Valence and Transitivity in Saliba
an Oceanic Language of Papua New Guinea

Valence and Transitivity in Saliba
an Oceanic Language of Papua New Guinea

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für meinen Bruder Jakob

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ABBREVIATIONS

APP	applicative
CAUS	causative
CL1	possessive classifier (general)
CL2	possessive classifier (food etc.)
COND	conditional marker
CONJ	conjunction
DEM	demonstrative
DET	determiner
DIR	directional
DIST	distal
DITR	ditransitive
DUR	duration
EMPH	free emphatic pronoun
EX	exclusive
INC	inclusive
INTR	intransitive
INTRJ	interjection
IR	irrealis marker
KAI	de-transitivizer (chap. 8)
KALI	postposition "towards"
LOC	locative
NEG	negative
O	object
OBLI/COMP	obligation/complementizer
P	possessive
PERF	perfect
PL	plural
PM	"previously mentioned", givenness marker
PP	postposition
PRHIB	prohibition
PROX	proximal
PRSUP	presupposition
RECIP	reciprocal
RED	reduplication
RESULT	resultative
SG	singular
TAM	tense/aspect/mode (*kabo*: "immediateness/future")
TR	transitive
WAI	postposition "towards"

Milne Bay area
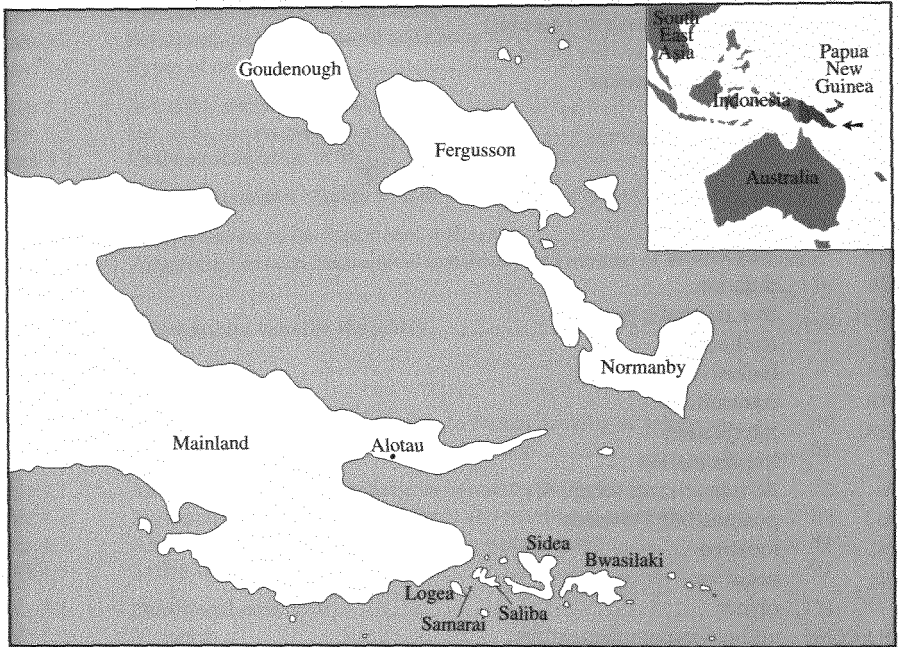
Samarai area
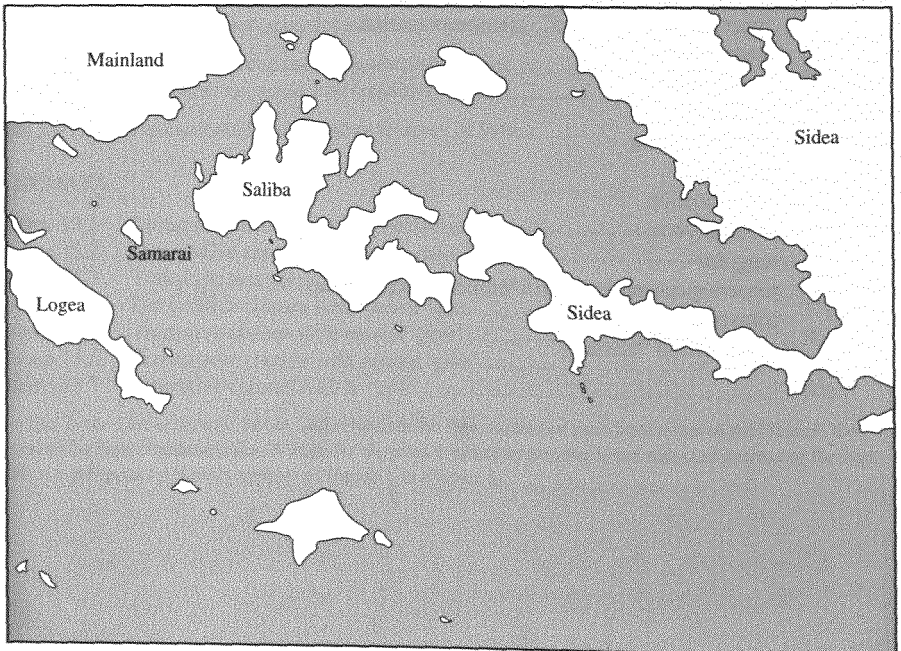
1. Introduction

1.1 THE SALIBA LANGUAGE AND ITS SPEAKERS

1.1.1 LINGUISTIC CLASSIFICATION AND LOCATION

Saliba is a Western Oceanic language belonging to the Suauic family of the
Nuclear Papuan Tip network (Papuan Tip Cluster) (Cooper 1975, Ross 1988:
190ff).[1] The language is spoken on the island of Saliba and on adjacent parts of
Sidea Island in Milne Bay Province, the easternmost part of Papua New Guinea. A
small number of speakers also live in parts of the nearby mainland and on Samarai
Island. As a rough estimate, Saliba is spoken by approximately one thousand
speakers. On the neighboring Logea (Rogeia) Island, a very closely related dialect
is spoken and the estimated number of speakers for both the Saliba and the Logea
dialect is around 2,500.

1.1.2 LANGUAGE CONTACT

Milne Bay Province is historically a contact area between Austronesian and
Papuan languages and the principal linguistic innovations shared across the
Papuan Tip Cluster are generally attributed to influence from Papuan languages
(Bradshaw 1982, Ross 1988). Nowadays, there is only one surviving Papuan
language in the area, Yeletnye on Rossel Island (Henderson 1995, Levinson in
press a and b), in the far East of Milne Bay Province. Inland, the geographically
closest Papuan languages belong to the Dagan family located in the Owen Stanley
Range and at the North coast (Murane 1974), and the Mailuan family at the South
coast of Central Province.

Suau, a closely related language, was historically used as a trade language in the
area and later by the Kwato mission (originally London Missionary Society) as a
lingua franca. There are a Suau Bible translation and a hymn book, which are
commonly used in Saliba speaking communities. The use of Suau as a mission
language had a strong impact on Saliba and there has been extensive borrowing of

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[1]   *Note that Papuan Tip Cluster languages are Austronesian and the term 'Papuan'
refers to the geographic location here rather than to the genetic affiliation.*

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vocabulary. In several cases, a borrowed term co-exists with the original Saliba word without differences in meaning. To a lesser degree, Saliba has also been influenced by the two other mission languages in the area, Dobu (United Church) and Wedau (Anglican), as well as other Milne Bay languages like Tavala, and Ware.

The influence of English as the modern lingua franca of Milne Bay Province (rather than Pidgin as in most parts of PNG) is strong in all areas of daily life and it is reflected in extensive borrowing into Saliba. English also seems to be gradually replacing Suau as the younger people's church language, but there is an ongoing SIL bible-translation project in Saliba and Logea which may have an impact on this in the future.

1.1.3 LANGUAGE MAINTENANCE, LITERACY, AND EDUCATION

Saliba is still acquired as a first language throughout the Island and there are now attempts to teach it in village-run monolingual pre-schools. There is an SIL-produced alphabet book (Oetzel, S. 1998) and a number of monolingual elementary readers in Saliba (adapted for preschools by S. Oetzel). From primary school on, education is entirely in English. Young people tend to have at least six years of schooling and are mostly fluent in Milne Bay English. Quite a number of older people read Suau (and Saliba if presented with it) but most do not read English. Intermarriage with other language communities is quite common and often seems to result in children not acquiring the language unless they grow up in a Saliba-speaking community.

The language has no written tradition and it does not yet have a standardized orthography. Recently, SIL developed a practical orthography which is now in the "trial orthography" phase (Oetzel and Oetzel 1997, Oetzel, R. 1998). For the purpose of this thesis, I follow this practical orthography with a few exceptions. I write certain morphemes together (rather than separating them as suggested in the orthography) to show the unity of grammatical words. The main examples of this are the subject prefix and the verb stem as well as the individual stems of complex verbs (which, in the practical orthography, are sometimes written together and sometimes not). Similarly, I generally write clitics attached to the noun or verb which they follow.

1.1.4 PREVIOUS LINGUISTIC WORK

The only previous work on Saliba is Mosel's (1994) short sketch grammar and the phonological description by Oetzel and Oetzel (1998). Linguistic work on the wider Suauic family includes Abel (1977), Cooper (1969, 1970, 1992), and Lithgow (1976a and b). Some further information on phonology and the lexicon of Suauic languages can be found in the British New Guinea Annual Report (1890), Cochran (1978), and Ross (1988). See also Carrington (1996).

1.2 AIMS AND FOCUS OF THE THESIS

This thesis is a morpho-syntactic account of Saliba verbs and simple verbal clauses with special emphasis on the expressions of valence and transitivity. The goals of the thesis are twofold: on the one hand, it aims at a thorough description of core areas of Saliba grammar, on the other hand, it is concerned with linguistic typology and with the contribution a study of Saliba may make in this field. In addition, in several parts of the thesis, I draw on Saliba data to show implications for linguistic theory. The methods applied in this study are tailored to these goals. To a large extent, they were chosen according to the descriptive needs arising from the data, but the methods were also selected so as to capture the typological characteristics of the language and describe them in terms which allow cross-linguistic comparison. At the core of the present approach are (a) the distinction of three structural levels of the grammar and (b) the consistent and rigorous application of morpho-syntactically-based definitions across these structural levels. In most parts, I do not apply a specific syntactic theory but strive for a largely framework-independent description of the language. This is to promote readability for a broad audience, especially since this study is one of the first thorough linguistic works on Saliba, together with Mosel (1994) and Oetzel and Oetzel (1997). In parts of the thesis, I draw on the framework of Role and Reference Grammar (especially chap. 5, complex verbs), which provides a useful set of distinctions for dealing with language description and typology. The approach taken in this thesis is clearly not the only possible one, but one that I feel is suitable for the grammatical description of Saliba and its typologically more interesting features.

Some of these features are language specific, others are shared across Oceanic languages or within the immediate subgroup. Historically, Saliba has been located in a contact area with Papuan languages which has led to a number of changes and resulted in differences to the modern Oceanic and Austronesian languages. These

changes are largely shared across the Oceanic languages close to the New Guinea mainland. Among the features which are of special typological or theoretical interest in Saliba, or which are particularly complex and challenging for linguistic description, are the following:

- Object-Verb constituent order and related features such as postpositions and genitive-noun ordering (but noun-adjective), like in Papuan languages, as opposed to Proto-Oceanic Verb-Object, prepositions, noun-genitive ordering.

- two positions (pre-nuclear vs. post-nuclear) for incorporated nouns (chap. 10).

- intransitive verbs incorporating patient objects (chaps. 3.4.1, 10).

- word-order variation in negative clauses correlating with the scope of negation (sentence focus vs. predicate focus) (Margetts 1999).

- a mainly monovalent and labile inventory of verb roots (chap. 4).

- complex verb constructions consisting of up to four verb stems which can combine lexical compounding and head-modifier relations in a single word (chap. 5).

- clauses with morphologically intransitive verbs and object NPs (chap. 12).

- a suppletive paradigm of 'give' with suppletion depending on grammatical person (chap. 13, Margetts in prep.).

- productive strategies for encoding event participants by pragmatic implication rather than as syntactic arguments (chap. 14).

The present study focuses on Saliba verbs and verbal clauses but it constantly touches, if only in passing, on other areas of the grammar. The choice of verbs and verbal clauses and of valence and transitivity as the core topic for this study was motivated by the fact that, in Saliba grammar, this is clearly "where the action is". As Lynch et al. (to appear §3.3.2) state, "[i]t is in the area of verbal morphology and verb phrase syntax that Oceanic languages generally exhibit the greatest complexity." It is also in this area of the grammar where many of the most interesting features lie for the study of language typology.

Transitivity has long been a focus of research in Oceanic and Austronesian linguistics. There are many important studies focusing on the function of the Proto Oceanic "transitive suffixes" *-i and *-aki(ni) and their reflexes in modern Oceanic languages (cf. Arms 1973, Clark 1973, Pawley 1973, 1986, Pawley and Reid 1980, Harrison 1978, 1982, to name but a few). Among the studies which look at transitivity in a wider context, as a discourse phenomenon, are Sugita (1973), Wouk (1986), and Cooreman (1987). The motivation for this work is clearly that linguists have recognized for a long time that the phenomenon of "transitivity" seems to be of a different kind and to play a different role in Oceanic languages than in the better-known languages of the European type.

So, what are these differences and what characterizes "transitivity" in Oceanic languages? In their classic work, Hopper & Thompson (1980) show that there is more to transitivity than the number of arguments and the presence or absence of an object. They argue that it is a property of the whole clause and show that, from a cross-linguistic point of view, transitivity can be described as a scalar phenomenon, which may apply to different constructions to different degrees.

Transitivity concerns verb morphology, syntactic and semantic argument structure, as well as discourse organization. All of these domains are relevant but languages differ in how and to what extent the expressions of transitivity are manifested in these areas. For linguistic description and theory, it is crucial to tease apart and distinguish the manifestation of transitivity in these different domains. In the present study, I describe the expressions of transitivity as a system of discrete morpho-syntactic features, located on different structural levels of the grammar. Oceanic languages are known for clauses which show both transitive and intransitive features and Saliba has its share of such constructions. A core topic of this thesis is an account of clauses with morphologically intransitive verbs taking lexical objects. Based on the expressions of valence and transitivity, I attempt a typological characterization of Saliba and I also review some evidence suggesting that this typological characterization may be extended to the larger Oceanic language family. In this sense, the thesis stands in the tradition of the work by Wouk (1986) which describes characteristics of transitivity marking peculiar to the Austronesian language family.

For the typological characterization, I draw on work by Nichols (1982, 1984a, 1984b) who proposes the notion of fundamental transitivity or intransitivity as a main parameter in which languages can typologically differ. This parameter is based on criteria such as the largely (in)transitive inventory of verb roots; the predominantly (de)transitivizing nature of derivational rules; sensitivity of transitivity marking to features such as those discussed by Hopper and Thompson (1980), e.g. affectedness or individuation of object. In fundamentally transitive languages, only few transitive features have to be present in a clause in order to trigger transitive marking. In fundamentally intransitive languages, by contrast, many transitive features have to be present in the clause for the verb to be marked as transitive.

In this study, I show that Saliba can be classified as fundamentally intransitive. Throughout the thesis, I relate Saliba data from the different structural levels to the parameter of fundamental (in)transitivity and I lay out further criteria on which a classification in terms of this parameter can be based. I show that a classification in terms of fundamental (in)transitivity can account for a number of salient and seemingly unrelated typological features of Saliba and other Oceanic languages, as well as for differences between Oceanic and languages of the European type. Here it is hoped that this thesis extends beyond some of the existing work and contributes to the study of transitivity in Oceania as well as cross-linguistically. In the conclusion, I draw together the various threads of analysis and present an overview of fundamental intransitivity in Saliba.

To summarize, this thesis is neither a full descriptive grammar nor a purely theory-driven study of a particular linguistic phenomenon. It is rather a description of a core area of Saliba grammar focusing on an area of particular theoretical and typological interest.

1.3 THE DATA

The present account of Saliba is based on a text corpus of about six hours of transcribed spoken language (in the form of a 'Shoebox' data base), as well as extensive elicitations with speakers. The data was collected during four visits to Papua New Guinea, ammounting to thirteen months altogether, between 1995 and 1998. The speakers who contributed to this corpus were between about fifteen and eighty years old and both women and men participated. The text collection consists mainly of traditional narratives (eight), personal narratives and historical accounts (five), procedural texts (five) and liturgical texts e.g. church sermons (three), but also includes some short conversations (six). Besides this, text material was also collected with the help of non-verbal stimuli for story telling developed by the Cognitive Anthropology Research Group at the Max Planck Institute for Psycholinguistics in Nijmegen (forty eight), and with the help of the "Pear film" (Chafe 1980) (four). For elicitations, I worked with two adult speakers, one woman and one man, but other speakers also helped with the occasional elicitation session.

Text examples are marked throughout the thesis by the text reference in parentheses following the English translation. Most examples without a text reference are elicited, but some also stem from notebook transcriptions of natural

spontaneous speech. Texts were divided into discourse units based on intonation and pauses. These discourse units can be considered intonational sentences. Examples from texts are generally presented as fragments of utterances rather than as complete sentences (unless marked as starting with a capital letter and ending with a period).

1.4 STRUCTURE OF THE THESIS

The thesis is structured in four parts. Part one, consisting of chapters 1 to 3, provides the general introduction to the research topic and to the Saliba language. Besides the general introductory notes in this chapter, a brief grammatical sketch is presented in chapter 2 with background information on areas of the grammar which are not covered in detail in the body of the thesis. Chapter 3 is one of the core pieces of the thesis, presenting the definitions applied throughout the study and introducing the notion of fundamental intransitivity and its diagnostics. Part two (chapter 4) focuses on Saliba verb roots and stems and discusses the valence-based verb classes of the language. Part three (chapters 5 to 10) is concerned with derived stems and transitivity-changing morphology. Chapter 5 presents an account of complex verbs (nuclear-layer serialization), chapter 6 discusses the applicative suffix and chapter 7 the causative prefix. Chapters 8 and 9 are concerned with the two detransitivizing prefixes *kai-* and *ta-*. Chapter 10 is a description of the different types of noun incorporation in Saliba. Part four of the thesis (chapters 11 to 13) is concerned with clause-level transitivity in intransitive, transitive, and ditransitive clauses. Chapter 12 constitutes another core piece of the study, investigating clauses with morphologically intransitive verbs and object arguments. Finally, part five (chapter 14) is an account of some Saliba strategies for the encoding of events and of the relation between clause-level transitivity and the number of principal event participants.

GRAMMATICAL SKETCH

In this chapter, I provide some brief notes about general features of Saliba grammar. They shall provide quick references to topics which are not in the focus of this study. A more complete grammatical sketch of Saliba is available in Mosel (1994).

Saliba is a nominative-accusative head-marking language. The intransitive subject (S) and the transitive subject (A) (following Dixon's 1979 terminology) pattern identically and stand in contrast to the object of transitive verbs (O) both on morphological and syntactic grounds. There is no basic formal distinction between the intransitive subjects of stative (or 'unaccusative') verbs (S_O) and the intransitive subjects of active (or 'unergative') verbs (S_A) (but cf. chap. 4.2.1). As Saliba does not show much evidence of hierarchical clause structure with formal means of subordination (cf. 2.2.2) there are no clear tests for the relations S, A, and O involving 'control' or 'raising' phenomena. Both subjects and objects can be relativized (cf. 2.4.4), there is no case marking on nominals, and also word order does not provide a defining characteristic since S and A as well as O precede the verb. The grammatical relations of subject (S, A) and object (O) can be identified primarily by pronominal cross-referencing on the verb. Subjects are marked by an obligatory prefix on the verb stem, objects are cross-referenced by a suffix on the verb (for a discussion of argumenthood and the term 'cross-referencing' cf. chap. 3). In contrast to subjects, which are always cross-referenced, only certain types of objects are marked on the verb (cf. chap. 12).

Like most Papuan Tip Cluster languages, but unlike Austronesian languages in general, Saliba has a predominant constituent order of Object-Verb (OV). The change to OV from Proto-Oceanic VO constituent order can be attributed to early contact with Papuan languages and is shared across most languages of the Papuan Tip Cluster. Saliba also shows related word order characteristics like postpositions and genitive-noun ordering, as opposed to prepositions and noun-genitive order in other Oceanic and Austronesian languages. Adjuncts can occur before and/or after the verb and are generally marked by postpositions.

2.1 PHONOLOGY

A more thorough phonological sketch of Saliba is presented in Oetzel and Oetzel (1997). Here, I present only basic information on the phoneme inventory. Saliba has 16 consonant phonemes including four labialized plosives and one labialized nasal.

Consonants	bilabial		alveolar		velar		glottal
plosive	p	b	t	d	k	g	
labialized plosive	pw	bw			kw	gw	
nasal	m		n				
labialized nasal	mw						
fricative			s				h
lateral approximant			l				

The language distinguishes five phonemic vowels.

Vowels	front	middle	back
close	i		u
mid-open	e		o
open		a	

There are a number of non-phonemic diphthongs *ei, eu, ai, ae, au, ao, ui, oi,* and *ou.* The two vowels of a diphthong build a single heavy syllable (as do long vowels). Vowel length is not phonemic. In word or syllable-initial position, the vowels /i/ and /u/ are realized as [y] and [w] respectively if they are followed by a [- high] vowel.

/ianua/	*yanuwa*	'place'
/ualata/	*walata*	'clay pot'

Glottal stops are not phonemic but are inserted before a word-initial vowel if it is followed by a consonant or a [+ high] vowel. In word-medial position, glottal stops are represented by ' in the orthography.

/poopoona/	*po'opo'ona*	'round one'
/aa/	*a'a*	'be clean'

Syllables can have the pattern CV, CVV or CVN. In Saliba reduplication, two light syllables are reduplicated (CV) or one heavy syllable (CVV, CVN), cf. 2.2.1.2.

Stress is not phonemic. Primary stress lies generally on the penultimate syllable. There are a few exceptions to this, like the name [Sáliba] itself which carries primary stress on the first syllable. The motivations for such exceptions are yet unclear and require further research. In words with more than two syllables, the initial syllable carries secondary stress.

Lexical roots consist of at least two light or one heavy syllable while function words and clitics consist of a single light syllable (but also more) (cf. 2.5.3.4). Simple verb stems build phonological (and grammatical) words with their pronominal affixes, nominals build phonological (and grammatical) words with their possessive suffixes if they are inalienably possessed (2.5.2.2, 2.4.5). For complex verb stems which are composed of more than one verb stem or which include incorporated nouns, the situation is less straightforward as some build single morphological words while others do not. Morphemes which attach at the end of a word are considered suffixes if they may change the stress pattern of the word such as pronominal affixes, the directional markers *-ma* and *-wa* or the perfect suffix *-ko*. Morphemes are considered clitics if they do not influence the stress pattern of the form to which they attach, such as the determiner clitics *-wa* and *-ne*. In the discussion throughout this thesis, I employ a morphological/ grammatical definition of 'word' rather than a phonological one.

2.2 VERB PHRASES AND VERBAL CLAUSES

Saliba verbs and verbal clauses constitute the center of this study and are discussed extensively in the body of the thesis. In this section I therefore present only a quick overview. In particular, I provide some information here on two areas which are not in the focus of the later discussion: TAM marking and complex sentences.

Every Saliba inflected verb constitutes a potentially complete clause. A clause may consist of an inflected verb only, or of a verb plus its extensions such as lexical arguments or adjuncts. The predominant constituent order is SOV for lexical elements. Adjuncts can occur before and/or after the verb and are generally marked by postpositions with the exceptions of some temporal nouns. Being a head-marking language, Saliba exhibits extensive omission of NPs and there is basically no NP which must surface with a verb. As in other Oceanic languages, there is no evidence in Saliba for a category of verb phrase including the verb and its object.

Every inflected verb obligatorily carries a pronominal subject prefix and morphologically transitive verbs also carry an object suffix indicating person and number of the object referent. With inanimate objects, the object suffix does not always agree in number and the singular form may be used even if the object referent is plural (though not vice versa).

The language has monovalent, bivalent and labile verb roots. Without derivational morphology being added, monovalent roots surface as intransitive verb stems, bivalent roots surface as transitive verb stems, and labile roots can surface as either. Saliba verb classes are discussed in chapter 4. Transitive stems can be derived from most intransitive stems either by means of the applicative (or 'transitive') suffix or the causative prefix and are discussed in chapters 6 and 7. There is only one type of applicative/transitive suffix in Saliba, while many Oceanic languages distinguish two. Detransitivizing processes are described in chapters 8 and 9 on the prefixes *kai-* and *ta-* and in chapter 10 which is concerned with noun incorporation. Complex verbs (nuclear-layer serialization) consisting of more than one verb stem are discussed in chapter 5. There are no passive constructions and the language employs clauses with impersonal (third person plural) subjects to demote the agent of an action.

2.2.1 TENSE, ASPECT, MODE

Tense is not an obligatory category in Saliba and arguably temporal reference is rather established by markers of aspect. There is a perfect suffix *-ko* and a future and immediateness particle *kabo*. Progressive aspect is marked by reduplication. An unmarked clause can have different temporal reference depending on its context. Once temporal reference has been established for a clause, following clauses typically do not explicitly mark any temporal anchoring. As a convention in this thesis, I translate unmarked clauses as past tense in the English gloss.

2.2.1.1 Perfect

The perfect marker *-ko* indicates that the activity expressed by the verb is completed or, with stative verbs, that a state resulting from an action has been achieved. Speakers tend to translate the suffix *-ko* as 'already' into English. The marker can be categorized as a suffix rather than a clitic since it triggers the word-medial allomorph of the third person singular object suffix (cf. 2.5.2.2 and 4.1.2) and because it can create a stress shift onto the new penultimate syllable.

(1) *Se-lao-**ko**.* (2) *Boga-gu ye-sese-**ko**.*
    3PL-go-PERF   belly-1SG.O 3SG-swollen-PERF
    'They left already.'   'My belly is already full.'

There is also a complex verb construction with the stem *gehe* 'finish' or the synonymous term *kohi* 'finish'. Such constructions are discussed in detail in chapter 5.

(3) *Se-paisowa-**gehe**.* (4) *Ye-dou-**kohi**.*
    3PL-work-finish   3SG-cry-finish
    'They finished working'   'He finished crying.'

Given that perfect expressions cross-linguistically often develop from terms like 'finish' it is conceivable that the suffix *-ko* developed from an earlier complex verb construction with the stem *kohi* 'finish', which, according to speakers, is the older and original Saliba form.

2.2.1.2 Progressive

The progressive aspect is expressed by reduplication of the verb stem. Reduplication applies to the first two syllables of the simplex or derived stem if they are light. If the word-initial syllable is heavy, featuring a diphthong, long vowel or nasal, only the initial heavy syllable is reduplicated (cf. 2.1 and 4.2.1.3).

(5) *Ye-**kita**-kita.* (6) *Se-**lao**-lao.*
    3SG-RED-see   3PL-RED-go
    'He was looking.'   'They were going.'

(7) *Ye-**to**-tolo.* (8) *Se-**tam**-tam.*
    3SG-RED-stand   3PL-RED-squeeze
    'He was standing.'   'They were squeezing.'

With stative verbs, reduplication expresses an inchoative function as in the case of the final verb in (9). If a causative stem occurs in the progressive aspect the causative prefix plus the first syllable of the root are reduplicated as shown of the first verb in (9).

(9) *Ma-habulu-da se-**hesu**-he-susu-da ta-**laki**-laki.*
    with-small-1INC.P 3PL-RED-CAUS-milk-1INC.P 1INC-RED-big
    'When we are small they breast-feed us until we grow up.'

2.2.1.3 Immediateness/future: *kabo*

The particle (i.e. uninflecting function word cf. 2.5.3.4) *kabo* is used to mark future reference as in (10).

(10) *Ku-lao na malaitom **kabo** ku-lao-ma ...*
    2SG-go CONJ next.day TAM 2SG-go-hither
    'You go now, and tomorrow you will come (back) ... ' (tbl72)

Kabo also occurs in utterances with non-future reference to mark immediateness,

independent of the absolute temporal reference of the clause. This is the case in (11) which expresses an event in the immediate past.

(11)   *Teina* **kabo** *ya-lage.*
         this   TAM   1SG-arrive
         'I just arrived.'

In addition, *kabo* functions as a discourse particle indicating temporal sequence of events, again regardless of the absolute temporal reference of the clause. An example is presented in (12).

(12)   *Hewa-hewali-o-wa*   *se-kai-kaikewa-i-ø*   *na*   **kabo** *ye-maliwai.*
         RED-young.man-PL-PM   3PL-RED-look.at-APP-3SG.O   CONJ TAM   3SG-vomit
         'The young men were watching her and then she vomited.' (yam44-45)

2.2.1.4 Intention/obligation: *bena*

The particle *bena* can express intention and/or obligation, as in (13), but it can also function as a complementizer, as in (14). Note however that *bena* is not obligatory between the two clauses in (14).

(13)   **Bena** *ya-lao Samarai.*   (14)   *Ya-henuwa* **bena**   *ya-lao* *Samarai.*
         OBLI/COMP 1SG-go Place.Name   1SG-like   OBLI/COMP   1SG-go   Place.Name
         'I should/must go to Samarai.'   'I want to go to Samarai.'

2.2.1.5 Condition and irrealis mode: *taba, taga, aga, ena*

There is a group of irrealis and conditional markers whose functional distinction is at present still unclear. Consider the conditional clauses in (15) and (16).

(15)   **Ena** *daumwali* *kabo*   *ya-lao-wa.*
         IR   calm.sea   TAM   1SG-go-thither
         'If the sea is calm I will come.'

(16)   **Aga** *hesau* *ya-ginauli* *kabo* *u-kita.*
         IR   other   1SG-make   TAM   2SG-see
         'If I had made one you could see it.' (Nogi:40)

In negated conditional clauses, the conditional marker *ena* seems to be preferred over the other particles. An example is given in (17):

(17)   **Ena** **nige** *waga* *kabo*   *ye-naya-naya.*
         COND   NEG   boat   TAM   3SG-RED-wait
         'If there is no boat she will wait.' (F-dial:24)

In negative clauses, the TAM particles *kabo* and *bena* cannot occur. Instead one of the irrealis markers precedes the negative.

(18) a. **Taba** **nige** *ya-lao* *Samarai.*
         IR   NEG   1SG-go   Place.Name
         'I shouldn't (won't) go to Samarai.'

2.2.2 COMPLEX SENTENCES

2.2.2.1 Intonational sentences vs. clause chains and serialization

In Saliba discourse, more or less complex units can be identified which share one intonation contour and whose final falling pitch typically correlates with pauses in speech. They can be considered intonational sentences. The texts in the data base are divided into such units. Intonational sentences can be composed of one or more clauses. Where several clauses are combined in one discourse unit, as for example in (19), the question arises of the relation between the clauses of such complex sentences.

(19) *Kaikaiwa   ye-hai-ø   ye-lao-ma   ede*
        stick   3SG-take/get-3SG.O 3SG-go-hither PRSUP
        'He got a stick, came,

        yo-na   golowa-wa   ye-mose-i-ø.
        CL1-3SG.O younger.bother-PM 3SG-give-APP-3SG.O
        and gave it to his small brother.' (a-r1c:18)

Mosel (1994: 38/39) uses the term 'clause chains' for such complex constructions. She suggests that they are chains rather than series of independent clauses because of their intonation contour and because speakers regard them as units. I take a slightly different position (although the difference might in the end be terminological) in that I reserve the term 'clause chain' for constructions which show a dependency relations between clauses. Examples of this are well known from the non-Austronesian languages of Papua New Guinea which show switch reference systems. In Foley's (1986, 1991) use, the term 'clause chain' refers to a phenomenon that is manifested in some ways in the grammar of that language. A defining criterion is that the verbs of a chain are dependent on one main verb. 'Dependent verbs' (or 'medial verbs') may not stand alone as a complete sentence, and the dependent status is reflected in their inflectional morphology. In the Saliba cases, such a dependency relation is not observable beyond the shared intonation contour. There is no formal hierarchical relation between the verbs involved (except that the events are typically described in temporal order). Each of the verbs in example (19) could stand alone as a complete utterance. For this reason, I consider the Saliba constructions as a discourse phenomenon rather than as grammaticalized structures. Intonational sentences are not grammatically defined but reflect the speaker's choice to structure the discourse and to package information into units (cf. Chafe 1987 for a discussion of clauses vs. sentences).

Another term which has been used in the literature for certain complex constructions with more than one verb is '(core-layer) serialization'.[1] Again, I reserve this term for grammaticalized constructions which show some kind of morpho-syntactic dependency between verbs. But for Saliba intonational sentences as in (19) there are yet no clear formal criteria showing that this is the case. One problem in identifying potential cases of serialization is that the language has only few inflectional categories (cf. 2.2.1) and that there is little morphological material which could reveal a dependency relation between two juxtaposed verbs (e.g. by inflectional categories being marked on one verb but not on the other). A further problem lies in the fact that every inflected verb may constitute an independent clause by virtue of the obligatory pronominal affixes. This complicates the distinction between clause chains and verb serialization even if a dependency relation can be established.

However, there are indeed constructions in Saliba which point to some degree of dependency between inflected verbs and these are potential candidates for serialization or chaining. Consider the sentence in (20) which shows two juxtaposed verbs the first being intransitive the second transitive. The transitive object stands sentence-initially and precedes the intransitive verb.

(20)   *Wawaya-o   ya-lao   ya-wase-nei-di.*
         child-PL   1SG-go   1SG-search-APP-3PL.O/P
         'I go and search for the children.'

Saliba constituent order is rigid and an object noun generally precedes its verb directly but in the example, the intransitive verb intervenes between the transitive verb and its object. The construction without the final transitive verb is ungrammatical as shown in (21).

(21) *   *Wawaya-o   ya-lao.*
         child-PL   1SG-go
         'I go the children.'

Final analysis of such constructions is pending further research. Future careful study of intonation patterns and of the scope of negation might reveal workable criteria for dependency relations between inflected verbs which can be considered serialization or clause chaining. This would allow one to distinguish between complex intonational sentences with juxtaposed clauses and those with grammaticalized complex structures.

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[1] *Cf. Foley and Van Valin (1984) and Foley and Olson (1985) for the terms 'core-layer' vs. 'nuclear-layer' serialization. Cases of nuclear-layer serialization, where several verb stems combine in a single inflected verb, are discussed in chapter 5.*

2.2.2.2 Co-ordination and subordination

As described above there is little indication of hierarchical structures in Saliba and grammatical dependency in the relation between clauses. There is coordination of clauses but little evidence for structural subordination. The relation between clauses (and also between sentences) can be marked by a number of discourse particles.

The conjunction *na* 'and' typically expresses temporal order and often combines with the TAM particle *kabo* (cf. 2.2.1) as in (22).

(22)   *Ka-lao   ka-kai-gwali **na** **kabo** ka-mai ku-lao-liga.*
        1EX-go   1EX-KAI-spear CONJ TAM CL2-1EX.P 2SG-go-cook
        'We'll go and spear fish and then you'll cook for us.' (tautela40)

Clauses which are linked by *na* 'and' or *na kabo* 'and then' always occur in iconic temporal order and the scrambling of clauses would result in a change of the temporal sequence of the expressed events.

A further common particle is *ede* which indicates that the preceding element is given or presupposed information. Within a clause, *ede* occurs between topic and focus. For example, in clauses with non-verbal predicates *ede* occurs between the presupposed subject and the predicate (cf. 2.3).[2] As a discourse marker, *ede* functions as a connective, indicating the relation between clauses by marking the preceding discourse unit as presupposed. Consider the text example in (23): the first sentence ends with a verb which constitutes new information (introduced by *na kabo*), the following sentence picks up this verb followed by *ede*.

(23)   *Hewa-hewali-o-wa   se-kai-kaikewa-i-ø   **na** **kabo** ye-maliwai.*
        RED-young.man-PL-PM 3PL-RED-look.at-APP-3SG.O CONJ TAM 3SG-vomit
        'The young men were watching her and then she vomited.

    *Ye-maliwai **ede**   kwateya se-tau-masahala.*
        3SG-vomit   PRSUP yam   3PL-go-appear
        As she vomited yams appeared.' (yam44-45)

As with the particle(s) *na (kabo)*, the clauses connected by *ede* always occur in iconic temporal order and scrambling results in a change in meaning. Note that all the clauses in the examples above can in principal stand alone and are structurally like main clauses, there is no sign of subordination. The same holds for conditional clauses which were discussed in 2.2.1.5.

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[2]   *Sometimes this particle is cliticized to the preceding element and an epenthetic -y- is at times inserted in these contexts.*

Saliba 'complement clauses' generally show no formal marking of subordination either and can be classified as 'sentence-like' complement clauses (following Noonan 1985) since they have the same structure as main clauses. In contrast to object arguments which precede the verb, complement clauses follow it.

(24) *Ya-kita-di   numa-ne   unai se-keno.*
      1SG-see-3PL.O/P house-DET   PP.SG 3PL-sleep.
      'I saw them, they slept in the house (I saw them sleeping in the house).'

(25) *Ta-hetubu   ta-paisowa.*
      1INC-start   1INC-work
      'We started working.'

The complement clauses of certain verbs can optionally be introduced by the particle *bena* expression obligation or intention (cf. 2.2.1.4).

(26) *se-kaipate   bena   se-hai-ø*
      3PL-try   OBLI/COMP   3PL-take/get-3SG.O
      'they tried to get it' (a-r1a7)

(27) *Ya-henuwa   bena   ya-lao.*
      1SG-like   OBLI/COMP   1SG-go
      'I want to go.'

There are only two verbs, *gado* 'want' and *henuwa* 'like', which can take complement clauses that structurally differ from main clauses. Both verbs can be followed by full clauses (with or without the particle *bena*) as in (27). But they can also take a complement consisting of a verb stem without a subject prefix, i.e. a form which may not occur as an independent verb or clause.

(28) *Ye-gado   gelu.*   (29) *Ya-henuwa   dobi   Alotau.*
      3SG-want   board   1SG-like   go.down   Place.Name
      'She wants to (get on) board.'   'I want to go down to Alotau.'

2.3 NON-VERBAL CLAUSES

Non-verbal clauses are expressed by simple juxtaposition of NPs. Optionally a particle can intervene between the subject NP and the non-verbal predicate. The functional difference between the presupposition marker *ede* and the particle *meta* in this function is still unclear. In negative clauses, the negative particle *nige* occurs between the subject and the non-verbal predicate. Consider the equational clauses in (30) and (31):

(30) *Hesa-gu ede   Anna.*   (31) *Iya   meta   taulauhekata.*
      name-1SG.P PRSUP Name   3SG.EMPH PARTICLE   teacher
      'My name is Anna.'   'He is a teacher.'

(32) *Hesa-gu nige   Martha.*   (33) *Iya   nige   taulauhekata.*
      name-1SG.P NEG   Name   3SG.EMPH NEG   teacher
      'My name is not Martha.'   'He is not a teacher.'

Examples (34) and (35) show locative clauses.

(34) *Iya*   *ede*   *numa-ne*   *unai.*
      3SG.EMPH   PRSUP   house-DET   PP.SG
      'She's in the house.'

(35) *Iya*   *nige*   *numa-ne*   *unai.*
      3SG.EMPH   NEG   house-DET   PP.SG
      'She's not in the house.'

Examples (36) to (38) present some possessive constructions.

(36) *Martha* *natu-na*   *(o*   *nige)?*
      Name   child-3SG.P   or   NEG
      'Does Martha have a child (or not)?'

(37) *Martha* *nige* *natu-na.*   (38) *Nige* *ka-da*   *sada.*
      Name   NEG   child-3SG.P   NEG   CL2-1INC   betelnut
      'Martha doesn't have children.'   'We have no betel nut.'

2.4 NOUN PHRASE

In Saliba, there is no case marking on nominals except for the residual locative suffix *-i* which is only attested on *numa* 'house' and *koya* 'garden' as well as on the demonstratives *teina* 'this' and *temeta* 'that' (cf. 2.5.3.2).

(39) *ta-lao*   *koya-i*   (40) *ya-kai-kai*   *numa-i*
      1INC-go   garden-LOC   1SG-RED-eat   house-LOC
      'we went to the garden' (bd9)   'I ate at home' (o1.152)

The language has no article distinguishing between proper and common nouns as is otherwise widespread among Austronesian languages (Ross 1988: 208). Bare nouns can be interpreted as definite or indefinite. Definiteness can be explicitly marked by an enclitic determiner on the noun. Modifiers, quantifiers, numerals, and determiners follow the noun, demonstratives precede it. The relative order of numerals and adjectives is free.

2.4.1 DETERMINERS

There are a number of determiner clitics, the most common being *-ne* and *-wa*. (Both *-ne* and *-wa* are also used to mark relative clauses, see 2.4.4). The clitic *-wa* marks a noun as given information.[3] In Saliba, a new participant is typically introduced by an unmarked noun (or one marked by *hesau* '(an)other' see below), later reference to the same participant is typically marked by *-wa*. Example (41)

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[3]   *In glossing* -wa *as* PM *('previously mentioned') I follow the convention by Peteliyaki and Lithgow (ms.) who discuss the functions of cognate morphemes in a number of Papuan Tip languages. Note however, that in Saliba (and presumably also in other Papuan Tip languages) a noun does not have to be actually mentioned before in order to be marked by* -wa, *it merely needs to be inferable from the contexts.*

shows the beginning of a story.

(41) *Bwanabwanaluwa hesau unai manuwa <u>ao'ao</u> ye-kabi-noi*
island   other   PP.SG bird   crow   3SG-make-nest
'On a certain island a black crow made a nest and stayed there.

*ye-miya. Huya hesaukabo <u>ao'ao</u>-**wa** ye-diyaka.*
3SG-stay time other   TAM   crow-PM 3SG-pregnant
One day the black crow became pregnant.' (Mosel 1994, T2)

The clitic *-ne* marks a noun as specific. This form can combine with a demonstrative preceding the noun.

(42) *Gogo-**ne** kwa-hai-di!* (43) *tem pilipilidai-**ne***
things-DET 2PL-get-3PL.O/P   DIST.DEM story-DET
'Get the things!'   'that story'

Further determiner clitics are the deictic forms *-ta* 'this' and *-me, -te* 'that' (whose precise semantic distinction is unclear). These determiners tend to cooccur with demonstratives preceding the noun as in (44) and (45) (see also 2.5.3.2).

(44) *Teina waiwai-**ta** kwa-usa-i-di.*
PROX.DEM mango-DET 2PL-put.in-APP-3PL.O/P
'Put these mangos in.'

(45) *Temata ginauli-**me** hesa-na saha?*
DIST.DEM thing-DET   name-3SG.P what
'What's that thing there called?' (fl#4:26)

2.4.2 NUMBER MARKING

The only class of nouns that is always marked for number are nouns with human referents. In some instances, nouns denoting animals such as *puwaka* 'pig' can also be marked by the plural suffix. Thus, the class of nouns which can take this suffix is not restricted to humans but seems similar to what Lichtenberk (1982) calls the class of 'higher animals' which includes humans and certain domestic animals. For this class, the unmarked form is singular but the plural form must carry the plural suffix *-o* (or its allomorphs *-ao* and *-wao*). A number of nouns have to reduplicate when they carry the plural suffix. An example was presented with the NP *hewa-hewali-o-wa* 'the young men' in (23), two further examples are given in (46) and (47).

(46) *Wawaya-o se-kai-kaiheya.* (47) ***Sine**-sine-o se-lao-ma.*
child-PL   3PL-RED-play   RED-woman-PL 3PL-go-hither
'The children are playing.'   'The women came.'

If a noun is inalienably possessed the plural marker follows the possessive suffix as in (48) and (49).

(48) *natu-gu-**wao*** (49) *sina-gu-**wao***
child-1SG.P-PL   mother-1SG.P-PL
'my children'   'my mothers'

Young people tend to use the plural suffix more extensively and in context where it is ungrammatical to the ears of older speakers. An example is the suffixation of the plural marker to the possessive classifiers.

(50)　　?*　*yo-gu-**wao***
　　　　　CL1-1SG.P-PL
　　　　　'mine/ my things'

Besides the plural suffix and reduplication, the number distinction between singular and plural can always be marked on a modifier following the noun, regardless of whether the noun is human/animate or not. Nominal modifier are discussed in the following section.

2.4.3 MODIFIERS

Stative verb roots can occur in attributive function as nominal modifiers following a noun (cf. 2.5.1). In this function, they carry a pronominal possessive suffix agreeing in person and number with the modified noun. This is one of the shared morpho-syntactic innovations of Papuan Tip Cluster (Ross 1988: 208).

(51)　　*lulu　　posiposi-di*　　　　(52)　　*numa　　namwa-namwa-na*
　　　　shirt　　white-3PL.O/P　　　　　　　house　　RED-good-3SG.P
　　　　'white shirts'　　　　　　　　　　　　'good house'

The modifier *hesau* '(an)other' typically functions as a specific indefinite article, introducing new participants into the discourse. In this case it does not carry a possessive suffix.

(53)　　*Tamowai　hesau　　ye-lao-ma.*
　　　　person　　　other　　3SG-come-hither
　　　　'A man came.'

(54)　　*Kokolaka　hesau　　numa-ne　　unai.*
　　　　rat　　　　　other　　house-DET　　PP.SG
　　　　'There is a rat in the house.'

For definite reference, it can also occur with a possessive suffix as in (55) and (56).

(55)　　*tamowai hesau-na*　　　　(56)　　*sabati　　hesau-na-wa*
　　　　person　　other-3SG.P　　　　　　　week　　other-3SG.P-PM
　　　　'the other man'　　　　　　　　　　 'the other week/last week'

The quantifiers *gwau* 'many' and *maudoi* 'all' also take the possessive suffixes (cf. 2.5.3.1).

(57)　　*lulu　　gwau-di*　　　　　(58)　　*numa　　maudoi-na*
　　　　shirt　　many-3PL.O/P　　　　　　　house　　all-3SG.P
　　　　'many shirts'　　　　　　　　　　　 'the whole house'

Numerals do not take a possessive suffix when modifying a noun.

(59)　　*lulu　　labui*　　　　　　(60)　　*numa　　haligigi　　kesega*
　　　　shirt　　two　　　　　　　　　　　house　　five　　　　one
　　　　'two shirts'　　　　　　　　　　　　 'six houses'

2.4.4 RELATIVE CLAUSES

Saliba relative clauses follow the noun and separate it from the main verb. There is no special relative clause marker or any indication of subordination. Relative clauses are typically marked by the determiner clitics *-ne* or *-wa* (cf. 2.4.1), occurring on the head noun as well as on the last element of the relative clause, generally the verb. Both subjects (61) and objects (62) can be relativized but not secondary objects of ditransitive clauses (neither can outer-core objects of transitive clauses, a notion introduced in chapter 3).

(61)   *Tem*   *pilipilidai-ne*   *ye-hedede-ne*   *ye-namwa.*
        DIST.DEM   story-DET   3SG-tell-DET   3SG- good
        'That story that he told was good.'

(62)   *Waiwai-wa*   *sina-gu*   *ye-hemaisa-di-wa*   *ya-wase-nei-di.*
        mango-PM   mother-1SG.P   3SG-buy-3PL.O/P-PM   1SG-search-APP-3PL.O/P
        'I'm looking for the mangos that my mother bought.'

(63)   *Nigwa-wa*   *unai*   *boxi*   *ya-soke-ø-wa*   *haedi?*
        knife-PM   PP.SG   box   3SG-open-3SG.O-PM   where
        'Where is the knife I opened the box with?'

(64)   *kaleko-wa*   *yo-gu*   *saya*   *ye-le-di-ma-wa*
        cloth-PM   CL1-1SG.P   sibling   3SG-give-3PL.O-hither-PM
        'the clothes that my sister gave me'

(65)   *koya-wa*   *unai*   *simsim*   *ya-kuma-i-di-wa*
        garden-PM   PP.SG   watermelon   1SG-plant-APP-3PL.O-PM
        'the garden where I planted watermelons'

Mosel (1994) suggests that the Saliba constructions constitute 'internal' relative clauses, where the head noun is located inside the relative clause. Keenan (1985) reports that such constructions are only found in languages that have SOV constituent order, which is the case for Saliba. Despite this and even though the Saliba examples structurally resemble cases of internal relative clauses as discussed by Keenan, it is not clear that they are best analyzed in this way. Basically, the relative clauses above occur in the same position as other nominal modifiers, such as 'adjectives' (attributively used stative verbs, cf. 2.5.1) and numerals. There are two facts which rather suggest that Saliba relative clauses are postnominal and not internal: the head noun can be fronted, as the object in (62) and it is typically marked by the same clitic (*-wa* or *-ne*) which marks the end of the relative clause.

If the head of the relative clause is the relative subject and has a human referent, the relative clause can either follow the same structure, as in (66), or it can be expressed by a construction with the form *tau* 'man/person' which nominalizes the verb of the relative clause which then carries no subject prefix as in (67).

(66)   *Wawaya-wa*   *waiwai*   *ye-kaiwahali-ø-wa*   *ye-heloi*   *ye-lao-ko.*
         child-PM   mango   3SG-steal-3SG.O-PM   3SG-run   3SG-go-PERF
         'The child who stole the mango ran away already.'

(67)   *Wawaya-wa*   *waiwai*   **tau** *kaiwahali-ø-wa*   *ye-heloi*   *ye-lao-ko.*
         child-PM   mango   man   steal-3SG.O-PM   3SG-run   3SG-go-PERF
         'The child who stole the mango ran away already.'

In this grammatical function, *tau* does not literally mean 'man' but can also refer to females (cf. 4.2.1.2). With this construction, the head of the relative clause is often omitted as in (68). (If present, the head noun would precede the relative object *luni* 'dugong'.)

(68)   *luni*   **tau**   *gwali-wa*
         dugong   man   spear-PM
         'the one who speared the dugong'

2.4.5 POSSESSION

Saliba has two types of possessive constructions. For direct or inalienable possession, the possessed noun itself carries the pronominal suffix which encodes the person and number of the possessor. This construction is used for most kinship terms, body part terms, as well as for part-whole relations in general.

(69)   *sina-gu*   (70)   *beya-m*
         mother-1SG.P   ear-2SG.P
         'my mother'   'your ear'

(71)   *numa*   *kalona-na*   (72)   *boxi*   *dedeka-na*
         house   inside-3SG.P   box   side-3SG.P
         'inside of the house'   'side of the box'

For indirect or alienable possession the possessed noun is preceded by a classifier carrying the possessive suffix. The choice between the classifiers *ka-* and *yo-* basically distinguishes edible items (*ka-*) from inedible items (*yo-*) although some abstract concepts, items of clothing, and a few kin terms can also occur in the "edible" *ka-* category. In some cases, the same noun can occur with either of the two classifiers as in (74) vs. (76).

(73)   **yo-ma**   *magai*   (74)   **yo-gu**   *yama*
         CL1-1EX.P   place   CL1-1SG.P   fish
         'our place'   'my fish' (e.g. I'll sell it)

(75)   **ka-m**   *ti*   (76)   **ka-gu**   *yama*
         CL2-2SG.P tea   CL2-1SG.P   fish
         'your tea'   'my fish' (I'll eat it)

2.4.6 CONJOINED NPs

NPs can be joined by the conjunction *yo* 'and' occurring between the NPs as in (77) and (78).

(77)   *sina-na*   ***yo***   *tama-na*   *se-lao-ma*
        mother-3SG.P   CONJ   father-3SG.P   3PL-go-hither
        'her mother and father came' (ed58)

(78)   *kwateya* ***yo***   *huni*   ***yo***   *kanuwa*   *ka-bahe*
        yams   CONJ   taro   CONJ   sweet.potato   1EX-carry
        'we carry yams and taro and sweet potatoes' (basket14)

The conjunction *yo* can also occur between the NPs as well as following the last NP of the list as in (79).

(79)   *puwaka* ***yo***   *kai*   ***yo***   *se-nonoha*
        pig   CONJ   food   CONJ   3PL-ready
        'they prepare a pig and food' (hair6)

2.5 WORD CLASSES AND WORD-CLASS CHANGES

The major form classes in Saliba are verbs and nouns, minor word classes include pronouns, numerals, demonstratives, postpositions and particles. As in other Oceanic languages, many Saliba lexemes can function both as verbs and as nouns without overt morphological derivation (cf. Vonen 1993, Broschart 1997). I consider roots to be nominal if they may appear as underived nouns but need to take derivational suffixes in order to occur as verb stems. Vice versa, a verb root is one which may occur as an underived verb stem (cf. chap. 4).

2.5.1 VERBS

Inflected verbs can be identified by the obligatory subject prefix. The language has monovalent, bivalent and labile verb roots. The verb classes are discussed in chapter 4. Denominal verbs generally behave like monovalent verb roots, deriving a transitive stem with the applicative suffix (chap. 6). There is no word class of adverbs and adverbial functions are expressed by (verb) stems which follow the main verb in a complex verb construction (chap. 5). In these constructions, main verb and adverbial are part of a single grammatical word.

(80)   *ye-he-kata-**namwa-namwa**-i-gai*
        3SG-CAUS-know-RED-good-APP-1EX.O
        'she taught us properly' (basket8)

(81)   *Ye-naya-**kasaya**-i-go.*
        3SG-wait-in.vain-APP-1SG.O
        'He waited in vain for you.'

Stative verb stems can be used both as predicates and as nominal attributes. In the

latter function, they must typically reduplicate and carry a possessive suffix indicating the number of the head noun (cf. 2.4.3).

(82) a. *Se-gwauyala.*   b. *tamowai gwau-gwauyala-di*
          3PL-happy   people   RED-happy-3PL.O/P
          'They are happy.'   'happy people'

(83) a. *Leiyaha   ye-pitali.*   b. *leiyaha   pita-pitali-na*
          pandanus 3SG-dry   pandanus   RED-dry-3SG.P
          'The pandanus is dry.'   'dry pandanus'

A small number of monovalent roots do not reduplicate in the attributive use, another small group are reduplicated for both the attributive and the verbal use (e.g. color terms). For these two groups, the predicative and attributive stems are morphologically identical and differ only in the type of pronominal affixes. In predicative function, they carry a subject prefix, as in (84a) and (85a), in attributive function, they carry a possessive suffix, as in (84b) and (85b).

(84) a. *Lulu   ye-posiposi.*   b. *lulu   posiposi-di*
          shirt   3SG-white   shirt   white-3PL.O/P
          'The shirt is white.'   'white shirts

(85) a. *Kae-m   ye-bida.*   b. *kae-m   bida-na*
          foot-2SG.P 3SG-dirty   foot-2SG.P dirty-3SG.P
          'Your foot is dirty.'   'your dirty foot'

These two subclasses of monovalent verb roots are closest to a word class of adjectives. The two classes feature some of the concepts which Dixon (1982) predicts to belong to the class of adjectives in a given language if it can be established as a separate word class. Since the attributive use of these forms is morphologically not less marked than the predicative use, I do not consider adjectives as a separate word class in Saliba. However, there are a few quantifier roots, e.g. *gwau* 'plenty', *maudoi* 'all', which occur as nominal attributes but never seem to occur as stative verbs (cf. 2.5.3.1, 2.4.3). Thus, possibly – pending further research – a very small class of adjectives could be identified.

2.5.2 NOMINALS

2.5.2.1 Nouns

Nouns can be identified by allowing determiner clitics and by the fact that they can be the heads of possessive constructions. Subclasses of nouns can be distinguished by the type of possession construction into which they engage (alienable vs. inalienable cf. 2.4.5). Most kinship and body part terms are inalienably possessed as well as terms in part-whole relations (e.g. spatial nouns such as *dedeka* 'side'). These terms may not appear as independent words without

a possessive suffix. Other nouns occur in alienable possessive constructions preceded by a possessive classifier. As mentioned, there is no article distinguishing proper and common nouns and it seems that in Saliba there are no good formal criteria to distinguish these categories. Nouns can be derived from verbs by reduplication.

(86) a.   *ye-lao*   b.   *yo-na*   *lao-lao*
          3SG-go   CL1-3SG.O/P   RED-go
          'he went'   'his behavior'

Such derived deverbal nouns can also function as nominal modifiers as in (87).

(87) a.   *ye-numa*   b.   *waila*   *numa-numa*
          3SG-drink   water   RED-drink
          'he drank'   'drinking water'

Nouns denoting the agent or the location of an activity can be derived from verbs by the forms *tau* 'man/person' and *kaba* 'place' respectively (cf. 4.2.1.2).

(88)   *se-lao-liga*   (89)   *tau*   *lao-liga*
       3PL-go-cook   man   go-cook
       'they cooked'   'the ones who cooked'

(90)   *se-keno*   (91)   *kaba*   *keno*
       3PL-sleep   place   sleep
       'they slept'   'sleeping place/bed'

2.5.2.2 Pronouns

There are four pronominal paradigms in Saliba: a set of free pronouns and three sets of bound pronominal affixes denoting subjects, objects, and possessors. They distinguish between singular and plural number, but there is no dual or paucal. In the first person plural, inclusive and exclusive reference is distinguished.

	independent	subject	object	possessive
1SG	*yau*	*ya-*	*-gau*	*-gu*
2SG	*kowa*	*ku-, ko-*	*-go*	*-m*
3SG	*iya*	*ye-, i-*	*-o, -ya*	*-na*
1INC	*kita*	*ta-*	*-da*	*-da*
1EX	*kai*	*ka-*	*-gai*	*-ma, -mai*
2PL	*komiu*	*kwa-*	*-gomiu*	*-mi*
3PL	*siya*	*se-, si-*	*-di*	*-di*

The free pronouns appear in clauses with non-verbal predicates (cf. 2.3) and also with verbal predicates for emphasis. The other three paradigms are analyzed as affixes based on three criteria. (a) No free elements can intervene between the pronominal forms and the stems to which they attach. Only derivational morphemes can intervene between the pronouns of the subject or object paradigm

and the verb stem and nothing can intervene between a nominal stem and the possessive affixes. (b) Intonationally the pronouns are part of the word: the object and the possessive forms trigger a stress shift onto the new penultimate syllable. (c) The object suffix of the third person singular has a word-final (-ϕ) and a word-internal allomorph (-*ya*).

The choice between forms in the subject paradigm (in the second and third singular as well as the third plural) seems to be a relic of a realis/irrealis mode distinction which is apparently not productive anymore.[4] For the possessive form of the first person plural exclusive there is a choice between -*ma* vs. -*mai*. The short form -*ma* seems to occur suffixed to the possessive classifiers only while the longer form -*mai* is suffixed directly onto inalienably possessed nouns (cf. 2.4.5).

2.5.3 MINOR WORD CLASSES

2.5.3.1 Numerals and quantifiers

Numerals do not qualify as verbs or nouns and can be considered a separate word class. Cardinals from one to five as well as the form for 'ten' are simplex, other numerals are composed of these simplex forms, e.g. the term for 'six' is composed of those for 'five' and 'one', the term for 'twelve' is composed of those for 'ten' and 'two'.

kesega	'one'	*haligigi labui*	'seven'
labui	'two'	*haligigi haeyona*	'eight'
haeyona	'three'	*haligigi hasi*	'nine'
hasi	'four'	*saudoudoi*	'ten'
haligigi	'five'	*saudoudoi kesega*	'eleven'
haligigi kesega	'six'	*saudoudoi labui*	'twelve'

The expression for 'twenty' is clausal and has a literal meaning of 'one man is dead', counting the toes and fingers of the person. Multiples of twenty are built accordingly, e.g. 'forty' is expressed as 'two men are dead'. Nowadays English numerals are generally used from six onwards.

tau	*kesega*	*ye-mwaloi*	'twenty (one man is dead)'
man	one	3SG-dead	

---

[4] *For a productive system of subject prefixes with a realis/irrealis distinction see Lichtenberk 1983 on Manam, for a survey of irrealis expressions in Austronesian languages of Papua New Guinea see Bugenhagen 1993.*

tamowai labui se-mwaloi 'forty (two men are dead)'
person two 3PL-dead

Frequentative numerals are derived from cardinals by the causative prefix (chap. 7) as in (92) and (93).

