

# Three Transitivity Markers in Arop-Sissano\*

John Nystrom

Summer Institute of Linguistics, Papua New Guinea

## 1 Introduction

Arop<sup>1</sup> has three particles used for increasing the transitivity of a clause: *-na*, *-tek*, and *-pajj*. In this paper I describe the use of these markers. The bulk of the paper is section 2, which deals with *-na*. *-Na* is much more common than *-tek* and *-pajj*, and is used to encode a wider variety of the parameters of transitivity than the other two markers do. These parameters are described in detail in section 2.

Section 3 deals with the derivational stem formative *-tek*, which also increases the transitivity of a verb. When *-tek* is used, either one or both of the transitivity parameters **kinesis** (action) and **volitionality** (purpose) are involved. Section 4 describes another derivational stem formative, *-pajj*, which is used to increase the telicity of a clause.

In Section 5 I discuss the use of *-na* to encode imminent and intentional actions. This use of *-na* is treated separately because it is very different from the uses of *-na* described in section 2.

In Section 6 I describe some uses of these three markers that need further research, including (among other things) the use of *-na* in relative clauses and *-na* used in an anaphoric reference to an important event in a narrative.

## 2 *-Na* Used for Increasing Transitivity

*-Na* marks an increase in the number of arguments in the clause, and/or an increase in one of the following parameters of transitivity: telicity, potency, individuation, affectedness of the

\* I wish to acknowledge the expert help I received on this paper from Ivan Lowe. Many of the ideas expressed in the paper were originally his. Many others, while originally mine, were sharpened considerably based on suggestions that he made. Some of my ideas are refinements of analyses Steve Whitacre made when he worked on Arop for several years before I did. Bob Conrad, Britten Årsjö, and Ginnie Schlie, and Malcolm Ross have also helped me at various times as I have struggled to understand what *-na* means.

<sup>1</sup> This paper deals with the language variety spoken in Arop village in Sandaun (West Sepik) Province, Papua New Guinea. I prefer to use the term "Arop" to refer to this language. I have used the term Arop-Sissano in the title of this paper to avoid confusion with the Arop-Lokep language of Madang Province. Traditionally, Arop has been considered to be a dialect of the Sissano language. Arop is an Austronesian language. Ross (1988) classifies it as a member of the Schouten chain, North New Guinea cluster of Oceanic.

patient, and volitionality.<sup>2</sup> It can also be used to transitivize a verb phrase containing a borrowed Tok Pisin verb.

### 2.1 Argument Added to the Normal Case Frame of the Predicate

*-Na* can be used to register an increase in transitivity when an argument is added to the normal case frame of the predicate. The predicate itself may be either a verb or an adjective. By "normal case frame" I mean that set of arguments that are inherently necessary for that predicate to make sense.

Which arguments are "inherently necessary" is language-specific. For example, in English the verb *sing* can take a subject and an optional direct object. In Arop, the object is obligatory on the verb *-mo* 'sing'. Only when a third nominal is added for the indirect object or benefactive is *-na* required with *-mo* 'sing'.

Other predicates in Arop can add certain optional arguments without having to add *-na*. For these predicates, the "normal case frame" includes those optional elements. When arguments other than the normal ones (including optional ones) are added to the clause, *-na* is required. Details on specific predicates are given in the sections 2.1.1 to 2.1.7.

**2.1.1 Addition of a Direct Object.** *-Na* can be used to transitivize a verb that normally does not take a direct object, as with *-tow* 'call-out' in (1-2).<sup>3</sup>

- 1) *Maiyn tortow amana tektek.*  
*maiyn ɪʋr-tow amana tektek*  
 bird IMP.3pl-call.out morning early  
 'The roosters call out early in the morning.'

<sup>2</sup> Except where indicated, I am using these terms in the senses in which Hopper and Thompson (1980) used them.

<sup>3</sup> 'represents [ʔ] in the practical orthography used for the examples. *ɪ* in the morpheme line indicates a vowel which harmonises with the vowel in the root. The following grammatical abbreviations are used in the morphemic glosses:

1s	1st Person Singular	DO	Direct Object	PF	Perfect (ono)
1s.O	1st Person Singular, Objective	EMPH	Emphasis	POSS	Possession, alienable
1s.S	1st Person Singular, Subjective	GEN	Genitive	RDP	Reduplication
2pl	2nd Person Plural	IA	Inalienable Possession	R	Realis
3dl	3rd Person dual	IMP	Imperfective	S	Subject
CONTR	Contrast	INCH	Inchoative	PRTV	Partitive
CNJ	Conjunction	IO	Indirect Object	TDC	Toward the deictic center
DEID	Deictic, Distal	IR	Irrealis	TELIC	Telicity Marker
DEIM	Deictic, Medial	NP	Noun Phrase	TRANS	Transitivity Marker
DEIP	Deictic, Proximal	O	Object		

- 2) *Kerkiy yi elin, yi lin towna re,*  
*kVr-kiy yi elin yi elin tow-na re*  
 R.3pl-call 3s NEG 3s NEG call.out-TRANS 3pl  
 'They called him, but he didn't call out to them.'

When the verb *-tow* 'call out' is intransitive as in (1), *-na* is not used. But when a direct object is added as in (2), *-na* is required.

*-Na* is also used when an intransitive verb is made reflexive (that is, when the subject and the object are the same nominal). Except for the *-na* and the addition of a direct object, sentences (3) and (4) are exactly the same.

- 3) *Tetmenmen peyian.*  
*tVt-RDP-men peyian*  
 IMP. 1pl-CONT-sit just  
 'We're just sitting around.'
- 4) *Tetmenmenna et peyian.*  
*tVt-RDP-men-na et peyian*  
 IMP. 1pl-PROG-sit-TRANS 1pl just  
 'We're just resting ourselves.'

When *-men* is reflexive, the *-na* is obligatory, so example (5) is ungrammatical.

- 5) \**Tetmenmen et peyian.*  
*tVt-RDP-men et peyian*  
 IMP. 1pl-CONT-sit 1pl just  
 ('We're just resting ourselves.')

The situation is the same for the two other common stative verbs in Arop, *-to* 'stand', and *-on* 'lie'. When these two verbs are reflexivized, they mean essentially the same thing as *-men* when it is reflexive. When *-to* 'stand' is reflexive it means 'rest oneself standing up'. When *-on* 'lie' is reflexive it means 'rest oneself lying down'.

*2.1.2 Addition of the Indirect Object.* When an indirect object is added to a verb that is not normally ditransitive, the verb must be suffixed with *-na*. In (7), *yi* '3s' is the indirect object, which here is the beneficiary or recipient of the action. (Note also that the Arop verb *-mo* 'sing' always takes at least a direct object, which is *o* 'thing' in (6-7). In Arop you can't say 'they sing', you have to say 'they sing something' or 'they sing a song'.)

- 6) *Re armo o.*  
*re ar-mo o*  
 3pl IR.3pl-sing thing  
 'They will sing something.'
- 7) *Re armo na yi o.*  
*re ar-mo na yi o*  
 3pl IR.3pl-sing TRANS 3s thing  
 'They will sing something to/for him.'

*2.1.3 Addition of Location.* When a speaker adds location information to a verb that does not inherently have to take a location as part of its case frame, then *-na* is used. One such verb is *-mat* 'die'. It is possible to say 'he died' without specifying where he died. Since the place of death is mentioned in (8), *-na* precedes the noun phrase describing the location.

- 8) *Niy tartar, re Orop niy teweyn tartar, temiyn,*  
*niy RDP-tar re Orop niy teweyn RDP-tar temiyn*  
 person EMPH-many 3pl Arop person big.pl EMPH-many female  
*pujelen, re karmat na taw tojoene.*  
*pujelen re kVr-mat na taw to-jo-ene*  
 children 3pl R.3pl-die TRANS place EMPH-EMPH-DEIP  
 'Many people, many Arops of long ago, including women and young people,  
 died at this place.'

In contrast to *-mat*, the verb *-men* 'sit' normally does take a location argument. Therefore, in (9), *-na* is not allowed because only the normal case frame of the verb (including the location) is present.

- 9) *Yi ekmen(\*na) Aitape.*  
*yi Vk-men Aitape*  
 3s PRES.3s-sit Aitape  
 'He is in Aitape.'

*-Na* cannot be used to register location on verbs such as *-men* 'sit' that normally take a location argument. When *-na* is used with such a verb, the added argument flagged by *-na* must be interpreted as something other than location.

In (10) *-na* is obligatory because the chair is affected by the sitting and it is also much more individuated (that is, distinguished from its environment). By contrast, in (9) above, the town of Aitape is much less affected by the sitting, and is much less individuated.

- 10) *Yi ekmen na sia ya'e.*  
*yi V<sub>k</sub>-men na sia ya-'e*  
 3s PRES.3s-sit TRANS chair 1s.S-POSS  
 'He's sitting on my chair.'

This contrasts with (11) which is grammatical in Arop only if *-na* is not used.

