

Chapter 7 Argument Structure

7.1 Argument indexing

7.1.1 Argument role hierarchy

The assignment of argument indexing in the verb complex is driven by a hierarchy of semantic roles. At the extremes of this hierarchy are the prototypical actor and the prototypical undergoer.

At the bottom of the hierarchy is the macro-role undergoer. This role reflects participants which undergo the event, ie. they are acted upon in some way. As a result of the event they are affected by the action, they change in some way. This may involve a change of activity (theme) or of state (patient). To use the 'primitive operator' terminology of Role and Reference Grammar, developed by Foley and Van Valin (1984) and Van Valin (1993), undergoer covers the roles of all arguments which are CAUSE DO and CAUSE BE by the situation coded by the predication. These are [-A] arguments.

The other end of the hierarchy is the macro-role actor, reflecting participants which carry out the event. These participants perform the action, either volitionally (agent) or non-volitionally (active theme); or cause it to happen, either volitionally (agent) or non-volitionally (force). In other words, actor covers the roles of all arguments which DO or CAUSE the situation coded by the predication. These are [+A] arguments.

A further category of argument, statives, are treated in Kokota in the same way as prototypical actors. Statives are participants which are in a state, but are not acted upon, and therefore do not undergo the predication (corresponding to unaccusative subjects). These arguments are not acted upon, so are not undergoers, and are therefore not [-A] arguments. Instead they are arguments which BE the situation coded by the predication.

Such arguments behave in the same way as actors. The highest position in the semantic hierarchy thus encompasses the semantic roles of all arguments which DO, CAUSE or BE the situation coded by the predication. For the purposes of representing the fact that actors and statives behave in the same way, both will be referred to as [+A] arguments. It should be kept in mind, however, that this umbrella term covers statives as well as actual actors.

In between are a number of argument roles which neither DO, CAUSE nor BE anything, nor do they have anything done to them which causes them to DO or BE anything. These are experiencers, instruments and locatives.

In experiencing an event no volition is involved, and a participant does not DO anything, or CAUSE anything to be done, or BE anything. Equally, however, they are not acted upon by another participant. Consequently experiencers are neither actors nor undergoers. However, the requirement that an experiencer has a sentient quality makes experiencer the most actor-like of the non-actor roles, and consequently the highest in the hierarchy below actor.

The role instrument on the other hand codes participants which are in a way the opposite of experiencers. While experiencers are not included in actor or undergoer because they neither carry out nor undergo an event and so don't have the crucial characteristic of either, an instrument is not included in actor or undergoer because it has some defining characteristics of *both*: it acts upon another participant to cause it to do or be something (so has the characteristics of an actor), while at the same time is acted upon by another participant which causes it to do something (so has the characteristics of an undergoer). Having some characteristics of both, it is grouped with neither. However, since it does not have the sentence requirement of experiencers, it falls below experiencer in the hierarchy. The location of instrument below experiencer in the hierarchy is demonstrated by the fact that experiencers may be subjects, while instruments may not, as discussed below.

Like the terms 'actor' and 'undergoer', 'locative' here is an umbrella term, in this case covering semantic roles including temporal and spatial locative, goal, and source, which all behave in a similar way, and

involve arguments which are the location associated with the primitive operators BE AT, CAUSE BE AT and CAUSE NOT BE AT. Locatives do not do anything, or cause anything to be done, or be anything. Equally, they are not acted upon and caused to do or be anything by any other participant. Consequently locative also falls into neither the [+A] category of actor/stative nor the or [-A] category of undergoer.

The semantic role hierarchy may be characterised as follows:

(7.1) ACTOR/ → EXP → INSTR → LOC → UNDERGOER
 STATIVE

Verbs do not subcategorise for the grammatical roles of their arguments. Instead the subcategorisation frame dictates the semantic roles of arguments. In addition, verb subcategorisations dictate whether the arguments subcategorised for are core arguments or obliques. In some instances an argument may be realised by a core *or* an oblique argument. In addition to these factors the optionality of arguments is represented in verbal subcategorisation. This is all exemplified in 7.1.3.

7.1.2 Argument agreement indexing

Argument agreement is assigned on the basis of the semantic role hierarchy. Two forms of agreement exist: preverbal agreement in the form of an argument-indexed modal auxiliary, and postverbal agreement. These superficially resemble subject and object indexing respectively.

7.1.2.1 Preverbal agreement

Preverbal modal auxiliaries occur in two competing systems. In the standard system the auxiliary is indexed for the subcategorised argument with the semantic role highest on the semantic hierarchy given in (7.1). This system recognises the categories of first person exclusive, first person inclusive, second person and third person, but does not distinguish number. The forms (repeating Table 4.1) are:

Table 7.1: Preverbal argument agreement.

1EXC	1INC	2	3
<i>a</i>	<i>da</i>	<i>o</i>	<i>e</i>

With the exception of the first inclusive category, these preverbal particles are immediately preceded by one of a set of modal markers (one of which is realised as zero). First inclusive auxiliaries typically make no modal distinctions.

In the competing auxiliary system, discussed in detail in 8.5.2.5, person categories are not distinguished. As no arguments are indexed in this system, it does not form part of the agreement system.

7.1.2.2 Postverbal agreement

Postverbal agreement recognises the same person categories as preverbal indexing: first exclusive, first inclusive, second and third persons. In addition it also distinguishes between singular and plural in all but the first inclusive category (where no singular exists). This agreement takes the form of a series of indexed enclitics on the verb complex. The forms (repeating Table 4.2) are:

Table 7.2: Postverbal argument indexing.

	1EXC	1INC	2	3
SG	<i>-au ~ -nau</i>	-	<i>-igo ~ -nigo</i>	<i>-i ~ -ni ~ Ø</i>
PL	<i>-ḡai</i>	<i>-gita</i>	<i>-ḡau</i>	<i>-di ~ -ri</i>

7.1.2.2.1 Postverbal agreement enclitic allomorphy

The third singular category includes a zero allomorph. This occurs solely in conjunction with the transitivising suffix *-i*, and will be discussed further in 7.3.2.

The remaining third singular forms, along with the first and second singular enclitics, involve an allomorph with the initial consonant /n/, and an allomorph without the consonant. The distribution of these allomorphs is partially systematic and phonologically motivated: the /n/ initial forms occur when the host has a final vowel identical to the initial vowel of the enclitic (/i/ for 2SG and 3SG, /a/ for 1SG). Verbs with other final vowels may occur with either allomorph, however there is a tendency towards the non-/n/ forms. The free variation of the allomorphs is demonstrated by the following two clauses, both produced by the same elderly speaker:

- (7.2) a. *ara-hi a turi tufa-nigo kaike tu-turi...*
 I-EMPH 1.SBJ tell affect-2SGO one RD-tell
 I'm going to tell you a story...
- b. *ara a-ke turi tufa-igo ago kaike tu-turi...*
 I 1.SBJ-PRF tell affect-2SGO you one RD-tell
 I'm going to tell you a story...

Tables 7.3, 7.4 and 7.5 illustrate the third singular suffix allomorphy in action.

The third plural allomorphy also appears to be partly phonologically motivated, or derived from a previous system that was phonologically motivated. Many verbs occur with either allomorph, however verbs which are /i/ final tend to occur with the *-ri* form, as do /e/ final verbs to a lesser extent. Verbs with other final vowels freely occur with either form. One speaker expressed the view that *-di* was the true Kokota form, while *-ri* was a borrowing from the neighbouring Zabana language. A possible piece of evidence supporting this is that there is an apparently greater tendency for speakers to give *-di* in elicitation. Whatever the origins, aside from the partial phonological motivation synchronic distribution is in free variation. The following two examples were produced by the same speaker only a few clauses apart:

- (7.3) a. *g̃-e la naboto-u ba, varedake-u ba, tulufulu teḡe*
 NT-3.SBJ go ten-NM ALT twenty-NM ALT thirty turtle
 (It) might be ten, might be twenty, thirty turtles
- ta la hod-i-dī-re gai*
 SB go take-TR-3PLO-thoseN weEXC
 that we take.
- b. *kaike hod-i-ri gudu bla ka taim t-au-ana e-u*
 one take-TR-3PLO EXHST LMT LOC time SB-exist-thatN 3.SBJ-be.thus
 We take them all at that time.

7.1.2.2.2 Postverbal agreement as clitic

The postverbal agreement markers occur cliticised to the core of the verb complex. Verbal predicates may consist of a single verb or a number of verbs in a serial construction (verb serialisation is discussed in more detail in 7.5.) Where a single verb is present any postverbal agreement marker present is cliticised to that verb. Where a serial construction is marked for agreement postverbally, it is the final element which carries the agreement marker, whether or not that is the root to which the marking applies. No agreement marking is possible within the verb complex core.

It is a feature of serial verb constructions that certain verbs may occur series-finally modifying the head verb. In the following example, the verb *mai* 'come' is modifying the verb *hoda* 'take' to give the meaning 'bring':

- (7.4) *o la hoda mai-ni-u ia raro ta dou*
 2.SBJ go take come-3SGO-PRG theSG pot SB be.big
 Go [and] bring the big pot.

The directional verb *mai* does not itself subcategorise for an argument other than agent or active theme. The undergoer in the clause is subcategorised for by *hoda* 'take'. However, it is the final element of the verb complex, *mai*, that carries the postverbal agreement indexing, not the verb which subcategorises for the indexed argument. Furthermore, the non-final element occurs in its intransitive form (*hoda*, instead of its transitivised counterpart *hod-i*).

When more than one bivalent verb occurs in a series, and all subcategorise for the same complement, the complex predication subcategorises for that one complement. Agreement indexing cliticises to only the final verb, but indexes an argument subcategorised for by each of the verbs. In (7.5) both *zikra* 'pour out' and *koko* 'leave' subcategorise for a theme. The participant filling this role is identical for each. The complex predication subcategorises for only that undergoer, and that argument is indexed only on the final of the two verbs:

- (7.5) *ta moita la raisi ana, zikra koko-ni bakru-na-na*
 SB be.cooked CND rice thatN pour.out leave-3SGO liquid-3SGP-thatN
 If the rice is cooked, pour away its liquid.

However, when several bivalent verbs subcategorise for different complements the complex predication subcategorises for all the arguments. The complement of the final verb in the series is indexed by the enclitic, complements of non-final verbs occurring as subsequent, unindexed, complements:

- (7.6) *toka fa-nhigo tufa-nau gazu ine*
 chop CS-be.finished affect-1SGO wood thisR
 Finish chopping this wood for me.

The first and second verbs subcategorise for a patient, and the clause contains an overt patient. However, the final verb, *tufa* 'affect', subcategorises for a goal (in this instance as a benefactive). The argument which is indexed postverbally is not the patient subcategorised for by the head and overtly realised in the clause, but the goal subcategorised for by *tufa*.

The clitic status of the postverbal agreement forms can be clearly seen when postverbal adverbial forms are also present. In (7.7)a. an indexed possessive base (*no-gu* 'my') occurs with an adverbial function (the adverbial functions of possessor forms are discussed in 8.5.4.3 and 8.6.1). With its adverbial function this modifier occurs within the verb complex core. As this modifier is therefore the final element of the verb complex core in (7.7)a., postverbal agreement indexing is cliticised to that form, and not to the verb itself. In (7.7)b. the modifier *fakamo* 'always' occurs, again finally in the verb complex core. Again the agreement enclitic attaches to that core final element, not the verb. In (7.7)b., however, a further postverbal modifier occurs - the progressive aspect marker *-u*. As this is a non-core modifier, it follows the agreement enclitic:

- (7.7) a. *ara n-a dupa no-gu-ni mane ine*
 I RL-1.SBJ punch GP-1SGP-3SGO man thisR
 I'm hitting this man.
- b. *ge e teo ge lao ge hoda fakamo-i-u gai le-legu nare...*
 SEQ 3.SBJ be.not NT go SEQ take always-3SGO-PRG weEXC RD-behind day
 We don't always go and take turtles every day...

7.1.3 The assignment of agreement

The agreement indexed by both the preverbal and postverbal agreement markers is assigned in a unified manner following the semantic role hierarchy discussed above. This assignment is driven by an interface between the semantic role hierarchy and the subcategorisation frames of individual verbs, with three constraints:

- (7.8)
- Agreement may only index a core argument.
 - Preverbal agreement is indexed to the subcategorised argument with the semantic role which is highest in the hierarchy.
 - Postverbal agreement is indexed to the subcategorised argument with the semantic role which is highest in the hierarchy **below** [+A] (ie. below actor/stative).

This drives the assignment of agreement in the following way. If a verb subcategorises for a single argument, preverbal agreement looks for the argument with the highest semantic role, finds the sole subcategorised argument, and maps on to that. Postverbal agreement looks for the argument with the highest role lower than actor. If the sole argument subcategorised for conforms to that constraint, then it is also indexed by the postverbal agreement, giving coreferential agreement. If that argument is an actor, then postverbal agreement is blocked from mapping on to it. Postverbal agreement then looks for the next highest argument, but with no other arguments being subcategorised for, postverbal agreement then exhausts (ie. is not assigned and thus not realised in the clause).

If a verb subcategorises for more than one argument, preverbal agreement looks for the subcategorised argument with the highest semantic role, and maps on to that. Postverbal agreement looks for the argument with the highest role below actor, and maps on to it. If that argument is realised as an oblique, then the agreement is blocked from mapping on to it, and looks for the subcategorised argument with the next highest role. If no further argument is present then that agreement exhausts. If a further argument is subcategorised for, postverbal agreement maps on to that, unless it too is an oblique. This process is carried out until the agreement is assigned, or no further arguments are available to be mapped on to and the agreement exhausts. If on the other hand postverbal agreement is assigned, and there is a further argument lower in the hierarchy, then that argument is realised without any agreement being marked, no agreement being left unassigned and free to index that argument.

7.1.3.1 Agreement assignment mapping

To expand on the discussion of the assignment of argument agreement above, we can consider initially the interface of the semantic role hierarchy with the verbal subcategorisation frames of stative verbs.

7.1.3.1.1 Monovalent verbs

A stative verb such as *dou* 'be big' is monovalent, subcategorising for a single argument with the semantic role stative, subcategorised for as a core argument. The subcategorisation frame is < ST_{CR} >. The production of a clause with only this verb involves preverbal agreement looking for the subcategorised argument with the highest semantic role in the hierarchy. This agreement finds the argument subcategorised as stative, and maps on to that. Postverbal agreement looks for the subcategorised argument which is highest in the role hierarchy below [+A] (ie. actor/stative). No such argument exists in the subcategorisation frame, so postverbal agreement finds no argument to map on to and consequently exhausts. In other words the absence of a suitable argument on which to map prevents any postverbal agreement from being realised. This generates a clause such as the following:

- (7.9)
- | | | | |
|--------------------|------------|------------|------------|
| <i>suḡa</i> | <i>ine</i> | <i>n-e</i> | <i>dou</i> |
| house | thisR | RL-3.SBJ | be.big |
| This house is big. | | | |

Here preverbal agreement is indexed to the stative, while no postverbal agreement is present. A similar result is reached with monovalent active verbs. A verb such as *kota* 'go ashore' subcategorises for a single argument which is an agent and is a core argument. The subcategorisation frame is < AG_{CR} >. Preverbal agreement looks for the subcategorised argument with the highest semantic role, and finds and maps on to the agent. Postverbal agreement looks for the argument with the highest semantic role below [+A], finds no such argument, is unable to map on to anything, and so exhausts, giving a clause such as the following:

- (7.10)
- | | | |
|--------------------|------------|-------------|
| <i>ara</i> | <i>n-a</i> | <i>kota</i> |
| I | RL-1.SBJ | go.ashore |
| I am going ashore. | | |

7.1.3.1.2 Bivalent verbs

Many bivalent verbs subcategorise for two core arguments, one of which is agent and the other patient. For such verbs, both preverbal and postverbal agreement are realised. The verb *dupa* 'punch' has the subcategorisation frame < AG_{CR} PAT_{CR} >. Here preverbal agreement looks for the subcategorised argument with the highest semantic role, and finds and maps on to the agent. Postverbal agreement looks for the subcategorised argument with the highest semantic role below [+A], finds patient, and maps on to that. Both preverbal and postverbal agreement are satisfied and thus realised, generating a clause such as the following:

- (7.11) *ara* *n-a* *dupa-i* *manei*
 I RL-1.SBJ punch-3SGO he
 I hit him.