(92)   *he-labui*   (93)   *he-hasi*
       CAUS-two   CAUS-four
       'second time'   'third time'

Like numerals, quantifiers follow the noun. They do not constitute a separate word class as different quantifiers belong to different form classes. The form *bado* 'many' is a stative verb root which takes a possessive suffix when it occurs as a nominal modifier (cf. 2.4.3). In its use as a modifier it typically occurs in the expression 'how many of them' or 'X of them' as presented in (94) to (96).

(94)   *Kwateya se-bado.*   (95)   *Tamowai bado-di   hisa?*
       yam   3PL-many   person   many-3PL.O/P how.many
       'There are many yams.'   'How many people?'

(96)   *tamowai   bado-di   haligigi   kesega*
       person   many-3PL.O/P five   one
       'six people'

To express indefinite quantity, the stem *bado* 'many' can be reduplicated and follows the noun without a possessive suffix.

(97)   *huya   bado-bado*
       time   RED-many
       'all the time/often'

Also *maudoi* 'all' takes the possessive suffix and this form is only attested as a nominal modifier but not as a stative verb stem carrying a subject prefix.

(98)   *Wawaya-o   maudoi-di   se-lao-ma.*
       child-PL   all-3PL.O/P   3PL-go-hither
       'All the children came.'

(99)   *mayadai   maudoi-na*
       day   all-3SG.P
       'all day'

The concept of 'few' is expressed by the form *hisa* (which also functions as a question word 'how many', cf. 2.6.1). *Hisa* 'few' behaves like a numeral in not taking a possessive suffix when modifying a noun. It cannot feature as a stative verb carrying a subject prefix. In (100) *hisa* is followed by the NP clitic *-mo* 'only/just'.

(100) *Tamowai hisa-mo   se-lao-ma.*
       person   few-only/just 3PL-go-hither
       'Only few people came.'

2.5.3.2 Demonstratives and deictics

There is a three-way contrast between demonstratives: *teina* is the proximal form, *tenem* and *temeta* are both preliminarily glossed as distal, their differentiation is pending further research. The demonstratives precede the noun and can optionally cooccur with a number of determiner enclitics on the noun.

(101) *teina   numa-ta*   (102) *tenem   sine-bada-ne*
       PROX.DEM   house-DET   DIST.DEM   woman-old-DET
       'this house'   'that old lady'

(103) *temeta   ginauli-me*
       DIST.DEM   thing-DET
       'that thing'

The demonstratives can also themselves occur as the head of a noun phrase and in this function the determiner enclitics can attach to the demonstrative itself. The clitics are again optional.

(104) *teina-ta*   (105) *tenem-ne*
       PROX.DEM-DET   DIST.DEM-DET
       'this one'   'that one'

To express locations, *teina* 'this' and *temeta* 'that' can take the locative ending *-i*. This ending is otherwise only preserved with *numa* 'house' and for *koya* 'garden'(2.4).

(106) *teina-i*   (107) *temeta-i*
       PROX.DEM-LOC   DIST.DEM-LOC
       'here'   'there'

The form *tenem* does not allow the locative suffix.

2.5.3.3 Postpositions

Saliba postpositions are morphologically complex and generally seem to be of nominal origin. They carry a possessive suffix reflecting the number distinction and in some cases also the person distinction of the figure (e.g. the positioned entity, cf. Talmy 1985). The general postposition *unai* and its plural form *udiedi* are morphological complex, but not transparent anymore. They seem to include the third person singular and plural possessive suffixes *-na* and *-di* respectively. The forms express a large range of functions and can mark for example a location, goal, source, instrument.

(108) *Iya   numa-ne   **unai**.*   (109) *Siya   numa-ne   **udiedi**.*
       3SG.EMPH   house-DET PP:SG   3PL.EMPH house-DET PP:PL
       'She is in the house.'   'They are in the house.'

(110) *Teina   leta-ta   sina-gu   **unai**   ye-lao-ma.*
       PROX.DEM   letter-DET mother-1SG.P PP.SG   3SG-go-hither
       'This letter comes from my mother.'

(111) *Lahi*   *ya-lage*   *Samarai*   **unai.**
       yesterday   1SG-arrive   Place.Name   PP.SG
       'Yesterday I arrived on Samarai.'

(112) *Ya-soke*   *nigwa-wa*   **unai.**
       1SG-open   knife-PM   PP.SG
       'I opened it with a knife.'

The postpositions *ena* (sg) and *edi* (pl) are less frequent but seem to be parallel in use to *unai* and *udiedi*. It is unclear how the two pairs differ semantically. The forms are again morphologically complex and can be analyzed as carrying the possessive suffixes *-na* and *-di* respectively. Possessive suffixes of other persons are not sanctioned with these forms.

(113) *seya*   *yo*   *boxi-wa*   *kewa-di*   **ena**   *ye-to-tolo*
       chair   CONJ   box-PM   top-3PL.O/P   PP.SG   3SG.RED-stand
       'he was standing on top of the chair and the box.' (a-r1a.24)

(114) *kipukipu*   **edi**   *yama* ... *ta-kai-unui*
       creek   PP.PL   fish   1INC-KAI-kill/catch
       'in the creeks we catch fish.' (fish09)

Further postpositions are *sabi*-PRO 'for' (as in 'to cry for'), *hesaba*-PRO 'to/towards' and the complex forms *kali*-PRO-*wai* and *kali*-PRO-*ena* to/towards' (apparently not semantically distinct) marking recipients or goals. As opposed to the previous forms, these postpositions can carry possessive suffixes of all person distinctions.

(115) *Sina-na*   **sabi-***na*   *ye-dou.*
       mother-3SG.P   for-3SG.P   3SG-cry
       'She cried for her mother.'

(116) *Ye-lao-ma*   **hesaba-***gu.*
       3SG-go-hither   towards-1SG.P
       'He came towards me.'

(117) *Leta-wa*   *ye-hetamali-ya-wa*   **kali-m-wai**   (or: **kali-m-ena**)
       letter-PM   3SG-send-3SG.O-thither KALI-2SG.P-WAI   KALI-2SG.P-PP.SG
       'He sent the letter to you.'

2.5.3.4 Particles

There are a number of particles, i.e. short independent function words which do not inflect for any categories. These forms have various functions and as is cross-linguistically notoriously the case, their semantics is often hard to identify. Their functions tend to be grammatical rather than lexical. A number of such forms have been discussed in the previous sections, e.g. the particles *kabo, bena, taba, taga, aga,* and *ena* in 2.2.1 on TAM marking, the discourse particles *ede* and *na* in 2.2.2, the conjunction *yo* in 2.4.6. The Saliba negation marker *nige* which is discussed in 2.6.3 also belongs to the class of particles.

2.6 SPEECH ACTS

Most examples in the preceding discussion presented declarative clauses. In this section, I briefly introduce other utterance types, namely questions, commands, prohibitive statements and negative statements.

2.6.1 QUESTIONS

Polar questions are distinguished from declarative clauses in their rising rather than falling intonation.

(118)	*Se-lage-ko?*		(119)	*Ka-m ti?*
	3PL-arrive-PERF			CL2-2SG.P tea
	'Did they arrive already?''			'Your tea?' (do you like some tea?)

But they can also be marked as questions and followed by *e nige* 'or not'.

(120)   *Kabo se-lao-ma e nige?*
       TAM   3PL-go-hither   or   NEG
       'Will they come, or not?'

Content questions show the same structure as declarative clauses with in situ question words.

(121)	*Saha ku-henuwa?*		(122)	*Saha-saha-na ku-henuwa?*
	what 2SG-want			RED-what-3SG.P 2SG-want
	'What do you want?'			'Which one do you want?'

(123)	*Kaiteya ye-lao-ma?*		(124)	*Hisa ye-lao-ma?*
	who 3SG-go-hither			how.many 3SG-go-hither
	'Who came?'			'How many came?'

(125)	*Kaehuya ku-lage?*		(126)	*Haedi ku-lao-lao?*
	when 2sg-arrive			where 2SG-RED-go
	'When did you arrive?'			'Where are you going?'

2.6.2 COMMANDS AND PROHIBITION

Imperative statements do not carry any special marking compared to declarative clauses. Verbs in the imperative show the same inflection as declarative counter parts and obligatorily carry a subject prefix.

(127)	*Ku-mwa-mwayau!*		(128)	*Ta-lao!*
	2SG-RED-quick			1INC-go
	'Hurry!'			'Let's go!'

Prohibition is expressed by the particle *tabu* preceding the verb, as in (129).

(129)	*Tabu kwa-kabi-kabi-lao!*	(130)	*Tabu kwa-hedede-gaibu!*
	PRHIB 2PL-RED-touch-go		PRHIB 2PL-talk-just.like.that
	'Don't you (pl) touch it!'		'Don't talk without sense!'

2.6.3 NEGATION

The inventory of Saliba negatives consists of the forms *nigele, nige. Nigele* expresses denial, typically as answer to a polar question as in (131).

(131) Q: *Ku-lao   maketi?*   A: **Nigele.**
         2SG-go   market   NEG
         'Did you go to the market?'   'No.' (I didn't go to the market)

The form *nige* is the general negation particle. It is used for negation of verbal and non-verbal predicates (cf. 2.3) as well as of focused constituents. The particle occurs in assertions and questions, but not in imperative sentences. Consider examples (132) and (133):

(132)   **Nige**   *ya-lao maketi.*   (133)   *Yau*   **nige**   *taulauhekata.*
       NEG   1SG-go market   1SG.EMPH   NEG   teacher
       'I didn't go to the market.'   'I am not a teacher.'

The form *nige* is clearly morphologically related to the denial marker *nigele*. In fact, *nigele* can be shortened to *nige* in all its occurrences. However, the general negation marker *nige* can never in turn be replaced by the longer form *nigele*. The relative word order between subject and negative marker reflects the scope of negation and the distinction between sentence focus vs. predicate focus (Lambrecht 1994) (or thetic vs. categorical statements, cf. Sasse 1987, 1996). The word order in clauses with predicate focus is Subject-Negative as in (134), in clauses with sentence focus where the subject is in the scope of negation it is Negative-Subject as in (135).

(134)   *Kwateya* **nige**   *se-bado.*   (135)   **Nige**   *kwateya*   *se-bado.*
       yams   NEG   3PL-many   NEG   yams   3PL-many
       'The yams are not many.'   'There are not many yams.'

A more detailed account of Saliba negation is presented in Margetts (1999).

VALENCE AND TRANSITIVITY

The topic of valence and transitivity has enjoyed considerable attention in the literature on Oceanic languages and within the Austronesian literature more generally. Among the authors who have contributed to this ongoing discussion are Arms 1973, 1974, Clark 1973, Pawley 1973, 1986, Pawley and Reid 1980, Sugita 1973, Harisson 1978, 1982, Chung 1981, Lichtenberk 1982, 1983, Wouk 1986, Mosel 1991a, 1991b, to name but a few. The fact that valence and transitivity constitute an especially interesting and challenging topic within the discussion of Oceanic languages can be attributed mainly to two linguistic features. First, most of these languages exhibit formal marking of transitivity on the verb, and second, the marking of transitivity is typically linked to certain properties of the object noun, such as definiteness or specificity and other features associated with object individuation as described by Hopper and Thompson (1980). In the literature, there is considerable variation in what is described as a transitive verb in a given language. This is because languages vary in their formal marking of transitivity, but also because scholars take different approaches in defining this notion. Two basic formal criteria suggest themselves for defining the transitivity status of a verb: (a) the number of participants expressed in the clause and (b) the morphological marking on the verb. But crucially, these two criteria do not necessarily align and pick out the same set of verbs as transitive. A given verb may be transitive according to one criterion, but intransitive according to the other, or it may be considered as 'semitransitive' if both criteria are considered (e.g. Sugita 1973). Such facts show the great need for explicitness about what is taken to define the notion of transitivity in a given language.

It is not surprising that in the description of Saliba verbs and verbal clauses the expression of transitivity plays a central role and therefore constitutes a major topic within this study. Like many Oceanic languages, Saliba has clauses which belong to the gray-area of transitivity marking in that they have both intransitive and transitive features. I approach such constructions by considering the relevant features on three distinct structural levels: the root, the inflected verb, and the clause. I argue that, on a given level, a construction can have either transitive or intransitive features but not both.

The treatment of transitivity on different structural levels in this study primarily arose as a descriptive tool and from the need for explicitness in the definition of this notion. But the approach taken here goes beyond the morpho-syntactic description of a single language in that it uncovers a number of typological generalizations. The treatment of transitivity on different structural levels sheds some light on certain regularities in the relations between syntactic and semantic arguments which make the Saliba language particularly interesting.

In this chapter I introduce the basic concepts and definitions which are relevant in the discussion of valence and transitivity in Saliba. In section 3.1 I present an introduction to the layered structure of the Saliba clause and show how argumenthood may be defined. In section 3.2 I define the terms valence and transitivity and show how they apply to the three structural levels, root, inflected verb, and clause. In 3.3 I discuss the relationship between these levels. As a general approach, I consider valence or transitivity as discrete morpho-syntactically-defined features of a given unit. Semantic and pragmatic factors such as (degrees of) agentivity, volitionality, affectedness or individuation of patient, or the number of semantic arguments of a verb are explicitly excluded from the definition. In the approach taken here, a definition and description of transitive constructions allows generalizations about these notions, rather than requiring them as input. Thanks to the level-bound definition of transitivity, the definition of semantic arguments can be based on morpho-syntactic criteria. Semantic objects can have a number of morpho-syntactic reflexes without necessarily being encoded as syntactic arguments of the verb. Therefore the notion of semantic argument plays a crucial role in understanding a number of constructions in Saliba grammar as well as the role of morphological transitivity marking.

In section 3.4 I present an overview of the different types of objects and I propose a definition of semantic arguments in Saliba. Section 3.5 briefly compares the present approach with approaches like that by Hopper and Thompson (1980), which treats transitivity as a scalar phenomenon which may apply to different constructions to different degrees. In section 3.6 I attempt a typological characterization of Saliba on the basis of the expression of transitivity with special consideration of those constructions which show both transitive and intransitive features. In this section I also extend the discussion to similar constructions in other Oceanic languages. I argue that Saliba, and probably the Oceanic family as a whole, can be classified as fundamentally intransitive (Nichols 1982, 1984a, 1984b) and that certain features which make transitivity such a problematic

phenomenon within this language family may be described as correlations with, and possibly as consequences of, this typological classification.

3.1 THE LAYERED STRUCTURE OF THE CLAUSE

For the description of Saliba clauses, I adopt an approach following Foley and Van Valin (1984) and Van Valin (1993) of describing the structure of the clause as layered.[1]

> On this view, the primary constituent units of the clause are the *nucleus*, which contains the predicate (usually a verb), the *core*, which contains the nucleus and the arguments of the predicate, and the *periphery*, which is an adjunct to the core and subsumes non-arguments of the predicate, e.g. setting locative and temporal phrases. (Van Valin 1993: 5)

The layered structure of the clause is represented in Figure 1 (adapted from Van Valin and LaPolla (1997)).

Predicate	+ Arguments	Non-arguments
	core	periphery

nucleus

Figure 1   *The layered structure of the clause*

This is exemplified by the Saliba clause in (1).

(1) Lahi   Maria   ya-kita-ø   maketi   unai
     yesterday Name   1SG-see-3SG.O market   PP.SG

nucleus

core

periphery   periphery

'Yesterday, I saw Maria at the market.'

In Saliba, the verb stem constitutes the nucleus, the inflected verb with its argument NPs constitutes the core, and non-arguments, which may precede and/or follow the verb, constitute the periphery of the clause. Arguments can be expressed as pronominal affixes on the verb and/or as NPs featuring lexical nouns

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[1]   See Klamer (1998: 84) for a similar approach, but note that her category of 'nuclear clause' consists of the nucleus plus the pronominal affixes and therefore cross-cuts Foley & Van Valin's notions of 'nucleus' and 'core'.

or free emphatic pronouns. Syntactic arguments are distinct from adjuncts, first, in that adjuncts are marked by postpositions while arguments occur as bare NPs, and second, that adjuncts may never be cross-referenced on the verb.[2] In Saliba, syntactic arguments, which are required by the verb, are never marked by postpositions, and there are no verbs in the language that subcategorize for an NP which is postpositionally marked. Among syntactic object arguments one can distinguish between two types: inner-core arguments which are cross-referenced on the verb and outer-core arguments which are not. This distinction is reminiscent of that between inner vs. outer peripheral arguments (both distinct from core arguments) advocated by Foley and Van Valin (1984: 93-94). In their definition, inner peripheral arguments are part of the logical structure of the verb but outer peripheral arguments are not.[3] There are two reasons for classifying Saliba bare NPs which are not cross-referenced on the verb as outer-core rather than as inner-peripheral arguments. First, like other core arguments they are unmarked, while both inner and outer-peripheral arguments, as discussed by Foley and Van Valin, are typically marked by adpositions (or lexical case). Second, outer-core arguments typically have no alternative expression as peripheral arguments, but most of them may occur as inner-core arguments in alternative constructions.[4]

So, there is a further layer to be added for the representation of certain types of Saliba clauses. In clauses which feature argument NPs that are not cross-referenced on the verb, one can distinguish between an inner- and an outer-core layer. Most of the standard morpho-syntactic tests for argumenthood are not available in Saliba as there is no passive, no dependent clause structure with complementation, and no clear cases of 'control' or 'raising' constructions (cf. chap. 2). Thus, the main criterion for the distinction between inner- and outer-core is the presence or absence of cross-referencing on the verb. But at least for transitive clauses, the difference between inner- and outer-core arguments can also be observed in relativization and topicalization: inner-core arguments can be relativized and topicalized but outer-core arguments cannot. In ditransitive clauses

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[2] *Note however that there are also syntactic arguments which may not be cross-referenced on the verb, such as the goals of motion verbs (see 3.4 and chap. 12).*

[3] *Where Foley and Van Valin talk about (inner or outer) peripheral arguments I generally use the term 'adjunct'.*

[4] *Goals of motion verbs are exceptional (see 3.4 and chap. 12).*

the situation is different as even outer-core arguments can be relativized or topicalized. The distinction between different types of outer-core objects (e.g. of transitive vs. of ditransitive clauses) is introduced in section 3.4.

For illustration of the inner/outer-core distinction, the text example in (2) shows a transitive clause with an object noun *kai-wa* 'the food' which is not cross-referenced on the verb and so classifies as an outer-core argument. The pronominal subject affix on the verb is the only inner-core argument in the clause.

(2) *Besi-na*[5] *kai-wa* *ye-lao-liga*
     enough-3SG.P food-PM 3SG-go-cook

```
                                      |
                                   nucleus
    _____         _____
         periphery                  inner
                        _____
                           outer
                 _____
                            core
```
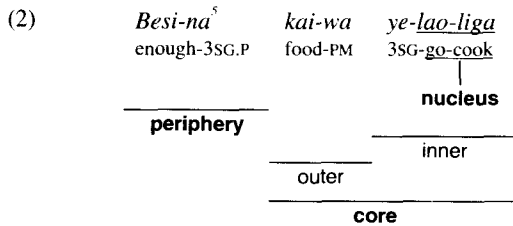
'And so she cooked the food ...' (bagi116)

Note that the stem *lao-liga* 'cook' in example (2) is intransitive and there is no object suffix on the verb while in example (1) above the verb carries the zero allomorph of the third singular object suffix. There are a number of morphological tests which allow us to distinguish the absence of a suffix from the zero allomorph. They are discussed in chapter 4.

Example (3) shows a ditransitive clause with an outer-core object NP *wana* 'song' which is not cross-referenced on the verb. The pronominal affixes on the verb represent the inner-core arguments of the clause.
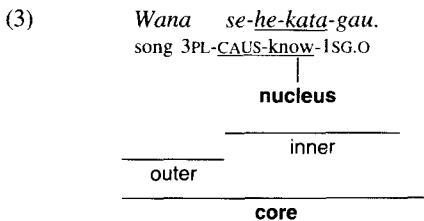
(3) *Wana* *se-he-kata-gau.*
     song 3PL-CAUS-know-1SG.O

```
                              |
                           nucleus
              _____
                   inner
         _____
            outer
    _____
               core
```

'They taught me a song.'

The category of outer-core arguments plays a central role in the definition of valence and transitivity and in the description of Saliba verbal clauses. Clauses which feature outer-core arguments are discussed in chapters 12 and 13. The definitions of argumenthood are summarized in Def 1 and 2 below.

Def 1

> A participant is an inner-core argument if it is cross-referenced by one of the pronominal affixes on the verb (optionally it may also be present as an NP).

Def 2

> A participant is an outer-core argument if it is (optionally) expressed as a bare NP in the same clause but not cross-referenced on the verb.

Adjuncts are generally marked by postpositions with the exceptions of some temporal nouns. Being a head-marking language, Saliba exhibits extensive omission of NPs. There is basically no NP which must surface with a verb. The term 'cross-reference' is used here following Nichols (1986: 108/9) as the marking of arguments on the verb in a language with consistently head-marking clauses (as opposed to 'agreement' which refers to the head-marked indexing of actants in a generally dependent-marking language). As is generally the case for head-marking languages, the Saliba verb itself constitutes a compete clause and the dependent NPs which are coreferential with the pronominal affixes are optional. This raises the question of what counts as the true expression of arguments, the bound pronouns on the verb, the coreferential NPs, or both. There has been considerable discussion of this topic in the literature (e.g. Jelinek 1984, Van Valin 1985, 1987, Bresnan & Mchombo 1986, 1987, Baker 1996). But especially head-marking languages remain problematic and a point of debate, due to the typological tendency to allow free omission of NPs. A full discussion or solution to this problem for Saliba is beyond the scope of this study, but there are a number of assumptions which are implicit in my approach and which I shall spell out here. I consider the pronominal affixes as the true arguments of the verb rather than merely agreement markers for explicit or implicit autonomous NPs.[6]

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[6] *Foley (1991) lists a number of points which speak for the argument status of the pronominal affixes in Yimas, a Papuan language of Papua New Guinea. Besides the NP being optional and participants being expressed typically by the pronominal forms, Foley lists that the Yimas pronominal affixes on the verb distinguish more number categories than the nominals. This is problematic for an account which considers the NPs as the only true arguments because the 'pronominal copies' of the arguments on the verb carry more explicit grammatical information than the NPs with which they are supposed to*

footnote continued ...

That means in Bresnan's & Mchombo's (1987) terms that the Saliba affixes express anaphoric agreement rather than grammatical agreement. However, I do not conclude from this that the coreferent NPs are necessarily non-arguments which stand in a preposed (e.g. topic or focus) position outside the clause.[7] Following e.g. Van Valin (1993:18) I assume that, syntactically, the NPs are clause internal. I consider the status of these NPs essentially an open question and assume they may have argument status, or that argument properties may be shared between the bound pronouns and their coreferent NPs.[8] This assumption is especially relevant for outer-core objects which are only expressed as NPs but which are not cross-referenced on the verb.

3.2 STRUCTURAL LEVELS

Throughout the study, I consider features that are relevant to the discussion of valence and transitivity on three distinct structural levels: the verb root, the inflected verb, and the clause. For a consistent distinction, I use the term VALENCE exclusively for the domain of the verb root, the term WORD-LEVEL TRANSITIVITY for the inflected verb, and the term CLAUSE-LEVEL TRANSITIVITY for the domain of the clause. Each of these terms is defined independently with features from the respective structural level. The benefit of this distinction is that it allows us to consider the transitivity features of a construction on the level on which they are manifested, rather than considering them only as features of the construction as a whole. Valence denotes the inherent relational need or potential of a verb root to take a certain number of core arguments. The valence of a verb root can be observed in its distributional behavior, that is in the root's ability to occur as a SIMPLEX stem in transitive and/or intransitive verbs without the addition of any derivational morphology. I discuss the notion of root valence in more detail in

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agree. This argumentation also holds for Saliba, in that the category of number is typically not marked on the NP at all (unless it refers to human referent or has modifiers) but it is generally expressed by the pronominal affixes on the verb.

[7] *While it could be argued that the subject NP in Saliba appears in a preposed topic position in many cases, this does not hold for object NPs as can be seen for example on evidence from word order in negative clauses where the object generally follows the negative particle (cf. Margetts 1999).*

[8] *Klamer (1998:84) makes similar assumptions in her description of Kambera, a Central-Malayo-Polynesian language of Eastern Indonesia. In her approach, the clause contains the verb with the bound pronominal markers (the 'nuclear clause' in her terms) as well as the coreferent NPs.*

section 3.2.1. Word-level transitivity depends on the morphological features of the inflected verb. A given verb is morphologically either transitive or intransitive, and so word-level transitivity expresses a binary distinction. It is discussed in section 3.2.2. Clause-level transitivity is defined by the overall number of arguments expressed in the clause. It marks a three-way distinction and a given clause can be intransitive, transitive, or ditransitive. Clause-level transitivity is discussed in section 3.2.3. Table 1 gives a preview and summary of the following discussion.

LEVEL	UNIT	TERM	DEFINED BY	DISTINCTION
root level	verb root	valence	occurrence as simplex intransitive and/or transitive stem	monovalent bivalent labile
word level	inflected verb and verb stem	word-level transitivity	pronominal affixes on the verb	intransitive transitive
clause level	clause i.e. inflected verb plus extensions	clause-level transitivity	overall number of syntactic arguments in the clause	intransitive transitive ditransitive

Table 1   *Valence and transitivity according to formal marking of arguments*

An intermediate level between the verb root and the inflected verb is represented by the verb STEM. A stem is that part of a verb to which inflectional morphemes, such as the pronominal affixes, attach. Verb stems are distinct from inflected verbs in that the inflected verb minimally carries a subject prefix, and potentially additional morphology, and so a verb stem can be considered a verb without its inflections. In terms of transitivity marking, I do not distinguish between verb stems and inflected verbs, because stems always have the same transitivity status as the inflected verb in which they occur.[9] So both verb stems and inflected verbs are units of the domain of word-level transitivity.

Stems are distinct from roots, although these units clearly share certain features. I consider roots the monomorphemic smallest elements of the lexicon, and stems as their instantiation in discourse. Certain roots can occur as either verb stems or

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[9]   *Of course this hold only for COMPLETE stems, in that a transitive verb stem can consist of an intransitive stem plus derivational morphology. Only in this sense can a transitive verb contain an intransitive stem.*

noun stems. A verb stem can be understood as the instantiation of a root as it occurs in an inflected verb. Verb stems can be simplex or derived. Simplex stems consist of only a verb root, derived stems consist of a root plus further derivational morphology. There are roots which only ever occur as part of derived verb stems. The transitivity status of a simplex stem is determined by the valence of the root, the status of a derived stem is determined by the valence of the root and the added morphology.

The stems of transitive verbs consist of everything that stands between the subject prefix and the object suffix. The stems of intransitive verbs consist of everything that stands between the subject prefix and the final word boundary, or between the subject prefix and those verbal affixes that would FOLLOW the object suffix in a transitive verb. These are the directional suffixes *-ma* 'hither' and *-wa* 'thither' and the perfect suffix *-ko*. In the examples in (4), the bivalent root *kita* 'see' occurs as a simplex verb stem in (a) where it is followed by the third person plural object suffix *-di* and the perfect suffix *-ko*. In (4b), the root occurs as part of a derived causative stem composed of *kita* 'see' and the causative prefix *he-*. The verb stems are marked in bold face.

	SIMPLEX STEM		DERIVED STEM
(4) a.	*ya-**kita**-di-ko*	b.	*ya-**he-kita**-go*
	1SG-see-3PL.O/P-PERF		1SG-CAUS-see-2SG.O
	'I saw them'		'I showed (it to) you'

In the examples in (5), the monovalent root *lao* 'go' occurs as a simplex stem in (a). The perfect suffix *-ko* is not part of the stem since it follows the object suffix in a transitive verb, as shown in (4a). In (5b), *lao* 'go' occurs as part of the derived complex stem *lao-gabae* 'leave behind' which is transitive (cf. chap. 5).

	SIMPLEX STEM		DERIVED STEM
(5) a.	*se-**lao**-ko*	b.	*se-**lao-gabae**-gau*
	3PL-go-PERF		3PL-go-away-1SG.O
	'they went already'		'they left me behind'

Finally, a further relevant distinction is that between inflected verbs and clauses. By means of the pronominal affixes, every Saliba inflected verb constitutes a potentially complete clause. Nevertheless, the distinction between word level and clause level is valid and necessary in that a clause may consist of an inflected verb only, or of an inflected verb plus its extensions such as lexical arguments or adjuncts. Having introduced these basic distinctions, I now turn to discussion of valence and transitivity on the three structural levels.

3.2.1 ROOT VALENCE

As introduced above, I consider valence a formal property of the verb root which can be identified by its potential to occur as a simplex stem (i.e. without derivational morphology) in morphologically transitive and/or intransitive verbs. Verb roots are the abstract members of the verbal lexicon. On the surface level they occur as verb stems (or as part of compositional stems). Verb stems are the instantiations of roots as they appear in inflected verbs. A root is bivalent if as a simplex stem it may only occur in transitive verbs. A root is monovalent if as a simplex stem it may only occur in intransitive verbs. And finally, a root is labile if as a simplex stem it can occur in either transitive or intransitive verbs. Note that this does not imply that a verb root is bivalent when it occurs in a given transitive verb but monovalent when it occurs in an intransitive verb; the valence of a root is its general potential to occur in transitive and/or intransitive verbs. In principle this means that one has to look at all the possible occurrences of a verb root to identify its valence. For example, if a verb root is attested as a simplex transitive stem, the root could be either bivalent or labile, depending on whether it can also occur as a simplex stem in intransitive verbs. In order to state the valence of a root as bivalent, negative evidence is needed, namely that the root cannot occur as a simplex intransitive stem. Since negative evidence is difficult to obtain from texts, elicitations with speakers are essential.[10] The identification of most monovalent roots is more straightforward: If a root is attested with the applicative suffix, it is a monovalent verb root (or a noun root). Neither bivalent nor labile roots can occur with the applicative suffix.[11]

The term 'valence' is originally borrowed from Tesnière (1959) who defines a verb's valence as the number of its arguments. In my definition of the valence as a property of the verb root rather than of the inflected verb, I stand in the tradition of, for example, Heger (1985) and Lehmann (1992). In other approaches (e.g. Mosel 1991a, Lichtenberk 1983, see below), valence has been considered a

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[10]   *As a consequence, quite a large number of Saliba roots have not yet been definitely classified as either bivalent or labile because it could not yet be ruled out through explicit consultation that the roots can also occur as simplex intransitive stems.*

[11]   *There are a few verb roots that obligatorily take the applicative suffix and only occur in derived transitive stems (chap. 6). In terms of root valence they classify as monovalent since they share with other monovalent roots that the derived applicative stem is transitive (and can only appear as the head of transitive clauses). For an exception see chaps. 6 and 13, as well as Margetts (in prep.).*

property not only of the verb root (or lexeme) but of the derived stem or inflected verb. For clarification, I briefly compare my use of the term to such approaches in the literature. Mosel (1991a) suggests that valence is both a property of the lexeme and of particular verb forms. She states:

> Since the lexeme contains information of which verb forms can be derived, valency as a property of the lexeme includes the valencies of all its verb forms. ... In the case ... that one of the verb forms is unmarked, where as others with a different valency are marked, it is reasonable to consider the valency of the unmarked form as basic ... and that of the marked form as derived or secondary ... (p. 240-41)

Mosel's concepts of basic and secondary 'valency' cross-cut my use of the terms valence and word-level transitivity. In my approach, valence is only a feature of the verb root (or lexeme), while Mosel applies the term equally to verb forms which I consider the domain of word-level transitivity. Mosel groups together the verb root and the underived verb as displaying basic valence, but derived verbs as displaying secondary valence. In contrast, with the terminology introduced above, I group together all verb forms, i.e. inflected verbs, as displaying word-level transitivity regardless of whether they are derived or underived.

Lichtenberk (1983: 222) employs the terms primary and secondary 'valency' in his description of Manam, an Oceanic language of Papua New Guinea. As opposed to Mosel, who describes basic 'valency' as a property that cannot vary (1991a: 245), Lichtenberk describes valence-changing processes which affect both primary and secondary 'valency'. Processes which affect primary 'valency' include for example the addition of transitivizing affixes. Processes which affect secondary 'valency' enable the verb to take an "additional non-oblique argument" as in the case of the Manam benefactive construction (1983: 241-42). From this, it follows that Lichtenberk's concept of primary 'valency' is not exclusively a feature of a root or an underived verb but also a feature of inflected verbs. This implies that Lichtenberk's term primary 'valency' cross-cuts not only my distinction of valence and word-level transitivity, but also Mosel's distinction between basic and secondary 'valency'.

The use of the term 'valence' as introduced above and the differentiation between root valence and word-level transitivity allow a consistent distinction between the general potential of a linguistic unit and its actual instantiation in a specific context which is crucial for the purpose of this study.

3.2.2 WORD-LEVEL TRANSITIVITY

Word-level transitivity is a feature of the inflected verb, i.e. of a verb stem with its pronominal subject and/or object affix.[12] Criteria for the affix status of the pronominal morphemes were discussed in chapter 2.5.2.2. Since the verb stem itself always shares the transitivity status of the inflected verb, word-level transitivity equally applies to uninflected verb stems. Unlike the definition of root valence, word-level transitivity is not defined by distributional criteria. The potential for a verb to occur in certain types of clauses, or with a certain number of arguments is explicitly not part of the definition of word-level transitivity. This is to say that in the terminology presented here, I distinguish between a verb's morphological marking and its distributional characteristics. The transitivity status of a verb is defined exclusively by its morphological marking, more precisely by the number of pronominal affixes. A verb is transitive if it carries an object suffix (including the zero allomorph of the third singular) and intransitive if it does not carry an object suffix in addition to the obligatory subject prefix.[13] Pawley and Reid (1980) suggest a similar morphology-based definition of (word-level) transitivity for the Oceanic language family. They state:

> 'Transitive verb' is a well defined category. A transitive verb is any verb which (a) carries a transitive suffix *-i or *-akki(ni), and/or (b) carries a pronominal suffix or clitic determining person and number of direct object ... Nearly all transitive verbs exhibit both features (a) and (b). (p. 105)

In Saliba, the defining factor for transitive verbs is the object suffix (which may or may not be preceded by the transitivizing suffix -i). The transitivizing suffix (which I call 'applicative' suffix, cf. chap. 6) is obligatorily followed by an object suffix.[14] An interesting point is Pawley & Reid's statement that nearly all transitive verbs in Oceanic languages carry both a "transitive" suffix and an object marker. This implies that nearly all transitive verbs are derived (presumably from intransitive verbs) by the transitivizing suffix. I will come back to this point in section 3.6.

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[12]   *Throughout this study, the term 'verb' generally refers to the inflected verb, while uninflected verbs are considered 'stems'. An inflected verb is minimally composed of a verb stem plus the obligatory pronominal affixes.*

[13]   *Imperatives carry the same pronominal subject prefixes as declarative verb forms.*

[14]   *In this way, the transitivizing (applicative) suffix can serve as an indication of the zero allomorph of the third singular object suffix, cf. transitivity tests chap. 4.*

In Saliba, maximally two pronominal affixes may appear on the verb (minimally a subject prefix), and so word-level transitivity expresses a binary distinction between transitive and intransitive verbs. There are no morphologically ditransitive verbs because there can be no affixes on the verb which would indicate the presence of a third argument (such as the benefactive affixes in Manam, cf. Lichtenberk 1983). However, taking distributional criteria into account, one can distinguish between those morphologically transitive verbs which can feature as the heads of ditransitive clauses, and those which can only feature as the heads of transitive clauses. In this context, it should be noted that the morphologically transitive verbs which can head ditransitive clauses do not need to, but can freely occur in transitive clauses as well. Similarly, as I show below, certain morphologically intransitive verbs can feature as the heads of transitive clauses. This is part of the motivation for keeping apart morphological and distributional features in the level-bound definition of transitivity. The relationship between the verb and the clause-level is discussed in section 3.3.

3.2.3 CLAUSE-LEVEL TRANSITIVITY

Clause-level transitivity is a feature of the entire clause. Due to the pronominal affixes, each inflected verb constitutes a potentially complete clause. But a clause can consist of a verb only or of a verb plus extensions, such as lexical expressions of arguments or adjuncts. Clause-level transitivity is defined by the overall number of arguments whether they are expressed as bound pronouns, free NPs, or both. In terms of clause-level transitivity, there is a three-way distinction between intransitive, transitive, and ditransitive clauses.

3.3 RELATIONSHIP BETWEEN THE LEVELS

According to the definitions above, the elements on the three structural levels, root, verb and clause, have a certain degree of independence from each other in terms of their valence or transitivity status. A given element supplies the material for a unit of the next higher level without necessarily determining the transitivity status of this higher-level unit. The valence of a verb root does not entirely determine the transitivity status of the inflected verb in which it occurs because the verb stem can consist of a root plus derivational morphology (see 3.3.1). The same holds for the relation between the inflected verb and the clause: the transitivity status of the verb does not predict the status of the clause because, potentially, there are more arguments expressed in the clause than are marked on the verb (3.3.2). In principle, the transitivity status of a given unit can either match or differ

from the status of the lower-level unit. But the relations between the levels is far from random. There are certain regularities in the relations between the units of the different levels. In 3.3.3, I introduce a further level into the discussion, the level of event construal. I argue that similar to the relations between the other levels, clause-level transitivity does not determine the number of participants in the expressed event, although, here too certain regularities hold.

3.3.1 ROOT TO WORD LEVEL: DERIVATION

The relation between the root level and the word level is determined by the presence or absence of derivational morphology which may change the transitivity status of a stem.[15] If no derivational morphology is added to a root, it occurs as a simplex stem whose transitivity status directly corresponds to the valence of the root: it is transitive if the root is bivalent, it is intransitive if the root is monovalent. The simplex stem may be transitive or intransitive if the root is labile. That means, if the verb stem is simplex, the valence of the root does determine the transitivity status of the verb and stem. For example, the verb root *deuli* 'wash' (as in 'washing clothes/dishes') is a bivalent root requiring two arguments. If no derivational morphology is added it may only occur in a transitive verb with a subject prefix and an object suffix, as in (6).

(6)   root level   *deuli*   bivalent root
                                            'wash'

            word level   *ya-deuli-di*   transitive verb
                                            1SG-wash-3PL
                                            'I washed them'

If the verb stem is derived, the transitivity status of the verb may or may not correspond to the valence of the root. This depends on whether the added derivational morphology changes the transitivity status from that of the simplex stem. If it does, the transitivity status of the inflected verb does not correspond to the valence of the root. For example, the bivalent root *deuli* 'wash' can appear with the detransitivizing prefix *kai-* (chap. 8) which derives an intransitive verb stem in (7).

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[15]   *Since I reserve the term 'valence' to the root level, and since a root's valence cannot change, I do not talk about 'valence-changing' morphology in the following but rather about morphological processes which change the transitivity status of a verb or stem. But note that this is a merely terminological distinction.*

(7)   word level   *ya-kai-deuli*   intransitive verb
                                 1SG-KAI-wash
                                 'I did the laundry'

Some verb roots by default occur as simplex stems without derivational morphology. However, such a correspondence between bivalent roots and transitive verbs on the one hand, and monovalent roots and intransitive verbs on the other hand, is not the default situation for all Saliba verb roots. There is a class of monovalent roots which may occur as underived intransitive stems, but which more commonly occur in derived transitive stems with the applicative suffix. An example is the root *bahe* 'carry' which can occur as a simplex intransitive stem as in (8a), but which, by text counts, more frequently occurs in a derived transitive stem with the applicative suffix as in (8b) (cf. chap. 12).

(8) a.   *Ye-bahe.*   b.   *Ye-bahe-i-di.*
           3SG-carry   3SG-carry-APP-3PL.O/P
           'He carried.'   'He carried them.'

Besides this, there is a small class of precategorial monovalent roots which must obligatorily take the applicative suffix and thus occur in transitive verbs (see chaps. 4 and 6). An example is the monovalent root *katu* 'catch' in (9) which may not surface as a simplex intransitive stem.

(9) a. * *Ye-katu.*   b.   *Ye-katu-ni-di.*
           3SG-catch   3SG-catch-APP-3PL.O/P
           'He caught.'   'He caught them.'

The relationship between the root and the verb level is further explored in the following chapters. Chapter 4 introduces the Saliba verb classes which are based on root valence (and on whether the root allows the applicative suffix). Chapters 5 to 10 are concerned with Saliba derivational morphology which changes the transitivity status of a stem.

3.3.2 VERB TO CLAUSE LEVEL: accord vs. discord

As laid out above, the transitivity status of a verb correspond to the valence of the verb root if no transitivity-changing morphology is applied, but if transitivity-changing morphology is added, the verb's transitivity status may deviate from the valence of the root. A similar relationship holds between clause-level and word-level transitivity. While derivational processes are well documented and familiar from most languages of the world, cases of non-correspondence between the transitivity status of a clause and that of its head verb are less common (or at least less commonly described as such). For the relationship between word-level and clause-level transitivity, I introduce the terms ACCORD and DISCORD. The verb and the clause are in a relationship of accord if they have the same transitivity status,

i.e. if they are both transitive or intransitive. They have a relation of discord if the transitivity status of the verb differs from that of the clause, for example, if the verb is intransitive but the clause is transitive. The distinction between accord and discord relationships follows from the independent definitions of word-level and clause-level transitivity. In cases of discord, it allows us to locate the transitive and intransitive features of a construction on the respective structural levels.

As pointed out earlier, despite the relative independence between the root, word, and clause level, the relation between word-level and clause-level transitivity is far from random. There are certain regularities in this relationship. First, the transitivity status of a clause can be the same or higher than that of the verb but it cannot be lower. The latter is ruled out by the fact that the pronominal affixes, which define transitivity on the word level, also count as expressions of arguments on the clause level. Second, there is a two-way distinction on the word level between intransitive and transitive verbs, but a three-way distinction on the clause level between intransitive, transitive, and ditransitive clauses. Third, in Saliba there can be maximally one argument in the clause which is not cross-referenced on the verb. Consequences of these restrictions are: (a) in intransitive clauses, there can only be a relation of accord; (b) in ditransitive clauses, there can only be a relation of discord, since there are no morphologically ditransitive verbs in Saliba; (c) because there can never be discord by more than a single extra argument, intransitive verbs cannot feature as the heads of ditransitive clauses (and neither are there clauses with four arguments). Figure 2 summarizes the relationships between word and clause-level transitivity.
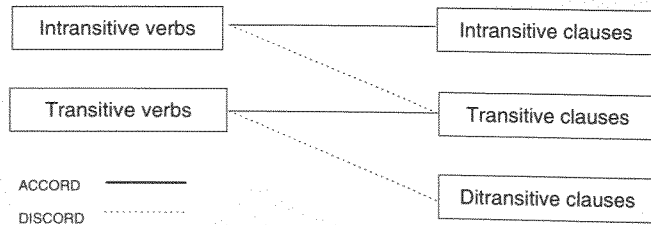
Figure 2 *Relationships between word and clause level transitivity*

The relation between the word and the clause level, the types of verbs, and the types of objects which feature in clauses with discord are further discussed in chapters 12 and 13.

3.3.3 EVENT REPRESENTATION

Besides the three structural levels, root, word, and clause, I occasionally make reference to the level of event representation. In chapter 14, I discuss the relation between clauses and the events which they encode. In particular, I investigate the relation between clause-level transitivity and the number of event participants. I argue that similar to the relation between the other levels, there is a certain degree of independence between the clause level and the level of event construal and that clause-level transitivity does not determine the number of event participants. An example are Saliba clauses with reflexive verbs which are formally transitive. There are two syntactic arguments in the clause as shown in (10) but on the event level there is in fact only one participant.

(10)　　 *(Ya-bom)*　　 *ya-kita-uyo-i-gau.*
　　　　 1SG-self/alone　 1SG-see-back/again-1SG.O
　　　　 'I saw myself.'

Another and more typical example for Saliba is that the language regularly employs a number of different strategies for encoding events with three participants. One of these strategies is the use of ditransitive clauses where each event participant is encoded as a syntactic argument. But more commonly, three-participant events are represented by transitive clauses in which the third participant is encoded by means of a directional marker on the verb or by a possessive pronoun, but not as a syntactic argument. It is important to note, however, that as opposed to roots, verbs and clauses, events are not a structural unit of the language. As a consequence, the relation between clause level and event level is of a different, less direct nature than the relation between root and verb, or verb and clause. While I provide formal definitions for roots, inflected verbs, and clauses, I do not attempt a definition of 'participants' or 'events' here but use these notions in a pretheoretical sense (cf. chap. 14).

3.4 OVERVIEW: TYPES OF OBJECTS

In this section, I give an overview of the types of arguments and particularly of the types of objects which can be distinguished on the basis of the definitions introduced in 3.1. This overview shall illustrate the benefit of the level-bound definition of transitivity and help to keep track of the distinctions made. It also gives a preview of topics discussed in the chapters to follow. Figure 3 summarizes the following discussion of object types. Based on the two features, cross-reference and position relative to the verb, objects can be described as sharing features, on the one hand, with subjects – the only arguments which are always obligatorily marked on the verb, and, on the other hand, with adjuncts, i.e. with

non-arguments. On the basis of these two features, one can speak of different degrees of 'argumenthood' or 'objecthood'. Objects in the left half of Figure 3 are more typical syntactic arguments, objects in the right half of the figure are less typical instances of syntactic arguments.[16]
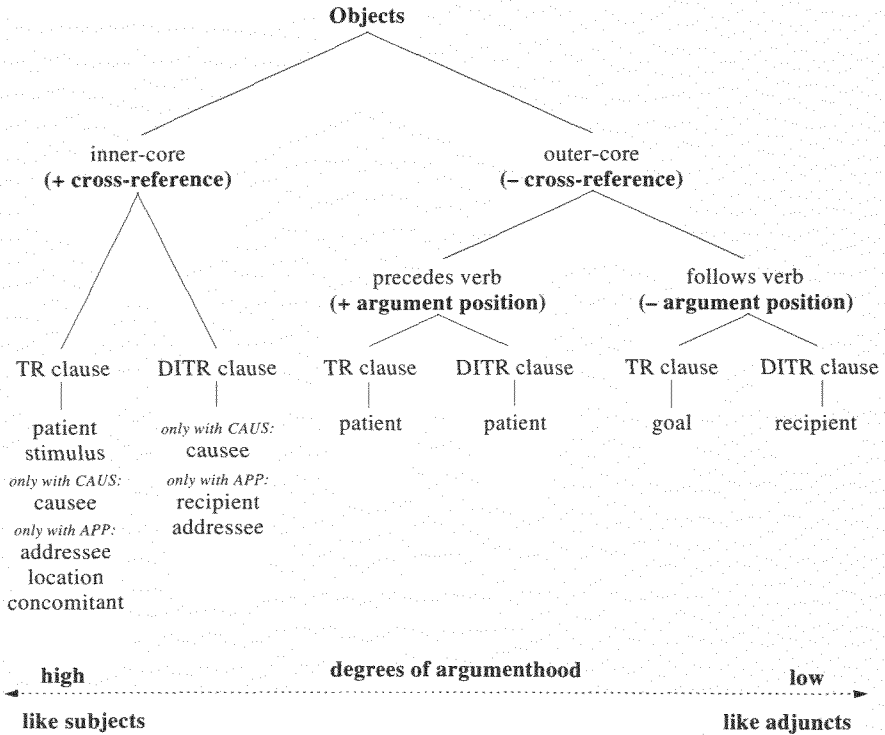
Figure 3   *Types of objects*

Types of syntactic objects can be distinguished by (a) whether or not they are cross-referenced on the verb, (b) their position relative to the verb, and © the type of clauses in which they occur, that is in transitive or ditransitive clauses. In 3.1, I have introduced the distinction between inner-core arguments which are cross-referenced and outer-core arguments which are not. Within the class of inner-core objects, one can further distinguish between those of transitive and those of

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[16]   *Note that this holds only for the first three levels, and not to the last levels of the figure in that e.g. outer-core arguments of ditransitive clauses are not less typical syntactic arguments than those in transitive clauses.*

ditransitive clauses. The inner-core objects of transitive clauses can have a range of semantic roles, depending on the derivational morphology on the verb (see e.g. chaps. 6 and 7). The attested roles are patient, stimulus, addressee, location, and concomitant (as defined in chap. 4). If only underived verbs are considered, the range of roles of inner-core objects of transitive clauses is basically reduced to patient and stimulus. The other roles are only attested with objects of derived verbs. Being sensitive to the distinction between primary and secondary objects introduced by Dryer (1986), the inner-core objects in Saliba ditransitive clauses generally have the semantic roles of causee, addressee, or recipient (chap. 13). That means the "indirect" rather than the "direct" object (i.e. the patient) is cross-referenced in ditransitive clause, while the patient is expressed as an outer-core argument.

Within the class of outer-core objects one can distinguish, on the one hand, between objects which precede the verb, i.e. in a position like that of inner-core arguments, and objects which follow the verb, on the other hand, i.e. which occur in an adjunct-like position. In addition, as for inner-core objects, one can distinguish between the outer-core objects of transitive clauses and those of ditransitive clauses. Outer-core objects which precede the verb in transitive clauses are generally patients. All of these outer-core objects may be encoded as inner-core objects in alternative constructions, where they are cross-referenced on the verb (e.g. when derivational morphology is added to the verb). Transitive clauses with discord where the outer-core object precedes the verb can be divided into the clauses with simplex intransitive verbs (chaps. 6, 12), and clauses with derived intransitive verbs (e.g. those which carry the detransitivizing prefix *kai-*) (chaps. 8, 12). Finally, there are a few exceptional, idiosyncratic cases of verbs that take preceding objects which cannot be cross-referenced, and which are therefore classified as outer-core. Examples are the object *kabi* 'nature/way' of *kata* 'know' (chap. 12) or, in a few exceptional cases, the objects of verbs which already have incorporated another object noun (chaps. 10, 12). Outer-core objects which precede the verb in ditransitive clauses are generally patients or stimuli (chap. 13). This is again predictable by the classification of Saliba as a secondary object language (following Dryer 1986).

The outer-core objects which follow the verb share the word order characteristics of adjuncts, but they share with inner-core arguments that they are not postpositionally marked. The only argument roles attested in this position are goal and recipient. In transitive clauses, only goals of motion verbs may occur as outer-

core objects following the verb. As opposed to other outer-core objects, they cannot be encoded as inner-core objects in alternative clauses. This means that the goals of motion verbs may never be cross-referenced by an object suffix on the verb. They may however alternatively be encoded as adjuncts of intransitive clauses (chap. 12). There is only one kind of ditransitive clause which may take an outer-core argument that follows the verb. These are clauses headed by *mose-i* 'give' which allows a frame, where the patient (the transferred theme) is cross-referenced and the recipient occurs as the outer-core object following the verb.[17] The case of outer-core objects following the verb in ditransitive clauses is discussed in chapter 13 and in Margetts (in prep.).

3.4.1 SEMANTIC OBJECTS

One of the benefits of the level-bound definitions of valence and transitivity is that, based on the distinction of object types discussed above, one can derive a definition of semantic arguments in Saliba. This definition of semantic arguments is not necessarily exhaustive or immediately applicable to other languages, but does provide a worthwhile first step towards capturing regularities in the syntax/semantics interface in Saliba. This definition only applies to semantic objects which have some kind of reflection in the morpho-syntactic behavior of the verb (there may be semantic arguments for which this is not the case, with which I am not concerned here). The proposed definition of semantic arguments is given in Def 3.

Def 3	A participant is a semantic argument of a verb root if it can be encoded as an (inner or outer) core argument of the underived inflected verb.

Certain semantic arguments are always encoded as syntactic arguments (e.g. subjects) while others may or may not be encoded as syntactic arguments of the verb. It is the latter type of semantic arguments which tends to be encoded as outer-core objects.

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[17] *This is an uncommon pattern for a secondary object language (Dryer 1986) and, indeed, this frame is attested with only this single verb and it only occurs as an alternative to the reverse more common frame, where it is the recipient which is cross-referenced and the patient occurs as the outer-core object preceding the verb.*

The strength of the definition is that it is ultimately based on morpho-syntactic grounds and it can therefore capture language-internal regularities, rather than assuming that a given verb has a certain semantic argument because its translation equivalent in another language shows it as a syntactic argument. The notion of semantic or implied arguments did not play a role in the definition of transitivity in 3.1. Thus, this notion is not the input but the pay off of the level-bound definition of transitivity. I discuss some problems and restrictions of the definition of semantic arguments later in this section.

Obviously, one cannot define semantic arguments on morpho-syntactic grounds and then explain the existing morpho-syntactic patterns as effects of semantic arguments. Such an argumentation would be circular. However, seemingly idiosyncratic patterns in the morpho-syntactic behavior of certain Saliba verbs appear more motivated if they are understood as effects of inherent semantic arguments of these verbs. Certain morpho-syntactic processes in Saliba seem to be sensitive not only to the formal transitivity status of the verb and to inner-core arguments but also to its implied semantic arguments. Similar findings are reported by Zavala (in prep.) for inverse marking in Olutec (Mexico). While inverse marking is generally argued to be sensitive to syntactic arguments only, Zavala shows that in Olutec, inherent semantic arguments which are not expressed syntactically can also trigger the inverse pattern. In Saliba, there are three relevant domains for morpho-syntactic reflexes of semantic objects: one is the lexical expression of object arguments, another is the process of noun incorporation, a third is the composition of complex verbs.

Certain intransitive verbs can occur in clauses with discord (i.e. with an outer-core argument), while others cannot. The choice of verbs which may occur in such constructions is not random, and neither is the choice of semantic roles the outer-core object arguments may have. It plays a role for such constructions what type of object a verb may take in clauses with accord. Relevant is the distinction between 'close' vs. 'remote' objects from the Oceanic literature (e.g. Pawley and Reid 1980). I discuss these terms in chapters 4 and 6 in more detail. One type of intransitive activity verbs which can occur in clauses with discord are those which take a 'close' object – such as a patient – as their applied object when they are transitivized. The objects in such discord clauses can only have the same semantic role as the applied object would have, i.e. patient. Examples are verbs based on monovalent roots such as *bahe* 'carry', *kuma* 'plant', *usa* 'put in', or *wase* 'search'. (11a) shows a transitive clause with an applied object, (11b) shows the

corresponding clause with discord.

(11) a.   *Kwateya se-kuma-i-di.*   b.   *Kwateya se-kuma.*
        yam 3PL-plant-APP-3PL.O/P   yam   3PL-plant
        'They planted the yams.'   'They planted yams.'

Other intransitive verbs which can equally be transitivized by the applicative suffix but which take a 'remote' type of participant as their applied object (cf. chaps. 4, 6), such as a location or concomitant, cannot appear in clauses with discord. Examples are verbs based on monovalent roots such as *bawa* 'stay', *heloi* 'run', *wose* 'paddle'. The discord construction in (12b) is ungrammatical.

(12) a.   *Teina   numa   ya-bawa-i-ø.*
        PROX.DEM house   1SG-stay-APP-3SG.O
        'I live in/occupy this house.'

    b. *   *Teina   numa   ya-bawa.*
        PROX.DEM house   1SG-stay
        'I live in/occupy this house.'

These two groups of verbs formally belong to the same verb class: they are monovalent and can derive a transitive stem by means of the applicative suffix (class 2, chap. 4). Now why can some of them occur in clauses with discord while others cannot? Because the one group has a patient as a semantic object argument while the other does not. On cross-linguistic grounds, it is not surprising that roots like 'carry', 'search', and 'plant' should have patient as a semantic argument since these concepts are expressed by simplex transitive verbs in many languages. The interesting typological fact about Saliba (and other Oceanic languages) is that these concepts are expressed by monovalent roots to start with and appear in the same form class as the concepts 'run', 'paddle', or 'stay'. I will come back to this point in section 3.6, in the discussion of Saliba as a fundamentally intransitive language.

The second environment where the notion of semantic argument sheds some light on seemingly idiosyncratic morpho-syntactic patterns is noun incorporation. Certain intransitive base verbs can incorporate an object noun in constructions where only transitive base verbs would be expected to do so. These verbs turn out to be of the same type as those which can figure in discord clauses with outer-core patients: they are intransitive activity verbs, which take a 'close' object as their applied object when they are transitivized (chaps. 4, 6). Like the objects in the discord construction, the incorporated nouns can only have the same semantic role as the applied object of the transitivized verb would have. Example (13) shows again the root *kuma* 'plant'.

(13) a.   *Ye-kuma.*   b.   *Ye-kwateya-kuma.*
           3SG-plant   3SG-yam-plant
           'He planted.'   'He yam-planted.'

It appears that in Saliba, the process of noun incorporation is not only sensitive to a verb's morpho-syntactic status and its inner-core arguments but also to the semantic arguments of the verb.

A third construction which shows sensitivity not only to syntactic but also semantic arguments are complex verbs. As discussed in chapter 5, two or more verb stems can combine to form a complex stem which takes a single set of inflectional affixes. In these constructions, there are certain constraints on the transitivity status of the stems to be combined. One class of stems, which I term V_4 stems (chap. 5), must always agree in transitivity status with the preceding verb stem. If the preceding stem is intransitive, the V_4 stem will also be intransitive and morphologically simplex. If the preceding stem is transitive, the V_4 stem also has to be transitive and in this case it must take the applicative suffix. While other types of stem can differ from (and change) the transitivity status of a preceding stem, V_4 stems cannot. Nevertheless, in certain cases an intransitive verb stem can be followed by a transitive V_4 stem (carrying the applicative suffix), even though this should be ruled out by the described constraint. These cases feature the same kind of root as the examples with noun incorporation and certain clauses with discord. These roots are monovalent but have a semantic patient argument. The simplex stems are intransitive but in certain respects they behave distributionally like transitive verb stems. Example (14) shows the intransitive stem *kuma* 'plant' followed by a transitive V_4 stem, the applicativized stem *uyo-i* 'back/again'.

(14)   *Ye-kuma-uyo-i-ø.*
        3SG-plant-back/again-3SG.O
        'He planted it again.'

Besides the verbs which have a patient as their semantic argument, also motion verbs which encode a path (rather than manner of motion) can occur in transitive clauses with discord. Roots such as *lao* 'go/travel', *sae* 'go up', *dobi* 'go down', can occur in clauses with an outer-core object expressing a goal of the motion event as in (15).

(15)   *Ya-dobi*   *sitowa.*
        1SG-go.down   store
        'I went to the store.'

Again, this appears well motivated if the outer-core argument in the discord clause is understood as the syntactic manifestation of a semantic argument of the verb. Cross-linguistically, place names, and goals more generally, are typically not

expressed as syntactic arguments of motion verbs, but they are often morphologically unmarked and thus not clearly marked as adjuncts either (see chap. 12).

Having described some benefits of the notion of semantic arguments, I now turn to discussing some of the problems and restrictions inherent to the proposed definition in Def 3. Impersonal verbs, such as English weather expressions like 'it rains' etc., would be an obvious problem to the definition. Such verbs need a grammatical subject, but these subjects are not referential, they cannot be represented by a lexical NP, and one would want to exclude them from a definition of semantic arguments. However, Saliba does not seem to have verbs which require impersonal arguments. Weather expressions, for example, generally have straightforward subject NPs as in (16) and (17).

(16)	*Mahana ye-sina.*	(17)	*Nabu ye-talu.*
	sun 3SG-shine		rain 3SG-land
	'The sun is shining.'		'It is raining.'

Similar expressions, such as (18), which refers to the breaking day, do not take impersonal subjects either. The only potentially problematic root that I am aware of in Saliba is the form *boni* which translates as 'become night' or 'get dark' in (19), which generally occurs without a lexical subject.