- 11) *Yi ekmen(\*na) olon.*  
*yi V<sub>k</sub>-men olon*  
 3s PRES.1s-sit house  
 'He is at home.'

A house, like a town, is not affected enough by the sitting and not individuated enough to warrant using *-na*. It is merely a location, which is part of the normal case frame of the verb.

2.1.4 *Addition of Stimulus.* When the stimulus that provokes the agent to perform an action is added to the case frame, *-na* is used to mark that stimulus.

- 12) *Re ter'eiylna re o.*  
*re tV<sub>r</sub>- 'eiy<sub>l</sub>-na re o*  
 3pl IMP.3pl-fight-TRANS pl thing  
 'They fight about things.'
- 13) *Etek lot elin tekniey enian na raskol.*  
*ete-k lot elin tV<sub>k</sub>-niey enian na raskol*  
 heart-1sIA 1pl NEG IMP.3s-think again TRANS rascal  
 'Our hearts didn't think again about the rascals (street criminals).'

In (12), it is the things that stimulate the fight; in (13) it is the rascals that stimulate the thinking. In each example, therefore, the stimulus is introduced as an extra argument.

Sentences (14) and (15) are nearly identical. When the stimulus is added, *-na* is required, and, in this case, the meaning is changed quite radically.

- 14) *Etek taklaw yi.*  
*ete-k tVʔ-law yi*  
 heart-1sIA IMP.3s-hurts 3s  
 'My heart **hurts** me.' ('I am angry.')
- 15) *Etek taklaw na yi.*  
*ete-k tVʔ-law na yi*  
 heart-1sIA IMP.3s-hurts TRANS 3s  
 'My heart **hurts** because of her.' ('I love her.')

2.1.5 *Addition of Cause.* The verb *-mat* 'die' does not require a cause argument in its case frame. When it does have a cause as an argument, as in (16), *-na* is required.

- 16) *Jo niy tartar karmat na aij iyn tepew.*  
*jo niy tar-RDP kVr-mat na aij iyn tepew*  
 okay person many-EMPH R.3pl-die TRANS talk GEN sorcery  
 'So many people have **died** because of sorcery.' (lit. 'the talk of sorcery')<sup>4</sup>

2.1.6 *Addition of Comparison.* The following examples show how *-na* can also be used with predicate adjectives. As with verbs, *-na* indicates that there is an extra argument added to the case frame of the predicate.

In (17-18), the predicate adjective *prum* 'big' is used with and without *-na*. *-Na* is not used when it just means 'big' as in (17), but when the speaker wants to say 'bigger than' as in (18), *-na* is required.

- 17) *Olon yi'e prum.*  
*olon yi-'e prum*  
 house 3s-POSS big  
 'His house **is** big.'
- 18) *Olon yi'e prum na olon ya'e.*  
*olon yi-'e prum na olon ya-'e*  
 house 3s-POSS big TRANS house 1s.S-POSS  
 'His house **is** bigger than my house.'

<sup>4</sup> Note that *aij iyn tepew* in (16) is what I have translated as 'sorcery'. This is a special use of the word *aij* 'talk'. Doing sorcery or any kind of magic requires special knowledge. That special knowledge is the *aij* 'talk'. It may be that the special knowledge involves specific incantations, but I do not know if that is true. The main point here, though, is that *aij iyn tepew* is a noun phrase that encodes the cause of the action of the verb *-mat* 'die'.

2.1.7 *Addition of an Argument to an Adverb.* *-Na* is also used to add an argument to the adverb *tiytiy* 'close'. The adverb *tiytiy* 'close' means, of course, that something is physically close to something else in the real world. When that something is referred to by a nominal that follows directly after *tiytiy*, *-na* is used. However, when that nominal is merely implied or precedes *tiytiy*, *-na* is disallowed.

In (19a-b), (which are two consecutive sentences in a text), the ship is the thing the men go close to. In (19b), the ship is not referred to by an overt surface nominal, so *-na* does not appear on the adverb there.

- 19) a. *Ke yi tekes, 'Em wuak yare Samarai akmen.'*  
*ke yi tV'k-es em wuak ya-re Samarai ak-mien*  
 CNJ 3s HAB.3s-say 3s ship GEN-3pl Samarai PRES.3s-sit  
 'And he said, "That's the Samarai's ship sitting there.'"
- b. *Et tawala tiytiy(\*na).*  
*et tV-wa-la tiytiy*  
 1pl R.1pl-go-cast close  
 'We went east close.'

However, in (20) *-na* is required because the bridge (which is the thing that the boat is being placed close to) follows directly after *tiytiy* 'close'.

- 20) *Tawa bot ana e wa tele kemen tiytiy-na bris*  
*tV-wa bot ana e wa tV'-le kV'-men tiytiy-na bris*  
 CMP.1pl-go boat DEIM 1pl go R.1pl-put RP.1s-sit close-TRANS bridge  
*Aitape,*  
*Aitape*  
*Aitape*  
 'We went, and we put the boat near the Aitape bridge.'

Examples (21) and (22) are two grammatical sentences that serve as further evidence that *-na* cannot be used with *tiytiy* 'close' unless the nominal that refers to what is close follows *tiytiy*.

- 21) *Re termen yia tiytiy(\*na).*  
*re tVr-men yia tiytiy*  
 3pl IMP.3pl-sit 1S.O close  
 'They live close to me.'

- 22) *Re termen tiytiyna yia.*  
*re tVr-men tiytiy-na yia*  
 3pl IMP.3pl-sit close-TRANS 1S.O  
 'They live close to me.'

In particular, notice that in (21) there is indeed a nominal *yia* 'me' that is the argument for the adverb *tiytiy*. Nevertheless, *-na* is not used because the *yia* precedes rather than follows the adverb.

## 2.2 Increase in Telicity

So far we have seen how *-na* is used when an argument is added to the case frame of the verb. *-Na* can also be used when certain other parameters of transitivity are increased. So far evidence has been found for *-na* marking telicity, individuation, and affectedness of patients.

In their seminal article on transitivity, Hopper and Thompson (1980) proposed telicity (or boundedness) as one of the parameters of transitivity. Sections 2.2.1 and 2.2.2 deal with the use of *-na* to mark increases in the telicity (or boundedness) of various kinds of actions in Arop, specifically in actions of moving things, loading and unloading, and climbing. Section 2.2.3 deals with the use of *-na* to mark verbs that refer to actions with an endpoint and contrasts these with the nonuse of *-na* when the verb merely refers to an activity without an endpoint.

2.2.1 *-Na* and *-'eiy!* 'load'. Lakoff and Johnson (1980:29-32) discuss the importance of container metaphors in language. In Arop the container metaphor is used to determine whether certain actions are telic or not. *-Na* is only used with the verb *-'eiy!* 'get-and-put' when the items being moved are being put into a container. Thus, putting things into some sort of container is seen as more telic than putting the same things somewhere else.

2.2.1.1 *Moving Things (Atelic) versus Loading Things (Telic)*. In Arop, moving things is regarded as an unbounded activity, whereas loading things into a container is regarded as a bounded (telic) operation and so is marked by *-na*. The same verb root *-'eiy!* is used for both, and the difference between *-'eiy!* with and without *-na* can best be shown by a short section from an Arop text.

In (23a-b), no *-na* is used with the verb *-'eiy!* when the men in the story are carrying things across the river and piling them up on the shore. Then in (23d) the men load the same cargo into the trailer. Here a *-na* occurs with the same verb (*-'eiy!*). The difference is the boundedness of



the action in the latter. The men are putting cargo into a particular closed container rather than putting it down just anywhere on the ground.

- 23) a. *Et tem re o lot Edward tem teyas*  
*et tV-em re o lot Edward t-em tV-yias*  
 1pl R.1dl-carry 3pl thing 1dl Edward R.1dl-carry R.1pl-cross.water  
*tamow wa te'eiyliw.*  
*t-a-mow wa tV-'eiyli-w*  
 R.1dl-go-west go R.1pl-get.and.put-down  
 'We carried the stuff, Edward and I carried it and crossed the water, and put it all down on the other side.'
- b. *Tem enian wa te'eiyliw, tem enian wa*  
*tV-em enian wa tV-'eiyli-w tV-em enian wa*  
 R.1dl-carry again go R.1dl-get.and.put-down R.1dl-carry again go  
*te'eiyliw tama.*  
*tV-'eiyli-w t-a-ma*  
 R.1dl-get.and.put-down R.1dl-go-TDC  
 'We carried cargo again and put it down, carried again and put it down, and came.'
- c. *Tes Florian pema kar.*  
*tV-es Florian pe-ma kar*  
 R.1dl-say Florian run-TDC car  
 'We told Florian to drive the tractor over.'
- d. *O ana yi 'eiykana, et tepe mow puiyn.*  
*o ana yi 'eiyli-a-na et tV-pe mow puiyn*  
 thing DEIM 3s get.and.put-up-TRANS 1pl R.1pl-run west night  
 'He (Florian) put the stuff up (into the tractor's trailer), and we drove west.'

