

Voice Alternations in Bonggi

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1. Introduction

Bonggi, a Western Austronesian language of Sabah, Malaysia, has three ways to express semantically transitive clauses, as seen in (1a) (cf. (2a)), (1b) (cf. (2b)) and (1c) (cf. (2c)).

- (1) a. *Sia ngo-lompukng asu na.*¹
3SNOM ACT-fat dog the
'He is fattening the dog.'
- b. *Asu na lumpung-un nya.*
dog the fat-UND 3SGEN
'He is fattening *the dog*.'
- c. *Asu na nuan nya ngo-lompukng.*
dog the PASS 3SGEN ACT-fat
'*The dog* is being fattened by *him*.'
- (2) a. *Sia nga-labad asu na.*
3SNOM ACT-hit dog the
'He is hitting the dog.'
- b. *Asu na labad-adn nya.*
dog the hit-UND 3SGEN
'He is hitting *the dog*.'
- c. *Asu na nuan nya nga-labad.*
dog the PASS 3SGEN ACT-fat
'*The dog* is being hit by *him*.'

Like other Philippine-type languages, the verb cross-references one nominal in every verbal clause. In (1a) and (2a) the verb cross-references the actor and is in active voice, whereas in (1b) and (2b) the verb cross-references the undergoer and is in passive voice. Clauses like (1a), (1b), (2a) and (2b) are common in Philippine languages, and I argue below that the cross-referenced argument in these clauses is the syntactic pivot. However, clauses

such as (1c) and (2c) are uncommon in Philippine languages. In these clauses the verb cross-references the actor, but I show below that the syntactic subject is the undergoer which is cross-referenced by the passive auxiliary *man*. Such clauses are periphrastic passive constructions. Thus, under my analysis, Bonggi has two types of passive constructions, undergoer cross-referenced constructions as in (1b) and (2b) and periphrastic passive constructions as in (1c) and (2c).

The primary goal of this paper is to demonstrate that Bonggi has a canonical passive construction (e.g. (1c) and (2c)) which is distinct from the undergoer cross-referenced construction (e.g. (1b) and (2b)). This goal is interesting for two reasons. First, Bonggi is a Philippine-type language and Philippine languages do not generally have a passive construction distinct from the cross-referencing system. In fact, much of the argument surrounding passives in Philippine languages has centered around the issue of whether undergoer cross-referenced constructions such as (1b) and (2b) are passives or not. Second, many different types of constructions are referred to as 'passive' in the linguistic literature. This variation in construction type has led a number of linguists to the conclusion that there is no single property which all the so-called 'passive' constructions have in common; yet, other linguists have come to the conclusion that there is a passive prototype which has been called various names including true passive, canonical passive, prototypical passive and personal passive. This is the type of passive that I describe here for Bonggi, not impersonal passives, lexical passives, mediopassives, reflexive passives, adversative passives, or any other noncanonical constructions which have been labelled 'passive' in the literature.

I begin in §2 with a description of the formal properties of active constructions and both types of passive constructions. §3 discusses functional properties of these three types of constructions, and §4 reviews some implications of this paper for Philippine language typology.

2. Formal properties of active and passive clauses

Voice alternations consist of two or more different ways of presenting a verb with its arguments. (3a) and (3b) illustrate an alternation between active and passive voice in English. In active voice the subject is the actor as in (3a) where the subject (*he*) is the actor. In passive voice the subject is the undergoer as in (3b) where the subject (*the dog*) is the undergoer.

- (3) a. *He is fattening the dog.*
 b. *The dog is being fattened by him.*

This section briefly compares the formal properties of active constructions, undergoer cross-referenced constructions, and periphrastic passive constructions. The formal differences between actor cross-referenced constructions (e.g. (1a) and (2a)), undergoer cross-referenced constructions (e.g. (1b) and (2b)), and periphrastic passive constructions (e.g. (1c) and (2c)) are the result of choosing which argument is the subject. Differences in subject choice result in differences in verbal cross-referencing morphology, case assignment, and word order. Thus, the primary concern is establishing which argument is the syntactic subject in these constructions. §2.1 discusses morphological properties of these constructions, whereas §2.2 discusses syntactic properties of these constructions.

Throughout this section I usually refrain from using the term passive for undergoer cross-referenced constructions such as (1b) and (2b); instead, I use the noncontroversial term undergoes cross-referenced constructions (cf. §3).

2.1. *Morphological properties*

Two aspects of morphology are dealt with: verbal cross-referencing and nominal case marking. My assumption is that these two aspects of morphology function together to signal which argument is the subject. §2.1.1 shows that the subject is the argument which is cross-referenced by the verb, whereas §2.1.2 shows that some subjects occur in nominative case while others occur in genitive case.

2.1.1. *Verbal cross-referencing*

The unmarked choice for subject in Bonggi is the actor. When the subject of a transitive verb is the actor as in (1a) and (2a), the verb is prefixed by *ng-* 'ACT'.² The marked choice for subject is the undergoer. When the subject of a transitive verb is the undergoing as in (1b) and (2b), the verb is suffixed by *-ən*.³ (1a) and (1b) illustrate imperfective verbs; the same verbs in perfective aspect are illustrated in (4a) and (4b). As seen in (4b), transitive verbs which cross-reference the undergoer are not suffixed in perfective aspect; instead, perfective aspect is marked by the infix *-in-* which is realized as [i] in (4b).⁴

- (4) a. *Sia i-ngo-lompukng asu na.*
 3SNOM PERF-ACT-fat dog the
 'He fattened the dog.'
- b. *Asu na l-i-ompukng nya.*
 dog the -PERF.UND-fat 3SGEN
 'He fattened *the dog*.'

In languages which have active and passive voice alternations, the passive is normally signalled by special morphology on the verb or in the verb phrase. The most common way of expressing the passive is attaching an affix to the verb (Haspelmath 1990:28). However, some languages, including English and Bonggi, have periphrastic or analytic passives which are constructed by combining an auxiliary verb with the verb.