(18)	*Mala ye-tom.*	(19)	*Ye-boni.*
	light 3SG-become.dusk		3SG-get.dark
	'The day broke.'		'It became night/dark.'

I have no data on whether the Saliba form can actually appear with a lexical subject noun, coreferential with the subject prefix. But note that, in Iduna, a related Papuan Tip Cluster language, a cognate verb form with apparently the same meaning occurs with the lexical subject *mala* 'light', parallel to the Saliba expression in (20).

(20)		*Mala gi-bogi.*
IDUNA		light 3SG-night
		'It became dark.' (Huckett 1974: 89)

So, impersonal verbs do not seem to pose a problem for the definition of semantic arguments in Saliba. But, clearly, such verbs remain a problem for extending the suggested definition of semantic arguments to other languages.

A further problem or rather limitation of the definition concerns the small number of precategorial roots, i.e. roots which obligatorily take derivational morphology (see chaps. 4 and 6). A number of Saliba roots, including *katu* 'catch (fish)' in (9) above, obligatorily take the applicative suffix and the definition in Def 3 simply

cannot say much about the semantic arguments of these roots since they never occur underived. The applied objects of these verbs are typically patients, i.e. they can be classified as close rather than remote objects. On the basis of this, I assume that the applied objects are semantic arguments of these precategorial roots.

Finally, the definition as stated in Def 3 above has nothing to say about the semantic arguments of derived verb forms such as the heads of ditransitive clauses, since it explicitly refers to the core arguments of the underived inflected verb. The heads of ditransitive clauses are never underived and generally carry the causative prefix, or in two exceptional cases the applicative suffix. To capture what semantic arguments the derived stem has, the definition of semantic arguments in Def 3 above, may be complemented by Def 3'.

Def 3'	A participant is a semantic argument of a (simplex or derived) verb stem if it can be encoded as a core argument of this particular stem.

This extension may capture facts about derived verb stems, such as *mose-i* 'give' which can occur in both ditransitive and transitive clauses. The clause in (21) is ditransitive: the recipient is cross-referenced on the verb and the patient (i.e. the transferred theme) is encoded as an outer-core object. The clause in (22), with the same verb stem as its head, is transitive: here it is the patient which is cross-referenced, while the recipient is encoded as an adjunct following the verb and marked by a postposition (see chap. 13 and Margetts in prep.).

(21)   *Bosa   kesega   ye-mose-i-di.*
           basket one   3SG-give-APP-3PL.O
           'He gave them one basket.'

(22)   *Ya-mose-i-di-ko   ka-gu   kaha-wa   unai.*
           1SG-give-APP-3PL.O-PERF CL2-1SG.P sibling-PM   PP.SG
           'I gave them to my sister.'

Following Def 3', the derived verb stem *mose-i* 'give' has three semantic arguments, because it can occur as the head of a ditransitive clause. This classification is independent of whether only two of the semantic arguments are actually encoded as syntactic arguments in a given clause (as long as the stem does not differ morphologically when it occurs in ditransitive vs. transitive clauses).

To summarize, outer-core objects of discord clauses such as (11b) and (15), were used to define the notion of semantic arguments in Def 3. Therefore, discord clauses cannot in turn be explained by the presence of a semantic argument, since such an argumentation would be circular. However, certain instances of noun incorporation and of complex verbs also show morpho-syntactic reflexes of

semantic objects, and in contrast to discord clauses, these constructions did not serve to define the notion of semantic argument. Therefore, the claim that the objects of discord clauses are reflexes of semantic arguments is well motivated, independent of the definition in Def 3. In Saliba there are a number of morphologically intransitive verbs or verb stems which, in certain contexts, behave as if they were transitive: they occur in a clause with an object NP, incorporate an object, or feature in a transitive complex verb followed by a transitive V_4 stem. The distributional behavior of these roots appears well motivated if it is understood a morpho-syntactic reflex of a semantic object argument.

3.5 TRANSITIVITY AS A SCALAR NOTION

In this study of Saliba verbs and verbal clauses, I describe transitivity as a system of discrete morpho-syntactic features, located on different structural levels. Transitivity is defined independently on each level: a verb is either intransitive or transitive (based on its morphological marking); a clause is either intransitive, transitive or ditransitive (based on the number of syntactic arguments expressed in the clause). In this section, I briefly compare this approach to a different approach where transitivity is described as scalar, e.g. by Hopper and Thompson (1980). Hopper and Thompson show that there is more to the description of transitivity than the mere presence or absence of an object argument, and that, from a cross-linguistic point of view, transitivity can be described as a scalar phenomenon. The authors isolate semantic and pragmatic components underlying the notion of transitivity and describe the typical correlations between these components across languages. In this account, clauses can be characterized as more or less transitive: the more features a clause has from the list of components which are associated with high transitivity, the closer it is to the pole of "cardinal transitivity". The parameters employed by Hopper and Thompson are the number of participants, kinesis, aspect, punctuality, volitionality, affirmation, mode, agency, affectedness and individuation of object. It appears that this scalar notion of transitivity is applied most successfully as a tool for describing language universals, that is for showing tendencies in the expression of transitivity across languages. In contrast, in the description and typological characterization of a single language, the goal is to capture which of the available choices in the formal marking of transitivity this particular language makes. The scalar quality of the semantic and pragmatic factors underlying the expression of transitivity is expressed differently in the grammar of different languages. That is languages vary in which of these

underlying semantic and pragmatic components of transitivity are grammaticalized to trigger formal, morpho-syntactic marking. I will clarify this point with examples from two types of construction: reflexives and partitive clauses.

Cross-linguistically, because of the referential identity of subject and object, reflexives can be placed on a transitivity scale à la Hopper and Thompson between one- and two-argument clauses. They can be said to be more transitive than clauses with one argument, but less transitive than clauses with two distinct arguments. This account is language independent, it is not describing a characteristic of a specific language. In contrast, one of the goals of the present study is to show how this generalization is manifested in a particular language, namely Saliba. A language may choose to mark clauses with reflexive verbs parallel to intransitive clauses and other constructions low in transitivity, or parallel to transitive clauses and constructions which are high in transitivity. For example, Hopper and Thompson (p. 277-78) report from Chimwi:ni, a language of Somalia, that reflexive clauses are marked in the same way as clauses which are low in transitivity. They do not show and object prefix on the verb while clauses which are high in transitivity do. By contrast, Saliba reflexive verbs are morphologically marked like transitive verbs and carry an object suffix. The fact that the verb is reflexive and that subject and object are coreferential is expressed by building a complex stem with the form *uyo* 'go back/again' (cf. chap. 5) (and optionally by adding a verb meaning 'self' or 'alone' preceding the complex verb). Consider (23) and (24), which is repeated from (10):

(23)   *Siya*   *se-bom*   *se-he-yababa-uyo-i-di.*
         3PL.EMPH   3PL-self/alone   3PL-CAUS-bad-back/again-APP-3PL.O/P
         'They got themselves into trouble.' (lit. 'They made themselves bad.')

(24)   *Ya-bom*   *ya-kita-uyo-i-gau.*
         1SG-self/alone   1SG-see-back/again-APP-1SG.O
         'I saw myself.'

Chimwi:ni and Saliba make different choices in the marking of reflexive clauses. They are morpho-syntactically intransitive in Chimwi:ni, but transitive in Saliba. But, on a transitivity scale of semantic and pragmatic parameters, the reflexive constructions of Chimwi:ni and Saliba will be placed at roughly the same position between the poles of cardinal transitivity vs. intransitivity.

Partitive constructions are a similar case. Similar to clauses that are high in transitivity they have an object argument, but they are less transitive than clauses in which the object is totally affected (rather than partially). Since Saliba does not have any special partitive construction, let me illustrate this point with two other

Oceanic languages. Wouk (1986) reports that in the Micronesian language Trukese, a partitive reading is expressed by a morphologically intransitive verb with a specific object. Conversely, in Woleaian, also a Micronesian language, a partitive meaning is expressed by a morphologically transitive verb with a non-specific object. Wouk presents the following examples (p.142-43):

(25)   *Wupwe wun   ewe   kkonik.*
TRUKESE   I.will   drink(INTR) the   water
            'I will drink some of the water.'
(26)   *I   be   lag chuwaaiy filoowa.*
WOLEAIAN   I   will   go   buy(TR)   bread
            'I will go buy some bread.'

While the partitive clauses of Trukese and Woleaian can be located at the same position on a transitivity scale of semantic and pragmatic features, the languages make the opposite choices in encoding the partitive meaning. Trukese employs morphologically intransitive verbs (with specific objects), while Woleaian chooses morphologically transitive verbs (with non-specific objects).

The discussion of partitives and reflexives shows clearly where the strength of the scalar notion of transitivity à la Hopper and Thompson lies: in the cross-linguistic description of the semantic and pragmatic basis of transitivity and its morpho-syntactic manifestations. Following the scalar approach, morpho-syntactically different expressions of similar concepts in different languages can be shown to be situated on a similar point of the transitivity scale due to shared semantic and pragmatic features. When examining and describing a specific language, as in this study, it is the choice in the formal marking of transitivity which is of primary typological interest and which is captured best in terms of discrete features.

Also in the present approach, the discrete features of transitivity can be translated into a scale and clauses may be described as having different degrees of transitivity. Transitive clauses with accord are higher in transitivity than those with discord, because, in cases of discord. the clause is transitive but the head verb is intransitive. In addition, as shown by the scale in Figure 3, object arguments may be described as having different degrees of syntactic argumenthood. In this sense, clauses can be more or less transitive depending on the status of the object argument. Note, however. that this notion of degree or scale is directly rooted in morpho-syntactic criteria and differs in this respect from the Hopper and Thompson approach.

3.6 SALIBA AS A FUNDAMENTALLY INTRANSITIVE LANGUAGE

In this section, I explore the typological characterization of languages as FUNDAMENTALLY INTRANSITIVE vs. FUNDAMENTALLY TRANSITIVE introduced by Nichols (1982, 1984a, 1984b). I argue that Saliba is fundamentally intransitive and that certain typological characteristics of the language can be explained by its fundamentally intransitive nature. Nichols (1982) develops the typological feature of fundamental (in)transitivity on the basis of data from Ingush, a North-Central Caucasian language. A fundamentally intransitive language is one whose "verbal morpho-syntax appears to be geared for accepting intransitives as input rather than for producing them as output" (p. 457). Conversely, a fundamentally transitive language is geared for accepting transitive verbs as input into morpho-syntactic processes and for producing intransitive output. This typological classification is an abstraction of certain features and Nichols (1982: 458) states:

> FUNDAMENTALLY INTRANSITIVE does not entail that every verbal lexeme in the language is ultimately – etymologically or underlyingly – intransitive; FUNDAMENTALLY TRANSITIVE does not entail that every verbal lexeme is ultimately transitive. These terms are simply generalizations about the preferred direction of valence-changing processes, and about the prototypical input and output verbs for such processes. (the emphasis is hers)

Nichols' classification of Ingush as fundamentally intransitive draws mainly on evidence from the root and word level, like the inventory of verbal roots and the type of derivational rules. Ingush lacks any 'valence-decreasing' processes; all derivational processes either add an argument to the verb or do not affect the transitivity status of the verb at all.[18] A further criterion is that the language has derivational processes which apply exclusively to intransitive verbs as input, but there are no processes which only apply to transitive verbs. This is a sign that derivational morphology is 'geared for' intransitive input. As a consequence, the language is rich in underived intransitive verbs, while transitive verbs are often derived. As opposed to Ingush, Indo-European languages can be classified as fundamentally transitive (Nichols 1982: 458, Haspelmath 1993). These languages

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[18]   *As a reminder, since my use of the term 'valence' as introduced in 3.2.1 is restricted to verb roots and is not affected by derivational morphology, the expressions 'valence changing/reducing/increasing' are not strictly correct for Saliba. These processes change what I consider verb-level transitivity. Because of their widespread use, I will continue to use the terms 'valence changing/reducing/increasing' at times to refer to derivational processes which affect the transitivity status of the verb, especially when referring to work by other authors if they use these terms.*

typically accept transitive verbs as input to derivational processes and produce intransitives as output.

Based on Nichols' approach and on work by Nedjalkov (1969) and Tsunoda (1981), Drossard (1991) develops several parameters according to which languages can be located on a scale between being fundamentally intransitive and fundamentally transitive. Some of the parameters he suggests apply to the root and verb level, others to the clause level. Adapting Nichols' general parameter of derivational rules being in the majority valence increasing vs. decreasing, Drossard locates languages as closer to the pole of fundamental intransitivity if change-of-state verbs are typically derived from intransitive verbs. A language is located closer to the pole of fundamental transitivity if change-of-state verbs are typically underived transitives ("lexical causatives"). This parameter is based on Nedjalkov's classic study of the derived vs. underived status of the transitive and intransitive versions of four verbs, 'laugh', 'boil', 'burn', and 'break', in 60 languages. A second of Drossard's parameters is based on Tsunoda's 'verb-type hierarchy' and the six semantically-based verb classes Tsunoda postulates. Drossard extends the set to ten semantic classes expressing effect, contact, experience, pursuit, attitude, control, social interaction, object-related action, psychological effect, and similarity (Drossard 1991: 411). These verb classes are considered "transitive" in a language if they typically show nominative-accusative, or ergative-absolutive case marking, but not if they show other case marking patterns. According to how many of these verb classes are "transitive", a language is classified as more or less transitive. Drossard shows that in Russian three of the ten classes are transitive, in German seven classes are transitive, and in English all ten classes are transitive (which is fully transitive according to this parameter). A third parameter adopted by Drossard from Tsunoda (1981) is the sensitivity of transitivity marking to TAM distinctions and to individuation of the object. Languages where transitivity marking is sensitive to these factors are closer to the pole of fundamental intransitivity.[19]

The classification of Saliba as a fundamentally intransitive language draws on similar parameters as those by Nichols used for Ingush, and also to some extent on

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[19]   *See also the relevant study by Haspelmath (1993), who, in the spirit of Nedjalkov (1969, 1990), looks at the cross-linguistic variation in the relationship between 31 inchoative/causative verb pairs in 21 languages.*

the additional parameters employed by Drossard. Nichols (1982) originally draws mainly on evidence from the root and word level, considering the type of derivational processes and the inventory of verbal roots in a language. Drossard's first and second parameters draw on similar data. They are basically finer-grained versions of the criteria whether the inventory of the verbal lexicon is mostly transitive or intransitive. I will not attempt a recreation of these semantically-defined classes for Saliba here, but go with Nichols' broader version of this criterion, which considers primarily morphological evidence.[20] In Saliba, there are both derivational processes which increase the transitivity status of a verb and those which decrease it. But the Saliba processes which increase the transitivity status of a verb are far more productive than the transitivity-decreasing operations. So, even though both types of processes exist, Saliba morpho-syntax is geared towards intransitive input and transitive output. The derivational processes are described in detail in chapters 5 to 10, and I only provide a brief overview here. Derivation with the applicative suffix (chap. 6) is one of the most productive processes in Saliba. It increases the transitivity status of a verb and it derives transitive verb stems from intransitive ones (but also from noun stems and English loan words). The suffix does not allow transitive stems as input but only intransitive ones.[21] The causative prefix (chap. 7) also increases the transitivity status of a verb. In the vast majority, it derives transitive stems from intransitive ones. In a much smaller number of cases, the prefix attaches to transitive stems, deriving stems which may feature as the heads of ditransitive clauses. While causativization of intransitive verbs is productive and also applies to loan words, causativization of transitive verbs is restricted and new creations are not readily accepted. Complex verbs (chap. 5) can take both transitive and intransitive verbs as input. The formation of a complex verb stem can increase or decrease the transitivity status of a verb or leave it unchanged. The process of noun incorporation (chap. 10) can take both transitive and intransitive stems as input, the output stems of this process can only be intransitive. The prefix *kai-* (chap. 8) derives intransitive verb stems from both transitive and intransitive stems as well as from noun stems. Derivations with the *kai*-prefix are rather rare and attested with only about ten verbs. The resultative prefix (chap. 9), finally, also derives

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[20] *Since I became aware of the work by Drossard and Haspelmath only after completing the major field work I cannot present the complete list of relevant tests and verb pairs for Saliba.*

[21] *A potential exception is discussed in chap. 13.*

intransitive stems. It is the only derivational morpheme which accepts only transitive stems as input. The prefix is not productive and it is restricted to about seven verb stems (most of which express some action of damage such as English 'break').

To summarize, compared to Ingush, which has no processes which decrease the transitivity status of a verb and no rules applying exclusively to transitive verbs, the Saliba picture of derivation is more varied. Saliba has both transitivity-increasing and decreasing morphology. However, the most productive derivational operations are clearly those which increase the transitivity status of a verb: the applicative suffix and the causative prefix. Derivations with the applicative suffix only apply to intransitive verbs, while most other processes allow both transitive and intransitive stems as input. However, while the causative prefix is very productive with intransitive stems, it allows only very few transitive stems as input. Overall, the evidence supports the claim that Saliba derivational processes are basically geared for accepting intransitive verbs as input rather than for producing them as output. However, in comparison to Ingush, Saliba is positioned less close to the pole of fundamental intransitivity.

In discussing the derivational processes and their input, I have so far considered only word-level transitivity. I distinguished between transitive vs. intransitive verbs or stems as input, independent of the valence of the root. Considering also the root level features, a point to be noted is that many of the transitive stems which figure as input into derivational processes are not based on bivalent roots, but on labile roots or even monovalent roots (which are transitivized by the applicative suffix). Transitive verbs based on labile roots are underived but they have equally underived intransitive counterparts. On the root level, the input into derivational processes clearly draws mostly on the class of monovalent and labile roots (as well as on noun roots) – even in some of those cases where the stems are transitive. This constitutes further evidence that Saliba can be classified as fundamentally intransitive. Table 2 summarizes the Saliba derivational processes.

DERIVATIONS	INPUT		OUTPUT	PRODUCTIVITY
	Stems	Roots		
Applicative	INTR	monovalent	TR	+
Causative	INTR, TR	monovalent, labile, bivalent	TR	+ with INTR stems − with TR stems
Complex verbs	INTR, TR	monovalent, labile. bivalent	INTR, TR	+
Incorporation	INTR, TR	monovalent, labile, bivalent	INTR	+
Prefix *kai-*	INTR, TR	monovalent, labile, bivalent	INTR	−
Resultative prefix	TR	bivalent	INTR	−

Table 2   *Saliba derivational processes and their input*

Following Nichols and Drossard, I used characteristics from the root and the word level, i.e. derivational processes and their input, as diagnostics for the classification of Saliba as fundamentally intransitive. I also argue in line with Drossard that the fundamentally intransitive character of Saliba is not only manifested in the root and the word level but also on the clause level.

Manifestations of fundamental intransitivity on the clause level are what I have called instances of discord in transitivity status between the verb and the clause.[22] Drossard's parameter about the sensitivity of transitivity marking to TAM distinctions and to the individuation of the object corresponds to cases of discord. As introduced in section 3.3.2, transitive clauses can be headed by morphologically intransitive verbs. That means that Saliba can employ intransitive verbs in an area where the better-studied European languages (which are classified as fundamentally transitive) categorically employ transitive verbs. I show in chapter 12 that discord in transitive clauses correlates with the more or less

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[22]   *Note that Ingush may have constructions which are similar to Saliba cases of discord. As defining criteria for the transitivity status or "valence patterns" of constructions, Nichols (1982: 446) states that a valence pattern is intransitive if it has a nominative subject but transitive if it has an ergative subject. Among the Ingush valence patterns she lists "two-place intransitives" which show a nominative subject and an oblique object, and "three-place transitive" which show an ergative subject and two objects. Nichols does not report a ditransitive valence pattern for Ingush and, similarly, I propose that there are no morphologically ditransitive verbs in Saliba.*

individuated status of the object argument. Instances of discord in ditransitive clauses (discussed in chap. 13) can be seen along the same lines (even though they are motivated by morphological criteria rather than semantic and pragmatic ones such as individuation of object). Since the language lacks morphologically ditransitive verbs altogether, all Saliba ditransitive clauses are headed by morphologically transitive verbs. Based on their distributional abilities, the heads of ditransitive clauses can be defined as a special class of transitive verbs, but in terms of inflection they do not differ from regular transitive verbs.[23]

Finally, going further than Nichols and Drossard, I hypothesize that fundamental intransitivity is also manifested on the level of event representation. As I show in chapter 14 on events and their participants, there is a clear tendency in Saliba of expressing three-participant events by transitive rather than by ditransitive clauses. This can possibly be seen as a consequence of the mainly monovalent/ intransitive verbal material available in the language and of the restrictions in applying derivational morphology (e.g. semantic restrictions in adding the causative prefix to transitive stems, see chap. 7). Construct ditransitive clauses can be considered as rather 'labor intensive' in a language where most of the verbal roots are monovalent or labile. For example in Saliba, a small number of verbs which may head ditransitives clause are indeed derived from monovalent roots. This requires two steps, first adding the applicative suffix to the root and then causativizing the applicative stem. Consider the verb in (27):

(27)   *Bosa-wa   ku-**he**-bahe-i-gau.*
         basket-PM   2SG-CAUS-carry-APP-1SG.O
         'Load me the basket (on my back).'

To summarize, features from the root and the word level served as diagnostics of classifying Saliba as a fundamentally intransitive language. In addition, certain typological characteristics manifested on the clause level and the level of event representation also correlate with this classification. These features may be considered as further consequences of the language's fundamental intransitivity. Among these features are the existence of discord constructions and the fact that three-participant events are more commonly expressed by transitive than by ditransitive clauses.

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[23]   *Note that these verbs are not restricted to ditransitive clauses but freely occur in transitive clauses as well. There are thus no verbs which require the expression of three arguments.*

There is evidence suggesting that the Oceanic language group as a whole may be classified as fundamentally intransitive. The following discussion gives a brief overview of some overt statements which relate to parameters applied above to Saliba, especially the inventory of verb roots, the nature of the derivational processes, and cases of discord. In this section, I discuss mainly the first two parameters, cases of transitive clauses with discord in a number of Oceanic languages are discussed in more detail in chapter 12. I do not present a full-fledged discussion here of fundamental intransitivity in Oceanic languages. This would require a representative selection of languages from different subgroups and a systematic review of the criteria involved for each of the languages of the sample. Such a detailed comparative investigation is beyond the scope of this study but may be the subject of future research.

Considering data from other Oceanic languages besides Saliba shows that the typological features which I describe as manifestations of fundamental intransitivity are not an idiosyncratic quirk of the Saliba language but have been recognized as features of the language family and as problems for the discussion of transitivity. This is what makes the Saliba data interesting for language typology beyond the task of language description and documentation.

There is evidence in the literature that the inventory of verbal roots in Oceanic languages is predominantly intransitive (or monovalent). As mentioned above, Pawley and Reid (1980: 105) report that in languages of the Oceanic type nearly all transitive verbs carry both a transitivizing suffix and an object suffix. This suggests that nearly all transitive verbs are derived – and presumably from intransitive verbs. Along the same lines, Pawley (1973: 114) states that in Proto Oceanic "[a]ll but a few transitive verbs required a transitive suffix before a direct object".[24] Dixon (1988) reports similar findings from Fijian. Most Fijian transitive verbs are derived by the "transitive suffix" from intransitive verbs, and the

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[24]   *It is important to note that at least in Saliba the "transitive" or applicative suffix is not a MARKER of the transitive status of the verb, but a DERIVATIONAL morpheme, deriving transitive verbs from intransitives. In Saliba there are derived and underived transitive verbs and the applicative can never occur on underived transitives i.e. on bivalent or labile roots, cf. chaps. 4 and 6.*

majority of elements in the verbal lexicon are intransitive. Just over 70% of verbs in Dixon's sample are intransitive. He states:

> In most languages ... transitive verbs are usually more common than intransitives, both on dictionary and on text counts. ... Fijian is unusual in that most verbs exist in both transitive and intransitive form; yet intransitives are far more common. (p. 295)

Among the languages discussed by Drossard (1991) (and Tsunoda (1981)) are Samoan and Tongan. Both are consistently located close to the fundamentally intransitive pole according to all parameters discussed. In both languages the majority of change-of-state verbs are derived from intransitives and in both languages only a few of the ten semantically-based verb classes are "transitive". For the encoding of change-of-state verbs, Drossard (p. 435) proposes the following scale, with some of the languages he discusses:

mainly derived from intransitives			mainly underived transitives
<-->			
Dakota	Tongan	Turk languages	English
	Samoan		German
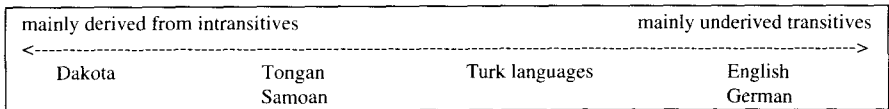
For the classification of the ten semantic verb classes as "transitive" he presents the following (adapted) scale:

fundamentally intransitive (few of the classes are "transitive")			fundamentally transitive (most of the classes are "transitive")
<-->			
Avar	Russian	German	English
Tongan			
Samoan			
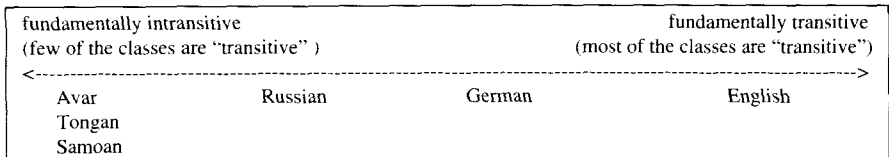
In addition, there is evidence that derivational processes in Oceanic languages are generally geared towards intransitive verbs as input. For example, Broschart (1987) reports that in Tongan of around 360 verbs in the International Dictionary Wordlist (ed. by M. R. Key, University of California at Irvine) which were tested, the vast majority of transitive verbs are derived (Drossard 1991, Footnote 7, p. 434). Similarly, Mosel (1985) reports that transitive verbs in Samoan are in the majority derived from intransitives by a transitivizing suffix.

Lichtenberk (1983: 226ff) describes the derivational processes in Manam, an Oceanic language of Papua New Guinea. He lists four basic valence-increasing processes deriving transitive verbs from intransitive ones (some of the processes

can combine so that there are overall seven valence-increasing rules). About valence-reducing processes in Manam, Lichtenberk (1983: 240) states:[25]

> There exist in Manam a few pairs of formally related verbs where it looks like the source has a valency of 2, and the derived verb has a valency of 1. However, one can hardly speak of a derivational process or processes that reduce valency for two reasons: first of all, there are very few such pairs; and secondly, the formal relationship between the members of such pairs are idiosyncratic. (his emphasis)

This clearly shows that derivational processes in Manam, like in Ingush and Saliba, are geared for intransitive verbs as input and transitive verbs as output.

Besides these root and word-level features, there is also evidence from the clause level which speaks for a classification of Oceanic languages as fundamentally intransitive. For example, Mosel (1991b: 192) describes again for Samoan:

> ... in Samoan transitive actions are not expressed by cardinal transitive clauses. The transitive agent is either expressed by an optional ergative argument or a possessive attribute. The verb is monovalent, as it requires only the absolutive argument.

Further evidence from the clause level for fundamental intransitivity as a typological characteristic of Oceanic languages is presented in chapter 12, where I discuss cases of discord in a number of Oceanic languages.

3.7 SUMMARY

In this chapter, I introduced the approach to valence and transitivity taken in this study. I distinguish features of valence and transitivity on three structural levels: the root, the word, and the clause. Valence was described as a property of verb roots, defined by their occurrence as simplex stems in intransitive and/or transitive verbs. Roots can be monovalent, bivalent, or labile. In terms of transitivity, I distinguish between word-level and clause-level transitivity. Word-level transitivity is defined by the morphological marking of the verb: if it carries an object suffix the verb is transitive, if it does not it is intransitive. Clause-level transitivity is defined by the number of syntactic arguments expressed in the clause. A clause can be intransitive, transitive, or ditransitive. There are different possible relationships between the three structural levels. The relation between the root and the word level can be derived or underived. If the relation involves

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[25] *See section 3.2.1 above for Lichtenberk's use of the term 'valency' which cross-cuts my notion of root valence and word-level transitivity.*

derivation, the transitivity status of the verb may or may not correspond to the valence of the root, depending on whether the derivational morphology affects the verb's transitivity status. The relation between the verb and the clause level may be one of accord or discord. In cases of accord, the clause has the same transitivity status as the verb. In cases of discord, the transitivity status of the clause is higher than that of the verb (but never lower). This is the case when not all arguments expressed in the clause are cross-referenced on the verb. In section 3.4.1, I introduced the notion of semantic object and showed that certain constructions in Saliba grammar are sensitive not only to syntactic but also to semantic arguments.

Finally, I argued that Saliba is a fundamentally intransitive language in the sense of Nichols (1982, 1984a, 1984b) and that this classification seems to apply to Oceanic languages more generally. I have shown that the fundamentally intransitive nature of Saliba and other Oceanic languages is manifested in different ways on the three structural levels. The characteristics were mainly demonstrated at the root and word level. The languages have a higher percentage of underived intransitive verbs than of underived transitive verbs. As a consequence, in the majority, the productive derivational processes increase rather than decrease a verb's transitivity status. On the clause level, fundamental intransitivity is reflected by the fact that transitivity marking is sensitive to semantic and pragmatic factors such as the degree of individuation of the object noun. This is the case, in the Saliba transitive clauses with discord which is further discussed in chapter 12. Finally, I hypothesized that fundamental intransitivity may also be manifested on the level of event representation. There is evidence for Saliba that not all event participants tend to be encoded as syntactic arguments. This is discussed further in chapter 14.

VERB CLASSES

Saliba verb roots can be grouped into classes according to two main criteria: their basic valence and their ability to take certain derivational morphology, which can be termed their 'secondary valence'. The basic valence distinction is between monovalent, bivalent, and labile roots. There are no trivalent roots in the language. A root's basic valence can be determined by its appearance as a simplex (i.e. underived) verb stem: monovalent roots occur as simplex intransitive stems, bivalent roots as simplex transitive stems, but labile roots can occur as either intransitive or transitive simplex stems.[1]

The secondary valence distinction applies only to monovalent roots. Monovalent roots, or rather simplex intransitive stems which are based on monovalent roots, can be divided into those which allow the applicative suffix and those that do not.[2] Intransitive stems which are attested to derive a transitive stem with the applicative suffix can never occur as transitive stems WITHOUT the applicative. This means that only intransitive stems based on monovalent roots but not those based on labile roots can take the applicative suffix.[3] Simplex transitive stems

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[1]   *Some roots are not attested as simplex stems but only as parts of complex verbs (chap. 5). These roots can be classified as monovalent if they can only occur in intransitive complex verbs, as bivalent if they can only occur in transitive complex verbs, but as labile if they can occur in either. In all three cases this classification holds only as long as they do not carry any derivational morphology.*

[2]   *I consider derivational morphology as applying to the stem and not to the abstract root level, but for simplicity I will at times speak of 'roots' allowing derivational morphology rather than of stems which are based on certain roots.*

[3]   *The root* gudu *'close' is problematic in this respect. It fulfills the requirements for a classification as monovalent but also those for a classification as labile (or even bivalent). The root is attested as a simplex transitive stem, as shown in (i a) below, but also as a derived applicative stem as in (b). Speakers insisted that the two forms are semantically identical.*

(i)   a.   *Keda   ya-gudu-o.*   b.   *Keda   ya-gudu-i-o.*
              door   1SG-close-3SG.O   door   1SG-close-APP-3SG.O
              'I closed the door.'   'I closed the door.'

The only explanation that I can think of for these examples is that one form (though unclear which one) might be borrowed from another language in which the root differs

cannot take the applicative suffix either (but cf. 4.3.2). Table 1 summarizes the classification of Saliba verb roots. The morphological tests which help identify a root's basic and secondary valence are discussed in section 4.1.

Class 1	**monovalent roots** • simplex stem is intransitive • cannot derive a transitive stem by the applicative suffix
Class 2	**monovalent roots** • simplex stem is intransitive • can derive a transitive stem by the applicative suffix
Class 3	**bivalent roots** • simplex stem is transitive
Class 4	**labile roots** • simplex stem may be intransitive or transitive

Table 1   *Verb classes according to basic and secondary valence*

Most Saliba verb roots belong to classes 1 and 2; they are monovalent and the simplex stem is intransitive. Many roots of class 1 can derive a transitive stem by means of the causative prefix, and all roots of class 2 can derive a transitive stem by means of the applicative suffix.

The boundary between classes 1 and 2 is at times fuzzy, or rather, speakers judgments about some roots are variable and uncertain. A root's membership in class 1 vs. 2 depends entirely on its ability to take the applicative suffix. Some roots clearly can and some clearly cannot, but there are a number of verb roots where speaker's judgments vary and where acceptability of the applicative depends on providing the appropriate context (see discussion of 'fall' roots in 4.2.1.1).[4] The boundary between classes 3 and 4 is similarly difficult to establish

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in basic valence form the original Saliba form and that the two forms co-exist. This would be somewhat parallel to the case of nonoha *'be ready' which is transitivized by the applicative suffix in Saliba, but a transitive stem with the causative prefix, borrowed from Suau, coexists without any semantic differences (see chap. 7).*

[4]   *Note also that certain roots, namely those which occur in the final ('V$_4$') slot of a complex verb (see chap. 5) do not belong to class 2 even though in complex verb constructions they may take the applicative suffix. If an intransitive stem only ever allows the applicative suffix when it occurs as the V$_4$ stem of a complex verb, the underlying root does classify as class 1 (rather than class 2) because the occurrence of the applicative suffix is also determined by the complex verb construction as a whole and not only by the stem which carries the suffix.*

since negative evidence is needed to determine whether a root is bivalent or labile. In order to identify a root as bivalent, it needs to be shown that the root CANNOT occur as a simplex intransitive stem. Since text examples cannot provide such negative evidence, the distinction between bivalent and labile roots can only be confidently drawn if the information was explicitly elicited.

A distinction which is commonly drawn between verb classes in Oceanic languages is that between stative and active verbs (e.g. Pawley 1973: 113), that is between verbs expressing states (or processes resulting in states) vs. activities. The subjects of stative verbs are undergoers, which are not in control of the process or state, the subjects of active verbs are actors, which are in control of the activity. While this distinction is basically valid for Saliba, it is quite problematic to find consistent morpho-syntactic parameters for it. In Saliba, there are no criteria that unambiguously carve out the distinction between stative vs. active roots, but there are several morphological parameters which allow a rough distinction (see 4.2.1). The bivalent and labile roots of classes 3 and 4 straightforwardly classify as active, their subjects are actors controlling the activity. Also most of the monovalent roots of class 2, which allow the applicative suffix, can be classified as active, although some of them show both stative and active features. Quite problematic is the classification within class 1. There are several morphological parameters that split the class into subgroups each of which potentially correspond to a stative-active distinction, but the splits do not neatly align across the parameters. Besides this, as for class-2, certain class-1 roots show both stative and active features and constitute a somewhat intermediate subclass. A further complication is variation in speaker's judgments of how roots behave with regards to the relevant parameters. As a consequence, one can not state the stative-active distinction as clear cut but rather in terms of prototypical properties not all of which hold for all members of the class.

For Tolai, also an Oceanic language of Papua New Guinea, Mosel (1984: 92) does not only distinguish between stative and active verbs but demonstrates a four-way distinction between verb classes. She distinguishes between 'dynamic' vs. 'stative' verbs by their behavior with respect to reduplication. Both the dynamic and the stative class is further split into 'active' verbs, whose subjects are 'agents', and 'inactive' ones, whose subjects are 'patients'. This active/inactive distinction is reflected in the syntax of the clause in that the 'agent' subject precedes the verb but the 'patient' subject follows it. Tolai dynamic/active verbs express concepts like 'hit' or 'go'; dynamic/inactive verbs are 'fall' or 'sink'; stative/active verbs

express concepts like, 'be sick' or 'be happy'; and finally stative/inactive verbs have meanings like 'be full' or 'be finished'. The crucial difference between Tolai and Saliba is that Tolai provides clear morpho-syntactic criteria for these binary distinctions while Saliba does not. For example, there is no word order difference for agent vs. patient subjects. However, the correlation between Mosel's classification of Tolai verbs and the Saliba classification presented below is quite clear: Mosel's dynamic/active verbs (e.g. 'hit', 'go') are the ones which unambiguously classify as active in Saliba and Tolai stative/inactive verbs (e.g. 'be full', 'be finished') correspond to those Saliba verbs which classify unambiguously as stative. The problems for the Saliba classification mostly arise for the Tolai dynamic/inactive verbs (e.g. 'sink', 'fall') and the stative/active ones (e.g. 'be sick', 'be happy') whose Saliba counterparts show a mix of stative and active features in my account.[5] In sum, an approach to verb classification by discrete features as in the Tolai example would be desirable, but in the Saliba case there are no morpho-syntactic features for distinguishing these categories.

The remainder of this chapter is structured as follows: In 4.1, I first discuss the morphological tests which reveal a verb's transitivity status and, derived from this, a root's valence. Following this, I discuss the four valence-based verb classes of Saliba.

4.1 TRANSITIVITY TESTS

A verb's transitivity status is a crucial factor for the discussion of valence and transitivity not only on the word level itself but on all three structural levels. In order to state a root's valence, it has to be known whether the verbs in which it can occur are morphologically transitive or intransitive. Clause-level transitivity is defined by the number of arguments and so it has to be known whether the verb is transitive or intransitive (because the object suffix counts as an argument on the clause level). These morpho-syntactically-based definitions of root valence, word-level and clause-level transitivity are themselves straightforward, but the analysis is obscured by the fact that word-level transitivity is not always morphologically

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5   A situation similar to Saliba holds for Tavala, a related (Papuan Tip Cluster) language, geographically adjacent. Ezard (1991: 119) describes the Tavala stative-active distinction as a continuum with stative and active verbs as the end points and 'process', 'psychological' and 'posture' verbs as intermediate categories that share features form both sides.

transparent. The crucial fact is that the third person singular object suffix, which is the most frequent object marker, has a zero and a non-zero allomorph. The zero allomorph is the more common form appearing in word-final position. The allomorph -*ya* only occurs in non-final position when the verb carries further affixes. As a consequence, there is a meaningful contrast between the absence of object suffix (intransitive verb) and the zero object suffix (transitive verb). Intransitive and transitive verbs in Saliba can have the same surface appearance. Compare the intransitive verb in (1a) with the transitive verb in (1b):

(1) a. *ya-lage*   b. *ya-liga-ø*
         1SG-arrive   1SG-cook-3SG.O
         'I arrived'   'I cooked it'

From the formal appearance of the examples one cannot infer the transitivity status of the verbs unless the valence of the roots is already known. If it is unknown, the transitivity status of the verbs in (1) is opaque. In this case, the transitivity status of the verb, and based on this the valence of the root, can be investigated by a number of morphological tests. There are two type of tests: those which directly test for the presence or absence of an object suffix and those which test for a stem's ability to take an applicative suffix, from which the presence of an object suffix can be inferred. The tests are discussed below and summarized in Table 2 at the end of this section.

4.1.1 OBJECT-SUFFIX TEST

The OBJECT-SUFFIX TEST shows whether a given verb can in principle take an object suffix. This is relevant because of the zero allomorph of the third person singular object suffix (cf. chapter 2.5.2.2). The test works by adding a morphologically overt object suffix to a stem for which it is unclear whether it actually carries the zero object suffix or no object suffix at all. If the addition of an object suffix is allowed, the root is either bivalent or labile but not monovalent. The example in (2) shows a verb based on the root *liga* 'cook'. From the morphological marking on the verb it is not transparent whether the verb is transitive or intransitive, i.e. whether it carries the zero object suffix, as in (3a), or no object suffix, as in (3b).

(2)   *ya-liga-?*
         1SG-cook-?
         'I cooked (it?)'

(3) a. ? *ya-liga-ø*   b. ? *ya-liga*
            1SG-cook-3SG.O   1SG-cook
            'I cooked it'   'I cooked'

Example (4) shows that the third person plural object suffix can be added to the stem.

(4)   *ya-liga-di*
        1SG-see-3PL.O/P
        'I cooked them'

This shows that the morphological break down with the zero object suffix presented in (3a) is a possible representation of example (2). From this follows that the root *liga* 'cook' is either bivalent or labile, but not monovalent. The object-suffix test is not suited to further distinguish between labile and bivalent roots in that it cannot specify whether an object suffix is only allowed or in fact required. In other words, the object-suffix test is not conclusive by itself, but it can only narrow down the possible choices of a root's basic valence. Whether the root *liga* 'cook' is bivalent or labile can only be discovered through further tests.

4.1.2 DIRECTIONAL-SUFFIX AND -*KO*-SUFFIX TEST

The DIRECTIONAL test and the -*KO*-SUFFIX test can provide information about whether a root can (or must) occur as a simplex intransitive stem without an object suffix. The directional suffixes -*ma* 'hither' and -*wa* 'thither' and the perfect suffix -*ko* attach directly to the verb stem of intransitive verbs, but they attach to the object suffix of transitive verbs. As a consequence, adding either of these suffixes triggers the non-final -*ya* allomorph of the third person singular object suffix instead of the word-final zero allomorph and the transitivity status of the verb becomes morphologically transparent. If the object suffix -*ya* occurs, the verb is transitive, if the directional or the perfect suffix attaches directly to the stem the verb is intransitive. There are restrictions on both tests in that not all verb stems allow all of these suffixes, but most Saliba verbs allow at least one of them. The root *liga* 'cook' does not allow the directional suffixes, but it does allow the -*ko* test. Consider (5):

(5) a.   *ya-liga-ya-ko*   b. *   *ya-liga-ko*
           1SG-cook-3SG.O-PERF   1SG-cook-PERF
           'I cooked it already'   'I cooked already'

Example (5a) shows the perfect suffix -*ko* preceded by the object suffix -*ya*. This confirms the earlier finding of the substitution test, that the simplex stem *liga* 'cook' can be transitive. (5b) shows that the verb is unacceptable when the perfect suffix attaches directly to the stem. This is proof that the root cannot occur as a simplex intransitive stem and that the root *liga* 'cook' is bivalent and not labile. In this way, it has been established that (3b) above is not a possible representation of the verb in (2).

The example in (6) shows a verb based on the root *pesa* 'exit'. As in (2) above the transitivity status of the verb is not morphologically transparent.

(6)   *se-pesa-?*
        3PL-exit
        'they went out'

In this case, the directional-suffix test can establish the transitivity status of the verb and the valence of the root. Consider the verbs in (7):

(7)   a.   *se-pesa-ma*   b. * *se-pesa-ya-ma*
           3PL-exit-hither   3PL-exit-3SG.O-hither
           'they came out here'

Example (7a) shows the directional suffix *-ma* 'hither' attached directly to the verb stem and so the verb is intransitive. (7b) shows that the transitive verb form with the object suffix *-ya* is ungrammatical. This demonstrates that the verb root *pesa* 'exit' is monovalent.

4.1.3 COMPLEX-VERB TEST

The COMPLEX-VERB TEST shows whether a stem can or must carry an object suffix and therefore it can help identify whether a root is monovalent, bivalent or labile. Complex verbs are typically composed of two (and maximally four) conjoined verb stems which build a complex stem that takes a single set of pronominal affixes (see chap. 5). The main verb stem occurs as the first stem (V_1) in the complex verb. The stems which follow typically modify this initial stem, they express the result, directionality, or adverbial features of the activity or event. There are certain constraints within complex verbs concerning the transitivity status of the combining stems. A particular class of stems (termed V_4 stems) which may occur in the final position of a complex verb must always agree with the transitivity status of V_1. If the V_1 stem is intransitive, the final (V_4) stem must also be intransitive (and morphologically simplex). If the V_1 stem is transitive the final (V_4) stem must also be transitive and carry the transitivizing applicative suffix. In this way, this particular class of final stems reflects the transitivity status of the main stem in V_1. In (8), as in (2) and (6) above, the transitivity status of the verb is not overtly marked.

(8)   *ye-hedede-?*
        3SG-talk/tell-?
        'he talked/he said it'

The complex-verb test with the root *uyo* 'go back/again' as the V_4 stem shows that the root *hedede* 'talk/tell' is labile and that the simplex stem in (8) may be transitive or intransitive. In (9a), the final stem *uyo* 'go back/again' carries the applicative suffix and the complex verb is transitive. In (9b), there is no

applicative suffix on V_4 and the complex verb is intransitive. This is because the stem *uyo* 'go back/again' may not change the transitivity status of the construction but must agree with the transitivity status of the preceding stem.

(9) a. *ye-hedede-uyo-i-ø*
   3SG-talk/tell-back/again-APP-3SG.O
   'he said it again'

        b. *ye-hedede-uyo*
          3SG-talk/tell-back/again
          'he talked again'

Example (10) shows a complex verb with the root *kasiyebwa* 'ill' as the main verb stem in initial position. The test shows that the root is monovalent: the transitive complex verb in (a) with the applicative suffix on the final stem is ungrammatical and only the intransitive complex verb in (b) without the applicative is acceptable.

(10) a. * *ye-kasiyebwa-uyo-i-ø*
     3SG-ill-back/again-APP-3SG.O

        b. *ye-kasiyebwa-uyo*
          3SG-ill-back/again
          'he is sick again'

Complex verbs are a frequent type of construction (chap. 5) and the complex-verb test is applicable to most Saliba verbs stems.[6]

4.1.4 APPLICATIVE TEST

The APPLICATIVE TEST establishes whether a verb root in principle allows the applicative suffix. Generally, only monovalent roots and noun roots allow the applicative and so if a root may take the suffix, it can be neither bivalent nor labile.[7] The example in (11a) shows a verb with the root *dobi* 'go down'. Again, the transitivity status of the verb is not transparent. The example in (11b) shows that the root can derive a transitive stem by means of the applicative suffix. This entails that the root is monovalent and the verb in (a) is intransitive.[8]

(11) a. *se-dobi*
   3PL-go.down
   'they went down'

        b. *se-dobi-ei-ø*
          3PL-go.down-APP-3SG.O
          'they took it down'

If a root does not allow the applicative suffix it cannot be a member of class 2 but this does not say anything as such about its basic valence. Additional tests are needed to determine whether it is bivalent, labile, or monovalent (of class 1).

  An exception is one subclass of monovalent roots for which the complex-verb test gives the wrong classification (cf. chap. 5.1.2).

  There is one exception of a root which takes the applicative suffix but which may neither be classified as a monovalent verb root nor as a noun root (cf. chaps. 6, 13).

  The form -ei is the most common allomorph of the applicative for i-final verb roots.

4.1.5 FINAL-VOWEL TEST AND INCORPORATION TEST

The FINAL-VOWEL TEST and the INCORPORATION TEST help to determine whether a final *i*-vowel is an instance of the applicative suffix or part of the verb root. The examples in (12) and (13) each show a transitive, *i*-final verb stem.

(12)   se-bwalai̱-di   (13)   se-tudai̱-di
          3PL-trick:(APP?)-3PL.O/P   3PL-dig:(APP?)-3PL.O/P
          'they tricked them'   'they dug them' (e.g. gardens)

It is unclear whether the verb stems are simplex and have the structure presented in (14a) and (15a), or whether the stems are derived by the applicative suffix and have the morphological break down presented in (14b) and (15b). If the stems are simplex, the root are either bivalent or labile. If the stems are derived the roots involved are monovalent.

(14) a.   ?   se- bwalai̱ di   b.   ?   se-bwala-i̱-di
              3PL-trick-3PL.O/P   3PL-trick-APP-3PL.O/P
              'they tricked them'   'they tricked them'

(15) a.   ?   se-tudai̱-di   b.   ?   se-tuda-i̱-di
              3PL-dig-3PL.O/P   3PL-dig-APP-3PL.O/P
              'they dug them'   'they dug them'

The final-vowel test is again based on the complex-verb constructions described above. The applicative suffix can only occur at the end of a complex verb stem but not on the initial (V_1) stem. If the stem-final vowel in (12) and (13) is the applicative morpheme it will be dropped when the stem appears as the initial stem in a complex verb, if the vowel is part of the root it will stay. Examples (16) and (17) show complex verbs based on the stems in (12) and (13) plus the final (V_4) stem *uyo(-i)* 'go back/again'.

(16)   se-bwala-uyo   (17)   se-tudai̱-uyo-i-di
          3PL-trick-go.back/again   3PL-dig-go.back/again-APP-3PL.O/P
          'they cheated again'   'they dug them again'

Example (16) shows that the final *i*-vowel from the verb stem *bwalai* 'trick' in (12) is dropped when the stem occurs as V_1 of a complex verb. This shows that the stem *bwalai* is composed of the monovalent root *bwala* 'trick' plus the applicative suffix. In contrast, the complex verb in (17) shows that the stem *tudai* 'dig' in (13) is a simplex transitive stem and that the final vowel is part of the root. The root *tudai* 'dig' is either bivalent or labile.[9]

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[9]   *The complex-verb test can show that* tudai *'dig' is in fact labile rather than bivalent. The root can not only occur as* V *of a transitive complex verb as in (17), but also of an intransitive complex verb as in* se-tudai-uyo *'they dug again' where the final stem* uyo *'go back/again' does not carry the applicative suffix.*

The same result can be achieved by the incorporation test. Saliba incorporating verb stems are morphologically intransitive and may not carry the applicative suffix. Example (18) shows that the stem-final vowel on *tudai* 'dig' is retained.

(18)   *se-koya-tudai*
           3PL-garden-dig
           'they garden-dug'

Table 2 summarizes the functions and descriptions of the transitivity tests.

TEST	PURPOSE	DESCRIPTION
OBJECT-SUFFIX TEST	Tests whether a verb stem can be transitive.	Adds a non-zero object suffix to a stem.
DIRECTIONAL-SUFFIX and -*KO*-SUFFIX TEST	Tests whether a verb carries the zero object suffix or no object suffix.	Adds a suffix to the verb, which triggers the non-zero -*ya* allomorph of the 3SG object suffix if the verb is transitive
COMPLEX-VERB TEST	Tests whether a verb carries the zero object suffix or no object suffix.	Builds a complex verb by adding a verb stem. If the main verb stem is INTR the final stem is simplex, if the main verb stem is TR the final stem must carry the applicative suffix.
APPLICATIVE TEST	Tests acceptability of applicative suffix.	Adds an applicative suffix to a verb stem.
FINAL-VOWEL TEST	Tests if a final vowel is the applicative suffix or part of the root.	Adds a verb stem to form a complex verb. If the final vowel is the applicative it will be dropped.
INCORPORATION TEST	Tests if a final vowel is the applicative suffix or part of the root.	Incorporates a noun root into the verb. If the final vowel is the applicative it will be dropped.

Table 2   *Morphological tests for root valence and word-level transitivity*

4.2 CLASS 1: MONOVALENT ROOTS NOT ALLOWING THE APPLICATIVE

As mentioned, the members of class 1 are monovalent roots which do not allow the applicative suffix. The simplex stems based on these roots are intransitive. Class 1 roots are in the vast majority stative, but there are also a number of active roots among the members of this class.

4.2.1 STATIVE-ACTIVE DISTINCTION

There are no clear cut morpho-syntactic criteria which allow a consistent distinction between stative and active verbs in Saliba, but there are a number of parameters which, combined, allow a rough distinction of these two classes. Among the relevant criteria for this distinction is whether a root can occur in attributive function, as a nominal modifier. While prototypical stative roots can, prototypical active roots cannot occur in this function. This parameter is used for example by Schütz (1985: 102/3) for the identification of stative verbs in Fijian. A second criterion is a root's ability to derive an agent noun: prototypical active roots can, prototypical stative roots cannot. A third parameter is a root's ability to express an ongoing activity when reduplicated. Prototypical active roots can reduplicate to express an ongoing activity, prototypical stative roots can either not reduplicate at all or they only allow an inchoative or habitual reading but not an activity reading. Some roots share features with both stative and active roots and here also seem to be a number of counter examples for each parameter. Therefore, these parameters describe tendencies rather than a clear-cut distinction. below, I discuss these three parameters distinguishing stative and active verbs in Saliba.[10]

4.2.1.1 Occurrence as nominal modifiers

Stative roots can typically occur as nominal modifiers following a noun. That means besides their verbal, predicative occurrence with a subject prefix, they can occur in an attributive function. These roots are classified as verbs rather than adjectives, because generally the attributive use requires derivation, while the verbal use does not (see chap. 2). Most roots must reduplicate in the attributive function and carry a third person possessive suffix reflecting the number of the noun referent. The examples in (19a) to (22a) show the roots as intransitive verb stems, the examples in (b) show them as attributes of the preceding nouns.

(19) a. *Leiyaha   ye-pitali.*   b. *leiyaha   pita-pitali-na*
         pandanus   3SG-dry   pandanus   RED-dry-3SG.P
         'The pandanus is dry.'   'dry pandanus'

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[10]   *Besides these parameters, other morphological criteria have been tested as, for example, allowance of the modifier* kalili *'very', the prohibition marker* tabu *'don't', the directional suffixes and the causative prefix. None of these provided a consistent distinction and at times speakers varied considerably in their judgment. Imperatives do not provide a test either since they are not morphologically marked.*

(20) a. *Numa-ne   ye-namwa.*
      house-DET   3SG-good
      'The house is good.'

    b. *numa   namwa-namwa-na*
      house   RED-good-3SG.P
      'good house'

(21) a. *Se-gwauyala.*
      3PL-happy
      'They are happy.'

    b. *sine   gwau-gwauyala-na*
      woman   RED-happy-3SG.P
      'happy woman'

(22) a. *Pwalawa   ye-gehe.*
      bread   3SG-finished
      'The bread is finished.'

    b. *pwalawa   gehe-gehe-na-ne*
      bread   RED-finished-3SG.P-DET
      'the last bread'

There is a group of four roots expressing concepts like 'fall' and 'sink' which show an interesting split. This group actually falls into the gray area between class 1 and class 2.[11] The verbs are discussed here because they nicely reveal a prerequisite for the attributive use of verb roots (independent of whether they actually belong to class 1 or 2). The roots in (23) and (24) can occur as nominal modifiers, but those in (25) and (26) cannot – even though they seem semantically very closely related. With all four roots the subject lacks control over the 'falling' or 'sinking' event expressed by the verb.

(23) a. *Kaiwa   ye-guli.*
      tree   3SG-fall.over
      'The tree fell over'

    b. *kaiwa   guli-guli-na*
      tree   RED-fall.over-3SG.P
      'fallen over tree'

(24) a. *Waga   ye-yoli.*
      boat   3SG-sink
      'The boat sank'

    b. *waga   yoli-yoli-na*
      boat   RED-sink-3SG.P
      'sunken boat'

(25) a. *Ye-soni.*
      3SG-fall.through
      'It fell through.'
      (e.g. through hole in the floor)

    b. * *ginauli soni-soni-na*
      thing   RED-fall.through-3SG.P
      'fallen through thing'

(26) a. *Buka   ye-beku.*
      book   3SG-fall
      'The book fell.'

    b. * *buka   beku-beku-na*
      book   RED-fall-3SG.P
      'fallen book'

It appears that generally a root's ability to occur in an attributive function depends on the duration of the state. A tree or boat may well stay in a 'fallen over' or 'sunken' state but things typically do not stay in a 'fallen' or 'fallen through' state for very long. That is, in contrast to *yoli* 'sink' and *guli* 'fall over', there seems to be no post-action result or state implied by *soni* 'fall through' and *beku* 'fall'.

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[11]   *According to elicitations,* yoli *'sink' and* soni *'fall through' allow the applicative suffix (and therefore belong to class 2) but* beku *'fall' and* guli *'fall over' do not and therefore, by definition would belong to class 1. I actually suspect this to be an artifact of insufficient elicitation and that all of the four verbs may in fact take the applicative suffix to add a concomitant object (see 4.3.1) if a proper context is provided. Final classification is pending until further elicitation.*

A subclass of class-1 roots does not reduplicate in the attributive use and another group of roots are reduplicated in both their attributive and verbal use, (e.g. color terms, as *posiposi* 'white' in (27)). For these two groups, the predicative and attributive stems are morphologically identical and differ only in the type of pronominal affixes they take (subject prefix in the verbal use, possessive suffix in the attributive use). This subclass of monovalent verb roots is closest to a word class of adjectives.[12] The classes feature some of the concepts which Dixon (1982) predicts to belong to the class of adjectives in a given language if it can be established a separate word class at all.[13] In Saliba there is no reason to consider adjectives a separate word class since the verbal forms are not more or less derived than the attributive forms. Consider (27) to (30):

(27) a.   *Lulu   ye-posiposi.*   b.   *lulu   posiposi-di*
         shirt   3SG-white   shirt   white-3PL.O/P
         'The shirt is white.'   'white shirts'

(28) a.   *Kae-m   ye-bida.*   b.   *kae-m   bida-na*
         foot-2SG.P 3SG-dirty   foot-2SG.P dirty-3SG.P
         'Your foot is dirty.'   'your dirty foot'

(29) a.   *Lulu   ye-gagili.*   b.   *lulu   gagili-di*
         shirt   3SG-small   shirt   small-3PL.O/P
         'The shirt is small.'   'small shirts'

(30) a.   *Numa-ne ye-yababa.*   b.   *numa yababa-na*[14]
         house-DET 3SG-bad   house   bad-3SG.P
         'The house is bad.'   'bad house'

The attributive forms of stative roots can also occur without preceding nouns and act as nominals themselves, e.g. *posiposi-na* 'white one', *gehe-gehe-na* 'last one'. In a number of cases, the verbal readings in (a) are interpreted with a connotation of 'too much', for example (29a) can be read as 'the shirt is too small'.

Active verb roots can typically not occur as nominal attributes carrying a possessive suffix Consider the motion verbs in (31) to (36):

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[12]   *See Ross (1998) for discussion of adjectives as a category in Oceanic languages.*

[13]   *Dixon (1982: 46) states "The AGE, DIMENSION, VALUE and COLOUR types are likely to belong to the adjectival class, however small it is.". Note however that in Saliba in some cases antonyms behave differently with respect to reduplication in the attributive use, e.g.* laki *'big' and* namwa *'good' reduplicate but* gagili *'small' and* yababa *'bad' do not.*

[14]   *For this root, the reduplicated form* yaba-yababa-na *was accepted and considered more emphatic:* numa yaba-yababa-na *'very bad house (e.g. it might collapse)'.*

(31) a. *Waga-wa   ye-lao-ko.*
boat-PM   3SG-go-PERF
'The boat went already.'

b. * *waga   lao-lao-na*
boat   RED-go-3SG.P
('gone boat')

(32) a. *Kwa-dobi!*
2PL-go.down
'Go down!'

b. * *tamowai   dobi-dobi-di*
people   RED-go.down-3PL.O/P
('gone down people')

(33) a. *Se-pesa*
3PL-exit
'They went out.'

b. * *tau   pesa-pesa-na*
man   RED-exit-3SG.P
('gone out man')

(34) a. *Se-lage.*
3PL-arrive
'They arrived.'

b. * *tamowai   lage-lage-di*
people   RED-arrive-3PL.O/P
('arrived people')

(35) a. *Se-wasabu.*
3PL-go.away
'They went away.'

b. * *tamowai   wasa-wasabu-di*
people   RED-go.away-3PL.O/P
('gone-away people')

(36) a. *Se-dikwa.*
3PL-cross
'They went across (the hill).'

b. * *tamowai   dikwa-dikwa-di*
people   RED-cross-3PL.O/P
('gone-across people')

To summarize, the parameter of attributive use splits monovalent roots into two groups which can be preliminarily labeled 'stative' and 'active'. Stative roots can occur as nominal modifiers while active roots cannot.

