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Switch-reference in Barai  
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Barai is a Papuan (non-Austronesian) language with some three thousand speakers in the Northern and Central Provinces of Papua New Guinea. It has a switch-reference mechanism that is of particular interest since the language also exhibits a complex of coding strategies for both a semantic role-oriented 'subject' and a pragmatic referentially-oriented 'subject'. These provide a prism for viewing the factors governing the variation of the switch-reference (S/R) markers against the backdrop of the traditional hypothesis that S/R monitors the coreferentiality of subjects in successive clauses. We will first introduce the syntactic reflexes of the role-oriented and referentially-oriented subjects as well as the S/R markers themselves and then demonstrate how neither subject candidate accounts for the S/R variations. The attempt, however, reveals that S/R is not only concerned with coreferentiality of certain primary participants, but with encoding whether the relation between the Actor and the activity of the verb is active/voluntary or inactive/involuntary. It is this fact, more than any other, that determines which participants will be monitored for coreferentiality by the S/R markers, although we will demonstrate how the referential factors of animacy and definiteness interfere as well.

Traditional characterizations of S/R presuppose a fairly transparent notion of subject. However, a number of recent studies (e.g., Schachter 1976 or Foley and Van Valin 1977) have shown the subject relation to be problematic in that subjects result from a variable convergence of semantic case relations with referential factors such as definiteness, givenness, and/or animacy. So the properties normally associated with subjects in languages where a traditional subject notion is transparent may well be distributed to more than one participant in other languages.

Barai is such a language in that there is a set of syntactic devices that is governed by what we will call a role prominent noun phrase (Role NP). They are invariably governed by the Actor for verbs that include an Actor in their case frame, or by the Patient in the absence of such an Actor. However, quite a distinct set of syntactic devices is governed by a referentially prominent noun phrase (Ref NP). Discourse-controlled factors like givenness and definiteness and factors of inherent referentiality such as animacy, interact with the role prominence of Actors and Patients to yield the Ref NP. The salient fact for our consideration of S/R is that the two sets of syntactic devices need not conflate on a single participant in a particular clause.

We will consider three syntactic reflexes governed by the Ref NP: the word order constraint, the distribution of pronominal copy, and the distribution of the aspectual particles.

There is a basic dichotomy among all Barai verbs entailing an Actor and a Patient such that the relative ordering of these two

constituents is constrained not only by their semantic roles but also by the referential status of the particular participants functioning in these roles. Thus, with one set of verbs, when there is a difference in the referential status of the Actor and Patient, the more referentially prominent NP precedes. With the other set of verbs, the constraint is reversed so that the more referentially prominent NP follows.

Roughly, participants which are definite, given, and/or animate have greater accessibility to the position of referential prominence than those that are indefinite, new, and/or inanimate. We will follow Chafe (1976) in our definitions of given and new. A given noun phrase is one whose referent the speaker assumes has already been activated in the hearer's consciousness, i.e., the selective attention of the hearer is assumed to still be focussed on the referent in question, as opposed to new information where the speaker assumes he is activating the referent in the hearer's consciousness at the time of the utterance. Pronominalization and the cross-referencing of noun phrases with a pronominal copy are two syntactic means by which referents with the status given can be identified in Barai. Definite new information may also be overtly coded with one of a set of case markers that is inflected for semantic role, role prominence (discussed below), and number. Indefinite new information may be overtly coded as well.

A definite referent is the one the speaker assumes the hearer can identify whether or not he is thinking about it at the time of the utterance. For common nouns, definiteness is coded with the definite determiner ije. So there are several overt markers which encode information about the referential status of the particular participant.

We will distinguish between the two types of transitive verbs as follows: those verbs that require the more referentially prominent of Actor or Patient to precede will be called Actor-oriented verbs (A-verbs) and those which require it to follow we will call Patient-oriented verbs (P-verbs). For A-verbs, the Actor will precede the Patient when the referential status of the two participants are comparable, but when the two vary in terms of referential status, the more highly referential NP will precede. The verb kan- "strike" is then an A-verb with Actor preceding Patient in the unmarked instance, as when both are pronominalized.