In active constructions (e.g. (1a), (2a), (4a), and (5a)) and periphrastic passive constructions (e.g. (1c), (2c), and (5b)) the morphology on the verb always cross-references the actor as seen by the presence of the prefix *ngo-* 'ACT' in (5a) and (5b). However, in periphrastic passive constructions the presence of a passive auxiliary such as *nuan* in (5b) indicates that the subject (e.g. *sia* '3SNOM' in (5b)) is an undergoer.

- (5) a. *Ou ngo-lompukng nya.*
 1sNOM ACT-fat 3sACC
 'I am fattening him.'
- b. *Sia nu-an ku ngo-lompukng.*
 3sNOM PASS-UND 1sGEN ACT-fat
 'He is being fattened by me.'

Three different forms of the passive auxiliary are used to cross-reference undergoers: *nuan* which is used for imperfective aspect (e.g. (1c), (2c), and (5b)), *inamu* which is used for perfective aspect (e.g. (6)), and *nua?* (e.g. (7)). These three forms of the passive auxiliary are morphologically related with the initial /a/ of the root being deleted when the root is suffixed. Synchronically, the root is *amu* with *-ən* used for imperfective aspect (e.g. (1c), (2c), and (5b)), *-in-* used for perfective aspect (e.g. (6)) and *-əʔ* used for imperatives (e.g. (7)).⁵

- (6) *Barabm pa in-anu nya i-ngo-lompukng.*
 many more PERF.UND-PASS 3SGEN PERF-ACT-fat
 'Many more were fattened by him.'

- (7) *Dei nu-a? ngo-lompukng!*
 don't PASS-UND.IMP ACT-fat
 'Don't fatten *it!*'

There are at least two arguments for the passive auxiliary being a main verb which takes a verbal complement. First, the passive auxiliary is different from other auxiliaries in that it is inflected like main verbs for mood and aspect, whereas other auxiliaries are not inflected. Second, if passive auxiliaries are not main verbs then in every periphrastic passive construction there is a cross-referencing conflict between the passive auxiliary which cross-references an undergoer and the verb which cross-references an actor. On the other hand, if passive auxiliaries are main verbs then the morphology on the verb itself is sufficient for distinguishing actor subjects from undergoer subjects. That is, a main verb analysis for passive auxiliaries means that passives are complex sentences consisting of two clauses with the active clause embedded as a complement of the passive clause. For example, in (5b) *ku* '1sGEN' is the subject of the embedded clause *ku ngolompukng* 'I fatten', while *sia* '3SNOM' is the subject of the main verb *nuan*.

To summarize, given the main verb analysis presented here for passive auxiliaries, the cross-referencing verb morphology selects one argument which is shown in §2.2 to be the syntactic subject.

2.1.2. *Nominal case marking*

NPs are minimally marked for case in Bonggi. Pronouns and personal nouns are case marked, but common nouns are not.⁶ Therefore, *sia* 'he/she' is case marked in (1a) since it is a pronoun, but *asu na* 'the dog' is not case marked in (1a), (1b), and (1c) since it is a common noun.

Table 1 contrasts three partially distinct sets of personal pronouns. As seen in Table 1, third-person plural pronouns are not case marked. They have the same form regardless of their syntactic function which is determined by their position in the syntax.

Table 1: Bonggi Personal Pronouns

	NOMINATIVE	GENITIVE	ACCUSATIVE
1 singular	ou	ku	diaadn
1 dual	kita	ta	dihita
1 plural-inclusive	kiti	ti	dihiti
1 plural-exclusive	ihi	mi	dihi
2 singular	aha	nu	diha
2 plural	uhu	nyu	dihu
3 singular	sia	nya	nya
3 plural	sigelama	sigelama	sigelama

Not only does the inherent lexical content of NPs play an important role in the formation of Bonggi case marking rules, so does the syntactic construction in which NPs occur. Although one might expect that all cross-referenced arguments which are capable of receiving case (i.e. pronouns and personal nouns) would occur in nominative case as in (1a), (2a), and (4a) where the actor (*sia* '3SNOM') occurs in nominative case, in a number of syntactic constructions the cross-referenced argument is in genitive case as in (8a) where the actor (*nya* '3SGEN') occurs in genitive case.

- (8) a. *Bas nya ngo-lompukng asu na.*
 PAST 3SGEN ACT-fat dog the
 'He already fattened the dog.'

The following is a brief overview of some syntactic constructions whose cross-referenced argument is in nominative case and others whose cross-referenced argument is in genitive case.

In main declarative clauses, if the cross-referenced argument is case marked (i.e. if it is a pronoun or a personal noun), it occurs in nominative case regardless of whether it is an actor in active voice constructions such as (1a) (cf. also (2a) and (4a)) or an undergoer in either periphrastic passive constructions such as (5b) or undergoer cross-referenced constructions such as (9). In all these examples, the cross-referenced argument (*sia* '3SNOM') occurs in nominative case.

- (9) *Sia k-i-ohol asu.*
 3SNOM -PERF.UND-bite dog
 'He was bitten by a dog.'

Cross-referenced arguments also occur in nominative case in imperative clauses. For example, (10) is an imperative clause in which the actor (*uhu* '2pNOM') is in nominative case. The verbal prefix *pong-* indicates that the verb is transitive, imperative mood, and the cross-referenced argument is an actor. Undergoer cross-referenced arguments also occur in nominative case in imperative clauses as in (11a) and (11b) where the undergoer (*sia* '3SNOM') is in nominative case. The verbal suffix *-əʔ* (realized as [oʔ]) indicates that the verb is transitive, imperative mood, and the cross-referenced argument is an undergoer.⁷

(10) *Dei uhu pongo-lompukng asu na!*
 don't 2pNOM IMP.ACT-fat dog the
 'Don't *you all* fatten the dog!'