2.2.1.2 *Loading (Telic) versus Unloading (Atelic)*. Arop regards loading as telic, and unloading as atelic. Example (24a-b) comes from a text where this distinction is made. In (24a), the men in the story are **loading** a boat before embarking on a trip. In that sentence *-na* is used. However, (24b) comes from the part of the story where they have reached their destination and are **unloading** the boat. There the speaker does not use *-na*. The presence and absence of *-na*

in these two sentences is due to the fact that loading is more telic than unloading; the items being loaded are being placed into a closed container.

- 24) a. *Tem re o et te'eiyliwna* *re o bot*  
*tem re o et tl'-eiyli-iw-na* *re o bot*  
 time 3pl thing 1pl R. 1pl-get.and.put-down-TRANS 3pl thing boat  
*olonma amana tektek vet,*  
*olonma amana tektek vet*  
 time morning SUPERLV INTS  
 'The time when we had put it all in the boat, was very early morning.'

- b. *Tama tepe'os ker'eiyli* *re o.*  
*tV-wa-ma tl'-pe-os kl'r-'eiyli-a* *re o*  
 R. 1pl-go-TDC R. 1pl-run-south R. 3pl-get.and.put-up 3pl thing  
 'We came riding south and they unloaded the things in the boat.'

In yet another text, the same phenomenon occurs. In (25), someone is carrying baggage from the inside of the airport to the outside. *-Na* is not used because this situation has comparatively little telicity.

- 25) *Kerem wawuj ker'eiyliw* *lilin ke e wa teniaw.*  
*kVr-em wa-wuj kl'r-'eiyli-iw* *lilin ke et wa tV-niaw*  
 R. 3pl-carry go-north R. 3pl-get.&.put-down outside CNJ 1pl go R. 1pl-see  
 'They carried it north and put it down together outside, and we went to look around.'

Example (26) comes from later in the same story. The main participants in the story are on a passenger ship. The passengers who have been occupying the bunks are getting off the ship at their destination and the main participants are loading their cargo onto the beds. The bunk beds on the ship the speaker is referring to are enclosed to a certain extent and are much more individuated than the outside of the airport, so the action is regarded as telic and *-na* is used.

- 26) *Tem re kerem o karwa, et tetem* *re o ete wa*  
*tem re kVr-em o kVr-wa et tVt-em* *re o ete wa*  
 time 3pl R. 3pl-carry thing R. 3pl-go 1pl IMP. 1pl-carry 3pl thing our go  
*tet'eiyliana* *bed.*  
*tVt-'eiyli-a-na* *bed*  
 IMP. 1pl-get.and.put-up-TRANS bed  
 'When they carried their stuff out, we carried our stuff and piled it on the beds.'

It is quite significant that when the ocean gets rough as in (27), it can -*'eiyla* but it cannot -*'eiyana*. The reason is obvious: the ocean is not putting the water into an enclosed container, nor is it ever in a particular place. In fact the verb is not used transitively at all in this sentence. It is clearly an activity with no endpoint.

- 27) ...*ke tapan ene tias tek'eiyła tawana ke raiyn*  
*ke tapan ene tias tɪʔk-'eiył-a tawana ke raiyn*  
 CNJ time DEIP ocean IMP.3s-get.and.put-up also CNJ water  
*tawana akama ke tias tek'eiyła.*  
*tawana ak-wa-ma ke tias tɪʔk-'eiył-a*  
 also PRES.3s-go-TDC CNJ ocean IMP.3s-get.and.put-up  
 '...and at this time the waves were getting rough, and the water was coming,  
 and the sea was getting rough.'

2.2.2 *Climbing into (Telic) versus Climbing onto (Atelic)*. The use of *-na* to mark telicity or boundedness is also illustrated by its use with the verb -*'er* 'to climb'. When this verb is suffixed with *-na*, it has the sense of boarding a plane or ship, both of which are containers as illustrated in (28-30).

- 28) *Hostes tekiy et, et tawuj enian te'erana,*  
*hostes tɪʔk-kiy et et tɪʔ-wa-wuj enian tɪʔ-'er-a-na*  
 hostess IMP.3s-call 1pl 1pl R.1pl-go-north again R.1pl-climb-up-TRANS  
*et tepe teken naw.*  
*et te-pe teken naw*  
 1pl R.1pl-run long now  
 'The hostess called us. We went north again and boarded (the airplane), and we went all the way to our destination.'
- 29) *Ker'erana wuak ene karama.*  
*kɪʔr-'er-a-na wuak ene kɪʔr-a-ma*  
 R.3pl-climb-up-TRANS ship DEIP R.3pl-go-TDC  
 'They boarded the boat (the ship), and were coming our direction.'

- 30) *Tem et ta'os, raskol foapela ker'erana et*  
*tem et tV'-wa-os raskol foapela kVr-'er-a-na et*  
 time 1pl R.1pl-go-south rascal four R.3pl-climb-up-TRANS 1pl  
*Madang et tama.*  
*Madang et tV'-wa-ma*  
 Madang 1pl R.1pl-go-TDC

'When we went southward (to the port), four rascals came on board with us at Madang and we came (with them).'

When two men wade ashore on an island as in example (31), the same verb for climb (-er) is used. But an island is not a container, so -na is not used in this situation.

- 31) *Keryias kara'os ker'era ailan yare Ali.*  
*kVr-yias kVr-a-os kVr-'er-a ailan yare Ali*  
 R.3pl-swim R.3pl-go-south R.3pl-climb-up Island their Ali  
 'They swam, went south and went up on the Island belonging to the Ali people.'

When someone climbs a tree to get its fruit as in examples (32-33), -na is not used.

- 32) *Ke yi tekes yi pene, 'Elin ya ke'ier new ke*  
*ke yi tV'-es yi pene Elin ya kV-'ier new ke*  
 CNJ 3s IMP.3s-say 3s GENSPEC NEG 1s.S R.1s-climb coconut CNJ  
*ya kalua.'*  
*ya kV-lua*  
 1s.S R.1s-fall

'And he told him, "No, I climbed a coconut tree and I fell."'

- 33) *Mande yi kon, re wuruaw karwa aplai, ker'er re po,*  
*Mande yi kV-on re wuruaw kVr-wa aplai kVr-'er re po*  
 Monday 3s R.3s-lie 3pl male R.3pl-go bush R.3pl-climb 3pl betelnut  
*ker'er re new, ker'er 'uiyl, karama...*  
*kVr-'er re new kVr-'er 'uiyl kVr-a-ma*  
 R.3pl-climb 3pl coconut R.3pl-climb breadfruit R.3pl-go-TDC

'He lay Monday, and the men went to the bush and climbed to get bettlenut, coconuts, and breadfruit trees. They came back...'

Since trees are not closed containers, this fits with what we have seen so far: *-na* is used with *-er*<sup>5</sup> only when the person is climbing into an enclosed container.<sup>6</sup>

2.2.3 *-Na Used to Mark Bounded Activities.* In the following examples, *-na* is used in (35-36) and not in (34) because (35-36) are more telic than (34) is. Just carving designs is an activity and thus has no perceptible telicity, whereas writing one's name and writing a notice both have definite endpoints, that is, you know when you are finished.

- 34) *Yi aw'ar terew.*  
*yi aw-'ar terew*  
 3s IR.3s-carve designs  
 'He will carve designs.'
- 35) *Yi aw'arna aan yi'e.*  
*yi aw-'ar-na aa-n yi-'e*  
 3s IR.3s-carve-TRANS name-3sIA 3s-POSS  
 'He will write (lit. carve) his name.'
- 36) *Ya aw'uarna aij kistekna iyn dinau.*  
*ya aw-'uar-na aij kistekna iyn dinau*  
 1s.S IR.1s-write-TRANS talk information GEN loan  
 'So that I can write an announcement about loans.'

2.2.4 *The Use of -na with -es 'say'.* As with the use of *-na* with *-eiyl*, *-na* encodes telicity or boundedness when used with *-es 'say'*. A story has an endpoint, and telling it is therefore a telic activity. Thus when a speaker is restricted to a story, or to a definable topic, the verb which describes his speech is suffixed with *-na*. When he is perceived as just talking generally without any such limitation, there is no perceived boundedness so *-na* is not used.

2.2.4.1 *-Es 'say' with -na.* Examples (37-39) illustrate the usual use of *-es 'say'* followed by *-na*.

- 37) *Orait nanakene yape awis na aij iyn tepew.*  
*orait nanakene ya-pe aw-is<sup>7</sup> na aij iyn tepew*  
 okay now 1s.S-CONTR IR.1s-say.1s TRANS talk GEN sorcery  
 'Okay, now I will tell you about sorcery.'

<sup>5</sup> The form *-ier* used here is an allomorph of the verb *-er 'climb'*. This form is always used in the first and second persons singular; *-er* occurs in all other persons and numbers.