- (1) fu na kan-ie<sup>1</sup>  
 3sg lsg strike-lsg      'He struck me.'

If, however, the Actor participant is marked indefinite and the Patient is definite, the Patient, being the more highly referential, will precede.

- (2) a. na e-be                      kan-ie  
 lsg person-indef strike-lsg  
 b. \*e-be na kan-ie                      'Someone struck me.'

With a P-verb such as ised- "be displeased", the Actor still precedes the Patient in the unmarked instance when the referential status of the two are comparable. However, a difference in the referential status of the two is marked by the more referential participant following rather than preceding the less referential.

- (3) a. ije bu ised-ia  
3sg 3pl displease-3pl
- b. \*bu ije ised-ia
- c. \*bu fu ised-ia 'It displeased them.'
- (4) a. e ij-ene fu ised-ia  
person def-new 3sg displease-3pl
- b. \*fu e ij-ene ised-ia
- c. \*e ij-ene ije ised-ia 'It displeased the people.'

In (3) both Actor and Patient are definite and given and the Actor must precede the Patient. But in (4), the Patient is coded for new information and precedes the Actor which is still definite and given. With P-verbs the more referentially prominent participant follows. Note also how the pronominalization strategy endorses the same principle. For inanimate referents, third singular participants are pronominalized with ije when they are not in the position reserved for the more referentially prominent referent for that verb type. Thus (3)b and (4)c are unacceptable because the inanimate third singular pronoun in the referentially prominent position must be fu and not ije. Similarly, (3)c and (4)b are not acceptable because this third singular pronoun outside the position of referential prominence must be ije rather than fu. (10)a, (28), and (31) further illustrate this point.

A second syntactic device that is governed by the Ref NP is the distribution of the pronominal copy. Only one NP per clause will ever be cross-referenced by an immediately subsequent pronominal copy and it is invariably the same participant that is in the referentially prominent position due to the word order constraint. This pronominal copy seems to function in coding given information for nonpronominalized participants in the referentially prominent position.<sup>2</sup> For A-verbs, when a pronominal copy occurs, it will accompany the Ref NP and precede the less referential of the Actor and Patient participants.

- (5) a. e ije bu i me-jo  
person def 3pl work do-pres/hab
- b. \*e ije i fu me-jo 'The people are doing work.'  
3sg

(6)a. are ije fu ame sikuru ij-iebe sa-vo  
 house def 3sg child school def-new(pl) build-pres/hab

b. \*are ije ame sikuru ijiebe bu savo  
 3pl

'The school children are building the house.'

In (5), the pronominal copy bu agrees in person and number with the Actor e ije which is in the initial position of referential prominence, and is restricted from occurring with the Patient. But in (6), also an A-verb, fu copies the third singular Patient are since the Actor which is marked for new information has been demoted to the position of lesser referentiality where a pronominal copy is not possible.

And the same principle applies to P-verbs with the pronominal copy immediately following the Ref NP.

(7)a. adame ije e none bu visinam-ia  
 poison 3sg person my 3pl make,sick-3pl

b. \*adame ije fu e none visinam-ia  
ije

'The poison sickened them.'

Still another syntactic reflex controlled by the Ref NP is the distribution of a set of aspectual particles. These aspectual particles occur phonologically bound to a pronoun, be it a pronominal copy or a fully pronominalized participant, but they are further constrained so that they only occur with pronouns in the referentially prominent position.

Thus with the A-verb kan- "strike" the aspectual particle occurs only with the participant in the prior position.

(8)a. Vito fu-ka na kan-ie  
 Vito 3sg-intens lsg strike-lsg

b. \*Vito fu na-ka kan-ie 'Vito is really striking me.'