4.2.1.2 Derived agent nouns with *tau* 'man/person'

The second parameter distinguishing stative and active roots is the derivation of agent nouns. Active roots can typically derive an agent noun (at least those that take animate subjects) by means of the stem *tau* 'man/person' preceding the verb stem. In contrast to *tau* 'man' as an independent noun, the nominalizing form *tau* is not in opposition with *sine* 'woman' but can refer to male and female agents (cf. 2.4.4). Examples (37) to (42) show roots which were classified as active in 4.2.1.1 because they cannot occur as nominal modifiers. They also classify as active according to the agent-noun parameter.

(37) *tau lao   (koya)*
man go   garden
'people who went (to the garden)'

(38) *tau lage-ne*
man arrived-DET
'the people who arrived'

(39) *tau dobi   (Alotau)*
man go.down   Place.Name
'people who went down (to Alotau)'

(40) *tau   wasabu*
man   go.away
'people who went away'

(41) *sikulu tau   pesa*
school man   exit
'school graduates'

(42) *tau dikwa-wa*
man cross-PM
'the people who went across'

Some of the roots which were classified as stative in 4.2.1.1 can also derive what

looks morphologically like an agent noun. The roots in (43) to (46) classify as stative according to the parameter in 4.2.1.1 but as active according to the agent noun parameter.[15]

(43)   *tau*   *namwa-namwa*   (44)   *tau*   *gwauyala*
          man   RED-good   man   happy
          'recovered person'   'dancers, people who celebrate'

(45)   *tau*   *yababa*   (46)   *sikulu* *tau*   *gehe-wa*
          man   bad   school man   finished-PM
          'bad person' (also 'Satan')   'the ones who finished school'

Other roots which were classified as stative in 4.2.1.1 do not allow the morpheme *tau* to derive an agent noun as shown in (47) to (50).

(47) * *tau*   *pitali*   (48) * *tau*   *posiposi*[16]
          man   dry   man   white
          'dry person'   'white person'

(49) * *tau*   *bida*   (50) * *tau*   *gagili*
          man   dirty   man   small
          'dirty person'   'small person'

These roots classify as stative according to both the parameters of attributive use and of derivation of agent nouns.

4.2.1.3 Reduplication

The parameter of reduplication is commonly cited in the Oceanic literature as a distinguishing feature between stative and active verbs (e.g. Lichtenberk 1983, Mosel 1984, Ezard 1991, Bugenhagen 1995). In some languages, a root's mere morphological ability to reduplicate is sufficient for the stative-active distinction. For example, Bugenhagen (1995: 122) notes in his description of Mangap-Mbula:

> Static verbs … which encode a state of affairs that is constant over an interval of time, do not undergo reduplication, whereas dynamic verbs … which encode a state of affairs that changes over time, do.

In Saliba, as in a number of languages, the mere ability to reduplicate does not reliably distinguish between stative and active roots, but the semantics of the

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[15]   *Speakers varied as to whether they allowed a non-reduplicated version* tau namwa *'good person' of (43). Some speakers allowed it in a religious context as referring to Jesus Christ. This, as well as the use of* tau yababa *for 'Satan', suggests that lexicalization is distorting the distinction drawn by the agent-noun parameter in that some of the derived forms with* tau *are not truly agent nouns but lexicalized forms which have a conventional referent rather than referring to any person or group of people defined by the semantics of the verb root.*

[16]   *This stem only allows the plural form* tatao posiposi *'white people'.*

reduplicated verb form also needs to be taken into account (cf. Lichtenberk 1983: 219). The criteria of allowing an ongoing-activity reading is also one of the classical tests cited by Dowty (1979: 55) for stative vs. 'non-stative' verbs. Reduplicated verbs typically (with a few exceptions) express the progressive aspect in Saliba, but different roots allow different readings of the progressive: some express ongoing activity, others have a habitual or inchoative reading, and some roots allow more than one of these interpretations. Roots which express ongoing activity in the progressive aspect can be classified as active, those which do not allow reduplication at all or which only allow an inchoative or habitual reading can be classified as stative.

The motion verbs, which classify as active according to both of the previous parameters can reduplicate and the reduplicated forms express ongoing activities. This means they also classify as active according to this third parameter.

(51) *Ye-lao-lao.*
      3SG-RED-go
      'He was going.'

(52) *Se-dikwa-dikwa.*
      3PL-RED-cross
      'They were going across.'

(53) *Se-dobi-dobi.*
      3PL-RED-go.down
      'They were going down.

(54) *Ye-wasa-wasabu.*
      3SG-RED-go.away
      'He was running away.'

(55) *Se-pesa-pesa.*
      3PL-RED-exit
      'They were going out.'

(56) *Se-lage-lage.*
      3PL-RED-arrive
      'They were arriving.'

Some roots, such as *lage* 'arrive' can only reduplicate when they have a plural subject. This is because the root expresses a punctual event which can only be understood as ongoing over time if several subjects are involved, arriving one after another.

The roots *gwauyala* 'happy', *namwa* 'good', *gehe* 'finished', and *yababa* 'bad', which can occur both as nominal modifiers but also derive agent nouns also allow reduplication. The readings of the reduplicated forms vary but they never express ongoing activity. They all classify as stative according to this parameter. The reduplicated stem with *gwauyala* 'happy' in (57) has a habitual reading, while the reduplicated form of *gehe* 'finished' in (58) is inchoative.

(57) *Ye-gwau-gwauyala.*
      3SG-RED-happy
      'He's (a) happy (character).'

(58) *Piuli   ye-gehe-gehe   (musamusana kabo   ye-gehe).*
      fuel   3SG-RED-finished   little.bit   TAM   3SG-finished
      'The fuel is finishing (in a little while it'll be finished).'

The root *namwa* 'good' can have both an inchoative reading as in (59) or express a temporary state of being as in the question and answer pair in (60a) and (b).

(59)   *Ye-namwa-namwa-ko.*
         3SG-RED-good-PERF
         'He recovered already.'

(60) a. *Ku-namwa-namwa?*   b. *Ya-namwa-namwa, na   kowa?*
         2SG-RED-good   1SG-RED-good   CONJ 2SG.EMPH
         'How are you doing?   'I'm well, and how are you?'
         (lit. 'Are you being well?')

The reduplicated form of *yababa* 'bad' in (61) only allows a habitual reading and can only take machines as its subject, such as engines, radios, etc.. The root was rejected with human subjects as shown in (b).

(61) a   *Engine-ne   ye-yaba-yababa.*
         engine-DET   3SG-RED-bad
         'The engine is habitually bad.' (*sometimes it works and s.t. it doesn't*)

     b. * *Tamowai-ne   ye-yaba-yababa.*
         person-DET   3SG-RED-bad
         'The person is habitually bad.'

The root *pitali* 'dry' was characterized as stative according to the first two parameters. It does allow reduplication as in (62) but only with a habitual reading ('this synthetic shirt is always dry, even when it rains') or with a lexicalized meaning of 'damp'. Accordingly, the root also classifies as stative according to this parameter.

(62)   *Ye-pita-pitali.*
         3SG-RED-dry
         'It's habitually dry.' or 'It's damp.'

The remaining roots which were classified as stative according to the previous two parameters do not allow reduplication at all, as shown in (63) and (64). These roots classify as stative according to all three parameters. (In the case of *posiposi* 'white' in (65), the basic form is reduplicated to start with and cannot be reduplicated further.)

(63)   * *Ye-bida-bida.*   (64) * *Ye-gagi-gagili.*
         3SG-RED-dirty   3SG-RED-small

(65)   * *Ye-posi-posiposi.*
         3SG-RED-white

To summarize, active roots can reduplicate and the reduplicated forms express ongoing activity. Stative roots either do not allow reduplication or they can reduplicate only with an inchoative or habitual reading, or a reading of a temporary state of being.

This picture is skewed by a group of positional roots expressing concepts like 'sit', stand', 'lie', and 'hang'. Conversely to the roots discussed above, these roots express an inchoative activity in the simplex form but a state in the reduplicated version. Consider (66) to (69):

(66) a. *Ye-tuli.*
3SG-sit
'He sat down.'

    b. *Ye-tu-tuli   temenai.*
3SG-RED-sit   DEM.DIST
'He is sitting there'

(67) a. *Ku-tolo!*
2SG-stand
'Stand up!'

    b. *Tabu ku-to-tolo, ku-tuli.*
PRHIB 2SG-RED-stand 2SG-sit
'Don't stand (around) sit down!'

(68) a. *Ku-keno!*
2SG-lie/sleep
'Lie down/sleep!'

    b. *Ye-keno-keno.*
3SG-RED-lie/sleep
'She is lying/sleeping.'

(69) a. ? *Ye-kabasi*[17]
3SG-hang
'It hung.'

    b. *Ye-kaba-kabasi*
3SG-RED-hang
'It is hanging.'

Interestingly, in English, positional verbs also behave differently in respect to the progressive aspect. For a discussion see Dowty (1979: 173).

4.2.1.4 Alignment of classification

The three parameters discussed in 4.2.1.1 to 4.2.1.3, attributive use, agent noun derivation, and reduplication, do not neatly align but pick out slightly different sets of verb roots. The roots which classify as stative according to all three parameters can be considered prototypical statives, the ones which classify as active according to all parameters as prototypical active roots within class 1. The remaining class-1 roots share features with both stative and active forms and constitute a transitional set. Table 3 summarizes the discussion and shows the (lack of) alignment across the three parameters. The gray fields signal classification as stative according to the respective parameter. The roots figuring at the top of the table are prototypical statives, those at the bottom are prototypical active roots within class 1.[18]

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[17]   *The root* kabasi *'hang' in (69) was not allowed in the non-reduplicated form by most speakers. It can only occur without reduplication when it carries the causative prefix as in* se-he-kabasi *'they hung it (up)'.*

[18]   *The 'fall' and 'sink' roots have been included in the table (even though two or possibly all of them may actually belong to class 2). Three of the positional roots have been included, for the fourth,* keno *'lie/sleep', not all of the relevant data was elicited.*

		NOMINAL MODIFIER	AGENT NOUN	REDUPLICATION
STATIVE				
bida	'dirty'	√	no	no
gagili	'small'	√	no	no
posiposi	'white'	√	(√pl)	no
pitali	'dry'	√	no	habitual
gwauyala	'happy'	√	√	habitual
gehe	'finished'	√	√	inchoative
yababa	'bad'	√	(√)	habitual
namwa	'good'	√	(√)	inchoative or temp. state of being
kabasi	'hang'	√	√ (must RED)	RED = state / simple = inchoative
tuli	'sit (down)'	no	√	" "
tolo	'stand (up)'	no	√	" "
guli	'fall over'	√	√	ongoing activity (pl)
yoli	'sink'	√	√	ongoing activity (pl)
beku	'fall'	no	√	ongoing activity (pl)
soni	'fall through'	no	√	ongoing activity (pl)
lage	'arrive'	no	√	ongoing activity (pl)
pesa	'exit'	no	√	ongoing activity (pl)
lao	'go/travel'	no	√	ongoing activity
dobi	'go down'	no	√	ongoing activity
dikwa	'go across'	no	√	ongoing activity
ACTIVE				

(√) = *tau* form possibly only with lexicalized meaning (i.e. not true agent noun)
(pl) = only with plural subjects

Table 3   *Alignment of stative-active distinction within class 1*

4.3 CLASS 2: MONOVALENT ROOTS THAT ALLOW THE APPLICATIVE

Class-2 roots are monovalent and they can derive a transitive stem by means of the applicative suffix (cf. chap. 6). Simplex stems based on these roots are intransitive. The roots largely classify as active: they build agent nouns with the form *tau* 'man', can reduplicate to express ongoing activity, and they can typically not function as nominal modifiers. There are exceptions, but these criteria hold for the vast majority of roots. One subclass of class 2, however, most likely has to be classified as stative, namely those which can be described as O-type roots.[19] For almost all roots of class 2, the subject of the intransitive verb corresponds to the

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[19]   *The relevant data on the stative-active distinction and the three parameters described in 4.2.1 above are not available for the group of O-type verbs in the current data base. A final classification as stative or active is pending.*

subject of the derived transitive verb as in (70) and in most of the examples in the remainder of this section.

(70) a. *Ye-kuma.*　　　　　　　　b.　*Kwateya　ye-kuma-i-di.*
　　　3SG-plant　　　　　　　　　　　yam　　3SG-plant-APP-3PL.O/P
　　　'He planted.'　　　　　　　　　　'He planted yams.'

In only a few cases, the subject of the intransitive verb is corresponds to the object (rather than the subject) of the transitive verb as in (71) to (73):

(71) a. *Pasa　ye-pane.*　　　　　　b.　*Pasa　ye-pane-i-ø.*
　　　flower　3SG-smell　　　　　　　　flower　3SG-smell-APP-3SG.O
　　　'The flower smells.'　　　　　　　'He smelled the flower.'

(72) a. *Ye-nonoha.*　　　　　　　　b.　*Ye-nonoha-i-di.*
　　　3SG-ready　　　　　　　　　　　3SG-ready-APP-3PL.O/P
　　　'He is ready.'　　　　　　　　　　'He gets them ready.'

(73) a. *Maina　unai　ya-sipwa.*　　b.　*Manuwa　ya-sipwa-i-ø.*
　　　string　PP.SG　1SG-trip　　　　　bird　　1SG-trip-APP-3SG.O
　　　'I tripped over the string.'　　　　'I trapped a bird.'

The difference between the roots in (70) vs.(71) to (73) corresponds to the distinction between the A-type and O-type verbs which Dixon (1988: 45) describes for Boumaa Fijian.[20] Saliba has only very few roots which classify as O-type. Besides the three class-2 roots in (71) to (73) only one class 4 root is attested so far (see 4.5 and 6).

The objects which are added by the applicative suffix can have different semantic roles and they also differ in their morpho-syntactic behavior. On the basis of this, subclasses can be distinguished within class 2.

4.3.1 'CLOSE' VS. 'REMOTE' OBJECTS

There is evidence for two morpho-syntactic subclasses. The distinction between these two correlates with the type of object roles which is added by the applicative suffix and with the nature of the relationship between the verb and its object. The two subclasses reflect the distinction between 'close' vs. 'remote' objects introduced by Pawley (1986: 95) and discussed in the Oceanic literature (e.g. Pawley and Reid 1980: 106, Lynch et al. to appear chap. 3). Historically, this distinction is associated with the choice between the two Proto Oceanic transitivizing suffixes *-i* (adding close objects) vs. *-akini* (adding remote objects). Even though Saliba has but a single transitivizing suffix (which I call 'applicative', chap. 6), it is possible to distinguish close vs. remote objects in

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[20]　*And to A-verbs vs. P-verbs in Harrison (1982: 193).*

Saliba by a number of morpho-syntactic criteria. These criteria show that in particular constructions only objects with certain semantic roles can occur. This allows one to assign certain semantic roles to the categories of close vs. remote objects respectively. The morpho-syntactic criteria are discussed in chapter 6, here I merely provide some examples for illustration. Objects with the semantic role of patient as in (74) are classified as close objects. The term 'patient' is used here to describe an entity which is affected or changed in some way by the event, as well as an entity which is being moved or transferred in the course of the event.[21]

(74) a.   *Ye-bahe.*   b.   *Ye-bahe-i-di.*
        3SG-carry   3SG-carry-APP-3PL.O/P
        'He carried.'   'He carried them.'

Locations, as in (75), and concomitant NPs, as in (76), classify as remote objects. A 'location' is defined here as the position in space where an entity or event is located. The term 'concomitant' denotes an entity which moves in the same manner, along with, and because of the subject.

(75) a.   *Ye-maliwai.*   b.   *Tebolo   ye-maliwai-ei-ø.*
        3SG-vomit   table   3SG-vomit-APP-3SG.O
        'She vomited.'   'She vomited on the table.'

(76) a.   *Ye-heloi.*   b.   *Ye-heloi-ei-ø.*
        3SG-run   3SG-run-APP-3SG.O
        'He ran.'   'He ran with it.' (e.g. in his hand)

Addressees and stimuli in (77) and (78) respectively constitute a somewhat transitional category (as well as recipients) but they behave more like remote than like close objects and are classified as such. The term 'stimulus' is used here as denoting the source of emotion or perception, for example the person with whom the subject referent is angry or the entity which is perceived or looked at. An 'addressee' is defined here as the person or entity at which the communication is directed.

(77) a.   *Ya-henamai.*   b.   *Ya-henamai-ei-go.*
        1SG-ask   1SG-ask -APP-2SG.O
        'I asked.'   'I asked you.'

(78) a.   *Ye-koipili.*   b.   *Ye-koipili-ei-gau.*
        3SG-angry   3SG-angry-APP-1SG.O
        'She's angry.'   'She's angry with me.'

The set of criteria that distinguishes close vs. remote applied objects concern the type of alternative constructions in which the objects may feature when the verb is morphologically intransitive, that is when it does not take the applicative suffix.

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[21]   *This is to say that the semantic role of 'theme' is treated here as a type of patient, since patients and themes do not differ in terms of their morpho-syntactic behavior.*

Relevant is whether or not an object may feature in clauses with discord, in noun incorporation, and whether it may be encoded as an adjunct. The notion of close objects as discussed in the Oceanic literature is closely linked to the concept of semantic argument in Saliba. The criteria for close objects are essentially the same as those listed for semantic arguments as defined in chapter 3.4.1. The two subclasses of class 2 thus differ in that, for the roots which take a close (patient) object, this applied object is the expression of a semantic argument. For roots which take remote objects (with semantic roles other than patient), the applied object is not a semantic argument of the verb. For more further discussion of the different types of applied objects the reader is referred to chapter 6.

4.3.2 OBLIGATORY APPLICATIVES

Two further subclasses of class 2 can be defined by the fact that they take the applicative suffix obligatorily. They are not attested as underived intransitive but only as derived transitive stems.[22] The roots of the first group can never occur as simplex stems of any kind. Only a few roots of this type are attested. Two examples are presented in (79) and (80).

(79) a. * *Ye-katu.*
      3SG-catch
      'He caught (fish).'

    b. *Ye-katu-ni-di.*
      3SG-catch-APP-3PL.O/P
      'He caught them.'

(80) a. * *Ye-lapu.*
      3SG-hear/feel
      'He heard/felt.'

    b. *Ye-lapu-i-ø.*
      3SG-hear/feel-APP-3SG.O
      'He heard/felt it.'

The roots of the second class do not appear as simplex verb stems but they can occur as simplex noun stems. Examples are *nigwa-i* 'cut' (from *nigwa* 'knife'), *guguya-i* 'advise' (from *guguya* 'advice') or *kainauya-i* 'give as gift' (from *kainauya* 'gift'). These roots are primarily classified as nominal roots but they can also be considered as a subclass of class 2 by virtue of the fact that they allow the applicative suffix to derive a transitive verb stem, which is not the case for all noun roots. For further discussion of obligatory applicatives see chapter 6.

4.4 CLASS 3: BIVALENT ROOTS

The roots of class 3 are bivalent and the simplex stems based on these roots are transitive. Some examples of transitive verbs with bivalent roots are given in (81) to (86).

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[22]   *This class corresponds to Pawley's (1973: 135) subclass A 'obligatory transitives'.*

(81)   *Saha   ku-gina-ginauli-ø?*
            what   2SG-RED-make/do-3SG.O
            'What are you doing?'

(82)   *Leta-wa   ya-hetamali-ya-ko.*
            letter-PM   1SG-send-3SG.O-PERF
            'I sent the letter already.'

(83)   *Ye-hai-ya-ko.*
            3SG-take/get-3SG.O-PERF
            'He got it already.'

(84)   *Kaputi   ya-tole-di.*
            cup   1SG-put-3PL.O/P
            'I put the cups (away).'

(85)   *Ku-le-ya-ma!*
            2SG-give-3SG.O-hither
            'Give it to me!'

(86)   *Kaleko   ya-deuli-di.*
            clothes   1SG-wash-3PL.O/P
            'I washed the clothes.'

Only relatively few Saliba verb roots have been clearly identified as bivalent. This reflects on the one hand the tendency that a majority of Saliba roots are monovalent and many transitive verb stems are derived (chap. 3). On the other hand, the small number of bivalent roots attested is partly due to the fact that they are difficult to distinguish from labile roots. In quite a few cases, this distinction has not been established yet and they are preliminarily classified as 'bivalent or labile' (see 4.6 below).

A subgroup of bivalent roots allows derivation with the resultative prefix *ta-* which detransitivizes a transitive verb stem (cf. chap. 9). Most roots which allow the resultative prefix express some action of damage like 'break', 'tear' or 'bend', as in (87) to (89). But also the root *soke* 'open' is attested with the resultative prefix as shown in (90).

(87) a.   *Galasi   ya-koi-kesi-ø.*
            glass   1SG-hit-break-3SG.O
            'I (hit-)broke the glass'

    b.   *Galasi   ye-ta-kesi.*
            glass   3SG-RESULT-break
            'The glass is broken.'

(88) a.   *Pilipou   ya-pulisi-ø.*
            trousers   1SG-tear-3SG.O
            'I tore the trousers'

    b.   *Pilipou   ye-ta-pulisi.*
            trousers   3SG-RESULT-tear
            'The trousers are torn.'

(89) a.   *Aiyani   ya-you-ø.*
            iron   1SG-bend-3SG.O
            'I bent the iron'

    b.   *Aiyani   ye-ta-you.*
            iron   3SG-RESULT-bend
            'The iron is bent.'

(90) a.   *Keda   ku-soke-ø!*
            door   2SG-open-3SG.O
            'Open the door!'

    b.   *Ye-saha-to   keda   ye-ta-soke?*
            3SG-what-??   door   3SG-RESULT-open
            'How come the door is open?'

4.5 CLASS 4: LABILE ROOTS

The roots of class 4 are labile, which means that the simplex stems based on these roots can be either intransitive or transitive. Labile roots do not constitute a third valence value as such but they can be considered undetermined between being monovalent and bivalent. A root's labile valence can be demonstrated by several of the transitivity tests discussed above. Examples (91) and (92) show the roots

sae 'go up' and *hedede* 'talk/tell'.)

(91) a. *ye-sae-ma*
3SG-go.up
'she came up' (bagi138)

b. *ku-sae-ya-ma*
2SG-go.up-3SG.O-hither
'bring her up here' (bagi102)

(92) a. *Se-hedede-go.*
3PL-talk/tell-2SG
'They talked about you.'

b. *Se-hedede.*
3PL-talk/tell
'They talked.'

In (93) and (94), the roots *numa* 'drink' and *kabi* 'touch/make' appear in an intransitive and a transitive complex verb each (see complex-verb test, 4.1.3).

(93) a. *Ya-numa-kasaya   na   sola   gado-gu   ye-magu.*
1SG-drink-in.vain   CONJ   still   throat-1SG.P   3SG-dry
'I drank in vain, I am still thirsty.'

b. *Ku-numa-kasaya-i-ø   kabo   ku-ini-gabae-ø.*
2SG-drink-in.vain-APP-3SG.O   TAM   2SG-pour-out/off-3SG.O
'If you can't finish it, pour it away.' (emadial147)

(94) a. *Ye-kabi-namwa-namwa-i-di.*
3SG-touch-RED-good-APP-3PL.O/P
'He held them properly.'

b. *Ye-kabi-namwa-namwa   ede   nige   ye-beku.*
3SG-touch-RED-good   PRSUP   NEG   3SG-fall
'He held (tight) properly and so he didn't fall.'

A further example of a labile root is *wadam* 'hide'. This root is only attested as part of a complex verb with a preceding verb stem, it never occurs as an independent stem. The root is attested with the intransitive stem *keno* 'lie/sleep' as in (95a) but also with the transitive stem *tole* 'put', as shown in (b).

(95) a. *ye-keno-wadam*
3SG-sleep/lie-hide
'he hid (himself)' (ar3a:28)

b. *ye-tole-wadam-ø*
3SG-put-hide-3SG.O
'she hid it' (bagi78)

As opposed to the previous examples, the intransitive and the transitive stem based on the root *mwalae* 'climb/enter' seem to differ in meaning beyond the difference in transitivity. The transitive stem means 'climb' and takes the ground object, i.e. the entity which is climbed (Talmy 1985), as its object. An example is given in (96a). As an intransitive stem *mwalae* means 'enter'. In the 'enter' use, the ground object, (e.g. the house that is entered) must be marked by a postposition as in (96b). It may not occur as the unmarked object of the transitive verb, as shown in (96c).

(96) a. *Niu   ye-mwalae-ya-ko.*
coconut   3SG-climb/enter-3SG.O-PERF
'He climbed the coconut (palm) already.'

b. *Yo-da   numa   unai   ye-mwalae.*
CL1-1INC   house   PP.SG   3SG-climb/enter
'He entered our house.'

c. * *Yo-da   numa   ye-mwalae.*
   CL1-1INC house   3SG-climb/enter
   'He entered our house.'

In all of the examples above, the subject of the intransitive verb corresponds to the subject of the transitive verb and the roots are A-type roots in Dixon's (1988) terminology. O-type roots are rare in Saliba (see 4.3 for O-type roots of class 2). The only attested labile root of this type is *bui* 'turn'. For this root, the subject of the intransitive verb corresponds to the object of the transitive verb. Labile O-type roots can be described as roots which allow 'causative alternation', i.e. the transitive use of the roots functions like a causativized version of the intransitive use (see Levin 1993: 26). The clause in (97) has an intransitive and a transitive reading. They are in principle morphologically distinct in that in the transitive reading the verb carries an object suffix but in the intransitive reading it does not. However, because of the word-final zero allomorph of the third singular object suffix, the surface structure of the intransitive and the transitive verb are indistinguishable.

(97)   *Waga-wa   ye-bui(-ø).*
          boat-PM   3SG-turn(-3SG.O)
          'The boat turned.' (or with object suffix: 'He turned the boat.')

The *ko*-suffix test (cf. 4.1.2) shows the difference between the intransitive and the transitive version of the verb. The absence of the object marker in (98a) where *-ko* attaches directly to the stem shows that the verb is intransitive. In (98b) the perfect suffix *-ko* triggers the non-final allomorph of the object suffix and shows that the verb is transitive.

(98) a.   *Waga-wa   ye-bui-ko.*   b.   *Waga-wa   ye-bui-ya-ko.*
          boat-PM   3SG-turn-PERF   boat-PM   3SG-turn-3SG.O-PERF
          'The boat turned already.'   'He turned the boat already.'

Examples (99) to (101) below give some text occurrances with *bui* 'turn'. In (99) the root occurs in the intransitive stem *ye-bui* 'it turned' (this was established in discussions with speakers about their understanding of the clause within the narrative). In example (100) *bui* 'turn' functions as a transitive stem; in this case the transitivity status is transparent because it carries the third plural object suffix *-di*.

(99)   *bicycle-wa   ye-bui*
          bicycle-PM   3SG-turn
          'the bicycle turned over' (pear3:24)

(100)   *bena   ta-bui-di*
          OBLI/COMP   1INC-turn-3PL.O/P
          'we have to turn them' (emadial76)

In the text example in (101), *bui* 'turn' occurs in both a transitive and an intransitive version. The forms in the first line are transitive, the occurence in the

second line is intransitive (this is not evident from the morphology but was again established by talking to speakers about their understanding of the clause within the narrative).

(101) *i-wane ...* *yo-m* *waga-ne* *ku-bui-ø,* *ku-bui-ø!*
    3SG-say CL1-2SG.P boat-DET 2SG-turn-3SG.O 2SG-turn-3SG.O
    'he said "... turn the canoe over, turn the canoe over!"

    Eey *taki* *waga-wa* *ye-bui* *me.*
    INTRJ just/only boat-PM 3SG-turn DEM
    So the canoe just turned over.' (yam14/15)

4.6 ROOTS WHICH ARE EITHER LABILE OR BIVALENT

As already mentioned, it is not easy to distinguish labile from bivalent roots. Labile differ from bivalent roots in that they can occur not only as simplex transitive stems but also as simplex intransitive stems. In order to establish that a root is bivalent it needs to be shown that it cannot feature as a simplex intransitive stem. This requires explicit elicitation since text examples cannot provide this kind of negative evidence. A further complication is the zero allomorph of the third person singular object suffix. The intransitive and transitive stems based on labile roots differ only in the presence and absence of an object suffix. In a given text example, the difference between transitive and intransitive stems can typically not be decided because the zero allomorph of the object suffix cannot be distinguished from the absence of an object suffix in surface grammar. Among the roots for which the classification as labile or bivalent could not yet be established are, *biteli* 'hit', *daibi* 'clear (garden)', *gabu* 'burn/bake', *gwali* 'spear', *hemaisa* 'buy', *hesulu* 'pile', *huwa* 'plant', *ini* 'pour', *pidu* 'spear (fish)', *tam* 'squeeze', *tu* 'throw', *tupa* 'hit/bump', *unui* 'kill/catch', *utu* 'step (on)', *yaga* 'scrape', *yagu* 'pick', *yiu* 'stir', and many others. An interesting case is the root *kai* 'eat/food' because it cannot be classified as bivalent or labile despite detailed elicitations. The rooot can clearly occur as a simplex transitive stem, as in (102), where it takes a second person object suffix.

(102) *Mata* *ku-lao-ma* ... *se-unui-go* *se-kai-go.*
    if/lest 2SG-go-hither 3PL-kill-2SG.O 3PL-eat-2SG.O
    'If you had come ... they would have killed and eaten you.' (oldtime3:98)

Whether *kai* 'eat/food' also occurs as a intransitive verb stem without derivation affecting its transitivity status is not obvious. In intransitive verbs, the stem occurs obligatorily as the longer form *kai-kai*.

(103) *Ku-lao-ma* *ta-kai-kai!*
    2SG-go-hither 1INC-??-food/eat
    'Come let's eat.'

There are several morphological analyses possible of this form: (a) it could be a reduplicated version of the simplex stem *kai*, (b) it could be a case of incorporation of the nominal stem *kai* 'food' into the verb stem *kai* 'eat', and © the stem could be detransitivized by the prefix *kai-* which is homophonous with the lexeme *kai* 'eat/food'. For these reasons, the root cannot unambiguously be classified as either bivalent or labile.[23]

4.7 SUMMARY

According to their basic valence, Saliba verb roots can be distinguished into monovalent, bivalent and labile roots. Monovalent roots can be further grouped into those which allow the applicative suffix and those that do not. A root's basic valence depends on the transitivity status of the simplex stems in which it can occur. The transitivity status of Saliba verbs is not always morphologically overt, but there are a number of morphological tests, described in 4.1, which can help identify it. Table 4 summarizes the characteristics of the four Saliba verb classes. Besides the discussed features, information on the root's behavior with respect to causativization and incorporation is also included For discussion of these processes see chapters 7 and 10.

	CLASS 1	**CLASS 2**	**CLASS 3**	**CLASS 4**
basic valence	monovalent	monovalent	bivalent	labile
simplex stem	INTR	INTR	TR	INTR/TR
stative/active	stative/active	active[24]	active	active
applicative	no	yes	no	no
causative	productive	restricted	restricted	restricted
incorporation	TYPE 2	TYPE 1	TYPE 1	TYPE 1

Table 4   *Saliba verb classes*

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[23]   *Note that, for simplicity, in text examples I gloss the stems* kai-kai *as cases of reduplication.*

[24]   *Including also transitional cases which share stative and active features such as* soni *'fall through' or* yoli *'sink', etc.*

COMPLEX VERBS

Saliba speakers frequently combine two or more verb stems into a single inflected verb and I will refer to these constructions as complex verbs. Similar constructions have been labeled verbal compounds (e.g. Bradshaw 1982) and nuclear-layer serialization (e.g. Foley and Olson 1985, see below). In Saliba complex verbs, typically two and occasionally three verb stems build a complex stem which takes a single set of pronominal affixes. In elicitations speakers accepted complex stems with up to four verb stems, but none of these were observed in spontaneous speech. Throughout this thesis, complex verbs play an important role in providing morphological tests for valence and transitivity as well as for noun incorporation. In addition, certain non-initial stems in such constructions can be described as transitivity-changing morphemes[1] and are relevant for the core topic of this study. Saliba complex verbs can be intransitive, as in (1), or transitive, as in (2).

(1)   *Ye-kamposi-dobi.*
        3SG-jump-go.down
        'He jumped down.'

(2)   *Ye-koi-kesi-di.*
        3SG-hit-break-3PL.O/P
        'He broke them.' (lit. 'He hit-break them.')

Example (1) shows a complex verb stem consisting of the two intransitive stems *kamposi* 'jump' and *dobi* 'go down'. The complex stem in (2) is composed of the two transitive stems *koi* 'hit' and *kesi* 'break'. In both examples, the stems that build the complex stem share a single subject prefix and in the transitive example also one object suffix. Complex verbs can be schematized as follows:

Schema 1 | **s-[V- ... -V](-o)**

Schema 1 is to be understood as a heuristic diagram: the brackets are intended to show the scope of the pronominal affixes (and in later schemata of derivational

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[1]   *As a reminder, since I reserve the term 'valence' for referring to the status of verb roots (which cannot be changed, cf. chap. 3), there are technically no valence-changing but only transitivity-changing processes in the language. But note that this is merely a terminological matter.*

morphemes) over one or more verb stems. The brackets are not intended to imply a model of the production of complex verbs or a particular order in which speakers fill the slots of the construction.[2]

Following Schema 1, examples (1) and (2) can be bracketed as in (1') and (2') (for examples with more than two stems see below):

(1')   *Ye-[kamposi-dobi].*
          3SG-[jump-go.down]

(2')   *Ye-[koi-kesi]-di.*
          3SG-[hit-break]-3PL.O/P

The morphological processes that can apply within complex verbs are very restricted. The stems show a tight bond and act like a grammatical unit in several respects. No unbound morphemes can intervene between the stems that are part of a complex verb and the stems which build a complex verb stem share a single set of pronominal affixes. Besides this, in certain transitive constructions, the stems together determine what the semantic role the object argument may be (cf. 5.2.2.1, 5.2.3). Finally, certain morphemes, such as the applicative suffix (cf. 5.1.2), the directionals, or the perfect suffix, can only attach to the end of the complex verb, that is to the final stem. On the other hand, the individual stems of a complex verb show some degree of morphological independence in that the causative prefix can attach to the initial and/or non-initial stem(s) of a complex verb as discussed in section 5.1.1.

Below, I propose analyzing Saliba complex verbs as a type of verb serialization (discussed in more detail below). A similar approach to this kind of construction in Oceanic languages has been taken for example by Crowley (1987), Early (1993), Sperlich (1993), and also Mosel (1984, 1994) and Ezard (1991).[3] Other sources, such as Bradshaw (1982) and Bugenhagen (1995), refer to these constructions as

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[2]   *Since most complex verbs are composed of only two stems, later schemata in this chapter will show only two verb stems (rather than keeping the notation with [V-...-V]). This will aid the clear presentation of the discussion but it should be kept in mind that complex verbs can be composed of more than two stems.*

[3]   *A full treatment of the large literature on serialization is beyond the scope of this study. See Foley and Olson (1985) and Durie (1997) for general discussion and references. For further discussion of serialization in Oceanic languages see e.g. Dempwolff (1939), Durie (1988), Bradshaw (1983, 1993), Forman (1993), and Hamel (1993). For discussion of Papuan languages see e.g. Foley (1986), Pawley (1987), Bruce (1988), Lane (1991), and Lane and Pawley (1992).*

verbal compounds.[4] In Government and Binding accounts of serialization as attempted for example by Baker (1989), constructions like the Saliba complex verbs are also termed 'compounds' and generally excluded from the account of serialization. Some well-founded criticism and discussion of this approach is provided by Durie (1997).

I choose the term 'complex verbs' for the Saliba constructions as a neutral and descriptive label because there can in fact be different types of relationships between the verb stems in the constructions described below. This is to say that the label 'complex verb' covers two different types of constructions (which are not always distinguished in the literature), one being more lexical in character, the other more grammatical. In all cases, they constitute a single grammatical word. For the description and analysis of Saliba complex verbs I make use of the framework of Role and Reference Grammar. Constructions of this kind have been treated extensively within this framework (see Olson 1978, 1981, Foley and Olson 1985, Foley and Van Valin 1984)[5] and it provides a suitable descriptive tool to capture both the similarities between types of Saliba complex verbs as well as their differences.

The remainder of this chapter is structured as follows: in 5.1, I discuss transitivity and the same subject constraint within complex verbs. In 5.2 I present an analysis of complex verbs as nuclear-layer serialization and introduce the different positional slots within complex verb constructions. Section 5.3 introduces a special type of complex verbs with the stem *sagu-i* 'help' and section 5.4 provides a summary of the chapter.

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[4]   *I propose that the term 'compound' does not by definition contradict an analysis as serialization. Rather, in the same way as I analyze certain noun-verb compounds as noun incorporation (chap. 10), one can analyze certain verb-verb compounds as instances of verb serialization. That is to say that my analysis of Saliba complex verbs does not make a claim about whether or not they are compounds, cf. Klamer (1998, chap. 7).*

[5]   *For more recent accounts along the same lines cf. Van Valin (1993) and Van Valin and LaPolla (1997). Note that Olson 1978, 1981 technically does not write within the framework of Role and Reference Grammar but, conversely, his treatment of serialization was incorporated into the theory by Foley and Van Valin 1984.*

5.1 TRANSITIVITY AND SAME-SUBJECT CONSTRAINT

As complex verbs constitute single morphological words, they are, like simplex verbs, either transitive or intransitive. But like simplex transitive verbs, complex verbs may occur as the heads of ditransitive clauses (chaps. 3, 7, 13) if a transitive base stem is causativized. A structural constraint on the combination of complex verb is that all stems involved need to take the same subject. Typically, transitive complex stems are composed of two (or more) transitive stems, and intransitive complex stems are composed of two (or more) intransitive verb stems as in (1) and (2) above.

Generally, the transitivity status of complex verbs is determined by the initial stem of the construction and the following stems agree with it in transitivity status, but there are exceptions to this in which a non-initial stem determines the transitivity status of the construction. However, it is not possible for a non-initial stem to add a further argument to an initial stem which is already transitive. There is only one exception, discussed in 5.3, which constitutes a somewhat different type of construction. In this case, the final stem in the complex construction can derive verbs which may head ditransitive clauses.

The fact that the stems in a complex verb must have the same subject is nicely demonstrated by the resultative construction in (3), where the second verb stems expresses the result of the activity encoded by the initial stem (cf. 5.2.2). Due to the same-subject constraint, the second stem needs to be causativized (if it is not transitive to start with).

(3)   *Ye-koi-he-mwaloi-ø.*
        3SG-hit-CAUS-dead-3SG.O
        'He hit it dead.' (lit. 'He hit-caused-dead it.')

The construction without the causative prefix in (4) where the object of the first stem would be coreferential with the subject of the second is ungrammatical in Saliba.

(4)   *   *Ye-koi-mwaloi-ø.*
        3SG-hit-dead-3SG.O
        'He hit it dead.' (lit. 'He hit-dead it.')

The same subject constraint is arguably violated by certain constructions with directional verbs (cf. 5.2.3) as in (5) (see also (6) below) because it is not the subject referent itself which performs an upward motion but only the subject's gaze.

(5)   *Ye-kita-sae.*
        3SG-see-go.up
        'He looked up.'

This behavior can be attributed to the partially grammaticalized status of the directional stems, as I discuss in 5.2.

In principle, the stems building a transitive complex verb stem must also share the same object (and morphologically they always do since the object suffix has scope over the whole construction). In a few cases however, the semantic role of the object argument is determined by a non-initial stem and independently the initial stem could not occur with that object role. Examples of this are discussed in 5.2.2.1 and 5.2.3.2.

The transitivity-changing or transitivity-determining function of certain non-initial stems is discussed in detail in 5.2. In the remainder of this section, I discuss the scope relations of the two Saliba transitivizing affixes, the causative and the applicative, when they occur in complex verb stems. In order to agree in transitivity status with a preceding transitive stem, some non-initial stems take the causative prefix as discussed in 5.1.1, while others take the applicative suffix as discussed in 5.1.2.

5.1.1 CAUSATIVE PREFIX

The causative prefix can attach to initial and/or non-initial stems of complex verbs. In (6) the initial stem is causativized and the second stem is a simplex transitive stem (based on the labile root *sae* 'go up'). In (7) the initial stem is the simplex transitive stem *koi* 'hit' and the second stem is based on the monovalent root *beku* 'fall'. In order to match the transitive status of the initial stem, as well as to satisfy the same-subject constraint, *beku* 'fall' must be transitivized by the causative prefix.

(6)   *ku-he-sigi-sae-ø*
        2SG-CAUS-move-go.up-3SG.O
        'move it up' (farm1#4:17)

(7)   *ye-koi-he-beku-ø*
        3SG-hit-CAUS-fall-3SG.O
        'he made it fall down' (lit. 'He hit-caused-fall it') (absrel1a:25)

If the second stem is not causativized, the constructions is ungrammatical as shown in (8).

(8)   *   *ye-koi-beku-ø*
           3SG-hit-fall-3SG.O
           'he made it fall down' (lit. 'he hit-fall it')

The transitivizing scope of the causative prefix in (6) and (7) above can be captured by a notation with brackets as in (6') and (7').[6]

(6')   *ku-[he-sigi]-sae-ø*
           2SG-[CAUS-move]-go.up-3SG.O

(7')   *ye-koi-[he-beku]-ø*
           3SG-hit-[CAUS-fall]-3SG.O

It is helpful in this context to distinguish between morphological vs. semantic scope relations. Semantically, the causative prefix can be said to modify all the stems to its right. I.e. when it attaches to the first stem as in (6), it causativizes the entire construction, in the sense that the subject causes the object to move (*sigi*) and to go up (*sae*). If the causative attaches to the final stem, as in (7), it causativizes only this stem but not the preceding one(s). But morphologically, the transitivizing effect of the causative prefix only affects the stem to which it immediately attaches. This is evident in complex verbs where the initial stem carries the causative prefix and the final stem is based on a monovalent root as in (9) and (10). Just like in (6) and (7), the initial stem is transitive and the final stem must match the transitivity status of the initial one. To do this, the final stem needs to take the applicative suffix.

(9)   *ku-he-sigi-dobi-ei-ø*
           2SG-CAUS-move-go.down-APP-3SG.O
           'move it down' (farm1#4:53)

(10)   *ta-he-yoli-uyo-i-ø*
           1INC-CAUS-sink-back/again-APP-3SG.O
           'we make it sink again' (oldtime2:288)

The fact that the final stems in (9) and (10) need to be transitivized by the applicative suffix, shows clearly that the transitivizing effect of the causative prefix does not extend to the final stem in the construction. The morphological (i.e. transitivizing) scope of the derivational affixes can be schematized as in (9') and (10').

(9')   *ku-[he-sigi]-[dobi-ei]-ø*
           2SG-[CAUS-move]-[go.down-APP]-3SG.O

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[6]   *In order to preserve the linear order of morphemes I deviate from the standard notation in formal logic and show the operator (the causative or applicative affix) within the brackets of its scope domain.*

(10')   *ta-[he-yoli]-[uyo-i]-ø*
          1INC-[CAUS-sink]-[back/again-APP]-3SG.O

In both examples, it is due to the transitive status of the first stem that the second stem must carry the applicative suffix. If, as in (11), the initial stem is intransitive (not carrying the causative prefix), the final stem is not transitivized either.

(11)   *Ye-yoli-uyo.*
          3SG-sink-back/again
          'It sank again.'

The constructions in (12), where only one of the two stems is transitivized, are both ungrammatical.

(12) a. * *Ye-he-yoli-uyo.*   b. * *Ye-yoli-uyo-i-ø.*
            3SG-CAUS-sink-back/again   3SG-sink-back/again-APP-3SG.O

The morphological scope of the causative prefix in these examples can be represented as in Schema 2:

Schema 2 | **S-[CAUS-V]-V-APP-O** |

5.1.2 APPLICATIVE SUFFIX

The applicative suffix can only occur at the end of a complex verb, it may not attach to non-final stems. Examples (13) and (14) show complex transitive verbs which are composed of a simplex transitive stem followed by a derived transitive stem in final position which carries the applicative suffix.[7]

(13)   *Ya-deuli-kasaya-i-di.*
          1SG-wash-in.vain-APP-3PL.O/P
          'I washed them in vain.'

(14)   *se-gabae-dobi-ei-ø*
          3PL-throw-go.down-APP-3SG.O
          'they throw it down' (oldtime1:53)

The examples differ from (9) and (10) above merely in that the initial transitive stem is simplex rather than derived by the causative prefix. The morphological scope of applicative suffix in (13) and (14) can be schematized as in (13') and (14'):

(13')   *Ya-deuli-[kasaya-i]-di.*
          1SG-wash-[in.vain-APP]-3PL.O/P

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[7]   *In (14) the applicative occurs as the allomorph* -ei, *see chap. 6.*

(14')   *se-gabae-[dobi-ei]-ø*
          3PL-throw-[go.down-APP]-3SG.O

Thus, parallel to the causative prefix in Schema 2, the applicative suffix does not transitivize the entire construction but only the stem to which it immediately attaches. This is apparent from the complex verb test introduced in chapter 4. 1.3. The stems which appear in the final slot of a complex verb (i.e. the V₄ slot, see below) never determine the transitivity status of the construction but agree in transitivity status with the preceding stem(s) (see also 5.2.4). The morphological scope of the applicative suffix can be represented as in Schema 3:

Schema 3   **s-V-[V-APP]-o**

Due to this constraint on the structure of complex verbs, applicativized transitive stems (in the V₄ slot) can only follow initial transitive stems but not intransitive ones. While this holds as a general rule, there are exceptions where the initial stem is morphologically intransitive while the final (V₄) stem and the complex verb as a whole is transitive. Consider (15) which shows a transitive complex verb which features two monovalent roots: the final stem *uyo-i* 'back/again' is transitivized by the applicative suffix, but the initial stem *bahe* 'carry' is underived – and therefore intransitive.

(15)   *ye-bahe-uyo-i-ø*
         3SG-carry-back/again-APP-3SG.O
         'he carried it back' (maus7e:19)

Following Schema 3 above, (15) can be schematized as in (15') where the applicative has scope over the final stem only.

(15')   *ye-bahe-[uyo-i]-ø*
         3SG-carry-[back/again-APP]-3SG.O

This, however, runs against the claim that final (V₄) stems, like *uyo* 'back/again', cannot change or determine the transitivity status of the complex verb, a constraint which is otherwise consistently supported by the data. Another possibility is then that, in this example, the applicative suffix has scope over the entire complex stem rather than just the final one. But, again, there is ample evidence that the scope relation of the applicative generally follows Schema 3 and this exception would appear unmotivated. An explanation for the unusual pattern in (15) can be found in the type of roots which are allowed as the initial stem of these constructions. It is roughly the same group of monovalent roots which may occur in transitive clauses with discord (i.e. intransitive verbs with object NPs, chaps. 3, 12) and those which allow noun incorporation into the intransitive base verb (chap. 10).

Besides *bahe* 'carry', further roots which feature in these constructions are for

example *kuma* 'plant', *sikwa* 'poke', *usa* 'put in'. In chapter 3.4.1, I have analyzed such monovalent roots as having a semantic object argument which may or may not be expressed syntactically. Although morphologically intransitive, the initial stem in (15) behaves like a transitive stem in that it is followed by a transitivized V$_{\text{i}}$ stem.[8] Besides discord clauses and noun incorporation, complex verbs thus constitute a further environments where morpho-syntactic reflexes of the semantic object argument can be observed. This shows that transitivity marking in complex verbs is not only sensitive to syntactic but also semantic arguments of the verb.

5.2 POSITIONAL SLOTS AND THEIR FUNCTIONS

Most instances of complex verbs are composed of two stems but there are also text examples of three stems combining in a complex verb as presented in (16) to (19).

(16)   *ye-tabe-he-dudulai-uyo-i-ya-ma*
         3SG-pull-CAUS-straight-back/again-APP-3SG.O-hither
         'he pulled it straight again' (maus3b:21)

(17)   *kabo   ya-tupa-he-yoli-he-gehe-di*
         TAM   1SG-hit/bump-CAUS-sink-CAUS-finished-3PL.O/P
         'I'll drown all of them' (lit. 'I'll hit-cause-sink-cause-finish them') (tautela59)

(18)   *ye-tu-isini-uyo-i-ø*
         3SG-throw-raise-back/again-APP-3SG.O
         'he threw it up again' (maus2b:7)

(19)   *ye-sikwa-he-beku-dobi-ei-ø*
         3SG-poke-CAUS-fall-go.down-APP-3SG.O
         'he poked it down/he made it fall down by poking it' (absrel1a:23)

In elicitations, up to four stems were accepted in a complex verb. An example is presented in (20).

(20)   *Ye-tu-isini-sae-kasaya-i-ø.*
         3SG-throw-raise-go.up-in.vain-APP-3SG.O
         'He threw it up in vain.'

Many verb roots are restricted to a certain position in a complex verb, both in absolute terms and with respect to each other. Certain stems may only occur in the initial position while others obligatorily appear in the final position of a complex verb construction. Some stems can occur in different positions but perform different functions in each case. Based on the sequential order of stems across

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[8]   *For this class of roots, the complex-verb test (chap 4.3.1) give the wrong classification. If a root seems to behave like a labile root according to this test, it has to be tested further whether the root allows the applicative suffix. If this is the case, the root is monovalent rather than labile and has a semantic object argument.*

examples and on the function that they perform, one can speak of different positional (and functional) slots within a complex verb. In Saliba, four positional slots can be distinguished which are sketched in Schema 4.

Schema 4 $s\text{-}[\ V_1\text{-}V_2\text{-}V_3\text{-}V_4\ ](\text{-o})$

It is important to note that these slots are abstract notions which do not directly correspond to the surface position of stems in a construction. The slots are abstracted from shared features such as co-occurrence restrictions, position, and function of verb stems within a complex verb. In a given construction, typically not all slots are filled, which means that a stem which appears in the second surface position does not necessarily stand in the second positional slot. It may in fact stand in the third or fourth positional slot, the preceding slot(s) being empty. This abstracted notion of positional slots differs from, for example, Mosel's (1984: 122-131) description of similar constructions in Tolai, where the labels V_1, V_2, etc., refer to the surface position of stems. Also Early's (1993) account of nuclear-layer serial verbs in Lewo does not recognize abstract slots but merely considers the stem's surface position in describing "elements that occur in the second (or subsequent) position" (p. 74). I show below that distinguishing abstract positional slots is a crucial step for making generalizations and predictions about the type of relations which hold between the stems in a complex verb.

The V_1 slot hosts the head of the construction which expresses the main activity or event. It is the only slot which is obligatorily filled and in this way it corresponds to the single slot in a simplex verb. The stem in the V_2 slot expresses a change of state or result of the activity or event denoted by the V_1 stem. If the V_2 slot is filled, V_1 and V_2 together constitute the head of the construction. The V_3 and V_4 slots, in contrast, have modifying functions. In the V_3 slot occur stems which specify the directionality of the activity or event, and the V_4 slot hosts stems with adverbial and aspectual functions.[9] Arguably, as discussed below, not all stems of the V_3 and especially the V_4 slot are fully verbal and a number of them can only ever occur as part of a complex verb construction but never as a simplex verb stem. However, the V_1 and V_2 slots can also host roots which never occur as a

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[9]   *Similar to Early (1993) and Sperlich (1993), I use the label 'adverbial' in a loose, pretheoretical sense here to denote types of stems which modify a verbal head.*

implex independent verb.[10]

In the elicited example in (20) above, all four slots are filled. Examples (16) to (19) above all showed complex verbs composed of three stems, but the final stems can be assigned to different slots. While (16) to (18) show a sequence of V_1-V_2-V_4 with the V_3 slot being empty, example (19) consists of a sequence of V_1-V_2-V_3 with the V_4 slot being empty. The following example shows a series of V_1-V_3-V_4.

(21)   *Kwa-tole-sae-uyo-i-ø!*
          2PL-put-go.up-back/again-APP-3SG.O
          'Put it back up!'

The positional slots, the stems which they can host, as well as their functions are discussed in sections 5.2.1 to 5.2.4 below.

The stems that appear in the four slots are grammaticalized to different degrees and the later the slot the more grammaticalized the stems that can occur in it. The grammaticalized status of the V_3 and V_4 slot is manifested in a number of properties which correspond to certain of the parameters of grammaticalization described for example by Lehmann (1985, 1995). Among these is first of all the fact that several of the stems may not occur as independent verb stems or in any other position of a complex verb. One may assume that these stems used to be able to occur independently although there is no synchronic evidence of this.[11] This corresponds to Lehmann's process of 'coalescence' and the parameter of 'bondedness': a form's transition from a free lexical item to a bound morpheme. A further fact speaking for the grammaticalized status of V_3 and V_4 stems is their more abstract meaning in comparison to main-verb occurrences of the stems (for those that allow them). For example, the stem *uyo* as a main verb stem has a meaning of 'go back' which entails motion of the subject. Occurring in the V_4 slot, the stem expresses the concept of repetition which may be glossed as 'back' or 'again' and it does not entail or imply a motion component. Example (22a) gives an example with *uyo* 'go back' as an independent verb stem, (22b) shows it as a

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[10]   *This is to say that in the description of Saliba complex verbs I include stems which would be ruled out by Sperlich's (1993: 107) requirement of occurrence as independent verbs. In Saliba, this requirement seems too strict as it would also exclude instances of initial stems. Crucially, every positional slot can host elements which may function as independent verb stems.*

[11]   *A careful study of cognate forms in related languages may reveal evidence in support of this assumption.*

V_4 stem (transitivized by the applicative suffix) without a semantic motion component.

(22) a. *se-uyo-ma*   b. *ku-hasili-uyo-i-ø*
       3PL-go.back-hither   2SG-count/read-back/again-APP-3SG.O
       'they came back' (yam67)   'count it again' (pearlb:27)

Similarly, the stem *gabae* as a main verb stem means 'throw', as in (23a), while as a V_4 stem it expresses a concept like 'away', 'off', or 'out' as in (23b).

(23) a. *maula ka-gabae-di*   b. *ye-mose-gabae-ø*
       bait   1EX-throw-3PL.O/P   3SG-give-away/off-3SG.O
       'we throw the baits out' (fdial80)   'he gave it away' (torres257)

In the grammaticalization literature, this process of semantic change has been called 'desemantization' or 'semantic bleaching': an item shifts towards a more abstract meaning and finally to a grammatical function. Evidence for this development is presented in Saliba for example by the fact that, in at least one case, the grammaticalized (V_4) version of a stem can co-occur with and modify its own non-grammaticalized source lexeme (as V_1). This is the case with the stem *uyo* 'go back' as discussed in 5.2.4.2.

It can be argued that complex verbs like (23b), or (5) and (6) above, which consist of V_1 plus V_3, violate the same-subject constraint in that it is not the subject but the object of *mose-gabae* 'give away' which moves 'away'. This can be considered a further symptom of the grammaticalizing status of V_3 stems and their more abstract meaning. A feature that goes with the process of semantic bleaching is the loss of selection restrictions: V_3 stems merely require that the modified V_1 stem encodes a path (but not necessarily motion proper). V_4 stems are further grammaticalized and can basically modify any stem in V_1 independent of its semantics. Another parameter which applies to at least one V_4 stem is that of phonological erosion, that is the phonological reduction of the grammaticalized form in comparison to the source lexeme. The transitivized V_4 stem *uyo-i* 'back/again' (carrying the applicative suffix), is frequently realized as monosyllabic [yoi]. Both semantic bleaching and phonological erosion fall under Lehmann's process of 'attrition'. Finally, also attested in the Saliba constructions is the feature of paradigmaticization: the process of moving from the large or open class of verb stems, which may occur independently (or in the V1 or V2 slot of complex verbs), into a diminishing paradigm of stems which may occupy the V3 or V4 slot.

Foley and Van Valin (1984) (FVV in the following) describe the structure of the clause as layered (cf. chap. 3 Figure 1). The innermost layer of their tripartite

division of clausal units is the nucleus, which corresponds to the verb stem in the present account of Saliba. The combination of two nuclei as in Saliba complex verbs can be described as nuclear-layer serialization. This term refers to the juncture of two or more nuclei and "is a construction with a complex nucleus. It is a single unit, and all core and peripheral arguments are arguments of this complex nuclear element." (FVV: 188). This accurately characterizes Saliba V_1-V_2 complex verb constructions. It is not quite clear, however, whether V_3 and V_4 stems also constitute nuclei. Many of them cannot occur as independent stems and the relation between them and the preceding stem(s) is clearly hierarchical. V_3 and V_4 stems have functions of what FVV describe as 'nuclear-layer operators': "Corresponding to each of the three layers is a set of operators which have as their scope the corresponding layer. ... They are not constituents of the layer, but are operators over the entire layer" (p. 208). Aspect, for example, is one type of nuclear-layer operator and FVV note:

> One of the ways for aspect to be indicated is by a serial verb construction with a stance verb like 'sit', 'stand', or 'lie' for progressive aspect and 'finish', 'throw away', or a similar verb for perfective aspect. *These are not verbs in a nuclear juncture*, but rather aspectual operators realized by a verb stem and a predicate in its scope. (p. 210, emphasis added)

Besides aspect, further nuclear-layer operators are adverbial forms with modifying functions such as *isema* 'wrongly' from Barai[12] discussed by FVV and Foley and Olson (1985). A third type of operator on the nuclear layer are directionals which "express a directional orientation of the nucleus, whether the action is up, down, toward, or away..." (p. 212). As discussed below in detail, the Saliba V_3 and V_4 stems express functions exactly of this kind. V_3 stems denote the directional orientation of the preceding stem(s) and V_4 stems can express aspectual and adverbial functions (e.g. *kesegai* 'continuously', *gehe* 'finish', *namwa-namwa* 'well/properly', *nogonogowai* 'slowly').

A small problem in the FVV account of constructions with nuclear-layer operators is that, on the one hand, they are considered serial verbs (see quote above) but that, on the other hand, it is explicitly stated that these constructions do not constitute nuclear-layer serialization. This is problematic since FVV (p. 188) distinguish only two types of serialization: core-layer vs. nuclear-layer. Core-layer serialization, however, involves a nucleus plus its arguments, which is clearly not

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[12]   *Barai is a Papuan language of the New Guinea mainland, cf. Olsen 1978, 1981.*

the case for the constructions in question. In Saliba, core-layer serialization would minimally require a pronominal subject prefix on each of the serializing stems. If the combination of a nucleus plus a stem which functions as a nuclear-layer operator is neither nuclear-layer nor core-layer serialization, then the question arises what the status of these constructions are in a Role and Reference Grammar account.[13]

I argue in the following that all types of Saliba complex verbs may in fact be analyzed as nuclear-layer serialization but that the distinction between 'true' nuclear serialization (V_1 plus V_2) and nucleus-plus-operator constructions is difficult to draw since they can be considered two states which are linked by a dynamic and ongoing process. I suggest that both combinations of V_1 plus V_2 but also combinations of V_1 stem plus V_3 or V_4 constitute nuclear-layer junctures. The different nature of such constructions can be attributed to different types of linkage or 'nexus'. FVV (chap. 6) distinguish three nexus types on each of the three layers of the clause. These are: coordination (-embedded, -dependent), subordination (+embedded, +dependent), and cosubordination (-embedded, +dependent). The term cosubordination (introduced by Olson 1981) refers to cases where two elements (e.g. two nuclei) are dependent on each other in sharing a single set of operators (e.g. aspect, directionals) but where neither of the two elements is embedded into the other. This is the most common nexus type for nuclear-layer serialization and Saliba V_1-V_2 combinations are instances of this: they are modified by the same set of nuclear-layer operators (e.g. by the V_3 and V_4 stems which may follow in the construction). In example (24), the V_1 stem *tupa* 'hit/bump' and the V_2 stem *he-yoli* 'CAUSE-sink' are modified by the V_4 stem *he-gehe* 'CAUSE-finish' which functions as an aspectual nuclear-layer operator. Neither of the first two stems is embedded in the other in that there is no hierarchical relation between the two. They form a complex nucleus and share a single set of arguments (expressed by the pronominal affixes).