(11) a. *Dei kohol-oʔ sia!*
 don't bite-UND.IMP 3SNOM
 'Don't bite *him!*'

b. *Dei nyu kohol-oʔ sia!*
 don't 2pGEN bite-UND.IMP 3SNOM
 'Don't you all bite *him!*'

In imperatives the actor is always the addressee and often both the actor and the undergoer are omitted (e.g. (7)). In imperative constructions second person singular addressees are omitted (e.g. (11a)), whereas an overt pronoun is required to indicate a second person plural addressee (e.g. (10) and (11b)). In (10) the actor (*uhu* '2pNOM') is in nominative case since it is cross-referenced by the verb, whereas in (11b) the actor (*nyu* '2pGEN') is in genitive case since the verb cross-references the undergoer (*sia* '3SNOM'). In periphrastic passives such as (12) actors occur in genitive case (e.g. *nyu* '2pGEN') since the main undergoer occurs in these imperative constructions, it is in nominative case (e.g. *ou* '1sNOM' in (13)). If both the actor and the undergoer occur in imperative periphrastic passive constructions as in (14), the actor (*nyu* '2pGEN') precedes the undergoer (*sia* '3SNOM').

(12) *Dei nu-aʔ nyu n-uud!*
 don't PASS-UND.IMP 2pGEN ACT-help
 'Don't *you all* help!'

(13) *Nu-aʔ ou n-uud!*
 PASS-UND.IMP 1sNOM ACT-help
 'Help *me!*'

- (14) *Dei nu-a? nyu sia ng-anggap sikng musu nyu!*
 don't PASS-UND.IMP 2pGEN 3sNOM ACT-regard as enemy your
 'Don't **you all** regard **him** as your enemy!'

Some adverbial subordinate clauses have cross-referenced arguments which are in nominative case, while other adverbial subordinate clauses have cross-referenced arguments which are in genitive case. For example, the adverbial clause *bakng sia nuud* 'if he helps' in (15) contains a nominative case pronoun (*sia* '3sNOM'), whereas the adverbial clause *atakng nya nuud* 'while he helps' in (16) contains a genitive case pronoun (*nya* '3sGEN'). Following Thompson & Longacre (1985:177ff.), adverbial subordinate clauses in Bonggi are subdivided into two groups: clauses which are substitutable for by a single word, and those which are not. Those which are substitutable for by a single word include: time, location, and manner clauses. If a cross-referenced argument occurs in a time, location, or manner clause, it is always in genitive case (e.g. *nya* '3sGEN' in (16)). Adverbial clauses which are not substitutable for by a single word include: conditional, purpose, reason, concessive, and substitutive clauses. If a cross-referenced argument occurs in one of these clauses, it is always in nominative case (e.g. *sia* '3sNOM' in (15)).

- (15) *Bakng sia n-uud, nd-ou mpanu.*
 if 3sNOM ACT-help not-1sNOM go
 'If **he** helps, **I** am not going.'
- (16) *Atakng nya n-uud, nd-ou mpanu.*
 while 3sGEN ACT-help not-1sNOM go
 'While **he** helps, **I** am not going.'

Undergoer cross-referenced arguments also occur in nominative case in adverbial clauses which are not substitutable for by a single word as in (17) where the undergoer (*sia* '3sNOM') is in nominative case (cf. the actor in (15)).⁸ Furthermore, undergoer cross-referenced arguments occur in genitive case in adverbial clauses which are substitutable for by a single word as in (18) where the undergoer (*nya* '3sGEN') is in genitive case (cf. the actor in (16)).

- (17) *Bakng sia koho-idn, nd-ou mpanu.*
 if 3sNOM bite-UND not-1sNOM go
 'If **he** is bitten, **I** am not going.'

- (18) *Atakng nya k-i-ohol, na saa tobos kerai.*
 while 3SGEN -PERF.UND-bite the spouse away work
 'While *he* was bitten, *the spouse* was away working.'

Adverbial clauses which are not substitutable for by a single word can occur in periphrastic passive constructions as in (19) (cf. (15) and (17)). However, adverbial clauses which are substitutable for by a single word cannot occur in periphrastic passive constructions as seen in (20) (cf. (16) and (18)).

- (19) *Bakng sia nu-an ku m-ori, nd-ou mpanu.*
 if 3SNOM PASS-UND 1SGEN ACT-give, not-1SNOM go
 'If *he* is given it by *me*, *I* am not going.'

- (20) **Atakng nya nu-an ku m-ori, sia senang ati.*
 while 3SGEN PASS-UND 1SGEN ACT-give 3SNOM happy
 'While *he* is given it by *me*, *he* will be happy.'

In some WH-questions, the question word is the NP which is cross-referenced by the verb. For example, the question word *osi* 'who' in (21) refers to the actor which is cross-referenced by the verb. In other WH-questions, the question word is not cross-referenced by the verb. For example, the question word *mipa?* 'when' in (22) is not cross-referenced by the verb; instead, the verb cross-references the actor (*nya* '3SGEN') which is in genitive case. Whenever a WH-question word is not cross-referenced by the verb, the cross-referenced argument occurs in genitive case if the argument is case marked (e.g. *nya* '3SGEN' in (22)).

- (21) *Osi ngo-lompukng asu na?*
 who ACT-fat dog the
 'Who is fattening the dog?'

- (22) *Mipa? nya ngo-lompukng asu na?*
 when 3SGEN ACT-fat dog the
 'When is *he* fattening the dog?'

Undergoer cross-referenced arguments also occur in genitive case in WH-questions in which the question word is not the cross-referenced argument as in (23) where the undergoer (*nya* '3SGEN') is in genitive case (cf. the actor in (22)). However, WH-questions in which the question word is not the cross-referenced argument cannot occur in periphrastic passive constructions as seen in (24) (cf. (22) and (23)).

- (23) *Mipa?* *nya* *k-i-ohol?*
 when 3SGEN -PERF.UND-bite
 'When was **he** bitten?'
- (24) **Mipa?* *nya* *nu-an* *nu* *m-ori?*
 when 3SGEN PASS-UND 2SGEN ACT-give
 'When is he to be given it by you?'