(9)a. na-ka maza kan-ie  
 lsg-intens sun strike-lsg

b. \*na maza (fu)-ka kan-ie '(The) sun is really striking me.'

Vito is the Ref NP in (8) as is evident by its position as well as the pronominal copy. As such, it governs the bonding of the aspectual -ka as well, which is restricted from occurring with any participant other than the Ref NP. In (9), however, the Actor is both inanimate and not marked for definiteness, a referential

status outranked by a definite animate Patient which consequently governs the bonding of the aspectual particle. In neither case can the aspectual occur with the primary participant of lesser referential status. P-verbs follow the same principle, the Ref NP controlling the distribution of the aspectual from its subsequent position.

(10)a. ije na-ka            ised-ie-mo  
           3sg lsg-intens    displeas-lsg-pres/hab

b. \*ije-ka na ised-ie-mo            'It really displeases me.'

So the word order, the distribution of pronominal copy, and the distribution of the aspectual particles are all controlled by the Ref NP which is determined by the referential status of the primary participants, not solely by semantic role.

We turn now to a consideration of the reflexes of the Role NP. Semantic roles are hierarchically ordered such that the Actor will always govern this set of reflexes when there is one. However, in the absence of an Actor, a Patient will govern, but in no case will a participant in any other semantic role govern them.

Role Prominence: Actor > Patient > Other

It should be noted that our term Actor is defined in a language specific sense. The Barai Actor encompasses a range of semantic role relationships, if viewed in a universal sense, that include Agent, Experiencer, and Source (as non-Actor cause)<sup>3</sup>. But it is clear that the language specific realization of these semantic roles emphasizes the unity in the above distinctions, as there is only one such participant per clause and each one governs the same set of syntactic reflexes (which we will discuss below). It is only in the absence of any of the above that a Patient will control the reflexes of the Role NP. The Patient is clearly distinct, of course, cooccurring with all the semantic options for Actor in addition to exclusively governing other syntactic devices such as the variation in suppletive verb stems and the cross-referencing of animate participants by verbal affixes. Its language specific definition closely parallels the universal one if taken roughly as the entity affected by the event or state identified by the verb.

We will consider three reflexes governed by the Role NP: the distribution of the independent mood markers, the control of tense/aspect verb agreement, and the distribution of the new information markers.

Consider first the distribution of the mood markers. The mood markers are phonologically independent but linearly follow the NP which is the Role NP for that clause. This is in spite of the fact that the Role NP may not be congruent with the Ref NP. For example, the A-verb sak- "bite" will place the mood marker following the Actor irrespective of its referential status and hence its resulting linear position.

(11)a. fu be na sak-ie  
3sg interr lsg bite-lsg

b. \*fu na be sak-ie 'Will he bite me?'

(12)a. na miane be sak-ie  
lsg firestick interr bite-lsg

b. \*na be miane sak-ie 'Did a firestick bite (burn) me?'

And P-verbs follow suit with the mood marker following the Patient only by default when no Actor occurs.

(13)a. ije be na ised-ie  
3sg interr lsg displease-lsg

b. \*ije na be ised-ie 'Will it displease me?'

(14) fu be barone  
3sg interr die 'Did he die?'

The same hierarchy obtains in the control of tense/aspect verb agreement. By tense/aspect verb agreement we are referring to several tense/aspect particles that have suppletive variants that cross-reference the Role NP. So, for example, the present/habitual morpheme is -mo (or -no, the variant being phonologically determined) if the governing NP is second or third person singular, but -vo (or -jo) if it is first person singular or any plural. Repeating (8) here as (15) with the addition of tense/aspect, the Actor is both the Role NP controlling tense/aspect agreement and the Ref NP as well.

(15)a. Vito fu-ka na kan-ie-mo  
Vito 3sg-intens lsg strike-lsg-pres/hab

b. \*Vito fu-ka na kan-ie-vo

'Vito is really hitting me.'