Not all verbs which subcategorise for two arguments will generate clauses in which both preverbal and postverbal agreement are present. It may be that one of the arguments is optional. The verb *n̄hau* 'eat', for example, subcategorises for an agent and a patient, however the patient is optional. The subcategorisation frame is < AG_{CR} (PAT_{CR}) >. This is identical to the subcategorisation for *dupa*, except that the patient is coded as optional. With this verb preverbal agreement will look for the subcategorised argument with the highest semantic role and find and map on to agent. Where the patient is realised, postverbal agreement looks for the argument with the highest role lower than [+A], and finds and maps on to patient, giving a clause such as:

- (7.12) *ara* *n-a* *n̄ha-ni* *ḡausa* *ka* *maneri*
 I RL-1.SBJ eat-3SGO betel.nut LOC they
 I ate their betel nut.

However, where the patient is not realised, postverbal agreement looks for the argument with the highest role below [+A], and finding no such argument, exhausts. This gives clauses such as:

- (7.13) *ge* *da* *turi-n̄a* *gita,* *gita* *da* *kusu* *n̄hau* *fea*
 SEQ 1INC.SBJ tell-IMM weINC weINC 1INC.SBJ be.first eat INIT
 Before we talk we should eat.

For the verbs discussed above the only core argument below [+A] is patient. However, many bivalent verbs subcategorise for arguments with other semantic roles. The verb *mhok-i* 'sit on' is bivalent (derived by the transitivity suffix from the intransitive root *mhoko* 'sit'). This verb subcategorises for an agent and a spatial locative, both core arguments, and both obligatory. The subcategorisation for *mhok-i* is < AG_{CR} SLOC_{CR} >. Here the preverbal agreement looks for the subcategorised argument with the highest semantic role, and finds and maps on to agent. Postverbal agreement looks for the subcategorised argument with the highest role below [+A], finds spatial locative, and maps on to that. This generates clauses such as the following:

- (7.14) *n-a* *mhok-i-Ø* *ara* *kaike* *ifra*
 RL-1.SBJ sit-TR-3SGO I one mat
 I sit on one mat.

Most verbs are capable of cooccurring with a spatial locative, however few subcategorise for a participatory inner locative as *mhok-i* does. Clauses may include a locative, either temporal or spatial, but where that is not subcategorised for, it is a circumstantial outer locative, and is realised by an oblique adjunct. As an adjunct, such an argument may not be indexed. However, where a verb subcategorises for an argument which may be an oblique, adjunct status does not block the assignment of agreement. Instead it is the argument's oblique status that precludes indexing.

Some verbs subcategorise for an argument as potentially either core or oblique. In this situation several different constructions may be generated, as the basic emotion verbs *fahega* and *dia-nanafa* exemplify. These two stative verbs code the presence of an emotional state. *Fahega* codes the presence of a positive

emotional state, and may be interpreted as 'be happy', 'be grateful' or any other positive emotional state. *Dia-nanafa* is a compound, literally 'be.bad-heart', which codes the presence of a negative emotional state.¹ This verb may be interpreted as meaning 'be sad' or 'be sorry', but not 'be sorry for' (as in 'to pity'). It also does not realise the notion of 'anger' which, while treated as a negative emotion in English, is treated as an experienced sensation in Kokota (using the verb *bula* 'be angry', discussed further in 7.1.3.2.3).

These two basic emotion verbs subcategorise for a stative (the person in the emotional state), and the source of the emotion. They both have the subcategorisation frame < ST_{CR} (SC_{CR}/OBL)>. In this frame not only is source optional, but it may be realised either by a core argument, or by an oblique. The preverbal agreement looks for the highest subcategorised argument role and finds and maps on to the stative. The postverbal agreement looks for the highest subcategorised argument role below [+A]. Where no source is realised that agreement exhausts:

- (7.15) *heve* *n-e-u* *ge* *n-o* *dia-nanafa-nā* *ago*
 what RL-3.SBJ-be.thus SEQ RL-2.SBJ be.bad-heart-IMM youSG
 Why are you sad?

Where a source is present and is realised as an oblique, postverbal agreement finds the source but is blocked from mapping on to it by the constraint on non-core agreement, so exhausts:

- (7.16) *ara* *n-a* *fahega* *ka* *ago*
 I RL-1.SBJ be.happy LOC youSG
 I'm happy with you.

Where a source is present but is realised by a core argument, postverbal agreement finds that and maps on to it:

- (7.17) *ara* *n-a* *fahega-nigo* *ago*
 I RL-1.SBJ be.happy-2SGO youSG
 I'm happy with you.

7.1.3.1.3 Trivalent verbs

Several trivalent verbs exist. For example *tore* 'request' has the subcategorisation frame < AG_{CR} (THM_{CR}) (GL_{CR}/OBL)>

This verb is maximally trivalent, subcategorising for an agent (the requester), a theme (the entity which is requested), and a goal (the person to whom the request is directed). Both the theme and goal are optional. Consequently *tore* may occur in an intransitive predication:

- (7.18) *ara* *n-a* *tore*
 I RL-1.SBJ ask
 I asked.

Here preverbal agreement looks for the highest argument present, finds the agent, and maps on to that. Postverbal agreement looks for the highest argument below [+A]. No such argument exists so no postverbal agreement occurs.

With this verb both agent and theme must be realised by a core argument, while the goal may be realised by a core argument or an oblique. As both the theme and goal are optional, *tore* may occur in a transitive predication with either as core argument complement. In (7.19)a. the theme is complement, in (7.19)b. the goal is. In both examples preverbal agreement maps on to the agent. Postverbal agreement looks for the highest argument below [+A], and finds and maps on to the theme in (7.19)a., and the goal in (7.19)b.

¹ It is interesting to note that the language treats the heart as the locus of emotion.

- (7.19) a. *n-a tore-i kaike bia*
 RL-1.SBJ ask-3SGO one beer
 I asked for one beer.
- b. *n-a tore-i mane ana*
 RL-1.SBJ ask-3SGO man thatN
 I asked that man.

However, all three arguments may occur. When the goal is expressed as a core argument the semantic hierarchy dictates argument order. In pragmatically unmarked clauses arguments are expressed in the order in which they occur in the hierarchy. As goal falls under the LOC umbrella, it is higher than theme in the hierarchy and must be expressed before the theme, as in (7.20)a. The reverse order is ungrammatical ((7.20)b.).

- (7.20) a. *n-a tore-i mane ana kaike bia*
 RL-1.SBJ ask-3SGO man thatN one beer
 I asked that man for a beer.
- b. **n-a tore-i kaike bia mane ana*
 I asked that man for a beer.

However, when the goal is expressed as an oblique different criteria apply. As discussed in 9.2.2, core arguments precede obliques in pragmatically unmarked clauses. Consequently, the grammaticality of the two argument order possibilities is the opposite of that in (7.20):

- (7.21) a. *n-a tore-i kaike bia ka mane ana*
 RL-1.SBJ ask-3SGO one beer LOC man thatN
 I asked for a beer from that man.
- b. **n-a tore-i mane ana ka kaike bia*
 I asked that man for a beer.

As only one complement may be indexed postverbally, when all three arguments are present one complement must remain unindexed. Goal is higher in the hierarchy than theme. Consequently in (7.20)a., where goal is realised as a core argument, postverbal agreement looks for the highest argument below [+A], finds goal, and maps on to it. Although a core argument theme is also present, it is not indexed as no indexing remains unassigned and thus available to map on to it.

However where the goal is realised as an oblique, as in (7.21)a., the indexing is assigned differently. Postverbal agreement looks for the highest argument below [+A], and finds goal but is blocked from mapping on to it by the constraint on indexing non-core arguments. It then looks for the next highest argument, and finding theme, maps on to that.

7.1.3.2 Middle voice - agreement assignment resulting in coreferential indexing

A number of classes of verbs have subcategorisation frames which interact with the hierarchical assignment of agreement to generate clauses with coreferential indexing. These consist primarily of verbs which subcategorise for an experiencer. These include verbs which code negative sensations, involuntary bodily actions, pleasure or displeasure, and ownership. It does not however include basic emotion verbs (as discussed above). In addition to experiencer verbs, one verb assigns agreement coreferentially to temporal locatives.

Coreferential assignment is a predictable result of the interface between the subcategorisation frames of the verbs and the hierarchical process of agreement assignment. As discussed above, preverbal assignment is assigned to the argument subcategorised for which has the highest semantic role in the hierarchy. As most verbs subcategorise for a stative or an actor of some kind, preverbal agreement will be assigned to that argument for those verbs. Postverbal agreement is assigned to the subcategorised argument with the highest role in the hierarchy below [+A]. Consequently that agreement will be assigned to any further core

arguments such as patient which are present in the subcategorisation frame. If no other arguments are present, the postverbal agreement finds nothing to map on to and exhausts.

However where a verb has no [+A] argument, ie. where its highest subcategorised argument is an argument lower in the hierarchy than [+A], that argument attracts both preverbal and postverbal agreement. If, for example, a verb has an experiencer as its highest subcategorised for argument, that argument, being the highest in the hierarchy present, attracts preverbal agreement. Since that argument is also the highest argument present below [+A], it also attracts postverbal agreement. Any further arguments subcategorised for by the verb, being still lower in the hierarchy, attract no agreement, because all possible agreement has already been assigned.

7.1.3.2.1 Involuntary bodily actions

A class of verbs exists which code bodily actions which may be involuntary. The members of this class are:

(7.22)	<i>hohoa</i>	'yawn'
	<i>kala-hohoa</i>	'burp' (lit. 'hair/leaf-yawn')
	<i>sune</i>	'sniff'
	<i>hekna</i>	'hiccup' ²
	<i>sihe</i>	'sneeze'
	<i>knaha</i>	'cough'
	<i>gloña</i>	'choke'

Verbs in this class assign argument roles in two different ways, reflecting two separate perspectives on the nature of the event, and reflected in parallel subcategorisation frames. The events coded by verbs in this class may be regarded as actions over which the participant has control. In this perspective the verb subcategorises for an agent. Alternatively, and more typically, the events may be regarded as sensations experienced by the participant, in which case the verb subcategorises for an experiencer.

Where verbs in this class are treated as an action, they have the subcategorisation frame < AG_{CR} >. With this subcategorisation the resulting clause structure resembles that of most verbs with only one core argument. Preverbal agreement looks for the subcategorised argument with the highest semantic role and finds and maps on to the agent. Postverbal agreement looks for the highest argument below [+A], and finding no such argument, exhausts. This generates clauses such as:

(7.23)	a.	<i>ago</i>	<i>n-o</i>	<i>hekna</i>
		youSG	RL-2.SBJ	hiccup
		You hiccup.		
	b.	<i>n-e</i>	<i>knaha</i>	<i>manei</i>
		RL-3.SBJ	cough	he
		He's coughing.		

If these verbs are treated as an experienced sensation, they subcategorise for an experiencer, and an optional source of the experience: < EXP_{CR} (SC_{CR}) >. With this subcategorisation preverbal agreement looks for the highest argument present, and finding experiencer, maps on to that. Postverbal agreement looks for the highest subcategorised argument below [+A], also finds experiencer, and so also maps on to that. The result is coreferential preverbal and postverbal agreement indexing:

(7.24)	a.	<i>ago</i>	<i>n-o</i>	<i>hekna-nigo</i>
		youSG	RL-2.SBJ	hiccup-2SGO
		You hiccup.		

² This is a reduced form of the now archaic *hehekna*.

- b. *ara n-a sihe-nau*
 I RL-1.SBJ sneeze-1SGO
 I am sneezing.

When a source is also present the same coreferential indexing occurs. Preverbal agreement looks for the subcategorised argument with the highest role, and finds and maps on to experiencer. Postverbal agreement looks for the highest argument below [+A], and also finds and maps on to experiencer, experiencer being higher in the hierarchy than source. The source, being a core argument, could potentially attract agreement, but does not do so because all possible agreement has already been assigned. The result is a clause with two core arguments, and with both preverbal and postverbal agreement, but where both forms of agreement coreferentially index one argument, while the other remains unindexed:

- (7.25) a. *ara n-a sihe-nau karipauda ana*
 I RL-1.SBJ sneeze-1SGO curry.powder thatN
 I am sneezing from that curry powder.
- b. *manei n-e knaha-i kufu ine*
 he RL-3.SBJ cough-3SGO smoke thisR
 He is coughing from this smoke.

7.1.3.2.2 Verbs of illness

A similar situation applies to verbs expressing degrees of illness:

- (7.26) *foḡra* 'be/feel unwell'
fo-foḡra 'be/feel a little bit unwell'

As the glosses suggest, the derived reduplicated form has a sense of a lesser degree of illness - not really sick, just a little unwell. As with the involuntary bodily action verbs, each has two argument structures. However, here the difference is between an experienced sensation and a state, rather than a volitional act. Both have one possible argument structure in which the participant is treated as being in a state of being unwell. With this sense the verbs have the subcategorisation frame < AG_{CR} >. This gives clauses such as:

- (7.27) a. *ara n-a foḡra*
 I RL-1.SBJ sick
 I am sick.
- b. *ara n-a fo-foḡra*
 I RL-1.SBJ RD-sick
 I am a little bit sick.

However, both verbs have an alternative subcategorisation frame in which the verbs are treated as experienced sensations, rather than states: < EXP_{CR} (SC_{CR}/OBL) >. As with the involuntary bodily action verbs, preverbal agreement looks for the highest argument present, and finds and maps on to the experiencer. Postverbal agreement looks for the highest subcategorised argument below [+A], and also finds and so maps on to experiencer. Again the result is coreferential preverbal and postverbal agreement indexing:

- (7.28) a. *ara n-a foḡra-nau*
 I RL-1.SBJ sick-1SGO
 I feel sick.
- b. *ara n-a fo-foḡra-nau*
 I RL-1.SBJ RD-sick-1SGO
 I feel a little bit sick.

The semantic distinction between the examples in (7.27) and the corresponding examples in (7.28) is captured by the use of *am* and *feel* in the free translations.

As the subcategorisation frame indicates, the source of the feeling of illness may be realised as an oblique argument. With any verb such an argument would not attract agreement indexing due to the constraint on indexing of non-core arguments:

- (7.29) *ara n-a (fo)-foḡra-nau ka mala-n̄hau are*
 I RL-1.SBJ RD-sick-1SGO LOC PURP-eat thoseN
 I feel (a little bit) sick from that food.

However, as with both the involuntary bodily action verbs, where the source is expressed as a core argument the same coreferential indexing occurs, leaving the source unindexed. Preverbal agreement looks for the subcategorised argument with the highest role, and finds and maps on to experiencer. Postverbal agreement looks for the highest argument below [+A], and also finds and maps on to experiencer. The resulting clauses again have two core arguments, and both preverbal and postverbal agreement, but again both forms of agreement coreferentially index one argument, leaving the other unindexed:

- (7.30) *ara n-a (fo)-foḡra-nau mala-n̄hau are*
 I RL-1.SBJ RD-sick-1SGO PURP-eat thoseN
 I feel (a little bit) sick from that food.

7.1.3.2.3 Negative sensory states

A similar situation applies to a class of verbs which code certain negative sensory states, including:

- (7.31) *marhi-* 'feel pain'
 bula- 'feel angry'
 huñu-/humu- 'have heartburn'

While the language treats the verbs in (7.22) as potentially intentional acts, it does not treat the sensations of pain, anger or heartburn as anything other than experienced sensations. Members of this class have the subcategorisation frame < EXPCR (SCCR/OBL) >. With these verbs when only the experiencer is present, preverbal agreement looks for the subcategorised argument with the role highest in the hierarchy, finds experiencer, and maps on to that. Postverbal agreement looks for the subcategorised argument with the highest role lower in the hierarchy than actor, also finds experiencer, and also maps on to that. This gives clauses such as the following:

- (7.32) a. *ara n-a marhi-nau*
 I RL-1.SBJ feel.pain-1SGO
 I am in pain.
- b. *ḡ-e bula-i-n̄a faknoe*
 NT-3.SBJ feel.angry-3SGO-IMM PN
 Faknoe was angry.
- c. *ara n-a huñu-nau*
 I RL-1.SBJ have.heartburn-1SGO
 I have heartburn.

