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Review of:

Arka, I Wayan. 2003. *Balinese morphosyntax: a lexical-functional approach*. Pacific Linguistics 547. Paperback: ISBN: 0858835371, Pages: xvii + 270 pp, Price: A\$59.00.

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## 1. Overview

This is an important book. It is clearly indispensable for anyone interested in Balinese grammar, but beyond that, it makes major contributions to our understanding of Austronesian syntax and the typology of voice systems in general.

Arka's key claim, and the unifying theme of the book, is that the alternation between Agentive Voice (AV) vs. Objective Voice (OV) is "symmetrical" in the sense of Foley (1998) and Ross (2002). This term is used to indicate that, while the alternation does involve a change of grammatical subject, neither of the voice categories is derived via demotion of a core argument; that is, both AV and OV clauses are fully transitive.

The concept of "symmetrical voice" is not included in most typologies of voice systems, and poses a challenge for many formal syntactic frameworks. Foley coined the term in the context of his discussion of Philippine languages, Tagalog in particular; but as Ross points out (2002:24), its applicability to Tagalog (and other Philippine languages) remains controversial. Arka has provided the clearest, most detailed and most convincing description to date of a symmetric voice language,<sup>1</sup> thus demonstrating that the pattern is a real one which both typologists and theoreticians need to account for.<sup>2</sup>

Arka has also (in this book and in other recent work, e.g. Arka 2000, 2003) given the concept a much firmer empirical basis by clarifying what syntactic "demotion" means. The central claim of the symmetric voice analysis is that both AV and OV clauses contain two (or more) TERMS or CORE ARGUMENTS (i.e., "direct core arguments" in the terminology of Role and Reference Grammar). Terms are essentially the subject and object(s) of the clause; non-terms would include oblique arguments (such as PP recipients in English) and adjuncts. Familiar voice alternations work by demoting a term argument to the status of an oblique argument or adjunct: passives by demoting the agent of a transitive clause, and anti-passives by demoting the patient.

In addition to identifying a list of syntactic properties in Balinese which uniquely identify the subject of a clause, Arka identifies a second set of properties which distinguish terms from

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<sup>1</sup> I personally find the *-al* in *symmetrical* redundant, and will omit it from here on.

<sup>2</sup> Additional data supporting this analysis, and a more condensed version of the arguments, are provided in Wechsler and Arka (1998).

non-terms. These properties, which are discussed in greater detail below, provide a strong empirical basis for claims about termhood and demotion, a basis which has been lacking in much previous discussion of these issues. For example, under the “ergative” analysis of Philippine languages (Gerdt 1980, 1988; Payne 1982; Brainard 1994, 1996), the AV is identified as an “anti-passive.” The key issue here is the syntactic status of the AV patient: is it a term (as claimed under the symmetric voice analysis) or an oblique argument (as claimed under the ergative analysis)? The question has not been decisively resolved, largely because very few termhood properties have been identified for these languages.<sup>3</sup> While the relevant tests in Balinese cannot be adapted directly into (for example) Tagalog, Arka’s work gives us a model for the kind of argument that needs to be made to decide such questions.

Arka describes his book as a slightly revised version of his 1998 PhD dissertation at the University of Sydney. That work was one of a trio of excellent dissertations by native speakers of Balinese studying at Australian universities, the other two being Artawa (1994) and Pastika (1999). Together with Clynes (1995), they provided a remarkable advance in our understanding of Balinese within a brief span of five years.

Arka adopts Lexical-Functional Grammar (LFG) as the framework for his study; but in one sense, that choice does not seem particularly crucial. Aside from the material in chapter 5 (see below), almost none of the discussion is focused on theory-internal issues or couched in theory-specific notations; linguists of any theoretical persuasion will find the discussion easy to follow, for the most part. What is crucial is that LFG, a non-transformational version of generative grammar, does not define grammatical relations like subject and object in terms of phrase-structure positions. Evidence for subjecthood, termhood, etc. comes from the eligibility of various arguments to occur in specific constructions, the kind of evidence that was characteristic of work in Relational Grammar.

Moreover, claims about grammatical relations are (in principle) independent of any claims about word order or constituency. One of the most interesting empirical claims that Arka makes is that an OV clause may contain a V-bar constituent in which the agent is an immediate sister of the verb (pp. 78–95). This is a structural position that is typically occupied by patients (or rather objects) cross-linguistically; and Arka identifies the OV agent as a kind of object. But Arka’s V-bar proposal is not based on his analysis of the grammatical relations. Rather, it is based on traditional constituency tests involving variation in word order, strict adjacency, etc., the kinds of facts that any framework should be expected to account for. If Arka is correct, the Balinese facts would seem to be problematic for frameworks which assume a universal, configurational representation of grammatical relations, and a universal underlying structure in which agents are “external arguments.”