-mo must be governed by a second or third person singular referent so the controlling NP has to be the third person singular proper noun Vito and cannot be the first person singular na which would be cross-referenced as -vo.

However, in (6) and (9), repeated here as (16) and (17), the Actors are not the Ref NP's due to their low referential status, but they are still the Role NP's and hence control tense/aspect agreement.

(16)a. are fu ame sikuru ij-iebe sa-vo  
house 3sg child school def-new build-pres/hab



(16)b. \*are fu ame sikuru ij-iebe sa-mo

'The school children are building the house.'

(17)a. na-ka maza kan-ie-mo  
lsg-intens sun strike-lsg-pres/hab

b. \*na-ka maza kan-ie-vo

'(The) sun is really striking me.'

Again the same principle applies to P-verbs as to the above A-verbs. The Actor retains control of tense/aspect verb agreement whenever it occurs, regardless of its referential status.

(18)a. ije na ised-ie-mo  
3sg lsg displease-lsg-pres/hab

b. \*ije na ised-ie-vo 'It is really displeasing me.'

A third reflex of the Role NP governs the case endings that encode definite new information. -iebe encodes definite new information when the participant is the Role NP and plural, -are when it is the Role NP and singular, and -ene for singular or plural Patients that are not the Role NP. Thus, in accordance with the role prominence hierarchy, an Actor that encodes definite new information will be marked with -iebe or -are while a Patient may be marked with either of these or with -ene depending on whether or not it is the Role NP of the clause.

(19) e Fafua ij-iebe boro re  
people Papua def-new(pl) ball do

'The Papuan people play ball.'

(20) bu-ka miane kuoke ij-ene ufemadi  
3pl-intens firestick coals def-new blow

'They really blew on the firestick coals.'

In (19) and (20) -iebe applies to Actors and -ene to Patients, but in (21) - (23) it becomes obvious that -iebe encodes the Role NP and not simply the semantic role of Actor.

(21) bara inokiro ij-iebe na-ka ised-ie  
woman two def-new lsg-intens displease-lsg

'The two women really displease me.'

(22)a. bara inokiro ij-iebe ised-ia  
 woman two def-new displease-3pl

b. \*bara inokiro ij-ene ised-ia

'The two women were displeased.'

(23) bara inokiro ij-ene fu ised-ia  
 woman two def-new 3sg displease-3pl

'He displeased the two women.'

In (21) and (22)a, -iebe encodes the role NP, an Actor in the first instance and a Patient in the second, due to the absence of an Actor. The Patient in (23) encodes definite new information with -ene, as an Actor, fu, occurs and is hence the Role NP of the clause.

So the Role NP governs the coding of new information just as it does the distribution of the mood markers and tense/aspect suppletion. The crucial fact is that in each instance the Role NP may function independently from the Ref NP, demonstrating that there is no necessary congruence between the two.

We mentioned earlier that the traditional hypothesis regarding S/R, in many Papuan languages at least, was that it monitors the coreferentiality of subjects in succeeding clauses. For example, Robert Longacre (1972) discusses reference switching in his introduction to the typological features of Papuan languages, noting that "a preceding clause has some device for marking whether the oncoming clause will have the same or different subject". Similarly, Phyllis Healey discusses the subject preview suffixes of Telefol (Healey 1966) in terms of "whether the subject of the next following clause is homopersonal - the same as that of the preceding clause, or heteropersonal - different from that of the present clause"<sup>4</sup>. In order to interpret this S/R principle for Barai where a subject notion is not immediately transparent, we must determine whether this subject control derives from the Role NP or the Ref NP.

We will restrict our discussion of S/R to the two particles, -na and -ga<sup>5</sup>, which we will loosely gloss as "same" and "different" respectively. When the Role NP and the Ref NP are simultaneously the same referent, there is usually no question but that the S/R device is concerned solely with the coreferentiality of this primary participant in the two clauses.

(24)a. na juae me-na fae kira  
 lsg garden do-same fence tie

'I made a garden and tied a fence.'

