

Causative constructions in Akawaio

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0. Introduction

This paper describes analytic causative constructions in Akawaio, a Cariban language of the Pemon subgroup spoken by approx. 9000 speakers in the Mazaruni district of Guyana.¹

Akawaio has no productive causative morphology. Causation is almost always expressed analytically. This makes Akawaio is one of the few Cariban languages for which analytic causatives have been reported so far, the others being Makushi (Abbott 1991) and Wayana (Tavares, in progress). Since analytic causative constructions differ considerably across these three languages, it can be assumed that they are independent recent innovations. As recent innovations, the constructions discussed here are still relatively transparent both formally and semantically. There is no formal evidence of grammaticization (i.e. there are no phonological or syntactic properties that distinguish the causative uses of the various verbs functioning as matrix verbs in the causative construction as compared to their lexical uses), but there is some semantic bleaching. Like English, Akawaio has different verbs that may serve this function, and the specific semantics imparted by each of these verbs will take up a major portion of this paper.

The paper is organized as follows: Section 1 gives a general overview over the aspects of Akawaio grammar relevant to the analytic causatives; Section 2 introduces the theoretical focus of the paper; Section 3 describes the structure of Akawaio analytic causatives (with some reference to complementation in general); Section 4 discusses the data; Section 5 discusses one of the three causation verbs of Akawaio in more detail; and finally, Section 6 draws some general conclusions.

1. Aspects of Akawaio grammar

There are three aspects of Akawaio grammar which are immediately relevant to causative constructions: argument structure (subcategorization and person marking), adverb(ial)s, nominalizations, and causation verbs. Each of these will briefly be discussed (for a more detailed treatment of Cariban morphosyntax, cf. e.g. Gildea 1998).

1.1. Subcategorization and core arguments

All verbs in Akawaio are either intransitive or transitive, i.e. they may have maximally two core

arguments. Any additional argument must be realized as an oblique; obliques are marked by a postposition and they are always optional (as indicated by the parenthesized material in [1c]):

- (1) a. *Tambik zaurogī'pī.*²
 tambik zaurogī -'pī
 tambik speak -PAST
 'Tambik spoke.'
- b. *Amörö ya urö'nogong wönö'pī.*
 amörö ya urö -'nogong wönö -'pī
 2SG ERG 1SG -PL hit -PAST
 'You hit us.'
- c. *(Igaredaydong ge) ireba'pī uya.*
 i- gareda -i -dong ge i- reba -'pī u- ya
 3- book -PSD -PL INST 3ABS- give -PAST 1- ERG
 'I gave him books.' (lit. 'I gifted him (with books)')

As (1-3) make clear, Akawaio is morphologically ergative.³ A is marked by the postposition *ya*, and S and O are morphologically unmarked. Absolutive nouns, as in (1a), or pronouns, as in (1b) always occur pre-verbally and there can be no intervening material between them and the verb. Absolutives can be realized as personal prefixes instead of free pronouns as in (1c). Ergatives are relatively free with respect to their position in the clause. They may occur before the verb phrase, i.e. preceding the absolutive, or post-verbally. No detailed work on basic word order in Akawaio has been done so far, but it seems the ergative is preferred in the post-verbal position (this is where it is typically produced in elicitation). Obliques may also occur before the verb phrase (preceding the ergative, if one is present), or post-verbally (preceding or following the ergative, if present). For a more detailed description of argument structure, cf. Stefanowitsch (1999), for person marking, cf. Mamalis (1999).

1.2. *Adverbials*

As far as we presently know, Akawaio has no adjectives. In those predicative constructions where English (and languages like it) use an adjective, Akawaio uses a noun followed by the postposition *pe*, as in (2a). However, PPs with *pe* (which I will refer to as *pe*-phrases) are not limited to this function. Akawaio also uses *pe*-phrases where English would use a predicative nominal, as in (2b), a resultative adverbial, as in (2c), or to add additional participants of various kinds to the clause, e.g. benefactives, as in (2d) (for want of a better English gloss I will gloss *pe* as 'as' in literal translations):

- (2) a. *Tambik eji a'nek pe*
 tambik eji a'nek pe
 tambik COP heat OBL
 'Tambik is hot' (Lit. 'Tambik is as heat')

- b. *Karoik eji amak pe*
karoik eji amak pe
Karoik COP thief OBL
‘Karoik is a thief’ (Lit. ‘Karoik is as a thief’)
- c. *Karoik ya Yaimuji wönö'pī egek pe*
karoik ya yaimuji wönö -'pī egek pe
karoik ERG yaimuji hit -PAST corpse OBL
‘Karoik beat Yaimuji unconscious’ (Lit. ‘K. beat Y. as a corpse’)
- d. *Tambik ya egi ögöinö'pī Karoik iwanok pe*
tambik ya egi ögöinö -'pī karoik iwanok pe
Tambik ERG bread bake -PAST karoik possession OBL
‘Tambik baked bread for Karoik’ (Lit. ‘T. baked bread as K.’s possession’)

1.3. Nominalization

As is typical of Cariban languages, Akawaio has a wide range of future, present, and past tense participant and event nominalizations. Some of these nominalizations are the diachronic source for the ergative system described in the preceding section. They provide the only means of forming subordinate clauses in the ergative system: nominalizations of various kinds can be added as obliques to transitive verbs in order to form complex sentences.⁴ Note that this means that there is strictly speaking no sentential complementation in Akawaio (see further Section 3.1 below). Consider Table 1, which shows the most important nominalization constructions in Akawaio.

Table 1: *Akawaio Nominalization Constructions*

CONSTRUCTION	NOMINALIZATION TYPE	ENGLISH GLOSS
VERB _{itr} - <i>ng</i>	EVENT	the VERB-ing
VERB _{itr/tr} - \emptyset	EVENT; (S/O-poss) (A-erg); present	(A’s) VERB-ing (of O)
VERB _{tr} - <i>tok</i>	EVENT; O-poss (A-erg); future	(A’s) future VERB-ing of O
VERB _{tr} - <i>ning</i>	A; (O-poss)	one who VERBs (O), VERB-er (of O)
VERB _{tr} - <i>tong</i>	A; O-poss; future	s.o. who will VERB O
<i>i</i> -VERB _{itr/tr} - <i>sak</i>	O/S; Past	one who (was) VERB-ed
<i>t(i)</i> -VERB _{itr/tr} - <i>seng</i>	O/S; present/habitual	one who is to (be) VERB(-ed)
<i>nī</i> -VERB _{tr} - <i>pī</i>	O; A-poss; past	one who was VERB-ed (by A)
<i>nī</i> -VERB _{tr} - <i>nī</i>	O; A-poss; habitual/imd. future	one that A is VERB-ing
<i>nī</i> -VERB _{tr} - <i>tong</i>	O; A-poss; future	one that A will VERB

The first column shows the respective Akawaio construction. The second column shows the nominalization type (event or participant), the possibility of expressing other participants (as possessors or ergative PPs, with parentheses marking optionality), and the tense.

Obviously, there are some recurring morphemes that can be separated and given individual meaning (they are glossed separately in the examples below), and, as already mentioned, some of the affixes shown here double as tense markers (a more detailed discussion of nominalizers can be found in Fleck 1999). For the purposes of this paper, the affixes or combinations of affixes will be thought of as constructions in a general sense (i.e. as recurring—and thus entrenched—form-meaning pairs, cf. Langacker 1987).

The constructions shown in Table 1 function syntactically as nouns (in a clause, they will be either one of the core arguments of a verb, or they an oblique whose relation to the verb is indicated by a postposition). The issue of whether (some of) these nominalizations are in fact still nominalizations or whether they have been reanalyzed as verbs is hotly debated, but it is not particularly relevant here (see further e.g. Gildea 2000). I will use the term *nominalization* for these constructions.

1.4. Causation verbs

As mentioned in the introduction, Akawaio has no productive morphological causative. It has a non-productive causative suffix *-niġi*, which accounts for isolated intransitive–causative verb pairs, e.g. *erewdang* ‘sit down’ vs. *erewdanġi* ‘sit s.o. down.’ It also has a general transitivizer *-ba*, also not productive, which accounts for some intransitive–transitive pairs where the transitive verb may have a causative meaning, e.g. *bininö* ‘walk’ vs. *binimba* ‘to walk s.o., to walk with s.o., to carry s.o.’ (see Wiedrick 1999 for a list of verbs).