(24)   *kabo   ya-tupa-he-yoli-he-gehe-di*
         TAM   1SG-hit/bump-CAUS-sink-CAUS-finished-3PL.O/P
         'I'll drown all of them' (lit. 'I'll drown cause-finish them') (tautela59)

Nuclear-layer serialization with cosubordinate nexus can be considered a lexical process creating new lexical items.

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[13]   *This is a further reason for 'complex verbs' to be taken as a theory-neutral, descriptive term in the present account.*

I propose that combinations of V_1 plus V_3 or V_4 also build a complex nucleus and take a single set of pronominal affixes. In contrast to combinations of V_1 plus V_2 they can be argued to constitute nuclear junctures with subordinate nexus. This type of serialization is more grammatical in nature and the resulting combinations are typically more predictable in meaning and semantically compositional. While this analysis is ruled out by FVV since they do not allow operators to be analyzed as stems in nuclear juncture and they rule out cases of nuclear subordination, the revised accounts in Van Valin (1993) and Van Valin and LaPolla (1997: 459) suggest the same type of solution. Van Valin (1993: 114) states: "This use of verbs in a serial construction as aspectual operators is an example of nuclear subordination, a juncture-nexus type that was erroneously claimed to be impossible in FVV".[14]

Ultimately, it seems that verb stems which function as nuclear-layer operators, such as Saliba V_3 and V_4 stems, move out of the inflected verb as they grammaticalize further. FVV (p. 211) suggest that in the Fijian example below (their example 5.44) it is the position inside vs. outside the inflected verb of the element tu, ̄ 'stand' (or 'PROGRESSIVE') which distinguishes its use as a nucleus from that of a nuclear-layer operator.[15]

(25) a.   *E   viri- tu, ̄-ra na   duru na   tu, ̄raga.*
FIJIAN   CM   put-stand-TR   ART   post   ART   chief
        'The chief erected the post.'

     b.   *E   viri-a   tu, ̄   na   duru   na   tu, ̄raga.*
          CM put-TR   PROG   ART   post   ART   chief
          'The chief is placing the post.'

There is evidence of a similar development in Saliba in that certain V_4 stems seem to be in the process of moving out of the V_4 slot and developing into post-verbal particles (see 5.2.4). In the following, I describe in detail the type of stems which occur in each of the four positional slots and the function they perform.

5.2.1 V_1: HEAD

The initial V_1 slot is the only one which is obligatorily filled and it corresponds to the single slot of a simplex verb. The V_1 slot hosts the head or nucleus (or part of a conjoint nucleus, cf. 5.2.2) of a complex verb and generally it determines the

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[14]   *See also Hasegawa's (1996) treatment of Japanese clause linkage.*

[15]   *FVV use the following abbreviations: ART = article, CM = clause marker, PROG = progressive, TR = transitive.*

transitivity status of the construction (if none of the following stems is transitivity changing, see below). Of all positional slots, V_1 can host the largest class of stems. It seems that every verb root which can occur as an independent verb stem may in principle occur as V_1 of a complex verb. Typically, complex verbs show V_1 stems which are based on active roots but, in principle, also stative stems can occur as V_1. Logically, if the V_1 stem is stative, only the V_4 slot may be filled but no other slot since a result (V_2) or directionality (V_3) can only be stated of an activity but not of a state. The examples in (26) and (27) show stative stems as V_1 followed by a V_4 stem.

(26) *Ye-pitali-uyo.*
      3SG-dry-back/again
      'It is dry again.'

(27) *Ye-yababa-kalili.*
      3SG-bad-very
      'It is very bad.'

Examples (28) to (30) show complex verbs with the active stem *sikwa* 'poke' as V_1. It is followed by a V_2 stem in (28), by a V_3 stem in (29) and by a V_4 stem in (30).

(28) *ye-sikwa-he-beku-ø*
      3SG-poke/hit-CAUS-fall-3SG.O
      'he poked it to make it fall' (Absrel1a:28)

(29) *Ye-sikwa-dobi-ei-ø.*
      3SG-poke/hit-go.down-APP-3SG.O
      'He poked it down.'

(30) *Ye-sikwa-kasaya-i-ø.*
      3SG-poke/hit-in.vain-APP-3SG.O
      'He poked it in vain.'

The V_1 slot is the only position which can host a verb stem with an incorporated noun stem. In these cases the complex verb is intransitive (since incorporating stems generally are) and apparently only the V_4 slot may be filled but not the V_2 or V_3 slot. Two examples are presented below. In (31) the incorporating stem *kabi-kabole* 'make sago' in the V_1 slot is followed by the V_4 stem *gehe* 'finish'. In (32) the same incorporating stem as V_1 is followed by *uyo* 'back/again' in the V_4 slot.

(31) *Se-kabi-kabole-gehe.*
      3PL-touch/make-sago-finish
      'They finished making sago.'

(32) *Se-kabi-kabole-uyo.*
      3PL-touch/make-sago-back/again
      'They made sago again.'

For a different type of complex verb construction which may host an incorporating stem as V_1 see the discussion in 5.3.

5.2.1.1 V_1 versus classificatory prefixes

As stated above and discussed in the following section, the combination of a V_1 and a V_2 stem constitutes a cosubordinate nuclear juncture. The two stems depend on each other in that they share the same operators (e.g. aspect, directional and

adverbial modifiers) but they are not in a hierarchical relationship, one embedded into the other. The Saliba combinations of V_1 plus V_2 typically denote a causation relation with the V_1 stem expressing the cause and the V_2 stem the effect or result. This type of construction seems to be the source for the development of 'classificatory prefixes' which are considered a typical feature of Papuan Tip Cluster languages (cf. Capell 1943, Ezard 1978, 1991, 1992). The most quoted case is Tawala, a language of Milne Bay Province in which classificatory prefixes can specify whether, for example, an action is done (or a result is achieved) by involvement of the hands, the feet, by biting, etc.. In his account of word-order shift in New Guinea Oceanic languages from basic SVO order, Bradshaw (1982: 23) considers both V_1-V_2 resultative constructions and classificatory prefixes as features "typically found in those languages which have made the full shift to OV order". In his account of complex verbs ('verbal compounds' in his terms), the V_1 stem "denotes the manner of action initiated by the Agent" (1982: 24). In Saliba, as opposed to Tawala and other Papuan Tip Cluster languages, classificatory prefixes are not a dominant feature and only very few forms can be analyzed in this way. To identify a form as a classificatory prefix rather than a V_1 stem, an incorporated noun stem, or a fossilized morpheme, I apply the following two criteria: (a) the morpheme must not occur as an independent verb or noun stem, (b) the morpheme must be attested attached to a number of different verb stems. If a form does occur as an independent verb or noun stem, I tend to consider it as a V_1 stem in a complex verb, or an incorporated noun respectively. If the form is attested only with one or two verb stems, I consider it a fossilized morpheme rather than a productive prefix. I am aware of only four Saliba forms which fulfill these conditions and which may be considered classificatory prefixes. The form *kai-* indicates that the activity or event expressed by the verb stem involves the body and in particular the body weight of the subject participant. This marker is discussed with examples in chapter 8. Besides the prefix *kai-*, there are three morphemes which fulfill the conditions in (a) and (b) above. The forms *tupa*, *koso* and *hedu* can be considered as classificatory prefixes in Saliba (or as verb stems which are in the process of developing into such markers). The form *tupa* 'hit/bump' expresses some kind of forceful impact and is often explained as a concept similar to hitting or bumping.

(33) a. *Se-tupa-he-beku-ø.*
          3PL-hit/bump-CAUS-fall-3SG.O
          'They bumped it making it fall.'

      b. *Se-tupa-lapai-ø.*
          3PL-hit/bump-make.hole-3SG.O
          'They bumped it making a hole in it.'

c.   *Se-tupa-utusi-ø.*
3PL-hit/bump-break-3SG.O
'They bumped it breaking it.'

The forms *koso* and *hedu* both are similar in meaning to *tupa* 'hit/bump' but the impact seems to be more often a type of pushing event.[16] The two forms differ from each other in that *koso* (as well as *tupa* 'hit/bump' above) tends to be interpreted as unintentional but *hedu* as intentional impact.

(34) a.   *Ye-koso-he-beku-gau.*
3SG-push-CAUS-fall-1SG.O
'He pushed me making me fall.' (unintentionally)

b.   *Ye-hedu-he-beku-gau.*
3SG-push-CAUS-fall-1SG.O
'He pushed me making me fall.' (intentionally)

In some cases, the Saliba prefixes stand in a paradigmatic relation to full verb stems which occur in the V_1 slot of a complex verb. This confirms Bradshaw's (1982) suggestion that complex verb constructions are the source for classificatory prefixes.[17] Consider the examples in (35). The verb in (a) shows the classificatory prefix *kai-* on the verb stem *kalatei* 'hold down'. The examples in (b) to (d) on the other hand show complex verb constructions with full verb stems as V_1 expressing a cause and *kalatei* 'hold down' occurring as V_2.

(35) a.   *Ya-kai-kalatei-ø.*
1SG-BODY.WEIGHT-hold.down-3SG.O
'I hold it down (with my body).' (e.g. by lying on it)

b.   *Ya-utu-kalatei-ø.*
1SG-step-hold.down-3SG.O
'I hold it down by stepping on it.'

c.   *Ya-kabi-kalatei-ø.*
1SG-touch -hold.down-3SG.O
'I hold it down with my hands.'

d.   *Ya-tuli-kalatei-ø.*
1SG-sit-hold.down-3SG.O
'I hold it down by sitting on it.'

Similarly, the forms *tupa* 'hit/bump' and *koso* or *hedu* 'push' can be in a paradigmatic relationship with certain V_1 stems. Compare (33a) and (34) above with the following example where the verb stems *koi* 'hit' and *sikwa* 'poke' fill the

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[16]   *This impression is possibly only due to the restricted number of examples.*

[17]   *Another semantically plausible source for the development of classificatory prefixes is Mithun's (1984) type IV incorporation, which is also termed 'classifier incorporation' (cf. Rosen 1989, Woodbury 1975). But note that this type of incorporation is not attested in Saliba.*

V₁ slot in a complex verb followed by the V₂ stem *he-beku* 'cause-fall'. In contrast to *tupa* 'hit/bump' and *koso* or *hedu* 'push', the forms *koi* 'hit' and *sikwa* 'poke' can occur as independent verb stems.

(36) a.   *Ye-koi-he-beku-ø.*   b.   *Ye-sikwa-he-beku-ø.*
            3SG-hit-CAUS-fall-1SG.O   3SG-poke-CAUS-fall-1SG.O
            'He hit it and made it fall.'   'He poked it and made it fall.'

The functional similarity between classificatory prefixes and the V₁ stems in (33) to (36) is striking: they indicate a manner in which an action is performed or a causing action by which a result is achieved. In Saliba, there is however no reason for considering the stem-initial morphemes in (35b) to (d) and in (36) as classificatory prefixes rather than as full verb stems and such prefixes are not a characteristic feature of the language.

In various Papuan Tip Cluster languages, classificatory prefixes ultimately give rise to a rich set of semantically only vaguely distinct causative prefixes (cf. Lithgow 1976b, Bradshaw 1982: 66/67). This is not the case in Saliba which exhibits only a single causative prefix (chap. 7). But it is easy to imagine a continuing development of prefixes such as *tupa* 'hit/bump', *koso* 'push', and *hedu* 'push' discussed above towards general markers of causation. The forms can be imagined to continue losing explicit information on the manner of causation through further semantic reduction and loss of selection restrictions.

5.2.2 V₂: RESULT AND CHANGE OF STATE

The verb stems which occupy the V₂ slot in a complex verb have a close bond to the V₁ stem. The relation between V₁ and V₂ is generally not hierarchical in the sense of a modifying relationship and the semantics of the verb is really composed of both stems. As mentioned above, in FVV's account, such combinations constitute cosubordinate nuclear junctures which are characterized by a mutual dependency relation but a lack of embedding. Both V₁ and V₂ are modified together by the same set of nuclear-layer operators (namely by following V₃ and V₄ stems, e.g. (16) to (20) above). Typically, the V₁ and V₂ stems in a complex verb express a relation of cause (V₁) and result (V₂). In certain cases, this relation is morphologically transparent, marked by the causative prefix on V₂. In other cases, the semantic relation between V₁ and V₂ can be more obscure. An explanation for this may lie in the fact that V₁-V₂ combinations are often lexicalized. In the following, I first discuss some cases where the cause-result relation between V₁ and V₂ is straightforward and then turn to some less clear more lexicalized combinations.

If V_2 is a simplex transitive stem (i.e. based on a bivalent or labile root), the same-subject constraint is satisfied and there is no overt morphological marking of the resultative relation. This is the case in (37) and (38) with the 'break' stems *kesi* and *utusi* (for a discussion of the semantic differences between the 'break' verbs cf. chap. 9).

(37)   *galasi se-koi-kesi-ø*
        glass   3PL-hit-break-3SG
        'they break the glass.' (lit. 'they hit-break the glass') (ot2:2 15)

(38)   *ye-naba-utusi-ø*
        3SG-cut.over-break
        'it cut through it' (lit. 'it cut-broke it') (yam32)

As discussed in 5.1, if V_1 is transitive and V_2 is based on a monovalent root, it needs to be transitivized in order to satisfy the same-subject constraint. All of the stems which occur in this slot transitivize by taking the causative prefix and the cause-result relation between V_1 and V_2 is made morphologically overt as in (39) to (43).

(39)   *ye-dobi   natu-na-wa   ye-koi-he-mwaloi-ø*
        3SG-go.down   child-3SG.P-PM   3SG-hit-CAUS-dead-3SG.O
        'it fell down and hit his child dead' (mahabu9)

(40)   *ye-sikwa-he-beku-ø*
        3SG-poke/hit-CAUS-fall-3SG.O
        'he poked it to make it fall' (absrel1a:28)

(41)   *ye-kabi-he-keno-ø*
        3SG-touch/make-CAUS-lie/sleep-3SG.O
        'he threw him down' (absrel2b:17)

(42)   *Kaputi   ku-ini-he-mwayau-ø!*
        cup   2SG-pour-CAUS-full-3SG.O
        'Pour the cup full!'

(43)   *ye-hedede-he-masahala-ø i-wane "sina-gu   meta   mwata"*
        3SG-tell-CAUS-clear-3SG.O   3SG-say   mother-1SG.P PARTICLE snake
        'she revealed it, she said "my mother is a snake"' (bagi128)

The following intransitive examples with the stem *lage* 'arrive' as V_2 may be analyzed in a similar fashion, i.e. V_1 specifies the cause and *lage* 'arrive' the result. The examples in (44) and (45) are both idiomatic, lexicalized expressions of coming out of the bush and arriving e.g. at home, at a village, a garden, or the beach.

(44)   *ye-sugu-lage*
        3SG-enter/dive-arrive
        'he came out of the bush' (bagi39)

(45)   *ka-lu-lage*
        1EX-go.in-arrive
        'we came home (out of the bush)' (basket14)

In the parallel constructions in (46) to (49), the V_1 stems seem to classify the 'arriving' event by expressing the specific manner of motion.

(46)   *ye-sobu-lage*
3SG-dance-arrive
'he came dancing' (kulupok28)

(47)   *Ye-heloi-lage.*
3SG-run-arrive
'He came running.'

(48)   *Ye-kamposi-lage.*
3SG-jump-arrive
'He came jumping.'

(49)   *He-nene-lage.*
3SG-crawl-arrive
'He came crawling.'

Possibly, such constructions are also best described as resultative constructions, parallel to the more straightforward cases discussed above. However, this analysis is more appealing in cases where the activities expressed by V_1 and V_2 are sequential as in (44) and (45) than in the cases where V_1 and V_2 are simultaneous as in (46) to (49). Besides this, a resultative analysis is quite problematic in cases like (50) where V_1 does not express (manner of) motion:

(50)   *Ye-wana-lage.*
3SG-sing-arrive
'He comes singing.' (it's his habit, we can hear him before he arrives)

This example seems to be somewhat of an exception however and constructions with other non-motion stems were rejected. Consider (51) and (52):

(51)   * *Ye-hedede-lage.*
3SG-talk-arrive
'He comes talking.'

(52)   * *Ye-maluhi-lage.*
3SG-laugh-arrive
'He comes laughing.'

Similar examples, are found with the stem *lobai* 'find' as V_2, consider (53) and (54):

(53)   *se-kita-lobai-ø*
3PL-see-find-3SG.O
'they realize it' (church1:99)

(54)   *Ya-nuwatu-lobai-ø.*
1SG-think-find-3SG.O
'I understand it.'

Examples (55) and (56) show similar instances with the V_2 stem *tonogi* 'try'.

(55)   *Ye-kai-tonogi-ø.*
3SG-eat-try-3SG.O
'He (ate-) tasted it.'

(56)   *Ye-numa-tonogi-ø.*
3SG-drink-try-3SG.O
'He (drank-) tasted it.'

Examples (57) and (58) with *wadam* 'hide' as V_2 stem follow a similar pattern.

(57)   *Ye-keno-wadam.*
3SG-sleep/lie-hide
'He hid (himself).'

(58)   *Ye-tole-wadam-ø.*
3SG-put-hide
'He hid it.'

As mentioned, an analysis as resultative constructions is sometimes possible but maybe not quite as appealing as in earlier examples.

5.2.2.1 Transitivizing V₂

In a small number of cases, a transitive V_2 stem derives a transitive complex verb from a V_1 stem which is intransitive. In these instances, the V_2 stem changes the transitivity status of the construction, overruling the intransitive value of V_1. In (59) (as well as in (54) above) the intransitive V_1 stem *nuwatu* 'think/remember' occurs in a complex verb which is transitivized by the V_2 stem *lobai* 'find'.

(59)   *Ya-nuwatu-lobai-go.*
                1SG-think-find-2SG.O
                'I know what kind of person you are/ I recognize you.'

The root, *nuwatu* 'think/remember' classifies as monovalent (class 2) and it must take the applicative suffix to derive a transitive stem as in (60).

(60)   *ku-nuwatu-i-di*
                2SG-think-APP-3PL.O/P
                'you remember them' (church1:129)

Similarly, the monovalent root *usa* 'put in' belongs to class 2 and it needs the applicative suffix to derive a transitive stem as in (61). As a simplex stem, it is intransitive as in (62).

(61)   *ye-usa-i-di*   *yo-na*   *tobwa-ne*   *unai*
                3SG-put.in-APP-3PL.O/P CL1-3SG.P bag-DET   PP.SG
                'he put them in his bag.' (pear3:10)

(62)   *ye-usa*
                3SG-put.in
                'he put (something) in' (pear1:42)

In (63) and (64), the underived and therefore intransitive stem *usa* 'put in' occurs as V_1 stem in a transitive complex verb where it is followed by the causative V_2 stems *he-kawa* 'CAUSE-enter' and *he-mwayau* 'fill' respectively. Again, it is the transitive V_2 stem and not the intransitive V_1 stem which determines the transitivity status of the construction.

(63)   *ye-usa-he-kawa-ø*   *yo-na*   *bosa*   *unai*
                3SG-put.in-CAUS-enter-3SG.O CL1-3SG.P basket PP.SG
                'he put it into his basket' (pear3:12)

(64)   *bosa-wa labui*   *ye-usa-he-mwayau-di*
                basket-PM two   3SG-put.in-CAUS-full-3PL.O/P
                'he filled the two baskets' (pear3:67)

Example (64) differs from the cases in (59) to (63) in that the V_2 stem not only changes the transitivity status of the construction from that of V_1 but it also changes the semantic role of the object argument. As a simplex stem, *usa* 'put in' takes the theme, i.e. the transferred entity as its object. This is the case in both (61) and (63) where the goal, i.e. the container into which the theme is inserted is expressed as an adjunct following the verb. The complex verb in (64) by contrast,

takes the goal as its object argument which is determined by the V_2 stem *he-mwayau* 'fill'. The same holds for the complex stem *ini-he-mwayau* 'pour-fill' in (42) above. Since the V_1 stem *ini* 'pour' is already transitive, the V_2 stem does not change the transitivity status of the construction. However, as an independent verb stem, *ini* 'pour' takes the theme as its object argument as in (65) and not the goal as in (42) above.

(65) *Ka-m   ti   ya-ini-ø?*
      CL2-2SG.P tea   1SG-pour-3SG.O
      'Shall I pour you some tea?' (lit. 'I pour your tea?')

5.2.3 V_3: DIRECTIONALITY OF ACTION/EVENT

The verb stems which occur in the V_3 slot specify the directionality of the event expressed by the preceding stem(s). The directional stems may either agree in transitivity status with the preceding stem(s) or they themselves may determine the transitivity status of the construction. Two types of V_3 stems can be distinguished: those which may be detransitivizing and those which may be transitivizing. Table 1 shows the inventory of directional roots which can occur as V_3 (the list of stems is possibly incomplete).

DETRANSITIVIZING: monovalent and labile roots		**TRANSITIVIZING:** bivalent roots	
lao	'go'	*gabae*	'away, off, out'
dobi	'go down'	*watani*	'follow'
sae	'go up'		
dikwa	'cross (e.g. hill)'[18]		
kawasi	'cross (e.g. water)'[18]		

Table 1   *Directional roots as V_3*

As a reminder, the positional slots of complex verbs are abstract notions that do not necessarily match the 'surface' position of a stem and the stems which stand in the abstract V_3 slot may occur as the second stem in a complex verb. In these cases, the V_2 slot is not filled but remains empty.

Above, I have proposed an analysis of V_3 stems in terms of Role and Reference Grammar as nuclear-layer operators which modify and have scope over the

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[18]   *The stem* dikwa *'cross' refers to movement along a path which crosses an obstacle such as a hill or fence. It implies that the path goes first up and then down again. The stem* kawasi *'cross' refers to movement along a path which crosses an obstacle such as a body of water or a gorge.*

preceding stem (i.e. over V_1 or V_1 plus V_2). They are in a subordinate juncture with this preceding stem, which accounts for their modifying function. Except one (*watani* 'follow'), the stems in Table 1 can all occur as independent main verbs. But occurring in the V_3 slot of complex verbs, their meaning is somewhat abstracted. They do not necessarily express motion proper (as they do as main verbs) but generally encode directionality of a path, which could be one motion but also of e.g. gaze or calling (cf. FVV p. 212 discussion of examples from Yimas).

Directional verb stems are very frequently used in Saliba sentences, as it has been reported also for other languages of Oceania (see e.g. contributions in Senft 1997). It is quite typical in Saliba to give information about the directionality of activities or the relative position of objects and this happens much more extensively and regularly than might be familiar from European languages. Directional stems commonly occur both as main verbs, as in (66) and (67), and as V_3 stems in complex verb constructions as in (68) to (70).

(66)   se-dobi   ede   Itou   unai   se-keno
       3PL-go.down   PRSUP Place.Name   PP.SG 3PL-sleep
       'they went down and slept at Itou Island' (yam39)

(67)   se-sae-ma   Saliba   hesaba-na
       3PL-go.up   Place.Name   towards-3SG.P
       'they came up towards Saliba' (yam8)

(68)   ye-hedede-dobi i-wane "Eey Tau Mekemekeya ..."
       3SG-tell-go.down 3SG-say INTRJ man Name
       'he called/spoke down and said "Eey, Tau Mekemekeya ..."' (yam14)

(69)   ye-kabi-dobi   bolo-wa ye-hai-ø
       3SG-touch-go.down ball-PM 3SG-take/get-3SG.O
       'he reached down and got the ball' (absrel3c:10)

(70)   nige ye-hedede-sae
       NEG   3SG-tell-go.up
       'he didn't call up' (pear3:20)

The basic directional paradigm makes a three way distinction between the roots *lao* 'go', *dobi* 'go down'. and *sae* 'go up'.[19] The same three-way distinction is used for two different systems which mainly differ in scale. What I propose to call the 'local' scale comprises the immediate surrounding, covering for example roughly the area of a village. On this scale *dobi* 'go down' refers to movement or position

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[19]   *In some contexts this paradigm is complemented by* dikwa *'cross (hill)' and* kawasi *'cross (water)' (cf. footnote 18).*

'towards the sea' and *sae* 'go up' refers to motion or position 'up hill' or 'inland'.[20] The term *lao* 'go' refers to the axis that crosses the *dobi-sae* axis by about 90 degrees, it describes for example movement parallel to the shore line.[21] The larger scale which I will call the 'global scale' applies to travel over longer distances. In this system, *dobi* 'go down' refers to traveling West (towards sun set), *sae* 'go up' refers to traveling East (towards sun rise), and *lao* 'go' again refers to the across axis, traveling North or South. The assignment of the three directional terms on the local vs. the global scale is represented in Figures 1 and 2 below.
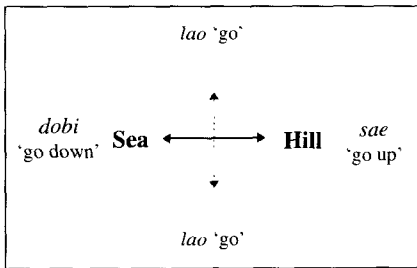
Figure 1   lao, dobi, sae *on local scale*   Figure 2   lao. dobi, sae *on global scale*
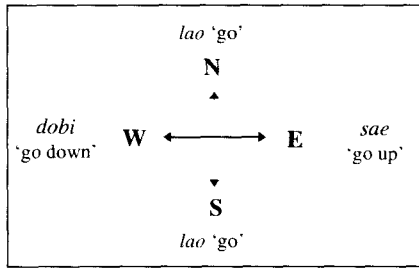
While the coordinate system of the global scale is fixed, the coordinates of the local scale constantly change their orientation depending on the position on the island, due to the curvy shape of the Saliba shore line. As a consequence, the coordinates of the two scales can overlap to any degree and assign the directional terms to the same as well as to different or even opposite directions depending on the orientation of the shore line. This is to say that there is no necessary or even typical alignment between hill-wards and East, and between sea-wards and West. This can lead to confusion and sometimes requires negotiating on which scale a term is used.

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[20]   *Saliba and the surrounding islands are of volcanic origin and they typically rise quite steeply after a narrow level stretch along the shore.*

[21]   *The local scale also applies to table-top set ups with manipulable objects. i.e. when talking about objects on a plane. e.g. a table, without actual differences in height. Moving e.g. a cup 'up' (sae) then means moving it towards the hill-ward side of the table' (rather than lifting it). Moving the cup 'down' (dobi) means moving it on the table plane towards the sea-wards side. Cf. Pederson et al. (1998) and further references therein.*

The distinction between these three directional terms tends to be obligatory and contrastive on both scales. For example, when traveling from Saliba Island to Alotau the provincial capital in the West, one MUST say *ya-DOBI Alotau* 'I GO DOWN to Alotau' and it is not correct to say *ya-lao Alotau* 'I GO to Alotau' because that would entail traveling in a different direction. The text sample in the appendix gives an impression of the extensive use of these terms (see e.g. the 'yam woman' story).

As mentioned, directional verb stems play an important role in the language both as independent verbs and as modifying V_3 stems in complex verbs. Their transitivity-determining ability within complex stems makes them especially relevant within this study. Note that a V_3 stem may determine the transitivity status of a complex verb without necessarily changing it. For example, if the V_1 stem is based on a labile root, it could be transitive or intransitive. Such a stem may be followed by a transitivizing V_3 stem and as a result, the construction as a whole is transitive. This is the case in (71) where the V_3 stem *gabae* 'away/off' derives an transitive complex stem from the V_1 stem which is based on the labile root *hedede* 'talk/tell'.

(71)   *Ye-hedede-gabae-ø, yau   yo-gu.*
         3SG-tell-away/off-3SG.O   1SG.EMPH   CL1-1SG.P
         'She gave it away, it's mine now.'
         (i.e. she transferred ownership from her to me by saying it is mine)

In this example, the V_3 stem determines the transitivity status of the complex verb, in that the V_1 stem *hedede* 'talk/tell' by itself can be transitive or intransitive but the complex stem *hedede-gabae* may only be transitive. But, the V_3 stem does not change the transitivity status of the complex stem but merely determines that it is transitive, restricting the V_1 stem's inherent flexibility. On the other hand, if a V_1 stem is intransitive (based on a monovalent root) and a transitive V_3 stem derives a transitive complex verb from it, then the V_3 stem does not only determine but change the transitivity status of the construction. This is the case in (72) where the transitive stem *gabae* 'away/off' derives a transitive complex verb from the intransitive V_1 stem *lao* 'go'.

(72)   *kabo ya-lao-gabae-go*
         TAM   1SG-go-away/off-2SG.O
         'I will leave you' (bagi169)

Some V_3 stems always determine the transitivity status of a complex verb while others may either themselves determine it or agree with the preceding stem(s). In the following, I discuss detransitivizing V_3 stems in 5.2.3.1, followed by transitivizing V_3 stems in 5.2.3.2.

5.2.3.1 Detransitivizing V₃

The directional stems *lao* 'go', *dobi* 'go down', and *sae* 'go up', *dikwa* 'cross (hill)' and *kawasi* 'cross (water)' can derive intransitive complex verb stems from transitive V₁ stems. The intransitive stem *lao* 'go' is based on a monovalent root of class 1. It allows neither the applicative suffix nor the causative prefix to derive a transitive stem. As a V₃ stem in a complex verb, *lao* 'go' always determines the transitivity status of the construction independent of the status of the V₁ stem. As opposed to the other V₃ stems which may be detransitivizing, *lao* 'go' cannot agree with a transitive V₁ since it has no morphological means of deriving a transitive stem. If the V₁ stem is intransitive, both stems, V₁ and *lao* 'go' as V₃ agree in transitivity status and the complex verb is intransitive. This is the case in (73) with the stem *kaikewa* 'look' as V₁ where *lao* 'go' as V₃ is indicating the directionality of the 'looking' event. The stimulus or goal towards which the subject is looking occurs as an adjunct marked by the singular postposition *unai*.[22]

(73) *Ye-kai-kaikewa-lao ka-na   kaha-ne   unai.*
      3SG-RED-look-go   CL2-3SG.P   friend/sibling PP.SG
      'He is looking over to its friend.' (farm1#4:106)

The root *kita* 'see' is labile and when it occurs as a simplex transitive stem it takes a stimulus as its object. In (74) the stimulus is a couple of baskets which are expressed as a lexical NP and cross-referenced by the object suffix on the verb.

(74) *apolo   bosa-di-wa   ye-kita-di*
      apple   basket-3PL.O/P-PM 3SG-see-3PL.O/P
      'he saw the apple baskets' (pear1:19)

When *kita* 'see' is followed by the V₃ stem *lao* 'go' in a complex verb, the construction is intransitive and parallel to (73), the stimulus may be expressed as an adjunct. In (75) the stimulus *yoda hasili* 'our reading' is marked by the plural postposition *udiedi* and it cannot be cross-referenced since the complex stem is intransitive.

(75) *muliena   ta-kita-lao   yo-da   hasili   udiedi*
      following   1INC-see-go   CL1-1INC.P reading PP.PL
      'later we will look at our readings' (church2:1)

The complex stems in (76) and (77) follow the same pattern. The V₁ stems are based on the labile roots *hedede* 'tell' and *kabi* 'touch/make'.

(76) *ye-hedede-lao sina-na-wa   unai   i-wane   "sina-gu   ..."*
      3SG-tell-go   mother-3SG.P-PM PP.SG   3SG-say   mother-1SG.P
      'she said to her mother "Mother, ..."' (bagi8)

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[22]   *The role terms are defined in chap. 4.*

(77)   *Tabu   kwa-kabi-kabi-lao!*[23]
         PRHIB   2PL-RED-touch/make-go
         'Don't touch!'(camera14)

Unlike *lao* 'go', the other detransitivizing V$_3$ stems may or may not determine the transitivity of the complex verb construction. The roots *dobi* 'go down', *dikwa* 'cross (hill)' and *kawasi* 'cross (water)' belong to class 2 (monovalent roots which allow the applicative) and *sae* 'go up' belongs to class 4 (labile roots). These roots differ from *lao* 'go' in that they have the morphological ability to agree with a transitive V$_1$ stem. In the following examples, both the V$_1$ and the V$_3$ stem are intransitive and so are the resulting complex verbs. In (78) the intransitive stem *tuba* 'swim' in V$_1$ is followed by the directional stem *sae* 'go up'.

(78)   *se-tuba-sae   Wakowakoko   unai*
         3PL-swim-go.up   Place.Name   PP.SG
         'they swam up to Wakowakoko' (yam17)

Similar examples, are given in (79) to (81) where the intransitive V$_1$ stems *beku* 'fall', *utu* 'step' and *loi* 'fly' are followed by the V$_3$ stems *dobi* 'go down', *dikwa* 'cross (hill)' and *kawasi* 'cross (water)' respectively.

(79)   *ye-beku-dobi*
         3SG-fall-go.down
         'he fell down' (abs-rel1c:22)

(80)   *se-utu-dikwa*
         3PL-step-across
         'they stepped across' (torres93)

(81)   *ye-loi-kawasi*
         3SG-fly-across
         'he flew across' (maus7b:17)

In (82) to (84), the V$_3$ stems *dobi* 'go down', *dikwa* 'cross (hill)' and *sae* 'go up' agree in transitivity status with the preceding transitive V$_1$ stems.[24] The transitive complex verb in (82) consists of the V$_1$ stem *tu* 'throw' and the applicative stem *dobi-ei* as V$_3$. In (83), the V$_3$ stem *sae* 'go up' follows the transitive V$_1$ stem *helele* 'reach', and in (84) *tu* 'throw' is followed by the applicative stem *dikwa-nei* 'cross'.

(82)   *Ye-tu-dobi-ei-ø.*   (83)   *Ye-helele-sae-di.*
         3SG-throw-go.down-APP-3SG.O   3SG-reach-go.up-3PL.O/P
         'He threw it down.'   'She stretched them up.' (her arms)

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[23]   *The reduplication of the stem is required by the prohibition marker* tabu.

[24]   *The V$_3$ stem* kawasi *'cross (water)' is not attested in a transitive complex verb. I consider this an accidental gap in the data rather than a difference in the behavior of this stem.*

(84)   *bolo-wa   ye-tu-dikwa-nei-ø*
ball-PM   3SG-throw-across-APP-3SG.O
'he threw the ball across' (absrel2c:14)

The text example in (85) shows a complex verb in which three slots are occupied: V_1, V_2, and V_3. The V_2 stem expresses the result of V_1 and the V_3 stem specifies the direction of the entire event.

(85)   *ye-sikwa-he-beku-dobi-ei-ø*
3SG-poke-CAUS-fall-go.down-APP-3SG.O
'he poked it down' (lit. 'he poked it and made it fall down') (absrel1a:32)

In (86) to (89) the V_3 stems derive intransitive complex stems from the V_1 stem *kita* 'see' which is based on a labile root. The examples are parallel to (75) with the stem *lao* 'go' as V_3.

(86)   *se-kita-dobi-ma*   (87)   *Ye-kita-sae David unai.*
3PL-see-go.down-hither   3SG-see-go.up Name PP.SG
'they looked down here' (torres84)   'He looked up to David.'

(88)   *Ye-kita-dikwa.*   (89)   *Ye-kita-kawasi.*
3SG-see-across   3SG-see-across
'He looked across (the hill).'   'He looked across (the water).'

An interesting effect of detransitivization with these V_3 stems can be observed in complex verbs with the V_1 stem *hedede* 'talk/tell' which is based on a labile root. As a transitive stem, *hedede* 'talk/tell' takes the theme as its object, i.e. the topic talked about. The addressee may not be expressed as the syntactic object of the construction. So, the verb in (90) can only mean 'they talked about you' but not 'they told you'.

(90)   *Se-hedede-go.*
3PL-tell-2SG.O
'They talked about you.' (* 'They told you.')

When the stem occurs in a complex verb followed by an intransitive directional stem such as *lao* 'go', *dobi* 'go down' or *sae* 'go up', the construction is intransitive. However, it actually implies a person distinction of the addressee. As I argue in more detail in chapter 14 and in Margetts (in prep.), in certain contexts the Saliba directional suffixes *-ma* 'hither' and *-wa* 'thither' indicate event participants rather than mere directionality. In the examples below, the form *-ma* 'hither' indicates a first person and *-wa* 'thither' a second person addressee. The absence of a directional suffix, as in example (76) which is repeated here as (93), implies a third person addressee.

(91)   *Ye-hedede-lao-ma.*
3SG-tell-go-thither
'She told me.'

(92)   *ya-hedede-lao-wa-ko   ena   ku-sae-sae*
      1SG-tell-go-thither-PERF   COND   2SG-RED-go.up
      'I told you already, if you're going up' (bagi26)

(93)   *ye-hedede-lao   ede   sina-na-wa   ye-dou*
      3SG-tell-go   PRSUP   mother-3SG.P-PM   3SG-cry
      'she told her and her mother cried' (bagi61)

As shown in (93), the addressee can additionally be expressed as a PP which clearly shows that, as in (90), the addressee participant is not a syntactic argument. What is gained by adding a V$_3$ stems in comparison to (90), is that information about addressee (the feature of person distinction) is actually marked on the verb itself. The crucial point is that *hedede* 'talk/tell' itself does not allow the directional suffixes to attach directly to the stem but only to the V$_3$ stems (the same holds for the V$_1$ stems discussed below).[25]

With the stem *kita* 'see' the addition of a directional V$_3$ stem has a slightly different effect. As an independent transitive verb stem, *kita* 'see' takes the stimulus participant as its object argument (cf. (74) above). When building a complex stem with a V$_3$ stem such as *lao* 'go', *dobi* 'go down', *sae* 'go up', the directional suffixes *-ma* and *-wa* as well as their absence hint at the identity of an event participant just as in (91) to (93). Again, *-ma* 'hither' indicates a first and *-wa* 'thither' a second person while the absence of a directional implies a third person participant. But as opposed to the examples with *hedede* 'talk/tell' the implied participant basically has the same role as the object of the corresponding transitive verb. The constructions differ slightly in meaning. Compare the examples in (94):

(94) a. *Ye-kita-gau.*   b.   *Ye-kita-lao-ma.*
        3SG-see-1SG.O   3SG-see-go-hither
        'He saw me.'   'He looked over to me.'

While (94a) entails that the stimulus was actually seen, this is implied but not entailed in the complex construction in (94b). This is evident from the fact that the (b) example may be followed by a clause like *na nige ye-kita-gau* 'but he didn't see me'. Similar contrasts can be found with the stems *kaikewa* 'look', *kabi* 'touch', *yoga* 'call' and possibly others.

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[25]   *In elicitations, a few speakers allowed the directional suffixes to attach directly to the stem but most rejected such examples.*

5.2.3.2 Transitivizing V₃

The two transitivizing stems *gabae* 'away/off/out' and *watani* 'follow' are both based on bivalent roots. The stem *gabae* only occurs in transitive verbs. As an independent verb stem (or as V₁ of a complex verb), it means 'throw' as in the simplex transitive verb in (95).

(95)   *Maula   ka-gabae-di.*
         bait   1EX-throw-3PL.O/P
         'We throw the bait out.' (fishdial80)

As a modifying V₃ stem, *gabae* expresses direction away from the original or previous location. It can be glossed as 'away', 'off' or 'out'. In all cases, *gabae* determines the transitivity status of the complex verbs independent of the transitivity status of V₁. In (96) and (97) it occurs in complex verbs with the transitive V₁ stems *hai* 'take/get' and *ini* 'pour' which are based on bivalent roots.

(96)   *kwateya   se-hai-gabae-ø*
         yam   3PL-take/get-away/off-3SG.O
         'they took the yam out' (yam52)

(97)   *mosomoso   ya-ini-gabae-ø*
         rubbish   1SG-pour-away/off-3SG.O
         'I pour the rubbish away' (bagi123)

But *gabae* 'away/off' also derives a transitive complex stem from intransitive V₁ stems. In (98) it derives the transitive stem *lao-gabae* 'leave behind' from the intransitive V₁ stem *lao* 'go'.

(98)   *kabo   ya-lao-gabae-go*
         TAM   1SG-go-away/off-2SG.O
         'I will leave you' (bagi169)

In (99) *gabae* 'away/off' derives a transitive complex stem from the intransitive stem *yabubu* 'go away' in the V₁ slot.

(99)   *slipway   se-yabubu-gabae-ø*
         slipway   3PL-go.away-away/off-3SG.O
         'They left the slipway' (nipunosi59)

As already described for V₂ stems in 5.2.2.1, V₃ stems may not only determine the transitivity of a complex verb but also the semantic role of the object argument. An example of this with *gabae* 'away/off' is given below. The stem *kaiso* 'spit' is intransitive but it can derive a transitive stem with the applicative suffix. The applied object of the transitivized verb is the location which is spat on as in (100a). The theme, i.e. the entity which is spat out, cannot feature as the applied object as shown in (100b).

(100) a.   *Weku   ye-kaiso-i-ø.*   b. * *Kwasina   ye-kaiso-i-ø.*
         stone   3SG-spit-APP-3SG.O   blood   3SG-spit-APP-3SG.O
         'He spat onto the stone.'   'He spat out blood.'[26]

But in the complex verb in (101), where *kaiso* 'spit' is followed by the V_3 stem *gabae* 'away/off' it is the theme participant which is expressed as the object argument of the construction.

(101)   *Kwasina   ye-kaiso-gabae-ø.*
          blood   3SG-spit-away/off-APP-3SG.O
          'He spat out blood.'

In this example *gabae* 'away/off' determines both the transitivity status and the type of object argument of the construction.

Like *gabae* 'away/off', the root *watani* 'follow' is bivalent. It never occurs as a simplex stem, but is only attested as V_3 in complex verbs. The meaning of *watani* 'follow' is not inherently spatial in that it may refer to a path following another figure, but also to, for example, following a beat while dancing. Like *gabae* 'away/off', *watani* 'follow' is restricted to occur in transitive verbs. When it follows a transitive stem in V_1, the stems agree in transitivity status as in (102) where the V_1 slot features the causative stem *he-muli*.

(102)   *se-he-muli-watani-go*
          3PL-CAUS-later/behind-follow-2SG.O
          'they follow you' (church1:104)

When the stem in the V_1 slot is intransitive, *watani* 'follow' changes the transitivity status of the construction and derives a transitive complex stem. In (103) the V_1 slot features the intransitive stem *lao* 'go'.

(103)   *bena   hinage   ku-lao-watani-di*
          OBLI/COMP also   2SG-go-follow-3PL.O/P
          'you must also follow them' (bagi84)

In (104) the transitive complex verb is derived from the intransitive stem *sobu-sobu* 'dancing' in the V_1 slot. The reduplication of the initial stem marks the progressive aspect.

(104)   *Bwaiyatu ... se-koi-ø   na   ka-sobu-sobu-watani-ø*
          kundu.drum   3PL-hit-3SG.O CONJ 1EX-RED-dance-follow-3SG.O
          'They beat the kundu drum ... and we're dancing following it' (nogi51)

To summarize, both *gabae* 'away/off' and *watani* 'follow' are restricted to transitive constructions. They always determine the transitivity status of the complex verbs in which they occur.

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[26] *The sentence could possibly mean 'he spat onto the blood'.*

5.2.4 V₄: ADVERBIAL, ASPECTUAL, AND MODAL MODIFIERS

The verb stems that occur in the V_4 slot have aspectual and adverbial functions. Above, I have analyzed V_4 stems in terms of Role and Reference Grammar as nuclear-layer operators modifying the action or event which is expressed by the preceding stem(s). V_4 stems are modifying this preceding unit and are in a subordinate relation with it. The stems which occur in this slot can by divided according to various criteria. Semantically, one can distinguish stems which specify the manner of the action or event (with meanings such as 'properly', 'slowly' or 'quickly') form stems which have a phasal aspectual meaning (like 'keep/continue', 'finish' or 'stop')[27] and finally stems which have a more modal meaning (like 'in vain' or 'with no particular reason'). Structurally, the stems can be divided into those which are transitivized by the applicative suffix and those which take the causative prefix. The stems which are attested in the V_4 slot are listed in Table 2 below.[28]

TRANSITIVIZED BY APPLICATIVE		TRANSITIVIZED BY CAUSATIVE	
namwa	'good'	*gehe* (or *kohi*)	'finished'
nogowai	'slow'	*lautom*	'stop/cease'
mwamwayau	'quick'	*kaiyawasi*	'rest'
uyo	'back/again'		
kasaya	'in vain'		
gaibu	'just like that'		
kalili	'very'		
mo	'only/just'		
kesegai	'one/continuously'		

Table 2   *V₄ stems*

Some of these stems may occur as independent verb stems while others may not. Those which may can all be classified as monovalent roots of class 1 because, as independent verb stems, they do not allow the applicative suffix (while as V_4 stems they do). These are the stems *namwa* 'good', *nogowai* 'slow', *mwamwayau* 'quick' and *uyo* 'back/again' from the left column of the table as well as all of the stems from the right column of Table 2. The remaining stems cannot occur as independent verb stems but some of them can occur as nominal modifiers. The stems listed in Table 2 are to a varying degree grammaticalized and the fact that

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[27]   *Note that there is no stem with a phasal meaning like 'start' or 'begin' that may occur in this slot. The stem* hetubu *'start' is only attested as a main verb.*

[28]   *The list is possibly incomplete.*

some of them cannot occur as independent verb stems is but one criterion for that. As I discuss below, some of them are in the process of grammaticalizing into post-verbal particles.

One property which is shared across V_4 stems (for an exception see 5.2.4.2) is that they must agree with the transitivity status of the preceding stem(s). The transitivity status of V_4 stems is always morphologically transparent by the presence or absence of the applicative or causative affix. In this way, they are a useful tool for testing the transitivity status of a V_1 stem as described in the complex-verb test in chapter 4.

As mentioned, there seems to be a general tendency for V_4 stems to grammaticalize into post-verbal particles. They leave the V_4 slot, which is morphologically within the verb, and occur in a postverbal modifier position. This development possibly originates from the reanalysis of intransitive complex verbs, where the final word boundary is typically not marked, such as in (105). The V_4 stem *uyo* 'back/again' may be reinterpreted as a particle following the inflected verb, rather than being morphologically part of it.

(105)   *Ye-dobi-uyo.*
          3SG-go.down-back/again
          'He went back down.'

Evidence in support of this comes from transitive complex verbs, where the final word boundary is often morphologically marked (by an object suffix and/or the applicative), but also from intransitive verbs which carry overt indications of the word boundary such as the directional suffixes *-ma* 'hither' and *-wa* 'thither'. In such contexts, it can be observed that a number of V_4 stems actually do occur in a post-verbal position. The text example in (106) demonstrates this particle-like status of V_4 stems. It shows a transitive complex verb construction featuring the stems *tu* 'throw' (V_1), *dobi-ei* 'go down' (V_3) and finally the V_4 stem *kasaya-i* 'in vain'. This last stem does not, however, appear in the V_4 slot but in a position after the inflected verb. It follows the applicative suffix on *dobi* 'go down' which indicates the final boundary of the complex stem.

(106)   *ye-tu-dobi-ei-ø*   *kasaya-i*
          3SG-throw-go.down-APP-3SG.O   in.vain-APP
          'he threw it down in vain' (goi1:68)

The text example in (107) shows the applicative stem *uyo-i* 'back/again' following a transitive complex verb whose final word boundary is indicated by the object suffix and the directional suffix *-ma* 'hither'. Again, the stem occurs in a post-verbal position.

(107)   *ye-tu-lae-ya-ma*   *uyo-i*
          3SG-throw-lead-3SG.O-hither   back/again-APP
          'he threw it back to me' (maus2b:21)

(108) shows an intransitive verb with the stem *uyo* 'go back' (whose final boundary is marked by the suffix *-ma* 'hither') which is followed by the grammaticalized V_4 version of the same stem *uyo* 'back/again'. Again, the second instance of *uyo* 'back/again' does not in fact stand in the V_4 slot since it follows the directional suffix. Note that, in this example, a V_4 stem modifies its own source lexeme in the V_1 slot which is further evidence for its grammaticalized status.

(108)   *Ye-lao na*   *ye-uyo-ma*   *uyo*
          3SG-go CONJ   3SG-go.back-thither   back/again
          'He went and came back again' (absrel3c:20)

In (106) to (108), the V_4 stems *kasaya-i* 'in vain' and *uyo(-i)* 'back/again' are neither part of the inflected verb nor do they constitute an independent verb by themselves since they do not carry the obligatory subject prefix. Generally, the applicative is obligatorily followed by an object suffix. If there is no overt object suffix, the applicative can be taken as evidence for the presence of the zero allomorph of the third person object suffix (cf. applicative test, chap. 4). However, for the particle-like V_4 stems which occur post-verbally, I propose that the *-i* suffix be analyzed as a mere marker of agreement in transitivity status (rather than an instance of the applicative suffix proper). I do not assume a zero object suffix following these forms.[29]

While in (106) to (108) the postverbal particles agree in transitivity by means of the applicative suffix, the post-verbal occurrences of *mwamwayau* 'quick' in (109) and (110) do not have the same transitivity marking as the verb they modify. In

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[29]   *This analysis remains hypothetical until there is evidence, for example, with non-zero object suffixes such as the third person plural. The analysis may be tested by eliciting speakers' judgments about examples like in (i).*

(i)   a.   ?   *Ye-tu-dobi-ei-di*   *kasaya-i.*
                3SG-throw-go.down-APP-3PL.O/P   in.vain-APP
                'He threw them down in vain.'

      b.   ?   *Ye-tu-dobi-ei-di*   *kasaya-i-di.*
                3SG-throw-go.down-APP-3PL.O/P   in.vain-APP-3PL.O/P
                'He threw them down in vain.'

According to the proposed analysis, (a) without an object suffix on kasaya-i *should be preferred over (b) where both the complex verb and the post-verbal stem carry the third person plural object suffix. (But quite possibly, both examples may be considered ungrammatical by Saliba speakers.)*

these examples, the bare intransitive stem *mwamwayau* 'quick' (which is intransitive without an applicative suffix) modifies a preceding transitive verb.

(109)   *ku-bahe-i-ya-ma*   *mwamwayau*
          2SG-carry-APP-3SG.O-hither   quick
          'bring it here quickly' (emadial165)

(110)   *se-kuli-di*   *mwamwayau   mwamwayau*[30]
          3PL-write/draw-3PL.O/P   quick   quick
          'they drew them quickly' (nipunosi121)

It seems that, as a post-verbal modifier, *mwamwayau* 'quick' fossilized in its intransitive form, modifying both transitive and intransitive verbs.

Constructions as in (106) to (108) are the only context where two stems of Table 2 can co-occur. One stands in the actual V_4 slot while the second (presumably more grammaticalized one) appears in the post-verbal position. It appears that once a V_4 stem is externalized and follows the (complex) verb, the V_4 slot of the complex verb can be refilled. As described for the Fijian example in (25) above, FVV suggest that ultimately, verb stems which function as nuclear-layer operators, such as Saliba V_4 stems, move out of the inflected verb as they grammaticalize further. The Saliba constructions with post-verbal occurrences of such stem are in line with this prediction.[31]

In the following, I discuss the function of the various V_4 stems. Stems expressing manner are discussed in 5.2.4.1. Stems with a modal or aspectual (phasal) function are discussed in 5.2.4.2, except for those which indicate the end or completion of the action or event which are discussed in 5.2.4.3. As indicated in Table 2, the first two groups build a transitive stem with the applicative suffix, the last group with the causative prefix.

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[30]   *The form* mwamwayau *'quick' is repeated for style and emphasis in this example. Note that this is not an instance of reduplication since in Saliba reduplication only applies to the first two syllables of a stem.*

[31]   *See also Early's (1993: 78) examples (18) with the transitive marker (similar to the Saliba applicative suffix) intervening between stems in Lewo nuclear-layer serialization.*

5.2.4.1 Manner

The V₄ slot may host at least three stems which give information about the manner in which an action or event is performed. They are based on the roots *namwa* 'good', *nogowai* 'slow' and *mwamwayau* 'quick'. As V₄ stems in a complex verb, they reduplicate obligatorily except for *mwamwayau* 'fast' for which the base form is reduplicated already. Note that these stems also reduplicate obligatorily when they occur as nominal modifiers (cf. chaps. 2 and 4). Examples (111) to (113) show them as independent intransitive verb stems.

(111)   *Ye-namwa.*
        3SG-good
        'It's good/all right.'

(112)   *Ku-nogo-nogowai!*
        2SG-RED-slow
        'Slowly!'

(113)   *Ku-mwamwayau!*
        2SG-quick
        'Hurry!'

Example (114) to (116) show them as modifying stems in the V₄ slot. In (114) both stems are transitive. The V₁ slot features the causative stem *he-kata* 'teach'.

(114)   *ye-he-kata-namwa-namwa-i-gai*
        3SG-CAUS-learn-RED-good-APP-1EX.O
        'she teaches us properly' (basdial22)

In example (115) both stems are intransitive. The stem *hedede* 'talk/tell' occurs as V₁.

(115)   *Ku-hedede-nogo-nogowai!*
        2SG-talk/tell-RED-slow
        'Speak slowly!'

In (116) the intransitive V₁ stem *yabubu* 'go away' is modified by the V₄ stem *mwamwayau* 'quick' which agrees in transitivity status.

(116)   *ku-yabubu-mwamwayau*
        2SG-go.away-quick
        'go away quickly' (kulupokaB32)

5.2.4.2 Modal and phasal function

The root *uyo* means 'return' or 'go back' as a main verb, but as a V₂ stem it expressed as meaning like 'back' or 'again', as in (117) and (118). (The examples in this section are presented in pairs of intransitive and transitive complex verbs)

(117)   *ye-dobi-uyo*   *sina-na-wa*   *unai*
        3SG-go.down-back/again   mother-3SG P-PM   PP.SG
        'she went back down to her mother' (bagi24)

(118)   *ye-tu-isini-uyo-i-o*
        3SG-throw-raise-back/again-APP-3SG.O
        'he threw it up again' (maus2b:7)

As opposed to *uyo* 'back/again', the other stems discussed in this section are restricted to the V₄ position. They can never occur as independent verb stems or in any other slot of a complex verb. But the forms *gaibu* 'just like that' and *mo* 'only/just' are attested as nominal modifiers. When they occur in this function, the stems simply follow the noun without any further morphological marking as shown in (119) and (120).[32]

(119)   *yama   gaibu*
          fish   just.like.that
          'fish by itself' (i.e. without rice or yams)

(120)   *mwasabwa-mo   ka-kai-katu*
          fish.name-just/only 1EX-KAI-catch
          'we catch only *mwasabwa*' (fishing35)

As a V₄ stem, *gaibu* 'just like that' indicates that an activity or event takes place for no particular reason, or without a particular goal.

(121)   *tabu   kwa-hedede-gaibu*
          PRHIB   2PL-talk/tell-just.like.that
          'don't talk around' (emadial101)

(122)   *Ya-hedede-gaibu-i-ø.*
          1SG-talk/tell-just.like.that-APP-3SG.O
          'I said it just like that, with no particular reason.'

The stem *kasaya* 'in vain' marks that the action or event expressed by the preceding stem(s) either took place without success or that contrary to the subject's intention it did not take place at all. Consider (123) and (124):

(123)   *Ye-heloi-kasaya   (waga-wa   ye-gelu-ko).*
          3SG-run-in.vain   boat-PM   3SG-board-PERF
          'He ran in vain (the boat had left already).'

(124)   *Ku-numa-kasaya-i-ø   kabo   ku-ini-gabae-ø.*
          2SG-drink-in.vain-APP-3SG.O TAM   2SG-pour-away/off-3SG.O
          'If you can't finish it pour it away.'
          ('If you drink it in vain you will pour it away.') (Ema-dial:147)

The examples with *kalili* 'very/much/completely' follow the same pattern.

(125)   *ye-namwa ... na   nige   ye-namwa-kalili*[33]
          3SG-good   CONJ NEG   3SG-good-very
          'it's good ... but it is not very good'

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[32]   *This is in contrast to stative roots which must generally reduplicate and take a possessive suffix when they occur as nominal modifiers, cf. chaps. 2 and 4.*

[33]   *This is the subtle but effective phrase with which Saliba speakers tend to express criticism.*

(126)   *ye-gadosisi-kali-kalili-ei-ø*[34]
          3SG-love-RED-very-APP-3SG.O
          'she loved her very much' (bagi87)

As shown in (120) above, the form *mo* 'only/just' may occur as a nominal modifier. The examples below show it as a V₄ stem.

(127)   *ya-hedede-mo*   (128)   *ye-kelebesi-mo-i-ø*
          1SG-talk/tell-only/just   3SG-grab-only/just-APP-3SG.O
          'I just talk' (torres8)   'he just grabbed it' (tblaki56)

The last form, *kesegai* 'continuously', is a special case. It seems that the numeral *kesega* 'one' has grammaticalized in the shape *kesega-i* with a phasal meaning of 'keep' or 'continue' but it can also mean 'together' or 'as one'. I assume that the final *-i* is a fossilized version of the applicative, but crucially, it also occurs on intransitive verbs. Example (129) is intransitive, while (130) is transitive but the form *kesegai* does not change.

(129)   *ye-dou-kesegai*
          3SG-cry-one/continuously
          'she kept crying (bagi174)

(130)   *ye-hai-kesegai-da*
          3SG-take/get-one/continuously-1EX.O
          'she took (photographed) us together' (f-dial40)

5.2.4.3 End of action/event

The last group of stems which may occupy the V₄ slot express the idea that the action or event is completed or comes to an end. When the complex verb is transitive, the V₄ stem indicates that the involved object is completely affected. The stems are *gehe* (or *kohi*[35]) 'finished', *lautom* 'stop', and *kaiyawasi* 'rest'. Unlike the stems discussed in the previous sections, they transitivize by means of the causative prefix. All of the stems are attested as independent verb stems. The most common of these stems is clearly *gehe* 'finished' and the other forms are quite rare in the V₄ slot. Consider (131) and (132).

(131)   *ye-dou-gehe*
          3SG-cry-finished
          'she finished crying' (bagi61)

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[34]   *The reduplication of* kalili *seems to indicate special emphasis here.*

[35]   *The stems* gehe *and* kohi *are synonyms meaning 'finished'.* kohi *is less common but said to be the original Saliba form while* gehe *is supposedly borrowed from Suau. The two forms seem to have the same range of meanings and applications. I restrict the discussion to examples of* gehe.

(132)   *Se-paisowa-gehe kabo   se-lao.*
          3PL-work-finished   TAM   3PL-go
          'They finish working and then they will go.'

In elicitations, speakers stated that the examples in (132) are equally acceptable with *kohi* 'finished', *lautom* 'stop', or *kaiyawasi* 'rest' without any difference in meaning. A text example with *lautom* 'stop' is given in (133)

(133)   *ye-kai-kai-lautom*
          3SG-RED-eat-stop
          'he stopped eating' (oba2:42)

If the complex verb is transitive, the V_4 stems must be causativized. As mentioned, only *he-gehe* 'CAUSE-finished' (and *he-kohi* 'CAUSE-finished') seem to be allowed in this context. The causativized stems *he-lautom* and *he-kaiyawasi* are attested as independent verb stems but not as V_4 stems. In the V_4 slot of a transitive complex verb, *he-gehe* 'CAUSE-finished' indicates that the involved object participant was completely affected. Consider (134) to (136):

(134)   *Biskete-ne   ya-kai-he-gehe-di.*
          biscuit-DET   1SG-eat-CAUS-finished-3PL.O/P
          'I ate up/finished the biscuits.'

