SELECTED ASPECTS OF AKAWAIO ARGUMENT STRUCTURE

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0. Introduction

This paper describes basic aspects of argument structure in Akawaio, a Cariban language of Guyana. It is based on the data of a field methods class held in the Fall of 1999 at Rice University.¹ Obviously, the data is limited in many respects, due both to its nature (it is mainly elicitied data) and to its incompleteness. In many ways, a description of argument structure is premature, since many of the relevant aspects of language (most importantly, voice) have not been studied yet. However, nothing makes for more tedious reading than an account which constantly points out the limitations of the data on which it is based. I will therefore keep such discussions to a minimum, and base my description on what is there as though that is all there is.

In order to describe case frames, we need a terminology. I adopt here the bare-bones version of semantic role theory developed by Scott de Lancey. I assume that there are only three semantic roles relevant to the description of core (i.e. obligatory) arguments in a clause, namely *agent* (henceforth abbreviated as AGT), *theme* (henceforth abbreviated as THM), and *location* (henceforth abbreviated as LOC). These are not defined in terms of prose definitions, as is customary in traditional approaches to case grammar, but instead are characterized in terms of a tightly constrained set of event schemas. LOC refers to any location, state, or property. THM refers to any entity located at or moving to LOC. AGT refers to any entity causing THM to move to LOC. Thus, there are three possible event schemas:

(1) a. THM at LOC b. THM goto LOC c. AGT cause THM goto LOC

¹ Thanks are due to Desrey Fox, who was extremely patient and very generous with her time both as a consultant and as a colleague, and to the other participants of the class, who did the amazing job of collecting their share of the 2200 clauses and phrases from which this paper draws.

Any more specific semantic content, such as typically attributed to (configurations of) semantic roles, is taken to be part of the semantics of a particular verb rather than an event schema.

It is assumed that these three event schemas are sufficient to account for all configurations of obligatory arguments in any given language, under the assumption that one or more of the roles can be incorporated into the verb. It is also assumed that these three roles are sufficient to account for all obligatory arguments in all case frames. As will become clear, this is certainly the case in Akawaio.

In addition to this terminology, I will use the traditional semantic roles as first introduced in Fillmore's *Case for Case* and now widely used in different theories—such as Agent, Patient, Instrument, etc. I will assume the informal type of definition typically given to these labels in textbooks such as Burling's *Patterns of Language*. I will use these labels for two purposes: (i) for talking about oblique (optional) arguments, and (ii) for making clear certain distinctions (or rather, the lack thereof) within AGT, THM, or LOC.

1. Subcategorization of Akawaio verbs: a brief sketch

This section gives a brief overview over the syntactic subcategorization of Akawaio verbs, before specific case frames are investigated in detail in the remaining sections of the paper.

Akawaio verbs are of one of two subcategorization types: intransitive or transitive. There are two configuration patterns for the subject of intransitve verbs (S), as shown in exx. 2a-b:

<i>, ,</i>
'pï
PAST
:
;
.ng.′

In ex. 2a, S appears as a morphologically unmarked pronoun (or, alternatively, as the prefix a-, i.e. *azawrogi'pi*). In ex. 2b, it occurs as a prefix *ma*-. There are also two configurational patterns for the subject and object of transitive verbs (A and O). In ex. 3a, A is marked by the postposition -*ya*, while O appears as an unmarked pronoun, while in 3b A occurs as a verbal prefix *ma*- and O appears as an unmarked pronoun.

 $^{^{2}}$ I am using the orthography developed in the Field Methods class mentioned. To draw attention to the fact that we are dealing with an orthography rather than a phonemic transcription, I have also adopted the English rules for capitalization and punctuation for now.

(3) a. Amöröya urö'nogong wönö'pï. amörö -ya urö -'nogong wönö -'pï 1SG -PL 2SG -A hit -PAST 'You hit us.' b. Urö'noqonq mïwö'ayk. -'ayk urö -'nogong mï- wö 1SG -PL 2A- hit -PRES 'You're hitting us.'

Comparing 2a and 3a, we have an ergative pattern, with S and O appearing as unmarked pronouns and A appearing with the postposition *-ya*. Comparing 2b and 3b, we have basically have a nominative pattern, with S and A occuring as prefixes (albeit different ones), and O occuring as a free unmarked pronoun. Thus, it seems that Akawaio is a split ergative language, although it is not presently clear what conditions the split (it is not tense or aspect, as the examples may suggest). Note that word order is comparatively flexible in Akawaio, except that absolutive nominals always occur pre-verbally.

There is no evidence at all of ditransitive verbs, i.e. of verbs with three obligatory arguments. Consider the following examples, both of which would be ditransitive in many other languages:

i-garedaydong ge) i-gareda -y -dong ge (4) a. ireba'pï uya. INST i- reba -'pï u- ya 3- book -PSD -PL 30- give -PAST 1A- A 'I gave him books.' b. Karoyk ya tambik enuba'pï (agawayo bök). karoyk ya tambik enuba -'pï agawayo bök Karoyk A tambik teach -PAST Akawaio DAT 'Karoyk taught Tambik Akawaio.'

In both cases (and as we will see in a later section, in all other potentially ditransitive clauses), there are only two core arguments, A and O. The potential indirect object ('books' in 4a and 'Akawaio' in 4b) appear with postpositions, and if they are deleted, we are left with complete sentences (more literal English counterparts would therefore be 'I gifted him (with books)' and 'Karoyk taught her (about Akawaio)').

2. Akawaio argument structure: a brief sketch

This section gives an overview of argument structure in Akawaio. Section 2.1 deals with one-place predicates, Section 2.2 deals with two-place predicates.

2.1 One-place predicates

One-place predicates in Akawaio can have one of three case frames: [THM (LOC)], [AGT (THM/LOC)], and [AGT/THM (LOC)]. The last of these, which is characterized by reflexive/reciprocal semantics, is only relevant in the context of de-transitivized verbs, which are discussed separately in Section 3. The three case frames are not distinguished formally: all one-place predicates have the morpho-syntax described in the preceding section.