The concept of symmetric voice is so new that there is no standard name available for the grammatical relation of the OV agent, that is, for a non-subject agent which is still a term. Various authors, going back at least to Marantz’s (1984) analysis of syntactic ergativity, have treated such arguments as “objects.”<sup>4</sup> But Arka recognizes that this label strikes many people as an odd way to refer to an agent. He therefore introduces the relation TCOMP (for Term

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<sup>3</sup> See Kroeger (1993:40–48) for some proposals in this area.

<sup>4</sup> Arka cites Kroeger (1993) as his precedent for this usage.

Complement) as an alternative to OBJ. Any non-oblique argument that is not the subject of its clause is a TCOMP, including both OV agents and AV patients.

## 2. Detailed summary

Chapter 1 mentions previous work on Balinese and provides a very brief overview of the rest of the book. Chapter 2 describes a number of tests for grammatical subjecthood in Balinese and uses them to demonstrate that AV and OV clauses do in fact have different grammatical subjects. This shows that “voice” is indeed the appropriate term to describe the contrast between AV and OV. Subjects are unique in that they precede the verb in canonical, pragmatically unmarked word-order, while all other arguments follow the verb. Only subjects can be relativized using the gap strategy. Only subjects can be raised in either the Raising to Subject or Raising to Object constructions. Only subjects can be controllees (in LFG terms), i.e., targets of “Equi-NP deletion,” in constructions like ‘He wants \_\_\_ to be examined by the doctor’ or ‘I wrote Nyoman a letter while \_\_\_ crying’. Among the term arguments, only subjects can be extraposed to sentence-final position, and only subjects can occur in the initial focus position marked with *anak*. Wh- fronting applies only to question words that are subjects; non-subject question words remain *in situ*. All of these tests confirm the fact that the agent is the subject of an AV clause, while the patient is the subject of an OV clause.

The last section in the chapter argues for a partitioning of the intransitive verbs in Balinese into two major classes, unaccusatives vs. unergatives. The classes are largely determined on morphological grounds, but Arka points out semantic correlations which are similar to those found in other languages.

Chapter 3 describes the tests for grammatical termhood in Balinese. The most obvious criterion is categorial: terms are expressed as NPs, while oblique arguments are expressed as PPs. Second, “floating quantifiers” (i.e., quantifiers which are detached from their NP and appear in clause-final position) can only be launched by terms.<sup>5</sup> Other restrictions apply as well: the construction is possible only for definite NPs, and “complex” (i.e., phrasal) quantifiers can only modify animate nouns. But controlling for these factors, Arka demonstrates that all term NPs, but no oblique arguments (e.g. the recipient in 1a), can launch floating quantifiers. (The pronouns in the following examples are unspecified for number, and take on a plural interpretation when modified by the quantifier.)

- (1) a. Anggur-e dumang=a teken okan-okan-ne ibi makejang.<sup>6</sup>  
grape-DEF OV.divide=3 to children-3 yesterday all  
(i) \*?’She distributed the grapes to all her children yesterday.’  
(ii) ‘She distributed all the grapes to her children yesterday.’ [p. 47, ex. 12b]

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<sup>5</sup> This is different from Tagalog and other Philippine languages, in which only subjects can launch floating quantifiers.

<sup>6</sup> Based on Arka’s description, it seems that a second interpretation should be possible for ex. (1a): ‘They all distributed the grapes to their children yesterday.’

- b. Cerik-cerik-e meli jaja-ne ibi onya.  
 children-DEF AV.buy cake-DEF yesterday all  
 (i) ‘The children bought all of the cake yesterday.’  
 (ii) ‘All of the children bought the cake yesterday.’ [p. 46, ex. 9]
- c. Panak-ne baang tiang ia ibi ajak.makejang.  
 child-3 OV.give 1 3 yesterday all  
 (i) ‘We all gave him his child yesterday.’  
 (ii) ‘I gave all of them their children yesterday.’  
 (iii) ‘I gave him all of his children yesterday.’ [p. 49, ex. 19]

Now in addition to the AV and OV clause types, Balinese also has a true passive. The contrast between the transitive OV and the intransitive passive construction is one of the most striking confirmations of the symmetric voice analysis. In both constructions, the grammatical subject is the patient; the contrast lies entirely in the status of the agent. The agent of the passive is optional, and when it does occur it is marked with a preposition. The OV agent, in contrast, is obligatory and always appears as a simple NP. The floating quantifier test confirms that the OV agent is a term (ex. 1c above), whereas the passive agent is an oblique argument (ex. 2).