First-person, second-person, and third-person singular genitive case pronouns can occur as enclitic pronouns in the second position of verb phrases following tense auxiliaries such as *bas* in (25a). This contrasts with nonclitic nominative case constructions as in (25b).

- (25) a. *Bas* *nya* *ngo-lompukng* *asu* *na.*
 PAST 3SGEN ACT-fat dog the
 '**He** already fattened the dog.'
- b. *Sia* *bas* *na* *ngo-lompukng* *asu* *na.*
 3SNOM PAST already ACT-fat dog the
 '**He** already fattened the dog.'

Undergoer cross-referenced arguments can also occur in genitive case following a tense auxiliary as in (26a) where the undergoer (*nya* '3SGEN') is an enclitic pronoun in genitive case (cf. the actor in (25a)). (26a) contrasts with nonclitic constructions such as (26b) in which the undergoer is in nominative case (cf. (25b)).

- (26) a. *Bas* *nya* *koho-idn.*
 PAST 3SGEN bite-UND
 '**He** has already been bitten.'
- b. *Sia* *bas* *na* *koho-idn.*
 3SNOM PAST already bite-UND
 '**He** has already been bitten.'

Arguments which are cross-referenced by periphrastic passives can only occur in nominative case. Thus, enclitic genitive case pronouns cannot follow tense auxiliaries in these constructions as seen in (27a) (cf. (25a) and (26a)); instead, nonclitic nominative case pronouns must be used as in (27b) (cf. (25b) and (26b)).

- (27) a. **Bas nya in-anu ku m-ori.*
 PAST 3SGEN PERF.UND-PASS 1SGEN ACT-give
 'He already has been given it by me.'
- b. *Sia bas na in-anu ku m-ori.*
 3SNOM PAST already PERF.UND-PASS 1SGEN ACT-give
 'He already has been given it by me.'

To summarize, NPs are minimally case marked in Bonggi. The cross-referencing verb morphology described in §2.1.1 selects one argument which is shown in §2.2 to be the syntactic subject. This section has shown that some cross-referenced arguments (i.e. subjects) occur in nominative case while others occur in genitive case. On the one hand, certain active voice constructions and undergoer cross-referenced constructions have nominative case subjects, whereas others have genitive case subjects. On the other hand, case marked arguments which are cross-referenced by periphrastic passives (*nuan*, *inamu*, or *nuaʔ*) only occur in nominative case as in (5b), (14), (19), and (27b) where the undergoer (*sia* '3SNOM') is in nominative case. The restriction of periphrastic passive constructions to nominative case subjects is a restriction on the type of clause that can be passivized (cf. Givón 1990:576).

Nominative case is used for cross-referenced arguments in: 1) main declarative clauses (e.g. *sia* '3SNOM' in (25b), (9), and (5b));⁹ 2) imperative clauses (e.g. *uhu* '2pNOM' in (10), *sia* '3SNOM' in (11a) and *ou* '1sNOM' in (13));¹⁰ and 3) adverbial clauses which are not substitutable for by a single word (e.g. *sia* '3SNOM' in (15), (17), and (19)).¹¹

Genitive case subjects occur in constructions which cannot be passivized in a periphrastic passive construction. Genitive case is used for cross-referenced arguments (subjects) in: 1) adverbial clauses which are substitutable for by a single word (e.g. *nya* '3SGEN' in (16) and (18));¹² 2) WH-questions in which the question word is not the cross-referenced argument (e.g. *nya* '3SGEN' in (22) and (23));¹³ and 3) following a tense auxiliary (e.g. *nya* '3SGEN' in (25a) and (26a)).¹⁴

Constructions that take nominative case subjects and those that take genitive case subjects correspond to constructions that can be passivized using a periphrastic passive and those that cannot.

2.2. Syntactic properties

Morphological properties of subjects were described in §2.1. Unmarked subjects normally receive nominative case and are

cross-referenced by the verb morphology. However, as shown in §2.1.2, nominative case arguments are not an obligatory element of every clause, and, in fact, the subject of some constructions can only receive genitive case.

§2.1.1 argued that passive auxiliaries are main verbs which results in periphrastic passive constructions being complex sentences consisting of two clauses with an active clause embedded as a complement of the passive clause. If passives are not main verbs, then subjects in periphrastic passive clauses (e.g. (1c) and (2c)) are not cross-referenced by the verb. Thus, according to a nonmain verb analysis of passive auxiliaries, neither verb morphology nor nominal morphology would be able to uniquely identify subjects.

Since subject is the syntactically privileged argument in a system of grammatical relations, grammatical subjects need to be decided on syntactic criteria rather than morphological, semantic, or discourse-pragmatic criteria. This section deals briefly with three syntactic properties of subjects: word order (§2.2.1), deletion under coreference (§2.2.2), and relativization (§2.2.3).

2.2.1. *Word order*

Bonggi is strongly VO with both VSO and SVO word order. The factors which govern the choice between VSO and SVO are not really relevant for this paper. The important fact for our purposes is that if two core arguments occur in a clause, the first core argument is the subject (S) regardless of whether it is an actor or an undergoer. Thus, returning to the examples in (1a), (1b), and (1c), the subject is the first core argument in all three of these clauses. In (1a) the subject is an actor, but in (1b) and (1c) the subject is an undergoer.

The claim that the first core argument is always the subject if two core arguments occur in a clause is not equivalent to saying that the first NP is always the subject. For example, peripheral NPs such as temporal nouns can occur before the subject. Nor is this claim equivalent to saying that the first core argument is always the subject since subjects can be deleted due to zero anaphora resulting in clauses with one core syntactic argument that is not the subject. Finally, although the subject is normally the first core argument in both active and passive voice constructions, there are two other constructions in which an NP other than the subject can occur in sentence-initial position. They are topicalizations as in (28a) and left-dislocations as in (28b). In (28a) the actor subject is deleted due to zero anaphora, and the undergoer has been fronted. In left-dislocations such as (28b), the initial NP

(*diaadn* '1sACC') is external to the clause and is set off from the clause by a pause.