<sup>6</sup> It is interesting that the directional affix *-a 'up'* is not used with *-er 'climb'* for climbing trees. Perhaps this is because a person who climbs a tree to get its fruit intends to climb down again. By contrast, one climbs into a plane or ship intending to stay there a while. In (32-33), *-er 'climb'* is used to refer to the whole process of climbing up, getting the fruit, and coming down. Using *-a 'up'* in this context would apparently be inappropriate.

<sup>7</sup> The verb *-es 'say'* has two allomorphs: *-is* is used in the first and second person singular; *-es* in all other forms.

- 38) *Orait, bai ya awis na aij naw.*  
*orait bai ya aw-is na aij naw*  
 okay FUT 1s.S IR.1s-say.1s TRANS talk now  
 'Okay, I will tell the story now.'
- 39) *Ya koluon ke ya kisna.*  
*ya kV-luon ke ya kV'-is-na*  
 1s.S R.1s-hear CNJ 1s.S R.1s-say.1s-TRANS  
 'I know it and I have told it (a story).'

Even when a speaker refers to someone else telling a story, *-na* is still used with *-es*, as shown in (40).

- 40) *Tasol aij Eon'e ene ya koluon, taja kes na yia.*  
*tasol aij Eon-'e ene ya kV'-luon taja kV'-es na yia*  
 DISJ talk Eon-POSS DEIP 1s.S R.1s-hear father R.3s-say TRANS IS.O  
 'But the story of this Eon, I heard, my father told me.'

Later in the same text, the speaker uses *-na* in (41) when he is referring to parts of the story he has already told. He does not mention the specific content, but rather treats them as identifiable topics in his story. Since they are identifiable topics, they are perceived as bounded.

- 41) *Jo tepew ene aij yi'e elin kawa prum pontenen, aij*  
*jo tepew ene aij yi-'e elin kV'-wa prum pontenen aij*  
 okay sorcery DEIP talk 3s-POSS NEG R.3s-go big one talk  
*yi'e welen welen tartar.*  
*yi-'e welen welen tar-RDP*  
 3s-POSS small.pl small.pl many-EMPH  
 'So this sorcery is not just one thing, it has many different manifestations.'
- On pene ya kis na re kawa ono.*  
*on pene ya kV'-is na re kV'-wa ono*  
 part GENSPEC 1s.S R.1s-say.1s TRANS 3pl R.3s-go DEID  
 'Just like what I told about them earlier.'

Similarly, in (42) *-na* is used with the content of what is said because that content is apparently perceived by the speaker as bounded.

- 42) *Sio naw re teres na Sio tias teweiy, on yi'e peyian.*  
*Sio naw re tVr-es na Sio tias teweiy on yi-'e peyian*  
 Sio now 3pl IMP.3dl-say TRANS Sio wave big.pl part 3s-POSS just  
 'We were at Sio now. They tell about how Sio has big waves, but this time  
 they were only a portion of their normal height.'

2.2.4.2 *-Es 'say' without -na.* When *-es* occurs without *-na*, it is because the speaking is regarded as an activity which is not telic, that is, not bounded in any way.

In (43), *-na* is not used because the 'talk' was a general public discussion about a marriage exchange agreement, not a story with a definite beginning and end; it was not regarded as telic in any way. When Arops talk about a marriage exchange agreement, the discussion is very unbounded both in terms of who may speak as well as in terms of time as the community seeks to establish the social harmony essential to life in most Papua New Guinean communities.

- 43) *Tapan pene tawan kataiy, et tala wa*  
*tapan pene tawan kV-taiy, et tV-wa-la wa*  
 time GENSPEC white.man R.3s-accompany 1pl R.1pl-go-cast go  
*tolon re keres aij iyn Christian Warepe ro awuan*  
*tV-lon re kVr-es aij iyn Christian Warepe ro awua-n*  
 R.1pl-hear 3pl R.3pl-say talk GEN Christian Warepe 3dl spouse-3sIA  
*temiyn...*  
*temiyn*  
 female  
 'When the white-man went with us to hear them talk about Christian  
 Warepe and his wife...'

The next example illustrates the use of *-es* without *-na* to report speech that is not telic.

- 44) *ke Bernard tekes yia pene ya awliew bot.*  
*ke Bernard tVr-es yia pene ya aw-liew bot*  
 CNJ Bernard IMP.3s-say 1S.O GENSPEC 1s.S IR.1s-turn boat  
 'and Bernard says to me, "I'll turn the boat."'

Note the use of *pene* 'generic-specific'. One of the uses of this word is to introduce the specific half of a generic-specific pair. One particular type of generic-specific pair is a speech margin followed by the quoted speech or the content of an indirect quote, as in (44). When *pene* is used, *-na* is not used.

Example (45) illustrates the use of *pene* versus *-na*. The two people the speaker refers to had just told stories.

- 45) *Watan peyian ya awis pene Linus ro Rudolf rope*  
*watan peyian ya aw-is pene Linus ro Rudolf ro-pe*  
 before EMPH 1s.S IR.1s-say.1s CNTNT Linus 3dl Rudolf 3dl-CONTR  
*keres na aij yaro konuiyn.*  
*kVr-es na aij yaro kV-nuiyn*  
 R.3dl-say TRANS talk GEN.3dl R.3s-finish  
 ‘Right at the beginning I’ll say this: as for Linus and Rudolf, those two **told** their stories already.’

*Pene* introduces a clause that represents the specific content of the verb *-is* ‘say’ here. That content has some sort of a limit to it, so it does have some telicity. But it is not nearly as bounded as the stories that the men told, which have very definite endpoints and are marked here by *-na*. Apparently, Arop considers specific content not to be as bounded as a story is. So *pene* marks one type of telicity and *-na* another more strictly bounded type.

In (46), when the speaker refers to the specifics of what his father told him, he leaves out *-na*. Again, the specific content of what is said is not bounded enough for *-na* to be used.

- 46) *Yi kes yia pene Eon ene, re niy teweiy n repe*  
*yi kV-es yia pene Eon ene re niy teweiy n re-pe*  
 3s R.3s-say 1S.O GENSPEC Eon DEIP 3pl person big.pl 3pl-CONTR  
*ela ono, ke yine lowon yare niy teweiy n ete.*  
*ela ono ke yine lowon yare niy teweiy n ete*  
 cast DEID CNJ PRO.3s friend GEN.3pl person big.pl our  
 ‘He **told** me **that** this Eon guy, the ancestors, that is those who live out east there, and he was a friend of our ancestors.’

2.2.4.3 *-Na in the Formulaic Finis of a Story.* We have already seen that *-na* can be used to encode telicity with the verb *-es* ‘say’. There is a special use of *-na* with this same verb that occurs in the *finis* of most stories. A typical instance of this is given in (47). The interesting thing about this usage is that in the *finis* of a story, the *-na* always occurs before the verb instead of after it as in all the examples we have seen thus far.



- 47) *Aij na kosana, aij iyn David'e.*  
*aij na kos-ana aij iyn David-'e*  
 talk TRANS enough-DEIM talk GEN David-POSS  
 'Talk is enough, the talk about David.' ('That's the end of the story about David.')

Example (48) occurs when the story proper is finished; all that remains after (48) is a concise summary of the whole story.

- 48) *Karwa teken ke aij yare ya na tekisna soene.*  
*kVr-wa teken ke aij yare ya na tVk-is-na soene*  
 R.3pl-go long CNJ story their 1s.S TRANS IMP.1s-say-TRANS this  
 'They went long (all the way, i.e., they never came back), and this is their story I'm telling you now.'

### 2.3 Individuation of Destination with Motion Verbs

2.3.1 *Wa 'go'*. Hopper and Thompson (1980) claim that clauses with animate objects are more transitive than clauses with inanimate objects, and that some languages mark this difference in their morphosyntax. They called this parameter individuation, but they only applied it to objects of transitive verbs.

I find the same parameter in Arop motion verbs: An animate destination is more individuated than an inanimate one, and is thus marked with *-na*. When the destination is inanimate, *-na* is optional; when a person or group of people are the destination of a motion verb, *-na* is required, as in (49a).

- 49) a. *Yi wama na yia.*<sup>8</sup>  
*yi wa-ma na yia*  
 3s go-TDC TRANS 1S.O  
 'He came to me.'
- b. *\*Yi wama yia.*  
*yi wa-ma yia*  
 3s go-TDC 1S.O

Example (49b) is ungrammatical because the animate destination requires *-na*.

<sup>8</sup> Note that the form *yia* is the same form as one would use for first person object with a transitive verb.

In the following pair of examples from the same text, all the arguments have the same referents except for the destination. Example (50a) requires *-na* because the destination is a person, that is, the Aid Post Orderly, but (50b) has no *-na* because the destination is a place and hence inanimate.

- 50) a. *Kopene ke re korow yi kawa na APO.*  
*kopene ke re kVr-ow yi kV-wa na APO*  
 be.like CNJ 3pl R.3pl-carry 3s R.3s-go TRANS A.P.O.  
 ‘So they carried him to the Aid Post Orderly (male nurse).’
- b. *Korow yi karwa Isono.*  
*kVr-ow yi kVr-wa Isono*  
 R.3pl-carry 3s R.3pl-go Sissano  
 ‘They carried him to Sissano (a village).’