Productive causatives in Akawaio can only be formed with one of three causation verbs,⁵ all of which still function as lexical verbs in addition to their function in the causative construction: *kubi* ‘do’, *emaiga* ‘put into’, and *a'kwarga*, which has a range of meanings ranging from ‘shock’ over ‘pressure’ to ‘destroy’ (it will be glossed as ‘pressure’ here and below’). Examples of their use as lexical verbs are given in (3a-c):

- (3) a. *tġdrawazoi* *gubi* *iya*
t- drawazo -i *kubi* i- ya
3R- work -PSD do 3- ERG
‘he is doing his work’
- b. *Tambik egi* *emaiga'pi* *waigara'pi* *yak*
tambik egi emaiga -'pi waigara'pi yak
tambik bread put.in -PAST basket LOC
‘Tambik put bread in the basket’
- c. *tġ'pay* *achi* *a'kwarga'pi* *iya*
t- 'pa -y achi a'kwarga -'pi i- ya
PSN- hair -PSD hold force -PAST 3- ERG
‘She forced her hairpin open/out of shape’

As these examples show, all three verbs are transitive. Their precise meanings in their use as causation verbs are discussed in Section 3.1.

2. Aspects of causativity

A *causative construction* can be defined at the most general level as any construction encoding what Shibatani (1976: 1ff.) has called a causative situation: two events occurring in temporal succession, where the speaker believes that the second event would not have happened if the first event had not happened. Following well-established terminology, I will refer to the first event of such a situation as the *causing event*, its agent as the *causer*, and its patient as the *causee*. The second event is referred to as the *resulting event* (or simply the *result*). Its main participant is the causee; this participant may be the theme, patient, or agent of a one-participant event, or the

agent of a two-participant event. The patient or theme of a two-participant event is the *affectee*.

There are many ways in which this type of situation may be encoded in a language (see e.g. Stefanowitsch 2001, Ch. 2 for a survey of such constructions in English); the one that concerns us here is the *analytic causative*.⁶ An analytic causative construction is a construction that overtly encodes causing and resulting event separately such that the morphosyntax encoding the effected event is in some way dependent on the morphosyntax encoding the causing event; furthermore, the causing event is encoded by a general verb expressing primarily causation, and hence its precise nature is left unspecified (cf. e.g. Comrie 1989: 167, Kemmer and Verhagen 1994: 117 for similar definitions). As a paradigm example, consider the English *make*-causative, as in *I made Karoik kill Tambik*, or *I made Karoik dance*.

There is a special case of the causative situation, where the result is not an event but a state, like *Karoik made Tambik happy*, *I made Karoik a killer*, or *I made Karoik a man*. Constructions encoding this type of situation are structurally identical with and semantically very similar to resultative constructions like *I banged the door shut* or *I painted the house green*, although unlike the latter, they leave the causing event unspecified (for a discussion of the resultative construction, cf. e.g. Goldberg 1995, Ch. 8, and the references cited therein). In this paper, I will refer to this type of construction as *resulting-state causative*, and to causative constructions encoding an event-result as *resulting-event causatives*.

Conceptually, there is a continuum between resulting states and resulting events. They share the same general characterization but differ in terms of the degree of dynamicity of the result, or, put differently they differ with respect to the semantic transitivity of the result (as defined e.g. by Hopper and Thompson 1980, Rice 1987). The two situations described are extreme points on this continuum: the resulting-state causative encodes a situation where an agent acts on a patient with the result that the patient is in a particular state, the resulting-event causative encodes a situation where an agent acts on a patient with the result that the patient engages in some action directed at a third participant. There are several intermediate points on the continuum between these two extreme characterizations: the result may be a non-directed activity, or an involuntary process. This continuum is informally represented in Table 2 for the English causation verb *make*.

Table 2. *The resultative-causative continuum*

CONSTRUCTION TYPE	EXAMPLE	MEANING OF CONSTRUCTION
RESULTING EVENT	<i>Karoik made Tambik kill Gyarak</i>	X CAUSE Y DO Z TO Q
	<i>Karoik made Tambik dance</i>	X CAUSE Y DO Z
	<i>Karoik made Tambik a killer</i>	X CAUSE Y BECOME Z _{participant} / X CAUSE Y DO Z
	<i>Karoik made Tambik a man</i>	X CAUSE Y BECOME Z _{person}
	<i>Karoik made Tambik sad</i>	X CAUSE Y BE/BECOME Z _{property}
RESULTING STATE		

At the top of the continuum are resulting-event causatives with highly transitive event-results (*kill*), followed by resulting-event causatives with non-transitive event-results (*dance*). Next are resulting-state causatives where the result denotes an entity that is conceptualized as a participant in an event (*killer*, i.e. ‘someone involved in an event of killing’), followed by resulting-state causatives where the result denotes a type of entity that is not conceptualized as participating in any particular event (*man*). My claim is that the former type of resulting-state causative is closer to resulting-event causatives because although the result is a state (‘being a killer’), this state is

conceptualized against the background of an event ('killing someone').

Note that not all causation verbs can encode situations along the entire continuum. English *make* can occur in all three: (i) the resulting-state causative (or the resultative construction) [SUBJ *make* OBJ OBL_{adj}], (ii) the resulting-object construction [SUBJ *make* OBJ OBL_{NP}], and (iii) the resulting-event causative [SUBJ *make* OBJ VP]. *Force*, on the other hand, only encodes the resulting-event end of the continuum: *I forced Karoik to kill Tambik*, but not **I forced Karoik a killer/man* or **I forced Karoik sad*. It seems that there is a correlation between the dynamicity (or transitivity) of the causation verb and the dynamicity of the result: highly dynamic causation verbs are restricted to encoding situations with highly dynamic results (i.e. the resulting-event end of the continuum), while more abstract and general (and therefore less dynamic) causation verbs encode the entire range of situation types, and hence the entire continuum. This correlation will be demonstrated and justified in detail on the basis of the Akawaio data below.

3. Akawaio causatives: general overview

There are two main parameters which I consider relevant to the description of analytic causatives, both separately and in terms of their interaction: (i) the semantics of the causation verb (i.e. the verb encoding the causing event) in a given construction type, which is relevant in terms of the precise meaning it has in a causative construction (which will typically be richer than 'X caused Y to do Z'), and in terms of the degree to which this meaning is motivated by the lexical source of the verb; (ii) the properties of the morphosyntax used to encode the effected event. The issue here is how the effected event is encoded in general, and how it is syntactically and semantically related to the caused event, as well as how the participants of the effected event (the causee and, if present, the patient, or affectee) are encoded (e.g. which of them are or can be overtly expressed, and with what morphosyntax).

3.1. *The syntax of Akawaio causatives*

Causative constructions in Akawaio have one of three syntactic patterns, which I will refer to as *causee absolute*, *result absolute*, and *dummy absolute*, based on which participant is encoded as the absolute of the causation verb. This section gives a basic overview over their general structural properties, which will then be referred to again in more detail in the main body of this paper.

As mentioned in Section 1.3 above, Akawaio uses nominalizations standing in an oblique relation to the matrix verb where a language like English uses sentential complements, thus equivalents of sentences with what Givón (1993) calls 'perception-cognition-utterance verbs,' like *I saw Karoik kill Tambik*, *I know that Karoik killed Tambik* or *I ordered Karoik to kill Tambik*, are all expressed by the same structures as causative sentences (this will be pointed out in the appropriate places, where I will give examples with such verbs which are structurally parallel to the causative examples discussed). A detailed description of such sentence types has not been undertaken so far, but it seems that any restrictions on which nominalizers can encode the 'sentential' complements of which matrix verbs are purely semantic (as in the case of the causation verbs, cf. Section 4 below).