- (28) a. *Siidn m-ori na.*
 money ACT-give already
 'Money, *he* gave.'
- b. *Diaadn, nd-ou molou.*
 1sACC not-1sNOM embarrassed
 'As for me, *I* am not embarrassed.'

Imperative clauses whose subject is an undergoer (e.g. (11b) and (14)) are the lone exception to the rule that the first core argument is always the subject. If the actor/addressee occurs in an imperative construction, it always precedes the undergoer.

2.2.2. Deletion under coreference

The subject is always the target of deletion in complements regardless of whether it is an actor or an undergoer. For example, in (29a) the subject of the complement verb (*kiid* 'see') is an actor and coreferential with the subject of the matrix verb (*mingin* 'want'), so the subject is obligatorily deleted (\emptyset) in the complement.¹⁵ In the same way, in (29b) the subject of the complement verb (*midadn* 'be seen') is an undergoer and coreferential with the subject of the matrix verb (*mingin* 'want'), so the subject is obligatorily deleted in the complement. In (29a) the deleted argument of the complement verb is the actor, whereas in (29b) the deleted argument of the complement verb is the undergoer.

As shown in (29c), the subject of the complement cannot occur if it refers to the same argument as the subject of the matrix verb. However, (29c) is grammatical if the meaning is changed to 'He wants her to see me', in which case the subject of the complement is not coreferential with the subject of the matrix verb. In fact, deletion cannot occur if the subject of the complement is different from the subject of the matrix verb as in (29d). In (29d) the subject of the complement has been raised to become the 'direct object' of the matrix verb *mingin* 'want'. In all the examples in (29), the subject of both the matrix verb and the complement verb is the argument which is cross-referenced by the verb.

- (29) a. *Sia m-ingin \emptyset k-iid diaadn.*
 3sNOM ACT-want ACT-see 1sACC
 'He wants to see me.'

- b. *Sia m-ingin Ø m-id-adn diaadn.*
 3SNOM ACT-want IMPERFECTIVE-see-UND 1sACC
 'He wants to be seen by me.'
- c. **Sia₁ m-ingin nya₁ k-iid diaadn.*
 3SNOM ACT-want 3sACC ACT-see 1sACC
 'He wants to see me.'
- d. *Sia m-ingin diaadn k-iid nya.*
 3SNOM ACT-want 1sACC ACT-see 3sACC
 'He wants me to see him.'

Periphrastic passive constructions can occur in the complement as in (30) where the subject of the main verb (*nuan*) in the complement is an undergoer which is coreferential with the subject of the matrix verb (*mingin* 'want'). Thus, the subject is obligatorily deleted (\emptyset) in the complement.

- (30) *Nd-ou m-ingin Ø nu-an nya n-ensara?*
 not-1sNOM ACT-want PASS-UND 3sGEN ACT-persecute
 'I do not want to be persecuted.'

2.2.3. *Relativization*

Only subjects can be relativized in Bonggi regardless of whether it is an actor or an undergoer. In Bonggi, relativization involves deletion of the relativized nominal from the relative clause. Compare (31a) which does not have a relative clause with (31b) which does have a relative clause. The subject of the verb *monsu?* 'bathe' in (31a) is *lama* 'people' which is an actor. To relativize on an actor, the actor must be the subject of the relative clause as in (31b) where the subject of both the main clause verb (*monsu?* 'bathe') and the relative clause verb (*ngkerai* 'work') is *lama* 'people'. The subject of the relative clause is always deleted or gapped. Similarly, to relativize on an undergoer, the undergoer must be the subject of the relative clause as in (31d) where *bali* 'house' is the subject of the relative clause verb (*bimuat* 'made'). Note that *bali* 'house' is not the subject of the verb (*kindii* 'go to') in (31d); instead, it is a locative argument. That is, there is no restriction in the main clause on the syntactic function of the gapped NP; the restriction to subject only applies within the relative clause itself. The subject of the relative clause in (31b) and (31d) is the argument which is cross-referenced by the verb in the relative clause. Periphrastic passive constructions can also occur in relative clauses as seen in (31e). Both the undergoer

cross-referenced construction in (31d) and the periphrastic passive construction in (31e) make non-actor arguments the subject so that they can be relativized.

- (31) a. *Nggien lama m-onsu??*
 where people ACT-bathe
 'Where do *people* bathe?'
- b. *Nggien lama ngkerai m-onsu??*
 where people working ACT-bathe
 'Where do *the people* who are working bathe?'
- c. *Sia kin-dii bali nu.*
 3SNOM go-to house 2SGEN
 '*He* is going to your house.'
- d. *Sia kin-dii bali b-in-uat nu.*
 3SNOM go-to house -PERF.UND-make 2SGEN
 '*He* is going to the house which was made by you.'
- e. *Sia kin-dii bali nu-an nu m-buat.*
 3SNOM go-to house PASS-UND 2SGEN ACT-make
 '*He* is going to the house which is being made by *you*.'

All the evidence presented in §2 points to the cross-referenced argument being the subject in Bonggi. The following generalizations have been made regarding subjects in Bonggi. The verbal morphology distinguishes actor subjects from undergoer subjects (§2.1.1). Subjects occur in either nominative or genitive case depending upon the type of syntactic construction involved (§2.1.2). With the exception of imperative constructions, if two core arguments occur in a clause, the first is always the subject (§2.2.1). In order for deletion under coreference to occur, the target of deletion must be the subject of the complement verb (§2.2.2). Only subjects can be relativized in a relative clause (§2.2.3).

3. Functional properties of active and passive clauses

Whereas many linguists define voice constructions in terms of formal (structural) properties, some (e.g. Givón 1994) define them functionally and others define them in terms of a prototype with both formal and functional properties (e.g. Shibatani 1985:837). While §2 dealt with formal/structural properties of active and passive constructions, this section deals with functional properties

of these constructions. However, before discussing functional properties, I provide a definition of passives and a brief overview of the types of arguments that can passivize.