Here are two more examples where the motion verb has no *-na* because the destination is inanimate.

- 51) *Tama tepema notaw.*  
*tV-wa-ma tV-pe-ma notaw*  
 R.1pl-go-TDC R.1pl-run-TDC village  
 ‘We came riding back to our village.’
- 52) *Re karwa ke David yipe kawa olon yi’e.*  
*re kVr-wa ke David yi-pe kV-wa olon yi-’e*  
 3pl R.3pl-go CNJ David 3s-CONTR R.3s-go house 3s-POSS  
 ‘They went and David went to his house.’

In (53) and (54), the same physical position is the destination. The important difference is that (53) refers to the **place** as the destination, and (54) refers to the **people** who are at that place. As expected, the animate destination takes *-na* while the inanimate one does not.

- 53) ...*ke re karwa aplain yare, re terkiy Olpu onoo olon*  
*ke re kVr-wa aplain yare re tVr-kiy Olpu onoo olon*  
 CNJ 3pl R.3pl-go inland POSS.3pl 3pl IMP.3pl-call Olpu place house  
*yare.*  
*yare*  
 POSS.3pl  
 ‘...and they went out to their part of the bush, which is called Olpu, where they have their house.’

- 54) *Ke yi lin wama kerie na re ni'inre elen na*  
*ke yi elin wa-ma kerie na re ni'i-n-re elen na*  
 CNJ 3s NEG go-TDC quickly TRANS 3pl cousin-3sIA-pl some TRANS  
*koron onoo olon yaro Olpu ono.*  
*kVr-on onoo olon yaro Olpu ono*  
 R.3pl-lie place house GEN.3dl Olpu DEID  
 'And he didn't come back right away to his uncles who were at their house-  
 place, Olpu.'

2.3.2 -*Na* Not Used when Other Verbs Come between -*na* and the Destination. In (55) the verb -*wa* 'go' is not suffixed with -*na* even though there is an animate destination. This is because there is another verb, *keniaw* 'he saw', in the surface structure between the motion verb -*wa* 'go' and the destination phrase *re ni'inre elen Apoj* 'his cousins at Apoj'. When another verb comes between the motion verb and the animate destination, -*na* is never used since the destination is now more closely related to the intervening verb. This explains why David can go to the same relatives in example (55) without -*na* as he does in example (54) with -*na*.

- 55) *Ke yi wama keniaw re ni'inre elen Apoj,*  
*ke yi wa-ma kV-niaw re ni'i-n-re elen Apoj*  
 CNJ 3s go-TDC R.3s-sce 3pl cousin-3sIA-pl some Apoj  
 'And he came and saw his uncles and aunts at Apoj.'

Examples (56a-b) illustrate the same point. The narrator describes the same event in two different ways in successive sentences:

- 56) a. *Yi tekes yi aij, yi wa keniaw Nowu awuan temiyn.*  
*yi tVk-es yi aij yi wa kV-niaw Nowu awua-n temiyn*  
 3s HAB.3s-say 3s talk 3s go R.3s-sce Nowu spouse-3sIA female  
 'She said this to him, and he went to see Nowu's wife.'
- b. *Ke David 'usia ke yi kawu na ni'in temiyn*  
*ke David 'usia ke yi kV-wa na ni'i-n temiyn*  
 CNJ David arise CNJ 3s R.3s-go TRANS uncle/aunt-3sIA female  
*yi'e.*  
*yi-'e*  
 3s-POSS  
 'And David got up and went to his aunt (i.e., Nowu's wife).'

Sentence (56a) has no *-na* after the motion verb because another verb, *keniaw* 'see', intervenes to take the destination as its object. In (56b), *-na* is required because the destination is animate.

2.3.3 *When Adverbs follow Motion Verbs, -na Is Not Disallowed.* Although an intervening verb disallows the use of *-na* with the destination, an intervening adverb does not, since it is part of the verb phrase. Thus in example (57), there is an adverb *stret* 'straight' right after the verb *awa* 'go', but the *-na* is present, and immediately follows the adverb.

- 57) *Kolon*    *aiy soono*            *yi awlaw,*    *aiy soono*            *amkur*  
*kV-lon*    *aiy so-ono*            *yi aw-law*    *aiy so-ono*            *am-kur*  
 R.3s-able tree EMPH-DEID 3s IR.3s-cut tree EMPH-DEID INCHO-broken  
*awla,*    *tasol elin kolon*    *amkur*            *awa,*    *amkur*  
*aw-la*    *tasol elin kV-lon*    *am-kur*            *aw-wa*    *am-kur*  
 IR.3s-fall DISJ NEG R.3s-able INCHO-break IR.3s-go INCHO-break  
*awa*    *stret*    *na*    *niy*    *lambat tojoene*            *iyin*    *awla*  
*aw-wa*    *stret*    *na*    *niy*    *lambat to-jo-ene*            *iyin*    *aw-la*  
 IR.3s-go straight TRANS person body EMPH-EMPH-DEIP PURP IR.3s-hit  
*yi awmat.*  
*yi aw-mat*  
 3s IR.3s-die

'He can cut that tree, that tree will break and fall, but it can't just break and go, it will break and fall straight on this person to kill him.'

Thus we see that the rules regarding when to use *-na* with the object of a verb actually apply to the verb phrase rather than to the verb.

2.3.4 *Use of -na with Other Motion Verbs.* The rules for *-na* mentioned above also apply to other motion verbs such as *-pe* 'run' and *-uw* 'carry', not just to *-wa* 'go'. Here is an example of *-pe* 'run' with a following animate destination.

- 58) *Kow*    *lot tepe*            *na*    *tawan*    *taako*    *re*    *terkiy*    *yi*  
*k-ow*    *lot tV-pe*            *na*    *tawan*    *taako*    *re*    *tVr-kiy*    *yi*  
 R.3s-carry 1dl R.1dl-run TRANS white.man INDEF 3pl IMP.3pl-call 3s  
 'Belken.'  
*Belken*  
*Belken*

'It took us and we went to a white man whom they call "Belken."'

If *-na* is required when the motion verb has a person as the destination, then the following otherwise obscure example makes sense:

- 59) *Ya tamtua re ke pene ya awpiyl yi elin, e awkuw*  
*ya tV-antua re ke pene ya aw-piyl yi elin e awk-uw*  
 1s.S IMP.1s-fear 3pl CNJ if 1s.S IR.1s-seeck 3s NEG 2s IR.2s-carry  
*yia awuon na re plis.*  
*yia aw-uon na re plis*  
 1S.O IR.1s-lic TRANS 3pl police  
 'I'm afraid of them, and If I look for him and can't find him, you **take me to sleep with the police.**'

Example (58) is the only one in all the texts of *-pe* 'run' with *-na*. However, *-pe* occurs often with inanimate destinations and therefore without *-na* as in examples (60-62).

- 60) *Tama tepema notaw.*  
*tV-wa-ma tV-pe-ma notaw*  
 R.1pl-go-TDC R.1pl-run-TDC village  
 'We rode<sup>9</sup> back to our village.'
- 61) *Et tepe tetniaw tias ke et tepe'os Aitape naw.*  
*et tV-pe tVt-niaw tias ke et tV-pe-os Aitape naw*  
 1pl R.1pl-run IMP.1pl-see wave CNJ 1pl R.1pl-run-south Aitape now  
 'We went on, saw the waves breaking, and rode south to Aitape.'
- 62) *Raiyn Pumpu et ta'awtala tepewuj Butipam.*  
*raiyn Pumpu et tV-'awtala tV-pe-wuj Butipam*  
 water Pumpu 1pl R.1pl-go.past R.1pl-run-north Butipam  
 'We went past the Pumpu River and rode northward to Butipam.'

2.3.5 *-Na Marks Most Important Destination in a Discourse.* Up until this point I have dealt with *-na* in its function at clause level. We need now, however, to consider the discourse function of *-na* in its use with motion verbs. There are just a few instances of this, but these instances seem to break the rule we have just established that *-na* is required on a motion verb if and only if the destination is animate.

<sup>9</sup> Note that *-pe* 'run' is not only used for people running, but also for traveling by any unnatural means or very fast means, e.g. riding in a car or boat, on a bicycle or on a surf board, hence the translation 'rode' here.

There are only two instances in the texts of the motion verb *-wa* 'go' used with *-na* where the destination is **not** animate. Both of these occurrences are in sentences in which the agent is going to what may be interpreted as the most important destination in the story. By "most important destination," I mean the destination that plays the most important role in the plot of the story, the destination to which the plot moves.

In (63), *-na* is present because the *tias* 'wave' is the destination to which the whole plot of the story moves.