Here the coreferential indexing is the only possible outcome of the interface between the semantic role hierarchy and the subcategorisation frames of these verbs. It is impossible for this interface to generate a clause without postverbal agreement, and such a clause would be ungrammatical:

- (7.33) **ara na marhi*
 I am in pain.

Coreferentially indexing clauses do not represent reflexive constructions. Reflexive constructions require a subcategorisation for patient or theme, and a realisation of that argument by an overt reflexive form. To form a reflexive construction, the verbs in (7.31) require causative marking overriding the subcategorisation frame of the verb, introducing an agent and requiring a patient. This patient may be realised by an overt reflexive argument, giving a reflexive construction which contrasts with the coreferentially indexed examples in (7.32):

- (7.34) *ara n-a fa marhi-nau tai-g̃u*
 I RL-1.SBJ CS feel.pain-1SGO RFL-1SGP
 I have hurt myself.

This parallels non-reflexive causative constructions:

- (7.35) a. *ara n-a fa marhi-nigo ago*
 I RL-1.SBJ CS feel.pain-2SGO youSG
 I have hurt you.
- b. *t-au-ana n-e fa bula-nigo ago*
 SB-exist-that RL-1.SBJ CS feel.pain-2SGO youSG
 That is making you cross.

As with the verbs of illness, the source of the pain, anger or heartburn may be realised as an oblique argument which does not attract agreement indexing:

- (7.36) a. *ago n-o marhi-nigo ka nene-mu-ana*
 youSG RL-2.SBJ feel.pain-2SGO LOC leg-2SGP-thatN
 You are in pain from that leg of yours.
- b. *ago n-o bula-nigo ka riva baiu*
 youSG RL-2.SBJ feel.angry-2SGO LOC PN maybe
 Maybe you are angry with Riva.
- c. *ara n-a huñu-nau ka maliri-na zora ana*
 I RL-1.SBJ have.heartburn-1SGO LOC fat-3SGP pig thatN
 I have heartburn from that pig fat.

However, as with both the involuntary bodily action verbs and the verbs of illness, where the source is expressed as a core argument the same coreferential indexing occurs, leaving the source unindexed:

- (7.37) a. *ago n-o marhi-nigo nene-mu-ana*
 youSG RL-2.SBJ feel.pain-2SGO leg-2SGP-thatN
 You are in pain from that leg of yours.
- b. *ara n-a bula-nau tu-turi are*
 I RL-1.SBJ feel.angry-1SGO RD-tell thoseN
 I am angry about those stories.
- c. *ara n-a huñu-nau maliri-na zora ana*
 I RL-1.SBJ have.heartburn-1SGO fat-3SGP pig thatN
 I have heartburn from that pig fat.

7.1.3.2.4 Verbs of possession

A similar situation applies to a class of verbs of possession, but here both arguments are obligatory. This class consists of three verbs:

- (7.38) *kuru* 'have'
au 'exist'
teo 'not exist'

Of these, only *kuru* occurs solely as a verb of possession. *Au* and *teo* occur primarily as existential verbs (positive and negative respectively - discussed in 7.5). With that function they are monovalent. However they also occur with *kuru* as bivalent verbs of possession.

The realisation of the relationship of possession by possessive verbs is treated in two different ways, depending on whether the possessive relationship is alienable or inalienable (as discussed in 6.9.2). Where the relationship is inalienable it is treated as a state. The possessor is a stative. Preverbal agreement looks for the highest argument, finds the stative, and maps on to that. Postverbal agreement looks for the highest argument below [+A], which excludes the stative. For reasons which are at this stage not understood, the possessum complement, whatever its role may be, is not then mapped on to by postverbal agreement. It does not attract agreement at all.³ The result is clauses such as the following (repeating (6.72)):

- (7.39) a. *n-a kuru ga-gato-gū ara*
 RL-1.SBJ own RD-think-1SGP I
 I have my ideas.
- b. *manei n-e au puhi ta dia*
 he RL-3.SBJ exist way SB be.bad
 He has bad ways.
- c. *manei n-e teo nehu dou*
 he RL-3.SBJ be.not nose be.big
 He doesn't have a big nose.

By contrast, where the relationship is alienable, it is treated as a phenomenon which is experienced by the possessor, rather than one in which the owner is in some way active or stative. The corollary to the coding of the owner as the experiencer of the ownership, is the treatment of the thing owned as the source of the experience. The subcategorisation frame of these verbs in alienable relationships is therefore < EXP_{CR} SCCR >.

Here preverbal agreement looks for the subcategorised argument with the highest semantic role in the hierarchy, and finds and maps on to the experiencer. Postverbal agreement looks for the argument with the highest role below [+A], and also finds and maps on to experiencer. The source does not attract agreement since both forms of agreement are already assigned. Again this is the only possible result of the interface between the hierarchy and the subcategorisation frame of these verbs. The result is clauses such as the following (repeating (6.73)):

- (7.40) a. *a kuru-gai gai la bla kokolo-di foḡra t-au-are*
 2.SBJ own-2PLO youPL ?? LMT class-3PLP sick SB-exist-thoseN
 We have all those kinds of sicknesses.
- b. *ara n-a au-nau kaike zuta-pamu*
 I RL-1.SBJ exist-1SGO one lamp-pump
 I have one tilly lamp.
- c. *gita da teo-gita faiba*
 weINC 1INC.SBJ not.be-1INC boat
 We haven't got a boat.

³ This could be because the possessed argument may be incorporated (see 7.4). If so, then an alternative analysis to that presented here would be simply that an NP core expressing an inalienably possessed entity are incorporated, while those expressing alienably possessed entities cannot be.

Again the resulting structure involves bivalent verbs marking agreement twice, with both forms of agreement coreferential to one argument, with the second argument not indexed.

7.1.3.2.5 Verbs of pleasure and displeasure

One further class of verbs has experiencer as its highest subcategorised argument. As discussed in 7.2, one function of reduplication is to derive bivalent forms from monovalent, typically stative, verbs. This valency-augmenting derivation applies to the stative verbs *dia* 'be bad' and *keli* 'be good', generating the forms *didia-* 'be displeased by' and *kekeli-* 'be pleased by'. These subcategorise for an experiencer and an optional source, both core arguments, with the subcategorisation frame < EXP_{CR} (SC_{CR}) >. Again preverbal agreement looks for the subcategorised argument with the highest semantic role, and finds and maps on to experiencer. Again postverbal agreement looks for the highest argument below [+A], also finds experiencer, and also maps on to that. Where the source is not present this process results in clauses resembling those in (7.24) and (7.32):

- (7.41) a. *n-a* *ke-keli-nau*
 RL-1.SBJ RD-be.good-1SGO
 I am pleased.
- b. *ta dupa-nau* *la manei,* *ara ginai* *a* *di-dia-nau*
 SB punch-1SGO CND he I FUT 1.SBJ RD-be.bad-1SGO
 If he hits me I will be displeased.

If a source is present the same assignment of agreement occurs, coreferentially indexing the experiencer, with the source attracting no agreement, all possible agreement indexing having already been assigned. This gives clauses resembling those in (7.37) and (7.40):

- (7.42) a. *n-a* *ke-keli-nau* *ara* *sote* *ine*
 RL-1.SBJ RD-be.good-1SGO I shirt thisR
 I am pleased by this shirt.
- b. *n-e* *di-dia-ni* *t-au-ana*
 RL-3.SBJ RD-be.bad-3SGO SB-exist-thatN
 He is displeased by that.

The effect on the valency of the reduplication evident in these verbs is discussed in 7.3.1.2.

7.2 Permissible subject roles

The grammatical relation 'subject' is limited to arguments with semantic roles at the top end of the semantic role hierarchy given in (7.1), the cut-off point falling between experiencer and instrument.

All argument roles encompassed by the macro-role actor (ie. all arguments that CAUSE or DO the situation coded by the predication) are permissible subjects. This includes agents of both transitive and unergative predications (as in (7.43)a. and b.); active themes ((7.43)c.); and force ((7.43)d.):

- (7.43) a. *ara* *n-a* *dupa-i* *manei*
 I RL-1.SBJ punch-3SGO he
 I hit him.
- b. *ara* *n-a* *kota*
 I RL-1.SBJ go.ashore
 I am going ashore.
- c. *ia* *koilo* *n-e* *zogu* *ka* *kokorako*
 theSG coconut RL-3.SBJ drop LOC chicken
 The coconut fell on the chicken.

- d. *ia dihunare n-e fa kokopo-i hore ana*
 theSG rough.sea RL-3.SBJ CS capsize-3SGO dugout thatN
 The rough sea capsized that dugout canoe.

In addition, statives (ie. arguments which BE the situation coded by the predication) are permissible subjects:

- (7.44) *suḡa ine n-e dou ḡlehe*
 house thisR RL-3.SBJ be.big very
 This house is very big

As discussed in 7.1.1, the highest position in the semantic role hierarchy in Kokota is occupied by all roles that CAUSE, DO or BE the situation coded by the predication. This encompasses all the roles exemplified as subjects in (7.43) and (7.44).

The next highest role in the hierarchy is experiencer. This is also a permissible subject, as illustrated extensively in 7.1.3.2. It is possible to hypothesise that experiencers are permissible subjects as they share certain crucial semantic features with prototypical actors. It is inherent in the notion of experiencer that the participant be sentient. It may be argued that sentience carries with it an implicit capacity for volition. Experiencers are therefore inherently potential agents.

Experiencer is, however, the lowest semantic role permissible as subject. The next lowest role, instrument, is not a permissible subject:

- (7.45) **vilai ine n-e fa-lehe-i kokorako ana*
 knife thisR RL-3.SBJ CS-die-3SGO chicken thatN
 This knife killed that chicken.

It is clear from discussion with informants that such clauses are unacceptable purely on semantic grounds - that the knife in (7.45) cannot kill the chicken because it cannot act on its own. Inanimate objects may be transitive subjects, but only as force, not as instrument. Thus the contexts of the clauses in (7.46) dictate the clauses' acceptability. The clause in (7.46)a. is acceptable because the coconut is an active theme - it fell without being acted upon, and in doing so killed the chicken. In (7.46)b. the clause is unacceptable because the coconut was being used as an instrument and was therefore being acted upon.

- (7.46) a. *koilo ine n-e fa-lehe-i kokorako ana*
 coconut thisR RL-3.SBJ CS-die-3SGO chicken thatN
 This coconut killed that chicken.
 [The coconut fell onto the chicken without being acted upon.]
- b. **koilo ine n-e fa-lehe-i kokorako ana*
 coconut thisR RL-3.SBJ CS-die-3SGO chicken thatN
 This coconut killed that chicken.
 [I clubbed the chicken with the coconut.]

All argument roles lower in the hierarchy are ineligible to be subject. Locatives are ineligible. A location name or an NP coding a physical or temporal location may be subject, but not with the semantic role of locative. Locations may function with other roles, including undergoer, in which case it is object. In (7.47) a location name is a theme ((7.47)a.) and a patient ((7.47)b.).

- (7.47) a. *...tabar-i-u manei banesokeo ana*
 buy-TR-PRG he PNLOC thatN
 ...he bought that Banesokeo.
- b. *aria d-aḡe nhura-i fitupoḡu*
 1INC.IMP 1INC.SBJ-go destroy-3SGO PNLOC
 Let's go and destroy Fitupogu!

At the other end of the semantic hierarchy, locations may function as statives. As discussed in 7.1.1, statives BE the situation coded by the predication and share highest position in the hierarchy. As such they are eligible to be subject:

- (7.48) *sisigā* *n-e* *namo* *bla*
 PNLOC RL-3.SBJ be.near LMT
 Sisiga is simply nearby.

Locations with a semantic role encompassed by the macro-role LOC (such as locative, goal, source, etc) are ineligible to be subject.

Undergoers (including theme and patient) occupy the lowest position in the hierarchy, and as such are also ineligible to be subject. A significant manifestation of this constraint is the complete absence of passive constructions in the language.

7.3 Valency alteration

Three derivational strategies exist which change the valency of a verb. One, reduplication, reduces the valency of a verb (with two partial exceptions). The remaining two strategies, causative marking and a transitivising suffix, augment valency.

7.3.1 Valency altering reduplication

As discussed in 2.4.1.1, reduplication has a general derivational function which in some cases changes word class, and in others does not. Relevant to a discussion of transitivity is verb reduplication affecting the valency of the verb. In a major functional subregularity, transitive verb roots are reduplicated to derive intransitive verbs; reduplication thereby reducing valency by one argument. With two semantically related forms reduplication idiosyncratically derives a valency-augmented, bivalent form, although not a transitive but an experiencer verb.

7.3.1.1 Valency reducing reduplication

Subregular valency-altering reduplication reduces the valency of the underived form by deriving an unergative verb from a transitive root. However, a small number of forms display reduplication idiosyncratically deriving an unaccusative form from a transitive root.

7.3.1.1.1 Unergative derivation

Unergative valency-reducing reduplication appears to be productive, to the extent that if a verb root is reduplicated, it will be interpreted as an unergative intransitive verb unless some other lexically specified meaning exists.

Unergative reduplicative derivation operates by removing the lowest subcategorised argument in the semantic hierarchy from the verb's argument structure. Since transitive verbs subcategorise for a [+A] and a [-A] argument, this effectively means that the [-A] argument is removed from the subcategorisation frame. For example, *dupa* 'punch', subcategorises for an agent and a patient in the frame < AG_{CR} PAT_{CR} >. The derived verb *dudupa* 'be punching' is an unergative verb with the frame < AG_{CR} >.

- (7.49) a. *manei* *n-e-ke* *dupa-nau* *ara*
 he RL-3.SBJ-PRF punch-1SGO I
 He punched me.
- b. *manei* *n-e* *du-dupa* *bla*
 he RL-3.SBJ RD-punch LMT
 He was just punching.

The same applies when the [-A] argument is a theme. The transitive root *gato* 'think about s.th.' is reduplicated to derive the unergative *gagato* 'think'. The underived subcategorisation frame is < AG_{CR} THM_{CR} >, while the derived verb has the frame < AG_{CR} >.

- (7.50) a. *ara n-a gato-igo ago*
 I RL-1.SBJ think-2SGO youSG
 I'm thinking about you.
- b. *ara n-a ga-gato*
 I RL-1.SBJ RD-think
 I'm thinking.

7.3.1.1.2 Unaccusative derivation

A small number of transitive roots are reduplicated to derive intransitive verbs which are unaccusative. This appears to be idiosyncratic and lexically specified. As with unergative derivation, the effect of this operation is to reduce the valency of the underived root by removing one argument from its argument structure. However, unlike unergative derivation, it is the [+A] argument, the agent, which is removed, not the [-A] undergoer argument. The remaining argument also undergoes modification of its semantic role. This argument is an undergoer in the underived frame, but it becomes a stative in the derived frame. For example the root *laḡe* 'castrate' subcategorises for an agent and a patient with the frame < AG_{CR} PAT_{CR} >. The derived verb *lalaḡe* 'be castrated' is an unaccusative verb with the frame < ST_{CR} >.

- (7.51) a. *manei n-e laḡe-i zora ana*
 he RL-3.SBJ castrate-3SGO pig thatN
 He castrated that pig.
- b. *zora ana n-e la-laḡe*
 pig thatN RL-3.SBJ RD-castrate
 That pig is castrated.

Unaccusative derivation only occurs where the underived undergoer is patient. The derived stative is then in the state resulting from the action coded by the transitive root. This state may be permanent, as in (7.51), but may equally be a temporary state. For example *hoti* 'sting' (< AG_{CR} PAT_{CR} >) is derived as *ho-hoti* 'be very sore and tender' (< ST_{CR} >):

- (7.52) a. *kaike toi-kame ikoa n-e hoti-nau ka kame-ḡu-ine*
 one cook-arm be.small RL-3.SBJ sting-1SGO LOC hand/arm-1SGP-thisR
 A small centipede has stung me on my hand.
- b. *kame-ḡu-ine n-e ho-hoti ḡlehe*
 hand/arm-1SGP-thisR RL-3.SBJ RD-sting very
 My hand is very sore and tender.