(i) *The causee absolute*. In the causee absolute, the causer is encoded as the ergative of the causation verb, the causee as the absolute of the causation verb, and the result as an oblique marked by the postposition *pe*. The result may either be a simple noun, denoting a state or a person, as in (4a), or a nominalized clause, which may have its own arguments, as in (4b):⁷

(4) a. <causer causee CAUSE result>
 ERG ABS VERB_{caus} OBL_{noun}

Karak ya tambik kubī'pī warawok pe
 karak ya tambik kubī -'pī warawok pe
 karak ERG tambik.ABS do -PAST man OBL
 'Karak made Tambik a man' (Lit. 'Karak did Tambik a man')

b. <causer causee CAUSE result>
 ERG ABS VERB_{caus} OBL_{nominalization}

Urö ya Karoik kubī'pī Tambik wödong pe
 urö ya karoik kubī -'pī tambik wö -tong pe
 1 ERG karoik.ABS do -PAST tambik.O hit -FUT OBL
 'I made Karoik kill Tambik' (Lit. 'I did Karoik as one who will kill Tambik')

Note that the causee is encoded twice in this pattern: once as the absolutive of the causation verb, and once as the referent of the result-nominalization (or one of its arguments). Note also that the causee absolutive pattern can occur with constructions on all points of the state–event continuum, since the result-oblique can be a noun (encoding states and entities), or a nominalization (encoding participants or events). In the case of the latter, this pattern can occur with all nominalizations shown in Table 1 except [VERB-*ng*] and [VERB- \emptyset].

The causee absolutive pattern is also possible with perception verbs, cognition verbs, and utterance verbs; the interpretation of the semantic relation between the verb and the oblique depends on whether the oblique is a noun or a nominalization (and in the case of the latter, on the type of nominalization), and on the specific verb used. In the case of a simple noun in the oblique slot, for perception and cognition verbs the interpretation is comparable to that of a *that*-clause or a *to be NP* complement in English, e.g. *Karak ya tambik ene'pī warawok pe* (karak ERG tambik.ABS see-PAST man OBL) 'Karak saw that Tambik was a man' (a literal translation would be 'Karak saw Tambik as a man'); or *Karak ya tambik i'tu'pī warawok pe* (karak ERG tambik.ABS know-PAST man OBL) 'Karak knew/realized that Tambik was a man' or 'Karak recognized Tambik to be a man' (a literal translation would be 'Karak knew Tambik as a man'. For utterance verbs, the interpretation is comparable to a manner adverbial in English, for example *Karak ya tambik auro'ka'pī warawok pe* (karak ERG tambik.ABS talk.to -PAST man OBL) 'Karak talked to Tambik like a man' (e.g. in a man's voice, using speech patterns typical for a man, etc.). If the oblique is, for example, a future nominalizer, the interpretation for all three types of verbs is something like a *that*-clause: *Urö ya Karoik ene'pī Tambik wödong pe* (1 ERG karoik.ABS see -PAST tambik.O hit -FUT OBL) 'I saw that Karoik would kill Tambik'; *Urö ya Karoik i'tu'pī Tambik wödong pe* (1 ERG karoik.ABS know -PAST tambik.O hit -FUT OBL) 'I knew that Karoik would kill Tambik'; and *Urö ya Karoik auro'ka'pī Tambik wödong pe* (1 ERG karoik.ABS talk.to -PAST tambik.O hit -FUT OBL) 'I told Karoik that he should kill Tambik/to kill Tambik.' The literal translation for these expressions is 'I saw/knew/talked.to Karoik as one who will kill Tambik.'

(ii) *The result absolutive.* In the result absolutive, the causer is again encoded by the ergative, and the nominalized resulting event with its participants is encoded as the absolutive, as shown in (5):

- (5) <causer result> CAUSE
 ERG ABS_{nominalization} VERB_{caus}

Urö ya waigara'pī gang dyö gubī'pī
 urö ya waigara'pī gang i- dö-Ø kubī -'pī
 1 ERG basket for 3S- go -NZR do -PAST
 'I made him go for the basket' (Lit. 'I did [his going for the basket]')

Note that the causee is no longer an argument of the causation verb. Instead, the resulting event as a whole now fills the absolutive position. It is unclear whether this has any direct semantic consequences. One might expect that the fact that the causee is not an argument of the causation verb iconically reflects a more mediated type of causation than the causee absolutive (S. Gildea, p.c.). However, no such differences can be elicited from the consultant. Note that the result absolutive occurs exclusively with the nominalizations [VERB-*ng*] and [VERB-Ø], which makes a direct comparison with the causee absolutive impossible.

The result absolutive can occur with verbs of perception and cognition, but not with utterance verbs. The reason for this becomes clear from the following examples with the [VERB-Ø] nominalization. Perception and cognition verbs yield a very straightforward interpretation comparable to bare infinitive complements or *that*-clauses in English, e.g. *Urö ya waigara'pī gang dyö ene'pī* (1 ERG basket for 3S-go-NZR see -PAST) 'I saw him go for the basket'; and *Urö ya waigara'pī gang dyö i'tu'pī* (1 ERG basket for 3S- go -NZR know -PAST) 'I know that he went for the basket.' As the glosses and the literal translation for such examples, 'I saw/knew his going for the basket', show, the action is simply the absolutive argument of these verbs, and thus naturally receives the interpretation 'event seen' or 'event known.' Utterance verbs are obviously impossible in this syntactic pattern, because they require the interlocutor to occupy the absolutive slot. Thus, ^{??}*Urö ya waigara'pī gang dyö auro'ka'pī* (1 ERG basket for 3S- go -NZR do -PAST) means 'I talked to his going for the basket,' which is ruled out by its semantic oddity.

(iii) *The dummy absolutive.* In the dummy absolutive, the causer is again encoded as the ergative of the causation verb. The resulting event with its arguments is encoded as an oblique. There is a dummy absolutive prefix on the causation verb. This prefix is always third person, thus it does not refer to any of the participants in the causing or resulting event:

- (6) <causer CAUSE result>
 ERG ABS_Δ-VERB_{caus} OBL_{nominalization}

Urö ya igubī'pī Karoik ya Tambik wödok pe
 urö ya i- kubī -'pī karoik ya tambik wö -dok be
 1 ERG ABS_Δ- put -PAST karoik A tambik hit -NZR OBL
 'I made Karoik kill Tambik' (Lit. 'I did it_i [Tambik's future killing by Karoik]_i)

This prefix is best thought of as standing in for the oblique nominalization (hence the term 'dummy').

This pattern can occur exclusively with the [VERB-*tok*] nominalization. Since this is an event nominalization, the pattern only encodes the resulting-event end of the state–event continuum. The question is again, whether the morphosyntactic form of the construction has immediate semantic consequences. Since the [VERB-*tok*] nominalization can also occur in the causee absolutive pattern, the two patterns can be directly compared. We might expect a difference in directness between them comparable to that between English 'I caused Karoik to

kill Tambik’ and ‘I caused it that Karoik killed Tambik.’ However, such a difference could not be elicited.

The dummy absolute pattern is not possible with perception or cognition verbs: **Urö ya ene'pi Karoik ya Tambik wödok pe* (1 ERG ABS_Δ- see -PAST karoik A tambik hit -NZR OBL), which would be literally translated as ‘I did it_i [T’s future killing by K]_i’ cannot be used to mean ‘I saw Karoik kill Tambik’; likewise, **Urö ya i'tu'pi Karoik ya Tambik wödok pe* (1 ERG ABS_Δ- know -PAST karoik A tambik hit -NZR OBL), which would be literally translated as ‘I did it_i [Tambik’s future killing by Karoik]_i’) cannot mean ‘I made Karoik kill Tambik.’ Instead, such examples are strongly and consistently rejected by the consultant. If an interpretation is forced, it is something like ‘I made Karoik kill Tambik by seeing/knowing him’), but even accepting the oddness of this interpretation, such examples are rejected. This is evidence for S. Gildea’s (p.c.) hypothesis that the combination of [VERB-*tok*] + *pe* has grammaticized to become a purpose complementizer meaning something like ‘in order to.’ Clearly, this meaning is compatible with directive utterance verbs, thus *Urö ya auro'ka'pi Karoik ya Tambik wödok pe* (1 ERG ABS_Δ- talk.to-PAST karoik A tambik hit-NZR OBL) ‘I told Karoik to kill Tambik’ is unproblematic.

3.2. The semantics of Akawaio causation verbs

This section provides a characterization of the semantics of *kubi*, *emaiga*, and *a'kwarga* in their use as causation verbs. These characterizations were arrived at by first constructing minimal pairs of sentences differing only in the choice of causation verb and asking for descriptions of what each sentence means, what situation it may be uttered in, etc., and then abstracting away from the specifics of these situations to arrive at something like an invariant core meaning. In addition to their specific semantics, each verb is characterized in terms of the general parameters animacy of the causer and causee, likelihood of success of the causing event (i.e. strength of the factive entailment or implicature), and dynamicity (or what I will call ‘high causativity’).