- (2) Murid-e baang-a teken guru-ne buku makejang.  
 student-DEF give-PASS by teacher-DEF book all  
 (i) ‘All the students were given books by the teachers.’  
 (ii) \*?‘The students were given books by all the teachers.’ [p. 238, ex. 86b]

A third test for termhood comes from eligibility for topicalization using the resumptive pronoun strategy. Arka shows (pp. 50–55) that terms and possessors of terms can be topicalized, but obliques and possessors of obliques cannot. (The resumptive pronoun is obligatory when possessors are topicalized.) As expected, passive agents cannot be topicalized (p. 55, ex. 33b and p. 239, ex. 87b).

Fourth, terms but not oblique arguments can be modified by secondary depictive predicates, as in ‘I cooked the *satay* drunk’ or ‘I served the *satay* raw’ (pp. 55–58). Again, passive agents cannot be so modified (\*‘The *satay* was cooked by Nyoman drunk’; p. 58, ex. 42b).

Finally, the addressee/agent of an imperative clause must be a term argument. There is no special morphology for imperatives. Either AV or OV verb forms may be used as imperatives, so the agent may be either the subject of an AV clause or the “object” (i.e., TCOMP) of an OV clause. But a passive verb may not function as an imperative, unlike Malay/Indonesian where the passive is often used in polite or softened imperatives. Thus passive agents can never be the addressee of an imperative.

Chapter 4 presents Arka’s analysis of Balinese phrase structure, including an extended discussion of the VP constituent and the position of the agent in an OV clause (pp. 78–95). Arka begins with a summary of the LFG formalism for mapping X-bar categories to units of functional structure (pp. 72–76). The summary is clear and well organized, but probably too brief to allow readers with no prior exposure to this framework to feel entirely comfortable

with the notation. However, such readers will not be at any disadvantage in what follows; the remainder of the chapter consists entirely of linguistic evidence for constituency and standard phrase structure diagrams, without any LFG-specific annotations.

Let me briefly summarize the evidence referred to above for the position of the OV agent. Arka shows that the OV verb and its TCOMP agent form a tighter unit than the corresponding AV verb and its TCOMP patient. First, adverbs may intervene between an AV verb and its patient, but not between an OV verb and its agent. Second, the TCOMP patient of an AV verb can be fronted to clause-initial position, e.g. for topicalization or contrastive focus; but this is impossible for the TCOMP agent of an OV verb. Third, when contrastive focus is marked on the verb itself via fronting, an OV verb and its TCOMP agent must move as a unit, as in (3b). This is not possible with an AV verb, which must move alone (4).

- (3) a. Nyoman beli-ang cang nasi ditu.  
 Nyoman OV.buy-APPL 1 rice there  
 ‘I bought Nyoman some rice there.’ [p. 100, ex. 79a, 80]
- b. [Beli-ang cang] Nyoman nasi ditu.  
 OV.buy-APPL 1 Nyoman rice there  
 ‘I DID buy Nyoman some rice there.’
- c. \*Beli-ang Nyoman cang nasi ditu.  
 OV.buy-APPL Nyoman 1 rice there
- (4) a. Cang meli-ang Nyoman nasi ditu.  
 1 AV.buy-APPL Nyoman rice there  
 ‘I bought Nyoman some rice there.’ [p. 100, ex. 79b, 81]
- b. Meli-ang cang Nyoman nasi ditu.  
 AV.buy-APPL 1 Nyoman rice there  
 ‘I BOUGHT Nyoman rice there (I didn’t just take it for free).’
- c. \*?[Meli-ang Nyoman] cang nasi ditu.  
 AV.buy-APPL Nyoman 1 rice there

An interesting feature of the OV construction in Balinese is that the agent must be either a pronoun or an indefinite NP.<sup>7</sup> This fact might suggest a possible competing analysis to the one proposed by Arka, one which would treat the OV agent as being incorporated into the verb as suggested by Clynes (1995). Arka presents 12 pages of arguments against this incorporation analysis (pp. 84–95).