7.3.1.2 Valency augmenting reduplication

Reduplicative derivation which augments the valency of a verb occurs idiosyncratically and only with two semantically related roots: *keli* 'be good' and *dia* 'be bad'. These are reduplicated to derive the bivalent verbs *ke-keli* 'be pleased (by s.th.)' and *di-dia* 'be displeased (by s.th.)'. Although the derived forms are bivalent, they are not transitive verbs but experiencer verbs, the second argument being the source of the experience. These experiencer verbs are discussed further in 7.1.3.2.5.

Reduplication in these two cases derives a verb which subcategorises for one more argument than the underived roots. The underived forms subcategorise only for a stative with the frame < ST_{CR} >. The

derivation introduces a new argument, an experiencer, and changes the role of the existing argument from stative to source, giving the subcategorisation frame < EXP_{CR} (SC_{CR}) >.

- (7.53) a. *sote ine n-e keli*
 shirt thisR RL-3.SBJ be.good
 This shirt is good.
- b. *n-a ke-keli-nau ara sote ine*
 RL-1.SBJ RD-be.good-1SGO I shirt thisR
 I am pleased by this shirt.

7.3.2 Valency augmentation by the transitivising suffix

A class of verbs exists which are underlyingly monovalent and which derive a bivalent form by means of the replacive suffix *-i*. This suffix replaces the final vowel of the root, and is homophonous with (and diachronically related to) an allomorph of the 3SG postverbal agreement marker.⁴ As discussed in 7.1.2.2, the pattern of postverbal agreement indexing for ordinary bivalent verbs is on the following pattern:

Table 7.3: Verb form and argument indexing for most verbs without the final vowel /i/.

ITR	TR [-3SGO]	TR [+3SGO]
<i>ago n-o tore</i> youSG RL-2.SBJ ask You're asking a lot.	<i>manei n-e tore-nau ara</i> he RL-3.SBJ ask-1SGO I He asked me.	<i>ara n-a tore-i manei</i> I RL-1.SBJ ask-3SGO he I asked him.

Where the root has /i/ as its final vowel, the 3SG postverbal agreement enclitic has the allomorph *-ni* to separate it from the root-final vowel:

Table 7.4: Verb form and argument indexing for most verbs with the final vowel /i/.

ITR	TR [-3SGO]	TR [+3SGO]
<i>manei n-e muni</i> he RL-3.SBJ hide He hid.	<i>n-a muni-nau tai-g̃u</i> RL-1.SBJ hide-1SGO RFL-1SGP I hid myself.	<i>ara n-a muni-ni g̃asi ine</i> I RL-1.SBJ hide-3SGO torch thisR I hid this torch.

The pattern involving verbs which take the transitivising suffix differs from this. The valency of the monovalent form is augmented by the transitivising suffix replacing the final vowel of the root. The suffixed form then takes postverbal agreement enclitics in the normal way, with the exception of the 3SG category. Instead of the normal enclitic, that category is realised by zero marking. This pattern is as follows:

Table 7.5: Verb form and argument indexing for verbs which take the transitivising suffix.

ITR	TR [-3SGO]	TR [+3SGO]
<i>n-e hoda ka are-lau</i> RL-3.SBJ take LOC thoseN-SPC They take from those.	<i>aḡe hod-i-ri ira foro</i> go take-TR-3PLO thePL foro [they] went and took the foro	<i>hod-i-Ø raro ana</i> take-TR-3SGO pot thatN Take that pot.

⁴ Both the replacive suffix and the 3SG agreement marker are in fact reflexes of the Proto Oceanic transitive marker **-i*. The agreement marker appears to be a reduction of the earlier sequence **-i-a*, the **-a* reflecting the POc 3SG agreement marker. (I am grateful to Malcom Ross for this observation.)

Membership of the class of verbs which take the transitivising suffix may be deduced from the form of the verb with 3SG postverbal agreement. If such a form occurs which has as its final vowel /i/, it is possible that it is an underlying bivalent verb with that final vowel, or that it is an underlying monovalent verb marked with the transitivising suffix. If the verb is underlyingly bivalent and /i/ final it will index 3SG postverbally with the suffix *-ni*, following the pattern shown in Table 7.4. If on the other hand the 3SG category is realised by a zero, the verb must follow the pattern shown in Table 7.5. In other words if an /i/ final bivalent verb indexes 3SG with a zero, the final vowel must be the transitivising suffix.

The behaviour of 3SG postverbal agreement enclitic allomorphy in relation to /i/ final roots and transitivised verbs makes it possible to identify verbs which are derived diachronically from an transitivising suffix marked form, but where that form has been reanalysed as the final vowel of the root. In some instances this diachronic regularisation is under way but is not yet complete.

An example of the reanalysis of the transitivising suffix as a root final vowel occurs with the bivalent verb *nomhi* 'hear'. The form **nomho* does not occur synchronically, but existed at an earlier stage in the language. This earlier form allowed both transitivising suffix and causative derivation, as well as causative marking of a reduplicated form. Both the causative marked forms have since undergone semantic reanalysis, giving the monovalent verbs *fanomho* 'be quiet' and *fanonomho* 'listen'. The bivalent verb has the final vowel /i/, which may be treated as the transitivising suffix, with commensurate zero 3SG postverbal agreement, despite the absence of a synchronic underived counterpart.

- (7.54) a. *n-o-ti* *noto fanomho*
 RL-2.SBJ-NEG stop be.quiet
 You didn't stop and be quiet.
- b. *ara n-a fanonomho bo,*
 I RL-1.SBJ listen CNT
 I listened
- ge teo bla ġe nomh-i-Ø-u*
 SEQ be.not LMT NT hear-TR-3SGO-PRG
 but I didn't hear it.

The bivalent form in the second line of (7.54)b. has zero 3SG agreement, demonstrating the presence of the transitivising suffix. However, the form *nomhi* may also be treated as monomorphemic, attracting the 3SG indexing appropriate to /i/ final roots:

- (7.55) *ara n-a nomhi-ni ia mheke*
 I RL-1.SBJ hear-3SGO theSG dog
 I heard the dog.

The two postverbally indexed 3SG forms *nomh-i* and *nomhi-ni* occur in free variation, and speakers are aware of this fact. It is however noteworthy that the reanalysed monomorphemic version only occurs in my corpus in direct elicitations.

7.3.2.1 Arguments raised by the transitivising suffix

The presence of the transitivising suffix has the effect of raising the valency of underlyingly monovalent verbs by introducing an additional core argument to the verb's subcategorisation. Almost all verbs taking the transitivising suffix are unergative, with the introduced argument an undergoer, or in some instances a locative. A very small number of unaccusative verbs also take the transitiviser. With these, the introduced argument is an agent.

7.3.2.1.1 Augmentation of unergative verbs

The presence of transitivising suffix marking on an unergative monovalent verb has the effect of introducing a second argument. Whether the introduced argument is an undergoer or a locative depends on the semantics of the underived root. In their underived monovalent forms all of the transitiviser-taking roots

have an implicit additional argument which is not subcategorised for. With some roots that implicit second argument is an undergoer, either patient or theme. It is implicit in the semantics of a verb like *hoda* 'take' or *korho* 'pull' that there something is taken or pulled. However, in their monovalent forms, these verbs have the subcategorisation frame < AG_{CR} >:

- (7.56) a. *n-e-ge fa-ḡo-no-di-nā ago ge hoda bla*
 RL-3.SBJ-PRS CS-forget-GP-3PLP-IMM youSG SEQ take LMT
 You [can] make a mistake and [it] will simply take [record].

While these verbs may occur without any overt undergoer, that is rare. Typically the undergoer is realised overtly, cooccurring with the monovalent form either because it is incorporated (as in (7.57)a.), or because the root occurs non-finally in a serial construction (as in (7.57)b.):

- (7.57) a. *ḡ-a-ke hoda neti*
 NT-1.SBJ-PRF take net
 We took nets
- b. *n-e hoda mai-di-nā no-ḡu letasi iao ara*
 RL-3.SBJ take come-3PLO-IMM GP-1SGP letter thatPV I
 He brought my mail.

When this class of verbs have their valency augmented by the transitivity suffix, the introduced argument is an undergoer, giving augmented subcategorisation frames < AG_{CR} PAT_{CR} > or < AG_{CR} THM_{CR} >. This generates clauses such as:

- (7.58) *ka-t-au-ao ḡ-e hod-i-Ø-u ooe t-au-ao tikilave*
 LOC-SB-exist-thisR NT-3.SBJ take-TR-3SGO-PRG word SB-be-this PN
 At that Tikilave got that story.

With at least one transitivity-taking root the implicit second argument of the monovalent form is locative. A verb such as *mhoko* 'sit' is monovalent, but has implicit in its semantics a location where the sitting takes place. This locative is often not overtly realised:

- (7.59) *mhoko lao ago*
 sit go youSG
 You go and sit.

When overtly realised, a locative is typically realised by an oblique prepositional adjunct:

- (7.60) *n-a mhoko ara ka palu ifra*
 RL-1.SBJ sit I LOC two mat
 I sat on two mats.

Transitivity suffix marking of verbs in this class has the effect of introducing a core argument which is locative, giving the subcategorisation frame < AG_{CR} LOC_{CR} >. This generates clauses such as:

- (7.61) *n-a mhok-i-Ø ara kaike ifra*
 RL-1.SBJ sit-TR-3SGO I one mat
 I sat on one mat.

Unergative verb roots which take the transitivity suffix include:

(7.62)	<i>faroho</i>	'be smiting'	<i>faroh-i</i>	'smite s.th.'
	<i>hoda</i>	'be taking'	<i>hod-i</i>	'take s.th.'
	<i>huhu</i>	'be asking (questions)'	<i>huh-i</i>	'ask s.th.'
	<i>korho</i>	'be pulling'	<i>korh-i</i>	'pull s.th.'
	<i>maḡra</i>	'be fighting'	<i>maḡr-i</i>	'fight s.th.'
	<i>mhoko</i>	'sit'	<i>mhok-i</i>	'sit on s.th.'
	<i>puḡra</i>	'be severing'	<i>puḡr-i</i>	'sever s.th.'
	<i>ruma</i>	'be entering'	<i>rum-i</i>	'enter s.th.'
	<i>safra</i>	'be missing'	<i>safr-i</i>	'miss s.th.'
	<i>sofo</i>	'be catching'	<i>sof-i</i>	'catch s.th.'
	<i>tabara</i>	'be buying'	<i>tabar-i</i>	'buy s.th.'
	<i>ufu</i>	'be blowing'	<i>uf-i</i>	'blow on s.th.'

7.3.2.1.2 Augmentation of unaccusative verbs

With unaccusative verbs the presence of the transitivising suffix has a more complex effect on argument structure. In its monovalent form, a stative verb has as its sole core argument a participant which is in the state coded by the verb, ie. a stative. The subcategorisation frame for such verbs is < ST_{CR} >. The presence of the transitivising suffix changes the argument structure by introducing an additional argument. With unergative verbs the additional argument is either undergoer or locative, and the existing argument, the agent, remains unchanged. When the valency of an unaccusative verb is augmented by the transitivising suffix, the argument which is in the state coded remains the argument to which that state applies, however it is no longer simply in that state, but rather is undergoing an event which causes it to change state, ie. it becomes a patient. The introduced argument is then the agent which brings about the change in state of the patient. For example, with *tora* 'be open' the sole subcategorised argument is stative, with the subcategorisation frame < ST_{CR} >:

(7.63)	<i>n-e</i>	<i>tora</i>	<i>bla</i>	<i>kokopa</i>	<i>ine</i>
	RL-3.SBJ	be.open	LMT	door	thisR
	The door is open.				

When this root is derived by the transitivising suffix the stative of the underived root is demoted to patient. The introduced argument is agent, ie. the participant which is causing the change of state in the patient. The augmented subcategorisation frame is thus < AG_{CR} PAT_{CR} >, generating clauses such as:

(7.64)	<i>ara</i>	<i>n-a-ke</i>	<i>tor-i-Ø-na</i>	<i>kokopa-na</i>
	I	RL-1.SBJ-PRF	open-TR-3SGO-thatN	door-thatN
	I opened that door.			

7.3.3 Valency augmentation by causative marking

In addition to transitivising suffix marking, valency augmentation may occur by means of the preposed causative particle *fa*. The formal characteristics of the causative particle are discussed in 3.1.6.2. Functionally, causative marking introduces a new argument, an agent, force, into the subcategorisation, and demotes to undergoer (patient or theme) the existing argument. In addition, causativised verbs have exactly two arguments. Causative derivation of a monovalent verb increases the argument structure from one to two arguments. Bivalent verbs may not be causativised. All verbs that may occur in transitive predications have monovalent and bivalent variants. This is illustrated by many of the transitiviser-taking verbs in (7.62), where there is a formal distinction between the monovalent and bivalent variants. Causative derivation of such verbs applies only to the monovalent form.

The effects of causative derivation may be characterised in the following way:

- (7.65) - a new argument is introduced which is an agent or force;
 - the existing argument is demoted to undergoer;
 - only monovalent verb forms may be causativised.

7.3.3.1 Causative marking of monovalent stative verbs

A class of monovalent verbs exists which subcategorise for a single argument, where that argument has the semantic role stative (ie. the argument which is in the state coded by the predication). Causative marking of these verbs introduces a new argument which is an agent or cause. This argument affects another participant by changing that participant's state from a state which is not that coded by the underived verb into a state which is that coded by the underived verb. The existing argument of the monovalent verb is demoted from stative to patient. The semantic relations of the uncausativised monovalent verb may be characterised as: 'participant X is in state Z' (X BE Z); while the semantic relations of the causative marked bivalent verb may be characterised as 'participant Y affects participant X and as a result participant X is in state Z' (Y CAUSE X BE Z).

The subcategorisation frame for these monovalent verbs is < ST_{CR} >, and for the causative marked forms < AG/CS_{CR} PAT_{CR} >.

The verb *fodu* 'be full', for example, subcategorises for a single argument with the semantic role of stative:

- (7.66) *daramu ine n-e fodu*
 drum thisR RL-3.SBJ be.full
 This drum is full.

The causative marked form involves an agent which is acting upon the drum in some way to change its state from 'not full' to 'full':

- (7.67) *gita da-ke fa fodu-i daramu ine*
 weINC 1INC.SBJ-PRF CS be.full-3SGO drum thisR
 We filled this drum.

This causative marking occurs productively with any unaccusative verb. The example above involves a physical state, but the process applies equally to non-physical states:

- (7.68) a. *goinode gita da nhigo*
 todayRL weINC 1INC.SBJ be.finished
 Now we're finished.
- b. *a fa-nhigo-ri-u*
 1.SBJ CS-be.finished-3PLO-PRG
 I will finish them.

The introduced argument may be either an agent or a force, however some verbs tend to occur with agent actors and others with force actors. Causative marking of verbs such as *nhigo* 'be finished' above typically introduce an agent. Causative marking of a verb such as *lehe-n̄hau* 'be hungry' typically introduces a participant (often a subordinated clause) which is force:

- (7.69) a. *ginai o lehe-n̄hau gau-palu*
 todayIRR 2.SBJ die-eat youPL-two
 You two will get hungry.
- b. *birho ravata n-e fa lehe-n̄hau-nigo ago*
 sleep afternoon RL-3.SBJ CS die-eat-2SGO youSG
 Sleeping in the afternoon is making you hungry.

7.3.3.2 Causative marking of monovalent active verbs

Where a monovalent verb has as its argument an actor, the causativisation again introduces a new actor (an agent or force), and again the existing argument is demoted, this time from agent or active theme to patient or theme. The existing argument is demoted from being the participant which is carrying out the action

coded by the verb, to being caused to carry out that action. The semantic relations of the unergative monovalent verb may be characterised as: 'participant X is carrying out action Z' (X DO Z); while the semantic relations of the causativised bivalent verb may be characterised as 'participant Y affects participant X and as a result participant X is carrying out action Z' (Y CAUSE X DO Z). So for example *n̄hau* 'eat' subcategorises for an agent with the frame < AG_{CR} > (as in (7.70)a.). Causativisation introduces a new agent or force which causes the existing participant to eat. That participant, the agent of the underived form, is therefore demoted to patient, being the undergoer of the causing. The derived frame is therefore < AG/CS_{CR} PAT_{CR} > (as in (7.70)b.).