In keeping with the idea of the state–event continuum, I will assume that results are high in causativity if (i) there is great resistance on the part of the causee, (ii) this resistance is overcome by forceful direct contact between causer and causee, (iii) there is a subsequent active involvement on the part of the causee in the result, and (iv) the result (or the whole event) involves physical or emotional damage to the causee. In other words, in a typical case of causation there is a highly transitive causing event whose transitivity carries across into a highly transitive resulting event.

(i) *kubi*. The verb *kubi* ‘do’ is semantically fairly abstract, and also the least restricted of the three verbs in terms of the animacy of causer and causee. It generally focuses on the result rather than on the change required to reach the result. In the case of voluntary actions it has a sense of the causer ‘selecting’ or ‘singling out’ the causee from a group of potential participants to do something. The result of the causing event is then the state of ‘being selected.’ Although there is a factive implicature pertaining to the action for which the causee has been selected, this can be easily canceled. In the case of resulting-state causative (esp. with emotional states), *kubi* seems to have a factive entailment (which cannot be canceled). Often there is a sense of *maintaining* a state, rather than bringing it about, and there is a sense that the effected state is permanent. *Kubi* is thus not very high in causativity. The consultant typically uses the English causation verb *make* to translate sentences containing *kubi*, although *select* is also sometimes used.

(ii) *emaiga*. The verb *emaiga* focuses on the actual change of state or the action leading to the result. It suggests that the causing event consists of a long preparation phase, during which the causer continually coaxes the causee, or teaches or trains the causee to bring about the result.

Both causer and causee must be animate; where inanimate nouns are used, this results in a personification interpretation of both entities. The factive properties of *emaiga* are much like those of *kubī*, although they seem to be somewhat stronger. *Emaiga* is higher in causativity than *kubī*, since there is not just an act of selection on the part of the causer, but more active involvement on the part of the causee in the preparation phase. Although *emaiga* implies that the causee does not necessarily want the result to happen, he or she is convinced into bringing it about rather than forced to, and there is no sense that the result affects him or her negatively. The consultant uses English expressions like *get s.o. to do sth.*, *coax s.o. into doing sth.*, and *brainwash s.o. into doing sth.* to translate sentences containing *emaiga*.

(iii) *a'kwarga*. The verb *a'kwarga* is the most specific and the most causative of the three causation verbs. It always implies resistance on the part of the causee, a large degree of force (physical force or a psychologically forceful experience) in overcoming this resistance, and, crucially, negative effects (typically in the form of psychological or emotional damage) for the causee. Again, both causer and causee must be animate. On the basis of presently available information, it seems that *a'kwarga* has a factive entailment. The consultant typically uses the English verb *force* in translating sentences containing *a'kwarga*. *A'kwarga* behaves differently than the other two causation verbs, and will be discussed in more detail in Section 5.

4. *Akawaio causatives and the state–event continuum*

In English, there is an expected correlation between the type of result and the form by which it is encoded: temporary resultant states are encoded by adjectives, more permanent resultant states are encoded by nouns, and resultant actions are encoded by verbs. When certain causation verbs cannot encode certain parts of the state–event continuum, this could theoretically be explained by positing syntactic restrictions. For example, it could be argued that *force* cannot encode the resulting–state end of the continuum because it does not allow an adjective or a noun as a complement besides the direct object, as in **Karoik forced Tambik sad*, **Karoik forced Tambik a man*. This is, of course, not a claim I wish to make, but it is a possible line of argumentation for a language like English, that allows different syntactic types of complements. In Akawaio, such a line of argumentation is not even theoretically possible, since all resultant states or actions are encoded by what is syntactically noun phrase. Thus, any restrictions on acceptability *must* be stated in purely semantic terms. I will deal with each semantic type in turn.

4.1. *X CAUSE Y BE Z_{STATE}*

This semantic type can only be encoded with the causee absolutive (Section 3.1, i). As examples (7a-c) show, both *kubī* and *emaiga* can occur in this construction if the resulting state is encoded by the structure $[[NP_{state}] pe]$, but *a'kwarga* cannot (here and in all following examples, the part of the construction encoding the result will be underlined for expository ease):

- (7) a. *pogoi be agubī'pī* *uya*
 pogoi pe a- kubī -'pī u- ya
 sadness OBL 2ABS- do -PAST 1- ERG
 ‘I made you permanently sad’ (Lit: ‘I did you as sadness’)

- b. *pogoi be ayemaiga'pi uya*
 pogoi pe a- emaiga -'pi u- ya
 sadness OBL 2ABS- put.in-PAST 1- ERG
 'I made you sad' (Lit: 'I put you as sadness')
- c. **pogoi be aya'kwarga'pi uya*
 pogoi pe a- a'kwarga -'pi u- ya
 sadness OBL 2ABS- pressure -PAST 1- ERG
 (Lit. '*I forced you as sadness')

The closest acceptable paraphrase of (7c) is one where the *pe*-phrase encoding the resultant state functions as the complement of the nominalized copula *aji* 'be,' which in turn functions as the complement of *a'kwarga*, as in the following example:

- (7) d. *pogoi be aye'tok pe aya'kwarga'pi uya*
 pogoi pe a- eji -tok pe a- a'kwarga -'pi u- ya
 sadness OBL 2S- COP -NZR OBL 2ABS- pressure -PAST 1- ERG
 'I forced you to be sad' (Lit: 'I forced you as [your future being as sadness])

Note that the difference between (7c) and (7d) is not a syntactic one, as the English glosses might suggest. The English counterpart of (7c) can be argued to be ungrammatical because *force* requires a *to*-clause as a complement, as in (7d). However, as shown by the literal glosses, the two examples have exactly the same syntactic structure in Akawaio: both take causer and causee as their ergative and absolutive arguments, and in both examples the result is a noun phrase embedded in a *pe*-phrase. Since the complement in (7d) has the same syntactic form as the disallowed one in (7c), the difference in acceptability between the two must be accounted for semantically. Since the same difference is relevant for the semantic types discussed in the next subsection, I will return to this issue after discussing these data.

Suffice it here to comment briefly on the semantic differences between the acceptable examples, i.e. (7a, b, d). Example (7a) expresses a situation where the resulting state is a permanent one, or where the causer keeps doing something that will maintain the resulting state; another example would be *panak pe agubi'pi uya* (strength ADV 2ABS-do 1-ERG) 'I kept you strong'. Example (7b), on the other hand, focuses on the causing event, evoking a situation where the causer has to expend more energy in order to bring about the effected event; another example would be *panak pe ayemaiga'pi uya* (strength OBL 2ABS-put.in 1-ERG) 'I made you strong', which implies that the causer exercised with the causee for a considerable length of time in order to make him/her strong. Example (7d), finally, implies that the causer forced the causee to behave or act like a sad person, and focuses on the fact that the causee initially resists this type of behavior. Thus, (7d) does not actually encode the semantic type X CAUSE Y BE Z_{STATE}: the nominalized copula turns the complement into an event, and the semantic type is thus X CAUSE Y ACT Z_{STATE}, which is just a specific instance of X CAUSE Y DO Z (TO Q), which will be discussed in Section 4.2.3.

The adversative nature of *a'kwarga* restricts its use with positive resulting states, resulting in the oddness of sentences like *??panak pe aye'tok pe agubi'pi uya* (strength ADV 2S-COP-NZR OBL 2ABS-do 1-ERG) 'I forced you to behave/act strong'.

4.2. X CAUSE Y BE Z_{PERSON}

The case of a resultant state expressed by a complement of the form [[N_{person}] *pe*] is much more complex than the case discussed in the preceding section, since a distinction needs to be made between morphologically simple nouns and nouns derived from verb roots by one of the participant nominalizers shown in Table 1 above. Semantically, this is the distinction between referents that can be conceptualized independently of any particular event (like *man* or *chief*), and referents that can only be conceptualized as participants in some event, and that thus automatically evoke that event (like *killer*). Note, that both semantic types can only be encoded by the causee absolutive.