(135)   *maudoi-di ye-hai-he-gehe-di*
          all-3PL.O/P   3SG-take/get-CAUS-finished-3PL.O/P
          'she took all of them' (bagi180)

(136)   *ya-tupa-he-yoli-he-gehe-di*
          1SG-IMPACT-CAUS-sink-CAUS-finished-3PL.O/P
          'I will drown all of them (until there is none left)' (Tautela59)

5.3 SAGU-I 'HELP'

There is a type of construction which is quite different in nature from the complex verbs described in 5.2 above. These constructions are morphologically always transitive and involve the stem *sagu-i* 'help' which is derived by the applicative suffix from the noun stem *sagu* 'help'. Consider the example in (137) which was noted from spontaneous speech (all later examples in this section were elicited):

(137)   *Eso   ya-niu-tutu-sagu-i-ø.*
          Name 1SG-coconut-hit/break-help-APP-3SG.O
          'I help Eso to pound coconuts.' (i.e. pounding copra into a bag)

The example shows a transitive complex verb which is composed of two stems. The first stem is intransitive and in itself morphologically complex, it consists of the verb stem *tutu* 'hit/break' and the incorporated noun stem *niu* 'coconut'. This incorporating stem is followed by the transitive stem *sagu-i* 'help'. The same type of structure is found in example (138) except that the incorporating stem is an instance of V-N incorporation (rather than N-V incorporation as in (137)) where

the incorporated noun stem *kabole* 'sago' follows the verb stem *kabi* 'touch/make'.

(138)   *Tamowai ya-kabi-kabole-sagu-i-di.*
          people   1SG-make-sago-help-APP-3PL.O/P
          'I help the people making sago.'

At the first glance, the ordering of stems in these Saliba examples look strikingly parallel to classical cases of serialization which are familiar from African languages. Consider the Yorùbá example in (139) which is taken from Foley and Olson (1985: 18, their example 3b).

(139)   *ó mú ìwé wá*
YORÙBÁ   he took book came
          'He brought the book.'

A crucial difference between the Yorùbá example and the expressions in (137) and (138) is that the Saliba constructions each constitute a single grammatical word. The object nouns in (137) and (138) are incorporated into the initial verb stem and do not have independent status. In Durie's (1997) account, the Yorùbá example constitute a 'non-contiguous' sequence in which the object noun intervenes between the serialized verbs, but both Saliba examples are 'contiguous' sequences because of the object's incorporated status. When the object nouns are not incorporated into the verb, they must precede the complex verb as shown in (140) and (141) which correspond to (137) and (138) above. The clauses in (140) and (141) are ditransitive featuring three arguments.

(140)   *Eso niu   ya-tutu-sagu-i-ø.*
          Name coconut 1SG-hit/break-help-APP-3SG.O
          'I help Eso to pound coconuts.' (i.e. pounding/stuffing copra into a bag)

(141)   *Tamowai kabole ya-kabi-sagu-i-di.*
          people   sago   1SG-make-help-APP-3PL.O/P
          'I help the people to make sago.'

Examples with *sagu-i* 'help' are the only instances of complex verbs where a stem may add an argument to a transitive verb and thus derive the head of a ditransitive clause. In contrast, the complex verb construcitons discussed in 5.2 above can merely change the semantic role of the existing object.

In (142), the stem *sagu-i* 'help' attaches to the intransitive complex stem *lao-liga* 'cook' which consists of a V_1 and a V_2 stem. In (143) *sagu-i* 'help' follows the simplex intransitive stem *wase* 'search'. Like (138), examples (142) and (143) were elicited.

(142)   *Sina-gu   ya-lao-liga-sagu-i-ø.*
          mother-1SG.P 1SG-go-cook-help-APP-3SG.O
          'I help my mother cook.'

(143)   *Ku-sae   tamowai   ku-wase-sagu-i-di!*
            2SG-go.up   people   2SG-search-help-APP-3PL.O/P
            'Go up and help the people search!'

In sum, complex constructions with *sagu-i* 'help' show a verb stem in the initial slot which may itself be complex or simplex. The stem *sagu-i* 'help' does not seem to stand in any of the four positional slots discussed in 5.2. A crucial difference to the complex verbs discussed in 5.2 is that in (137) to (143) the object of the construction corresponds semantically to the subject of the initial stem. This becomes clear when omitting the stem *sagu-i* from the constructions which results in ungrammatical sentences in most cases because the verbs are intransitive and cannot take an object. Consider for example (138') and (142') which correspond to (138) and (142) above.

(138')   * Tamowai ya-kabi-kabole*   (142')   * Sina-gu   ya-lao-liga*
              people   1SG-make-sago   mother-3SG.P 1SG-go-cook

Examples (137) to (143) can be paraphrased by bi-clausal constructions as in (144) to (147) where both of the verb stems are inflected independently (and where *sagu-i* 'help' occurs as the first verb).

(144)   *Eso   ya-sagu-i-ø   ka-niu-tutu.*
            Name   1SG-help-APP-3SG.O   1EX-coconut-hit/break
            'I help Eso to pound coconuts.'

(145)   *Tamowai ya-sagu-i-di   ka-kabi-kabole.*
            people   1SG-help-APP-3PL.O/P   1EX-make-sago
            'I help the people making sago.'

(146)   *Sina-gu   ya-sagu-i-ø   ka-lao-liga.*
            mother-3SG.P 1SG-help-APP-3SG.O 1EX-go-cook
            'I help my mother cook.'

(147)   *Ku-sae   tamowai   ku-sagu-i-di   kwa-wase!*
            2SG-go.up   people   2SG-help-APP-3PL.O/P 2PL-search
            'Go up and help the people search!'

In these examples, both the subject and the object of the first verb are coreferential with the subject of the second verb. These constructions constitute complex sentences which functionally correspond to English complement clauses. It should be noted however, that in the Saliba examples there is no indication of a hierarchical relationship between the clauses.[36]

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[36]   *The only formal constraint on this construction is that the subject of the second verb must refer to both the subject and the object of* sagu-i *'help'. These constructions are possible candidates for core-layer serialization in the sense of FVV and Foley and Olson (1985). But note that there is not sufficient evidence yet that the two verbs constitute serial verb constructions rather than clause chains or other constructions where two clauses that are link in some way.*

In FVV's typology of juncture types discussed above, the constructions with *sagu-i* 'help' in (137) to (143) constitute nuclear-layer junctures. The difference between the *sagu-i* constructions and the complex verbs discussed in section 5.2 possibly lies in the nexus type of the juncture. While the constructions in the previous section were classified as nuclear cosubordination and subordination, I suspect that constructions with *sagu-i* 'help' may possibly constitute nuclear coordination.[37] To answer this question, further research on such complex constructions will be required.

5.4 SUMMARY

In this chapter, I discussed Saliba complex verb constructions, which I analyzed as instances of nuclear-layer serialization. Constructions of this type are wide spread in both Papuan and Austronesian languages of the New Guinea area but are also found in the broader Oceanic language area (e.g. Dempwolf 1939, Bradshaw 1982, 1983, Mosel 1984, Bisang 1986, Crowley 1987, Early 1993, Hamel 1993, Sperlich 1993). In Saliba, there are two major types of complex verbs. The first type, which was discussed in 5.2 in terms of four positional and functional slots, is extremely common and productive in the language. The second type, discussed in 5.3, is also productive but less commonly found since it is restricted to constructions with a single stem, *sagu-i* 'help'. Following Foley and Van Valin (1984) and Foley and Olson (1985) Saliba complex verbs were described as types of juncture-nexus combinations. The analysis within the framework of Role and Reference grammar allowed us to capture both the similarities between the different types of complex verbs (they are all nuclear junctures) and their differences (they differ in nexus type).

Complex verb constructions involving V_3 and V_4 stems most likely originate form grammaticalization of V_1-V_2 combinations in which V_1 expresses a cause and V_2 its effect or result (cf. Bradshaw 1982, Durie 1997). Both the V_3 and the V_4 slot can be seen as developing from the V_2 slot through a process of reanalysis. In this

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[37]   *This would be an interesting finding in light of the fact that FVV (p. 248) describe coordinate nexus as very rare on the nuclear level. The only examples they present come from two non-Austronesian languages of Papua New Guinea.*

development, the V_2 stem expressing an effect or result is reinterpreted as a modifier of the V_1 stem. This process can also be described as a shift from cosubordinate to subordinate nexus.

Parallel to this process, there is a different route of grammaticalization leading to the development of classificatory prefixes which are a striking feature of a number of Papuan Tip Cluster languages. Classificatory prefixes also originate from V_1-V_2 combinations source constructions but it is the V_1 stem of such constructions which grammaticalizes (Bradshaw 1982, Ezard 1978, 1992). The process from V_1 to a prefix draws on constructions where the V_1 stem can be interpreted as denoting the manner of the activity expressed by V_2. The two grammaticalization channels are schematized in Figure 3.
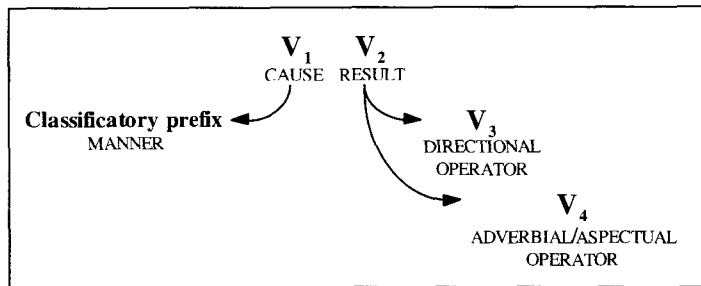
Figure 3   *Grammaticalization of V_1-V_2 sequences*

While classificatory prefixes are generally considered a typical feature of Papuan Tip Cluster languages, in Saliba there are only a few. The process of grammaticalization of V_1 stems into classificatory prefixes is clearly less developed than the grammaticalization of V_2 stems into directional, adverbial and aspectual modifiers in Saliba.[38]

I have barely touched on the question of whether Saliba also has serial verb constructions on the core-layer. For a discussion of the problems in identifying such constructions in Saliba cf. chapter 2.2.2.

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[38]   *It is unclear what motivates a language's choice for either grammaticalization channel and also to what extent the two processes can coexist or interfere with each other in the long term since they both draw on the same source constructions. This potentially constitutes an interesting field for future research on the languages of the Papuan Tip Cluster.*

To summarize, complex verbs play an important role in the description of valence and transitivity in Saliba. They constitute part of the transitivity-changing morphology in the language and provide tests for word-level transitivity as well as root valence. The stems within a complex verb follow a same-subject constraint and certain rules of transitivity agreement. Complex verbs also further support the earlier findings that verbs which can head ditransitive clauses are rare in Saliba.

THE APPLICATIVE SUFFIX

The Saliba applicative suffix derives transitive verb stems from intransitive ones by licensing a further argument, generally an object. This suffix is one of the most productive derivational morphemes of the language. As discussed in chapter 4, subclasses of monovalent roots can be distinguished by whether the roots allow the applicative suffix or not. For those that allow it, the subject of the underived intransitive verb generally corresponds to the subject of the transitivized verb (but see examples (5) to (7) below). The objects which are introduced by the suffix will be called 'applied objects'.

(1) a. *Ye-bahe.*
         3SG-carry
         'He carried.'

     b. *Ye-bahe-i-ø.*
         3SG-carry-APP-3SG.O
         'He carried it.'

(2) a. *Ye-maluhi.*
         3SG-laugh
         'He laughed.'

     b. *Ye-maluhi-ei-gau.*
         3SG-laugh-APP-1SG.O
         'He laughed at me.'

(3) a. *Ye-wose.*
         3SG-paddle
         'He paddled.'

     b. *Ye-wose-i-di.*
         3SG-paddle-APP-3SG.O
         'He paddled them.' (as his passengers)

(4) a. *Ye-buse.*
         3SG-shit
         'He shat.'

     b. *Ye-buse-i-ø.*
         3SG-shit-APP-3SG.O
         'He shat on it/he soiled it.'

In a few rare cases, the subject of the intransitive verb corresponds to the object rather than to the subject of the derived transitive verb. These roots can be described as O-type roots following Dixon (1988) (see also chap. 4). Only very few roots are attested with this pattern. Consider (5) to (7):

(5) a. *Pasa ye-pane.*
         flower 3SG-smell
         'The flower smells.'

     b. *Pasa ye-pane-i-ø.*
         flower 3SG-smell-APP-3SG.O
         'He smelled the flower.'

(6) a. *Se-nonoha.*
         3PL-ready
         'They are ready.'

     b. *Ye-nonoha-i-di.*
         3SG-ready-APP-3PL.O/P
         'He gets them ready.'

(7) a. *Ye-sipwa.*
         3SG-trip
         'He tripped.'

     b. *Manuwa ya-sipwa-i-ø.*
         bird 1SG-trip-APP-3SG.O
         'I trapped a bird.' (with a string)

Transitive verb stems are not allowed as input to suffixation of the applicative. This means the applicative is never used to add an argument to transitive verbs or to change the roles of their existing arguments (cf. 6.2.4 for a potential exception).

Furthermore, only intransitive stems based on monovalent roots but not those based on labile roots allow the applicative suffix. If a simplex stem can derive a transitive stem with the applicative, this stem can never occur as a transitive stem without the applicative.[1] The applicative suffix has scope over the verb stem to which it immediately attaches. In complex verbs (chap. 5), it has scope only over the final stem but not over the preceding stems of the construction.

The remainder of this chapter is structured as follows: in section 6.1, I briefly investigate the differences in use between the terms 'applicative' vs. 'transitive' suffix and discuss the relation between the Saliba suffix and the forms that have been called 'transitive suffixes' in the Oceanic literature. I also introduce the allomorphs of the Saliba suffix. Section 6.2 discusses the different types of objects which can be added by the applicative. 6.3 is concerned with cases of obligatory applicatives and, finally, section 6.4 provides a summary of the chapter.

6.1 'APPLICATIVE' VS. 'TRANSITIVE' SUFFIX

The term 'applicative' has been used most prominently in the description of Bantu languages (Trithart 1983, Abdulaziz and Samuelsdorff 1983, Marantz 1984, Baker 1988, Bresnan and Moshi 1990, Samuelsdorff 1991, Van Valin 1993, Roberts 1995, among others). It has generally been used to label markers which add a certain type of object argument to a verb. Pederson (1991: 285) more precisely describes applicatives as markers which "sanction the addition of further arguments which are not semantically associated with direct objects". Similarly, Payne (1997: 191) describes applicativization as an "operation by which a participant which has a semantic role normally expressed in an 'oblique' phrase can 'advance' to direct object status". Van Valin and LaPolla (1997: 338) describe applicative constructions along similar lines as forms where "a non-argument of the verb appears as undergoer". It becomes clear that, very roughly speaking, applicatives typically add object arguments with roles like instrument, location, beneficiary, cause, etc.. In contrast, markers which add object arguments of the type that ARE 'semantically associated with direct objects' (cf. Pederson's 1991 definition above), that is arguments with roles such as patients or stimuli, are cross-linguistically more often simply described as 'transitivizing' or 'transitive' morphemes.

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[1]   *But see footnote 3 on* gudu *'closed' in chap. 4.*

Verbal suffixes (or clitics) which add an object argument to a verb are a characteristic feature of many Oceanic languages. In the literature, these suffixes have traditionally been called 'transitive suffixes' and only more recently has the term 'applicative' also come into use. Unlike Saliba, which has only one such transitivizing suffix, many Oceanic languages have two suffixes historically derived from the reconstructed Proto Oceanic (POC) forms *-i and *-aki(ni) (see e.g. Pawley 1973, Pawley and Reid 1980, Lynch et al. to appear).[2] The two POC suffixes add different types of objects to a verb and the distinction between these two types resembles the distinction, outlined above, between the objects typically added by 'applicatives' vs. those added by 'transitive' morphemes. Pawley and Reid (1980: 105/6) state about POC:

> Direct objects divide into two types according to the transitive suffix which they select. The suffix *-i marks a cluster of roles of the sort typically associated with direct objects – patients and products of agentive verbs, stimuli/targets of psychological verbs – and it also marks location/goal of verbs of motion and posture. The suffix *-aki(ni), on the other hand, marks a cluster of roles which are of the "accessory" or "indirect" sort: instruments (with agentive verbs), concomitant (with posture and motion verbs), cause or concomitant (e.g., with psychological verbs), etc. The opposition might be labeled 'close' vs. 'remote' ...

Thus, *-i resembles more what was described as a 'transitive' suffix, but *-aki(ni) rather resembles an 'applicative' morpheme as described above. Indeed, this terminological distinction between the two POC suffixes is introduced in Lynch et al. (to appear, chapter 3) who describe the suffix *-i which adds close objects as a transitivizing morpheme but the suffix *-aki(ni), which adds "a location, a goal, an instrument or a cause, i.e. an argument which would otherwise be an oblique noun phrase" as an applicative.

As mentioned, Saliba has only one such suffix. I am using the label 'applicative' but the term 'transitive suffix' would in fact be equally suitable since it introduces objects with either type of role, close and remote.[3] Roughly speaking, there seem to be two alternative explanations how the current Saliba system derived from POC. First, it is possible that the language lost one of the two POC suffixes and the remaining suffix took over the assignment of some object roles which were

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[2] *Harrison (1982) reconstructs* *aki(ni) *as an independent verb for POC.*

[3] *At times I also refer to the applicative marker in a descriptive way as 'the transitivizing suffix' (since there is only one such suffix in Saliba).*

originally covered by the lost form. A second and perhaps more likely hypothesis is that in Saliba, reflexes of *-i and *-aki(ni) have merged into a single morpheme and are no longer phonologically distinct.[4] It is beyond the scope of this study to lay open the historical development that led to the single suffix in Saliba and it remains an open question for future research which of these two hypotheses (if either) is correct.

Like in POC, as pointed out in the quote by Pawley and Reid above, in Saliba the choice of semantic role that an applied object may have depends on the semantics of the verb. Agentive verbs take patients as their applied object, verbs denoting 'transfer' take themes or recipients. Psychological verbs and verbs of perception take stimuli, and verbs of verbal communication take addressees or recipients as their objects when they are applicativized. These roles are associated with the POC morpheme *-i. Besides these, at least two further roles are attested: locations occur as the applied objects of verbs expressing bodily functions and concomitants figure as the applied objects of manner of motion verbs. These roles are associated with the POC morpheme *-aki(ni).[5] The types of object which are added by the Saliba applicative suffix are discussed in more detail in 6.2 below (the role terms are defined in chap. 4).

Apart from the roles of concomitant and location, the other roles which are associated with POC *-aki(ni) are not attested as applied objects in Saliba. For example, nouns denoting the instrument, purpose, or cause of an action are

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[4]   *There is one pair of examples which possibly reflect the two distinct POC suffixes. The verb stem* yoga *'call' can build two different applicative stems, one with the suffix* -nei *and one with the suffix* -i. *The derived stems have different meanings which can be attributed to the choice of suffix (unless one assumes two homophonous verb stems with the meanings 'call' and 'invite'):*

(i)   a.   *Ya-yoga-nei-ø.*   b.   *Ya-yoga-i-ø.*
           1SG-call-APP-3SG.O   1SG-call-APP-3SG.O
           'I called him.'   'I invited him.'

The derived complex verb with the stem uyo *'back/again' is ambiguous since the applicative can only appear on the last stem of the complex verb (and the stem* uyo, *as basically all stems in Saliba, does only allow one applicative form).*

(i)   *Ya-yoga-uyo-i-ø.*
      1SG-call-back/again-APP-3SG.O
      'I called him again.' OR 'I invited him again.'

[5]   *Note that Pawley and Reid (1980) actually list location among the roles added by* *-i, while Lynch et al. list it as a role that is associated with* *-aki(ni).

generally expressed by adjuncts and marked by postpositions. Consider examples (8) and (9) where a postpositionally marked adjunct follows the verb:

(8) *Boxi-wa   ya-soke-ø   weku   unai.*
     box-PM   1SG-open-3SG.O stone PP.SG
     'I opened the box with a stone.'

(9) *Yo-gu   hinaya   ya-nonoha-i-ø   kokolaka   hesaba-di.*
     CL1-1SG.P trap   1SG-prepare-APP-3SG.O rat   towards-3PL.O/P
     'I set a trap for the rats.'

Beneficiaries do not occur as applied objects either. They are expressed by means of possessive classifiers as in (10) (see chap. 14).

(10) *Ka-di   ya-lao-liga.*
      CL1-3PL.P 1SG-go-cook
      'I cook for them.' (lit. 'Theirs I cook.')

The Saliba applicative suffix has several allomorphs. The fact that the different shapes of the suffix are (at least synchronically) not associated with distinct functions can be demonstrated with the allomorphs *-i* and *-ei* which are attested with both types of object roles (i.e. with close roles associated with *-i* and remote roles associated with *-aki(ni)*). The examples in (11) to (14) each show different verbs in (a) vs. (b) but the applied objects in each example have the same semantic role. The verbs in (a) take the allomorph *-i* of the applicative suffix, the verbs in (b) take the allomorph *-ei*. The applied objects in (11) are addressees, those in (12) are stimuli. The verbs in (13) take a location as their applied object, and the verbs in (14) take a concomitant (for discussion of the roles see 6.2 below).

(11) a. *Ye-dila-**i**-di.*   b. *Ye-henamai-**ei**-di.*
ADDRESSEE 3SG-scold-APP-3PL.O/P   3SG-ask-APP-3PL.O/P
         'She scolded them.'   'She asked them.'

(12) a. *Se-mwadine-**i**-ø.*   b. *Se-matausi-**ei**-ø.*
STIMULUS 3PL-shy-APP-3SG.O   3PL-scared-APP-3SG.O
         'They are shy of her.'   'They are scared of her.'

(13) a. *Weku   ye-kaiso-**i**-ø.*   b. *Weku   ye-maliwai-**ei**-ø.*
LOCATION stone   3SG-spit-APP-3SG.O   stone   3SG-vomit-APP-3SG.O
         'He spat onto the stone.'   'He vomited onto the stone.'

(14) a. *Moni   ye-tuba-**i**-ø.*   b. *Moni   ye-heloi-**ei**-ø.*
CONCOMIT. money   3SG-swim-APP-3SG.O   money   3SG-run-APP-3SG.O
         'He swam with the money.'   'He ran with the money.'

The examples show that there is no straightforward correlation between the shape

of the applicative suffix and the type of object that is added.[6] The semantic role of the object is not predictable from the allomorph (but from the semantics of the verb).

The Saliba applicative has several allomorphs besides the forms *-i* and *-ei*. The further attested variants are *-li, -ni, -nei,* and *-yei.* For simplicity, I generally refer to the suffix by the most common allomorph *-i.* The initial consonants in some allomorphs of Oceanic applicative (or transitive) suffixes are commonly called "thematic consonants" in the literature. Historically, these consonants are generally analyzed as stem-final elements of the verb which became reanalyzed as part of the suffix (cf. Arms 1973, Clark 1973: 564, Pawley 1973: 114).[7] This reanalysis resulted in a number of consonant-initial allomorphs. Synchronically, the consonants clearly have to be analyzed as part of the suffix since in Saliba they only occur with the applicative and do not surface on the verb stem in any other non-final environments, such as in complex verbs, with directional suffixes, or with the perfect marker *-ko.*

In some contexts, the choice of allomorph is phonologically predictable. If a stem already ends in *-i*, it will typically take the suffix *-ei*, as in *heloi-ei* 'run with' (from *heloi* 'run') or *matausi-ei* 'scared of' (from *matausi* 'scared'). But in most instances, the stem-final phoneme does not allow one predict the form of the applicative suffix. For instance, some *-a*, and *-u* final stems take the suffix *-i* as in (15a), but others take the allomorphs *-ni* or *-nei* as in (15b). As a consequence, in many cases the allomorph of the applicative suffix simply has to be learned.

(15) a.   *tupa-i*   'bump'   b.   *yoga-nei* 'call'
              nonoha-i 'prepare'   *dikwa-nei* 'cross'
              nuwatu-i 'think'   *dudu-ni* 'push'
              sagu-i   'help'   *katu-ni* 'catch(fish)'

For some verb roots, there is speaker variation in the choice of allomorph. For example, from the root *nogowai* 'slow' some speakers derive the transitive stem *nogowai-e* while others prefer *nogowai-ei*. With a few stems, some speakers drop the stem-final vowel before adding the applicative suffix while other speakers keep the vowel. Compare (16a) vs. (b):

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[6]   *Nevertheless, it is quite striking that in Saliba many (manner of) motion and psychological verbs roots take the allomorph -ei. Harrison (1982) argues that particularly these types of root occurred with the POC form *aki(ni).*

[7]   *For an alternative view see Harrison (1982).*

(16) a.   *Se-matausi-ei-ø.*   b.   *Se-mataus-ei-ø.*
      3PL-scared-APP-3SG.O   3PL-scared-APP-3SG.O
      'They are scared of it.'   'They are scared of it.'

6.2 TYPES OF APPLIED OBJECTS

As discussed in 6.1, the literature on Oceanic languages distinguishes two types of applied objects in POC labeled close vs. remote and associated with *-i* and *-aki(ni)* respectively (see Pawley and Reid 1980 quoted above). Even though Saliba has only a single transitivizing suffix, a distinction between close and remote objects is possible. This distinction follows similar lines as in POC although it does not necessarily align exactly with the POC assignment of semantic roles to the two categories. There are a number of morpho-syntactic criteria (discussed shortly) distinguishing close vs. remote objects in Saliba. They show that only objects with certain semantic roles occur in particular constructions. On the basis of this, patients can be assigned to the category of close objects but locations and concomitant NPs to remote objects. Stimuli, addressees, and recipients are a somewhat transitional category but overall they pattern more like close objects in Saliba.[8]

There are three morpho-syntactic criteria which pick out patients as close objects. First, in certain cases, the patients which occur as applied objects of a transitive verb may occur as outer-core objects (i.e. not cross-referenced) with the corresponding intransitive verb. I have described such constructions as clauses with discord in transitivity status (chap. 3). Second, with some verb roots, the patients which occur as applied objects of the transitive verb can be incorporated into the intransitive base verb (without the applicative) (chap. 10). Third, patients cannot be expressed as adjuncts of the clause with the corresponding intransitive verb because there is no postposition in Saliba that could mark a role like patient as an adjunct. In essence, close objects constitute a subtype of what I have discussed as semantic objects in chapter 3. In contrast, applied objects of the remote type are not attested as outer-core arguments with intransitive verbs (i.e. in clauses with discord) and they cannot be incorporated. But, as opposed to patients,

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[8]   *Note that in POC, stimuli, i.e. the applied objects of psychological verbs, are associated with both *-i and *-aki(ni) and so their intermediate status in Saliba is not at all surprising. See the quote by Pawley and Reid (1980) above and also Harrison's (1982:189/90) discussion of the so called 'refective' function of *-aki(ni).*

remote objects can typically be expressed as adjuncts of the clause with the corresponding intransitive verb. I illustrate these criteria with examples for each of the object roles in the following sections.

Besides the three morpho-syntactic criteria, there is further evidence that close objects have a closer bond to the verb than remote objects. Verb roots whose applied objects are of the close type seem to occur more frequently in derived transitive stems with the applicative suffix and less often as underived intransitive stems (see discussion of *bahe* 'carry' and *usa* 'insert' in chapter 12). In contrast, roots whose applied objects are of the remote type seem to occur more frequently as underived intransitive stems.

In the following, I discuss applied objects in terms of their semantic roles (as defined in chap. 4). Most transitive applicative stems have underived intransitive counterparts which are presented for comparison with each example (but see 6.3 on obligatory applicatives).[9] Throughout the discussion of applied objects, it should be kept in mind that it is the semantics of the verb root which determines the semantic role of the object. So any classification of semantic roles into close and remote objects is a classification of verb roots which take these roles as their applied objects.

6.2.1 PATIENTS

Agentive verbs and verbs denoting 'transfer' of some kind take a patient as their applied object (see also 6.2.4). Consider examples (17) to (20).

(17) a. *Ta-sikwa-sikwa.*
1INC-RED-poke
'We were poking.'

    b. *Ta-sikwa-i-ø.*
1INC-poke-APP-3SG.O
'We poked it.'

(18) a. *Se-lulu.*
3PL-fight
'They fought.'

    b. *Se-lulu-i-gau.*
3PL-fight-APP-1SG.O
'They attacked me.'

(19) a. *Ya-naba-naba.*
1SG-RED-carry.on.head
'I'm carrying on my head.'

    b. *Bosa ya-naba-i-ø.*
basket 1SG-carry.on.head-APP-3SG.O
'I carry the basket on my head.'

(20) a. *Ku-tabe!*
2SG-pull
'Pull!'

    b. *Ku-tabe-i-ø!*
2SG-pull-APP-3SG.O
'Pull it!'

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[9] *In some cases, the intransitive stems are not attested as simplex stems but only as a reduplicated form in the progressive aspect or as the initial stem of a complex verb.*

As stated above, patients are classified as close objects. They cannot be marked by postpositions and, with a number of verbs, they can occur as outer-core objects in the clause with the morphologically intransitive verb. The clauses in (21a) and (22a) show such cases where the object noun is not cross-referenced on the verb. The examples in (b) show regular transitive clauses with the applicativized transitive verbs, where the object is cross-referenced.

(21) a. *Koya se-deula.*
garden 3PL-terrace
'They terraced the garden.'

b. *Koya se-deula-i-ɸ.*
garden 3PL-terrace-APP-3SG.O
'They terraced the garden.'

(22) a. *Apolo ye-usa.*
apple 3SG-put.in
'He put apples in.'

b. *Apolo-wa ye-usa-i-di.*
apple-PM 3SG-put.in-APP-3PL.O/P
'He put the apples in.'

In some cases, even though the simplex verb stems are intransitive, applied patient objects can be incorporated when the verb is not derived by the applicative. Consider (23) and (24) below:

(23) a. *Ye-kuma.*
3SG-plant
'He planted.'

b. *Ye-kwatea-kuma.*
3SG-yam-plant
'He yam-planted.'

(24) a. *Se-deula.*
3PL-terrace
'They terraced.'

b. *Se-koya-deula.*
3PL-garden-terrace
'They garden-terraced.'

6.2.2 STIMULI

Psychological verbs and verbs of perception, take a stimulus as their applied object. Some examples are given in (25) to (28).

(25) a. *Ye-mwadine.*
3SG-shy
'She's shy.'

b. *Ye-mwadine-i-go.*
3SG-shy-APP-2SG.O
'She's shy of you.'

(26) a. *Ye-koipili.*
3SG-angry
'She's angry.'

b. *Ye-koipili-ei-gau.*
3SG-angry-APP-1SG.O
'She's angry with me.'

(27) a. *Pasa ye-pane.*
flower 3SG-smell
'The flower smells.'

b. *Pasa ye-pane-i-o.*
flower 3SG-smell-APP-3SG.O
'He smelled the flower.'

(28) a. *Ye-kaikewa.*
3SG-stare/look
'She stared.'

b. *Ye-kaikewa-i-go.*
3SG-stare/look-APP-2SG.O
'She stared at you.'

Objects with the semantic role of stimulus pattern more like remote objects than close ones according to the morpho-syntactic criteria outlined above. They do not occur as outer-core arguments in discord constructions and cannot be incorporated into the verb. Besides this, at least for a few verbs, the stimulus can be expressed

as an adjunct with the corresponding intransitive version of the verb. For example, the root *kaikewa* 'look/stare' in (28) can build a complex verb stem with *lao* 'go/travel' as in (29a). The participant which is encoded as the applied object in (28b) can then be encoded as an adjunct. In (29a) it is marked by the general postposition *unai*.

(29) a. *Ye-kaikewa-lao unai.*   b. * *Ye-kaikewa unai.*
     3SG-stare/look-go   PP.SG   3SG-stare/look PP.SG
     'She looked over to him.'   'She looked over to him.'

However, only the derived complex verb but not the underived intransitive stem *kaikewa* 'look/stare' can take an adjunct marked by *unai* as shown in (29b).[10]

6.2.3 ADDRESSEES

Verbs of communication take an addressee as their applied object. Some examples are presented in (30) to (32).

(30) a. *Ye-yoga.*   b. *Ye-yoga-nei-gau.*
     3SG-call   3SG-call-APP-1SG.O
     'He called.'   'He called me.'

(31) a. *Ya-henamai.*   b. *Ya-henamai-ei-go.*
     1SG-ask   1SG-ask -APP-2SG.O
     'I asked.'   'I asked you (a question).'

(32) a. *Ye-dila-dila-gaibu.* b. *Ye-dila-i-gau.*
     3SG-RED-scold-no.reason   3SG-scold-APP-1SG.O
     'She's scolding for no reason.'   'She scolded me.'

Like stimuli, objects with the semantic role of addressee pattern more like remote than like close objects. They do not occur as outer-core arguments in discord constructions and they cannot be incorporated into the verb.[11]

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[10] *For the other verbs in (25) to (28) I have no information on whether the stimulus can alternatively be expressed as an adjunct when the verb is intransitive. Further tests are required.*

[11] *Again, there is no information available on whether intransitive verbs of communication can take an addressee as an adjunct. I suspect that this is not the case but further tests are required.*

6.2.4 CHOICE BETWEEN PATIENT AND ADDRESSEE/RECIPIENT

There are three attested applicative stems which can take different participants as their applied object. In all three cases, the choice is between a patient on the one hand and a recipient or addressee on the other. The attested stems are *kaibwada* 'ask for', *kainauya* '(give as) gift', and *mose* 'give'. The example in (33a) shows the underived intransitive verb stem *kaibwada* 'ask for'. The transitivized stem with the applicative suffix can take the addressee of the request as its applied object, as in (33b), or the requested entity, as in (33c).

(33) a.   *Ku-lao ku-kaibwada!*   b.   *Ya-kaibwada-i-go.*
      2SG-go   2SG-ask.for   1SG-ask.for-APP-2SG.O
      'Go and ask!'   'I asked you (for s.th.).'

    c.   *Laisi pasolo labiu   se-kaibwada-i-di.*
      rice   parcel   two   3PL-ask.for-APP-3PL.O/P
      'They asked for two packs of rice.'

With *kaibwada* 'ask for' only one of the two participants, the patient or the addressee, can figure as an argument at a time. This means that the transitivized stem *kaibwada-i* cannot be the head of a ditransitive clause where both participants, patient and addressee, are expressed as arguments. Example (34), where the addressee is cross-referenced by the object suffix and where the patient occurs as a outer-core object preceding the verb, is ungrammatical.

(34)   * *Laisi   se-kaibwada-i-gau.*
      rice   3PL-ask.for-APP-1SG.O
      'They asked me for rice.'

Similar to *kaibwada-i* 'ask for', the applicative stems *kainauya-i* 'give as gift', and *mose-i* 'give' can take either the recipient or the patient of the transfer event as their applied object. When they take the patient as the object, the recipient can be expressed as an adjunct and be marked by a postposition, as in (35) and (36).

(35)   *Ya-kainauya-i-di ka-gu   kaha-wa   unai.*
      1SG-gift-APP-3PL.O/P   CL2-1SG.P   sibling-PM   PP.SG
      'I gave them (as a gift) to my sister.'

(36)   *Ya-mose-i-di   ka-gu   kaha-wa   unai.*
      1SG-give-APP-3PL.O/P   CL2-1SG.P   sibling-PM   PP.SG
      'I gave them to my sister.'

When the verbs based on *kainauya* '(give as) gift' and *mose* 'give' encode the recipient as their applied object, the patient may occur as an outer-core argument. This means that, in contrast to *kaibwada-i* 'ask for', the transitivized stems *kainauya-i* and *mose-i* can occur as heads of ditransitive clauses. Consider examples (37) and (38) where the recipients are cross-referenced on the verb and the patients figure as preceding outer-core arguments.

(37)   *Teina lulu ka-gu   kaha   ye-kainauya-i-gau.*
                  PROX.DEM shirt   CL2-1SG.P sibling   3SG-gift-APP-1SG.O
                  'My sister gave me this shirt as a gift.' (nb7:64)

(38)   *Bosa kesega ye-mose-i-di.*
                  basket one   3SG-give-APP-3PL.O/P
                  'He gave them one basket.'

As a rule, the input to suffixation of the applicative are intransitive stems (based on monovalent roots) and the suffix derives transitive verbs which can be the heads of transitive but not of ditransitive clauses. The roots *kainauya* '(give as) gift' and *mose* 'give' in (37) and (38) are the only exceptions. Apart from these two, the heads of ditransitive clauses are derived by the causative prefix (chap. 7).

6.2.5 LOCATIONS

Roots expressing bodily functions, as well as a few other roots, take a location as their applied object. The examples in (39) shows the stem *bawa* 'stay/be located'. There is a semantic contrast between (a) where the verb is intransitive and the location is marked by a postposition, and the clause in (b) where the verb is marked by the applicative and the location is encoded as the object of the event.

(39) a.   *Teina   numa unai ya-bawa.*
               PROX.DEM house PP.SG 1SG-stay
               'I stay at this house.' (e.g. as a guest)

     b.   *Teina   numa ya-bawa-i-ø.*
               PROX.DEM house 1SG-stay-APP-3SG.O
               'I live in/occupy this house.' (e.g. it's my home)

Two further examples of locations as applied objects with the roots *sina* 'shine' and *talu* 'fall/land' are given in (40) and (41).

(40)   *Mahana-ne   ye-sina-i-ø.*
                  sun-DET   3SG-shine-APP-3SG.O
                  'The sun shone on it.' (Edial188)

(41)   *Nabu ye-talu-i-ø.*
                  rain   3SG-fall-APP-3SG.O
                  'Rain fell on it.'

Roots expressing bodily functions like 'piss', 'shit', 'vomit', 'spit', etc., take the location or thing which is soiled by being pissed, shat, vomited, or spat on as the applied object. In this way, the locations in (42b) to (47b) are described as being affected by the event.[12]

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[12]   *In the examples with applied locative objects, the function of the applicative closely resembles that of the verbal prefix* be- *in German (cf. Wunderlich 1987, Stiebels 1991).*

(42) a.   *Kamkam-wa ye-bwasulu.*
            chicken-PM   3SG-piss
            'The chicken pissed.'

      b.   *Madai   tebolo ye-bwasu-bwasulu-i-ɸ.*
            lest   table   3SG-RED-piss-APP-3SG.O
            'It might piss on the table!'

(43) a.   *Ye-lao ye-buse.*   b.   *Weku ye-buse-i-ɸ.*
            3SG-go   3SG-shit   stone   3SG-shit-APP-3SG.O
            'He went to shit.'   'He shat on/soiled the stone.'

(44) a.   *Ye-maliwai.*   b.   *Tebolo ye-maliwai-ei-ɸ.*
            3SG-vomit   table   3SG-vomit-APP-3SG.O
            'She vomited.'   'She vomited on the table.'

(45) a.   *Ye-kaiso.*   b.   *Tebolo ye-kai-kaiso-i.*
            3SG-spit   table   3SG-RED-spit-APP-3SG.O
            'He spat.'   'He spat on the table.'

It was not possible to construct examples where these verbs take a theme (in the sense of a moved, transferred patient entity) as their object. The theme entity involved in these processes (urine, vomit, etc.) is generally not of much concern to the described event and so it is less likely to be encoded as the applied object of the verb. In order to express the entity which is vomited or spat out etc. a multi-clause construction can be used. Consider the text example in (46):

(46)   *Ye-maliwai   ede kwatea se-tau-masahala.*
            3SG-vomit   PRSUP yam   3SG-go-clear
            'As she vomited yams appeared.' (yam45)

Another possibility of expressing the theme participant is by means of complex verbs. In an elicitation a speaker rejected the example in (47a) below where the theme (*kwasina* 'blood') of the spitting is encoded as the applied object. The speaker suggested instead the complex verb in (b) where *kaiso* 'spit' is followed by the stem *gabae* 'away/off'. In this construction the theme must be expressed as the object of the complex verb because the final stem *gabae* 'away/off' does not allow a location as its objects (see chap. 5).

(47) a.   *   *Kwasina ye-kai-kaiso-i-ɸ.*
            blood   3SG-RED-spit-APP-3SG.O
            'He spat blood.'

      b.   *Kwasina ye-kaiso-gabae-ɸ.*
            blood   3SG-spit-away-3SG.O
            'He spat out blood.'

Locations classify as remote objects in that they can typically be expressed as adjuncts with the corresponding intransitive verb and they cannot be incorporated or occur as outer-core arguments.

6.2.6 CONCOMITANT OBJECTS

Verb roots expressing motion (especially manner of motion but also to some extent path) take a concomitant NP as their applied object. As defined in chapter 4, the term concomitant refers to entities that move in the same fashion as and because of the subject.[13] The verbs in examples (48a) and (49a) are underived intransitives, those in (b) show the transitivized applicative stems which take a concomitant object.

(48) a. *Ye-loi.*
      3SG-fly
      'It flew.'

      b. *Ye-loi-ei-ø.*
            3SG-fly-APP-3SG.O
            'It flew with it.'
            (e.g. something tied to its foot)

(49) a. *Ye-heloi.*
      3SG-run
      'He ran.'

      b. *Ye-heloi-ei-ø.*
            3SG-run-APP-3SG.O
            'He ran with it.'
            (e.g. something tied to his foot)

In contrast to verbs which are transitivized by the causative prefix (chap. 7), in (48) and (49) the activity expressed by the verb cannot involve the concomitant object alone without including the subject too. The example in (50) cannot refer to a situation where the subject makes the radio disappear but does not go away himself.

(50)   *Ledio   ye-yabubu-yei-ø.*
        radio   3SG-go.away-APP-3SG.O
        'He took off with the radio.' (i.e. he stole it)

Similarly, in (51b) with the stem *takikili* 'circle', the box goes in circles because the subject carries it and walks in circles himself.

(51) a. *Ya-takikili.*
      1SG-circle
      'I turned around.'

      b. *Boxi   ya-takikili-ei-ø.*
         box   1SG-circle-APP-3SG.O
         'I turn in circles with the box.'
         (e.g. while carrying it)

The same holds for the complex verb in (52). By paddling in circles the subject causes the log to go in circles too. Neither example can mean that the subject itself stands still and causes only the object to turn. Both subject and object have to be involved in the same motion event.

(52)   *Logi   ya-niuli-ø   ya-wose-takikili-ei-ø.*
        log   1SG-pull-3SG   1SG-paddle-circle-APP-3SG.O
        'Dragging the log I paddle in circles with it.'

Two more examples of concomitant objects are given in (53) and (54) with the

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[13]   *Pawley (1986: 90) calls this role 'transportative' ("something carried in hand or lead").*

stems *wose* 'paddle' and *tuba* 'swim'.

(53)   *Tubu-gu*   *ya-wose-i-ø*   *ka-lao*   *Saliba.*
        ancestor-1SG.P 1SG-paddle-APP-3SG.O 1EX-go   Place.Name
        'I paddled my grandmother to Saliba.'

(54)   *Leta*   *ya-tuba-i-ø*   *ede* *ye-ta-pulisi.*
        letter   1SG-swim-APP-3SG.O PRSUP 3SG-RESULT-tear
        'I swam with the letter (e.g. I forgot it in my pocket) and so it is torn.'

Concomitant NPs are classified as remote objects. They cannot occur as outer-core arguments in clauses with discord nor can they be incorporated into the verb. Besides this, clauses with concomitant objects can generally be paraphrased by locative constructions. Compare (54) above with the example in (55), where the verb occurs in its underived intransitive form and the concomitant object is described as being located with the speaker.

(55)   *Leta-wa* *yo-na*   *poketi* *unai* *ye-tuba.*
        letter-PM   CL1-3SG.P pocket   PP.SG   3SG-swim
        'He swam with the letter in his pocket.'

Concomitants with a human referent can alternatively be expressed by a comitative construction. Compare the conjoint subjects in (56) with the applicative construction in (53) above.

(56)   *Maiya-gu* *ka-wose.*
        with.3SG-1SG.P 1EX-paddle
        'I with her, we paddled.'

The constructions differ semantically in that (56) implies that both participants are active agents who paddle, while (53) implies that the subject paddles alone, the object participant being a passenger.

6.2.7 SUMMARY: APPLIED OBJECTS

To summarize, the objects of applicative verbs can be distinguished into close and remote objects. Patients classify as close, all other roles as remote. The semantic role of the applied object depends on the semantics of the verb. The classification into close and remote objects was based on three morpho-syntactic criteria. They refer to the alternative expressions which an applied object may have when the verb is intransitive (and does not carry the applicative suffix). Patients are attested as outer-core arguments in discord constructions and can be incorporated into the intransitive verb, but they cannot be encoded as adjuncts.[14] Conversely, the other roles may not figure as outer-core arguments and cannot be incorporated, they can,

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[14]   *Note that this does not mean that all patient objects of all applicative verbs fulfill these criteria. The point is that only objects with the role of patient ever do.*

however, typically be expressed as adjuncts. Table 1 summarizes the classification of applied objects.[15]

TYPE OF VERBS	OBJECT ROLE	OUTER-CORE ARGUMENT	INCORP.	ADJUNCT	CLOSE VS. REMOTE
agentive verbs and verbs of transfer	patient	yes	yes	no	close
psychological verbs and verbs of perception	stimulus	no	no	(yes)[16]	remote
verbs of communication	addressee	no	no	(no)[17]	remote
'stay', 'shine', 'fall', and bodily functions	location	no	no	yes	remote
motion verbs (path- or manner-encoding)	concomitant	no	no	yes	remote

Table 1   *Applied objects and their classification*

6.3 OBLIGATORY APPLICATIVES

A number of applicative stems do not have underived intransitive counterparts. These stems fall in two groups: those which can never surface as simplex stems, that is neither as a verb nor as a noun stem, and those which can figure as noun stems but not as simplex intransitive verb stems. The first type of stem is relatively rare. They are morphologically defective in that they can surface only in a derived form but never as an underived stem. An example is the root *mose* 'give' discussed in 6.2.4 (and in more detail in chapter 13). Further examples are the roots *lapu* 'hear/feel', *sapa* 'board', and *katu* 'catch (fish)' in (57) to (59). The applied object of the experiencer verb in (57) is a stimulus, the one in (58) is a patient and that in (59) is a location.[18]

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[15] *For comparison with applied object in Fijian, see Pawley (1986: 91) Table 1.*

[16] *At least one verb attested but possibly this is an exception, see 6.2.2.*

[17] *Further tests are required, see 6.2.3.*

[18] *Since the transitive stems do not have underived intransitive counterparts, these roots cannot be classified as A-type or O-type (following Dixon 1988, cf. chap 4). It is the correlation between the intransitive subject and either the transitive subject (A-type) or the transitive object (O-type) which determines this classification. The glosses 'hear/feel', 'catch', etc. are therefore nothing more than convenient working labels.*

(57) a. * *Ye-lapu.*
      3SG-hear/feel
      'He heard/felt.'

      b.   *Ye-lapu-i-ø.*
              3SG-hear/feel-APP-3SG.O
              'He heard/felt it.'

(58) a. * *Ye-katu.*
      3SG-catch
      'He caught (fish).'

      b.   *Ye-katu-ni-di.*
              3SG-catch-APP-3PL.O/P
              'He caught them.'

(59) a. * *Se-sapa.*
      3PL-board
      'They boarded.'

      b.   *Waga se-sapa-i-ø.*
              boat   3PL-board-APP-3SG.O
              'They boarded the boat.'

Although they cannot occur as simplex intransitive stems, the verb roots *lapu* 'hear/feel', *katu* 'catch (fish)', and *sapa* 'board' can be classified as monovalent on the basis of their morphological behavior (i.e. by the very fact that they allow the applicative suffix) and their syntactic distribution: the transitive stems with the applicative can occur as heads of transitive but not of ditransitive clauses.[19]

The second group of stems which can take the applicative but which cannot figure as underived intransitive verbs are attested as simplex noun stems. The intransitive verb in (60a) with the stem *hekasisi* 'respect' is ungrammatical while the derived transitive stem with the applicative in (60b) is well formed. The clause in (c) shows *hekasisi* 'respect' as a noun stem.

(60) a. * *Ya-hekasisi.*
      1SG-respect
      'I respect.'

      b.   *Ya-hekasisi-ei-go.*
              1SG-respect-APP-2SG.O
              'I respect you.'

      c.   *Hekasisi nige kabi-na se-kata.*[20]
              respect   NEG   nature/way-3SG.P 3PL-know
              'They don't know any respect.'

The same pattern is found with the stems *gadosisi* 'love' in (61) and *nigwa* 'knife' in (62) among others. The underived intransitive verb forms in (61a) and (62a) are ungrammatical while the applicative stems in (b) are correct. In the examples in (c), the underived stems figure as nouns.

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[19]   *The fact that the final i-vowel is the applicative suffix rather than part of the root can be observed in complex verbs as in (i) where the stem* lapu *'hear' occurs as the initial stem of the construction without the final* -i.

(i)   *Ye-lapu-lobai-ø.*
          3SG-hear/feel-find-3SG.O
          'He understood it.'

[20]   *For discussion of the construction with* kabi *'nature/way' and* kata *'know' see chap. 12.*

(61) a. * *Ya-gadosisi.*
1SG-love
'I love.'

    b. *Ya-gadosisi-ei-go.*
1SG-love-APP-2SG.O
'I love you.'

    c. *Yo-gu   gadosisi ya-hetamali-ya-wa.*
CLI-1SG.P love   1SG-send-3SG.O-thither
'I send my love to you.'

(62) a. * *Ya-nigwa.*
1SG-knife/cut
'I cut.'

    b. *Ya-nigwa-i-ø.*
1SG-knife/cut-APP-3SG.O
'I cut it.'

    c. *Nigwa-wa ku-hai-ya-ma.*
knife-PM   2SG-take/get-3SG.O-hither
'Give me the knife.'

The same pattern is attested for the loan word *bata* 'butter' in (63), which may figure as a noun but not as a verb stem without the applicative suffix.

(63) a. *Bata ku-hai-ø!*
butter 2SG-put-3SG.O
'Get the butter!'

    b. *Pwalawa ya-bata-i-ya-ko.*
bread   1SG-butter-APP-3SG.O-PERF
'I buttered the bread already.'

On the basis of examples like (60) to (63), Mosel (1994) describes the Saliba applicative suffix not only as transitivizing but as a verbalizing morpheme which derives verbs from nouns. It seems safe to say, however, that the transitivizing function of the suffix is the basic one since all applicative verbs are transitive and there is no example of an intransitive verb stem derived by the applicative suffix. It has to be noted that Saliba has quite a number of lexemes which can freely occur as either verbal or nominal stems without any derivational morphology. The text examples in (64) and (65) demonstrate this point. The root *iyala* 'fight' functions as an intransitive verb stem in (64a), a transitive stem is derived by the applicative suffix in (64b), and in (64c) the lexeme occurs as a noun stem.

(64) a. *ta-iyala*
1INC-fight
'we fought' (oldtime3:68)

    b. *Milne Bay   se-iyala-i-di*
Place.Name   3PL-fight-APP-3PL.O/P
'they fought the Milne Bay people'(tbb99)

    c. *iyala   ye-hetubu*
fight   3SG-start
'the war started' (oba1:98)

The same pattern is found with *buse* 'shit' in (65).

(65) a. *Ya-lao   ya-buse.*
1SG-go   1SG-shit
'I go and shit.'

    b. *Tebolo ye-buse-i-ø.*
table   3SG-shit-APP-3SG.O
'It shat on/soiled the table.'

c. *ye-lao*   *buse*   *ye-bahe-i-ya-ma*   *ede*   *ya-liga-ø*
    3SG-go   shit   3SG-carry-APP-3SG.O-hither   PRSUP   1SG-cook-3SG.O
    'he went and brought the shit and I cooked it'[21] (tautela38)

This holds not only for the roots of class 2 (which can take the applicative), but also for roots that have been assigned to the other verb classes. For example, for verbal roots such as *bayao* 'strong' or *namwa* 'good' (class 1) no morphological derivation is required in order to use the roots as verb or as noun stems as shown in (66) and (67).

(66) a. *Ye-bayao.*   b. *yo-gu*   *bayao*
         3SG-strong   CL1-1SG.P strong
         'She is strong.'   'my strength'

(67) a. *Ye-namwa.*   b. *kabo*   *namwa* *ta-lobai-ø*
         3SG-good   TAM   good   1INC-find-3SG.O
         'It's good.'   'we'll find goodness' (church2:2)

Some roots which have been classified as bivalent (class 3) also freely allow this shift. The examples in (68) show the complex stem *kita-hetete* 'look after' as a transitive verb stem and as a noun stem.

(68) a. *Ya-kita-hetete-ø.*   b. *Yaubada* *yo-na*   *kita-hetete*
         1SG-see-look.after-3SG.O   god   CL1-3SG.P see-look.after
         'I looked after it.' (oba1:46)   'the Lord's guidance' (church1:28)

It is beyond the scope of this study to discuss in detail the noun-verb distinction (or a lack thereof) in Saliba. For further discussion of the topic in an Oceanic language see Broschart (1991, 1997) and Vonen (1993) and the references therein. See Sasse (1993) for further discussion on noun-verb distinction.

6.4 SUMMARY

Saliba has only a single transitivizing suffix, which I label applicative. This affix is one of the most productive derivational morphemes in Saliba. Monovalent roots can be distinguished into two classes according to whether or not they allow the applicative (class 1 vs. 2, chap. 4). Only intransitive verbs can figure as input to suffixation with the applicative and applicativized verbs can generally figure as heads of transitive but not of ditransitive clauses. In the vast majority of instances, the subject of the intransitive verb corresponds to the subject of the applicative verb. In only a few cases, the intransitive subject corresponds to the object of the

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[21] *This example stems form a traditional story, where a woman and her husband are upset about her brothers' laziness and punish them by serving them food with shit. See Mosel (1994) for a published version.*

transitive applicative verb. The suffix can add objects of both the close and the remote category. Patients were classified as close, all other roles as remote objects. The category of close objects was identified as a subtype of semantic argument as introduced in chapter 3. In summary, close objects of applicativized verbs are semantic arguments of the corresponding verb roots while remote objects do not qualify as semantic arguments of the roots.

THE CAUSATIVE PREFIX

Saliba has a causative prefix *he-*. It introduces a subject argument which plays the role of a causing agent or effector, i.e. an entity actively performing the event action which may or may not be intentional.[1] Both intransitive and transitive stems can take the causative prefix. With the exception of a few lexicalizations, the relation between the input stem and the derived causative stem is systematic and semantically transparent. With intransitive input, the subject of the input verb occurs as the object of the causativized verb. Examples (1) to (3) show the intransitive base verb in (a) and their derived causativized counterparts in (b). The subjects of the base verbs are encoded as the objects of the causativized verbs.

(1) a. *Ye-bida.*
3SG-dirty
'It is dirty.'

b. *Ya-he-bida-ø.*
1SG-CAUS-dirty-3SG.O
'I made it dirty.'

(2) a. *Se-matausi.*
3PL-scared
'They are scared.'

b. *Ya-he-matausi-di.*
1SG-CAUS-scared-3PL.O/P
'I scared them.'

(3) a. *Ye-kaba-kabasi.*[2]
3SG-RED-hang
'It is hanging.'

b. *Ya-he-kabasi-ø.*
1SG-CAUS-hang-3SG.O
'I hang it (somewhere).'

With transitive input, the subject of the base verb occurs as the primary object of the derived verb and the object of the input occurs as the secondary object of the causativized verb (as shown in (4) and (5) below). Secondary objects (cf. Dryer 1986) classify as outer-core arguments, they are not cross-referenced on the verb but can occur in the clause as bare NPs, while adjuncts are marked by a postposition (chap. 3). The secondary object is typically a patient (more precisely a theme, i.e. an entity located or transferred in the course of the event), as in (4), or a stimulus, as in (5) (for a definition of these roles see chap. 4).[3]

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[1]   For discussion of agent vs. effector see Van Valin and Wilkins (1996).

[2]   As an intransitive stem, kabasi 'hang' is only allowed in its reduplicated version. It belongs to the small class of positional verbs for which the reduplicated stem expresses a state but the simplex stem has an inchoative meaning (chap. 4).

[3]   The fact that transitive verb stems may also figure as input to causativization means that Saliba does not show the constraint described by Pagotto (1992) for

(4) a. *Lulu-wa ku-likwa-ø.*   b.   *Lulu-wa ye-he-likwa-go.*
       shirt-PM   2SG-wear-3SG.O   shirt-PM   3SG-CAUS-wear-2SG.O
       'You wore the shirt.'   'She made you wear the shirt.'

(5) a. *Tautau-ne ya-kita-ya-ko.*   b.   *Tautau-ne ye-he-kita-gau.*
       picture-DET   1SG-see-3SG.O-PERF   picture-DET   3SG-CAUS-see-1SG.O
       'I saw the picture already.'   'He showed me the picture.'

The causative prefix has scope to its right over the verb stem to which it attaches. In complex verb constructions it can modify either the entire complex stem or only part of a complex stem, depending on the position of the prefix (chap. 5). When the prefix attaches to the initial stem of a complex verb it has scope over the entire construction, as in (6) where it causativizes the complex stem *numa-tonogi* 'taste (drink-try)'.

(6)   *Gulai   ya-he-numa-tonogi-go.*
       soup   1SG-CAUS-drink-try-2SG.O
       'I made you try the soup.'

When the prefix attaches to a non-initial stem of a complex verb it modifies the stem(s) to its right but not the preceding verb stem(s) to its left. This is the case in the resultative constructions in (7) and (8).[4]

(7)   *Kaputi   ku-ini-he-mwayau-ø!*
       cup   2SG-pour-CAUS-full-3SG.O
       'Pour the cup full!'

(8)   *ye-sikwa-he-beku-dobi-ei-ø*
       3SG-poke-CAUS-fall-go.down-APP-3SG.O
       'he poked it down/he made it fall down by poking it' (absrel1a:23)

According to the morphology-based definition of word-level transitivity, both causatives of intransitives and causatives of transitives are morphologically transitive and there are no morphologically ditransitive verbs in Saliba. Causatives of intransitives and causatives of transitives do not differ in their morphological marking. They differ, however, in their distribution and typically also in the semantic roles of their (primary) object.

The causatives of intransitives in (1b) to (3b) differ from the causatives of transitives in (5b) and (4b) in that the latter can occur in ditransitive clauses while (1b) to (3b) cannot. For consistency in the definitions, as well as in order to be true to the morphological structure of the language, I distinguish the two types of verbs

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Micronesian and Polynesian languages, which ruled out causativization of transitive verbs. Pagotto attributes this constraint to a 'principle of actor conservation'.

[4]   *For a distinction between semantic vs. morphological scope of the causative prefix in complex verbs see chap. 5.*

by exactly this criterion: there are morphologically transitive verbs which can only occur as the heads of transitive clauses (causatives of intransitives) and those which can occur as the heads of transitive or ditransitive clauses (causatives of transitives). The latter type corresponds to 'ditransitive verbs' in other language descriptions, where a definition of (word-level) transitivity is not exclusively based on the morphological marking of a verb but includes distributional criteria (e.g. occurrence with three NP's). It should be noted that the absence of ditransitive verbs in the present account is entirely due to the nature of the definition of word-level transitivity. It is not a claim about Saliba but merely a consequence of the definition of transitivity on separate structural levels (chap. 3).

Causatives of transitives may occur in ditransitive clauses but also in transitive ones. In the latter case, they occur with only one object argument, namely the one which is cross-referenced on the verb. Consider the clauses in (9) and (10):

(9)	*Ye-he-kita-gau.*	(10)	*Ya-he-kai-di.*
	3SG-CAUS-see-1SG.O		1SG-CAUS-eat-3PL.O
	'He showed me (s.th.).'		'I fed them.'

In some cases it may appear that a secondary object is strongly implied but omitted, as perhaps in (9) (lexical expression of arguments is not obligatory but governed by pragmatic factors, cf. discussion of argumenthood in chap. 3). But in other cases such as the clause in (10), there is no reason to assume that there is an omitted secondary object and that the clause is ditransitive. In any case, structurally the clauses in (9) and (10) do not differ. Chapter 13 presents a more detailed discussion of ditransitive clauses and their (morphologically) transitive heads.