- (7.70) a. *ara n-a n̄hau no-ḡū*
 I RL-1.SBJ eat GP-1SGP
 I am eating.
- b. *ara n-a-ke fa n̄hau-nigo ago*
 I RL-1.SBJ-PRF CS eat-2SGO youSG
 I made you eat.

With active verbs, causative marking demotes the existing argument from actor to undergoer. Most active verbs are unergative, and for these causativisation involves the former agent taking the role patient. However, some active monovalent verbs are nonagentive, with an active theme rather than an agent as the subcategorised argument. With a verb such as *zogu* 'drop', for example, the actor is non-volitional. The subcategorisation frame for this verb is < A.THM_{CR} > (as in (7.71)a.). Causativisation introduces a new agent, force, and demotes the existing active theme actor to undergoer theme, with the causative derived frame < AG/CS_{CR} THM_{CR} > (as in (7.71)b.).

- (7.71) a. *koilo ana n-e zogu-n̄a*
 coconut thatN RL-3.SBJ drop-IMM
 That coconut just dropped.
- b. *manei n-e la fa zogu-i koilo ine k-ara*
 he RL-3.SBJ go CS drop-3SGO coconut thisR LOC-I
 He went and threw down this coconut to me.

7.3.3.3 Causative marking restriction to monovalent verbs

Verbs which may occur in transitive predications have monovalent and bivalent forms. Causativisation in Kokota only occurs with monovalent verbs. Many verbs have no formal distinction between their monovalent and bivalent variants, only the subcategorisation frames differing. However, some, such as the transitiviser taking verbs discussed in 7.3.2.1, do differ. With these the constraint on causativising bivalent verbs is most visible.

A verb such as *sofo* 'be catching' is monovalent, subcategorising only for an agent with the subcategorisation frame < AG_{CR} > (as in (7.72)a.). Its transitivised counterpart, *sof-i*, 'catch s.th.', is bivalent, subcategorising for an agent and a patient with the frame < AG_{CR} PAT_{CR} > (as in (7.72)b.).

- (7.72) a. *pusi ana n-e sofo bla*
 cat thatN RL-3.SBJ catch LMT
 That cat was simply catching.
- b. *pusi ana n-e sof-i-di palu kubiliki are*
 cat thatN RL-3.SBJ catch-TR-3PLO two rat thoseN
 That cat caught those two rats.

When causativised, it is the untransitivised monovalent form that is marked, not the transitivised bivalent form:

- (7.73) *manei n-e fa sofo-i pusi ana*
 he RL-3.SBJ CS catch-3SGO cat thatN
 He made that cat catch.

As with any monovalent active verb, causativisation introduces a new agent, force, and demotes the actor of the underived root to undergoer. *Fa sofo* has the derived subcategorisation frame < AG_{CR} PAT_{CR} >. A participant which would occur as the core argument undergoer of the transitive form (such as the rats in (7.72)b.) may be expressed with a causative verb, but only as an oblique adjunct ((7.74)a.), not as a second core argument complement ((7.74)b.):

- (7.74) a. *manei n-e fa sofo-i pusi ana ka palu kubiliki are*
 he RL-3.SBJ CS catch-3SGO cat thatN LOC two rat thoseN
 He made that cat catch those two rats.
- b. **manei n-e fa sofo-i pusi ana palu kubiliki are*
 He made that cat catch those two rats.

The constraint on the causativising of bivalent verbs is less readily observable with roots which do not distinguished formally between the monovalent and bivalent variants. The effect of the constraint is visible, however, in the behaviour of the undergoer of the bivalent variant. The verb *n̄hau* 'eat', may be monovalent or bivalent, with no formal distinction between the forms:

- (7.75) a. *ara n-a n̄hau no-ḡu*
 I RL-1.SBJ eat GP-1SGP
 I am eating. [repeating (7.70)a.]
- b. *ara n-a n̄hau tañano are*
 I RL-1.SBJ eat food thoseN
 I ate that food.

The undergoer of the causativised verb is the participant which occurs as the agent of the underived root. The undergoer of the underived verb is expressible, but only as an oblique, paralleling the behaviour of *fa sofo* in (7.74):

- (7.76) a. *ara n-a fa n̄hau-nigo ago ka tañano are*
 I RL-1.SBJ CS eat-2SGO youSG LOC food thoseN
 I made you eat that food.
- b. **ara n-a fa n̄hau-nigo ago tañano are*
 I made you eat that food.

7.4 Incorporation

A process of incorporation exists in the language which allows any non-specific undergoer to be incorporated into the verb complex. Incorporation applies to not merely a nominal root, but to the NP core as discussed in 4.3.1.

7.4.1 Incorporation verb forms

Any verb which subcategorises for an undergoer may have an incorporated undergoer. However, it is a constraint on incorporation that the form of the verb occurring with the incorporated undergoer is the verb's intransitive form. Where a verb's intransitive and transitive variants are formally identical, incorporation is distinguished only by the presence or absence of postverbal agreement. In (7.77) postverbal agreement occurs, indexing the undergoers. In (7.78) no postverbal agreement is present, despite the presence in the clause of an overt undergoer, the undergoer being incorporated:

- (7.77) a. *n-a manahagi-di gudu ara namhari gudu*
 RL-1.SBJ want-3PLO EXHST I fish EXHST
 I want all the fish.
- b. *ara n-a flalo-i vaka-flalo ine*
 I RL-1.SBJ fly-3SGO ship-fly this
 I'm flying this plane.
- (7.78) a. *n-a manahagi namhari gudu ara*
 RL-1.SBJ want fish EXHST I
 I want all the fish.
- b. *ara mala flalo vaka-flalo*
 I RL-1.SBJ fly ship-fly
 I fly planes.

Where a formal distinction exists between intransitive and transitive variants of a verb, it is the intransitive form which occurs with an incorporated undergoer. The intransitive verb *korho* 'be pulling', for example, is transitivised by the suffix *-i* discussed in 7.3.2.1, giving the transitive form *korh-i* 'pull s.th.'. In a normal transitive clause the transitivised form occurs with postverbal agreement indexing an undergoer:

- (7.79) *ara n-a korh-i-ri palu namhari are*
 I RL-1.SBJ pull-TR-3PLO two fish thoseN
 I caught those two fish.

However, when the undergoer is incorporated it is the underived intransitive form which occurs:

- (7.80) *ara n-a korho namhari*
 I RL-1.SBJ pull fish
 I caught fish.

7.4.2 Incorporated nominals

Incorporated undergoers are not limited to a nominal root alone. Instead, it is the entire NP core which is incorporated. In (7.78) (7.80) and (7.85) the incorporated cores consist only of a nominal root. However, other elements of the NP may also occur modifying the incorporated root. As discussed in 7.3.2.1, in addition to the nominal head the core may contain one of the two pre-head multitude markers *tehi* 'many' and *toga-tehi* 'very many' (literally 'thousand-many'). Being within the core, these may occur with incorporated nominals:

- (7.81) a. *ago n-o hoda tehi kaku*
 youSG RL-2.SBJ take many banana
 You took many bananas.
- b. *ara n-a korho toga-tehi namhari*
 I RL-1.SBJ pull thousand-many fish
 I caught very many fish.

Both verbs in (7.81) belong to the class which takes the transitivising suffix *-i*. The presence of the intransitive verb forms demonstrates the incorporated status of the undergoers.

In addition, the core contains one post-head modifier position. As discussed in 4.3.1.2, this post-head core modifier position may contain one member of a number of word classes including adjectives, nouns, stative verbs, personal and location names, and spatial locatives. In (7.82), for example, an incorporated nominal is modified by another noun:

(7.82) *n-a-ke* *frīñhe* *suḡa* *tetena*
 RL-1.SBJ-PRF work house sago
 We built sago-thatch houses.

Possessor indexing also occurs within the noun core, and consequently participates in incorporation:

(7.83) *ara* *n-a* *hoda* *ge-ḡu* *kaku*
 I RL-1.SBJ take CP-1SGP banana
 I'm taking my bananas.

Incorporation is not limited to nouns plus one core modifier. NP cores of any size can participate in incorporation. In (7.84) possessor indexing and an adjective modify the head:

(7.84) *ara* *manahagi* *no-ḡu* *gorha* *foforu-na*
 I want GP-1SGP paddle new-3SGP
 I need a new paddle.

Any noun which realises an undergoer may be incorporated. There is no restriction that the noun be generic in the sense that it is a superordinate term. For example, any fish species name may be substituted for the taxonomic generic *namhari* in (7.80):

(7.85) *ara* *n-a* *korho* *pele*
 I RL-1.SBJ pull honeycomb.rock.cod
 I caught honeycomb rock cod.

However, while incorporated undergoers may be specific types of entities, they may not be specific in the sense of being a definite or specifically identified instantiation of the class of entities to which they belong. Consequently no articles or demonstratives may modify incorporated nominals, these falling outside the NP core. Incorporated nominals may also not be specified for number, the numerals being an NP outer modifier.

7.4.3 Structure of incorporating verb complexes

No constituents may intervene between the root component(s) of the verb complex and the incorporated nominal. It is not, for example, possible for another argument to intervene. In non-incorporating clauses the pragmatically unmarked constituent order places the argument with the semantic role highest in the hierarchy in the immediate postverbal position, with the next highest following, and so on. This generates transitive clauses in which the actor precedes the undergoer, intervening between the verb and the undergoer:

(7.86) *n-e* *korh-i-ri* *manei* *palu* *namhari* *are*
 RL-3.SBJ pull-TR-3PLO he two fish thoseN
 He caught those two fish.

However, with incorporated undergoers the order reflected in (7.86) is impossible, as the actor would intervene between the verb and the incorporated nominal (as in (7.87)b.). Instead the reverse order occurs ((7.87)a.):

(7.87) a. *n-e* *korho* *namhari* *manei*
 RL-3.SBJ pull fish he
 He caught fish.

b. **n-e korho manei namhari*
 He caught fish.

This applies equally to postverbal outer modifiers, which follow the verb complex core. In non-incorporating clauses these of course precede any arguments (as in (7.88)). In incorporating clauses they follow the incorporated nominal ((7.89)):

(7.88) a. *g̃-a fa-lehe-ri gudu n̄a gai teḡe are-lau*
 NT-1.SBJ CS-die-3PLO EXHST IMM weEXC turtle thoseN-SPC
 ...we kill every one of those turtles.

b. *n-e-ge mai fakae-ni-u mane ine*
 RL-3.SBJ-PRS come see-3SGO-PRG man thisR
 He is coming and seeing this man.

(7.89) b. *n-a manahagi namhari gudu ara*
 RL-1.SBJ want fish EXHST I
 I want all the fish.

b. *manei teo g̃-e korho namhari-u*
 he be.not NT-3.SBJ pull fish-PRG
 He wasn't catching fish.

This constraint does not apply to verbs such as directionals occurring finally in a serial construction. In incorporating clauses these occur in their normal position preceding the incorporated nominal:

(7.90) *gai n-a hoda mai mala-n̄hau*
 weEXC RL-1.SBJ take come PURP-eat
 We bring food.

7.4.4 Object agreement indexing on incorporating verb complexes

The incorporation of an undergoer generates a complex predicate consisting of the verb(s) plus the undergoer. These complex predicates are typically intransitive in the sense that the entire predication does not subcategorise for a second argument which is indexed by a postverbal agreement enclitic. All the examples of incorporation above reflect this. However, transitive incorporating predications are possible. This involves a complex predication with an incorporated undergoer, where the entire complex predication itself has a complement which is indexed postverbally. As postverbal agreement involves an enclitic which attaches to the verb complex core, and an incorporated nominal is the final element in the core, the effect is the attachment of the enclitic to the incorporated nominal. In (7.91)a. the verb series *hoda faña* 'take give.food' has the incorporated theme *kaku* 'banana'. The resulting complex predication, *hoda faña kaku* 'take bananas to' itself has a goal complement which is indexed by the enclitic attached to the verb complex. Similarly, in (7.91)b. the verb series *turi tufa* 'tell affect' has the incorporated nominal *tu-turi* 'story'. The entire complex predication *turi tufa tu-turi* 'tell stories to' itself has a goal complement indexed by an enclitic.

(7.91) a. *nakodou ana n-e hoda faña kaku-i hei*
 woman thatN RL-3.SBJ take give.food banana-3SGO who
 Who did that woman give bananas to?

b. *mane-ne n-e-ke turi tufa tu-turi-di ira suli*
 man-thisR RL-3.SBJ-PRF tell affect RD-tell-3PLO thePL child
 This man told stories to the children.

7.5 Verb serialisation

The verb complex core often contains a single verb root. However, up to three verb roots may combine in a serial construction to form a single complex predicate. Any verb may occur in first (V₁) and second (V₂) position in a series, however third position (V₃) is limited to a small set of verbs. Verb series have the structure:

(7.92) (V₁) V₂ (V₃)

This means that a verb series may comprise V₁ + V₂, V₂ + V₃, or a verb in all three positions.

7.5.1 V₁ + V₂ series

Any verb may occur in V₁ and V₂ positions. However, there is a very strong tendency for verbs in V₁ position to be verbs of general motion, commencement or completion, or verbs such as the desiderative, abilitative or unitive. Verbs commonly occurring in V₁ position include:

(7.93)	<i>lao</i>	'go (towards)'
	<i>mai</i>	'come'
	<i>aḡe</i>	'go'
	<i>zaho</i>	'go (away from)'
	<i>fufunu</i>	'begin'
	<i>kusu/kulu</i>	'be first' ⁵
	<i>nodo/noto</i>	'stop'
	<i>nhigo</i>	'be finished'
	<i>manahagi</i>	'want, need'
	<i>boka</i>	'be able'
	<i>kaike</i>	'be one' (ie. 'act in unison') ⁶

When occurring with a non-motion V₂, motion verbs in V₁ position indicate a motion event preceding the V₂ event:

- (7.94) a. ...*ḡ-e la au iaro hurepelo keha-re...*
 NT-3.SBJ go exist thosePV PNLOC NSP-thoseN
 ...some of them went [and] lived over at Hurepelo...
- ...*ade-hi goveo ḡ-e mai au-gu gai keha ide*
 here-EMPH PNLOC NT-3.SBJ come exist-PRG weEXC NSP theseR
 ...[and] some of us came [and] are living here in Goveo.
- b. *ka mai rum-i-na ia suḡa dou...*
 LOC come enter-TR-thatN theSG house be.big
 When [they] came [and] entered the big house...
- c. *ka-t-au-ana ḡ-e aḡe tob-i-ri ka poto-di-re*
 LOC-SB-exist-thatN NT-3.SBJ go kick-TR-3PLO LOC arse-3PLP-thoseN
 At that he went [and] kicked them in the arse.

When a V₁ motion verb occurs with a motion V₂, the two motion events occur simultaneously:

- (7.95) *n-e zaho n̄hañha-na...*
 RL-3.SBJ go run-thatN
 He ran away...

⁵ The two forms *kusu* and *kulu* are variant forms of the same verb. The reason for the variation is unclear. However it may be the result of influence from the neighbouring Maringe language, the source of many borrowings into Kokota. In Maringe *kulu* is an adverbial meaning 'first' (White et al 1988:95). The Maringe form *kusu*, on the other hand, is a verb with an unrelated meaning ('sever'). If the Kokota form was originally *kusu*, it may be changing to *kulu* under the influence of the semantically similar Maringe form. However, it is clear that synchronically both forms occur in Kokota and are consciously regarded by speakers as variant forms of the same thing. Interestingly, while the two forms have roughly equal occurrence in unelicited texts, *kusu* is the form usually given during direct elicitation.

⁶ The form *kaike* functions primarily as the numeral 'one'. However, it also has the verbal meaning 'be one'.

Two motion verbs, *lao* and *aḡe*, occur very commonly in V₁ position with the non-literal meaning 'proceed' or 'go ahead and':

- (7.96) a. *ka ta la mai-o ia vetula-na-na ia gavana...*
 LOC SB go come-thatNV theSG law-3SGP-thatN theSG government
 When the law of the government proceeded to come...
- b. *n-e-ge la maku-nā manei ge*
 RL-3.SBJ-PRS go be.hard-IMM it SEQ
 It [a gas tap on a stove] becomes firm and then
- ao bla lehe-na-na e-u*
 thisT LMT die-3SGP-thatN 3.SBJ-be.thus
 it's off.
- c. *...ḡ-e aḡe sugu ia to-toi...*
 NT-3.SBJ go hiss theSG RD-cook
 ...the fire went ahead [and] hissed...