One-place predicates in Akawaio fall into the expected semantic domains. They are: — involuntary change-of-state verbs (with the case frame [THM (LOC)]), as in ex. 5:

(5) Yaymuji ma'ta'pi. yaymuji ma'ta -'pi yaymuji die -PAST 'Yaymuji died.'

— stative verbs (also with the case frame [THM (LOC)], as in exx. 6 and 7:

(6)	King biyaw	gyo'mang	gyo'mangbödï'pï.					
	king biyaw	gyo'mang	-bödï -'pï					
	king near.t	to 3.live	-FREQ -PASI	2				
	'He used to	o live near	the king.'					

(7) Tambik e'nunnö'pi te'kwe taw. tambik e'nunnö -'pi te'kwe taw Tambik sleep -PAST hammock in 'Tambik slept in her hammock.'

— verbs denoting bodily functions, whether involuntary, as in ex. 8, or voluntary, as in 9:

- (8) Yaymuji eramu'ta'pi. yaymuji eramu'ta -'pi Yaymuji sweat -PAST 'Yaymuji sweated.'
- (9) Yaymuji zu'tabödi'pi. yaymuji zu'ta -bödi -'pi Yaymuji urinate? -FREQ -PAST 'Yaymuji urinated.'

With these verbs it is more difficult to say what case frame they should be assigned. There are languages where similar events arguably have the case frame [LOC (THM)], e.g. German *Mir fröstelt*, to.me is.cold, 'I'm freezing', or [AGT/THM (LOC)], like English *He relieved himself*. However, in absence of evidence to the contrary, exx. 8 and 9 are assumed to have the case frame [THM (LOC)], just like the preceding verbs;

— verbs denoting properties (again with the case frame [THM (LOC)]), as in ex. 10:

(10) Yöybiri gwönimi wagi be. yöybiri gwönimi wagi be flower smell good ADVZR `The flowers smell good.' — and finally, motion verbs, both involutary, as in ex. 11, and voluntary, as in exx. 12a and b:

- (11) Tambik da'mo'ka'pï. tambik da'mo'ka -'pï tambik fall -PAST 'Tambik fell.'
 (12) a. Tambik binimï yuk yaw. tambik binimï yuk yaw
 - tambik walk forest in
 'Tambik walks in the forest.'
 b. E'ma daw urö zarö'pï.
 e'ma daw urö z- arö -'pï
 path in 1SG DETR- carry -PAST
 'I walked along the path.'

Again, the case frame of these verbs is less straightforward. From a semantic perspective, one would expect motion verbs to have the case frame [THM (LOC)] in the case of involuntary motion, and [AGT/THM (LOC)] in the case of voluntary motion. However, there is no evidence for this distinction. Although there are a few voluntary motion verbs that have detransitive morphology, and thus might be considered to have the case frame [AGT/THM (LOC)], such as the one in ex. 12b, most voluntary motion verbs look just like involuntary motion verbs (compare exx. 11 and 12a). I will return to this point presently, and I will briefly return to the verb *zaröng* 'walk' at the end of Section 3.

As these examples show, Akawaio does not distinguish the different traditional semantic roles that may be said to be required by the semantics of these different types of verbs. Exx. 5-7 and 11 have a Patient, 8, 9, 12a and b an Agent (in the latter two examples sometimes referred to as Mover), and 10 a Stimulus. Yet none of these roles has any effect on the syntax. In terms of the case frames given above, the match is better. Without stretching the semantics of the verbs involved too much, it could be argued that all of them have the case frame [THM (LOC)]. The match between case frames and syntax would then be perfect in the case of one-place predicates. I will show that this position cannot be upheld either, however, at the end of Section 3.