4.2.1. Event-independent referents

For simple nouns (i.e. those encoding event-independent referents), the behavior of the three verbs is very similar to the case of nouns encoding states:

- (8) a. *Karak ya warawok pe tambik kubi'pi*
 karak ya warawok pe tambik kubi -'pi
 karak ERG man OBL tambik do -PAST
 'Karak chose/mistook Tambik to be a man'
- b. *Karak ya warawok pe Tambik emaiga'pi*
 karak ya warawok pe tambik emaiga -'pi
 karak ERG man OBL tambik put.in -PAST
 'Karak made Tambik (into) a man'
- c. ??*Karak ya warawok pe Tambik a'kwarga'pi*
 karak ya warawok pe tambik a'kwarga -'pi
 karak ERG man OBL tambik pressure -PAST
 (Intended: 'Karak forced Tambik to be a man')
- d. *Karakya warawok pe ye'tok pe Tambik a'kwarga'pi*
 karak ya warawok pe i- eji-tok pe tambik a'kwarga -'pi
 karak ERG man OBL 3S- be -NZR OBL tambik pressure -PAST
 'Karak forced Tambik to be a man'

Here, the restriction on *a'kwarga* is the same as in the case of nouns encoding states, although the restrictions seem to be less strong.⁸

The semantics of the three verbs in this variant of the construction are interesting. *Kubi* has the meaning 'choose' or 'mistake for' here. At first, the second meaning seems unexpected. However, it is very much in line with the general meaning of *kubi*, as characterized in Section 3.1: selecting someone to be something is in a sense a categorization process (recall that *kubi* does not necessarily imply that the causer acts on the basis of his or her selection). The sense of 'mistake for' comes from the possibility of miscategorizing. The English verb *take* has the same ambiguity in certain contexts: *I took her to be my wife* could mean 'I chose her to be my wife', but it could also mean 'I erroneously assumed she was my wife'.

Example (8b), using *emaiga*, immediately evoked from my consultant the idea of a woman sleeping with a young man, thus making him a 'real' man. It can, however, also refer to

- (11) a. *Karoik kubi'pī uya Tambik wōdong pe*
 karoik kubi -'pī u- ya tambik wō -tong pe
 karoik do -PAST 1- ERG tambik hit -FUT OBL
 'I selected Karoik to be the one to kill Tambik'
- b. *Karoik emaiga'pī uya Tambik wōdong pe*
 karoik emaiga -'pī u- ya tambik wō -tong pe
 karoik put.in -PAST 1- ERG tambik hit -FUT OBL
 'I made Karoik be the one to kill Tambik'
- c. **Karoik a'kwarga'pī uya Tambik wōdong be*
 karoik a'kwarga -'pī u- ya tambik wō -tong pe
 karoik pressure -PAST 1- ERG tambik hit -FUT OBL
 (Intended: 'I forced Karoik to be the one to kill Tambik')

Turning to the semantics of these examples, in (11a) the connotation is that I simply select Karoik at random with no implication that I assess Karoik's ability to kill or even teach him how to do so. In (11b) there is a sense that I trained Karoik as a killer, teaching him how to use weapons, etc. As (11c) shows, this nominalization is not acceptable as a direct complement to *a'kwarga*, but the sentence would be acceptable with a nominalized copula taking the nominalization as a complement; as expected, the interpretation is then one of physical force on the part of the causer:

- (11) d. *Karoik a'kwarga'pī uya Tambik wōdong be ye'tok pe*
 karoik a'kwarga -'pī u- ya tambik wō -tong pe i-
 eji -tok pe
 karoik pressure -PAST 1- A tambik hit -FUT OBL 3S- be -NZR OBL
 'I forced Karoik to be the one to kill Tambik'

Now consider (12a-c):

- (12) a. *Tambik ya Karoik wōning be urō gubi'pī*
 tambik ya karoik wō -ning pe urō kubi -'pī
 tambik ERG karoik hit -NZR OBL 1SG do -PAST
 'Tambik put me aside / selected me to be the killer of Karoik'
- b. *Tambik ya Karoik wōning be urō emaiga'pī*
 tambik ya karoik wō -ning pe urō emaiga -'pī
 tambik ERG karoik hit -NZR OBL 1SG put.in -PAST
 'Tambik made me (into) the killer of Karoik'
- c. *Tambik ya Karoik wōning be urō a'kwarga'pī*
 tambik ya karoik wō -ning pe urō a'kwarga -'pī
 Tambik ERG Karoik hit -NZR OBL 1SG pressure -PAST
 'Tambik forced me to be the killer of Karoik'

This nominalization works with all three verbs (with the expected semantic distinctions between them). This is unexpected in light of the pattern which emerged in the preceding subsections. It is also unexpected in light of the close semantic similarity between (11a-c) and (12a-c).

At this point, we need to come back to the question of how to explain the constraint on *a'kwarga* in the first place. Recall that it can be freely used with event nominalizations (cf. also next subsection). On the other hand, it can never be used with nouns denoting states or event-independent participants, and it seems that in general it cannot be used with participant nominalizations. Were it not for (12c), we could phrase this constraint in just these terms. As it stands, we have to look for an explanation for the difference in acceptability between (11c) and (12c) elsewhere. Since the morphosyntactic structure of both examples is the same (something like [ERG_{causer} ABS_{causee} *a'kwarga* [[O_{affectee} NZR] *pe*]]), the constraint cannot be a purely formal one. Instead, consider the difference in semantics: examples (11a-c) encode a situation where the causee is chosen/made/forced to be the one who *will* kill the affectee; the result is their concession to do so in the future, but no killing has actually taken place at this point. Examples (12a-c), in contrast, encode a situation where the causee is chosen/made/forced to be the affectee's actual killer, which they will only become through the event of killing. In other words, although both sets of examples evoke an event of killing via the nominalization encoding an event-dependent participant, only the second set of examples is capable of an interpretation where this event is already realized. In other words, the semantics of (12c) encompasses both X CAUSE Y BECOME Z_{AGT} and X CAUSE Y DO Z, while (11c) can only have the first reading. The constraint on *a'kwarga* can then be stated in terms of semantics: *a'kwarga* can only occur where the result is an event, regardless of whether this event is directly encoded as an event nominalization or whether it is entailed by a participant nominalization. It can not occur with participant nominalization that does not entail that the event evoked actually is taking or has already taken place.

Finally, let us look at the two ABS-nominalizations, beginning with [*t*-VERB-*seng*] 'one who is to VERB_{intr} / one who is to be VERB_{trans}-ed'. For intransitive verbs (i.e., where S is nominalized), all three verbs can occur with this nominalization, including *a'kwarga*. as in (13c):

- (13) a. *Tambik ya Karak kubī'pī* *tīmanunzeng* *be*
 tambik ya karak kubī -'pī t- manun -seng be
 tambik ERG Karak do -PAST PTCP- dance -ABS.NZR OBL
 'Tambik made Karak dance'
- b. *Tambik ya Karak emaiga'pī* *tīmanunzeng* *be*
 tambik ya karak emaiga -'pī t- manun -seng be
 tambik ERG Karak put.in -PAST PTCP- dance -ABS.NZR OBL
 'Tambik got Karak to dance'
- c. *Tambik ya Karak a'kwarga'pī* *tīmanunzeng* *be*
 tambik ya karak a'kwarga -'pī t- manun -seng be
 tambik ERG Karak pressure -PAST PTCP- dance -ABS.NZR OBL
 'Tambik forced Karak to dance'

For transitive verbs, *emaiga* and *kubī* can occur with this nominalization, but *a'kwarga* cannot:

- (14) a. *Karoik kubī'pī uya tīwōzeng _____ be*
 karoik kubī -'pī u- ya t- wō -seng pe
 karoik do -PAST 1- ERG PTCP- hit - ABS.NZR OBL
 'I made Karoik the one to be hit'
- b. *Karoik emaiga'pī uya tīwōzeng _____ be*
 karoik emaiga-'pī u- ya t- wō -seng pe
 karoik put.in - PAST 1- ERG PTCP - hit - ABS.NZR OBL
 'I made Karoik the one to be hit'
- c. *??Karoik a'kwarga'pī uya tīwōzeng _____ be*
 karoik a'kwarga -'pī u- ya t- wō -seng pe
 karoik pressure - PAST 1- ERG PTCP - hit - ABS.NZR OBL
 'I forced Karoik to be the one to be hit'