In the remainder of this chapter, I discuss the semantics of the causative prefix and of the derived causativized stems in section 7.1. Following this, I consider the two types of causativized verbs: causatives of intransitives are discussed in 7.2, causatives of transitives in 7.3. Section 7.4 provides a comparison between the causative prefix and the applicative suffix. Section 7.5 describes the derivation of ordinal numbers by the prefix. A summary of the main points is presented in 7.6.

7.1 SEMANTICS OF THE CAUSATIVE PREFIX

The Saliba causative prefix expresses a specific kind of what has been described in the literature as direct causation.[5] The prefix implies a physically active role for the causer and it is generally not used to express social or psychological causation such as ordering or driving someone to do something (cf. Pederson 1991: 141). Prototyically (but not necessarily), the causer is animate and the causation is volitional. But the causer may also be inanimate and the causation non-volitional as in example (11) where the causer is a falling coconut (see also the discussion on the permissive reading below). In a number of cases, causatives of intransitives are preferred as V_2 stems in complex verb constructions (chap. 5) rather than as independent verb stems and some causative stems are sanctioned in complex verbs only. In these constructions, the initial stem specifies the involvement of the causer and expresses the type of activity which brings about the event encoded by the causativized stem. Consider the examples in (11) to (14):

(11)   *(niu) ... ye-dobi,   natu-na-wa   ye-koi-he-mwaloi-ø*
        coconut 3SG-go.down child-3SG.P-PM 3SG-hit-CAUS-dead-3SG.O
        '(the coconut) ... fell down and hit his child dead' (mahabu9)

(12)   *nige gonowa-na   ye-sikwa-he-beku-ø*
        NEG ability-3SG.P 3SG-poke/hit-CAUS-fall-3SG.O
        'he couldn't poke it to make it fall down' (absrel1a:28)

(13)   *Ye-kabi-he-keno-ø*
        3SG-touch-CAUS-lie/sleep-3SG.O
        'He threw him down' (absrel2b:17)

(14)   *Kaputi   ku-ini-he-mwayau-ø!*
        cup   2SG-pour-CAUS-full-3SG.O
        'Pour the cup full!'

While the causation is typically of a physical nature, it may also consist of a speech act as in (15) where the causing activity is talking.

(15)   *ye-hedede-he-masahala-ø   i-wane   "sina-gu   meta   mwata"*
        3SG-tell-CAUS-clear-3SG.O   3SG-say   mother-1SG.P PARTICLE snake
        'she revealed it, she said "my mother is a snake"' (bagi128)

The semantic constraint that the causer has to play a (physically) active role in the causation becomes overt in examples such as (16) which was considered only marginally acceptable. The only context in which (16) can possibly be used is one where the causer holds the paddle and leads the causee's hands in paddling.

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[5]   *Shibatani's 1976 term "manipulative causation" and Comrie's 1985 use of "immediate causation" are roughly equivalent.*

(16)   ?   *Natu-gu ya-he-wose-ø.*
          child-1SG.P 1SG-CAUS-paddle-3SG.O
          'I make my child paddle.'

This semantic restriction can be observed even more clearly with causativization of transitive stems. The clause in (17) with the stem *he-numa* 'CAUSE-drink' entails physical manipulation of the type that the causing agent holds a cup and puts it on the causee's lips. The clause cannot be interpreted as 'I have the child drink' or 'I tell/order the child to drink'.

(17)   *Natu-gu ti ya-he-numa-ø.*
          child-1SG.P   tea   1SG-CAUS-drink-3SG.O
          'I made my child drink tea.'

Similarly, the stem *he-likwa* 'CAUSE-wear' in (18), entails that the causer is actively involved in dressing the causee.

(18)   *Lulu-wa ye-hai-ø   ede   ye-he-likwa-ø.*
          shirt-PM   3SG-take/get-3SG.O   PRSUP 3SG-CAUS-wear-3SG.O
          'He got the shirt and made him wear it.' (absrel1c:25)

These semantic constraints restrict the derivation of novel heads of ditransitive clauses, since many transitive verb stems do not allow derivation with the causative prefix. For example, the clauses in (19) and (20) are at best marginally acceptable.

(19)   *?   *Leta ya-he-kuli-go.*
          letter 1SG-CAUS-write-2SG.O
          'I make you write a letter.' (by leading your hand)

(20)   *?   *Wawaya ye-he-pwaisa-ø.*
          child 3SG-CAUS-smoke-3SG.O
          'He made the child smoke.' (by holding the cigarette to its lips)

Example (19) can only be interpreted as meaning that the speaker leads the addressee's hands which holds the pen. Similarly, the clause in (20) was only considered acceptable if the agent holds the cigarette to the child's lips. Examples of this type are perceived as quite unnatural and speakers tend to reject them unless one provides a special context involving for example teaching or children's play.

The requirement that the causer has to play an active part in the causation applies most strictly to novel derivations. Among existing causative stems there are a few exceptions to this semantic constraint. For instance, a speaker suggested that the clause in (21) can describe a situation where the causer has no active part in the causation and it was considered acceptable even when the dog is sleeping (but see 7.4).

(21)   *Kedewa ye-he-matausi-di.*
         dog   3SG-CAUS-afraid-3PL.O/P
         'The dog scared them.'

Besides this, there are a few instances where the causative prefix does not express direct causation but has a permissive reading, i.e. a meaning like "fail to prevent" (cf. Comrie 1985: 330, 333) or what Talmy (1988: 57) calls "extended letting". Consider (22) to (24):

(22)   *Manuwa   ya-he-lao-ø.*
         bird   1SG-CAUS-go-3SG.O
         'I let the bird go.' (e.g. I didn't hold it properly and it escaped) (goi3:53)

(23)   *Kulu-gu   ya-he-kini-ø   ye-loha.*
         hair-1SG.P 1SG-CAUS-grow-3SG.O 3SG-long
         'I let my hair grow long.'

(24)   *Ka-gu   ti   ya-he-gwagwama-ø   na   kabo   ya-numa-ø.*
         CL2-1SG.P tea 1SG-CAUS-cold-3SG.O CONJ TAM   1SG-drink-3SG.O
         'I let my tea cool down and then I drink it.' (goi3:100)

Talmy (1988: 57) describes extended letting as the situation where "a stronger Antagonist ... disengages and releases the Agonist to manifest its tendency" (the terms antagonist and agonist roughly correspond to causer and causee in this context). While basic causation implies force directed by the causer towards the causee, letting describes the lack of intervening directed force.[6]

7.2 HEADS OF TRANSITIVE CLAUSES (CAUSATIVES OF INTRANSITIVES)

As introduced above, causatives of intransitives are morphologically transitive verbs and they can appear as the heads of transitive clauses only. The causative prefix adds a causer in subject position and the subject of the intransitive base verb occurs as the object of the causativized verb, expressed by the object suffix.

The intransitive verb stems which figure as input to causativization can be stative as in (25) and (28) or active as in (26) to (27) (for stative vs. active verbs cf. chap. 4.2). Example (25a) shows the intransitive verb *ye-loha* 'it is long' (here in the

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[6]   *This extension of the use of the causative prefix to cover situations like (22) to (24) is in line with Comrie's (1985) description of permissive meaning as a common subfunction of causative morphemes. A shared feature of permissive readings and causation proper "is the control imputed to the causer over whether the situation comes about or not" (p. 334). Similarly, Pederson (1991: 165) shows that cross-linguistically causative constructions "extend most readily to cases of enabling ... and ... to cases of letting. Let shares with causing and enablement the responsibility for creating a change in resultant state."*

sense of 'far away'). (25b) shows the causativized verb and the base-verb subject is expressed as the object of the causativized verb. The subject prefix of the causativized verb refers to the newly introduced causer of the event.

(25) a. *Yo-myanuwa … ye-loha   kalili.*
          CL1-2SG.P place   3SG-long   very
          'Your place is far away.' (oldtime3:82)

     b. *Isu-na-wa   ye-he-loha-ø.*
          nose-3SG-PM   3SG-CAUS-long-3SG.O
          'He made his nose long.' (maus4b:16)

Examples (26) and (27) follow the same pattern.

(26) a. *se-wane "kwa-laki   kalili   kwa-pesa"*
          3PL-say   2PL-big   very   2PL-go.out
          'and they said "you are too big you have to leave"' (oba1:45)

     b. *Sawasawaga unai se-he-pesa-gai   na   temenai ka-keno.*
          Place.Name   PP.SG 3PL-CAUS-go.out-1EX.O CONJ DEM   1EX-lie/sleep
          'They dropped us off at Sawasawaga and we slept there.' (Emalet35)

(27) a. *Ya-lao   ya-dui.*
          1SG-go   1SG-wash
          'I go and (have a) wash.'

     b. *Emi ya-hedu-he-dui-ø.*
          Name 1SG-RED-CAUS-wash-3SG.O
          'I'm washing Emi.'

Example (28) shows the stem *pitali* 'dry' both with and without the causative prefix in the same utterance. In the first instance, it occurs in the causative stem *he-pitali* and the object suffix cross-references the object NP *maina* 'string' of the preceding clause. In the second instance, *pitali* 'dry' occurs as a simplex intransitive stem and it is the subject prefix which refers to *maina* 'string'.

(28) *maina   ta-koi-ø   ta-he-pitali-ø   i-pitali*
       string 1INC-hit-3SG.O   1INC-CAUS-dry-3SG.O 3SG.IR-dry
       'we cut a string and dry it until it is dry' (basdial37)

The Saliba causative prefix is also attested with loan words. In (29) and (30), causative stems are derived from the English loans 'stop' and 'on' respectively.

(29) *na   kabo   ye-he-stop-o*
       CONJ TAM   3SG-CAUS-stop-3SG.O
       'and then she'll turn it off' (camera2)

(30) *Tem ku-he-on-ya-ko?*
       DEM 2SG-CAUS-on-3SG.O-PERF
       'Did you turn this on already?' (edial60)

7.3 HEADS OF DITRANSITIVE CLAUSES (CAUSATIVES OF TRANSITIVES)

When a transitive verb stem takes the causative prefix, the subject of the base verb occurs as the primary object of the causativized verb and is cross-referenced by the object suffix on the verb. The object of the base verb may occur as the secondary object of the causativized verb. The transitive stems which feature as input to causativization can be morphologically simplex (based on bivalent or labile roots) or derived from an intransitive stem by the applicative suffix (based on monovalent roots).

Due to the semantic restrictions in the use of the causative prefix discussed above, many transitive verb stems do not allow derivation with the causative prefix, and the verbs which may head ditransitive clauses form a rather restricted set. The attested examples in Saliba include verbs of cognition/perception like *he-kata* 'teach', *he-kita* 'show', *he-kita-lobai* 'make understand', verbs of carrying/wearing, e.g. *he-bahe-i* 'make carry', *he-likwa* 'make wear', and verbs of eating/drinking like *he-kai* 'feed', *he-numa* 'make drink', *he-kai-tonogi* 'make taste'.[7] As described above, novel derivations of such verbs were generally considered only marginally acceptable in Saliba.

7.3.1 SIMPLEX STEMS AS INPUT

The simplex transitive stems which can feature as input to causativization can be based on labile or bivalent roots. The verbs in (31) and (32) are based on the labile roots *numa* 'drink' and *kai* 'eat' respectively. Example (31a) shows *numa* 'drink' as a simplex transitive stem, (31b) shows the causative stem . The causee is encoded as the primary object and cross-referenced on the verb, the patient object *ti* 'tea' is expressed as the secondary object.

(31) a.   *Ka-m*   *ti*   *ku-numa-ø!*   b.   *Wawaya*   *ti*   *ya-he-numa-ø.*
       CL2-2SG.P   tea   2SG-drink-3SG.O   child   tea   1SG-CAUS-drink-3SG.O
       'Drink your tea!'   'I give the child tea to drink.'

Similarly, in (32a) the root *kai* 'eat' occurs as a simplex transitive stem, in (b) it is causativized and the patient is expressed as the secondary object.

(32) a.   *Mata*   *ku-lao-ma* ... *se-unui-go*   *se-kai-go.*
       if/lest   2SG-go-hither   3PL-kill-2SG.O   3PL-eat-2SG.O
       'If you had come ... they would have killed and eaten you.' (oldtime3:98)

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[7]   *Causativization of transitives is restricted to a very similar set in Tawala, a Papuan Tip language like Saliba, as described by Ezard (1991: 214-15).*

b. *Niu ka-he-kai-di.*
coconut 1EX-CAUS-eat-3PL.O/P
'We feed them coconuts.'

Example (33a) shows the complex verb stem *kai-tonogi* 'taste (eat-try)' which is causativized in (b).

(33) a. *Bisikete ya-kai-tonogi-di.*
biscuit 1SG-CAUS-eat-try-3PL.O/P
'I tried the biscuits.'

b. *Bisikete ya-he-kai-tonogi-go.*
biscuit 1SG-CAUS-eat-try-2SG.O
'I made you try the biscuits.'

The verbs in (34) are based on the labile root *kita* 'see' which occurs as a simplex transitive stem in (a). In (b) it is causativized and the clause is ditransitive, featuring three arguments.

(34) a. *ka-kita-di   kabo   ka-gala-i-di*
1EX-see-3PL.O/P TAM   1EX-catch.with.net-APP-3PL.O/P
'we see them and we catch them with a net' (fishing18)

b. *Tautau-ne kabo   ya-he-kita-go*
picture-DET TAM   1SG-CAUS-see-2SG.O
'I'll show you the picture' (Hirte2:7)

An interesting case involves the stem *kata* 'know', which is morphologically intransitive (cf. 12.2.2.4), but the causativized stem *he-kata* 'teach' can occur as the head of ditransitive clauses. Although it never allows an object suffix (unless it is causativized), *kata* 'know' almost always occurs with the preceding possessed noun *kabi* which can be roughly glossed as 'nature/way'.[8] It is the possessor of *kabi* 'nature/way' which encodes the logical object of *kata* 'know', i.e. the entity or fact that is known. In (35) the known entity is the referent of the possessive pronoun *-gu* '1SG' on the object *kabi* 'nature/way'.

(35) *Kabi-gu se-kata.*
nature-1SG.P 3PL-know
'They know me.' (lit. 'They know my *kabi*.')

In (36) the object NP consists of the possessor *pilipilidai* 'legend' and the possessed noun *kabi-na* 'its nature'.

(36) *Iya   pilipilidai   kabi-na   ye-kata.*
3SG.EMPH legend   nature-3SG.P   3SG-know
'*He* knows the story.' (lit. 'He knows the story's *kabi*.') (oldial112)

In (37) where the root *kata* 'know' takes the causative prefix, the construction follows the pattern of causativization of transitive rather than intransitive base

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[8] *Of a total of 45 instances in the text sample only two instances showed* kata 'know' *without the preceding noun* kabi '*nature/way*'.

verbs. The subject prefix of the derived verb encodes a newly introduced causing agent, the experiencer which was encoded as the subject of the base verb occurs as the primary object.

(37)   *kabo sina-mai*   *ye-he-kata-gai*
         TAM   mother-1EX.P   3SG-CAUS-know-1EX.O
         'our mother will teach us' (basdial21)

Note that the possessed object noun *kabi* 'nature/way' does not feature in the clause with the causativized verb. The logical object of 'know' which was expressed as the grammatical possessor of *kabi* 'nature/way' in the transitive clauses in (35) and (36) can be expressed as a secondary object of the causativized verb. In (38) it is the NP *kalina Saliba* 'Saliba language' preceding the verb.

(38)   *Kalina   Saliba*   *kwa-he-kata-gau.*
         language Place.Name   2PL-CAUS-know-1SG.O
         'You teach me Saliba.'

In sum, even though *kata* 'know' is morphologically an intransitive stem, distributionally it behaves like a transitive verb stem in that the causativized stem can feature as the head of ditransitive clauses. It is the only root attested which behaves in this way (besides *mose* 'give' discussed in chap. 13 which has similar features).

7.3.2 APPLICATIVE STEMS AS INPUT

In a small number of cases, the transitive stems which figure as input to causativization are derived from intransitive stems by means of the applicative suffix. The three attested examples are presented in (39) to (41). The expressions can be classified as verbs of 'carrying' and 'wearing', they involve the monovalent roots *bahe* 'carry', and *naba* 'carry on head', and the noun root *gado* 'throat/neck'. The derived applicative stems follow the same pattern as the simplex transitive input stems. In examples (39) to (41), the secondary objects precede the causativized verbs.

(39)   *Bosa-wa ku-**he**-bahe-**i**-gau.*
         basket-PM 2SG-CAUS-carry-APP-1SG.O
         'Load me the basket.' (e.g. on my back)

(40)   *Bosa-wa ku-**he**-naba-**i**-gau.*
         basket-PM 2SG-CAUS-carry.on.head-1SG.O
         'Load me the basket (on my head).'

(41)   *Bagi-wa ye-**he**-gado-**i**-gau.*
         necklace-PM   3SG-CAUS-throat/neck-APP-1SG.O
         'She put the bagi on my neck.' (lit. 'She necked me the bagi.')

The verbs in (39) to (41) show both the applicative suffix and the causative prefix. In these examples, the applicative stems are input to causativization and not

otherwise (i.e. the causative stems do not provide input to applicativization). This can be seen in (42) to (44). The applicative stems (without the causative prefix) in (a) are grammatical, but the causative stems (without the applicative suffix) in (b) are ungrammatical.

(42) a. *Ya-bahe-i-ø.*   b. * *Ya-he-bahe-ø.*
         1SG-carry-APP-3SG.O   1SG-CAUS-carry-3SG.O
         'I carried it.'   'I make him carry.'

(43) a. *Bosa   ya-naba-i-ø.*   b. * *Ya-he-naba-ø.*
         basket 1SG-carry.on.head-APP-3SG.O   1SG-CAUS-carry.on.head-3SG.O
         'I carried the basket.'   'I make him carry.'

(44) a. *Bagi   ye-gado-i-ø.*   b. * *Ye-he-gado-ø.*
         necklace 3SG-throat/neck-APP-3SG.O 3SG-CAUS-throat/neck-3SG.O
         'She put on a bagi (necklace).'

7.4 CAUSATIVE PREFIX VERSUS APPLICATIVE SUFFIX

Most Saliba intransitive verb stems allow derivation with the causative prefix or the applicative suffix (chap. 4). Only a small group of intransitive stems allows either affix to derive a transitive stem. The resulting pairs of causative vs. applicative stems and their semantic and pragmatic differences are discussed in this section. Among the intransitive stems which can choose either of the two affixes are a number of stems which take an experiencer as their subject, such as *koipili* 'angry', *mwadine* 'shy', and *matausi* 'scared'. The root *maluhi* 'laugh' also follows the same pattern. Examples (45) to (48) show the simplex underived stems.

(45) *Se-koipili.*   (46) *Se-matausi.*
      3PL-angry   3PL-scared
      'They are angry.'   'They are scared.'

(47) *Se-mwadine.*   (48) *Se-maluhi.*
      3PL-shy   3PL-laugh
      'They are shy.'   'They laugh.'

When these stems are transitivized they encode the same two referents as arguments whether they take the causative prefix or the applicative suffix, but they assign them to different syntactic roles. The causative introduces a causer in subject position and the subject of the intransitive base verb occurs as the object of the derived transitive verb. The applicative introduces a stimulus in object position and the subject argument remains unchanged. Examples (49a) to (52a) show the causativized stems corresponding to (45) to (48), the examples in (b) show the applicativized stems.

(49) a. *Ya-he-koipili-di.*[9]
  1SG-CAUS-angry-3PL.O/P
  'I made them angry.'

  b. *Se-koipili-ei-gau.*
   3PL-angry-APP-1SG.O
   'They are angry with me.'

(50) a. *Ya-he-mwadine-di.*
  1SG-CAUS-shy-3PL.O/P
  'I made them shy.'

  b. *Se-mwadine-i-gau.*
   3PL-shy-APP-1SG.O
   'They are shy of me.'

(51) a. *Kedewa ye-he-matausi-di.*
  dog 3SG-CAUS-scared-3PL.O/P
  'The dog scared them.'

  b. *Kedewa se-matausi-ei-ø.*[10]
   dog 3PL-scared-APP-3SG.O
   'They are scared of the dog.'

(52) a. *Ye-he-maluhi-gau.*[11]
  3SG-CAUS-laugh-1SG.O
  'He made me laugh.'

  b. *Saha ku-malu-maluhi-ei-ø?*
   what 2SG-RED-laugh-APP-3.SG.O
   'What are you laughing about?'

The examples in (a) vs. (b) encode the same two real-world participants as arguments but assign them different syntactic roles. It seems that, similar to a voice distinction, the choice of transitivizing affix allows the speaker to describe the same situation from two different perspectives. The choice of transitivizing morphology determines which participant is encoded as the subject and which as the object. In this way, the experiencer can be backgrounded, as in (a), or foregrounded, as in (b).

The question arises however, whether the verb pairs may in fact really refer to exactly the same situations (i.e. whether the distinction between the constructions purely reflects a discourse strategy) or whether the expressions also entail a semantic distinction. If the two constructions obligatorily describe different events (for example with respect to active involvement or control of the causer/stimulus argument), then the difference between the pairs must be attributed to the semantics of the constructions rather than to pragmatics. In 7.1 I showed that novel derivations with the causative prefix require the causer of the event to play an active and direct role in the causation. But, not all existing causative stems follow this restriction as closely as the novel derivations. Besides this, causative stems can have a permissive meaning rather than expressing causation proper. From discussions with speakers, it is clear that the causativized examples in (49a) to

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[9] *One speaker used a form with both causative and applicative in spontaneous speech:* ya-he-koipili-ei-ø *'I made her angry', but other speakers rejected this form.*

[10] *People vary in how they pronounce this word, besides (**Fout! Alleen hoofddocument.b**) the stem* mataus-ei *was also suggested with the final vowel being dropped before the applicative* -ei.

[11] *This causativized verb was rejected by one speaker who only accepted the applicativized version in (b).*

(52a) are strongly preferred in contexts where the causer plays an active part. For instance (50a), the causative verb *ya-he-mwadine-di* 'I made them shy' was preferred in a context preceded by, for example, *ya-dilai-di* 'I scolded them' where the causer had actually done something to cause the shyness. The corresponding applicative verb *se-mwadine-i-gau* 'they are shy of me' can be used independent of the behavior of the stimulus participant. Similarly, the causativized verb *ye-he-matausi-di* 'it scared them' in (51a) was preferred in a situation where, for example, the dog is barking rather than sleeping. However, at least some of the speakers who contributed to the discussion allowed both (51a) and (b) to describe a situation where the dog sleeps and therefore does not have an active role in the causation. This should be ruled out, however, if the distinction between the clauses is semantically constrained rather than pragmatically determined. In sum, from the available data it is not possible to positively answer whether an active part of the causer is semantically entailed or pragmatically implied in the clauses (49a) to (52a). Future research on speaker's judgments of causative expressions should be able to shed some light on this question.

There is a further group of intransitive stems that allow either the causative or the applicative affix. Consider the intransitive verbs in (53) to (55):

(53) *Ye-sobu.*
      3SG-dance
      'She danced.'

(54) *Ye-tawasola.*
      3SG-marry
      'She got/is married.'

(55) *Ye-paisowa.*
      3SG-work
      'She worked.'

In contrast to the experiencer verbs above, the causative vs. applicative stems based on *sobu* 'dance', *tawasola* 'marry/married', and *paisowa* 'work' encode different participants as their arguments. In (56a) to (58a), the causative introduces a causer in subject position. In (56b) to (58b), the applicative introduces an object referring to the type of dance in (56), to the groom or bride in (57), and to the type of work in (58).

(56) a. *Kwabuli se-he-sobu-ø.*
         widow   3PL-CAUS-dance-3SG.O
         'They made the widow dance.'

     b. *Bwayatu se-sobu-i-ø.* [12]
         kundu.drum   3PL-dance-APP-3SG.O
         'They danced (to) the kundu drum.'

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[12] *Note that this is an elicited example and speakers alternatively suggested (and perhaps preferred) the complex verb* se-sobu-watani *'they dance-followed'.*

(57) a. *Nata-gu ya-he-tawasola-ø.*   b.   *Ye-tawasola-i-ø.*
child-1SG.P 1SG-CAUS-marry-3SG.O   3SG-marry-APP-3SG.O
'I married my child (to s.o.).'   'She married him.'

(58) a. *Bairol ya-he-paisowa-ø.*
pen 1SG-CAUS-work-3SG.O
'I used the pen.'

    b. *Yo-gu   bodi-bodi   ya-paisowa-i-ø.*
CL1-1SG.P RED-sew   1SG-work-APP-3SG.O
'I worked on my sewing.'

Similar to these examples, the stem *takikili* 'spin/circle' allows either of the two affixes. The text example in (59) shows the underived intransitive stem. It describes the movement of a person spinning around on something like a swivel chair.

(59)   *Gom, ye-takikili   ye-lao-lao ee   kulu-na-wa   ye-kwade-kwade.*
INTRJ 3SG-spin/circle 3SG-RED-go DUR head-3SG.P-PM 3SG-RED-swing/shake
'He spun around, on and on and his head was shaking.' (maus8b:1)

When the stem *takikili* 'spin/circle' takes the causative prefix as in (60), as usual a causer is introduced in subject position. But interestingly, it is this newly introduced subject which is performing the circling movement and not the object argument of the transitive verb. The object denotes the ground entity that is circled around.

(60)   *Sada ya-he-takikili-ø.*
betelnut 1SG-CAUS-spin/circle-3SG.O
'I circle around the betelnut tree.'

The causative stem *he-takikili* in (60) was considered acceptable but speakers preferred examples where it reduplicates and occurs as the V_2 stem of a complex verb. The initial verb stem of such complex verbs describes the manner or nature of the encirclement as in (61a) to (c) below.

(61) a. *Se-heloi-heta-he-takikili-da.*
3PL-run-RED-CAUS-spin/circle-1INC.O
'They were running around us.'

    b. *Se-tolo-heta-he-takikili-da.*
3PL-stand-RED-CAUS-spin/circle-1INC.O
They were standing around us.'

    c. *Se-wose-heta-he-takikili-da.*
3PL-paddle-RED-CAUS-spin/circle-1INC.O
'They were paddling around us.'

When *takikili* 'spin/circle' takes the applicative, the introduced object argument is a concomitant. In (62a) *takikili* occurs as an independent stem, in (b) it is the second stem in a complex verb.

(62) a. *Boxi ya-bahe   ya-takikili-ei-ø.*
box   1SG-carry   1SG-spin/circle-APP-3SG.O
'I carry the box and turn in circles with it.'

b. *Logi-wa ya-niuli-ø   ya-wose-takikili-ei-ø.*
log-PM   1SG-drag-3SG.O   1SG-paddle-spin/circle-APP-3SG.O
'I drag the log and paddle in a circle with it.'

Neither verb in (62) can refer to a situation where only the object argument is moving. In both examples, it is the subject which moves and causes the object argument to move along with it (cf. the definition of concomitant in chaps. 4 and 6). This is clearly semantically distinct from transitivization with the causative prefix.[13]

7.5 FREQUENTATIVE NUMBERS

The Saliba causative prefix (or a homophonous morpheme) is also attested to derive frequentative numerals (cf. Mosel and Hovdhaugen 1992) from cardinals. The text example in (63), shows three instances of ordinals.

(63)   *ye-tu-lae-ø   he-labui na*
3SG-throw-lead-3SG.O   CAUS-two CONJ
'he threw it a second time,

ye-tu-lae-ya-ma   he-hayona   na
3SG-throw-lead-3SG.O-hither CAUS-three CONJ
he threw it a third time,

ye-tu-lae-uyo-i-ø   he-hasi ...
3SG-throw-lead-back/again-APP-3SG.O CAUS-four
he threw it back a fourth time ...' (maus2b:21)

This function is attested in a variety of Austronesian languages, for example Fijian (Dixon 1988), Kambera (Klamer 1998), Kusaiean (Lee 1975), Taba (Bowden 1998), and Tawala (Ezard 1991) to name but a few (cf. also Crowley 1982 on Paamese). Pawley (1972) reconstructs in fact two functions for the POC prefix **paka-*: it is a causativizing morpheme but also a marker of the number of times an action is carried out when it is prefixed to a numeral.[14]

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[13]   *There is one verb stem,* nonoha *'(be) ready', for which speakers accepted both the causative and the applicative affix, but without any differences in meaning. Speakers suggested that the causativized stem is actually a loan from the related Suau language, while the applicative stem is the original Saliba form.*

a. SUAU   *Ya-he-nonoha-ø.*   b. SALIBA   *Ya-nonoha-i-ø.*
1SG-CAUS-ready-3SG.O   1SG-ready-APP-3SG.O
'I prepare it.'   ·   'I prepare it.'

[14]   *Cf. the English colloquial expression: 'He threw it again. That made four'.*

7.6 SUMMARY

In Saliba, both intransitive and transitive verb stems can be causativized. Causatives of intransitives and causatives of transitives are identical in their morphological marking, but only the latter may occur as heads of ditransitive clauses. Constructions with the causative prefix generally denote situations in which the causing agent plays a (physically) active part in the causation. This means that the prefix expresses a specific kind of what has been discussed as direct, manipulative, or immediate causation (cf. e.g. Shibatani 1976, Comrie 1985, 1993, Comrie and Polinsky 1993, Pederson 1991, Song 1996). This constraint acts as a semantic restriction to novel derivations, in particular with transitive input stems. Most intransitive verb stems in Saliba allow transitivization by means of either the applicative suffix or the causative prefix, but there are a small number of stems which allow either of these two transitivizing affixes.

THE PREFIX *KAI-*

Saliba has a verbal prefix *kai-* which derives intransitive stems from transitive and intransitive ones. When a transitive stem takes the *kai*-prefix, it is detransitivized and can no longer take an object suffix. However, the object of the transitive input verb (which is an inner-core argument and cross-referenced) may occur as an outer-core argument (not cross-referenced) with the intransitive *kai*-verb. While the verb is morphologically intransitive, the clause may still be transitive and show discord in transitivity status. Consider the text examples in (1) and (2):

(1)   *ka-dui   na   hinage   yama   ka-kai-gwali*
      1EX-dive   CONJ   also   fish   1EX-KAI-spear
      'we dive and spear fish' (fishing59)

(2)   *Ka-hepaisowa-ø   na   unai   hinage   yama   ka-kai-unui.*
      1EX-use-3SG.O   CONJ   PP.SG   also   fish   1EX-KAI-kill/catch
      'We use it and catch fish with it.' (fishdial60)

Clauses with *kai*-verbs and lexical objects have features of both intransitive and transitive clauses. They are like intransitive clauses in that the verb is morphologically intransitive, but they are like transitive clauses in that they feature an object argument. These outer-core objects are phonologically and morpho-syntactically independent words: they occur in the canonical object position preceding the inflected verb, can take modifiers, inflect for number, and they do not differ phonologically from inner-core arguments. The outer-core objects of *kai*-verbs differ in these respects from incorporated nominals (cf. 8.1.3.1). They also differ from adjuncts in that they are not marked by postpositions. Besides the detransitivizing function just outlined, the *kai*-prefix also occurs on verbs to indicate that the expressed activity is done for fun or play (often implying that it is not performed in the proper way or for the proper reason). I will loosely call this the "play" function of the prefix.

In 8.1, I first describe in some detail the detransitivizing function of *kai-* and the status of the object nouns involved. Following this, in 8.2, I introduce the "play" function of the prefix. There is also a homophonous classificatory prefix *kai-* which can occur on transitive or intransitive verbs, expressing that the body of the agent is involved in the activity. In order to avoid confusion and for comparison of the two forms, I briefly discuss this homophonous prefix in 8.3.

8.1 DETRANSITIVIZING FUNCTION

As introduced above, the prefix *kai-* can derive intransitive verb stems from transitive stems as in (3) and (4).

(3)   *Ya-lao ya-kai-deuli.*
        1SG-go 1SG-KAI-wash
        'I go and wash the laundry/the dishes.'

(4)   *pawati   ka-bahe-i-di   na hinage yama ka-kai-gwali*
        spear   1EX-carry-APP-3PL.O/P CONJ also   fish   1EX-KAI-spear
        'we carry the spear and spear fish' (fish-dial82)

The underived transitive stems on which *kai-* verbs are based occur with essentially the same meaning when they do not carry the prefix (but see below on lexicalization). In (5) and (6), the stems *deuli* 'wash' and *gwali* 'spear' feature in underived transitive verbs.

(5)   *Ya-deuli-di.*   (6)   *Ka-gwali-di.*
        1SG-wash-3PL.O/P   1EX-spear-3PL.O/P
        'I washed them.'   'We speared them.'

Verbs which are derived by the *kai-*prefix are morphologically intransitive and cannot take object suffixes. The examples in (7) and (8), with object suffixes on the *kai-*verbs are ungrammatical.

(7) *   *Ya-kai-deuli-di.*   (8) *   *Ka-kai-gwali-di.*
        1SG-KAI-wash-3PL.O/P   1EX-KAI-spear-3PL.O/P
        'I wash them.'   'We spear them.'

Nevertheless, the derived intransitive verbs can occur with an object argument as in the text examples in (1), (2), and (4) above, where the intransitive *kai-*verb is preceded by the object noun *yama* 'fish'. The objects of *kai-*verbs are typically non-specific and in general non-individuated. Their morpho-syntactic and pragmatic status is discussed in 8.1.2.

The input to derivations with the *kai-*prefix are typically transitive stems, but in a few instances, the *kai-*verb can be derived from an intransitive verb stem as in (9), or from a noun stem as in (10). The derived verbs in (9a) and (10a) share with the *kai-*verbs in (3) and (4) above the feature that they have morphologically transitive counter parts as shown in (9b) and (10b).

(9) a.   *Yama se-kai-katu.*   b.   *Yama se-katu-ni-di.*
            fish   3PL-KAI-catch   fish   3PL-catch-APP-3PL.O/P
            'They catch fish.'   'They catch fish.'

(10) a.   *Yama ta-kai-tuha.*   b.   *Yama ta-tuha-i-di.*
            fish   1INC-KAI-poison.root   fish   1INC-poison.root-APP-3PL.O/P
            'We poison fish.'   'We poison fish.'

In contrast to the verbs in (5) and (6) which feature simplex transitive stems, the

transitive stems in (9b) and (10b) are derived by the applicative suffix. However, the underived stems *katu* 'catch' and *tuha* 'poison root' can not occur as intransitive verb stems.[1]

In cases like (9) and (10), the prefix is not technically detransitivizing because the input stems are already intransitive. A more accurate description is that the prefix determines the transitivity status of the stem in that the input can be transitive or intransitive but the output from the derivation is invariably intransitive. For simplicity, I will refer to the function of *kai*- as 'detransitivizing' since this is the case in the majority of examples.

Overall, derivations with the *kai*-prefix are not very frequent. The list of verb stems which are attested with the *kai*- prefix in its detransitivizing function is presented in (11). The prefix is a rather rare morpheme in the large text sample with only 14 occurrences (although more were observed in natural speech independent of the text database). Some verbs in the examples below are only documented through elicitations.

(11)	*biteli*	'hit'	*keli*	'dig'
	deuli	'wash'	*sapi*	'slap'
	gabu	'bake/burn'	*sikwa*	'poke'
	gwali	'spear'	*tuha*	'(poison with) poison root'
	katu	'catch (fish)'	*unui*	'kill/catch'

Most of the text examples of *kai*-verbs describe habitual activities and come from a procedural text about fishing techniques. While rather rare in the overall text sample, the morpheme is relatively common in this text type. Some further text examples come from narrative texts where they again typically describe habitual activities.

8.1.1 LEXICALIZATION OF *KAI*-STEMS

Some Saliba *kai*-stems are lexicalized and have acquired a more specific reading than the corresponding transitive stems. For example, the transitive stem *gwali* 'spear' can refer to any kind of 'spearing' event while the derived intransitive stem *kai-gwali* can only refer to the spearing of fish. The examples in (12) show that both the nouns *yama* 'fish' and *puwaka* 'pig' can occur as the object of the

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[1] *But there seems to be some speaker variation in accepting* tuha *'poison (with) poison root)' as an intransitive verb stem.*

transitive verb. But with the intransitive *kai*-verb in (13), *yama* 'fish' is allowed but not *puwaka* 'pig'.

(12) a. *Yama   ka-gwali-di.*   b.   *Puwaka   ka-gwali-di.*
         fish   1EX-spear-3PL.O/P   pig   1EX-spear-3PL.O/P
         'We spear fish.'   'We spear pigs.'

(13) a. *Yama   ka-kai-gwali.*   b.   *   *Puwaka   ka-kai-gwali.*
         fish   1EX-KAI-spear   pig   1EX-KAI-spear
         'We spear fish.' (fishing59)   'We spear pigs.'

Similarly, while the transitive stem *tuha-i* 'poison (with *tuha* root)' can refer to any act of poisoning that involves the root of the *tuha* plant, the stem *kai-tuha* can only refer to a specific technique of catching fish with this poison. The activity denoted by *kai-tuha* refers to squeezing the pounded roots of the *tuha* plant in the shallow sea water during low tide.[2] The swarms of small fish in the shallow waters or in the puddles on the reefs get poisoned, they loose become disoriented, die, and are easily collected. As a consequence of the semantic restriction, the stem *kai-tuha* can only take a subset of the object nouns which can appear with its transitive counterpart *tuha-i*. The *kai*-verb allows only those nouns which refer to types of fish that are found in the shallow waters during low tide. Consider the examples in (14) to (16). The superordinate term *yama* 'fish' can occur as the object of the *kai*-verb as can the subordinate term *kumkum* which refers to a type of small reef fish. But the co-subordinate term *winuwinu* which refers to another small fish type cannot occur as the object of *kai-tuha* and example (16) was rejected.

(14)   *Yama   ta-kai-tuha.*   (15)   *Kumkum   ta-kai-tuha.*
          fish   1INC-KAI-poison.root   Fish.Name   1INC-KAI-poison.root
          'We poison fish.'   'We poison Kumkum fish.'

(16)   * *Winuwinu   ta-kai-tuha.*
          Fish.Name   1INC-KAI-poison.root
          'We poison Winuwinu fish.'

The explanation is that *kumkum* are reef fish which stay in the shallow waters during low tide, but *winuwinu* are surface fish which leave the shore area during ebb tide. Because of that, they cannot be caught with the fishing technique denoted by *kai-tuha*.

A similar point can be noted with the stem *kai-katu* 'catch (fish with hook)' and its transitive counterpart *katu-ni*, which is composed of the stem *katu* plus the applicative suffix. The transitive stem can refer to the act of catching any fish with

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[2]   *It is also used in creeks but I am more familiar with the application in the sea, therefore I restrict the discussion here to this method.*

a hook, but the intransitive *kai*-stem is more restricted. In (17a), the superordinate term *yama* 'fish' occurs as the object of the *kai*-verb. Also specific fish names such as *mwasabwa*, a smallish type of fish are allowed as objects, as shown in (17b). But the nouns *baewa* 'shark' in (c), and *luni* 'dugong' in (d) were rejected or accepted only very hesitantly as objects of the *kai*-verb. The transitive form of the verb was clearly preferred with these nouns.

(17) a. *Yama se-kai-katu.*
　　　 fish　　3PL-KAI-catch
　　　 'They catch fish.'

b. *Mwasabwa se-kai-katu.*
　　 Fish.Name　　3PL-KAI-catch
　　 'They catch mwasabwa.'

c. ? *Baewa se-kai-katu.*
　　　 shark　　3PL-KAI-catch
　　　 'They catch sharks.'

d. ? *Luni se-kai-katu.*
　　　 dugong　　3PL-KAI-catch
　　　 'They catch dugongs.'

A speaker described that it is not impossible to catch sharks or dugongs with the lines and hooks people in the area use, but that it is rather rare and unexpected when it happens. Because of this, the intransitive verb stem *kai-katu* does not "sound right" with these objects. The transitive stem *katu-ni* is favored with objects that denote such unexpected catch. The speaker's observation is thus in line with the fact that *kai*-verb usually denote habitual and repeated activities.

The lexicalized instances of *kai*-stems discussed above already introduced the fact that there are certain restrictions on objects of *kai*-clauses. In the following section, I investigate these restrictions, especially in the choice of modifiers, in more detail.

8.1.2 STATUS OF OBJECTS

As stated, verbs with the *kai*-prefix typically occur as the heads of intransitive clauses, but they can also feature as the heads of transitive clauses where they are preceded by an object noun. Of the 14 text examples with the *kai*-prefix in its detransitivizing function, three are preceded by an object noun. In all three examples, which were given in (1), (2), and (4) above, the object is the unmodified noun *yama* 'fish'. But elicitations show that the objects of *kai*-verbs can be modified. Among the forms which are allowed as modifiers are the possessive classifiers.[3] Consider (18):

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[3]　*It should be noted that Saliba possessive constructions do not entail definiteness or specificity of the possessed noun (cf. chap. 14).*

(18)   *Ya-lao   yo-gu   lulu   ya-kai-deuli.*
         1SG-go   CL1-1SG.P   shirt   1SG-KAI-wash
         'I go and wash my shirts.'

Compared to the objects of transitive verbs, these objects are syntactically restricted in that they cannot choose their modifiers as freely. The question of exactly which modifiers are allowed with objects of *kai*-verbs is unclear in many cases. There is a fair amount of variation across speakers, and even single speakers might allow a modifier with one type of *kai*-verb but not with another. Despite this variation, there are some clear tendencies which I summarize in the following.

In contrast to the possessive classifiers, many other modifiers are not allowed with the object of *kai*-verbs.[4] The clearest restrictions on the objects of *kai*-verbs are that, first, they can never be modified by numerals. Consider (19) and (20) which are ungrammatical.

(19)   *   *Lulu   labui   ya-kai-deuli.*
              shirt   two   1SG-KAI-wash
              'I washed two shirts.'

(20)   *   *Kanuwa   haligigi-kesega   se-kai-keli.*
              sweet.potato   five-one   3PL-KAI-dig
              'They dug (out) six sweet potatoes.'

Second, the objects must allow a plural interpretation which can be attributed to their non-individuated status. This can be observed on modified but also on unmodified nouns. Grammatical number can generally be marked on the noun itself only when it denotes a human being as in (21) below (cf. chap. 2.4.2). For such nouns, the unmarked form is singular but the plural form must carry the plural suffix -*o*. The examples in (21) show that only the plural marked noun is allowed as the object of *kai-biteli* 'beat', the unmarked singular form of the noun is not allowed with this verb.

(21) a.   *Wawaya-o   ye-kai-biteli   (ena se-bigihedi).*
            child-PL   3SG-KAI-beat   if   3PL-big.head
            'He beats the children (when they are naughty).'

    b. *   *Wawaya   ye-kai-biteli (ena   ye-bigihedi).*
            child   3SG-KAI-beat   if   3SG-big.head
            'He beats the child (when it is naughty).'

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[4]   *Note that all of the modifiers which are discussed as ungrammatical with the objects of* kai-*verbs can freely occur with the objects of the corresponding transitive verb forms.*

Unlike human nouns, most other nouns are not marked for number themselves, but a number distinction can be marked on modifiers which obligatorily carry a possessive suffix (indicating the number of noun, cf. chap. 2.4.3). The objects of *kai*-verbs only allow modifiers which are either unmarked for number or marked as plural. Any singular marked modifier is categorically rejected. That includes adjectival forms with the singular suffix *-na* as in examples (22) and (23), but also the modifier *hesau* 'other' in (24), which functions as a singular indefinite article.

(22)   * *Lulu   posiposi-na   ya-kai-deuli.*
          shirt   white-3SG.P   1SG-KAI-wash
          'I wash the/a white shirt.'

(23)   * *Kanuwa   laki-laki-na   se-kai-keli.*
          sweet.potato   RED-big-3SG.P   3PL-KAI-dig
          'They dig (out) a big sweet potato.'

(24)   * *Yama hesau se-kai-katu.*
          fish   other   3PL-KAI-catch
          'They catch a fish.'

Speaker's judgments about the acceptability of plural marked modifiers varies considerably. There is variation not only across speakers, but also across different *kai*-verbs and across the adjectival forms themselves. One can only talk about tendencies rather than strict (un)grammaticality for most of the forms discussed below. Speakers varied in whether they accepted modifiers such as *hauhau-di* 'new (ones)', *bida-bida-di* 'dirty (ones)', or *posi-posi-di* 'white (ones)'. The forms *gagili-di* 'small (ones)' and *laki-laki-di* 'big/large (ones)' triggered the same kind of varied reactions.

(25)   ? *Ya-lao lulu gagili-di   ya-kai-deuli.*
          1SG-go   shirt small-3PL.P   1SG-KAI-wash
          'I go and wash (the) small shirts.'

(26)   ? *Ya-lao lulu laki-laki-di   ya-kai-deuli.*
          1SG-go   shirt RED-big-3PL.P   1SG-KAI-wash
          'I go and wash (the) big shirts.'

Interestingly, there seems to be a preference for accepting *gagili-di* 'small (ones)' in (25) over *laki-laki-di* 'big/large (ones)' in (26). A speaker explained this by the fact that one can wash plenty of small items but only a few big ones in one operation. She also suggested that the intransitive stem *kai-deuli* 'wash' refers to an easy washing job. But the transitive version of the verb, without the *kai*-prefix, would be required when referring to a more thorough washing job, where each single piece is treated separately with brush and soap. Such observations suggest that individuation of the object noun is a relevant factor for the choice between the transitive and the intransitive verb.

A further set of modifiers that triggers considerable variation are the determiner clitics *-wa,* which marks given information, and *-ne*, which marks definiteness, as well as the demonstratives *teina (... -ta)* 'this/these', and *tenem (... -ne)* 'that/those' (cf. chap. 2.4.1). Examples (27) and (28) show object nouns with the determiners *-wa* and *-ne*. Some speakers readily accepted the examples, others were hesitant or rejected them outright. Occasionally, one and the same speaker judged the grammaticality of these clauses differently at different occasions.

(27)   ?   *Yama-wa   se-kai-gwali.*   (28) ?   *Yama-ne   se-kai-gwali.*
          fish-PM   3PL-KAI-spear   fish-DET   3PL-KAI-spear
          'They speared the fish.'   'They speared the fish.'

The same holds for the examples where the *kai*-object is marked by a demonstrative as in (29) and (30).

(29)   ?   *Ku-henuwa teina   peleide-ta   ya-kai-deuli?*
          2SG-want   PROX.DEM   plate-DET   1SG-KAI-wash
          'Do you want me to wash these dishes?'

(30)   ?   *Tenem   labiya-ne   ku-kai-gabu!*
          DIST.DEM   sago-DET   2SG-KAI-bake/burn
          'Bake that sago!'

Finally, also relative clauses as modifiers of *kai*-objects trigger variation in speakers' judgments. Example (31) shows the object *kaleko* 'cloth(es)' as the head of a relative clause. The relative clause is marked by the determiner suffix *-wa* on both the head noun and the final element of the clause.

(31)   ?   *Kaleko-wa   yo-gu   saya   ye-le-di-ma-wa   ya-kai-deuli.*
          cloth-PM   CL1-1SG.P   sibling   3SG-give-3PL.O/P-hither-PM   1SG-KAI-wash
          'I washed the clothes that my sister gave me.'

In sum, the grammaticality judgments about the modifiers of *kai*-objects are variable and rather inconsistent. The examples discussed in (25) to (31) do not give a clear picture of the acceptability of these forms. Nevertheless, the variation and inconsistency in the speakers' judgments can itself be considered significant. Overall, these types of modifiers seem at best marginally acceptable. However, they are clearly not as categorically rejected as the numerals or the singular marked modifiers discussed in the earlier examples.

The described restrictions on the objects of *kai*-verbs raise the question of whether or not these objects are referential. This question is not easily answered as there are no satisfactory formal tests for referentiality in Saliba. The objects of *kai*-verbs share several features with incorporated nominals (which cross-linguistically tend to be non-referential, cf. 8.1.3.1 below) but they also share features with objects of regular transitive clauses. Given these features and the lack of formal tests for referentiality, a general classification of the objects of *kai*-verbs as referential or

non-referential seems stipulated and not very informative. However, for the three text examples presented in (1), (2), and (4) above, it can be stated that the object nouns express generic objects and are non-referential. The restrictions and preferences in the choice of modifiers suggest the same tendency for the objects in the elicited examples.

8.1.3 RELATED CONSTRUCTIONS

The detransitivizing function of the *kai*-prefix is similar to what Lichtenberk (1991) describes for the 'depatientive' in To'aba'ita, an Austronesian language of the Solomon Islands. In To'aba'ita, the prefix *kwai-*, which marks reciprocals and sometimes 'middle voice', is also attested as a detransitivizing morpheme.[5] The resulting verbs are morphologically intransitive but often imply an undergoer. Consider the To'aba'ita examples in (32) and (33) (Lichtenberk's examples (23) and (26) p. 178/9):

(32)   *Roo   wane kero   kwai-labata'i.*
TO'ABA'I. two   man   they.DU KWAI-harm
          'The two men harm (people).' (e.g. by stealing from them or by performing harmful magic on them)

(33)   *Wane 'e kwai-ilamata'i.*
TO'ABA'I. man   he   KWAI-hate
          'The man hates people/everybody/everything./ The man is a hater.'

Lichtenberk (1991: 179) notes:

> Clauses with the depatientive construction are syntactically intransitive; there is no direct object. At the same time, such clauses are transitive semantically. Although no patient/direct object is expressed, there is always one implied. The implied patient is general, non-specific; the event encoded by the verb is directed not at a specific participant but at any and all of a certain kind. ... The formally intransitive nature of clauses with the depatientive construction is a consequence of the semantics/pragmatics of the situation encoded.

Similar facts hold for clauses with the Saliba *kai*-prefix. Objects of *kai*-verbs are non-individuated and they are typically generic, non-specific, and indefinite. The crucial difference is that Saliba *kai*-clauses show object arguments and are formally transitive rather than being only "semantically transitive" as described of the To'aba'ita constructions.

Huckett (1974: 83) reports on a very similar construction from Iduna, like Saliba a Papuan Tip Cluster language of Milne Bay Province. She states "[t]he prefixes -ai-

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[5]   *In Saliba, there seems to be no connection between these functions.*

and -au- occur with transitive verbs to indicate plurality or repetition of action and the object suffix is dropped." To illustrate, Huckett provides the following two examples (p. 84).[6] The verbs in (34a) and (35a) are transitive and carry an object suffix, those in (b) with the prefixes -au and -ai are intransitive. Huckett does not discuss whether the intransitive verbs may occur with a preceding object NP.

(34) a. *gi-hali-na*   b. *gi'-au-hali*
IDUNA   3SG-dig-3SG.O   3SG-??-dig
        'he dug a hole'   'he dug and dug holes'

(35) a. *gi-daka-na*   b. *gi'-ai-daka*
IDUNA   3SG-break.off-3SG.O   3SG-??-break.off
        'he broke one off'   'he broke off many'

As discussed above, plurality of object and repetition of action are also relevant criteria for derivations with the Saliba *kai*-prefix.

Saliba clauses which feature *kai*-verbs and lexical objects also resemble what has been called "noun stripping" in the literature (Miner 1986, 1989, Gerdts 1998). Gerdts (1998: 93) describes that "a 'stripped' noun does not have the usual case marking associated with its grammatical function". While Saliba does not have case marking, the lack of cross-referencing morphology on the verb suggests a similar status of the objects for clauses with feature *kai*-verbs and objects. Besides this, clauses with the *kai*-prefix bear some functional resemblance to other constructions such as noun incorporation (attested in Saliba itself) or antipassive constructions (attested cross-linguistically). I briefly discuss these in the following sections.

8.1.3.1 Similarity to noun incorporation

The detransitivizing effect of the *kai*-prefix functionally resembles that of noun incorporation. In Saliba, as well as cross-linguistically, incorporated objects are less prominent than non-incorporated objects, and they tend to be non-referential, non-specific, and indefinite. Similar features were discussed above for the objects of *kai-* verbs and the question arises as to how these constructions differ functionally. The main difference between these constructions lies in the syntactic freedom of the object. Objects of *kai*-verbs are morphologically and syntactically independent and can be modified (by a restricted set of modifiers), while

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[6]   *Huckett provides no morphemic breakdown for the examples. The given morpheme breaks are inferred from her discussion of these and other examples.*

incorporated object nouns are morphologically part of the verb and cannot take any modifiers. Thus, the functional difference between these constructions seems to be essentially a matter of degree of independence.

I am aware of only a single verb stem, the form *deuli* 'wash', which allows both constructions. With this stem the two constructions allow different objects.[7] Consider (36) and (37):

(36) a. *Ya-lao lulu ya-kai-deuli.*   b. * *Ya-lao ya-lulu-deuli.*
        1SG-go shirts 1SG-KAI-wash   1SG-go 1SG-shirt-wash
        'I go and wash shirts.'   'I go and shirt-wash.'

(37) a. * *Numa se-kai-deuli.*   b. *Se-numa-deuli.*
        house 3PL-KAI-wash   3PL-house-wash
        'They clean the house.'   'They house-clean.'

8.1.3.2 Similarity to antipassive

Besides the similarity to noun incorporation, the detransitivizing effect of the *kai-* prefix also resembles the functions of antipassive markers in ergative languages.[8] Givón (1984:162-64) lists among the properties of antipassive objects their tendency to be indefinite and plural, as well as less topical and less referential than other object nouns. As I have shown above, similar observations also hold for the objects of *kai-*verbs. Givón defines the antipassive as a "de-transitive voice" in which "[t]he agent is more topical than the patient, and the patient is extremely non-topical ('suppressed', 'demoted')." (Givón 1994:9). Heath (1976:202) considers the antipassive as a transformation by which a transitive object is deleted or demoted while the transitive subject becomes the surface intransitive subject. Although the term 'antipassive' was originally applied to constructions in ergative languages (cf. Silverstein 1972, 1976, Dixon 1976, 1979 among others), quite a number of authors have extended the use of the term to accusative languages (cf. Heath 1976, Postal 1977, Cooreman 1982, 1985, 1987, 1994, Givón 1984, 1994, Foley & Van Valin 1985, Lazard 1986, 1989).

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[7] *Only the object* kaleko *'cloth(es)' seems allowed in both constructions. Speakers' intuitions were not clear about a functional difference between the two sentences.*

(iii) a. *Ya-dobi kaleko ya-kai-deuli.*   b. *Ya-dobi ya-kaleko-deuli.*
        1SG-go.down clothes 1SG-KAI-wash   1SG-go.down 1SG-clothes-wash
        'I go down to do the laundry.'   'I go down to do the laundry.'

[8]   *Note that because of its backgrounding function some authors consider noun incorporation as a type of antipassive (e.g. Heath 1976: 202, Foley & Van Valin 1985: 343ff, Givón 1990: 626).*

Although the Saliba *kai*-prefix functionally resembles an antipassive marker, I do not suggest 'antipassive' as the general label for the prefix for a number of reasons. Primarily this is because antipassive markers are considered as marking a voice distinction and a voice alternation ideally applies to a larger part of the verbal lexicon, where as the *kai*-prefix is restricted to a relatively small number of verb roots and in this sense it is not a generally available construction to modify voice. Besides this, only the detransitivizing function of the *kai*-prefix is comparable to that of an antipassive marker but not the "play" function discussed below. In 8.2, I argue that the "play" function and the detransitivizing function are different but related functions of the same morpheme. Using the term 'antipassive' for both functions would be misleading.

8.2 "PLAY" FUNCTION

Derivation with the *kai*-prefix can also create a different type of intransitive verb stems which are typically translated as "VERB around", "play at VERBING" or "pretend to VERB". In many cases, speakers suggested that the activity expressed by the *kai*-verb would be performed by children in the context of playing. There are no text examples of this type of verb in the database but several examples were observed in spontaneous speech. These derivations differ formally from the derived verbs discussed in 8.1 in that the verb stem is obligatorily reduplicated. Consider the examples in (38) to (40).

(38)   *Se-kai-helo-heloi.*
        3PL-KAI-RED-run
        'They are running around (for fun, no particular goal or reason).'

(39)   *Wawaya-o   se-kai-kam-kamposi.*
        child-PL   3PL-KAI-RED-jump
        'The children are jumping (playing, jumping into the sea).'

(40)   *Kaiwa-ne   unai   wawaya-o se-kai-mwala-mwalae.*
        tree-DET   PP.SG   child-PL   3PL-KAI-RED-climb
        'The children are climbing around in the tree.'

The "play" or "pretend" semantics of the construction is determined by both the prefix and the reduplication of the stem. As opposed to the verbs discussed in 8.1, the verbs which take *kai* with this "play" semantics can never occur with a outer-core object. In (38) to (40), the input stems are intransitive, but there are also a few instances where the input is transitive. The intransitive *kai*-verb in (41) is derived from the transitive complex stem *tole-wadam* 'put-hide', 'hide (something)'.

(41) *Se-kai-tole-tole-wadam.*
3PL-KAI-RED-put-hide
'They are hiding things (as a game).'

Also noun stems can feature as input to the derivation. Like the verb stems above, the noun stems in (42) and (43) are reduplicated. The *kai*-verb in (42) is derived from the noun *waga* 'boat', the one in (43) is derived from the loan word *sitowa* 'store'. The verbs are again interpreted as indicating a "play" context. The reduplicated stems are not meaningful by themselves without the *kai*-prefix. The examples in (b) are ungrammatical. Also without reduplication they may not occur as verbal stems.

(42) a. *Se-kai-waga-waga.* b. * *Se-waga-waga.*
3PL-KAI-RED-boat   3PL-RED-boat
'They play with a toy boat.'

(43) a. *Se-kai-sito-sitowa.* b. * *Se-sito-sitowa.*
3PL-KAI-RED-store   3PL-RED-store
'They play store.'

In only a few attested cases, one and the same verb root can feature in both types of constructions with the *kai*-prefix. The root *unui* 'catch/kill' can take the prefix in the "play" function as in (44) but also with its detransitivizing function as in (45). The examples constitute a minimal pair which only differs in the reduplication of the verb stem. While in (44) the NP *wawayao* 'children' can only be the subject of the clause, in (45) it was interpreted as the (outer-core) object of the clause. This minimal pair clearly shows that reduplication plays a part in determining the semantics of the construction.

(44) *Wawaya-o se-kai-unu-unui.* (45) *Wawaya-o se-kai-unui.*
child-PL   3PL-KAI-RED-catch/kill   child-PL   3PL-KAI-catch/kill
'The children play catch.'   'They kill/catch children.'

I have suggested above that the detransitivizing function and the "play" function are two related functions of the same morpheme (rather than constituting two homophonous morphemes). There is clearly a connection between the detransitivizing and object-demoting effect of the prefix and the derived verbs with the "play" function. In both cases it is the activity itself that is highlighted rather than its purpose, or its effect on an object. The action is not goal-directed. Playing can be considered a prototypical instance of performing an activity for its own sake.

8.3 THE CLASSIFICATORY PREFIX *KAI-* 'BODY INVOLVED'

Besides the constructions discussed in 8.1 and 8.2, there is a third type of derivation involving a prefixed form *kai-*. This form can be described as a

classificatory prefix following Ezard (1978, 1991, 1992) and Bradshaw (1982) and was discussed briefly in chapter 5. In contrast to the two functions discussed in 8.1 and 8.2 which I attribute to a single morpheme, I consider this classificatory prefix a distinct homophonous morpheme. Crucially, many stems derived by this form are transitive while the derivations with the *kai*-prefix described above are always (morphologically) intransitive. The classificatory prefix *kai*- is not central to the topic of this thesis and for this reason I only present a very brief discussion here.

When the classificatory prefix *kai*- attaches to a verb stem, it adds the information that the activity or event involves the body and often specifically the body weight of the actor. In (46), the prefix attaches to the transitive stem *godu* 'break' deriving the stem *kai-godu* 'break with body weight' (which is still transitive).