The Bonggi data supports the longstanding claim that the passive is primarily a morphological category (cf. Haspelmath 1990). Bonggi verb morphology is an essential part of both types of passive constructions. In nonperiphrastic (undergoer cross-referenced) constructions the passive is marked by stem affixes, whereas in periphrastic passive constructions the passive is marked by an auxiliary which functions as a main verb.

The main syntactic property of Bonggi passives is that a non-actor argument (normally the undergoer) is the subject. Semantically transitive verbs (e.g. 'fatten' in (1a), (1b), and (1c)) have both an actor and an undergoer either of which can be the syntactic subject. Languages have an unmarked or default choice for which argument becomes the syntactic subject. In syntactically accusative languages (e.g. English and Bonggi), the actor is the unmarked choice and the undergoer is the marked choice. However, in syntactically ergative languages, the undergoer is the unmarked choice and the actor is the marked choice. A number of linguists have claimed that different Philippine languages are syntactically ergative (e.g. Walton 1986:130 for Sama Pangutaran).

The actor cross-referenced construction in (1a), the undergoer cross-referenced construction in (1b), and the periphrastic passive construction in (1c) share the same argument structure. Thus, passive constructions can be defined relationally. That is, following Siewierska (1984), passives have a corresponding active construction. The syntactic difference is that in active constructions the actor is the subject, whereas in passive constructions a non-actor argument (normally the undergoer) is the subject.

Passive constructions allow non-actor arguments of transitive verbs to undergo grammatical operations (e.g. deletion under coreference §2.2.2 and relativization §2.2.3) which are restricted to subjects. Although §2 provided an overview of the types of clauses that can passivize, it did not discuss the types of arguments that can be passivized. Only undergoers were described as passivizing in §2 since they are the default subject in passive constructions. That is, if a language passivizes only one argument, it is the undergoer. In terms of thematic relations, the passive constructions in (1b) and (1c) involve promotion of the patient (*asu na* 'the dog') to subject.

(32a) is an active voice construction whose subject is the actor (*ou* '1sNOM'). (32b) is an active voice construction in which dative-shift has occurred. (32c) is a nonperiphrastic passive con-

struction whose subject (*siidn* 'money') corresponds to the theme (undergoer) in the active construction. Similarly, (32d) is a periphrastic passive construction whose subject (*siidn* 'money') is the theme (undergoer). (32e) is a nonperiphrastic passive construction whose subject (*sia* '3SNOM') corresponds to the recipient in the active construction. Similarly, (32f) is a periphrastic passive whose subject (*sia* '3SNOM') is the recipient.

- (32) a. *Ou m-ori siidn dii nya.*
 1sNOM ACT-give money to 3sACC
 'I give money to her.'
- b. *Ou m-ori nya siidn.*
 1sNOM ACT-give 3sACC money
 'I give her money.'
- c. *Siidn biri-idn ku dii nya.*
 money give-UND 1sGEN to 3sACC
 'Money is given by me to her.'
- d. *Siidn nu-an ku m-ori dii nya.*
 money PASS-UND 1sGEN ACT-give to 3sACC
 'Money is given by me to her.'
- e. *Sia biri-adn ku siidn.*
 3sNOM give-RECIPIENT 1sGEN money
 'She is given money by me.'
- f. *Sia nu-an ku m-ori siidn.*
 3sNOM PASS-UND 1sGEN ACT-give money
 'She is given money by me.'

The passives described thus far are restricted to core arguments; however, like other Western Austronesian languages, Bonggi allows certain noncore or peripheral constituents to be cross-referenced by the verb. Unlike Tagalog, Bonggi does not cross-reference locations and benefactives (cf. Kroeger 1993:13-14); however, it does occasionally cross-reference instruments. In active voice constructions such as (33a) instruments occur as oblique NPs preceded by the preposition *maʔ* 'with'. (33b) is a nonperiphrastic passive construction whose subject (*kiou* 'wood') corresponds to the instrument in the active construction. However, peripheral constituents cannot be the subject in periphrastic passive constructions as shown in (33c). Thus, once again

periphrastic passives have a narrower distribution than non-periphrastic passives (cf. §2.1.2).

(33) a. *Ou nga-labad asu na ma? kiou.*
 1SNOM ACT-hit dog the with wood
 'I hit the dog with wood.'

b. *Kiou panga-labad ku asu na.*
 wood INSTRUMENT-hit 1SGEN dog the
 'I hit the dog with the *wood*.'

c. **Kiou nu-an ku panga-labad asu na.*
 wood PASS-UND 1SGEN INSTRUMENT-hit dog the
 'I hit the dog with the wood.'

Givón (1984, 1990) has identified three functional domains of passive voice: 1) agent demotion, 2) non-agent promotion, and 3) stativization. Briefly, in the passive voice, the agent (actor) is demoted from its status as subject (Givón 1990:567), some other argument is promoted to subject (Givón 1990:569), and the event is normally presented as a resulting state (Givón 1990:571). According to Givón (1994), the first two functional domains are crucial in studying pragmatic aspects of voice. Givón (1994:8) defines the pragmatics of voice in terms of the **relative topicality** of the agent [actor] and patient [undergoer]. His relative topicality scale yields four main voices: active, inverse, passive, and antipassive.

Givón's pragmatic approach to voice is very different from the structure-dependent approach taken here. A detailed analysis of the various functional properties associated with the three voice contrasts in (1a), (1b), and (1c) is beyond the scope of this paper; however, functional properties are important for answering two crucial questions. First, what are the crucial differences between periphrastic and nonperiphrastic passives? Or stated another way, why does Bonggi have two passive constructions? Second, what is the unmarked choice for syntactic subject in transitive clauses?