The other absolutive nominalization, [*i-VERB-sak*] 'one who VERB_{intr}-ed/was VERB_{trans}-ed', behaves exactly like [*t-VERB-seng*], i.e. it can also occur with *kubī* and *emaiga* but not with *a'kwarga*:

- (15) a. *Karoik kubī'pī uya iwōzak _____ pe.*
 karoik kubī -'pī u- ya i- wō -sak pe
 karoik do -PAST 1- ERG 3- hit -PAST OBL
 'I selected Karoik to be like / play the one that was killed'
- b. *Karoik emaiga'pī uya iwōzak _____ pe.*
 karoik emaiga-'pī u- ya i- wō -sak pe
 karoik put.in -PAST 1- ERG 3- hit - NZR OBL
 'I made Karoik like someone who was killed'
- c. *??Karoik a'kwarga'pī uya iwōzak _____ pe*
 karoik a'kwarga -'pī u- ya i- wō -sak pe
 karoik force - PAST 1- ERG 3- hit - NZR OBL
 (Intended: 'I forced Karoik to be the one who was killed')
- d. *Karoik a'kwargapī uya iwōzak _____ pe y-e'tok _____ pe*
 karoik a'kwarga-'pī u- ya i- wō -sak pe i- eji -tok pe
 karoik force - PAST 1- ERG 3- hit - NZR OBL 3- COP -NZR OBL
 'I forced Karoik to be like the one who was killed'

How does the proposed characterization of the restrictions on *a'kwarga* fare in light of these examples? Again, looking at all examples in this subsection, there are two clear patterns: patient-nominalizations and any kind of past-tense participant nominalizations can not occur with *a'kwarga*. Agent nominalizations sometimes can. The first case was explained by arguing that the nominalization in question strongly evokes the event with respect to which the agent is conceptualized. Examples (13c) and (14c) fit this generalization: the [*t-VERB-seng*] construction is similar to the [*VERB-ning*] construction in that it allows for an interpretation of the event as immediately realized, thus (13c) is acceptable. The fact that (14c) is unacceptable is in line with the fact that patient nominalizations in general are unacceptable.

4.3. X CAUSE Y DO Z (TO Q)

While the semantic types discussed so far can only occur with the causee absolutive, the type X CAUSE Y DO Z (TO Q) can occur with all three (although not every event nominalization can occur with any construction). I will discuss each of the three event nominalizations in turn, and within each of these discussions look at the three different constructions.

(i) [VERB-Ø] ‘S’s VERB-ing, A’s VERB-ing of O’. This is an event nominalizer which is possessed either by the S or by the O. It can only occur in the result absolutive construction; as (16a-b) and (17a-b) show, *kubi* and *emaiga* are acceptable for results encoded by both intransitive and transitive verbs, but as (16c) and (17c) show, *a'kwarga* is acceptable with neither of the two:

(16) a. *waigara'pi gang dyö* *gubi'pi uya*
 waigara'pi gang i- dö-Ø kubi -'pi u- ya
 basket for 3S- go-NZR do -'pi 1- ERG
 ‘I made him/her go for the basket’ (Lit. ‘I did/made his/her going for the basket’)

b. *waigara'pi gang dyö* *emaiga'pi uya*
 waigara'pi gang i- dö-Ø emaiga-'pi u- ya
 basket for 3S- go-NZR put.in -'pi 1- ERG
 ‘I got him/her to go for the basket’ (Lit. ‘I put/made his/her going for the basket’)

c. **waigara'pi gangidö* *a'kwarga'pi uya*
 waigara'pi gang i- dö -Ø a'kwarga -'pi u- ya
 basket for 3O- go -NZR pressure -PAST 1- ERG
 (Intended: ‘I forced him/her to go for the basket’)

(17) a. *Tambik ya Karoik wönö* *gubi'pi uya*
 tambik ya karoik wönö-Ø kubi -'pi u- ya
 tambik A karoik hit -NZR do -PAST 1- ERG
 ‘I made Tambik kill Karoik’ (Lit. ‘I did/made Karoik’s killing by Tambik’)

b. *Tambik ya Karoik wönö* *emaiga'pi uya*
 tambik ya karoik wönö-Ø emaiga-'pi u- ya
 tambik A karoik hit -NZR put-in -PAST 1- ERG
 ‘I got Tambik to kill Karoik’ (Lit. ‘I put/made Karoik’s killing by Tambik’)

c. **Tambik ya Karoik wönö* *a'kwarga'pi uya*
 tambik ya karoik wönö-Ø a'kwarga -'pi u- ya
 tambik A karoik hit -NZR pressure -PAST 1- ERG
 (Intended: ‘I forced Tambik to kill Karoik’)

Although both *kubi* and *emaiga* are fully acceptable here, the consultant prefers *kubi* in this construction. The meaning difference between the two is that *kubi* conveys that the causer simply initiated the resulting event, while *emaiga* conveys that the causer did something to make the resulting event possible.

(ii) [VERB-ng] ‘the VERB-ing’. Again, this event nominalizer can only occur in the result absolutive construction. As the following examples show, it is not acceptable with *a'kwarga*:

- (18) a. waigara'pī gang dōng gubī'pī uya
 waigara'pī gang dō -ng gubī- 'pī u- ya
 basket for go -NZR do -PAST 1- ERG
 'I initiated the going for the basket'
- b. waigara'pī gang dōng emaiga'pī uya
 waigara'pī gang dō- ng emaiga- 'pī u- ya
 basket for go -NZR put.in - PAST 1- ERG
 'I initiated the going for the basket'
- c. *waigara'pī gangdōng a'kwarga'pī uya
 waigara'pī gang dō -ng a'kwarga -'pī u- ya
 basket for go -NZR pressure - PAST 1- ERG
 (Intended: 'I initiated by force the going for the basket')

Again, *kubī* is preferred over *emaiga*, even though both are possible and despite the identical gloss, *emaiga* suggests a greater effort on the part of the causer.

(iii) [VERB-tok] 'A's future VERB-ing of O'. This nominalizer may occur in the causee absolutive and the dummy absolutive. First, consider the causee absolutives in (19a-c):

- (19) a. Tambik emaiga'pī uya Karoik wödok pe iya
 tambik emaiga-'pī u- ya karoik wö -tok pe i- ya
 tambik_i put -PAST 1- ERG karoik hit -NZR OBL 3_i- A
 'I made Tambik hit Karoik' (Lit. 'I put T_i in order for him_i to hit K.')
- b. Tambik kubī'pī uya Karoik wödok pe iya
 tambik kubī -'pī u- ya karoik wö -dok be i- ya
 tambik_i cause- PAST 1- ERG karoik hit -NZR OBL 3_i- A
 'I made Tambik hit Karoik' (Lit. 'I did T_i in order for him_i to hit K.')
- c. Tambik a'kwarga'pī uya Karoik wödok pe iya
 tambik a'kwarga -'pī u- ya karoik wö -dok be i- ya
 tambik force - PAST 1- ERG Karoik hit -NZR OBL 3- A
 'I forced Tambik to hit Karoik' (Lit. 'I forced T_i in order for him_i to hit K.')

As examples (19a-c) show, the combination of [VERB-tok] and causee absolutive is acceptable for all three causation verbs. Recall that the structure of these examples is as follows: *Tambik* is the ABS argument of *a'kwarga*, being zero-marked and occurring immediately before the verb. *Uya* is the ERG argument of *a'kwarga*. *Karoik* is the ABS argument of the nominalized result verb, and *iya* is its ERG argument (co-referential with *Tambik*).