- (24)b. na juae me-ga fu fae kira  
-diff

'I made a garden and he tied a fence.'

- (25)a. no i me-na aem-uo  
lpl work do-same be.tired-lpl

'We are doing work and are tired.'

- b. no i me-ga bu aem-ia  
-diff

'We are doing work and they are tired.'

In the a. versions of (24) and (25), -na is used where the participant in the prior clause that is both the Role NP and the Ref NP, is accounted for by zero anaphora in the subsequent clause due to its coreferentiality. And in the b. versions, the Role/Ref NP in each of the two clauses is not coreferential, so that -ga occurs.

But in (26) and (27), the Ref NP and the Role NP are not the same participants. From these examples it would appear that the Ref NP's are being monitored by the S/R device.

- (26) na i me-na ine bij-ie  
lsg work do-same stick poke-lsg

'I was working and a stick poked me.'

- (27) fu miane saki-na barone  
3sg firestick bite-same die

'A firestick bit (burned) him and he died.'

In (26), zero anaphora marks the Patient participant in the subsequent clause coreferential with the Actor in the initial clause. And, in fact, animate definite Patients outrank inanimate Actors not marked for definiteness (as we noted above) so that it is the Ref NP's that are the coreferential participants. Again in (27), it is the more highly referential Patient in the initial position with the A-verb sak- "bite" whose identity with the single participant in the subsequent clause is coded with -na. The case is even more convincing when we consider a sequence of P-verbs with coreferential participants in their subsequent position that marked the Ref NP.

- (28) ije na ninaek-ie-na ame none na-ka  
3sg lsg make.sleepy-lsg-same child my lsg-intens

tot-ie  
escape, memory-lsg

'It makes-sleepy me and my children really escape-memory me (i.e., it makes me sleepy and my children really escape my memory.)'

It is the Patient participants that are coreferential. And in each clause, it is the Patient that is marked with the syntactic reflexes of the Ref NP. Consequently, it appears that the S/R device is keyed to the same constraints that determine Ref NP within the clause. That is, it is governed by the verb class in the unmarked instance but by the more referential participant when the primary participants differ in referential status. The interaction of the discourse bound referential factors of definiteness and givenness with the inherent referentiality of the referent in terms of animacy appears to be crucial both to the internal structure of the clause as well as to interclausal relations.

However, equally frequent are other instances where the Role NP and the Ref NP are distinct participants and it appears that just the opposite is the case, i.e., that S/R is coding the identity of Role NP's.

- (29) ije no-ka            ised-uo-ga            no e            ije  
 3sg 1pl-intens    displease-1pl-diff 1pl person 3sg

kan-ia                            'It really displeased us and we  
 strike-3pl                            struck the people.'

- (30) ijare bu    vasiaor-ia-ga            bu va-e  
 this 3pl make,hungry-3pl-diff 3pl go-past

'This made them hungry and they went.'

Thus, in both (29) and (30), the Patients in the initial clauses outrank the Actors in terms of animacy and assume the positions that encode the Ref NP for P-verbs. But despite the fact that they are coreferential with the animate Actors that are the Ref NP's for the following A-verbs, the S/R indicator reads -ga for different. It would appear in these instances, then, that the Role NP's were being monitored by S/R since they are not coreferential and the S/R marker is -ga.

The apparent anomaly stems from the attempt to force a 'subject' interpretation of the S/R principle. Clearly Barai does have a well marked semantic based 'subject' notion in its Role NP. And cross-linguistically it is not uncommon for such a role based subject to control S/R, as it does in Choctaw (see Heath 1977). But Barai also has a clearly marked referentially based subject in its Ref NP and, again, it is quite common for such a discourse-oriented subject or topic to be crucial to interclausal junctures as it does in Dyrbal for example (Dixon 1972). However, despite the attention Barai gives to both its Role NP and its Ref NP, neither of them captures the basic fundamental operative in its S/R device.