- 63) *Ya kepi mer'er wuawuj na tias,*  
*ya kl'-pi mer'er wua-wuj na tias*  
 1s.S R.1s-run straight go-north TRANS wave  
 'I went straight north on the wave.'

The story that this sentence comes from is about the time when the narrator drove his boat out onto the ocean and a big wave almost capsized the boat. The experience was all the more traumatic because he had an expatriate woman and her baby in the boat, both of whom he was extremely concerned about.

Driving a small motor boat on the ocean is easy once one gets past the breaking waves near the shore. It takes a great deal of skill to get safely past those breakers, however, and the narrator of this story is known as one of the best drivers in his village.

There is a long section in the story just prior to this sentence in which the narrator describes the tension and apprehension he felt as he was getting ready to go out on the ocean. The sea was rough and some of the other people in the travel party were giving him plenty of advice as to when he should gun the engine to get the boat out past the breakers and out of danger. And just before this sentence, he says that the boat is out too far to avoid the next wave as it breaks; he is out beyond the point of no return. He has no choice but to gun the engine and hope for the best.

So when the narrator says, 'So I drove straight to/on *-na* the wave,' the wave is the destination uppermost in his mind. At this point, he is not thinking at all about the ultimate destination of their trip. No time for that now. All his energies are concentrated on getting his boat and his passengers past that one particular wave and out of danger. Right after this sentence he describes the wave breaking over the top of the boat and knocking the passengers off their seats (see (85)).

Thus the clause in (63) is high in telicity; it is the end of the tense sequence of events that leads up to it. It is also high in individuation because it is the one and only destination that the narrator is concerned with at the moment. This one particular wave is also the most important destination in the story. Not only does the whole plot lead up to the wave crashing into the boat,

but the narrator also spends a lot of time in the rest of the story reflecting on how traumatic that moment was to him.

By contrast, there is another sentence at the beginning of the same story that describes going out onto the breakers, but does not portray them as the final destination at all:

- 64) ...*iyn et atniaw tias elin amlet ke atpewuj*  
*iyn et at-niaw tias elin am-let ke at-pe-wuj*  
 PURP 1pl IR.1pl-see ocean surface INCHO-calm CNJ IR.1pl-run-north  
*tias wa atwa Aitape,*  
*tias wa at-wa Aitape*  
 ocean gō IR.1pl-go Aitape  
 '...so that we could see when the sea would become calm and we would go  
 northward onto the waves and continue on to Aitape.'

In (64), the narrator is explaining why he was holding the boat in the shallow water. It is merely an explanation off the event line that occurs at the beginning of the story. Note also that the ocean or waves are not portrayed as the final destination in this sentence, the town of Aitape is. The action of going to the wave is low in telicity: it is merely a mid-way point of going to the town of Aitape.

The destination in (64) is also low in individuation: the narrator does not refer to a particular wave, but to the waves or ocean in general. (Note that *tias* means 'ocean' as well as 'wave/waves'.) Therefore *-na* occurs in (63) but not in (64) because the former is higher in telicity and individuation, and, perhaps most importantly, because it contains the most important destination in the story.

Example (65) is similar to (63) and also requires some background information. This story this sentence is from is about a young man named David who died very mysteriously. At his funeral, his relatives knocked on the coffin and asked the deceased (whose body was in the coffin) questions about his death. According to Arop custom, the deceased would move the coffin when the answer to a question would be 'yes' if the deceased chose to cooperate.

The whole story about David builds up to the point in the narrative where the deceased finally moves the coffin in response to questions his mother asks him. He not only answers her questions, he also leads her and the scores of people present around the village to the places where he was attacked and killed by the ritual murderers (*sanguma*).

Example (65) is from the part of the story where the coffin leads David's mother to these important places. *-Na* marks two of three destinations in the sentence.

- 65) *Ke wawuj na new onton taako okto aluana,*  
*ke wa-wuj na new onton taako ok-to aluana*  
 CNJ go-north TRANS coconut small INDEF PRES.3s-stand middle  
*wa'os haus lotu eyosiw, ke wawuj na olon yi'e*  
*wa-os haus lotu eyos-iw ke wa-wuj na olon yi-'e*  
 go-south house church south-down CNJ go-north TRANS house 3s-POSS  
*yi tokon, olon iyn David tokon.*  
*yi tɬk-on olon iyn David tɬk-on*  
 3s IMP.3s-lic house GEN David IMP.3s-lic  
 'And it (the coffin) went north to the small coconut tree standing in the middle, and went south to the church building on the south side, and went north to the house where David sleeps.'

The places that the narrator marked with *-na* are the place where the *sanguma* took him after they killed him, and the place where the *sanguma* laid him after he died. These two motions were toward the north. Since the final destination, David's house, was northward, *-na* is apparently encoding motion toward the deceased's final destination. The place where the *sanguma* actually killed him was the church, but it is not encoded with a *-na*.

Note also that the northward destinations are more heavily coded than the other destinations in this section of the story. The southerly destination has merely one word modifying the noun *haus lotu* 'church', while the northerly destinations have four and ten words modifying the nouns, respectively. The one with ten words is the final destination. On the principle of iconicity, we would expect the most heavily coded NPs to be the most informative or the most important.

The rules for using *-na* with motion verbs can be summarized as follows:

1. With motion verbs where the agent is animate, *-na* obligatorily precedes the destination if it is also animate.
2. When the destination is inanimate, *-na* is not used unless the destination is important enough in relation to the plot structure of the narrative to warrant extra coding.

#### 2.4 Increase in Affectedness of the Patient

*-Na* can also be used to encode an increase in the affectedness of the patient. According to Hopper and Thompson (1980), a greater degree of affectedness of the patient means higher transitivity. Thus, for food that is cooked all the way but not burnt, one would say:



- 66) *Eteiyn ka'aiyn omon omon.*  
*eteiyn kV-'aiyn omon omon*  
 fire R.3s-cat good good  
 'The fire cooked it just right.'

But if someone forgets the brownies in the oven, the appropriate thing to say is that they were affected by the fire a lot more than normal:

- 67) *Eteiyn aiynaiynna.*  
*eteiyn RDP-aiyn-na*  
 fire PROG-cat-TRANS  
 'The fire ate them (the black brownies) completely.'

Example (68) is another example of *-na* marking an increase in affectedness of the patient.

- 68) *Niy tojoene niy teweiyw watan re tamta na yi.*  
*niy to-jo-ene niy teweiyw watan re tV'-amta na yi*  
 person EMPH-EMPH-DEIP person big.pl before 3pl IMP-fear TRANS 3s  
 'This man, the ancestors were very afraid of him.'

Without *-na*, this sentence would mean that the ancestors were just afraid of him. With *-na* added it means they were very afraid of him.

The patient is sleepy in both (69) and (70), but the patient is more affected by sleep in (70) so he is very sleepy. *-Na* signals the increase in affecteness of the patient.

- 69) *Muoiyn teklek yi.*  
*muoiyn tV'k-lek yi*  
 sleep IMP.3s-destroy 3s  
 'He is sleepy.'
- 70) *Muoiyn teklek na yi.*  
*muoiyn tV'k-lek na yi*  
 sleep IMP.3s-destroy TRANS 3s  
 'He is very sleepy.'

## 2.5 Addition of *-na* to a Transitive Tok Pisin Verb Phrase

*-Na* can be used in the same ways with Tok Pisin verbs as it can with native Arop verbs. Arop can borrow any Tok Pisin verb by placing the verb *-o* 'do' before the Tok Pisin verb. In the following example, *tingting* 'think' is transitivized by adding *-na*.

- 71) *E mas awkuo tingting na ya.*  
*e mas awk-uo tingting na ya*  
 2s OBLIG IR.2s-do think TRANS IS.O  
 'You must think about me.'

### 3 The Use of *-tek* to Increase Transitivity

Like *-na*, *-tek* 'purposeful action' marks an increase in the transitivity of the clause. To be specific, *-tek* is used when the idea of doing something for a purpose is added to the basic verb root. Whereas *-na* works on the verb and verb phrase, and occasionally has higher level discourse functions, the *-tek* suffix is often a derivational stem formative that converts a mental state verb to an action verb. This clearly means an increase in transitivity.

In (72) and (73), the verb *-niaw* 'see' is used with and without *-tek*.

- 72) *Topun temiyn keniaw yi.*  
*topu-n temiyn kl'-niaw yi*  
 grand.rcl-3sIA female R.3s-scc 3s  
 'His grandparent saw him.'

- 73) *Tonuan kamat, topun temiyn niawtek yi.*  
*tonua-n kl'-mat topu-n temiyn niaw-tek yi*  
 mother-3sIA R.3s-die grand.rcl-3sIA female scc-TRANS 3s  
 'His mother died, his grandmother took care of him.'

Without the suffix *-tek*, the verb *-niaw* merely means 'to see', which is just a mental state of perceiving. It assumes no effort or purpose on the part of the one doing the seeing. But when *-tek* 'purposeful action' is added, it means 'to look after, to take care of', which is something that doesn't just happen, one has to do it on purpose. By adding *-na*, a mental state verb is converted to a verb of volitional action.