There are some examples in the data which seem to pose an interesting challenge to the set of one-place case frames as well as to the subcategorization frames discussed in the preceding section. Consider the following examples:

```
(13) a. Karoyk ya kareda egama'pï.
karoyk ya kareda egama -'pï
karoyk A book read -PAST
'Karoyk read a book.'
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- b. Karoyk ya egama'pï. karoyk ya egama -'pï karoyk A read -PAST 'Karoyk read (it).'
- (14) a. Karoyk ya tuna enji'pï. karoyk ya tuna enji -'pï karoyk A water drink -PAST 'Karoyk drank water.'
 - b. Karoyk ya enji'pï. karoyk ya enji -'pï karoyk A drink -PAST 'Karoyk drank (it).'

In both examples, it seems that the case frame [AGT THM (LOC)] alternates with [AGT (THM/LOC)], but the AGT is marked by the postposition *-ya* in both cases. This contradicts the expected configurational pattern, which says that the S of intransitives (and the b-examples here seem to be intransitive) should appear as morphologically unmarked nominals (and the evidence presented in Section 3 below strongly supports this). The *ya*-marker on the S in exx. 13 and 14 would be motivated from a case-frame viewpoint, since it would allow us to state that a 'pure' AGT (i.e. one not sharing a slot with THM) is always marked by *-ya*.

The question is, whether exx. 13b and 14b are actually truly intransitive. Note that they get translated into English either as intransitives, or as transitives with a pronoun in the O slot. On the other hand, the Akawaio sentences clearly do not contain an overt pronoun or pronominal prefix. It is thus difficult to tell whether the motivation mentioned in the preceding paragraph is arguing on the basis of the English translation rather than the Akawaio data. But note that the possibility of inserting a pronoun into the English translation toghether with the fact that the AGT is marked in the Akawaio sentences as though they contained an O-pronoun *should* make us suspicious. It is possible, that the examples contain covert (i.e. zero pronouns). Although I cannot argue it conclusively, I claim that they do. There are two pieces of evidence from other parts of the grammar. Consider the following examples:

- (15) a. Nya mine'ayk. nya mi- ne' -ayk 1+3S 2A- bring -PRES 'You're bringing us.' b. Tok mine'ayk. tok mi- ne'- -ayk 3PL 2A- bring -PRES 'You're bringing them'
 - c. Mine'ayk. mi- ne'- -ayk 2A- bring -PRES 'You're bringing him/her/it.'

In all three examples, the A is marked by the prefix $m\ddot{i}$. In the first two examples, the O appears as an unmarked free pronoun. However, in the third example, there is no pronoun corrresponding to the 3SG-O that we see in the free translation.

Now consider the following examples:

(16) a. *Poqoy* be urö manq. poqoy be urö mang 1SG COP sadness ADVZR 'I am sad b. Pogoy be amörö manq. amörö mang pogoy be sadness ADVZR 2SG COP 'You are sad.' c. Poqoy be manq. poqoy be mang sadness ADVZR COP 'He/she/it is sad.'

Here, we have free pronouns coding the subject in the first two examples, but nothing corresponding to the 3SG-subject in the English translation in the thire. There seem to be two ways of solving this problem: (i) we could claim that *mï*- means '2A' in some cases (namely, when there is an O-pronoun present), and '2A acting on 3SG-O' in other cases (namely, when there is no O-pronoun present; (ii) we could claim that there is an allomorph of the 3SG pronoun that is zero. The same two lines of argumentation are open for the copula *mang*, which we would claim sometimes means 'COPULA' and sometimes means '3SG.COPULA', again, unless we allow for a zero pronoun for 3SG. Both choices are problematic, one giving up the principle that linguistic elements should be overt, the other positing a polysemy for morphemes whose meaning would otherwise be unambiguous.

Luckily, I do not have to make this choice: in the context of the present paper it is enough to point out that 3SG participants go unmarked on the surface in various areas of Akawaio grammar. Coming back to examples 13 and 14, I now have some evidence to claim that they do indeed contain a covert O. Thus, the marking on the AGT is as expected, since the sentences are not actually intransitive at all.

2.2 Two-place predicates

Two-place predicates in Akawaio have the case frame [AGT THM (LOC)]. The AGT can be an Agent, an Instrument, or an Experiencer in terms of traditional semantic roles. The THM is either a Pateint or a Recipient.

Semantically, transitive verbs fall into the expected semantic domains involving events that are typically thought of as having two participants, but they also encode events that might be thought of as having three core participants. The latter will be treated in a separate

section, not because their morpho-syntax or their case frames warrant it (they are identical to other transitives), but because they are unexpected compared to SAE languages (where they would be di-transitive).

Some typical types of transitive verbs are:

— change-of-state verbs, with the case frame [AGT THM (LOC)], where the THM is a Patient, as in exx. 18 and 19:

- (18) Yaymuji pöröw i'kwödï'pï. yaymuji pöröw i'kwödï -'pï yaymuji arrow break -PAST 'Yaymuji broke the arrow.'
 (19) a. Karoyk ya mra'ta a'koga'pï. karoyk ya mra'ta a'koga -'pï karoyk A door open -PAST 'Karoyk opened the door.'
 - b. Pese'tö ya mra'ta a'koga'pï. pese'tö ya mra'ta a'koga -'pï wind A door open -PAST 'The wind opened the door.'

As exx. 19a-b show, there is no morpho-syntactic distinction between animate AGTs (i.e. Agents), and inanmate AGTs (i.e. Forces/Instruments);

- surface-contact verbs, as in exx. 20 and 21:

(20) Tambik wönö'pi karoyk ya. tambik wönö -'pi karoyk ya tambik hit -PAST Karoyk A 'Karoyk hit/killed Tambik.'
(21) Karoyk ya Yaymuji boga'pi. karoyk ya yaymuji boga -'pi karoyk INTJ yaymuji shoot -PAST 'Karoyk shot Yaymuji.'

Such verbs are distinguished in many languages as arguably having the case frame [AGT LOC (THM)], the difference to change-of-state verbs showing up as (obligatory or optional) locative marking on the O. There is no reason to assume that surface-contact verbs in Akawaio have such a case frame. Locative marking is not available even as an option. Note also, that the two paradigm examples of change-of-state vs. surface-contact verbs, 'hit' and 'kill', are the same verb in Akawaio. Once voice in Akawaio is described, we might be able to find differences in the behavior of these two classes, but at present there is no reason to believe that surface-contact verbs have a different case frame from change-of-state verbs;

— creation verbs (i.e. verbs with an effected O) as in ex. 22. Again, there is no evidence that they differ in their case frame from the preceding verb classes:

(22) Karoyk ya uraba konega'pï. karoyk ya uraba konega -'pï karoyk A bow make -PAST 'Karoyk made a bow.'

— non-affecting verbs, in which there is no contact between AGT and THM, and THM does not undergo any change-of-state:

(23) Karoyk ya Tambik i'nïmma. karoyk ya tambik i'nïmma karoyk A tambik like 'Karoyk likes Tambik.'
(24) Karoyk ya zari ondïma'pï. karoyk ya zari ondïma -'pï karoyk A deer hunt -PAST 'Karoyk hunted deer.'
(25) Karoyk ya Yaymuji agama'pï. karoyk ya yaymuji agama -'pï karoyk A yaymuji miss -PAST 'Karoyk missed (=failed to hit) Yaymuji'

Ex. 23 show that Experiencers and Stimuli are not treated any different from Agents and Patients. In general, Patients who are unaffected by the action (whether potentially so, as in ex. 24, or explicitly so, as in ex. 25) are treated morphosyntactically just like any other THM.

In the case of transitive verbs, there is a good match between morphosyntax and the semantic roles AGT and THM, with AGT always appearing as the ergative argument. However, this is due to the abstract characterization of these roles described in the Introduction. There is no match at all in Akawaio between morpho-syntax and the traditional case roles, such as Agent, Patient, etc.

2.3 Two-place predicates encoding events with more than two potential participants

As already mentioned, predicates encoding events which potentially involve three core participants are strictly transitive in Akawaio. Only two of the potential cor participants can be chosen as core arguments, the third must be appear as an oblique, if it appears at all. In the examples in this section, the oblique argument encoding the potential third participant is always given in parentheses, as in ex. 26:

```
(26) Tambik ya (Karoyk enak) kareda ennogi'pi.
tambik ya karoyk enak kareda ennogi -'pi
tambik A karoyk to book send -PAST
'Tambik sent (Karoyk) a letter.'
```

It should be kept in mind, however, that this argument is always fully optional, its nonappearance does not render the sentences in question incomplete or dependent on discourse context. I assume that semantically, three-participant events encode an Agent, a Patient, and a Recipient (in the widest sense). Which of the latter two is chosen as THM is in the vast majority of cases determined by the verb, i.e. most verbs will always take one or the other (for an exception see below).

Consider ex. 27:

(27) a. Karoyk ya (Tambik pök) pandong egama'pï. karoyk ya tambik pök pandong egama -'pï karoyk A tambik DAT story tell -PAST 'Karoyk told (Tambik) a story' b. (Ubök) megamaayk. u- bök m– egama -ayk 1- DAT 2A10- tell -PRES 'You are telling it (to me).' (Tambik pök). c. Yeqamaayk y- egama -ayk tambik pök 2A10- tell -PRES tambik DAT 'You are telling on me / talking about me (to Tambik).'

The verb *egama* 'to tell' has the semantic frame (in Fillmore's sense) Teller-Thing Told. The AGT encodes the Teller, the THM encodes the Thing Told. The Recipient (of the speech act) is an oblique, as shown by exx. 27a-b (for a discussion of the different kinds of obliques see Section 4). If we try to bring a human participant besides the agent into the case frame, as in ex. 27c, the result is that the meaning of the verb (or at least its translation) changes to accomodate this participant as a Thing Told.

Next, consider ex. 28:

(28) a. Tambik ya Karoyk e'kyari'tö'pï (egi ge). tambik ya karoyk e'kyari'tö -'pï egi ge tambik A karoyk feed -PAST bread INST 'Tambik fed Karoyk (bread).'

The verb *e'kyari'tö* 'feed' can be thought of as having the case frame [AGT LOC (THM)] (providing, at last, evidence for LOC). Note that there is actual evidence in this verb for an incorporated THM in the verb. It's morphological structure is something like this:

(28) b. e' kyari 'tö VBLZR food VBLZR 'food' 'provide with'

This leaves the O-argument with the role of LOC (or Recipient, or Person Fed). The Thing Fed can appear as an oblique.

We can think of this case frame as associated with the verbalizer $-t\ddot{o}$ 'provide with'. Although there are some restrictions on the kinds of nominals which can be verbalized by it,³ it is fairly productive.

As another example, condsider exx. 29a-c:

(29) a. Igaredaytö'pï uya. i- gareda -v -'pï u- ya -tö 3- book -PSD -VBZR -PAST 1A- A 'I gave him a book.' (lit. 'I book-provided him') b. *Igaredaydongtö'pi uya. -dong -tö -'pï i- gareda -y u- ya 3- book -VBZR -PAST 1A- A -PSD -PL 'I gave him books' c. Iqaredaytö'pï (kara'wak peang uya -tö u- ya kara'wak peang i- gareda -y -'pï 3- book -PSD -VBZR -PAST 1A- A yellow ADVZR kareda ge) kareda ge book INST 'I gave him a yellow book' (lit. 'I book-provided him (with a yellow book')

Note that modified nominals (e.g. pluralized or premodified nouns) cannot be verbalized, as ex. 29b shows. In such cases, the Thing Given occurs twice: once as an (unmodified) verbalized noun, and once as a (modified) oblique.

In addition to the verbalizer -'tö, there are two lexical verbs which encode transfer events: *reba* and *tïrï*. Consider the following examples:

(30)	a.	. (Igaredaydong ge) i	reba'pï	uya.
		i- gareda -y -dong ge i	- reba -'pï	u- ya
		3- book -PSD -PL INST 3	0- give -PAST	1A- A
		`I gave him books' (lit. `I	gave to.him	(with books)')
	b.	. Karak ya kareda diri'pi	(Tambik enal	<).
		karak ya kareda dïrï -'pï	tambik enak	
		karak A book give -PAST	tambik to	
		`Karak gave books (to Tambi	k).′	

The verb in ex. 30a has the sematic frame Giver-Recipient-(Given). It is thus similar in argument structure (but not in meaning) to the English transfer verbs *shower* or *flood*, as in *They showered him with presents*, *They are flooding me with junk mail*. The verb in ex. 30b has the semantic frame Giver-Given-(Recipient). It is thus similar in argument structure to the

³ As far as I can tell at present, loan words and words without an overt PSD suffix cannot be readily integrated. Note also that the examples in 29 differ somewhat from ex. 28 in their structure. Instead of the e'- of the latter, they have possessor prefixes. I have glossed e'- as VBLZR, but in fact it is unclear what status it has (it may be a default case where the Recipient is a lexical noun, and there is no possessor prefix). A closer analysis of this verbalizer certainly seems promising.

English verb *give away*. Toghether, these two verbs achieve the kind of alternation that English achieves with the so-called *dative shift* (cf. the English glosses). In other words, due to its heavily restricted inventory of subcategorization frames (or case frames), Akawaio has to solve lexically what a language like English ca achieve by subcategorization/case frame alternation. It would be interesting to have more data on verbs like the ones in exx. 30a-b available. This is not the case at present.

Finally, there is one verb in my data which shows a true case-frame alternation. Consider ex. 31:

(31)	a.	Yegampoayk	(ibök).
		y- egampo -ayk	i- bök
		2A10- ask -PRES	3- DAT
		'You are asking me (:	it) / You are requesting (it) from me.'
	b.	Megampoavk	(urö bivabav).
		m- egampo -ayk	urö biyabay
		2A30- ask -PRES	1SG from
		'You are asking (me)	it / You are requesting it (from me).'

As these examples show, the verb *egampo* 'ask, request' has the semantic frame Asker-Person Asked-(Thing Asked For) in 31a, and the semantic frame Asker-Thing Asked For-(Person Asked) in 31b. In other words, THM alternates between two participants, as was the case with the verb *egama* 'tell' in ex. 27 above, but the in contrast to the latter, *egampo* allows the participants to keep their semantic roles.

3. Detransitive-transitive verb pairs

This section returns to one-place predicates. It deals with a set of verb roots that occur both as intransitive and as transitive verbs. Section 3.1 outlines the form and morphological status of the morpheme accompanying this alternation, Section 3.2 discusses the consequences of this alternation for argument structure, and Section 3.2 discusses some cases of alternation that are accompanied by unpredictable (but not totally unmotivated) differences in meaning.

3.1 The form of the detransitive morpheme

On the surface, Akawaio has four detransitivizers, as the following examples show:

(32) a. Pöröw e'kwödï'pï. pöröw e'- kwödï -'pï arrow DETR- break -PAST 'The arrow broke.' b. Mra'ta da'koro'pï. mra'ta d- a'koro -'pï door DETR- close -PAST 'The door closed.' c. Kïrö zêmbaga'pï. kïrö z- êmbaqa -'pï 3S DETR- awaken -PAST 'He woke up.' d. Urö ji'nïgï'pï. urö j- i'nïgï -'pï 1SG DETR- frighten -PAST 'I got scared.'

Of these, the last two are due to allophonic variation (/z/goes to [j] adjacent to an [i], and to [z] everywhere else.

This leaves the three forms e-, d-, and z- to be accounted for. For the vast majority of cases, these forms are in complementary distribution, and can therefore be regarded as allomorphs. The allomorphy is conditioned as follows:

```
(33) e- for consonant-initial roots
    d- for roots beginning with [a]
    z- for roots beginning with [e], [o], and [i].
```

I will refer to this morpheme as DETR. In my data, there are only two exceptions to the set of rules in (33), which I will return to below.

The morphological status of DETR is actually not as straightforward as it seems. Although it functions as a detransitivizer in many cases, i.e. it appears on many verbs that have a transitive counterpart with the same root, it also occurs on verbs that seem to be derived from ideophones or nouns, as in ex. 34:

In addition, a number of detransitive verbs begin with [e], [d], or [z] that do not contain any readily recoverable root, as in ex. 35:

(35)	a.	Intransitive verbs beginning with e-
		egabö'no `defecate', e'kwara `fart', e'nunnö `sleep',
		eramu'tang `sweat', erewdang `sit'
	b.	Intransitive verbs beginning with d-
		da `say', da'körö `laugh', da'mo'kang `fall', dö `go',
		durum `play music'
	c.	Intransitive verbs beginning with z-
		zennachikang `sneeze', zu'tang `urinate'

As can be seen from this list, these verbs adhere to the distributional statements in 33, except for *durum*, which is, however, based on the ideophone *turum turum* 'play a musical instrument.'

The fact that there are verbs containing [e] but no verbal root tentatively suggests that DETR (or at least the e-allomorph) was at some point a verbalizer, deriving intransitive verbs from various sources. The fact that the verbs in (35) follow the general rules in their distribution of [e], [d] and [z] suggest that they were at some point derived verbs whose original source morphemes have since been lost.

3.2 The consequences of the detransitive morpheme for argument structure

Assuming that synchronically DETR derives intransitive verbs from transitive verbs, there are two major ways in which it changes the argument structure of the latter. Assuming for now that transitive verbs in Akawaio have the argument structure [AGT THM (LOC)], DETR either removes the AGT, or it integrates AGT and THM into a single slot in the case frame: [AGT/THM (LOC)].

In the case of DETR removing the AGT we get middle semantics, as in the following pairs of examples:

(36)	a.	Y <i>aymuji pöröw i'kwödï'pï.</i> yaymuji pöröw i'kwödï -'pï Yaymuji arrow break _{tr} -PAST `Yaymuji broke the arrow.'	b.	<i>Pöröw e'kwödï'pï.</i> pöröw e'- kwödï -'pï arrow DETR- break -PAST `The arrow broke.'
(37)	a.	<i>Karoyk ya mra'ta a'koga'pï.</i> karoyk ya mra'ta a'koga -'pï Karoyk A door open _{tr} -PAST 'Karoyk opened the door.'	b.	<i>Mra'ta da'koga'pï.</i> Mra'ta d- a'koga -'pï door DETR- open -PAST `The door opened.'
(38)	a.	<i>Ipïrï'sï'ka uya.</i> i- pïrï'sï'ka u- ya 30- detach _{tr} 1A- A 'I pulled it off.'	b.	Ye'pïrï'sï'ka y- e'- pïrï'sï'ka 3S- DETR- detach `It came off.'
(39)	a.	<i>Mêmbagay.</i> m- êmbaga -y 2A30- awaken _{tr} -PAST 'You woke him up.'	b.	<i>Nïzêmbagay.</i> nï- z- êmbaga -y 3S DETR- awaken _{tr} -PAST 'He woke up.'
(40)	a.	Tambik ya Yaymuji emo'ka'pï. tambik ya yaymuji emo'ka -'pï Tambik A Yaymuji raise -PAST 'Tambik raised Yaymuji.'	b.	Y <i>aymuji zemo'ka'pï.</i> yaymuji z- emo'ka -'pï Yaymuji DETR- raise -PAST `Yaymuji grew up.'
(41)	a.	<i>Karoyk ya yi'nïgï'pï.</i> karoyk ya y- i'nïgï -'pï karoyk ya 1S- frighten -PAST 'Karoyk frightened me.'	b.	<i>Uji'nïgï'pï</i> u- j- i'nïgï -'pï 10- DETR- frighten -PAST 'I got scared.'

In the case of DETR integrating AGT and THM into the same slot in the case frame, we get reflexive/reciprocal semantics, as in the following pairs of examples:

(42) a.	Amörö ya kïrö wönö'pï. b amörö ya kïrö wönö -'pï 2SG A 3SG hit -PAST 'You hit him.'	ο.	Amörö e'wönö'pï. amörö e'- wönö -'pï 2SG DETR- hit -PAST 'You hit yourself.'
(43) a.	Yaymuji ya Karak a'su'ka'pï. k yaymuji ya karak a'su'ka -'pï yaymuji A karak suck -PAST 'Yaymuji kissed Karak.'		Yaymuji mörabay Karak yaymuji mörabay karak yaymuji and karak da'su'ka'pï.
			DETR- suck -PAST 'Yaymuji and Karak kissed each other/themselves'

The type of case frame created by DETR (and hence the type of semantics) depends on whether or not the THM in the transitive case frame is a potential Agent for the action described by the particular verb. If not, we get middle semantics, since the AGT cannot be integrated with the THM, if yes, we get reflexive/reciprocal semantics.

There are a few verbs that behave idiosyncratically with respect to case frames when detransitivized. For example, the famous 'cook' shows the same case frame alternation that it does in English (cf. Fillmore 1968):