The verbs of commencement and completion freely occur as single verb predicates, and occur as serial V₁, indicating the commencement or completion of the event expressed by the V₂:

- (7.97) a. *ara n-a-ge fufunu lase-i ooe kokota*
 I RL-3.SBJ-PRS begin know-3SGO talk PNLOC
 I am beginning to understand the Kokota language.
- b. *nhigo ri-riso*
 be.finished RD-write
 Finish writing!

The desiderative, abilitative and unitative verbs also occur with predictable meanings in relation to the V₁ event:

- (7.98) a. *ara n-a manahagi tore-ḡau gau ira kompanion*
 I RL-1.SBJ want ask-2PLO youPL thePL Companion
 I want to ask you the Companions
- ta friñhe-i-na fea kaike suḡa...*
 SB work-3SGO-thatN INIT one house
 to build me a house...
- b. *gai a boka n̄ha-di gudu...*
 weEXC 1.SBJ be.able eat-3PLO EXHST
 We could eat them all...
- c. *gita-palu kaike au bo*
 weINC-two one exist CNT
 We two still live together.

Although the verbs listed in (7.93) constitute a majority of verbs occurring in V₁ position, there is no restriction on other verbs occurring in this position to combine with V₂ in a complex predication:

- (7.99) a. *manei n-e-ke kumai fa knaso-i botolo swepi ine*
 he RL-3.SBJ-PRF drink CS be.empty-3SGO bottle soft.drink thisR
 He drank empty this bottle of soft drink.⁷
- b. *ara n-a tarai togo-di ira nakoni ta foḡra*
 I RL-1.SBJ pray help-3PLO thePL person SB sick
 I prayed for the sick people.
- c. *ara n-a babao no-ḡu gu-na-na friñhe heta fakamo*
 I RL-1.SBJ be.tired GP-1SGP CNTX-3SGP-thatN work be.strong always
 I am tired because I always work hard.
- d. *bi-mu-de ago n-e siri dia-de*
 fart-2SGP-theseR youSG RL-3.SBJ smell be.bad-theseR
 These farts of yours smell bad.

7.5.2 V₂ + V₃ series

The verbs which may occur in V₃ position are limited to verbs of directional movement, including arrival and departure, the verb of completion, and the affective verb. These include:

- (7.100) *mai* 'come'
lao 'go'
hage 'ascend'
kave 'descend'
kota 'go ashore, land'
salupu 'pass'
pulo 'return'
koko 'leave'
toke 'arrive'
toga 'arrive'
nhigo 'be finished'
tufa 'affect'

The directional verbs *zaho* 'go (away)' and *aḡe* 'go' do not appear to occur in V₃ position.

As with V₁ motion verbs, where a V₃ motion verb occurs with a V₂ which itself has inherent motion, the motion events occur simultaneously, the V₃ effectively indicating the direction in which the V₂ motion occurred:

- (7.101) a. *ara ginai pulo mai ka fa-palu wiki ana*
 I FUT return come LOC CS-two week thatN
 I will return in two weeks. [lit. ...on the second week.]
- b. *n-e korho ma-di ia ḡobi-lho-lhoguai-na e-u*
 RL-3.SBJ pull come-3PLO thePL hundred-RD-coil-3SGP 3.SBJ-be.thus
 He pulled towards him his hundred coils, like that.
- c. *ia kakau n-e seha kave ka raro-no*
 theSG crab RL-3.SBJ climb descend LOC pot-thatNV
 The crab climbed out of the pot.

⁷ *Swepi*, the generic term for any soft drink, is a borrowing of the brand name *Schweppes*.

- d. *kubiliki ana n-e ruma lao ka ġilu-na korosa*
 rat thatN RL-3.SBJ enter go LOC inside-3SGP hole
 That rat went inside the hole.
- e. *fa loga mai katana kareseni n̄a bo*
 CS pour come modicum kerosene IMM CNT
 Pour out a little bit more kerosene!
- f. *ġ-e koko la-ni-n̄a sara rauru*
 NT-3.SBJ leave go-3SGO-IMM thereD seaward
 He threw him there seaward.

The function of the V₃ to indicate the direction in which the V₂ motion occurred applies even when the V₂ motion is metaphorical, as in the process of telling a story or in recollection:

- (7.102) a. *are-lau ago ne-ge turi salupu-di-ro bla ago*
 thoseN-SPC youSG RL-PRS tell pass-3PLO-thoseNV LMT youSG
 Those ones [parts of the story] you're telling past [ie. leaving out].
- b. *ka varedake palu zulai*
 LOC twenty two July
 On the twenty second of July
- ġinai e gato pulo-i ia sekon apointed dei*
 FUT 3.SBJ think return-3SGO theSG second.appointed.day
 [one] will remember the Second Appointed Day.⁸

As with V₁ motion verbs, where the V₂ does not involve directed motion a V₃ motion verb indicates a sequential, not simultaneous, event:

- (7.103) *legu-na toka kave-i-na ġita ġazu ana...*
 behind-3SGP chop descend-3SGO-thatN weINC wood thatN
 After we have chopped down that tree...

The exception to this is when the nature of the V₂ event precludes subsequent motion. In that case the reading is again of simultaneity. In this case a V₁ motion verb will give a sequential reading (as in (7.104)a.) while the same verb in V₃ position will give a simultaneous reading ((7.104)b.):

- (7.104) a. *mai mhoko*
 come sit
 Come and sit down.
- b. *mhoko mai*
 sit come
 Sit towards me./Sit over here.

The completive verb *nhigo* 'be finished' occurs in isolation with the sense that a volitional subject has finished an unspecified but understood activity (as in (7.105)a.), or that an activity associated with a non-volitional subject has been completed ((7.105)b.), or that an event expressed by a subordinate clause subject is finished ((7.105)c.):

- (7.105) a. *...n-e ġru-i-ġru-i la-ni-n̄a ka ġuku-na mala la mai-na ġobilologu*
 RL-3.SBJ garden-garden go-3SGO-IMMLOC road-3SGP PURP go come-3SGPPN
 ...they brushed the road for the coming of Gobilologu.

⁸ Ie. it will be the anniversary of the Second Appointed Day, the day on which Provincial powers were devolved to the island of Santa Isabel.

gu maneri nhigo-u...
 be.thus they be.finished-PRG
 So, they were finished [doing that]...

b. *...ia tu-turi-na marha-pau-o nhigo...*
 theSG RD-tell-3SGP feel.pain-head-thatNV be.finished
 ...the [telling of] story of the headache will be finished...

c. *frin̄he-ni ia suḡa n-e nhigo-u...*
 work-3SGO theSG house RL-3.SBJ be.finished-PRG
 Building the house is finished...

As a serial V_1 , *nhigo* indicates completion of the event expressed by the V_2 , as illustrated in (7.97)b. As a serial V_3 , *nhigo* indicates that the V_2 event has been carried to completion:

(7.106) *manei n-e-ke fa-lehe nhigo-ri gudu kokorako are*
 he RL-3.SBJ-PRF CS-die be.finished-3PLO EXHST chicken thoseN
 He killed [to completion] all those chickens.

The affective verb *tufa*, is normally interpreted in isolation with a meaning similar to 'give'. When occurring finally in a serial construction it is benefactive or malefactive depending on the semantics of the overall predication.

(7.107) a. *fa doli tufa-nau zuta-na*
 CS be.alive affect-1SGO lamp-thatN
 Light that lamp for me.

b. *an-lau e mhemhe tufa-ḡai gai*
 thatN-SPC 3.SBJ be.difficult affect-1EXCO weEXC
 That makes it hard for us.

7.5.3 Three verb series

A maximum of three verbs may occur in a serial construction. Three verb series conform to the constraints and tendencies discussed above for each of the serial verb positions. Again there is a tendency for the verb in V_1 position to be a verb of motion, commencement or completion, or the desiderative, abilitative or unitative, as in (7.108) (see also (7.110)), but again this is a tendency only and other verbs may occur, as in (7.109).

(7.108) a. *manei n-e fufunu toka kave-i ia ḡazu*
 he RL-3.SBJ begin chop descend-3SGO theSG wood
 He started chopping down the tree.

b. *ara manahagi turi tufa-nigo ago*
 I want tell affect-2SGO youSG
 I want to tell you

ka gu-na ia au ka gai...
 LOC CNTX-3SGP theSG exist LOC weEXC
 about our living...

c. *tehi-di mane-re n-e kaike isi hage ka ḡuku ana*
 many-3PLP man-thoseN RL-3.SBJ one flee ascend LOC road thatN
 Many of the people ran away up the road.

- (7.109) *toka fa nhigo tufa-nau ḡazu ana*
 chop CS be.finished affect-1SGO wood thatN
 Finish chopping that wood for me.

7.5.4 The argument structure of serial predications

When only one verb in a serial verb construction is transitive the complex predicate subcategorises for that complement. The postverbal agreement enclitic attaches to the final verb in the series, regardless of whether that is the transitive verb. Transitive verbs appear in their intransitive form when non-final in a series. In (7.110) only the V_2 verb is transitive. The entire predication subcategorises for the theme complement of that verb. The postverbal agreement enclitic attaches to the final element of the verb complex core, being the final verb in the series, *mai* 'come', although that verb itself is intransitive. The V_2 verb occurs in its intransitive form *hoda*, not in its transitivised form *hod-i*:

- (7.110) *o la hoda mai-ni-u ia raro ta dou*
 2.SBJ go take come-3SGO-PRG theSG pot SB be.big
 Go [and] bring the big pot.

When more than one transitive verb occurs, and the complement subcategorised for by all verbs represents the same participant, the complex predication subcategorises for that one complement. Each of the verbs may subcategorise for a complement, however postverbal agreement is again only marked on the final verb: In (7.111) both verbs are transitive and subcategorise for a theme. The entire predication consequently subcategorises for that one theme, and the series final verb carries the agreement enclitic:

- (7.111) *ta moita la raisi ana, zikra koko-ni bakru-na-na*
 SB be.cooked CND rice thatN pour.out leave-3SGO liquid-3SGP-thatN
 If the rice is cooked, pour away its liquid.

When several transitive verbs occur subcategorising for complements which represent different participants, the complex predication subcategorises for all the complements, generating a ditransitive complex predication. In this situation it is the complement of the final verb in the series which is indexed by the postverbal enclitic. Complements of non-final verbs occur as additional, unindexed, complements. In (7.112) (repeating (7.109)) three verbs occur. The V_1 and V_2 verbs each subcategorise for a patient complement representing the same participant: *ḡazu ana* 'that wood'. The complex predication therefore also subcategorises for that complement. However, the V_3 verb also subcategorises for a complement, a benefactive (in this case the speaker). The complement which is indexed postverbally is the complement of the series final verb. This argument is not also overtly realised by a full mention, however it could be. The complement of the V_1 and V_2 verbs is overtly realised, but is a second complement and is not indexed.

- (7.112) *toka fa nhigo tufa-nau ḡazu ana*
 chop CS be.finished affect-1SGO wood thatN
 Finish chopping that wood for me.

Some functions which are performed by adverbials in some other languages are performed by serialised verbs in Kokota. This is discussed in 8.4.

7.6 Existential predications

Existential predications in Kokota involve the use of existential verbs. Two existential verbs exist - the positive existential *au* 'exist' and the negative *teo* 'not exist'. Both verbs have a number of other functions.

7.6.1 Positive existential verb *au*

The form *au* is fundamentally an existential verb expressing a range of closely related meanings. It frequently functions to place an entity in a location, either temporarily (as in (7.113) a.), long term ((7.113) b.), or permanently ((7.113) c.). Thus it is normally translatable as 'live at' or 'be at':

- (7.113) a. ...*mane n-e-ke au-ro ka g̃ilu-na tema-na*
 man RL-3.SBJ-PRF exist-thoseNV LOC inside-3SGP hut-thatN
 ...the men who were inside the small house.
- b. *n-e-ge mai au banesokeo*
 RL-3.SBJ-PRS come exist PNLOC
 He came and lived at Banesokeo.
- c. *mala-na-re au ka g̃ahipa sare-lau*
 footprint-3SGP-thoseN exist LOC stone thereP-SPC
 Those footprints of his are in the stone there.⁹

As (7.113)c. illustrates, the located participant need not be human or even animate. In fact it need not be a physical object:

- (7.114) ...*la mai-u kilau-ne e-u*
 go come-PRG religion-thisR 3.SBJ-be.thus
 ...this religion [Christianity] came.
- n-e mai au buala e-u*
 RL-3.SBJ come exist PNLOC 3.SBJ-be.thus
 It came and was at Buala.

Clauses like those in (7.113) and (7.114) are existential clauses with a specified location of the existence. The meanings are therefore more literally "the men who existed inside the small house"; "he came and existed at Banesokeo" and so on.

Without an overt locative adjunct *au* simply indicates the existence of an entity. This may occur when the actual location of the existence is apparent from the context:

- (7.115) *manahagi-g̃au gau mane huhurani kaike mai au gudu ade-hi kokota*
 want-2PLO youPL man PNLOC one come exist EXHST here-EMPH PNLOC
 [I] want you Huhurangi people to together come and all live here at Kokota,
- ge g̃-e au-na velepuhi, g̃-e mala au-na suḡa tarai*
 SEQ NT-3.SBJ exist-IMM right.way NT-3.SBJ PURP exist-IMM house pray
 then there will be a Catechist, there will be a church.

In other instances no locative adjunct is present because the verb is used to express the existence of an entity, rather than its presence in any location:

- (7.116) *n-e-ge au dokta, n-e-ge au ira mereseni ka mane-vaka*
 RL-3.SBJ-PRS exist doctor RL-3.SBJ-PRS exist thePL medicine LOC man-ship
 Now there are doctors, now there are the medicines of white men.

The fundamentally unitary nature of the locative and purely existential functions of *au* is illustrated when an overt location adjunct is present but does not represent a physical location:

- (7.117) *ka ira mane-vaka e au no-di fama*
 LOC thePL man-ship 3.SBJ exist GP-3PLP farm
 'With the white men there are their farms.'

The presence of a non-physical 'location' and the use of irrealis mood, indicating in this instance an habitual state, combine to give a simultaneously locative and existential sense in clauses of this kind.

⁹ The footprints are of a legendary figure and are holes in a rock shelf and thus permanent.

As an extension of its existential function, *au* also functions as a verb of possession, as discussed in 6.9.2. With this function the verb occurs with middle voice. This is discussed further in 7.1.3.2.4.

7.6.2 Negative existential verb *teo*

The form *teo* occurs as the exclamatory 'no', opposing *ehe* 'yes'. It also functions as a negative existential verb. The positive existential verb *au*, discussed in 7.6.1, occurs with both a locative and purely existential sense. *Teo*, however, only occurs with a purely existential sense:

(7.118) a. *teo namhari*
 be.not fish
 There are no fish.

b. *teo ihei mane ta torai mai reregi-ni-na*
 be.not whoever man SB definitely come look.after-3SGO-thatN
 There isn't anyone who actually looks after

ia vetula-na gavana ka-ia gilu-na nau gai
 theSG rule-3SGP government LOC-theSG inside-3SGP village weEXC
 the government's law in our village.

Although a locative adjunct is present in (7.118)b., it is in the relative clause, and does not modify *teo*. The main clause expresses the absence of the existence of the subject, not the subject's non-presence in the village. This example would be more literally translated as 'Someone who looks after the Government's law in our village does not exist'.

The non-existence in (7.118) represents a stable state, however *teo* may also express the result of a change of state:

(7.119) *n-e-ge la teo ira nakoni n-e-u*
 RL-3.SBJ-PRS go be.not thePL person RL-3.SBJ-be.thus
 There were no more people. [Lit. The people were gone to non-existence.]