Hopper and Thompson (1980) call the difference between a state and an action "kinesis," and claim that action verbs are inherently more transitive since "actions can be transferred from one participant to another; states cannot" (p.252).

In the case of the verb *-piyl* 'like' or 'want', when *-tek* 'purposeful action' is added it means 'look for' as illustrated in (74-75).

- 74) *E tekpiyl anen?*  
*e t'k-piyl anen*  
 2s IMP.2s-want what  
 'What do you want?'

- 75) *E tekpiyltek anen?*  
*e tɪk-piyl-tek anen*  
 2s IMP.2s-like-TRANS what  
 'What are you looking for?'

Liking or wanting something are merely mental states. But looking for something is an action with a purpose. So the parameters of kinesis (action) and volitionality (purpose) are both involved again.

*-Tek* can be added to the verb *-men* 'sit' resulting in *-mentek* 'wait for'. Purpose is again involved. Sitting is merely a state, but when you wait for someone you sit for a purpose. A second argument must also be added for the person, thing or event that the agent is waiting for, and thus there is an increase in transitivity as expected.

- 76) *Lo ekmen.*  
*lo ek-men*  
 2dl IR.2dl-SIT  
 'You two sit.'

- 77) *Orait yi tekes lot onton wuruaw yi'e 'Lo*  
*orait yi tɪk-es lot onto-n wuruaw yi'e lo*  
 okay 3s IMP.3s-say 1dl child-3sIA male 3s-POSS 2dl  
*ekmentek yia.'*  
*ek-men-tek yia*  
 IR.2dl-sit-TRANS 1S.O

'Then he said to me and his son, "You two wait for me."'

Similarly, *-tek* can also be used with the other stative verbs *-to* 'stand' and *-on* 'lie' to mean 'stand and wait' and 'lie and wait' respectively. Again there is an element of purpose introduced and also an extra argument as shown in (78).

- 78) *Yi awosaliek ke e awkis yi pene yi awontek e.*  
*yi aw-osaliek ke e awk-is yi pene yi aw-on-tek e*  
 3s IR.3s-dislike CNJ 2s IR.2s-say 3s GENSPEC 3s IR.3s-LIE-TRANS 2s  
 'If she doesn't want to, then tell her to wait for you (to come back).'

#### 4 The Use of *-paij* to Increase Transitivity

Like *-na* and *-tek*, *-paij* marks an increase in transitivity. *-Paij* is more similar to *-tek* than

to *-na* in that *-paij* and *-tek* are both derivational stem formatives, while *-na* works on the verb phrase and higher levels. The specific parameter of transitivity that *-paij* marks is telicity.

The verb *-niaw* 'see' occurs with and without *-paij* in the same sentence in (79).

- 79) *Yi kawa, yi keniaw yia, yi lin niawpaij*<sup>10</sup> *yia.*  
*yi kV-wa yi kV-niaw yia yi elin niaw-paij yia*  
 3s R.3s-go 3s R.3s-see 1S.O 3s NEG see-TELIC 1S.O  
 'He went, he saw me, but he did not recognize me.'

*-Niaw* (without *-paij*) means 'see', but *-niawpaij* means 'recognize'. The act of seeing is not bounded, but recognizing is bounded. The boundary is where something happens in the seer's mind when he changes states from not recognizing to recognizing.

In the following example, *-paij* is added to the verb *-es* 'say' to add telicity to it and resulting in 'to tell the truth'. Apparently in Arop truth is viewed as bounded (within a container), and that anything outside this boundary is untruth.

- 80) *Yino niy tekespaij aij.*  
*yi-no niy tV'k-es-paij aij*  
 3s-DEID person IMP.3s-say-TELIC talk  
 'He is a person who tells the truth.'

When someone is very tired and falling asleep, the appropriate thing to tell them is:

- 81) *E awkuonpaij e muoiyn.*  
*e awk-uon-paij e muoiyn*  
 2s IR.2s-lic-TELIC 2s sleep  
 'You go and lay down to sleep all the way (instead of just sitting there dozing off).'

Again, *-paij* encodes telicity in this case. This example is similar to (80) in that a boundary is being crossed, that is, the boundary between being awake and being asleep. In (81) the sleepy one is advised to cross that boundary once and for all instead of remaining on the boundary between sleep and wakefulness. This expression is also used when the one spoken to is going to do a lot of work the next day. The speaker is encouraging the hearer to get enough sleep. The boundary then would be between enough and not enough sleep.

The verb *-elweiyn* means 'to be slippery', but when *-paij* is added, as in the following example, it means 'to slip all the way' or 'slip off'. Again, a state verb is converted to an action, and the resulting action is clearly telic.

<sup>10</sup> Note that the person/number/mood portmanteau subject marker does not occur when *-paij* occurs. This is true only with singular subjects.

- 82) *Alapak kelweinyapaij.*  
*alapa-k kV-el-weiny-paij*  
 hand-1sIA R.3s-INCHO-be.slippery-TELIC  
 'My hand slipped off (or out).'

Bailing water is one thing, but bailing the water to the point where there is none left is something else. The difference is telicity of course, and *-paij* is used to encode the difference in (83).

- 83) *Yi takyispaij raiyn.*  
*yi 1V'k-yis-paij raiyn*  
 3s IMP.3s-bail-TELIC water  
 'He is bailing the water completely.'

*-Paij* can also be used with *-yiy* 'pull' to mean 'pull all the way'. When starting an outboard motor on a boat, merely pulling will not have the desired effect. You have to pull the rope all the way until the engine starts.

- 84) *Enjin ya yiyapaij,*  
*enjin ya yiy-paij*  
 engine 1s.S pull-TELIC  
 'I pulled on the (outboard) engine all the way.'

When *-paij* is added to the verb *-taw* 'hit', the verb means 'hit out of place'. This use is clearly telic because *-paij* is not used unless the thing hit is dislodged. There is a very clear boundary between just hitting and hitting so hard that something is dislodged. In (85), a wave comes and hits someone right off a platform in a boat.

- 85) *Yi wama ya iepem yi, tias ko'a prum ke*  
*yi wa-ma ya iepem yi tias k-o-a prum ke*  
 3s go-TDC 1s.S grasp.tightly 3s sea R-do-up big CNJ  
*tawpaijos yi ke ya muonraina tias na awkaina*  
*taw-paij-os yi ke ya muonrai-na tias na awkaina*  
 hit-TELIC-south 3s CNJ 1s.S worry.about-TRANS sea ANA splash.into  
*et bot na keter.*  
*et bot na kV-ter*  
 1pl boat ANA R-fill

'It came, I grasped it (the steering handle of the engine), the wave came up big and hit her southward (off the platform), and I was sorry that the wave had come in and the boat was full.'

## 5 Nontransitive Use of *-na*: *-na* with Imminent Events and Intentional Events

So far, almost all the uses of *-na* we have seen have had *-na* following the verb<sup>11</sup> and have all marked an increase in transitivity. In the use of *-na* discussed in this section, *-na* occurs preverbally and appears to have little if anything to do with transitivity. Instead, this use of *-na* indicates an action that the agent intends to do (intentional events) or is about to do (imminent events). Sometimes these two categories overlap, but not always. When either one or both of them is present, *-na* is used. So *-na* is used to encode three possibilities: imminent intentional actions, imminent unintentional actions, and nonimminent intentional actions. *-Na* is not used when an action is neither imminent nor intentional.

### 5.1 *Imminent Events*

The first use of the preverbal *-na* we will look at occurs in events that an agent is about to do, but is not necessarily intending to do.

*5.1.1 Imminent Unintentional Events.* Sometimes people do things that they do not intend to do, and in some cases it can be obvious to an onlooker when such an event is about to take place. Arop uses preverbal *-na* to mark these. In (86), the narrator describes a participant in a story who is about to cry involuntarily. In the story, the narrator has just travelled to a town far away from his home village to find his nephew whom he has not seen in many years. That nephew is the subject of the verbs in this sentence.

- 86) *Yi 'usia, yi kanai yia peyian, yi kanai yia ene, yi kaw*  
*yi usia yi kl'-nai yia peyian yi kl'-nai yia ene yi kaw*  
 3s arise 3s R.3s-hug IS.O EMPH 3s R.3s-hug IS.O DEIP 3s clasp  
*yia alapak ene, yi toko na awtaiyn yia.*  
*yia alapa-k ene yi tl'k-o na aw-taiyn yia*  
 IS.O hand-POSS.1s DEIP 3s IMP.3s-do TRANS IR.3s-cry IS.O

'He stood up, hugged me tight, he hugged me here, shook my hand, and **was about to cry** about me.'

The nephew has no intention of crying, but he cannot help it because he is so happy to see his uncle. Presumably the uncle can see the tears welling up in his nephew's eyes, so he knows the nephew is about to cry.

<sup>11</sup> The one exception is *-na* used in the formulaic finis of a story as discussed in 2.2.4.3.