Now consider the resultative absolutives in (20a-c):

- (20) a. Tambik ya Karoik wödok pe emaiga'pī uya
 tambik ya karoik wö -dok be Ø- emaiga -'pī u- ya
 tambik A karoik hit -NZR OBL ABS_Δ- put - PAST 1- ERG
 'I made Tambik hit Karoik'

- b. *Tambik ya Karoik wödok pe igubi'pī uya*
 tambik ya karoik wō -dok be i- kubī -'pī u- ya
 tambik A karoik hit -NZR OBL ABS_Δ- do -PAST 1- ERG
 'I made Tambik hit Karoik'
- c. *Tambik ya Karoik wödok pe a'kwarga'pī uya*
 tambik ya karoik wō -dok be Ø- a'kwarga -'pī u- ya
 tambik A karoik hit -NZR OBL ABS_Δ- force -PAST 1- ERG
 'I forced Tambik to hit Karoik'

Again, the combination of [VERB-*tok*] and the dummy absolutive is acceptable with all three verbs. Again, recall the structure of this construction: the ABS argument is a dummy prefix, which is realized as zero on vowel-initial verbs (*emaiga* and *a'kwarga*), but which has an invariant surface realization *i-* with consonant-initial verbs (like *kubī*). *Uya* is the ERG argument of *a'kwarga*, and *Tambik ya* and *Karoik* are the ERG and the ABS arguments of the event nominalization.

The dummy absolutive construction is the construction most frequently offered in elicitation as a translation of causative constructions encoding a situation with a lot of force on the part of the causer. In other words, it seems to be the most natural construction for *a'kwarga* to occur in.

The question now needs to be addressed, why *a'kwarga* is not possible with the event nominalizers [VERB-Ø] and [VERB-*ng*]. The explanation developed above (i.e. that *a'kwarga*, due to its high dynamicity, is only compatible with eventive results) does not account for this unacceptability. Yet, the fact is certainly intriguing that the cline of acceptability from the preferred *kubī* over the acceptable but less preferred *emaiga* to the unacceptable *a'kwarga* mirrors the cline of causativity from the least causative *kubī* to the somewhat more causative *emaiga* to the most causative *a'kwarga*.

I would argue that the cline in acceptability can be accounted for in terms of causativity, albeit in a somewhat different way than the cases in the previous sections. Note that both of the event nominalizers that cannot occur with *a'kwarga* occur only in the result absolutive. So far, we have made nothing of the different constructions introduced in Section 3.1., treating them as purely syntactic patterns. However, once we take them to symbolize different construals of a scene, the difference between them can actually account for the cline in acceptability. Note that in the case of the RESULT ABS it is the resulting event itself that is the absolutive argument of the causation verb, rather than the causee or some dummy element. If syntactic structure reflects semantic structure here, as hinted at in Section 3.1, then this means that the causer is viewed as acting on the resulting event itself, rather than on the causee. The glosses at least for the [VERB-*ng*], as well as the descriptions of the meanings for both nominalizations support this. (19-20) focus on the fact that the causer *initiates the event* rather than the fact that the causer directly *acts on the patient* in some way. This reduces the causativity of this construction type in terms of the state–event continuum discussed above, since high causativity on this continuum requires direct contact between the causer and the causee.

5. A closer look at *a'kwarga*

Clearly, *a'kwarga* is different than the other two causation verbs in terms of its distribution across the semantic types on the state–event continuum. Its distribution is summarized in Table 3 in terms of construction type, semantic type, and nominalization type (√ means ‘possible,’ *

means ‘impossible,’ the shaded area concerns combinations of nominalizers and syntactic patterns that are impossible regardless of the matrix verb used).

Table 3: *Restrictions on a'kwarga*

X CAUSE Y BE Z _{state}	... BE Z _{person}	...BE Z _{participant}	... DO Z (TO Q)
<i>Causee absolutive</i>	*	*	√ [V _{tr} - <i>ning</i>] √ [<i>t</i> -V _{tr/itr} - <i>seng</i>] * [ni-V _{tr} -TENSE] * [V _{tr} - <i>tong</i>] * [<i>t</i> -V _{itr/tr} - <i>seng</i>] * [<i>i</i> -V _{itr/tr} - <i>sak</i>]	√ [V _{tr} - <i>tok</i>]
<i>Result absolutive</i>				* [V _{tr/itr} -∅] * [V _{itr} - <i>ng</i>]
<i>Dummy absolutive</i>				√ [V _{tr/itr} - <i>tok</i>]
<i>Causee absolutive with nominalized verb ‘to be’</i>	√	√	√	√

In order to account for this distribution, I appealed to the notion of a state–event continuum, and to the idea that *a'kwarga* is highly dynamic, and hence can only encode the causative end of this continuum. Let us summarize this line of argumentation, and then take a closer look at the semantics of *a'kwarga*.

First, *a'kwarga* cannot be used to encode the semantic types ‘X CAUSE Y BE Z_{STATE}’ and ‘X CAUSE Y BE Z_{PERSON}’. Since neither of them involves a resulting event, and since neither of them involves any activity on the part of the causee, they are too low in causativity to be compatible with the high causativity of *a'kwarga*. Evidence for this analysis comes from the fact, that the corresponding constructions become acceptable if the Oblique encoding the STATE/PERSON becomes the complement of the (nominalized) ‘to be’: this converts the semantic types to ‘X CAUSE Y BEHAVE/ACT LIKE Z_{STATE}’ and ‘X CAUSE Y BEHAVE/ACT LIKE Z_{PERSON}’ respectively, and thus adds the necessary dynamicity and activity on the part of the causee.

Next, *a'kwarga* cannot be used to encode the semantic type ‘X CAUSE Y BE Z_{PARTICIPANT}’ if the participant is a patient. This is only to be expected, since, again, there is no active involvement on the part of the causee. Again, construing the causee as more active by the use of nominalized ‘be’ makes the corresponding constructions acceptable. However, *a'kwarga* can be used to encode the ‘X CAUSE Y BE Z_{PARTICIPANT}’-type if the participant is an Agent. This is to be expected, given the account offered so far. Note that the fact that intransitive [*i*-VERB-*sak*] is not acceptable even though technically it construes the causee as an Agent is not problematic; the event with respect to which the causee is conceptualized occurs in the past with reference to the causing event, and can thus not render the result dynamic. More puzzling is the unacceptability of [VERB-*tong*], which seems to be semantically very similar to the acceptable [VERB-*ning*]. The difference is again in the degree to which the causee actively participates: [VERB-*tong*] means ‘one who will VERB’; if used in the result slot of a causative construction, the resulting event is taken to be the causee’s agreement to perform the action of VERB-ing sometime in the future. Again, this is not dynamic enough to satisfy the high causativity of *a'kwarga*. [VERB-

ning], on the other hand, means ‘one who VERBs’: the interpretation here is that the resulting event is the causee’s act of becoming a VERB-er.

Finally, *a'kwarga* can encode the semantic type ‘X CAUSE Y DO Z’, which is expected, given the active involvement of the causee in this semantic type. However, *a'kwarga* is acceptable only for the causee absolutive and the dummy absolutive, but not for the result absolutive. This cannot be explained in terms of the dynamicity of the resulting event, since the event *is* encoded as dynamic. Instead, what is at issue here is the fact that the result absolutive construes the causer as acting on the whole resulting event rather than just on the causee. This is not compatible with the idea of direct contact between causer and causee evoked by *a'kwarga*.

Given that *a'kwarga* is highly causative in the sense of the term used here, the question is where this high causativity comes from. In its non-causative function, *a'kwarga* has a cluster of intuitively related meanings, which I briefly demonstrate in the following examples.

— ‘shock’

- (21) a. *Tenjiy akörö y-e'sak ya Tambik a'kwarga'pī.*
 t- enji -y akörö i- eji -sak -Ø ya tambik a'kwarga -'pī
 PSN- daughter-PSD with 3S- COP -PAST NZR ERG Tambik force -PAST
 ‘The fact that he had been with (= slept) with his daughter shocked Tambik’
- b. *Karoik a'kwarga'pī uya uburukui tīnu'tōik.*
 karoik a'kwarga-'pī u- ya u- puruku-i tī- nu'tō -ik
 Karoik force -PAST 1- ERG PSN- pants -PSD 3O- pull.down -SEQ
 ‘I shocked Karoik by pulling down my pants’ (Lit. ‘... having pulled down ...’)

— ‘destroy,’ ‘forcefully act upon’

- (22) a. *Tipai achi a'kwarga'pī iya.*
 t- pa -i achi a'kwarga -'pī i- ya
 PSN- hair -PSD hold force -PAST 3- ERG
 ‘She forced her hairpin open/out of shape’
- b. *Mirata a'kwarga'pī iya.*
 mīrata a'kwarga -'pī i- ya
 door force -PAST 3- ERG
 ‘He forced the door (open)’

— ‘deprive of’

- (23) *Ya'kwarga'pī iya mire bök.*
 u- a'kwarga -'pī i- ya mire bök
 1ABS- force -PAST 3- ERG child DAT
 ‘He forced my child away’ (Lit. ‘He shocked me of my child’)

In its detransitivized form, *a'kwarga* means something like ‘exhaust oneself’, as the following examples show.