When languages have two or more types of passives, we do not expect the passives to have the same distribution and function. Besides the structural differences between periphrastic and nonperiphrastic passive constructions (cf. §2), periphrastic passives have a narrower distribution than nonperiphrastic passives in terms of both clause types (cf. §2.1.2) and argument types (cf. above). While the subject is the undergoer in both passive constructions, one possibility is that there is a functional difference between the two types of passives in terms of the presence of the

actor. For example, Chamorro, like Bonggi, has a passive construction which is distinct from the cross-referencing system (Shibatani 1985:834-35). The passive construction in Chamorro typically occurs without an agent (85%), but the undergoer cross-referencing construction typically occurs with an agent (80%) (Shibatani 1985:836). Table 2 contrasts the distribution of transitive clauses that can passivize in Bonggi. Verbs with two arguments that cannot passivize such as *kiara* 'have' are excluded from Table 2. Like the Chamorro passive, the periphrastic passive in Bonggi typically occurs without an actor. Of the 19 tokens present in the text count, 18 (94.7%) occur without an actor. However, nonperiphrastic passive constructions in Bonggi do not occur with an actor as frequently as the undergoer cross-referencing constructions in Chamorro. Of the 19 tokens present in the text count, only 6 (31.6%) occur with an actor. Thus, while there is some difference between the two types of Bonggi passives in terms of the presence of an actor, the differences are not as pronounced as in Chamorro.

Table 2: Relative distribution of transitive clauses in oral texts

construction type	tokens		with actor		without actor	
active	164	81.2%				
nonperiphrastic passive	19	9.4%	6	31.6%	13	68.4%
periphrastic passive	19	9.4%	1	5.3%	18	94.7%
	202	100%				

The most interesting aspect of Table 2 is the high frequency of active voice constructions. These figures are very different from frequency counts which have been done for other Western Austronesian languages. It is generally believed that Philippine-type languages have a propensity toward undergoer cross-referenced constructions. Most text frequency counts have borne out this belief. For example, Cooreman, Fox, and Givón (1984) found that of 281 transitive clauses in Tagalog, 213 (75.8%) were undergoer cross-referenced constructions and 68 (24.2%) were actor cross-referenced constructions. Similarly, Brainard (1994: 383) found that of 96 clauses in Karao, 61 (63.5%) were undergoer cross-referenced constructions and only 6 (6.3%) were actor cross-referenced constructions. However, Shibatani (1988: 96) found that transitive verbs in Cebuano occur in approximately equal proportions. In his survey of 106 transitive clauses, 55 (52%) were actor cross-referenced constructions and 49 (46%)

were undergoer cross-referenced constructions. His frequency counts contrast with Payne's (1994:335ff.) frequency counts of perfective aspect clauses. Payne found that only 80 (30%) were actor cross-referenced constructions and 114 (42.9%) were undergoer cross-referenced constructions.¹⁶

Recent arguments in favour of Philippine languages being ergative cite the high text frequency of undergoer cross-referenced constructions as evidence for these languages being ergative. The argument is that the ergative analysis provides an explanation for the high text frequency of undergoer cross-referenced constructions relative to passives in nominative-accusative languages. Passive is a marked voice construction, whereas the ergative is an unmarked voice construction with 'raw frequency' being a criterion for markedness (Comrie 1988:19).

On the one hand, the passive analysis assumes that actor cross-referenced constructions such as (1a) are basic transitive constructions and that undergoer cross-referenced constructions such as (1b) are nonbasic. On the other hand, the ergative analysis assumes that undergoer cross-referenced constructions such as (1b) are basic transitive constructions and that actor cross-referenced constructions such as (1a) are nonbasic. I believe that Bonggi has two basic transitive sentences. That is, despite the high frequency of active voice constructions in Bonggi, both actor cross-referenced constructions (e.g. (1a)) and undergoer cross-referenced constructions (e.g. (1b)) are basic and it is periphrastic constructions such as (1c) that are nonbasic. Undergoer cross-referenced constructions are not marked, but periphrastic passive constructions are marked.

Since antipassives are marked constructions (Comrie 1988:19) and have an extremely low text frequency in ergative languages, it would be very strange to claim that actor cross-referenced constructions are antipassives in Bonggi since they constitute over 80% of transitive constructions.

4. Implications for Philippine language typology

Assuming that Philippine languages have subjects as has been shown for Bonggi, two aspects of morphology are important for signalling which argument is the subject: verbal cross-referencing and nominal case marking. The Bonggi data indicates that analyses of subject in Philippine languages should not be based strictly on case marking since the subject in some constructions always occurs in genitive case. Verbal morphology and not case marking is the critical morphological factor in determining the subject. Thus, instead of claiming that the subject in Philippine

languages is the nominative argument (or the absolutive argument in an ergative system), the Bonggi data suggests that the subject is the cross-referenced argument regardless of its case marking.

The frequency of actor cross-referenced constructions in Bonggi indicates that any generalization which claims that all Philippine-type languages are ergative is unfounded.

Another generalization that is often made about Philippine-type languages is that if the undergoer is definite, it will be cross-referenced. This generalization is often used to account for the high frequency of undergoer cross-referenced constructions. The data presented here and the high frequency of actor cross-referenced constructions indicate that this generalization is not true for Bonggi and that it needs to be reexamined.

Apart from the cross-referencing system, Philippine languages do not generally have another construction for making the undergoer the subject. This makes Bonggi unusual but not unique since at least two other Philippine languages are said to have passives apart from the cross-referencing system. Sama Pangutaran has a passive which is marked by the verbal infix *-i-* (Walton 1986:116ff.). Sinama Manuk Mangkaw has a passive construction similar to what I have described here according to Jun (1996). The construction contains an actor cross-referenced verb which is preceded by the particle *leʔ*. Jun analyzes *leʔ* as a prefix; however, *leʔ* appears to be an auxiliary. If *leʔ* is a passive prefix, then both Sinama Manuk Mangkaw and Sama Pangutaran form passives via affixation. In most languages the passive is formed by adding an affix to the verb. Haspelmath (1990:29) found that only 6 of 31 languages with passives use an auxiliary verb to form the passive; furthermore, auxiliary verbs did not occur outside of Indo-European languages in his sample. The passive auxiliary in Bonggi is a feature not shared by other Philippine-type languages. Even if *leʔ* in Sinama Manuk Mangkaw is an auxiliary as I believe, it is not inflected like the passive auxiliary in Bonggi.