5.1.2 *Imminent Intentional Events*. By contrast, sometimes people do intend to do the things they are about to do. Arop uses the pre-verbal *-na* in this case also. See the first *-na* in (87).

- 87) *Ya na awis na re aij nanakene.*  
*ya na aw-is na re aij nanakene*  
 1s.S TRANS IR. 1s-say TRANS pl talk now  
 'Now I will tell a story.'

The narrator of this story means that he will begin to tell the story right now, not later.

## 5.2 *Intentional Events*

When a person intends to do something, but not right away, the event is not imminent although it is still intentional. In example (88) the speaker uses *-na* to indicate his intention to look for his nephew, even though he will not do it immediately (he's going to sleep first). *-Na* is used to mark the event as intentional.

- 88) *Ya wua awtuoiyl re plis awuon, amana ya na*  
*ya wua aw-tuoiyl re plis aw-uon amana ya na*  
 1s.S go IR. 1s-accompany 3pl police IR. 1s-lic morning 1s.S TRANS  
*awniatek ni 'ik ya'e tojoene.*  
*aw-niaw-tek ni 'i-k ya-'e to-jo-ene*  
 IR. 1s-sec-TRANS nephew-1sIA 1s.S-POSS EMPH-EMPH-DEIP  
 'I will go and sleep with the police, and tomorrow morning I will look for this nephew of mine.'

## 6 For Further Research

There are a number of areas where more research may help us to understand better how *-na*, *-tek* and *-paj* work in Arop.

### 6.1 *Relative Clause*

*-Na* can be used to mark the beginning of a relative clause. When it does, *-na* occurs immediately preceding the verb in the relative clause as in (89). This is different from the

position in which *-na* occurs when it is marking an increase in transitivity (that is, after the verb phrase). But it is the same position as when *-na* marks an intentional or imminent event, and when it is used in the formulaic finis of a story.

The second *na* in (89) is marking the relative clause. The people referred to by the relative clause (*ni 'inre elen na koron ono olon yaro Olpu ono* 'his uncles who were at their house-place called Olpu') have been mentioned earlier in the narrative.

- 89) *Ke yi lin wama kerie na re ni'inre elen na*  
*ke yi elin wa-ma kerie na re ni'in-re elen na*  
 CNJ 3s NEG go-TDC quickly TRANS 3pl unclc/aunt-pl some TRANS  
*koron onoo olon yaro Olpu ono, yi kawa kawa*  
*kl'-on onoo olon ya-ro Olpu ono yi kl'-wa kl'-wa*  
 R.3pl-lay place house GEN-3dl Olpu DEID 3s R.3s-go R.3s-go  
*tem teken.*  
*tem teken*  
 time long

'And he didn't come back right away to his uncles who were at their house-place, Olpu. He was gone for a long time.'

So far all the relative clauses I have seen that contain *na* have been referring to nominals that were introduced earlier in the discourse. More research is needed to determine if *-na* is used only to relativize nominals that are old information, and if all relative clauses introducing new nominals lack *na*. If the former is the case, then this would be a subset of the anaphoric use of *na* (see below).

## 6.2 Anaphoric Use of *-na*

In the next two examples, *-na* is in a clause that refers back to an earlier event in the story. In this use, *-na* comes in the same position as when it marks the beginning of a relative clause (that is, immediately preceding the verb). What these two uses (anaphoric and relative clause) have in common is that they both refer to old information.

In (90-91), the clauses containing *-na* refer to events that had occurred at the climax of the story. More research is needed to determine if this is the normal way of referring back to the climax of a story.

- 90) *Ke taman kes et pene tonuan kera aij*  
*ke tama-n kl'-es et pene tonua-n kl'-era aij*  
 CNJ father-3sIA R.3s-say 1pl GENSPEC mother-3sIA R.3s-ask talk



*pene re sanguma karla yi ke yi na ko bokis*  
*pene re sanguma kl'r-la yi ke yi na kl'-o bokis*  
 GENSPEC 3pl sanguma R.3pl-injure 3s CNJ 3s TRANS R.3s-do box

*iy n et teniawniawna.*

*iy n et tV-RDP-niaw-na*

GEN 1pl R.1pl-CONT-scc-TRANS

'And his father told us that his mother asked him if the *sanguma* had killed him and **that is when he moved the box** for us to see.'

- 91) *Sopene ke tias na kala et,*  
*so-pe-ne ke tias na kl'-la et*  
 EMPH-like-DEIP CNJ wave TRANS R.3s-hit 1pl  
 'And so the wave hit us.'

In (92), the school being built has not yet been mentioned in the story, but the speaker assumes the hearer knows the place and so he treats it as old information.

- 92) *Taw iy n yi tokoko na tepew ene, nanakene re*  
*taw iy n yi tV'k-ko-RDP na tepew ene nanakene re*  
 place GEN 3s IMP.3s-do-CONT TRANS sorcery DEIP now 3pl  
*na koro skol akto.*  
*na kl'r-o skol ak-to*  
 TRANS R.3pl-do school PRES.3s-stand

'This place where he would do sorcery, now **they have built** a school there.'

### 6.3 -*Tek-na* and -*paij-na*

-*Na* can be combined with -*tek* and -*paij* to form -*tekna* and -*paijna*. These combinations have not yet been studied to see which parameters of transitivity they encode.

### 6.4 Interaction with Other Suffixes

More research is needed on the use of -*na* in combination with other suffixes, such as -*kai* 'away from'.

Perhaps example (93) fits with the comparison and proximity uses of -*na*. Perhaps they all indicate relativity (or maybe range).

- 93) *Et tolokaina* *yi enian, tepe teken tepe la*  
*et il'-lo-kai-na* *yi enian il'-pe teken il'-pe la*  
 1pl R.1pl-fly-away-TRANS 3s again R.1pl-run long R.1pl-run east  
*tias, ta'awtalana enian, tamow re'e Army.*  
*tias ta-'awtala-na enian il'-wa-mow re-'e Army*  
 ocean R.1pl-go.past-TRANS again R.1pl-go-west 3pl-POSS Army  
 'We flew away from him again, went all the way out east over the ocean,  
 came around again, went west of that [plane] of the Army.'

Getting out of the way and the flying around both have to be done in relation to something else. The *-na* is required to show that relationship. Perhaps this fits with the addition of an argument on the verb.

### 6.5 *-Na* and Reduplicated Verbs

Occasionally *-na* occurs with reduplicated verbs without any apparent increase in transitivity as shown in (94).

- 94) *Taw iyn yi tokoko na tepew ene, nanakene re*  
*taw iyn yi il'k-ko-RDP na tepew ene nanakene re*  
 place GEN 3s IMP.3s-do-PROG TRANS sorcery DEIP now 3pl  
*na koro skul akto.*  
*na kl'r-o skul ak-to*  
 ANA R.3pl-do school PRES.3s-stand

'This place where he would do sorcery, now they have built a school there.'

This phenomenon should be studied in the context of a thorough study of reduplication in Arop.

### 6.6 Obligatory *-na* on Some Verbs?

The verb *-tuiyn* 'show' requires both a direct object and an indirect object, and apparently never occurs without *-na*. This may be a case where the *-na* does not increase the transitivity of the verb but rather is an inseparable part of the verb root itself. This needs to be checked with native speakers to see if *-tuiyn* can ever be used without *-na* and if there are other verbs that always take *-na*.

- 95) *Ker'eiyɫ'os*                      *kawa wuak, re kerej et tiket*  
*kl'ɾ-'eiyɫ-os*                      *kl'-wa wuak re kl'ɾ-ej et tiket*  
 R.3pl-get.and.put-south R.3s-go ship 3pl R.3pl-give 1pl ticket  
*tawa totuiynna re.*  
*tV-wa tV-tuiyn-na re*  
 R.1pl-go R.1pl-show-TRANS 3pl  
 'They took (our cargo) and put it in the ship, and gave us a ticket, we went and showed it to them.'

## 7 Conclusion

The three Arop morphemes *-na*, *-tek* and *-paij* can be added to a verb (in the cases of *-tek* and *-paij*) or verb phrase (in the case of *-na*) to make a clause more transitive. Various parameters of transitivity are involved, depending on the predicate and the context. *-Na* also has other uses, including marking the most important destination in a story and marking imminent and/or intentional events. More work remains to be done on these markers, especially regarding the use of *-na* in relative clauses and for anaphoric reference.

## References

- Hopper, Paul J. and Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56:251-299.  
 Lakoff, George and Mark Johnson. 1980. *Metaphors we live by*. Chicago: University of Chicago Press.  
 Ross, M. D. 1988. *Proto Oceanic and the Austronesian languages of Western Melanesia*. Pacific Linguistics C-98. Canberra: Australian National University.  
 Whitacre, Steven. 1986. Arop-Sissano grammar essentials. ms. Summer Institute of Linguistics, Papua New Guinea.

Received 16 May 1994

SIL, Box 365  
 Ukarumpa via Lae  
 PAPUA NEW GUINEA