- (24) a. Karak da'kwarga'pī abonok eno'maik che.
 karak d- a'kwarga -'pī abonok eno'ma-ik che
 karak DETR- pressure -PAST bench throw -PURP DESID
 'Karak exerted herself to throw the bench over'
- b. *Ida'kwarga prada eboroik che.*
 i- d- a'kwarga prada eboro -ik che
 3- DETR - pressure money find -PURP DESID
 'He is really trying hard to get money'

How can we unify these uses, i.e. what is the notion underlying all these uses? The etymology of *a'kwarga* is enlightening in this respect:

- (25) *a'kwari* + *ga*
 'spirit' 'remove (VERBALIZER)'

This etymology is transparent to the speaker, since the word *a'kwari* still exists (and, in fact, has an important place in mythology), and since *-ga*, being at least semi-productive, shows up in a number of morphologically transparent verbs (cf. Wiedrick 1999):

- (26) a. *abiri* + *ga* > *abiriga*
 'feather' remove.VBZR de-feather
- b. *argok* + *ga* > *argo'ka*
 'hat' remove.VBZR 'take off sb.'s hat'
- c. *emu* + *ga* > *emuga*
 'testicle' remove.VBZR 'castrate'

Accepting the etymology, then, *a'kwarga* would mean something like 'remove the spirit of', which may seem rather far removed from the cluster of meanings discussed above. However, once we gain a better understanding of what 'spirit' refers to here, things become clearer: the Akawaio believe that every person, animal, or object has its unique *a'kwari*, an inner force that cannot be changed or destroyed, but that will leave an entity when the entity is destroyed (D. Fox, p.c.). This rough sketch of course does not do justice to the complex belief system of the Akawaio, but it will do for our purposes here. The unifying imagery behind the semantic notions encoded by *a'kwarga* can indeed be claimed to be 'robbing an entity of its essence.' This imagery is not as strange as it may seem. The notion of *a'kwari* is not too different from the notion of 'essence', as posited by the ancient Greek philosophers and as present in the folk theories of children and adults from Western cultures. The image of expending that essence actually underlies Indo-European words and expressions for the same semantic domains encoded by *a'kwarga*: For example, English has a series of metaphors for shock and fear that involve the imagery of robbing someone of some inner substance, such as *to scare THE LIVING DAYLIGHTS out of someone*, *to scare s.o. WITLESS*, etc., and there are both Latin-based and Germanic words for exhaustion in English that are diachronically based on a similar imagery, such as the word *exhaust* itself (Lat. *ex-* 'out' + *haurire* 'draw'), the word *exert* (Lat. *ex-* 'out' + *serere* 'bind'), or the expressions *to SPEND oneself*, *to feel DRAINED*.

Coming back to *a'kwarga*, its lexical uses all imply an extreme amount of (physical or

intense abstract) force on the part of the Agent, direct contact with the Patient, and a massive impact on the latter; all these properties emerge from the conceptual imagery underlying them. These semantic properties are retained in the causative uses: *a'kwarga* is appropriate only where there is great resistance on the part of the causee, a resistance that is overcome by force and that causes physical or emotional damage to the causee, that may well be long-lasting. In addition, *a'kwarga* has the strongest factive implicatures of all three causative verbs in Akawaio, the causee is most actively involved in the resulting event.

6. Conclusion

This paper has described analytic causatives in Akawaio. Two issues of greater theoretical interest emerged.

The first issue is that of the state–event continuum. I have argued that an adequate description of analytic causatives presupposes a semantic continuum between these two types of result. Since in purely syntactic terms resulting-state causatives (and resultatives) and resulting-event causatives are identical in Akawaio, all asymmetries between them must be explained on the basis of a general semantic distinction between caused events and caused states. Causation verbs (i.e. matrix verbs in causative constructions) have different degrees of causativity, based on generic properties of causation scenes. I have suggested that generally, high causativity may be defined as high semantic transitivity of a causing event whose transitivity carries over into a highly transitive resulting event. More specifically, the properties that make a sequence of events highly causative are (i) a great resistance on the part of the causee, (ii) a forceful direct contact between causer and causee to overcome this resistance, (iii) a subsequent active involvement on the part of the causee in the result, and (iv) physical or emotional damage to the causee as a consequence. The three causation verbs in Akawaio can be characterized in these terms, and their overall degree of causativity interacts with the semantic continuum between causativity and resultativity. Most importantly, the causation verb with the highest dynamicity, *a'kwarga*, only encodes the event–result end of the continuum. It remains to be seen whether this phenomenon can be generalized to a typological statement that if a language has causation verbs with different degrees of dynamicity, the more dynamic one(s) will only encode the causative end of the state–event continuum. Certainly the English verb *force* behaves in this way, but of course the cross-linguistic validity of this observation can not be established on the basis of two languages.

The second issue concerns the motivation of a causation verb's semantics by the semantics of its lexical source. In the context of this issue, it is again *a'kwarga* that is especially interesting, because it shows how causation verbs emerge from verbs encoding particular modes of interaction that have consequences for their participants. The specific properties of such a particular mode of interaction are retained by the causation verb, and seem to be just as important as the fact that these verbs encode causation. In fact, in the case of *a'kwarga*, it is the forcefulness of the interaction, the initial resistance of the causee, the breaking of this resistance, and the negative consequences for the causee that are the primary semantic content. The fact that the interaction results in an action by the causee is in a sense important only because it is the nature of this action by the causee which is to a large part responsible for the resistance and the negative consequences.

In essence, then, the case of *a'kwarga* is interesting because it shows how a causative construction emerges from a rich model of the inner life of entities, and the changes in this inner life that may occur as the consequence of their interaction with other entities. The way in which a world view gives rise to a set of formal restrictions on a particular verb and the set of constructions it could potentially occur in is what, in my view, the study of language is all about:

understanding the way a speech community perceives the world by learning how they talk about it.

List of Abbreviations

1	1st person
2	2nd person
3	3rd person
A	the more agent-like argument of a transitive verb
ABS	absolutive
COP	copula
DAT	dative postposition
DESID	desiderative postposition
DETR	detransitivizer
ERG	ergative
FUT	future tense
INST	instrumental postposition
LOC	locative postposition
NZR	nominalizer
O	the less agent-like argument of a transitive verb
OBL	oblique-marking postposition
PAST	past tense
PL	plural
POSS	possessor
PRES	present tense
PSD	possessee suffix
PSN	possessee prefix
PTCP	participle
PURP	purpose
R	reflexive
S	the single argument of an intransitive verb
SEQ	sequence marker
SG	singular

Notes

¹ The paper is based on data elicited partly in the context of a field methods class held during the academic year 1999-2000 at Rice University. I would like to thank my consultant, Desrey Fox, for her patience and willingness to spend countless hours teaching me her language. I would also like to thank the participants of this and a previous field methods class, whose data provided a rich background for my own work. Here, Fine (1999) deserves special mention. Although her semantic analysis of Akawaio causatives is very preliminary and neglects syntactic issues altogether, it has provided me with stimulation and guidance in the early stages of my investigation. Finally, I would like to thank the participants of the 2000 Workshop on American Indigenous Languages at UC Santa Barbara, where I presented some of the material contained in this paper (Stefanowitsch 1999) for their critical questions and perceptive comments, and last but not least, I thank Spike Gildea for teaching me how to be a linguist and for providing detailed comments on an earlier draft of this paper.

² This paper uses the orthography developed by Spike Gildea and Desrey Fox at Rice University as a proposal for an official orthography. The phonetic values for most characters employed are self-explanatory; the only exceptions are: {i} for a high central unrounded vowel, {ö} for a mid central unrounded vowel, {ŋg} for a velar nasal (not a sequence of a nasal and a velar), {ʔ} for a glottal stop, and {r} for a lateral alveolar flap. In sequences of two orthographic vowels, the second vowel is phonetically a glide, e.g. {au} represents [aw].