Arka notes (p. 63, fn. 21) that the prohibition against definite NPs as OV agents shows that definiteness *per se* is irrelevant to termhood, at least for Balinese and possibly in general. All of the termhood criteria discussed in chapter 3 demonstrate that an indefinite OV agent is a term. In the debate over Philippine voice, the fact that AV patients are typically indefinite (in

<sup>7</sup> Definiteness also plays a role in the AV construction, with indefinite patient NPs occurring inside the V-bar as immediate sisters of V.

languages like Tagalog) has been the main piece of evidence for viewing them as syntactically demoted, i.e., for identifying the AV construction as an anti-passive. The Balinese facts suggest that these arguments may carry less weight than some authors have assumed.

We noted above that symmetric voice is a challenge to many syntactic frameworks. In fact, one of the earliest explicit discussions of symmetric voice (though not under that label) was Schachter's (1984) paper on Toba Batak. Schachter argued that, since no current framework (at that time) would allow the subject and object of a transitive clause to simply trade places, as seemed to be the case in Toba Batak, these relations must not be part of Batak grammar and therefore cannot be taken to be universal.

The problem of non-demoting voice alternations challenges different frameworks in different ways. Within the Chomskyan paradigm, the expanded X-bar model of the clause provides at least a partial solution by making available distinct specifier positions for the agent and the grammatical subject, as demonstrated by Guilfoyle, Hung and Travis (1992). For frameworks with a highly constrained inventory of grammatical relations, such as Relational Grammar and LFG, the challenge seems even greater, especially when such frameworks include an explicit and detailed model of the "linking" or mapping from semantic roles to grammatical relations such as LFG's Lexical Mapping Theory (LMT).

In chapter 5 Arka develops a revised version of LMT that is compatible with symmetric voice. He points out that ergative languages like Dyirbal must have a different basic mapping rule from accusative languages like English. In a symmetric voice language like Balinese, both of these rules can apply.

I will not attempt to review all of the formal details of the proposal, which are somewhat complex; but a crucial component is the adoption of a "syntacticized" model of argument structure, building on the work of Manning (1996). In most LFG work, argument structure is represented as a list of the semantic roles that a verb assigns to its arguments (agent, patient, recipient, instrument etc.). Arka starts with a richer model of semantic structure, based on Jackendoff (1990), and projects that onto a leaner model of argument structure. His argument structure contains only minimal semantic information, namely the relative semantic prominence of the arguments, rather than specific semantic role labels. In addition, it contains minimal syntactic information, namely which arguments are terms and which are obliques. The mapping algorithm works in two stages: first from semantic structure to argument structure, and then from argument structure to grammatical relations.

This conception of argument structure plays a crucial role in chapters 6 and 7, both of which deal with binding and morpholexical processes. Chapter 6 shows that possible antecedents for a reflexive pronoun cannot be determined strictly on the basis of relative semantic prominence, as has been claimed for a number of Philippine languages, because passive agents cannot bind term arguments. A modified version of the LFG binding theory is proposed which (again building on Manning 1996) includes the principle that a non-term cannot bind a term. Binding potential is determined by the "a-command" relation, defined on syntacticized argument structures as discussed above. The remainder of the chapter discusses

causatives and applicatives, both defined as operations on argument structure. Balinese has two applicative suffixes, *-ang* and *-in*, roughly analogous to Malay *-kan* vs. *-i*. Both of these suffixes can also be used to derive causatives, with the syntactic valence of the derived form depending on the choice of suffix when the root is transitive.

Chapter 7 discusses further issues in binding theory and then examines the passive construction in some detail. Chapter 8 provides a very helpful summary of the major conclusions of the book.

## Conclusion

I said that this is an important book. I do not, of course, claim that it is a perfect book. For example, the table of contents is very detailed, but the book would have been much easier to use if it contained an index as well.

Like most dissertations, there are some rough spots in the prose and occasional lapses in argumentation. One such lapse occurs toward the end of chapter 3 in a small section entitled “Symmetricality” (pp. 64–66). The issue here is not symmetric voice but apparently, in light of the reference to Donohue (1996), the question of whether Balinese is a “symmetric object” language in the sense of Bresnan and Moshi (1990). A symmetric object language is one in which both objects in a ditransitive (double object) construction may exhibit the properties typically associated with primary objecthood, such as triggering object agreement and eligibility for passivization. Arka presents some passivization examples (p. 64, ex. 54) which suggest that this may indeed be the case in Balinese. But the remainder of the section focuses on termhood properties, which are irrelevant since both objects must be terms whether the language is symmetric or not.