In (7.118) and (7.119) *teo* is the antonym of *au*. However, *teo* does not also have a counterpart to the locative function of *au*. The non-presence of an entity in a location is expressed using the negative subordinating construction discussed in 9.7.1.2. In this construction a subordinated clause functions as the subject of the negative existential verb. To express the non-presence of an entity in a location the subordinate clause has the positive existential verb *au* as its predicate. The opposite of (7.120)a. is therefore (7.120)b. A negative locative use of *teo*, as in (7.120)c., is ungrammatical.

(7.120) a. *n-e au buala*
 RL-3.SBJ exist PNLOC
 He is in Buala.

b. *n-e-ge teo g-e au buala*
 RL-3.SBJ-PRS be.not NT-3.SBJ exist PNLOC
 He isn't in Buala. [Lit. His being in Buala is not.]

c. **n-e-ge teo buala*
 RL-3.SBJ-PRS be.not PNLOC
 He isn't in Buala.

As with *au*, *teo* also functions as a verb of possession (expressing the non-possession of an entity). This is discussed in 6.9.2. Its occurrence with middle voice is discussed in 7.1.3.2.4.

7.6.3 Structure of existential clauses

Existential clauses resemble other intransitive clauses in constituent structure possibilities. The unmarked structure may occur, with the sole core argument following the predicate (as in (7.115) to (7.119)) and any oblique occurring subsequent to that. Alternatively, topicalisation may occur, with fronting of the subject (as in (7.113)c.) or an oblique (7.117).

Existential predications may occur as main clause predication, as seen in most of the above examples, or as a subordinate clause predication, as the relative clauses in (7.113)a. and the clausal argument in the first line of (7.115) illustrate.

7.6.4 Causative marked existential verbs

Existential verbs can be marked with the causative particle, encoding an effective change of state brought about by an agent or force. Thus *fa au* encodes the bringing about of the existence or presence of an entity, while *fa teo* encodes the bringing about of the cessation of existence of an entity. The entity which would be the subject of the existential verb becomes the object of the causativised forms:

- (7.121) a. *n-a fa au-i kaike suli*
 RL-1.SBJ CS exist-3SGO one child
 I have created a child. [lit. I have caused a child to exist.]
- b. *n-e fa au-ri mane are*
 RL-3.SBJ CS exist-3PLO man thoseN
 He told those men to stay. [lit. He caused those men to be present.]
- c. *n-a-ke fa teo-i haidu ana*
 RL-1.SBJ-PRF CS be.not-3SGO meeting thatN
 I stopped that meeting. [lit. I caused that meeting to not exist.]

The range of meanings of these causativised forms corresponds to those of the root verbs. Thus the causativised positive existential verb expresses existence or presence, while the negative expresses only non-existence, and not non-presence.

As (7.121)a. shows, the causativised positive existential verb can mean to cause the life of a person (by parenting it). The causativised negative existential verb alone does not have the opposite sense of 'kill'. It does, however, occur in a lexicalised collocation with *faro(go)ho* 'smite'¹⁰ with that meaning:

- (7.122) *g̃-e farogoho fa teo-ri*
 NT-3.SBJ smite CS be.not-3PLO
 He killed
- mane n-e-ke au-ro ka g̃ilu-na tema-na*
 man RL-3.SBJ-PRF exist-thoseNV LOC inside-3SGP hut-thatN
 the men who were inside the small house.

The causativised existential verbs are transitive. *Fa teo* also occurs as a ditransitive predication. In this construction the indirect object is a subordinate clause expressing an event which was prevented from occurring by the agent. The direct object is not an entity that would be the subject of *teo* in an uncausativised clause, but instead is the subject of the subordinate clause IO:

- (7.123) *n-e fa teo-i gase ana ta lao-na ka sikolu-na*
 RL-3.SBJ CS be.not-3SGO woman thatN SB go-thatN LOC school-thatN
 He didn't allow that girl to go to school.

¹⁰ This verb is undergoing diachronic loss of the bracketed syllable. Only elderly speakers use the longer form.

7.6.5 *Teo* as a verb proform

The negative existential verb *teo* also functions as a verb proform meaning 'not do':

- (7.124) *ara manahagi-nigo ago ta dupa-i-na manei*
I want-2SGO youSG SB punch-3SGO-thatN he
I wanted you to hit him,
- ge ne teo bla ago*
SEQ RL be.not LMT youSG
but you didn't.

7.7 Oblique arguments

Oblique arguments comprise prepositional phrases, location names, local nouns, temporal and spatial deictics, and contextualising and associative nouns. The formal characteristics of these argument types are discussed in chapter 5. The behaviour of these argument types in argument structure is discussed here.

Oblique arguments in Kokota almost always function as peripheral arguments. The distinction between oblique and peripheral arguments assumed here is as follows: the notion of oblique employed for Kokota is a formal one - core arguments are those whose roles are formally unmarked (case is not marked), while obliques are formally marked (by a preposition or other oblique argument form). The semantic content of an oblique argument is expressed by a constituent which is governed by a head (such as a preposition, local noun, or contextualising or associative noun). The head itself only expresses the role of the governed constituent. Alternatively, the constituent itself inherently codes the role, as with deictics and location names.

The notion of a peripheral argument relates to argument structure - peripheral arguments are those which are not subcategorised for by the predication, ie. adjuncts rather than complements.

In Kokota core arguments occur only as subcategorised arguments, and never as peripheral arguments. Oblique arguments may be subcategorised for (ie. complements) or may be peripheral (ie. adjuncts), though subcategorised for obliques are uncommon.

The following sections discuss the semantic roles of each oblique argument type.

7.7.1 Prepositional phrases

One preposition exists in Kokota: the general purpose locative *ka*. This preposition acts as the head of prepositional phrases with a variety of semantic roles, including various kinds of locative, goal, source, cause, instrument and benefactive. The semantic role of a prepositional oblique in any clause is determined by a combination of the semantics of the predication and the semantics of the constituent governed by the preposition.

7.7.1.1 Spatial locatives

The existential verb *au* has a broad meaning covering notions such as 'exist' 'be [somewhere]', 'stay', and 'live'. Due to the inherently location-dependant nature of the event expressed by this verb, prepositional phrases occurring with *au* are interpreted as having the semantic role of spatial locative:

- (7.125) *nā gita-palu gē au la ka nasona a-hi gērona keli*
but weINC-two NT exist CND LOC point thisT-EMPH PNLOC be.good
But if you and I lived at the point at Gerona [that would be] good.

Au also frequently occurs with a location name or spatial deictic locative (see 7.7.2).

In clauses where the semantics of the predication do not indicate some other kind of peripheral notion, any PP present is typically interpreted as a locative (rather than a goal or source, for example). In (7.126)a. the

oblique argument is interpreted as a locative although the predicate *friñhe* does not have an implicit location built into its semantics (beyond the general requirement that any event must take place somewhere). In (7.126)b. the PP is interpreted as a locative, and not as goal or source - the clause does not mean '...chase...into the garden' or '...chase...from the garden'.

(7.126) a. *e-u friñhe n-e-ke friñhe-ni-na palu mane aro*
 3.SBJ-be.thus work RL-3.SBJ-PRF work-3SGO-thatN two man theseT
 That's the thing these two men did

ka nasona ine ġerona
 LOC point thisR PNLOC
 at this point at Gerona.

b. *ira mheke n-e toġla-di ia zora ka-ia ġrui*
 thePL dog RL-3.SBJ chase-3PLO theSG pig LOC-theSG garden
 The dogs chased the pig in [ie. within] the garden.

The oblique argument in this example is a physical location, so it lends itself to a locative interpretation. However, the interpretation of an oblique argument as a locative when occurring with a non-location-dependent verb is not limited to obliques that refer to physical locations, such as 'the point at Gerona' in (7.126). Oblique arguments whose referents would not otherwise be regarded as locations are interpreted as such:

(7.127) a. *...ġ-e la uf-i ia to-toi ka-ia papaġu ġazu*
 NT-3.SBJ go blow-TR theSG RD-cook LOC-theSG stack wood
 ...he went and blew on the fire on the pile of wood

b. *ġ-e knusu bla ka-to-toi-ne-n-e-ke-u*
 NT-3.SBJ break LMT LOC-RD-cook-thisR-RL-3.SBJ-PRF-be.thus
 It broke on the fire, it was like that.

Note that in (7.127)a. the pile of wood is given as the location of the blowing, not the location of the fire. Neither of the predications in (7.126) have an implicit location, and neither of the oblique arguments have referents that would be interpreted as locatives in other constructions.

Oblique arguments which do not even represent physical entities, such as customs or languages, are also typically interpreted as locatives:

(7.128) a. *...ka-ia kastom ġai tana goi momoru e-ni e-u*
 LOC-theSG custom weEXC then VOC momoru 3.SBJ-3SGO 3.SBJ-be.thus
 ...in our custom, man!, it's called *momoru*.

b. *...malaria ta-ni-o nañha-na-na e-u ka ooe-vaka*
 malaria SB-3SGO-thatNV name-3SGP-thatN 3.SBJ-be.thus LOC talk-ship
 ...malaria, as it's called in English. [lit. ...which does that name of it in English.]

Locatives of this kind are often governed by the form *fai*, usually translated by speakers as 'side'. This may refer literally to the side of a physical object:

(7.129) *roha-i ka fai hage-na naprai e-u ba*
 scrape-3SGO LOC side ascend-3SGP sun 3.SBJ-be.thus ALT
 Scrape it [the bark of a tree] on the side where the sun comes up.

However *fai* frequently occurs with a sense of 'on the part of', 'in the context of':

(7.130) a. *e-u e tehi la bla gai kokolo-di foḡra*
 3.SBJ-be.thus 3.SBJ be.many ?? LMT weEXC class-3PLP sick
 There are many kinds of sicknesses

ka-ia fai dokta
 LOC-theSG side doctor
 to do with doctors.

b. *ḡ-e la turi-di bla palu ḡlepo bla ka fai kastom-de bla*
 NT-3.SBJ go tell-3PLO LMT two thing LMT LOC side custom-these LMT
 Just tell two things on the part of custom.

Locatives are extended to the notion that an event may take place in a person's thoughts:

(7.131) *ara ka ga-gato-ḡu-re gita ginai korho namhari fufugo*
 I LOC RD-think-1SGP-thoseN weINC FUT pull fish tomorrow
 I think we will catch fish tomorrow.

7.7.1.2 Source and goal

Some verbs code events which inherently involve directed motion or directed action. Prepositional phrases occurring with these verbs will be interpreted as goal or source, depending on an interaction of the semantics of the predication and the nature of the oblique argument itself.

Several verbs code motion which is inherently directional. These include *mai* 'come', *lao* 'go (towards)', *zaho* 'go (away)' and *aḡe* 'go'. Prepositional phrases associated with these verbs are interpreted as goals:

- (7.132) a. *...ge ḡ-e lao-nā ka-ia suḡa...*
 SEQ NT-3.SBJ go-IMM LOC-theSG house
 ...then she will go to the house
- b. *ginai mai gudu bla baiu ka sikolu-ne bla*
 FUT come EXHST LMT PSBL LOC school-thisR LMT
 I think they will all come just to this school.
- c. *ara n-a aḡe ka-ia sitoa*
 I RL-1.SBJ go LOC-theSG store
 I went to the store.
- d. *zaho ka no-u suḡa-o*
 go LOC GP-2SGP house-thatN
 Go to your house!

This applies equally to causativised forms of these verbs:

(7.133) *n-e fa mai-ni kaike letasi k-ara*
 RL-3.SBJ CS come-3SGO one letter LOC-I
 They have sent me a letter.

Several verbs code various concepts of return or arrival, including *pulo* 'return', *posa* 'emerge', *toke* 'arrive back' *toga* 'arrive'. PPs occurring with these verbs are also interpreted as goal:

(7.134) a. *ke pulo e-u... ka-n-e-ke hure-ro ira tilo tomoko*
 PRF return 3.SBJ-be.thus LOC-RL-3.SBJ-PRF carry-thoseNV thePL three war.canoe
 They went back...to where they had carried the three canoes.

- b. ...*n-e-ke* *posa* *maneri* *ka* *toa-na* *e-u*
 RL-3.SBJ-PRF emerge they LOC fort-thatN 3.SBJ-be.thus
 ...they emerged at the fort.
- c. *ḡ-e* *toke* *ka-ia* *suḡa*
 NT-3.SBJ return LOC-theSG house
 They go back to the house.
- d. *n-e* *toga* *ka* *rarata-o*
 RL-3.SBJ arrive LOC beach-thatNV
 He arrived at that beach.

Two verbs meaning 'put' exist: *nai* and *lisa*. Both subcategorise for a theme complement, and with both, a PP is interpreted as goal:

- (7.135) *ḡahipa* *sagetolu* *ine,* *hod-i* *aḡe* *nai-ni* *ka* *suḡa* *tarai-ne*
 stone PN thisR take-TR go put-3SGO LOC house pray-thisR
 This stone Sagetolu, take it and put it in the church.

A number of other verbs of motion prompt goal interpretations of prepositional oblique locations. These include verbs such as *flalo* 'fly', where the actors themselves change location (as in (7.136)a.), or verbs such as *korho* 'pull', where it is an acted-upon undergoer that changes location (as in (7.136)b. and c.):

- (7.136) a. *ara* *ginai* *flalo* *ka* *nau-ḡu-o*
 I FUT fly LOC place-1SGP-thatNV
 I will fly to my home.
- b. ...*korho-u* *tagi-di* *ka-nau* *fai* *kokota* *a-hi...*
 pull-PRG RFL-3PLP LOC-place side PNLOC thisT-EMPH
 ...they pulled themselves to this place Kokota...

Some verbs which are not motion verbs prompt a goal interpretation of prepositional obliques with specific kinds of referents. For example a verb which realises an event which brings about the existence of small objects will prompt a goal interpretation of a prepositional oblique which has as its referent an object which could function as a receptacle. In (7.129) *roha* 'scrape' occurs with a prepositional oblique which is interpreted as a locative. In (7.137) the inherently resultative nature of the event interacts with the semantics of the oblique referent to prompt a goal interpretation:

- (7.137) *roha-i* *nhigo* *ka* *botolo* *ba* *ka* *tini*
 scrape-3SGO be.finished LOC bottle ALT LOC tin
 Scrape it into a bottle or tin.

Prepositional obliques occurring with the directional verb *hage* 'ascend' are interpreted as goal:

- (7.138) a. *n-e* *la* *hage-u-na* *manei* *ka* *toa*
 RL-3.SBJ go ascend-PRG-thatN he LOC fort
 He was going up to the fort.
- b. ...*ḡ-a* *fa* *hage-i* *ka* *hinage*
 NT-1.SBJ CS ascend-3SGO LOC boat
 ...we lift it into the boat.

However, with its antonym, *kave* 'descend', a PP will be interpreted as source:

- (7.139) a. *ia* *kakau* *n-e* *seha* *kave* *ka* *raro-no*
 theSG crab RL-3.SBJ climb descend LOC pot-thatNV
 The crab climbed out of the pot.

With some other verbs, such as *fufunu* 'begin', a PP will again be interpreted as source:

- (7.140) *ara n-a fufunu ka-ia sitoa*
 I RL-1.SBJ begin LOC-theSG store
 I started from the store.

When a serial verb construction involves both a goal oriented directional verb such as *mai* 'come' or *lao* 'go', and another verb for which PPs have a source interpretation, such as *kave* 'descend' or *fufunu* 'begin', the source interpretation applies:

- (7.141) a. *tana kave mai ka-ia riñata*
 then descend come LOC-theSG doorway
 ...then they come out from the doorway.
- b. *manei n-e fufunu mai-na ka suğa tarai*
 he RL-3.SBJ begin come-thatN LOC house pray
 He is coming from the church.

However, when a serial verb construction involves a goal oriented directional verb and a verb which has no implicit direct motion or action (like those discussed in 7.7.1.1), a PP is interpreted as goal. In (7.142)a., for example, *ravi* 'hide from' occurs with a PP which is interpreted as locative. However, in (7.142)b. the presence of *lao* 'go' means that a PP occurring with the complex predication is interpreted as goal:

- (7.142) a. *hei n-e ravi-nau ana ka bakla-na*
 who RL-3.SBJ hide.from-1SGO thatN LOC flat.root-thatN
 Who is hiding from me behind that flat root?
- b. *manei ġ-e-ke ravi lao ka-ira bakla*
 he NT-3.SBJ-PRF hide go LOC-thePL flat.root
 He hid down among the flat roots.

