides a rough account of the relationship between the elements of the possessive phrase *bali nya* 'his house'. A more detailed SR would represent this relationship in terms of the predicate **have'** as in **be'** (3s, [**be-at'** (**have'** [3s, <u>*bali*</u>])]) where the underlined item (*bali* 'house') functions as the head of the NP.