Notes

I am indebted to Paul Kroeger for comments on and discussion of the issues involved in this paper; any faults are my own.

1. Abbreviations used: ACC accusative case, ACT actor, GEN genitive case, IMP imperative, NOM nominative case, p plural, PASS passive, PERF perfective aspect, s singular, and UND undergoer. Orthographic conventions used: *ng=ŋ/* and *ny=/ŋ/* [editor's note: *ŋ?*]. In the English free translation the NP

- which is cross-referenced by the verb is in **bold**, the syntactic subject is in *italics*, and an argument which is both cross-referenced and the syntactic subject is in ***bold italics***.
2. The prefix *ng-* is realized in different ways. The relevant phonological processes are: vowel epenthesis, vowel harmony, vowel weakening, and consonant coalescence.
 3. The suffix vowel *ə* in imperfective, undergoer cross-referenced constructions is subject to vowel harmony. Thus, in (1b) the surface vowel in the suffix is /u/, whereas in (2b) it is /a/. The suffix nasal *n* is subject to nasal prelosion which is contingent upon nasal harmony—a process whereby vowels are nasalized following nasal consonants. For example, the suffix vowel in (1b) is nasalized since it follows the nasal /ŋ/. If the suffix vowel is nasalized as in (1b), then the suffix nasal is simple, e.g. [un] in (1b); however, if the suffix vowel is not nasalized as in (2b), then the suffix nasal is preploded, e.g. [adn] in (2b). These generalizations are only for imperfective aspect.
 4. The infix *-in-* is realized as a prefix before vowel-initial stems (e.g. *in-anu* in (6)); as an infix [in] in stems whose initial shape is either CVV (e.g. *b-in-uat* in (31d)) or Ci; and as an infix [i] otherwise (e.g. (4b), (9), (18), and (23)).
 5. See Boutin (1996) for the development of periphrastic passives.
 6. Personal nouns include personal names, nicknames, and some kinship terms.
 7. The imperative suffix is subject to vowel harmony; i.e. if the last vowel in the stem is /o/, the imperative form is realized as [oʔ].
 8. The suffix *-ən* 'UND' is realized as [idn] in (17) and (26) due to deletion of /l/ root-finally and nasal prelosion.
 9. (25b) is an active construction; (9) is an undergoer cross-referenced construction; and (5b) is a periphrastic passive construction.
 10. (10) is an active construction; (11a) is an undergoer cross-referenced construction; and (13) is a periphrastic passive construction.
 11. (15) is an active construction; (17) is an undergoer cross-referenced construction; and (19) is a periphrastic passive construction.

12. (16) is an active construction, whereas (18) is an undergoer cross-referenced construction.
13. (22) is an active construction, whereas (23) is an undergoer cross-referenced construction.
14. (25a) is an active construction, whereas (26a) is an undergoer cross-referenced construction.
15. The complement verb (*kiid* 'see') in (29) is a perception stative verb, whereas the matrix verb (*mingin* 'want') in (29) is a cognition stative verb. Perception and cognition statives have different cross-referencing morphology than prototypical transitive verbs.
16. See Payne (1994:336) for his explanation of why his frequency counts differ from Shibatani's.

References

- Boutin, Michael E. 1996. A tale of two passives in Bonggi. Paper presented at the 4th Biennial Conference of the Borneo Research Council, June 10-15, 1996. Universiti Brunei Darussalam.
- Brainard, Sherri. 1994. Voice and ergativity in Karao. Voice and inversion, ed. T. Givón, 365-402. Amsterdam: John Benjamins.
- Comrie, Bernard. 1988. Passive and voice. Passive and voice, ed. Masayoshi Shibatani, 9-23. Amsterdam: John Benjamins.
- Cooreman, Ann, Barbara Fox, and T. Givón. 1984. The discourse definition of ergativity. *Studies in Language* 8:1-34.
- Givón, T. 1984. *Syntax: A functional-typological introduction*, vol. 1. Amsterdam: John Benjamins.
- . 1990. *Syntax: A functional-typological introduction*, vol. 2. Amsterdam: John Benjamins.
- . 1994. The pragmatics of de-transitive voice: Functional and typological aspects of inversion. Voice and inversion, ed. T. Givón, 3-44. Amsterdam: John Benjamins.

- Haspelmath, Martin. 1990. The grammaticalization of passive morphology. *Studies in Language* 14(1):25-72.
- Jun, Akamine. 1996. Sinama passive constructions. *Pan-Asiatic Linguistics. Proceedings of the 4th International Symposium on Language and Linguistics January 8-10, 1996*, 2:494-504. Mahidol University: Institute of Language and Culture.
- Kroeger, Paul R. 1993. *Phrase structure and grammatical relations in Tagalog*. Stanford: CSLI.
- Payne, Thomas E. 1994. The pragmatics of voice in Philippine language: Actor-focus and goal-focus in Cebuano narrative. *Voice and inversion*, ed. T. Givón, 317-64. Amsterdam: John Benjamins.
- Shibatani, Masayoshi. 1985. Passives and related constructions: A prototype analysis. *Language* 61(4):821-48.
- . 1988. Voice in Philippine languages. *Passive and voice*, ed. Masayoshi Shibatani, 85-142. (Typological Studies in Language 16.) Amsterdam: John Benjamins.
- Siewierska, Anne. 1984. *The passive. A comparative linguistic analysis*. London: Croom Helm.
- Thompson, Sandra A. and Robert E. Longacre. 1985. Adverbial clauses. *Language typology and syntactic description. Vol. II, Complex constructions*, ed. Timothy Shopen, 171-234. Cambridge: Cambridge University Press.
- Walton, Charles. 1986. *Sama verbal semantics: Classification, derivation and inflection*. Manila: Linguistic Society of the Philippines.