This applies equally to non-physical events:

- (7.143) *mane sala ge ruruboñi n-e-ke namha mai ka suaragi*
 man PN and PN RL-3.SBJ-PRF love come LOC PN
 Sala and Rurubongi were kind to Suaragi.

At least one verb, *fa kamo* 'transfer' (lit. 'cause to cross'), often occurs with two PPs, one interpreted as a source and the other a goal, in that order (the order is presumably temporally iconic):

- (7.144) *fa kamo-i bakru ta-au-ana ka timosi ana ka panakini ana*
 CS cross-3SGO liquid SB-exist-thatN LOC thermos thatN LOC cup thatN
 Transfer that tea from that thermos to that cup.

Like locatives, sources and goals may be physical locations, physical objects, people or non-physical entities. In (7.145) a PP occurs in each of the two clauses, one a source, the other a goal. Both refer to locations in a story:

- (7.145) *fu-funu ka keli-kava-o*
 RD-start LOC be.good-earth-thatNV
 Start from the peace
- n-e la mai-u ka ġilu-na toke-i-a ta dia*
 RL-3.SBJ go come-PRG LOC inside-3SGP arrive-3SGO-theSG SB be.bad
 [and] go ahead [until you] come to the badness.

7.7.1.3 Temporal locatives

The oblique interpretations discussed in 7.7.1.1 and 7.7.1.2 do not apply when the phrase which is governed by the preposition codes a temporal location of some kind. Temporal expressions occurring within a PP always locate the event in time, regardless of the semantics of the verb realising the event.

- (7.146) a. *hage ka saigona-na sarere ana*
ascend LOC evening-3SGP Saturday thatN
[They] went up on that Saturday evening.
- b. *ka nare t-au-ana bla e-ke aḡe keli bla manei*
LOC day SB-exist-thatN LMT 3.SBJ-PRF go be.good LMT he
On that very day he recovers.

As discussed in 5.5, some deictic temporal forms are inherently locative and occur as an oblique temporal locative without being governed by a preposition. Some temporal locative NPs, however, may or may not be governed by a preposition:

- (7.147) a. *niha fata lao ago buala ka wiki ta aḡe-o*
how.many occasion go youSG PNLOC LOC week SB go-thatNV
How many times did you go to Buala last week?
- b. *niha fata lao ago buala wiki ta aḡe-o*
how.many occasion go youSG PNLOC week SB go-thatNV
How many times did you go to Buala last week?

7.7.1.4 Cause

In some instances the semantics of the PP referent combined with the semantics of the predication prompt an interpretation of the PP as a cause. With the verb *lehe* 'die, be dead', for example, most PPs would be interpreted as the location of the dying or being dead, as in (7.148)a. Equally, prepositional obliques with human referents are normally interpreted as locatives, goals or sources, depending on the verb, as in (7.148)b.:

- (7.148) a. *n-e-ge lehe ia-hi kolodadara ka pauna kumai-na*
RL-3.SBJ-PRS die thatPV PNLOC LOC head-3SGP water-thatN
He died at Kolodadara at the headwater.
- b. *ke mai ka suaragi*
PRF come LOC PN
[They] came to Suaragi.

However, since deaths are assumed to result from a cause of some kind, prepositional obliques with human referents in clauses with the verb *lehe* are interpreted as having the semantic role cause:¹¹

- (7.149) a. *ka sala ge ruruboñi bla n-a lehe-na ara*
LOC PN and PN LMT RL-1.SBJ die-thatN I
Simply from Sala and Rurubongi I am dying.
- b. *n-e-ke lehe hogo-na bla ka mane aro si-ba-ia*
RL-3.SBJ-PRF die be.true-thatN LMT LOC man theseT FOC-ALT-PRO
He really did die from these men.

¹¹ Particularly since the Kokota assume that human intervention, usually with the assistance of a 'devil' or spirit, plays a part in any sickness or death.

This interpretation applies to a number of other responses, physical or emotional, which are seen as having some implicit cause. With the verb *mphoto* 'sweat', for example, a source of heat will be interpreted as a cause, not a locative ((7.150)a.). With a verb such as *fahega* 'be happy' a much wider range of PP referents, including humans or events, will be interpreted as having the semantic role cause ((7.150)b.).

- (7.150) a. *ago n-o mphoto ka naprai ana*
 youSG RL-2.SBJ sweat LOC sun thatN
 You are sweating from that sun.
- b. *ara n-a fahega ka ago*
 I RL-1.SBJ be.happy LOC youSG
 I'm happy with you.

The interpretation of a prepositional oblique as cause is particularly extensive with predications containing an experiencer verb. As discussed in 7.1.3.2, several classes of verbs subcategorise for an experiencer. With these verbs, a broad range of prepositional obliques are interpreted as the cause of the experienced sensation, an argument actually subcategorised for by the verb:

- (7.151) *ago n-o humu-nigo ka maliri-na zora-na*
 youSG RL-2.SBJ be.heartburn-2SGO LOC fat-3SGP pig-thatN
 You have heartburn from that pig fat.

The positive and negative existential verbs *au* and *teo* each have a number of closely related senses, including a general existential meaning and a sense of 'live', 'reside' or 'stay'. As discussed in 7.7.1.1, the latter senses prompt the interpretation of prepositional obliques as spatial locatives. However in some contexts the general existential sense occurs with a prepositional oblique representing an event or a participant, prompting an interpretation of that oblique as a cause of the existence or non-existence coded by the predication. The two examples in (7.152) come from a narrative about a devil giant who was eating people and almost wiped out the entire population before being killed:

- (7.152) a. *n-e-ge teo sini ka naitu parahaḡal-a-hi*
 RL-3.SBJ-PRS be.not FOC LOC devil giant-thisT-EMPH
 We are finished because of this giant.
- b. *n-e-ke kaike au nakoni-de-ṅa*
 RL-3.SBJ-PRF one exist person-theseR-IMM
 These people together lived on still,
- ka lehe-na-na naitu t-au-ne*
 LOC die-3SGP-thatN devil SB-exist-thisR
 because of the death of that devil.

7.7.1.5 Instrument

With some clauses a combination of the semantics of the predication and of a prepositional oblique prompt an interpretation of the oblique as having the semantic role instrument.

With a verb of hitting or striking, such as *faroho* 'smite', a prepositional oblique will normally be interpreted as a locative, or if the oblique is a body part, then a goal - a verb of physical contact carries an implicit point of contact, and an oblique body part will be interpreted as that point of contact:

- (7.153) *ia nakodou n-e faraho-ri ira mheke ka pau-di-re*
 theSG woman RL-3.SBJ smite-3PLO thePL dog LOC head-3PLP-thoseN
 The woman hit the dogs on their heads.

However, the verb also carries an implicit instrument. If the oblique realises a physical object that is able to be wielded in some way, it is interpreted as an instrument:

- (7.154) *ira huḡru suli n-e faraho-ri ira mheke ka ḡazu*
 thePL all child RL-3.SBJ hit-3PLO thePL dog LOC wood
 All the children hit the dogs with sticks.

Equally, a prepositional oblique with a verb of tying, such as *piri* 'bind', will normally be interpreted as a locative. However, when the oblique realises an object which is long and flexible, it is interpreted as an instrument:

- (7.155) *n-e la piri-ni-u ka-ia kolu e-u*
 RL-3.SBJ go bind-3SGO-PRG LOC-theSG snake 3.SBJ-be.thus
 He tied him up with the snake,

ka-ia kolu-seku-na-o manei
 LOC-theSG snake-tail-3SGP-thatN he
 with his snake's tail.

Instruments need not be physical objects. In (7.156) *fa-lehe* 'kill' (lit. 'cause-die') occurs in two examples with non-physical entities which are interpreted as instruments. Note that in (7.156)b. the oblique instrument is an argument of the negative existential verb *teo* (functioning as a kind of verbal proform). However, it relates semantically to *falehe*, the predicate of the preceding clause.

- (7.156) a. *ka fari-namha-i a-hi da fa-lehe-i-u mane-ne*
 LOC MT-love-3SGO thisT-EMPH 1INC.SBJ CS-die-3SGO-PRG man-thisR
 With this mutual kindness we will kill this man.

 b. *kopea, mala fa-lehe-i-u n-e-ke-u-o b-ara,*
 EXCLM PURP CS-die-3SGO-PRG RL-3.SBJ-PRF-be.thus-thatNV ALT-I
 Goodness! I intended to kill him,

teo bla si-boka-ḡu-na ka kuiti aro-hi
 be.not LMT FOC-be.able-1SGP-thatN LOC trick theseT-EMPH
 but I simply wasn't able to [lit. my ability simply was not] with these tricks.

7.7.1.6 Benefactive

A number of verbs realise a process of making something. With such verbs, where a prepositional oblique realises a physical location of some kind the oblique has the role of locative. However, if the referent of the oblique is a person, the argument is interpreted as a benefactive:

- (7.157) a. *heve n-e friñhe-i-na ka-man ta foḡra-u*
 what RL-3.SBJ work-3SGO-thatN LOC-man SB sick-PRG
 What was done for the man who is sick?

 b. *...ke la toi mala-nhau ka-manei*
 PRF go cook PURP-eat LOC-he
 ...[they] went [and] cooked food for him.

7.7.1.7 Comitative

With a number of verbs a prepositional oblique realising a human participant is interpreted as a comitative argument. These verbs all encode interpersonal contact of some kind: talking, shaking hands, having sex and so on. This is distinct from arguments involving the associative noun *tareme-* discussed in 5.7 and 7.7.2.3. The associative involves the sense that the actor performs the event encoded by the verb while in the company of the participant realised by the oblique. With prepositional comitative the event is instead directed towards the oblique participant as a co-participant.

Two general speech act verbs, *ooe* 'talk' and *turi/tu-turi* 'tell stories, chat', prompt a comitative interpretation of a human prepositional oblique. *Ooe* has both ditransitive and intransitive argument structures. With the ditransitive variant the interlocutor is realised as a core argument (as is the thing said, typically expressed as a subordinate clause):

- (7.158) *ara n-a-ke ooe-ni manei*
 I RL-1.SBJ-PRF talk-3SGO he
 I told him
- ta mala tazi-ni neu reregi-ni t-au-na no-g̃u zuta-na*
 SB PURP keep-3SGO and look.after-3SGO SB-exist-thatN GP-1SGP lamp-thatN
 to keep and look after my lamp.

With the intransitive form, however, the interlocutor is treated as a co-participant and is realised as a prepositional comitative oblique:

- (7.159) *ara manahagi ooe ka ago ginai*
 I want talk LOC youSG todayIRR
 I want to talk with you later.

Turi and *tu-turi* are the transitive root and derived intransitive counterparts of a verb meaning 'tell stories, chat'. With the transitive form *turi* the thing told is expressed as a core argument theme:

- (7.160) *turi-di-re keha tu-turi-di kokota*
 tell-3PLO-thoseN NSP RD-tell-3PLP PNLOC
 Tell some Kokota stories.

However, with the intransitive *tu-turi* a human prepositional oblique is interpreted as a comitative argument, again expressing a co-participant interlocutor:

- (7.161) *ara n-a tu-turi ka manei*
 I RL-1.SBJ RD-tell LOC he
 I chatted with him.

The verb *kubai* 'shake hands' can only be intransitive, and may occur with a human prepositional oblique interpreted as a co-participant:

- (7.162) *ago n-o kubai bo ka nakonide*
 youSG RL-2.SBJ shake.hands CNT LOC person-theseR
 You shook hands with these people.

Three verb forms refer to performing sexual intercourse. One is the verb root *ome* 'fuck'. The remaining two verbs, *visi* 'play' and *friñhe-puhi* 'do bad things' (lit. 'work-way') are used metaphorically for politeness or formality in place of *ome*, which is a non-respect term. With all three a human prepositional oblique is interpreted as a comitative oblique expressing a co-participant:

- (7.163) a. *ara n-a ome ka gase ana*
 I RL-1.SBJ fuck LOC woman thatN
 I fucked with that woman.
- b. *ara n-a no-g̃u visi ka ago*
 I RL-1.SBJ GP-1SGP play LOC youSG
 I want to play [ie. have sex] with you.

- c. *ara n-a no-g̃u friñhe-puhi ka ago*
 I RL-1.SBJ GP-1SGP work-way LOC youSG
 I want to do bad things with you. [ie. have sex]

7.7.2 Semantic roles of other oblique argument types

The formal characteristics of these argument types are discussed in chapter 5.

7.7.2.1 Deictics and local nouns

Spatial deictic locative forms (see 5.2) and local nouns (see 5.4) have the semantic roles of spatial locative, goal or source, depending on the semantics of the verb. Source interpretations, however, occur rarely. In (7.164) deictics and location names occur with a spatial locative role, and in (7.165) as goal:

- (7.164) a. *teo g̃-a manahagi-nigo ta au-na ade*
 be.not NT-1.SBJ want-2SGO SB exist-thatN here
 I don't want you to stay here.
- b. *t-au-ana n-e au mautu bo*
 SB-exist-thatN RL-3.SBJ exist right CNT
 That's on the right.
- (7.165) a. *hage mai ade*
 ascend come here
 Come up here!
- b. *n-e lao-u fate*
 RL-3.SBJ go-PRG above
 He's going up on top.

Temporal deictic locative forms (see 5.5) function as temporal locatives. The local nouns *legu* 'behind' and *g̃ilu* 'inside' occur with a temporal locative role as well as spatial locatives. This is discussed in 5.4.1, and illustrated with examples (5.16)c.-d. and (5.17).

7.7.2.2 Location names

The proper names of physical locations (see 5.3) typically function as oblique arguments. They occur commonly with the existential verb *au* as a locative:

- (7.166) *g̃-e au-gu buala e-u*
 NT-3.SBJ exist-PRG PNLOC 3.SBJ-be.thus
 He [was] living in Buala.

When *au* occurs as the final verb in a serial construction a location name remains a locative rather than a goal or source, even when the construction also involves a directional verb:

- (7.167) a. *ke aḡe au paloho*
 PRF go exist PNLOC
 He went [and] stayed at Paloho.
- b. *n-e mai au buala e-u*
 RL-3.SBJ come exist PNLOC 3.SBJ-be.thus
 It came [and] was at Buala.

This also applies when other non-motion verbs occur following motion verbs in serial constructions:

- (7.168) a. *g̃-e mai haidu-na selana*
 NT-3.SBJ come meet-thatN PNLOC
 he came and held a meeting at Selana.
- b. *g̃-e mai lehe-u bla n-e-u are rabaka...*
 NT-3.SBJ come die-PRG LMT RL-3.SBJ-be.thus thoseN PNLOC
 Then came [and] died, some at Rabaka...

As with prepositional obliques, some verbs prompt a goal interpretation:

- (7.169) a. *n-e-ge kusu la toga no-di-u bagovu*
 RL-3.SBJ-PRS be.first go arrive GP-3PLP-PRG PNLOC
 They're the first to be going and arriving at Bagovu.
- b. *aḡe da hage-u fitupoḡu*
 go IINC.SBJ ascend-PRG PNLOC
 Let's go up to Seven Hills.
- c. *ke pulo e-u tana zelu*
 PRF return 3.SBJ-be.thus then PNLOC
 [They] returned to Zelu

With other verbs the oblique is interpreted as a source:

- (7.170) *gita da-ke fufunu mai-da hoḡrano*
 weINC IINC.SBJ-PRF begin come-IINCP PNLOC
 We came from Hograno.

While physical locations typically function as a locative, goal or source, in certain semantically or contextually dictated circumstances they may have other semantic roles. For example in 7.7.1.4 prepositional obliques with human referents were shown to have the semantic role cause when the predication included the verb *lehe* 'die'. This also applies when a location name occurs as the oblique, the sense being that people from that location caused the death:

- (7.171) *n-e la lehe mariṇe, ka mane aro*
 RL-3.SBJ go die PN LOC man thoseN
 He is dead from Maringe, from those men.

In addition to oblique roles, location names may function as a core argument, with semantic roles including stative and theme or patient (see example (7.47) above).

7.7.2.3 Contextualising and associative nouns

Contextualising nouns, discussed in 5.6, and associative nouns, discussed in 5.7, have the semantic roles of context and associative respectively.