```
(44) a. Urö ya kyari ku'kuma.
urö ya kyari ku'kuma
1A A food cook
'I am cooking the food.'
b. Urö e'ku'kuma.
urö e- 'ku'kuma
1S DETR- cook
'I am cooking.'
c. Kyari e'ku'kuma.
kyari e- 'ku'kuma
food DETR- cook
'The food is cooking.'
```

DETR either removes the AGT, as in ex. 44b, or it integrates the THM into the verb, leaving behind the AGT, as in ex. 44c.

It seems that where the THM is in a part/whole relationship to the AGT, both these case frames are also possible:

```
(45) a. Yenu biwma uya.
y- enu biwma u- ya
1- eye blink 1A- A
`I blink my eyes.'
```

```
b. Urö e'piwbiwma.
urö e- 'piwbiwma
ISG DETR- blink
'I am blinking.'
c. Yenu e'piwbiwma.
y- enu e- 'piwbiwma
1- eye DETR- blink
'My eyes are blinking.'
```

Again, the THM may be integrated into the verb, leaving AGT as the sole argument (as in ex. 45c), or the AGT may be deleted (as in ex. 45c). Obviously, more data is needed to determine if this is a general pattern.

Finally, a third case of unusal case frame alternation is presented by the verb *prema* 'pray.' Consider the following examples:

```
(46) a. Tok ya Karoyk prema'pï.
        tok ya karoyk prema -'pï
                            -PAST
        3PL A karoyk pray
        'They prayed for Karoyk.'
    b. Tok ebrema'pï.
                  brema -'pï
        tok e-
        3PL DETR- pray
                        -PAST
        'They prayed.'
    c. Tok ebrema'pï
                              Karoyk bona.
        tok e- brema -'pï
                              karoyk bona
        3PL DETR- pray -PAST karoyk on
        'They prayed for Karoyk.'
```

Here, the transitive verb in ex. 46a, with the case frame [AGT THM (LOC)], alternates with an intransitive verb (in ex. 46b) with the case frame [AGT (THM/LOC)], thus, just as with the previous examples, the THM is incorporated into the verb, leaving AGT as the sole argument. Interestingly, the Benefactor of the praying can be reintroduced in intransitive sentences as an oblique.⁴

3.3 The semantics of detransitivization

As mentioned, the semantics of detransitivization are relatively straightforward for the bulk of my data: it can be described as either middle, or reflexive/reciprocal.

⁴ There is a semantic difference between exx. 46a and 46b: in the former, the prototypical event described by the consultant is one where the person prayed for is present at the scene, and the prayers are spoken over his or her body, involving ritual chanting, and maybe dancing. In the latter, the person prayed for need not be there at all. This difference is not entirely unexpected, given that 46a is a transitive sentence, which should encode events with a greater degree of affectedness of the THM than intransitive sentences like 46c. These examples show that case frames in Akawaio may not be quite as bland a topic as the absence of commonly found distinctio other places of Akawaio grammar suggests. There are doubtless many interesting patterns for specific verbs waiting to be discoverd.

However, not all verb pairs that are related morphologically by the presence or absence of DETR have a predictable semantic relationship that is as predictable as this. There are three idiosyncratic cases in my data (and more data would surely uncover more):

(47) a.	<i>Kïrö eguka</i> . kïrö eguka 3SG breathe.one's.last `He breathed his last (breath).'	b.	<i>Tiygu ku'ka'pï iya</i> . tiygu ku'ka -pï i -ya drink slurp -PAST 1A -A `He slurped the drink.'
(48) a.	Karoyk zennagang dyeburu be. karoyk zennagang deburu be karoyk play leader ADVZR 'Karoyk played chief (=pretended he was the chief).'	b.	Amörö ya urö ennaga'pï. amörö ya urö ennaga -pï 2SG A 1SG deceive -PAST `You fooled me.'
(49) a.	<i>Karoyk zawrogï'pï</i> . karoyk zawrogï -pï karoyk speak -PAST `Karoyk spoke.'	b.	Karoyk ya tambik awroka. karoyk ya tambik awroka karoyk A tambik advise `Karoyk gave Tambik advice.'

Clearly, the connections between the verbs in each pair are not semantically opaque, but they are unpredictable, and they are irregular enough to make a single gloss for the transitive and intransitive forms impossible. Pairs such as these can be regarded as somewhere between the fully predictable alternations in exx. 36-43, and the intransitive verbs without a transitve counterpart in ex. 35. All that has to happen is for the transitive forms in 47-49 to disappear, and the transitive forms will join the list in 35.

Interestingly, from the perspective of argument structure, all three semantically irregular examples are also irregular with respect to case frames: DETR for all of them involves the integration of THM into the verb, with AGT as the sole argument.

Finally, let me return briefly to the exceptions to the distributional statements concerning the allomorphs of DETR given in Section 3.1. Consider the following examples:

```
(50) a. Karoyk zawrogï'pï.
karoyk zawrogï -pï
karoyk speak -PAST
'Karoyk spoke.' (=49a)
b. Urö zarö'pï.
urö z- arö -'pï
1SG DETR- carry -PAST
'I walked.' (cf. 13)
c. Urö darö'pï.
urö d- arö -'pï
1SG DETR- carry -PAST
'I carried myself.'
```

Notice that the verbs in the first two examples, which are the two exceptions mentioned, both belong to the group of detransitive verbs that are exceptional both with respect to their case frames, and with respect to the semantic relation they bear to their transitive counterparts. If they were productive uses of DETR, they should mean 'Karoyk gave himself advice' and 'I carried myself' respectively. In fact, for *arö* 'carry' there is a semantically and argument-structurally regular counterpart which *does* follow the general pattern (cf. ex. 50c). Thus, these examples show that the story of DETR is probably more complex than the analyis in Section 3.1 suggests, but that (for my data) the distributional statements hold true for the productive uses of DETR.

4. **Obliques**

This section gives a brief overview of the most important oblique markers in Akawaio. Note that spatial and temporal postpositions are not discussed here, except as a contrast to some of the oblique postpositions. Some of the postpostions alternate between a voiced and a voiceless initial stop. This is due to a general phonological rule. Note also that the postpositons are not given glosses in this section, since their meaning is what is under investigation here.

4.1 *The postposition* ke

The postposition ke marks the following kinds of participants:

— instruments, as in exx. 51-52

- (51) Ege kareda ge wönö'pi iya. ege kareda ge wönö -'pi i- ya big book GE 10.hit -PAST 3A- A 'He hit me with a big book'
- (52) Karoyk ya a'koga'pï kiy ge. karoyk ya a'koga -'pï kiy ge karoyk A open -PAST key GE 'Karoyk opened it with a key.'

— various types of means, as in exx. 53-55:

- (53) Tambik ya karoyk e'kyari'tö'pï egi ge. tambik ya karoyk e'kyari'tö -'pï egi ge tambik A karoyk feed -PAST bread GE 'Tambik fed Karoyk bread.'
- (54) Igaredaydong ge ireba'pï uya. i- gareda -y -dong ge i- reba -'pï u- ya 3- book -PSD -PL GE 30- give -PAST 1A- A `I gave him books.'

(55) Karoyk ya Tambik egampo'pi tegampozeng ge. karoyk ya tambik egampo -'pi t- egampo -ze -ng ge karoyk A tambik ask -PAST PRTCP- ask -PRTCP -NZR GE 'Karoyk asked Tambik a question.'

Thus, this postposition can comfortably be glossed as Instrument.

4.2 *The postposition* pök

The postposition *pök* marks the following participants:

— the contents of a speech act, as in exx. 56-57, and, stretching the notion speech act a litte bit, ex. 58:

(56)	Karak eji'pi gya'nö pra ti n karak eji -'pi gya'nö pra ti- n- karak COP -PAST sweet NEG 3R- O.NZR 'Karak was offended by something she	<i>eda'pï</i> eda -'pï hear -PAST had heard.'	<i>bök</i> . bök BÖK
(57)	<i>Karoyk pök tambik zawrogï'pï.</i> karoyk pök tambik zawrogï -'pï karoyk PÖK tambik speak -PAST `Tambik spoke about Karoyk.'		
(58)	Karoyk ya Tambik enuba'pi agawayo karoyk ya tambik enuba -'pi agawayo karoyk A tambik teach -PAST akawaio	<i>bök.</i> bök BÖK	

Note that *pök* also marks the recipient of a speech act, as in ex. 59:

'Karoyk taught Tambik Akawaio.'

(59) Karoyk ya Tambik pök pandong egama'pï. karoyk ya tambik pök pandong egama -'pï karoyk A tambik PÖK story tell -PAST 'Karoyk told Tambik a story.'

These two uses could be unified under the label 'Non-core participant in a speech act';

— the contents of any symbolic act, as in ex. 60, or of an act that can be interpreted as having a semiot function in social interaction:

(60) Emik ka'sak neji ball bök. emik ka'sak n- eji ball bök face draw/make 30- COP ball BÖK 'A face was drawn on the ball.'
(61) Dö bök jagoroda'pï. dö bök jagoroda -'pï IS.go BÖK 3S.get.angry -PAST 'He got angry because of my going.'

The characterization just given of these two uses is less straightforward than the preceding uses. They make sense though, if we consider the fact that a face drawn on a ball is not a real

face but a symbol of a face, and thus not fundamentally different from a linguistic expression, and if we consider that an act will typically make someone angry if it is in some sense intentional, and thus similar to an act that has a communicative intent. This oblique marker looks certainly promising for future investigation:

— finally, *bök* marks food with verbs of eating, as in ex. 62:

(62) Karoyk enda'na'pï egi bök. karoyk enda'na -'pï egi bök karoyk eat(intr) -PAST bread BÖK 'Karoyk ate bread.'

This example makes it difficult to come up with a unified meaning for $b\ddot{o}k$; I will leave the issue open.

4.3 *The postposition* enak

Enak marks the following participants:

— recipients, as in exx. 63-64:

(63)	Tambik	ya	kareda	dïrï'pï		Karak	enak.
	tambik	ya	kareda	dïrï	-'pï	karak	enak
	tambik	А	book	give(s.th.)	-PAST	karak	ENAK
	'Tambił	c ga	ave boo	ks to Karak.′			

(64) Yaymuji ya pöröw burugo'poma'pi Karoyk enak. yaymuji ya pöröw burugo'poma -'pi karoyk enak yaymuji A arrow sell -PAST karoyk ENAK 'Yaymuji sold an arrow to Karoyk.'

— recipients that are more like animate locations, as in exx. 65-66:

- (65) Tambik ya karoyk enak kareda ennogi'pi. tambik ya karoyk enak kareda ennogi -'pi tambik A karoyk ENAK book send -PAST 'Tambik sent Karoyk a letter.'
- (66) Tambik ya pöröw arö'pi Yaymuji enak. tambik ya pöröw arö -'pi yaymuji enak tambik A arrow take -PAST yaymuji ENAK `Tambik took the arrow to Yaymuji.'

- recipients of acts of caused perception, as in ex. 67, or communication, as in 68:

(67) Karoyk ya Yaymuji enak kareda emboyga'pi. karoyk ya yaymuji ENAK kareda emboyga -'pi karoyk A yaymuji to book show -PAST 'Karoyk showed Yaymuji a letter.' (68) Karoyk ya kareda egama'pi Tambik enak. karoyk ya kareda egama -'pi tambik enak karoyk A book read -PAST tambik ENAK 'Karoyk read a book to Tambik.'

It is not clear what the difference in meaning is between *bök* and *enak* when they are used to mark recipients of communication. The examples seem to suggest that perhaps *bök* marks the audience of a speech act, and *enak* marks the direct adressee of a speech act.

In any case, Recipient is a comfortable gloss for *enak*. Compare spatial Goals, which cannot be encoded by it:

(69) Tambik ya kareda ennogï'pï Georgetown bona. tambik ya kareda ennogï -'pï Georgetown bona tambik A book send -PAST Georgetown on.to 'Tambik sent a letter to Georgetown.'
(70) Yenno ayk ibiyak. y- enno -ayk i- biyak 2A10- send -PRES 3- to 'You are sending me to him.'

4.4 *The postposition* be

The postposition *be* marks all kinds of participants. It is too frequent, and its range of uses too wide to even begin to discuss it here. Two examples may suffice:

— additional participants of all kinds, as in ex. 71:

(71) Karoyk ya pöröw ê'ma'pï Yaymuji biyabay ten dara be. karoyk ya pöröw ê'ma -'pï yaymuji biyabay ten dara be karoyk A arrow buy -PAST yaymuji from ten dollar BE 'Karoyk bought an arrow from Yaymuji for ten dollars.'

— adverbials, as in ex. 72:

(72) Karoyk ya tiywik agu'nözak a'kraymudung be.
karoyk ya tiy- wik agu'nö -zak a'kraymudung be
karoyk A 3?- house paint -PAST green BE
'Karoyk painted his house green.'

Pe can also mark food in verbs of eating. Note that there is an interesting contrast with *bök* in this function:

(73) Dyomba be inva'kö. dyomba i- nya' -kö be 30- eat.fruit -SG.IMP 3.some BE 'Eat only some of it.' (i.e. some of what is on one plate, leaving behind the rest) (74) Dyomba bök enda'nak. dyomba bök enda'na -k 3.some BÖK eat(intr) -IMP 'Eat some of it.' (i.e. one plate from several distinct plates)

It seems that *bök* focuses on the fact that *domba* refers to food, it thus defocuses the meaning 'some' in ex. 74. In ex. 73, no focus is put on the fact that *domba* refers to food, thus, the meaning 'some' is more focused. A similar contrast as that in these examples can be produced in English by *Have some* vs. *Have some food*, uttered pointing at food. Again, this is a promising area for future research.

4.5 *The postposition* gang

The postposition *gang* is very straightforward in my data: it encodes exclusively the purpose of a motion event:

(75)	<i>Karoyk</i> karoyk karoyk `Karoy	: <i>ya</i> : ya : A rk se	<i>Tambik</i> tambik tambik ent Taml	<i>ennogï'</i> ennogï send bik for	<i>pï</i> -'pï -PAST water.	<i>tuna</i> tuna water .'	gang. gang GANG
(76)	<i>Tuna</i> tuna water `I wer	tenj t- PRT(nt f(<i>izeng</i> en 2P - dr: or wate:	ji -ze ink -PR' r to dr	-ng ICP -NZ ink.'	<i>gan</i> g g gang IR GANG	g dö'pï. g dö -'pï go -PAST

4.6 The postposition akörö

The postposition *akörö* marks participants accompanying the primary core participant in some activity:

(77)	Karoyk	ya	tïywï	k	agu'nöz	ak	Tambik	akörö	•	
	karoyk	ya	tiy-	wïk	agu'nö	-zak	tambik	akörö		
	karoyk	А	3?-	house	paint	-PAST	tambik	AKÖRÖ		
	'Karoył	c pa:	inted	his h	ouse wi	th Tambił	k (i.e.	with	her	help).'
(78)	Karoyk	zaw	rogï';	pï	Tambik	akörö.				
	karoyk	zaw	rogï	-'pï	tambik	akörö				
	karoyk	spea	ak	-PAST	tambik	AKÖRÖ				

Thus, *akörö* can be glossed as Comitative.

4.7 *The postposition* biyabay

The postposition *biyabay* marks the following participants:

'Karoyk spoke with Tambik.'

— source of transsaction, as in ex. 79:

(79) Karoyk ya pöröw ê'ma'pï Yaymuji biyabay. karoyk ya pöröw ê'ma -'pï yaymuji biyabay karoyk A arrow buy -PAST yaymuji BIYABAY 'Karoyk bought an arrow from Yaymuji.' — source of communicative transaction, as in ex. 80:

(80) Megampoayk urö biyabay. m- egampo -ayk urö biyabay 2A10- ask -PRES 1SG BIYABAY 'You are asking me it.'

Note that *biyabay* cannot be marked as Source, since does not mark spatial sources:

(81) Yustön bong serö. yustön bong se -rö houston from this EMPH 'It is from Houston.'

A possible gloss for *byabay* may be Genitive, if that term were not so loaded with notions associated with SAE genitives.

Issues for future research

This paper has provided a very general account of argument structure. Future research will have to augment this account with explorations of argument structure in complex sentences, embedded clauses, in different voice constructions, etc.

There are two points which clearly emerge even from this paper: First, in terms of semantic role theory, obliques are more interesting in Akawaio than core arguments. Several points have come up which beg for a more detailed account of the semantics of the oblique markers.

Second, it is clear that typologically, some languages express subtleties in verbal semantics by varying case frames (the Tibeto-Burman languages come to mind). Other languages express subtleties in verbal semantics by choosing from a large inventory of semantically extremely rich verbs (German comes to mind, with its vast set of verbal prefixes that derive unpredictable sets of verbs from every single verb root). It seems, that rich verb semantics and case-frame variation may be two alternative strategies for achieving the same thing (varying the construal of events). In order for this possibility to be investigated more fully, we need descriptions of semantic roles in languages like Akawaio, which do not vary case frames very much.