Consider again the A-verbs, P-verbs distinction. We noted that the word order constraint, the distribution of the pronominal copy, and the bonding of the aspectuals are all consistently associated with the more referentially prominent of the Actor and Patient participants. However, the fact remains that in the unmarked instances,

all of these devices are not associated with the same participant. Rather, the verb class dictates whether the governing participant is Actor or Patient, Actor for some verbs and Patient for others. So the verb class is predictable even in those instances where the participants themselves swap due to referential factors, simply by virtue of the position they are associated with, i.e., the prior position for A-verbs and the subsequent position for P-verbs. The A-verb, P-verb distinction is obviously fundamental to clause level syntax.

We will argue that the reflexes of the A-verb, P-verb distinction encode a difference in the nature of the relation between the Actor and the activity of the verb, one I will refer to as either active/voluntary or inactive/involuntary.<sup>6</sup> We will further argue that this same distinction is the crux of the S/R principle although there is substantial but secondary interest in encoding referential aspects of the primary participants. To facilitate our discussion, we will refer to this orientation of A-verbs to their Actors and P-verbs to their Patients as the perspective of the verb.

Consider the following:

- (31) bu ije fie-na fu oeserad-ia  
 3pl 3sg hear-same 3sg surprise-3pl

'They heard it and it surprised them.'

- (32) kusare ije na tot-ie-ga fu saere  
 plant def lsg escape.memory-1sg-diff 3sg wither

'The plant escaped-memory me (escaped my memory)  
 and it withered.'

In (31), the Actor that is the perspective of the initial A-verb fie- is coreferential with the Patient that is the perspective of the P-verb oeserad- and the resulting S/R indicator reads same. It is just these participants that govern the syntactic processes that distinguish the verb classes. In (32), the Patient of the initial P-verb is not coreferential with the sole participant in the subsequent clause and the S/R marker is -ga for different, despite the fact that the Actor of tot- is coreferential with that sole participant of saere. However, it is worth noting that the Actors in both (31) and (32) that do not control the S/R mechanism are inanimate. This is the case in (26) and (27) as well, so it is tempting to surmise that S/R is role-oriented but bypasses Actors of low referential status. This is, in fact, the case for A-verbs. The referential status of the Actor interferes with the control of S/R just as it does with the word order constraint within the clause. The Actor, which is the NP in perspective for A-verbs, is the unmarked choice, but an Actor of low referentiality will be outranked by a highly referential Patient which will then become the participant monitored by S/R.

However, the critical fact is that the Actor by-pass on referential grounds does not apply to P-verbs as well. There is no case where the Actor of a P-verb participates in S/R, regardless of its

referential status. Thus in (28), the animate definite Actor of the P-verb tot- "escape memory" is ignored by the S/R device. This is because the fundamental criterion for S/R is the perspective of the verb rather than either role or referential factors. If the Actor by-pass on referential grounds that applies to A-verbs were relevant to P-verbs, the S/R marker for (28) would have to be -ga, the animate Patient in the initial clause not being coreferential with the animate Actor in the subsequent clause. Rather, for this sequence of P-verbs, since the perspective is the fundamental criterion and both Patients are highly referential, they hold the highest possible rank for monitoring by S/R. The two patients are coreferential and the S/R indicator reads same.

Again, as with the word order constraint, the S/R mechanism is not only concerned with inherent referentiality but also with discourse governed referentiality. Compare (27) repeated here as (33)a, with (33)b:

(33)a. fu miane saki-na barone  
3sg firestick bite-same die

'A firestick bit him and he died.'

b. miane ije fu saki-ga fu barone  
firestick def 3sg bite-diff 3sg die

'The firestick bit him and he died.'