Taken as a whole, however, the merits of the book far outweigh its minor deficiencies. Arka’s explicit and detailed description of the Balinese voice system should provide a model, or at least a starting point, for work on typologically similar languages. A number of other languages in insular southeast Asia seem to share many features of the Balinese system: a symmetric two-voice system (with OV marked by  $\emptyset$ ), plus (in some cases) a true passive or some other voice-like category, and one or more distinct applicative suffixes which co-occur freely with the voice affixes. Arka and Manning (1998) argue that Indonesian is a language of essentially this type. Some varieties of Sama-Bajau seem quite similar. A number of Borneo languages seem to have symmetric two-voice systems, e.g. Begak and Melanau, though they do not appear to have a true passive. Toba Batak and Karo Batak also show strong similarities.

In addition, as emphasized above, Arka’s work represents a major advance in the study of symmetric voice in general.

## References:

Arka, I Wayan. 2000. Voice and being core: Evidence from (eastern) Indonesian languages. presented as an invited paper at the AFLA7 Conference, Amsterdam, May 2000.

- Arka, I Wayan. 2003. Voice systems in the Austronesian languages of Nusantara: Typology, symmetry and Undergoer orientation. *Linguistik Indonesia* 21(1):113–39.
- Arka, I Wayan and Christopher Manning. 1998. Voice and grammatical relations in Indonesian: A new perspective. In *Proceedings of the LFG98 Conference*, ed. by Miriam Butt and Tracy King. Stanford CA: CSLI Publications.
- Artawa, I Ketut. 1994. Ergativity and Balinese syntax. Ph.D dissertation, La Trobe University.
- Brainard, Sherri. 1994. Voice and ergativity in Karao. Ph.D. dissertation, University of Oregon.
- Brainard, Sherri. 1996. Why the ‘focused NP’ is not the subject in Philippine languages: Evidence from Karao. *Philippine Journal of Linguistics* 27:1–47.
- Bresnan, Joan and Lioba Moshi. 1990. Object asymmetries in comparative Bantu syntax. *Linguistic Inquiry* 21:147–185.
- Clynes, Adrian. 1995. Topics in the phonology and morphosyntax of Balinese. Ph.D dissertation, Australian National University.
- Donohue, Mark. 1996. Bajau, a symmetrical Austronesian language. *Language* 72(4):782–93.
- Foley, William A. 1998. Symmetrical voice systems and precategoriality in Philippine languages. Paper presented at the workshop on Voice and Grammatical Functions in Austronesian Languages, LFG98, Brisbane, Australia.
- Gerdts, Donna B. 1980. Towards an ergative analysis of Ilokano. Paper presented at the Canadian Linguistic Society conference, Ottawa.
- Gerdts, Donna B. 1988. Antipassives and causatives in Ilokano: evidence for an ergative analysis. In *Studies in Austronesian Linguistics*, ed. by Richard McGinn, 295–321. Athens, OH: Ohio University Press.
- Guilfoyle, Eithne, Henrietta Hung and Lisa Travis. 1992. SPEC of IP and SPEC of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10:375–414.
- Jackendoff, Ray S. 1990. *Semantic structures*. Cambridge, MA: MIT Press.
- Kroeger, Paul R. 1993. *Phrase structure and grammatical relations in Tagalog*. Stanford CA: CSLI Publications.
- Manning, Christopher. 1996. *Ergativity: Argument structure and grammatical relations*. Stanford, CA: CSLI Publications.
- Marantz, Alec. 1984. *On the nature of grammatical relations*. Linguistic Inquiry Monographs No. 10. Cambridge, MA: MIT Press.
- Pastika, I Wayan. 1999. Voice selection in Balinese narrative discourse. PhD dissertation, Australian National University.
- Payne, Thomas E. 1982. Role and reference related subject properties and ergativity in Yup’ik Eskimo and Tagalog. *Studies in Language* 6(1):75–106.

- Ross, Malcolm D. 2002. The history and transitivity of Western Austronesian voice and voice marking. In *The historical and typological development of Western Austronesian voice systems*, ed. by Fay Wouk and Malcolm D. Ross, 17–62. Canberra: Pacific Linguistics.
- Schachter, Paul. 1984. Semantic-Role-Based Syntax in Toba Batak. In *Studies in the Structure of Toba Batak*, ed. by Paul Schachter, 122–49. UCLA Occasional Papers in Linguistics No. 5.
- Wechsler, Stephen and I Wayan Arka. 1998. Syntactic ergativity in Balinese: An argument structure based theory. *Natural Language and Linguistic Theory* 16(2):387–441.