The Actor is the NP in perspective for the A-verb saki- and hence the unmarked choice for the status being monitored by S/R. However, in (33)a, since it is both inanimate and not marked for definiteness, it is outranked by the highly referential Patient which is then monitored against the sole participant in the subsequent clause. Being coreferential, S/R marks them as same. But when an inanimate Actor is marked for definiteness, it retains its status for being monitored by S/R as well as its initial position of referential prominence for A-verbs. So in (33)b the inanimate Actor of the A-verb sak- retains its accessibility to the control of S/R because of its definiteness. The referential factors of animacy and definiteness alter word order as well as determine accessibility to the control of S/R.

There is still further evidence that S/R is fundamentally preoccupied with the A-verb/P-verb distinction stemming from a constraint on their linear sequencing. A sequence of A-verbs, a sequence of P-verbs, and a sequence of a P-verb following an A-verb, all follow the principles we have just outlined. Here S/R reflects the coreferentiality of key participants, determined by the perspective of the verb and certain referential factors related to role prominent participants (i.e., Actor and Patient). However, a sequence of a P-verb followed by an A-verb will be marked with -ga regardless of referential criteria of any kind. In these instances S/R is not encoding a switch of referents at all, but a switch to an active/

voluntary relation between Actor and activity from an inactive/involuntary one. Where this relation is constant or shifts to an inactive/involuntary activity, referential considerations are crucial to S/R. But where an active/voluntary relation is introduced following an inactive/involuntary one, S/R is entirely preoccupied with encoding this change and ignores the referential factors altogether. This explains the use of -ga in (29) and (30), where the animate Patient of a P-verb in the initial clause is coreferential with the animate Actor of the subsequent clause and yet the S/R indicator is -ga.

The significance of this distinction in Barai is further attested among a few verbs that can attach the syntactic reflexes that encode perspective to either Actor or Patient. Thus the verb oefiad- "sadden" or mad- "please" can be interpreted with or without any active voluntary participation of the Actor. It is the grammatical reflexes associated with the primary participants that determines whether the verb is active/voluntary or not.

(34) a. a bu-ka oefiad-ia  
2sg 3pl-intens sadden-3pl

'You really saddened them (unintentionally).'

b. a-ka bu oefiad-ia

'You really saddened them (deliberately).'

(35) a. a bu-ka mad-ia  
2sg 3pl-intens please-3pl

'You really pleased them (unintentionally).'

b. a-ka bu mad-ia

'You really pleased them (deliberately).'

The b. versions of (34) and (35) encode an active/voluntary interpretation of the relation between Actor and activity where the a. versions impose an inactive/involuntary interpretation.

In addition, an 'activation' construction<sup>7</sup> can convert a number of process P-verbs to A-verbs.

(36) a. sea ije na-re tuase  
chair def lsg-contr break

'I broke the chair (unintentionally).'

b. na-re sea ije dabe tuase

'I broke the chair (deliberately).'

- (37)a. do na-re usiae  
water lsg-contr spill

'I spilled (the) water (unintentionally).'

- b. na-re do dabe usiae

'I spilled (the) water (deliberately).'

tuase and usiae are P-verbs that encode their perspective by placing the more referentially prominent of Actor and Patient in the subsequent position. Animate Actors outrank definite but inanimate Patients for P-verbs<sup>8</sup> so that the a. versions of (36) and (37) give the Patient perspective of tuase and usiae. The b. versions are the consequence of the activation construction which introduces an auxiliary and shifts the syntactic reflexes associated with the perspective of the activity from the subsequent P-verb position to the prior A-verb position. Again, the critical semantic variable is the active/voluntary vs. inactive/involuntary distinction.

Cross-linguistically, such a distinction is fairly common. Choctaw reflects it in its bound case system that applies to pronominal affixes in the verb. Certain intransitive verbs describing active or voluntary activity take what Heath (1977) calls the agentive series while the other intransitive verbs describing inactive or involuntary activity will take another series called the patientive series. There are a handful of stative intransitives that take a third dative series as well, but it is the active/voluntary vs. inactive/involuntary nature of the activity that determines whether the agentive series is used. In Tagalog, a special stative form of the verb is used along with a further constraint that Patient be 'topic' if the action of the verb is involuntary or accidental (Foley 1976).

Carol Slater (1977) documents a similar distinction in Kwtsaan. (38) is one of her examples of a switch reference device where an inadvertent action triggers -m, the marker for switch of reference, despite the coreferentiality of 'subjects'.

- (38)a. tamah-k adaw-ta  
3.raise.up-same 3/3.get-tns

'He raised it up (the cook pot lid) and got him.

- b. taman-m adaw-ta  
3.raise.up-diff 3/3.get-tns

'He raised it up by accident and got him.

Kwtsaan switch-reference differs in many respects from Barai, but the relevant fact is that it too encodes a deliberate vs. inadvertent distinction in its S/R mechanism.



In Barai, this clear delineation of active/voluntary and inactive/involuntary activities is an important typological feature of the language. It is at the heart of a basic dichotomy throughout the verbs that governs several syntactic features of the clause. It is also the basis of an activation construction for process verbs. And it is the crux of an important S/R device across clause junctures. Certainly it is also the case that the role prominence hierarchy and the referential criteria that determine the Ref NP are also relevant. Role prominence is significant in that it is only Actors and Patients at the top of the hierarchy that have access to S/R in the first place. And the referential criteria of definiteness and animacy heavily interfere with the accessibility to S/R for the primary participants of A-verbs. But, while role prominence discriminates clearly between Actor and Patient within the clause, it has a much lesser function in S/R. And even the referential factors, while significant, are only relevant to the Actors of A-verbs.

On the other hand, the perspective of the verb as we have defined it, is fundamental to every aspect of S/R. It is the perspective of the verb that provides the unmarked choice for accessibility to the control of S/R for A-verbs as well as the only possible participant for P-verbs. And it is also the semantics of perspective that account for the use of -ga in the special P-verb, A-verb sequences.

#### Footnotes.

1. Tense is not obligatory. Animate Patients are normally cross-referenced on the verb.
2. See Olson (in progress) for a discussion of strategies that encode given information and Chafe (1976) for a discussion of nonpronominalized given information functioning to prevent ambiguities.
3. We basically follow Foley (1976) in his universal definitions for Agent, Experiencer, and Source.
 

Actor (Agent):	the typically animate entity to whom the action is attributed.
Experiencer:	the typically animate experiencer of a mental state or psychological event.
Source:	the non-Actor cause of the action or state.
4. Healey does give account of some exceptions to the same subject principle. The main one is the use of the same subject marker with impersonal verbs whose Patient is coreferential with the Actor of the preceding clauses, a situation very similar to certain P-verbs following A-verbs in Barai, as (31) below.
5. -na and -ga are only one of several means of encoding switch-reference in Barai. They further encode specific types of clause juncture.
6. These terms are borrowed from Heath (1977) where there is a similar distinction that governs quite different syntactic reflexes. I have included the terms active/inactive to

account for certain inanimate Actors of A-verbs that function in an active though hardly volitional sense. That is, they encode an active interaction between man and his environment that contrasts with an inadvertent cause-effect relation. For example, "the sun struck me", "the stick poked me", or "the firestick burned me" are all viewed as active in contrast to "she attracted me", "he escaped my memory", or "it made me sneeze".

7. This process could qualify as an antipassive construction in that there is a shift of control over the reflexes associated with perspective from the Patient to the Actor. However, I have not used the term here as the variation is semantically based on the active/voluntary vs. inactive/involuntary nature of the activity.
8. Role prominence also appears to have a part in the constraints on word order (other than the unmarked preference for Actors to precede Patients). It surfaces in those instances where the participant that defines the perspective for a particular verb has marginal referential status. So a definite but inanimate Actor with an A-verb will not be outranked by an animate Patient and will assume the position of referential prominence. But a definite inanimate Patient with a P-verb will be outranked by an animate Actor (as in 36a), the difference being a reflex of the greater salience of Actors on the role prominence hierarchy.

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