(46)   *Pom   unai   ye-tu-tuli   ede   pom   ye-kai-godu-ø.*
            bench   PP.SG   3SG-RED-sit   PRSUP   bench   3SG-BODY.WEIGHT-break-3SG.O
            'He was sitting on the bench and the bench broke (under his weight).'

The verb *ye-godu-ø* 'he broke it' without the prefix implies that the activity is done with the hands rather than with the weight of the body. A further example of the classificatory prefix is given in (47). The verb is again transitive.

(47)   *Tebolo   ya-kai-piloi-ø.*
            table   1SG-BODY.WEIGHT-turn.over-3SG.O
            'I sat on (the edge of) the table and made it turn over.'

Prefixes which classify the activity expressed by the verb, for example as done by hand or foot or by biting, etc. are considered a typical feature of Papuan Tip Cluster languages (cf. Ezard 1978, 1991, 1992, Bradshaw 1982). Saliba does not seem to follow this pattern generally: the form *kai*- 'body weight involved' is the only classificatory prefix attested so far. Instead, the language is rich in complex verb constructions which cover similar functions as the classificatory prefixes in other Papuan Tip languages. In some cases, the Saliba prefix *kai*- stands in fact in a paradigmatic relation to verb stems which occur as V₁ of a complex verb as I show below. This is consistent with Bradshaw's (1982) suggestion that complex verb constructions ('verbal compounds' in his terms) are the source of classificatory prefixes. Consider the examples in (48): example (a) shows the classificatory prefix on the verb stem *kalatei* 'hold down'. The examples in (48b) to (d) on the other hand show complex verb constructions with V₁ expressing a manner or cause and *kalatei* 'hold down' occurring as V₂.

(48) a.   *Ya-kai-kalatei-ø.*   b.   *Ya-utu-kalatei-ø.*
          1SG-BODY.WEIGHT-hold.down-3SG.O   1SG-step-hold.down-3SG.O
          'I hold it down (with my body).'   'I hold it down stepping on it.'

c. *Ya-kabi-kalatei-ø.*
1SG-touch/make-hold.down-3SG.O
'I hold it down with my hands.'

d. *Ya-tuli-kalatei-ø.*
1SG-sit-hold.down-3SG.O
'I hold it down by sitting on it.'

The functional similarity between the classificatory prefix *kai* 'body involved' and the verb stems *utu* 'step', *kabi* 'touch/make' and *tuli* 'sit' in these constructions is striking. But note that there is no reason to consider *utu, kabi* and *tuli* as classificatory prefixes rather than as verb stems. First, these forms occur as independent verb stems, while the classificatory prefix never does, and second, the three verb stems are not allowed in combination with most of the other stems with which the classificatory prefix can combine (see also chap. 5).

There are a few cases where intransitive verbs are derived from noun stems by a prefix *kai-* but where it is semantically not evident whether it is an instance of the classificatory prefix or of the *kai*-prefix discussed in 8.1 and 8.2. Consider the examples in (49) to (52) with intransitive *kai*-verbs derived from the nouns *mahana* 'sun', *nawalai* 'moon', *nagali* 'sand', and *nabu* 'rain'.[9]

(49) *sinebada   hesau ... ye-kai-mahana   ye-tu-tuli*
old.woman   other   3SG-?-sun   3SG-RED-sit
'an old woman ... was sitting in the sun' (tbl16)

(50) *Se-kai-nava-navalai.*
3PL-?-RED-moon
'They sit/stand/walk in the moon light.'

(51) *Ye-kai-nagali.*
3SG-?-sand
'Her body is covered with sand.'

(52) *Ya-kai-nabu.*
1SG-?-rain
'I sit/stand/walk in the rain.'

There is some evidence suggesting that the *kai*-forms in (49) to (52) are instances of the classificatory prefix, namely that the *kai*-verbs in (49) to (52) can be causativized. Consider the verbs in (53) and (54).[10]

(53) *kabo   ka-he-kai-mahana-di   ye-pitali*
TAM   1EX-CAUS-KAI-sun-3PL.O/P   3SG-dry
'we put them in the sun so that it dries' (basket11)

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[9] *Speakers varied in the translation/explanation they gave for this form but all shared the view that the subject's body was exposed to and in contact with the sand.*

[10] *The semantics of the constructions in (49) to (52) do not clearly speak for one prefix or the other. But it can be noted that all of the examples describe the BODY of the subject being exposed to the entity denoted by the noun stem from which the verb is derived ('sun', 'moon', 'sand', 'rain'). This is at least compatible with the semantics of the classificatory prefix.*

(54)   *Wawaya   ya-he-kai-nabu-ø.*
         child   1SG-CAUS-KAI-ran-3SG.O
         'I carry the child through the rain.'

Causativization of verbs with the classificatory prefix *kai-* 'body involved' is allowed as shown in (55), while causativization of verbs which carry the detransitivizing *kai*-prefix is not attested.

(55)   *Ya-he-kai-kalatei-ø.*
         1SG-CAUS-BODY.WEIGHT-hold.down-3SG.O
         'I make it hold (s.th.) down (with its weight).'

8.4 SUMMARY

The *kai*-prefix can derive two different types of intransitive verb stems which were described in 8.1 and 8.2. In its detransitivizing function discussed in 8.1, the prefix derives intransitive verb stems from transitive or intransitive verb stems or from noun stems. Interestingly, the derived (morphologically) intransitive verbs may occur as the heads of transitive clauses where they are preceded by a lexical object. Many of the *kai-* verbs have a canonical object that is understood even if it is not expressed in the clause. The meaning of the derived verb stems is not considerably different from the semantics of the underived stems (with some exceptions) and, in this sense, the prefix has a grammatical function rather than a lexical meaning.

Clauses with *kai*-verbs typically refer to habitual activities or events. Several of the *kai*-stems are lexicalized and express habitual activities which are more specific than the corresponding transitive stems. As a consequence, compared to their transitive counterparts, *kai*-verbs only allow a more restricted choice of nouns as their objects. The discourse emphasis in clauses with *kai*-verbs lies in the activity expressed by the verb rather than in the object of the action. Verbs which carry the detransitivizing *kai*-prefix denote a type or class of activities rather than a particular instance of an action. Similarly, the objects of *kai*-verbs denote a class or type of nouns rather than picking out individual entities. Overall, the text examples show that clauses with *kai*-verbs are mostly objectless. In the cases where clauses do feature a lexical object, the NP tends to consist of a bare (unmodified) noun – this was the case for all text examples with lexical objects. The objects of *kai*-verbs may also be modified but they follow certain restrictions. Modifiers which promote the individuation of an object noun, such as numerals, singular marked adjectival forms, or the singular indefinite article *hesau* 'other', are generally rejected. Most crucially, the objects must allow a plural

interpretation. The detransitivizing function of the prefix shows some functional resemblance to noun incorporation and antipassivization, as well as to the To'aba'ita 'depatientive' marker (Lichtenberk 1991).

The second type of derivation with the prefix, described in 8.2, creates intransitive verbs that are typically translated as "VERB around", "play at VERBING" or "pretend to VERB". I have called this the "play" function of the prefix. In these derivations, the verb stem is reduplicated and the derived verbs can only occur in intransitive clauses. I have suggested that there is a connection between the detransitivizing and object-demoting effect discussed in 8.1, and the "play" function of the prefix: in both cases, it is the activity itself that is highlighted rather than the purpose of the activity or its effect on an object. Finally, for comparison, I have introduced the homophonous classificatory prefix *kai-* 'body involved' in 8.3, which does not affect the transitivity status of the input stem.

THE RESULTATIVE PREFIX *TA-*

Saliba has a prefix *ta-* which derives intransitive stems from transitive ones. The object of the transitive base verb functions as the subject of the derived intransitive verb. The derived stem expresses the state which results from the action denoted by its transitive counterpart, such as intransitive 'broken' from transitive 'break'. In this sense, derivation with the *ta-* prefix is the mirror image of causativization described in chapter 7. In contrast to many other Austronesian languages where a prefix *ta-* is a productive means of deriving intransitive verbs (see e.g. Schütz 1985, Woollams 1994, Bowden 1998, also Ross 1988), the Saliba prefix is a residual form which is only attested with seven stems in total. Five of these stems express some action of damage like English 'break', 'tear', 'bend'. The resultative prefix is the only derivation in Saliba which exclusively takes transitive stems as input. The fact that it is especially attested with 'break' verbs is in line with the findings of the studies by Nedjalkov (1969) and Haspelmath (1993), which show that, cross-linguistically, verbs such as 'break' are typically base transitives with their intransitive counterpart being derived.

The seven Saliba stems attested with the resultative prefix include *huhu* 'pluck', *soke* 'open', and *you* 'bend', as well as the four 'break' stems *godu* 'break', *kesi* 'break', *pulisi* 'tear', and *utusi* 'break'. The 'break' stems differ among each other mainly in the kind of objects that the action may involve.[1] Table 1 summarizes the semantic differences between these stems.

kesi 'break'	*ta-kesi* 'broken'	of thin rigid objects like: clay pots, wooden plates, glass, china wear, plastic, …
godu 'break'	*ta-godu* 'broken'	of long rigid objects like: sticks, plants, table legs, pencils, rulers, metal pipes, also body parts like arms and legs, …
utusi 'break'	*ta-utusi* 'broken'	of string-like objects like: vines, strings, necklaces, wire, cable, rubber bands, … also metaphorical: advice
pulisi 'tear'	*ta-pulisi* 'torn'	of thin, soft, flexible objects like: fabric, coconut husk, banana leafs, mats, paper, plastic bags, …

Table 1   *Semantic differences of 'break' stems*

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[1]   *It is in fact unclear whether the differences refer to the involved objects or rather to the manner of the breaking event.*

Examples with the four 'break' stems are presented in (1) to (4). The examples in (a) show the simplex transitive stems, those in (b) the intransitive stems with the *ta*-prefix (the argument NPs are as always optional).

(1) a. *Galasi ya-kesi-ø.*   b. *Galasi ye-ta-kesi.*
          glass   1SG-break-3SG.O   glass   3SG-RESULT-break
          'I broke the glass.'   'The glass is broken.'

(2) a. *Kaikaiwa ya-godu-ø.*   b. *Kaikaiwa ye-ta-godu.*
          stick   1SG-break-3SG.O   stick   3SG-RESULT-break
          'I broke the stick.'   'The stick is broken.'

(3) a. *Pilipou ya-pulisi-ø.*   b. *Pilipou ye-ta-pulisi.*
          trousers 1SG-tear-3SG.O   trousers 3SG-RESULT-tear
          'I tore the trousers.'   'The trousers are torn.' (nb5:74)

(4) a. *Maina-wa ku-utusi-ø.*   b. *Maina-wa ye-ta-utusi.*
          string-PM   2SG-break-3SG.O   string-PM   3SG-RESULT-break
          'You broke the string.'   'The string is broken.'

Note that examples (1a) to (4a) are elicited and are considered slightly marked by speakers. It is more natural for the transitive 'break' stems to occur as the second stem in complex verbs, preceded by a verb stem specifying the cause of the 'breaking' event as in the text examples in (5) and (6).

(5) *ye-koi-kesi-di*   (6) *ye-naba-utusi-ø*
      3SG-hit-break-3PL.O/P   3SG-cut.over-break-3SG.O
      'he hit (and) broke them' (tbl2:17)   'he cut through it' (yam13)

While the underived transitive 'break' stems express activities and cannot occur as nominal modifiers, the detransitivized stems express states and may occur in this function (cf. chap. 4.2.1). Consider example (7):

(7) *Tabu   kaputi   tago-ta-godu-na   ku-mose-i-ø!*
      PRHIB   cup   RED-RESULT-break-3SG.P 2SG-give-APP-3SG.O
      'Don't give him the broken cup!' (nb5:69)

It appears that all seven verb stems which allow the *ta*- prefix are based on bivalent roots.[2] As simplex stems they are transitive and cannot have active intransitive ('unergative') interpretations as shown in (8).

(8) a. *Ye-utusi-ø.*   b. * *Ye-utusi.*
          3SG-break-3SG.O   3SG-break
          'He broke it.'   'It broke.'

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[2]   *There is one problem with the classification as bivalent: some of the roots may occur in intransitive complex verbs without carrying the detransitivizing ta- prefix as in ye-talu-kesi 'it land-broke.' (but * ye-talu-kesi-ø 'he land-broke-it'). This would rather suggest a classification of the roots as labile. Further analysis of such complex verbs will be necessary for a definitive classification.*

Examples with the three remaining stems *huhu* 'pluck', *soke* 'open', and *you* 'bend' are presented in (9) to (11).

(9)   a.   *Ayaini ya-you-ø.*
            iron   1SG-bend-3SG.O
            'I bent the metal.'

       b.   *Ayaini ye-ta-you.*
            iron   3SG-RESULT-bend
            'The metal is bent.'

(10) a.   *Keda   ku-soke-ø!*
            door   2SG-open-3SG.O
            'Open the door!'

       b.   *Keda   ye-ta-soke.*
            door   3SG-RESULT-open
            'The door is open.'

(11) a.   *Kawa-gu ya-huhu-ø.*
            tooth-1SG.P   1SG-pluck-3SG.O
            'I took my tooth out.'

       b.   *Kawa-gu se-ta-huhu.*
            tooth-1SG.P   3PL-RESULT-pluck
            'My teeth have fallen out.'

Note that the transitive stem *huhu* 'pluck' in (11a) most commonly occurs with the object nouns *sada* 'betelnut' or *niu* 'coconut' and that neither of these two nouns may occur as the subject of the derived intransitive *ta*-stem. Consider (12):

(12) a.   *Sada   se-huhu-ø.*
            betelnut   3PL-pluck-3SG.O
            'They plucked betelnuts.'

       b. * *Sada   ye-ta-huhu.*
            betelnut   3SG-RESULT-pluck
            'The betelnut is plucked.'

It seems that only nouns which are sanctioned as the subjects of the derived intransitive stem are *kulu* 'head/hair' and *kawa* 'mouth/tooth' in (11b) above. An explanation might lie in the fact that, with these nouns, but not with *sada* 'betelnut' or *niu* 'coconut', the verb implies a post-action result.

NOUN INCORPORATION

Saliba shows two patterns of noun incorporation, which follow the patterns described as type I and II in Mithun's (1984) typology of incorporation. In both types of constructions, a noun is morphologically incorporated into the verb and, as a consequence, it is semantically backgrounded and loses its syntactic independence. This section provides a brief overview, the constructions are discussed in more detail in sections 10.2 and 10.3.

In Saliba type I incorporation (lexical compounding), the incorporated noun has the function of specifying the activity expressed by the verb stem and it generally corresponds to the object argument in a corresponding analytic clause. The incorporating base verb is typically transitive and becomes morphologically intransitive through the incorporation of the noun (although also intransitive base verbs can incorporate, cf. 10.2.2). The base verb stem and the incorporated noun stem together build a morphologically complex verb stem which takes a single set of inflectional morphology. There are two possibilities for the internal ordering of stems in Saliba type I incorporation: N-V or V-N. The order of stems is, however, not free. N-V incorporation is the more common and productive type and V-N incorporation is restricted to a small number of verb stems (see 10.2.1).

Two examples are presented in (1) and (2). The clauses in (a) show the corresponding analytic constructions with the noun as an independent word preceding the verb in object position. The clauses in (b) show the nouns incorporated into the verb. Note the different internal order of stems in (1b) vs. (2b).

(1) a. *Koya* *se-tudai-ø.*   b. *Se-koya-tudai.*
         garden 3PL-dig-3SG.O   3PL-garden-dig
         'They dig a garden.'   'They garden-dig.'

(2) a. *Numa* *se-kabi-ø.*   b. *Se-kabi-numa.*
         house 3PL-touch-3SG.O   3PL-touch-house
         'They build a house.'   'They house-built.'

In Saliba type II incorporation, the incorporated noun generally corresponds to a possessed subject argument in an analytic clause. This type of incorporation constitutes a form of "external possession" construction (discussed in 10.3) The base verb in these constructions is typically intransitive and the class of nouns that

can be incorporated is restricted to person-part terms (which, when not incorporated, must be inalienably possessed). The internal ordering in Saliba type II incorporation is invariably N-V. The corresponding analytic clauses show an inalienably possessed as the subject as in (3a). In the incorporation constructions, the person-part term is incorporated and the possessor participant is expressed as the subject of the incorporating verb as in (3b).

(3) a. *Kulu-gu   ye-kamkamna.*   b. *Ya-kulu-kamkamna.*
         head-1SG.P 3SG-hurt   1SG-head-hurt
         'My head hurts.'   'I have a headache.'

As in type I incorporation, the base verb stem and the incorporated noun build a single morphologically complex verb stem. In contrast to type I incorporation, the transitivity status of the verb does not change through this process of incorporation. Both the base verbs and the incorporation constructions are generally intransitive (unless they are causativized, cf. 10.3.1).

The term 'noun incorporation' has been used in the literature in a rather heterogeneous way and the suggested definitions differ as to what constitutes an instance of noun incorporation. I propose a rather narrow and structurally-based definition here which distinguishes incorporation, on the one hand from other constructions that involve the backgrounding of nouns, and, on the other hand, from constructions in which a noun is merely verbalized. The definition is intended to provide a firm basis for cross-linguistic comparison.

According to this definition, a noun is considered incorporated only if it is morphologically part of the verb and has no morpho-syntactically independent status (i.e. it is similar to the verb stems in complex verb constructions, cf. chap. 5 and the complex verb test in 10.1.4). This is to say that not every noun which is marked in some ways as backgrounded, non-specific, or non-referential is considered an instance of incorporation. The definition excludes constructions where the noun is not in fact morphologically incorporated in to the verb. Such constructions have at times been considered as incorporation in the literature, such as the Mayan examples discussed by Mithun (1984: 852) but more appropriately they can be described as 'noun stripping' (Miner 1986, 1989, Gerdts 1998).

> ... a "stripped" noun does not have the usual case marking associated with its grammatical function. ... Noun stripping differs from incorporation. however. Incorporation is morphological: the two elements involved are part of the same word in surface structure. In noun stripping, the two elements remain as separate words according to phonological criteria ... (Gerdts 1998: 93)

As a result, the proposed definition allows us to distinguish between true morphological incorporation and instances of intransitive verbs with non-specific objects discussed for Oceanic languages (cf. Sugita 1973, Pawley 1986, among others) For Saliba the definition allows to distinguish between incorporation and what I have called discord constructions (chaps. 3, 12), whose objects share features of incorporated nouns but are phonologically and morpho-syntactically independent words.[1] While Sugita's (1973) study suggests that Oceanic languages either have noun incorporation or clauses with discord ('semi-transitive verbs' in his terms), Saliba clearly shows both types of constructions.[2]

On the other hand, a noun is considered incorporated only if it combines with a full verbal lexeme rather than with an auxiliary-like verbalizing affix. The boundary between incorporation and derivation of "denominal verbs" (Mithun 1986, Sadock 1986, Gerdts 1998) may of course be fluid since the first can serve as the source construction from which the latter grammaticalizes. But there are certain criteria which allow one to distinguish between such constructions: verbalizing affixes are typically part of a paradigm with only a few members, while productive noun incorporation generally applies to a larger number of verbs. Semantically, verbalizing affixes typically have meanings like 'do', 'be' or 'have'– if any semantics can be attributed to them beyond the verbalizing function itself. Incorporating verbs, in contrast, can show the full range of verbal semantics. As a rule of thumb, in incorporation constructions, the noun tends to semantically specify the verb, rather than merely being verbalized itself.[3] This part of the definition excludes another type of construction that has been described as noun incorporation in the literature, such as the Greenlandic examples discussed by Sadock (1986).

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[1]   *Saliba discord constructions can probably be analyzed as cases of noun stripping but note that in contrast to Gerdts' definition there is no case marking in Saliba.*

[2]   *Similarly, Miner (1986) argues that noun stripping and incorporation are two distinct processes since both exist in Zuni.*

[3]   *In Saliba, the strict criterion can be applied that a construction is an instance of incorporation only if the incorporating/verbalizing element can also occur as an independent verb stem. However, cross-linguistically, such a criterion is clearly too narrow, as it would exclude constructions with verbs that incorporate obligatorily, as attested for example in Iroquoian languages (Woodbury 1975, Mithun 1984, 1986, Mithun & Corbett to appear).*

Having framed and defined the notion of incorporation and clarified how the term is applied here, I now turn to discuss the different types of noun incorporation in Saliba. The chapter is structured as follows: In 10.1 I introduce a number of morpho-syntactic tests by which noun incorporation can be identified in Saliba. Section 10.2 discusses type I incorporation, section 10.3 discusses type II incorporation (external-possessor constructions). Section 10.4 is concerned with a transitional type of incorporation construction which shares features with both type I and type II. In 10.5 I review Saliba evidence for a syntactic vs. lexical account of incorporation. A summary of the chapter is provided in 10.6.

10.1 MORPHO-SYNTACTIC TESTS

Saliba has hardly any phonological processes which take place word-internally but not across word boundaries. Also in terms of stress pattern and intonation there is no generalized distinction between elements which are morphologically bound and those which are syntactically combined in connected speech. Therefore, phonological evidence cannot easily establish that incorporation constructions constitute single words (but phonological evidence does not speak against this in any way either!). It is on the basis of bound morphology that Saliba incorporation constructions can be identified as single morphological units. The combination of noun stem and verb stem clearly constitutes a single morphologically complex verb stem which takes a single set of inflectional affixes. Incorporation constructions build grammatical words and neither part can occur independently. In this section, I discuss a number of tests which demonstrate this dependent and morphologically bound status of the incorporated noun stem. The tests show that incorporated nouns are morphologically part of the verb and are not morpho-syntactically independent. For N-V incorporation where the noun stem precedes the verb, the incorporated status of the noun is immediately obvious from its position between the obligatory subject prefix and the verb stem, that is, inside the inflected verb. Except for certain verbal prefixes (cf. chaps. 7 and 8), no other elements can occur in this position. Besides the verb-internal position of the noun, there are further features which distinguish them from their counterparts in analytic constructions. This can be shown by a number of the morpho-syntactic tests discussed below. The incorporated status of nouns in constructions with V-N ordering is less immediately obvious since the noun appears at the end of the verb and there are no obligatory suffixes following. In principle, the noun in V-N type incorporation could be a morphologically independent element rather than part of the inflected verb as discussed in 10.1.6. There are several morphological tests

which show that this is not the case. Some of the tests introduced below apply to both N-V and V-N constructions while others are useful specifically to one of the two types of compounds. An overview of the tests and their functions is presented in 10.1.7.

10.1.1 REDUPLICATION TEST

Reduplication for the progressive aspect provides a test which applies only to incorporation with N-V ordering. The reduplication test demonstrates that the incorporated noun behaves morphologically as part of the verb stem. In Saliba, the progressive aspect is expressed by reduplication of the first two syllables of the verb stem. In incorporation with N-V order, the incorporated noun stem reduplicates instead of the verb stem. The analytic construction in (4a) shows the verb *kuli* 'write' reduplicated for progressive aspect. In (4b), which stems from spontaneous speech, the verb incorporates the loan word *leta* 'letter' and it is the incorporated noun which reduplicates to express the progressive aspect rather than the verb stem.

(4) a.   *Leta ye-kuli-kuli-ø.*   b.   *Sinebada ye-leta-leta-kuli.*
          letter 3SG-RED-write-3SG.O   old.woman 3SG-RED-letter-write
          'She was writing a letter.'   'The woman was letter writing.' (f:j/d)

Example (5a) shows the incorporated noun *niu* 'coconut' reduplicated for progressive aspect. The form in (5b), where the incorporating verb stem *pulisi* 'husk' is reduplicated rather than the preceding noun stem, is ungrammatical

(5) a.   *Se-niu-niu-pulisi.*   b. * *Se-niu-puli-pulisi.*
          3PL-RED-coconut-husk   3PL-coconut-RED-husk
          'They were coconut husking.'   'They were coconut husking.'

10.1.2 MODIFIER TEST

As cross-linguistically common, Saliba incorporated nouns cannot take modifiers. Modifiers can neither occur immediately adjacent to the noun stem nor can they be stranded preceding or following the verb. Example (6a) shows a lexical NP in the regular object position preceding the inflected verb.[3] The NP consists of the noun *niu* 'coconut' and the determiner *-ne*. In (6b) the bare noun is incorporated into the verb. The incorporated object cannot carry the determiner clitic since it is morphologically part of the verb. Example (c) where the clitic occurs on the

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[3]   *The determiner clitic is not obligatory.*

incorporated noun is ungrammatical.[5]

(6) a.   *Niu-ne   se-yaga-di.*   b.   *Se-niu-yaga.*
          coconut-DET   3PL-scrape-3PL.O   3PL-coconut-scrape
          'They scraped the coconuts.'   'They coconut-scraped.'

     c. * *Se-niu-ne-yaga.*
           3PL-coconut-DET-scrape
           'They scraped the coconuts.'

Example (7a) shows a clause with the independent object *ti* 'tea' preceding the inflected verb with the stem *numa* 'drink'. In (7b) the noun is incorporated to form the compound stem 'tea-drink'. (For discussion of the semantic/pragmatic status of the incorporated nouns see 10.2.3.)

(7) a.   *Ti se-numa.*   b.   *Se-ti-numa.*
          tea 3PL-drink   3PL-tea-drink
          'They drank tea.'   'They tea-drank.'

In (8a) the preverbal object *ti* 'tea' is modified by the attribute *gigibwali-na* 'hot (sg)'. When it is incorporated, the noun cannot be followed by the modifier as shown in (8b), and neither can the modifier occur stranded outside the verb as shown in (c) and (d). The only sanctioned form of incorporation is the one involving the bare noun as in (7b).

(8) a.   *Ti   gigibwali-na se-numa.*   b. * *Se-ti-gigibwali-na-numa.*
          tea   hot-3SG.P   3PL-drink   3PL-tea-hot-3SG.P-drink
          'They drank hot tea.' (NB5:42)   'They drank hot tea.'

     c. * *Gigibwali-na   se-ti-numa.*   d. * *Se-ti-numa   gigibwali-na.*
           hot-3SG.P   3PL-tea-drink   3PL-tea-drink   hot-3SG.P
           'They drank hot tea.'   'They drank hot tea.'

The modifier test also holds for V-N type incorporation as shown in (9a) where the noun *puwaka* 'pig' is incorporated into verb stem *kai* 'eat'. Examples where the noun is followed by a adjectival form or a numeral are ungrammatical as indicated by (b) and (c).

(9) a.   *Se-kai-puwaka.*   b. * *Se-kai   puwaka   laki-laki-di.*
          3PL-eat-pig   3PL-eat   pig   RED-big-3PL.O/P
          'They ate pork.'   'They ate big pigs.'

     c. * *Se-kai   puwaka   labui.*
           3PL-eat   pig   two
           'They ate two pigs.'

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[5]   *Strictly speaking, the example does not directly demonstrate whether the determiner cannot occur due to a morphological restriction or due to the backgrounded nature of the reference such that it can't take definite reference. However, the incorporated nouns cannot take modifiers of any kind independent of their function.*

A similar test involves inalienably possessed nouns which, in analytic constructions, may not occur without a suffix indicating the possessor. Only when it is incorporated as in (10b) can an (and must) inalienable body part such as *kawa* 'mouth/teeth' occur without the possessor suffix. The construction with the bare noun in the analytic construction in (c) is ungrammatical.

(10) a.   *Kawa-gu   ya-deuli-ø.*   b.   *Ya-kawa-deuli.*
          mouth-1SG.P 1SG-wash-3SG.O   1SG-tooth-wash
          'I brushed my teeth.'   'I-tooth-brushed.'

     c.   * *Kawa ya-deuli-ø.*
          mouth   1SG-wash-3SG.O
          'I brushed teeth.'

Incorporated objects cannot be modified by possessive classifiers either. The preverbal object NP in (11a) consists of the noun *ti* 'tea' plus the preceding possessive classifier *kadi* 'their'. The example in (b) shows that the possessive classifier cannot precede the noun when it is incorporated into the verb.

(11) a.   *Ka-di   ti se-numa.*   b.   * *Se-ka-di-ti-numa.*
          CL2-3PL.P tea 3PL-drink   3PL-CL2-3PL.P-tea-drink
          'They drank their tea.'   'They drank their tea.'

Example (12a) shows V-N type incorporation with the noun *kabole* 'sago' and the verb stem *kabi* 'touch/make'. A possessive classifier which intervenes between the verb stem and the noun renders the construction ungrammatical.

(12) a.   *Se-kabi-kabole.*   b.   * *Se-kabi ka-di   kabole.*
          3PL-touch-sago   3PL-touch CL2-3PL.O/P sago
          'They make sago.'   'They make their sago.'

As opposed to adjectives and other modifiers, possessive classifiers (with their pronominal suffixes) can however appear immediately preceding the incorporating verb as in (13).

(13)   *Ka-da   ye-niu-mwalae.*
          CL2-1INC.P   3SG-coconut-climb
          'He coconut-climbs for us.'

At first glance, it might appear that the possessive classifier modifies the incorporated nominal in such constructions. But as discussed in detail in chapter 14, possessive classifiers (with their pronominal suffix) cannot only express possession but also benefaction. In benefactive constructions. the classifier has the syntactic status of an adjunct and may occur preceding an intransitive verb without a possessed nominal as in (14). In this example, the classifier *kadi* 'their' precedes an intransitive verb with the complex stem *lao-liga* 'cook'. (Note that this stem is always intransitive and can never take an object suffix, the corresponding transitive form is the simplex stem *liga* 'cook').

(14) *Ka-di   ya-lao-liga.*
CL1-3PL.P 1SG-go-cook
'I cook for them.' (lit. 'Theirs I do the cooking.')

Examples of this type clearly show that the classifier in (13) does not modify the incorporated noun but introduces a beneficiary of the expressed activity. For further discussion of the benefactive constructions cf. chapter 14.

10.1.3 NOMINALIZATION TEST

In the nominalization test, which applies to both N-V and V-N constructions, the compound verb stem as a unit is nominalized by a possessive classifier, by the morpheme *tau* 'man/person', or by *kaba* 'place'. The incorporating stem *niu-pulisi* 'coconut-husk' in (15a) is nominalized in (b) by a preceding possessive classifier. Parallel to the nominalization of simplex verb stems, the subject prefix is dropped and the classifier directly precedes the compound stem.

(15) a. *Ka-niu-pulisi.*   b. *Yo-ma   niu-pulisi.*
         1EX-coconut-husk   CL1-1EX.P coconut-husk
         'We coconut-husked.'   'Our coconut husking.'

In (16) the compound *kabi-kabole* 'make-sago' is nominalized in the same way. The nominalized stem acts as the subject of the sentence.

(16) *Wau   yo-da   kabi-kabole ye-namwa kalili.*
      now/today CL1-1INC.P touch-sago   3SG-good very
      'Our sago making today was very good.'

The noun *tau* 'man/person' derives agent nouns form verbs (cf. chap. 4). Parallel to the nominalization of simplex verbs, the subject prefix of the compound verb stem is dropped as *tau* is added to the construction.

(17) *Tau   niu-pulisi se-dahalai-ko.*
      man/person coconut-husk 3PL-leave-PERF
      'The coconut huskers left already.'

(18) *Tau   kabi-kabole se-lage.*
      man/person touch-sago   3PL-arrive
      'The sago makers arrive.'

The stem *kaba* 'place' derives a noun denoting a location where the activity expressed by the nominalized verb stem takes place.

(19) *Yo-ma   kaba   niu-pulisi   ede   teina.*
      CL1-1EX.P place coconut-husk PRSUP   PROX.DEM
      'This is where we husk coconuts.' (lit. 'This is our coconut-husking place.')

The nominalization test shows that the verb stem and its incorporated noun behave like a morphological unit and a semantically unitary concept.

10.1.4 COMPLEX-VERB TEST

Further proof that the compound verb stems which result from noun incorporation form a morphological unit is provided by the fact that these stems in turn can feature in complex verbs. In chapter 5, I have analyzed complex-verb constructions as nuclear-layer verb serialization. The incorporating stem may occur in the V_1 slot and can be followed by a V_4 stem or by the stem *sagu-i* 'help'.[6] In the case of N-V type incorporation, the complex-verb test, similar to the nominalization test, simply shows that the compound stem acts like a single unit. An example is given in (20), which is taken from spontaneous speech. The compound stem *niu-tutu* 'coconut-pound' occupies the V_1 slot of the construction followed by *sagu-i* 'help'.

(20)   *Eso   ya-niu-tutu-sagu-i-ø.*
       Name 1SG-coconut-hit/break-help-APP-3SG.O
       'I help Eso to pound coconuts.'

In the case of V-N incorporation, the test verifies that the noun is in fact part of the verb stem rather than occupying a position following the inflected verb. The noun stem occurs in a position where no other morpheme is sanctioned except for another verb stem (potentially also the causative or resultative prefix). The compound stem counts as a V_1 and builds a single complex stem with the following V_4 stem and the whole construction shares but a single set of pronominal affixes. Consider the examples in (21) and (22) with the verb stems *gehe* 'finished' and *uyo* 'back/again' as V_4. In the examples in (a), they form a complex verb stem with the preceding compound *kabi-kabole* 'make-sago' in the V_1 slot. In (21b) and (22b) the V_4 stem immediately follows the verb stem *kabi* 'touch/make' separating it from the incorporated noun. These examples were considered ungrammatical by Saliba speakers.

(21) a.   *Se-kabi-kabole-gehe.*   b. *   *Se-kabi-gehe   kabole.*
          3PL-touch-sago-finished   3PL-touch-finished sago
          'They finished making sago.'

(22) a.   *Se-kabi-kabole-uyo.*   b. *   *Se-kabi-uyo   kabole.*
          3PL-touch-sago-back/again   3PL-touch-back/again sago
          'They made sago again.'

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[6]   *The fact that V_3 stems are not attested with incorporation can be attributed to semantic incomparability of incorporation constructions with directional verbs (cf. chap. 5)*

10.1.5 -*KO*-SUFFIX TEST

The -*ko* suffix test is most useful to V-N type incorporation because, like the complex verb test, it shows that the noun stem is part of the inflected verb rather than occupying a position following it. The perfective suffix -*ko* marks the final word boundary of the verb. In cases of V-N incorporation the suffix does not attach directly to the verb stem but to the incorporated noun. (23a) gives an example of this while (23b) demonstrates that the suffix cannot intervene between the verb stem *kabi* 'touch/make' and the noun stem *maketi* 'market'. (23c) show the corresponding analytic example with a preceding object NP.

(23) a.   *Se-kabi-maketi-ko.*   b. *   *Se-kabi-ko*   *maketi.*
        3PL-touch-market-PERF   3PL-touch-PERF   market
        'They already prepared their
        market goods.'

     c.   *Yo-di*   *maketi*   *se-kabi-ya-ko.*[7]
        CL1-3PL.O/P   market   3PL-touch-3SG.O-PERF
        'They already prepared their market goods.'

10.1.6 POST-VERBAL COMPLEMENTS VS. V-N INCORPORATION

Even though Saliba SOV word order is rather rigid, a noun's position following the verb stem is not sufficient proof for its incorporated status. There are a few constructions in which a noun occurs in post-verbal position without being incorporated into the verb. The verb stems *henuwa* 'like', *gado* 'want', and *hemala* 'become' differ from other verbal lexemes in allowing, or requiring, objects to occur in this position. These constructions are not instances of incorporation since they do not form a single unit with the verb and show more syntactic independence than the nouns in incorporation constructions. Consider the sentences in (24) to (28) below which show verbs that are followed by a lexical object. The examples in (a) resemble V-N incorporation but, as shown in (b), according to modifier test they are not incorporation constructions. In (24a) the verb stem *henuwa* 'want/like' is immediately followed by the object *ti*. In sentence (b), the possessive classifier *kadi* 'their' which modifies the post-verbal noun intervenes between the verb and the noun stem. This demonstrates that the verb and its object do not form a single grammatical word and that the noun is not incorporated.

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[7]   *This is a constructed example which has not been checked with a Saliba speaker yet.*

(24) a.   *Se-henuwa-ø*[8] *ti.*   b.   *Se-henuwa   ka-di   ti.*
      3PL-like-3SG.O? tea   3PL-like   CL2-3PL.P tea
      'They want tea.'   'They want their tea.'

Similarly, in (25a) the stem *gado* 'want' is followed by the object *simsim* 'watermelon'. As opposed to *henuwa* 'want/like' which allows object nouns to precede or follow, *gado* 'want' allows objects in postverbal position only. In (25b) the object is modified by the preceding demonstrative *teina* 'this'. This indicates that the verb and the noun stem do not build a single grammatical word, and I do not consider the construction to constitute noun incorporation.

(25) a.   *Se-gado   simsim.*   b.   *Se-gado   teina   simsim.*
      3PL-want   watermelon   3PL-want   PROX.DEM watermelon
      'They want watermelon.'   'They want this watermelon.'

The constructions in (24) and (25) can possibly be analyzed as reduced complement clauses. Complement clauses generally follow the verb and, in all cases, the nouns following *henuwa* 'like/want' and *gado* 'want' can be extended to full complement clauses. Consider the examples in (26) and (27) where the verbs may or may not be followed by the particle *bena* which seems to function as a complementizer in such constructions.

(26)   *Se-gado   (bena)   ti   se-numa-ø.*
         3PL-want   OBLI/COMP tea   3PL-drink-3SG.O
         'They want to drink tea.'

(27)   *Se-henuwa   (bena)   ti   se-numa-ø.*
         3PL-like   OBLI/COMP tea   3PL-drink-3SG.O
         'They want to drink tea.'

Like *gado* 'want', the stem *hemala* 'become' allows objects only postverbally but not in the canonical object position preceding the verb. In (28a) the verb is followed by the place name *Kwatou*. As demonstrated in (28b), the construction fails the modifier test, i.e. unlike incorporated nouns, the object following *hemala* 'become' can be modified. The example shows the postverbal object *Kwatou* as the possessor in the construction *Kwatou tauna* 'Kwato man'.

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[8]   *Note that none of the morphological transitivity tests discussed in chap. 3 can clarify whether or not* henua *'like' carries a zero object suffix when it is followed by a noun, NP or complement clause. No overt object suffix (e.g. third person, plural) is allowed in such constructions and none of the other tests apply. The same holds for constructions with* gado *'want' and* hemala *'become'. For simplicity, I write these forms without an object suffix in the following even though the absence of an object suffix has not been established beyond doubt yet.*

(28) a.　*Ya-hemala　Kwatou.* b.　*Ya-hemala　Kwatou　tau-na.*
　　　　1SG-become　Place.Name　　　　1SG-become　Place.Name man-3SG.P
　　　　'I became Kwato.'　　　　　　　'I became a Kwato man.'

10.1.7 OVERVIEW OF MORPHOLOGICAL TESTS

In the preceding sections above, I have discussed several ways of proving a noun's incorporated status. Table 1 summarizes the tests and their results. Note that if a noun classifies as incorporated by one test it will classify as incorporated by all the applicable tests, i.e. generally, all tests give the same result about the status of a construction.

TEST	DESCRIPTION	FUNCTION	MOST USEFUL FOR
Reduplication test	N reduplicates instead of V.	shows morphologically bound status of N	N-V
Modifier test	N cannot take modifiers.	shows morphologically bound status of N	N-V and V-N
Nominalization test	N and V are nominalized as a unit.	shows morphological and semantic unit of V and N	N-V and V-N
Complex verb test	$V_{_j}$ or *sagu-i* 'help' attaches to N not to V.	shows morphologically bound status of N	(N-V), V-N
-ko suffix test	suffix attaches to N rather than to V.	shows morphologically bound status of N	V-N

Table 1　*Morphological tests for noun incorporation*

Having laid out the morphological tests to identify noun incorporation in Saliba, I now turn to a more detailed discussion of the constructions. Section 10.2 introduces Saliba cases of Mithun's type I incorporation, sections 10.3 is concerned with the Saliba incorporation constructions of Mithun's type II.

10.2 TYPE I: LEXICAL COMPOUNDING

In incorporation constructions which Mithun (1984) describes as type I or "lexical compounding", a noun stem and a verb stem are compounded to build a new lexical item which functions as a verb stem. The basic semantic/pragmatic condition for the creation of such compounds is that a noun stem and a verb stem together constitute what Mithun (1984: 848) considers a "recognizable, unitary concept" in the language. Within type I incorporation, Mithun (1984) distinguishes between morphological compounding and composition by mere juxtaposition. She discusses a number of Oceanic languages as examples of compounding by

juxtaposition. In contrast to these, noun incorporation in Saliba exhibits the characteristics of morphological compounding. But, as opposed to other languages with morphological compounding, there are no word-internal processes that could identify incorporation constructions as single units on phonological grounds. Rather, Saliba incorporation constructions are identified as single units on the basis of bound morphology. The morphologically dependent status and the fact that incorporated nouns, in contrast to their analytic counterparts, cannot take any modifiers was discussed in detail in 10.1. Besides this, an incorporated noun cannot be cross-referenced by a pronominal affix on the incorporating verb. The compound verb is generally intransitive, as discussed in 10.2.2, and takes as its only argument the subject, expressed by the prefix.

Type I incorporation is a productive process in Saliba as can be seen in the fact that loan words may be incorporated and that relatively novel activities may be expressed by incorporation constructions. Both of these points are illustrated in (4) above (repeated here as (29)) with the English loan *leta* 'letter', as well as in (30) where the loan *gita* 'guitar' is incorporated.

(29)	*Sinebada*	*ye-leta-leta-kuli.*	(30)	*Se-koi-gita.*
	old.woman	3SG-RED-letter-write		3PL-hit/cut-guitar
		'The woman was letter writing.'		'They played guitar.'

In most cases, the compounds are semantically transparent and the rough meaning of the constructions can be predicted from its parts. However, there is a tendency for lexicalization of incorporation constructions in the sense that they tend to acquire a more specialized meaning than the corresponding analytic constructions (see 10.2.3.2). In many respects, Saliba noun incorporation follows the cross-linguistically most common and well attested patterns as discussed in 10.2.3. There is however one typologically uncommon structural feature which makes the Saliba constructions particularly interesting: the fact that there are two distinct patterns of incorporation which differ in the position into which a noun may be incorporated. These two patterns may contribute new evidence to the ongoing discussion of noun incorporation in the literature as lexical vs. syntactic. Section 10.2.1 discusses the difference between these constructions.

10.2.1 N-V VS. V-N INCORPORATION

As stated earlier, Saliba type I incorporation is attested with two different internal structures and the ordering of stems within the compound may be N-V or V-N. I will call these positions pre-nuclear vs. post-nuclear, reflecting the noun's position with respect to the verb stem. Most incorporating verbs allow only one of the two

orderings and a noun stem may be incorporated either preceding or following the verb stem. Incorporation into the pre-nuclear slot is attested with a larger number of verb roots, but examples of post-nuclear incorporation are quite common in that it occurs especially with high-frequency verb roots. Just a few verb stems allow both constructions and in this case the different order of stems may or may not result in a difference in meaning.

Overall, the same semantic and pragmatic constraints apply to both N-V and V-N constructions: the incorporated nouns are patients and they specify and narrow the scope of the expressed activity. The structural difference is an idiosyncratic feature of certain verb roots which is not semantically or grammatically predictable and which has to be learned for each individual verbal lexeme, just like the fact whether a root allows incorporation at all. Only seven verb roots are so far attested which may incorporate a noun stem into the post-nuclear position. They do not seem to constitute a formal or semantic class but the stems share that they are high-frequency lexical items. The list of roots is given in (31).[9]

(31)	*he-kai*	'feed (CAUS-eat)'
	kabi	'touch, reach, make'
	kai	'eat'
	kaibwada	'ask for, beg'
	kaiheya	'play'
	koi	'hit, cut'
	numa	'drink'

The verb stem *kai* 'eat' only allows V-N type incorporation. It is attested with several different incorporated nouns. A text example where the noun stem *simsim* 'water melon' is incorporated following the verb stem is presented in (32).

(32) *Sola,   ye-kai-simsim   baguna!*
      still   3SG-eat-watermelon   first
      'Wait, she'll eat watermelon first!' (Emadia1122)

In (33a) the noun *puwaka* is incorporated following the verb stem. The reverse order of stems is ungrammatical as shown in (33b).

(33) a *Se-kai-puwaka.*   b. * *Se-puwaka-kai.*
        3PL-eat-pig   3PL-pig-eat
        'They ate pork.'   'They ate pork.'

Similarly, the stem *kaiheya* 'play' may only incorporate with V-N order. The incorporated noun denotes the game that is played. In both attested examples the

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[9]   *The forms* kaibwada *'ask' and* kaiheya *'play' are morphologically simplex and it appear that there is no semantic connection between the stems starting with* kai.

incorporated noun is an English loan word as shown in (34).

(34) a. *Se-kaiheya-bolo.*   b.   *se-kaiheya-mabolo*
         3PL-play-ball   3PL-play-marble
         'They play ball.'   'they play the marble game'
                                                          (Mosel 1994:33)

The stem *kaibwada* 'ask for' can incorporate the theme, i.e. what is asked for, into the position after the verb stem. In (35a) the noun *laisi* 'rice' is incorporated, in (b) it is the noun *moni* 'money'.

(35) a. *Se-kaibwada-laisi.*   b.   *Se-kaibwada-moni.*
         3PL-ask.for-rice   3PL-ask.for-money
         'They asked for rice.'   'They asked for money.'

In analytical constructions, the applicative stem *kaibwada-i* 'ask for' can take either the theme or the addressee of the request as its object but in contrast to the theme, the addressee may never be incorporated into the verb (cf. chap. 6).

The verb stem *numa* 'drink' normally shows N-V incorporation as in (36a) and (37a). But some speakers allow both N-V and V-N ordering with *numa* 'drink' and accepted the examples in both (a) and (b). Other speakers rejected the (b) examples. For the speakers who allowed incorporation into either position there was no difference in meaning between the constructions.

(36) a. *Ta-ti-numa.*   b.   *Ta-numa-ti.*
         1INC-tea-drink   1INC-drink-tea
         'We tea-drank.'   'We tea-drank.'

(37) a. *Se-gulai-numa.*   b.   *Se-numa-gulai.*
         3PL-soup-drink   3PL-drink-soup
         'They soup-drank.'   'They soup-drank.'

Interestingly, some nouns were never accepted as incorporations into the pre-nuclear slot but only into the position following the verb stem. Note however, that these examples were not accepted by all speakers.

(38) a. * *Ta-kopi-numa.*   b. ? *Ta-numa-kopi.*
         1INC-coffee-drink   1INC-drink-coffee
         'We coffee-drank.'   'We coffee-drank.'

The above verb stems *kai* 'eat', *kaibwada* 'ask for' and *numa* 'drink' either allow incorporation only into the post-verbal slot or into either position but with no difference in meaning. But there are a few verb stems which can feature in constructions with either N-V or V-N ordering and for which the order of stems reflects a semantic difference. The verb stem *kabi* 'touch/make' allows both N-V and V-N type incorporation but while a range of different nouns (including a loan word in (40)) may appear in the post-nuclear position as shown in (39) to (42), only a single noun stem is attested in the pre-nuclear slot, shown in (43). In all of ⋯ples, the reversal of stems is ungrammatical.

(39)   *Se-kabi-kabole.*   (40)   *Se-kabi-maketi.*
       3PL-touch-sago   3PL-touch-market
       'They made sago.'   'They prepared their market goods.'

(41)   *Se-kabi-numa.*   (42)   *Ye-kabi-noi.*
       3PL-touch-house   3SG-touch-nest
       'They house-built.'   'She nest-made.'

The only noun attested in the pre-nuclear position is the stem *mata* 'eye' in (43a) which may not occur in the post-verbal slot as shown by the ungrammatical example in (b).

(43) a.   *Ya-mata-kabi.*   b. *   *Ya-kabi-mata.*
          1SG-eye-touch   1SG-touch-eye
          'I wash my face.'

The difference between the V-N constructions with *kabi* 'touch/make' and the N-V example in (43a) lies in the fact that the incorporated noun in the pre-nuclear position in (43) is a body part and semantically (or inferentially) there is a part-whole relation between the subject of the incorporating verb and the incorporated noun.[1]

A similar semantic difference is found with the verb stem *koi* 'hit' which also allows both N-V and V-N incorporation. The noun stem *kaiwa* 'tree/wood' only occurs in the pre-nuclear position while *bwayatu* 'kundu drum' and *gita* 'guitar' may only occur in the post-nuclear slot. Consider the examples in (44) to (46) none of which may show the reversed order of stems. (Note that the incorporated noun in (46) is an English loan word.)

(44)   *Se-kaiwa-koi.*
       3PL-tree/wood-hit
       'They tree-cut.'

(45)   *Se-koi-bwayatu.*   (46)   *Se-koi-gita.*
       3PL-hit-kundu.drum   3PL-hit-guitar
       'They played kundu drum.'   'They played guitar.'

Similar to the compounds with *kabi* 'touch/make' above, in all three cases, the incorporated noun denotes the patient of the expressed activity but the semantics of the compound stems differs considerably. The N-V construction in (44) refers to the activity of tree-cutting while the V-N constructions in (45) and (46) refer to playing a musical instrument.

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[1]   *A further difference between the V-N constructions with* kabi *'touch/make' and example (43a) is that the meaning contributed by the verb stem is close to English 'produce', 'make', 'build', or 'prepare' in the examples with V-N order but it translates as 'wash' in the case with N-V order.*

The final example of a stem which allows incorporation into either position is different in nature. For incorporation into the derived causative stem *he-kai* 'feed (CAUSE-eat)' the different positions correspond to different semantic roles held by the incorporated noun. In analytic constructions, *he-kai* 'feed (CAUSE-eat)' may occur as the head of a ditransitive clause with two objects, a recipient (the causee) and a theme. Both of these two objects are attested incorporated into the verb but into different positions. Consider the examples in (47) and (48) where the same incorporated noun plays different semantic roles: the pre-nuclear noun in (47) is a recipient, the noun in the post-nuclear position in (48) is a theme.

(47)	*Se-puwaka-he-kai.*	(48)	*Kwabuli*	*se-he-kai-puwaka-ø.*
	3PL-pig-CAUS-eat		widow	3PL-CAUS-eat-pig-3SG.O
	'They pig-fed.' (i.e. pigs eat)			'They fed the widow pork.'

The two examples differ in that in (47) the recipient of the feeding event is incorporated and the resulting verb is intransitive. In (48) in contrast, the incorporated noun denotes the theme of the feeding event and the resulting verb is morphologically transitive. The transitivity status of the verbs in (47) and (48) can be established by some of the transitivity test introduced in chapter 3 as discussed in 10.2.2 below. It is important to note that (48) constitutes a fixed lexicalized expression in which only the noun stem *puwaka* 'pig' may occur (cf. chap. 12). If the order of stems in (48) is changed to N-V, as in (49), the interpretation can only be one where the incorporated noun *puwaka* 'pig' denotes the recipient of the feeding event (parallel to (47)) rather than the theme as in (48).

(49)	*Kwabuli*	*se-puwaka-he-kai.*
	widow	3PL-pig-CAUS-eat
	'The widows feed/raise pigs.'	

A possible source for the two kinds of internal orderings within Saliba type 1 incorporation is the historical change in word order. Like most languages of the Papuan Tip Cluster, Saliba has shifted from Proto Oceanic SVO as basic word order to SOV, presumably under Papuan influence (cf. Bradshaw 1982, Ross 1988). Within the Oceanic family, as well as cross-linguistically (cf. Madirussian 1975), languages with VO word order typically incorporate into the post-nuclear position (e.g. Sugita 1973, Mosel 1984, Dixon 1988) while languages with OV as basic order tend to show incorporation into the pre-nuclear slot (cf. Ezard 1991: 191/92, Huckett 1974: 67).Under this view, V-N type incorporation possibly constitutes a reflex of the historical SVO word order while N-V ordering within compound stems would be an innovation following the word order change to SOV. At the present state of research, such an account is only speculative and

needs to be investigated more thoroughly, but it is clearly compatible with the Saliba data and with the fact that N-V type incorporation is more common.[11]

Assuming for a moment that the V-N compounds are indeed a reflex of the historical SVO word order, the Saliba data can provide additional support for Mithun's implicational (and hence chronological) hierarchy of incorporation types. Mithun (1984) suggests that type II incorporation (discussed in 10.3 below) develops on the basis of type I. In Saliba, only type I shows cases of V-N incorporation but not type II. This is compatible with the assumption that type I incorporation developed prior to the Saliba shift to SOV constituent order and therefore shows V-N incorporation as reflexes of the older SVO order. Type II constructions, in contrast, always shows N-V ordering and can be assumed to have evolved only after the word order shift was completed.

10.2.2 TRANSITIVITY

Saliba incorporation constructions which classify as Mithun's type I are generally intransitive. They follow the cross-linguistically well attested pattern in which the compound stem of noun and verb acts like a single intransitive verb stem. The verbs in the corresponding analytic constructions are typically transitive and are based on bivalent or labile verb stems. The incorporated noun corresponds to the object noun in the analytic clause.

(50) a. *Se-koya-tudai.*
3PL-garden-dig
'They garden-dig.'

b. *Koya   se-tudai-ø.*
garden   3PL-dig-3SG.O
'They dig a garden.'

Interestingly, in a number of cases the Saliba incorporation constructions are based on monovalent verb roots (of class two, i.e. monovalent roots which can take the applicative suffix) and the underived verb into which a noun is incorporated is intransitive. Consider (51) to (53) which show the underived intransitive verb in (a), and the incorporating verbs in (b).

(51) a. *Ye-wase.*
3SG-search
'He searched.'

b. *Ye-sada-wase.*
3SG-betelnut-search
'He betelnut-searched.'

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[11]   *Both slots can host English loan words such as 'guitar', 'letter', 'rice and therefore, the type of incorporated noun does not provide evidence for one construction being older than the other.*

(52) a. *Ye-kuma.* b. *Ye-kwateya-kuma.*
    3SG-plant   3SG-yam-plant
    'He planted.'   'He yam-planted.'

(53) a. *Ye-deula.* b. *Ye-koya-deula.*
    3SG-terrace   3SG-garden-terrace
    'He terraced.'   'He garden-terraced.'

The incorporated nouns are semantically the patients of the activity and they are of the same (open) semantic class which occurs as the applied objects of the transitivized verbs when they take the applicative suffix as for example in (54) which corresponds to (51). Note however that the incorporating verbs in (51b) to (53b) do not carry the applicative suffix.

(54) a. *Sada   ye-wase-nei-ø.*
    betelnut   3SG-search-APP-3SG.O
    'He searched for the betelnut.'

Not just any class-two root allows incorporation of a noun which may occur as its applied object. As discussed in chapters 4 and 6, class-2 roots can be distinguished into those which take a close object, i.e. a patient, as their applied object and those which take a remote object role such as location or concomitant as their applied object. Only verbs of the first group allow incorporation of the object noun as in (51a) in (53a). Crucially, the monovalent roots which are attested as intransitive base stems for noun incorporation are essentially the same which behave like transitive stems with respect to the complex verb test (i.e. they can be followed by a transitive V_4 stem) (cf. chap. 5) and which can figure in transitive clauses with discord, as in (55) to (57) (cf. chaps. 3 and 12).[12]

(55) a. *Sada   ye-wase.*
    betelnut   3SG-search
    'He searched for betelnut.'

(56) a. *Kwateya ye-kuma.*
    yam   3SG-plant
    'He planted yams.'

(57) a. *Koya   ye-deula.*
    garden   3SG-terrace
    'He terraced a garden.'

In chapter 3, I have discussed these monovalent verb roots as having a semantic object argument which may or may not surface morpho-syntactically. Morphologically, the simplex stems based on these roots are clearly intransitive but distributionally they share characteristics with transitive verb stems. Noun

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[12] *This means that the clauses in (55) to (57) can be considered as the analytic (i.e. non-incorporating) construction corresponding to (51a) to (53a), rather than clauses with the applicativized verb such as (54).*

incorporation is one of the constructions which is sensitive not only to the syntactic but also to the semantic arguments of the verb, similar to what Zavala (in prep.) discusses for inverse constructions in Olutec.

The fact that, in type I incorporation, the incorporating stems (i.e. the compound stems of noun and verb) are generally intransitive can be established by several of the morphological tests introduced in chapter 3. The object-suffix test shows that incorporating verbs do not allow an object suffix. (58a) shows an analytic construction where the object NP *niu labui* 'two coconuts' is cross-referenced on the transitive verb by the third person plural object suffix. The incorporating verb in (58b) the verb stem *pulisi* 'husk' and cannot take an object suffix as shown in (c).

(58) a.   *Nui   labui   ya-pulisi-di.*   b.   *Ya-niu-pulisi.*
             coconut two   1SG-husk-3PL.O/P   1SG-coconut-husk
             'I husked two coconuts.'   'I coconut-husked.'

     c.   *   *Ya-niu-pulisi-di.*
             1SG-coconut-husk-3PL.O/P
             'I coconut-husked them.'

The possibility that incorporating verbs such as (58b) carry the zero allomorph of the third person singular object suffix can be ruled out by the *-ko* suffix test (in (59)) or the complex-verb test (in (60) cf. chap. 4). In (59a) the object *niu* 'coconut' occurs as a free NP preceding the verb. It is cross-referenced by the object suffix on the verb which is followed by the perfective suffix *-ko*. In (59b) *niu* 'coconut' is incorporated and the perfective suffix attaches directly to the verb stem. Example (c) shows that the presence of an object suffix on the incorporating stem is in fact ungrammatical.

(59) a.   *Niu   ya-yaga-ya-ko.*   b.   *Ya-niu-yaga-ko.*
             coconut 1SG-scrape-3SG.O-PERF   1SG-coconut-scrape-PERF
             'I scraped the coconut already.'   'I coconut-scraped already.'

     c.   *   *Ya-niu-yaga-ya-ko.*
             1SG-coconut-scrape-3SG.O-PERF
             'I coconut-scraped it already.'

In the analytic construction in (60a), the object noun *kaigalu* "two-leaf", (a type of edible bush greens) precedes a transitive complex verb. The transitive status of the verb is reflected by the causative prefix on the V_+ stem *gehe* 'finished'. In (b) the object noun is incorporated into the verb and builds the compound stem *kaigalu-yagu* '*kaigalu*-pick' which occupies the V_1 slot of a complex verb and is followed by the V_4 stem *gehe* 'finished'. The construction is intransitive since the final

V_4 stem, does not carry the causative prefix. Example (60c) shows that the causative prefix may not appear in the construction.[13]

(60) a. *Kaigalu   ya-yagu-he-gehe-ø.*
          Plant.Name   1SG-pick-CAUS-finished-3SG.O
          'I picked all the *kaigalu*.'

     b. *Ya-kaigalu-yagu-gehe.*
          1SG-Plant.Name-pick-finished
          'I finished *kaigalu*-picking.'

     c. * *Ya-kaigalu-yagu-he-gehe.*
          1SG-Plant.Name-pick-CAUS-finished
          'I finished *kaigalu*-picking it.'

The transitivity tests establish that the compound stems which result from noun incorporation are generally intransitive and that the only syntactic argument of the incorporating verbs is the subject. An exception to this is the compound stem *he-kai-puwaka* 'feed pork' which was already mentioned in section 10.2.1 and which is transitive.

(61)   *Kwabuli   se-he-kai-puwaka-ø.*
          widow   3PL-CAUS-eat-pig-3SG.O
          'They fed the widow pork.'

In principle, the incorporation construction in (61) follows exactly the same pattern as the canonical type I constructions: one of the syntactic arguments of the verb is incorporated and therefore the remaining number of arguments is reduced by one. The crucial difference between this expression and canonical type I incorporations previously discussed is that the analytic expression corresponding to (61) is a ditransitive rather than a transitive clause. Example (62) was accepted by speakers as a paraphrase of (61). But note that this analytic expression is not normally used to refer to the specific custom and that it is considered awkward because of the abundance of noun phrases. In natural speech, one or both of the NPs would typically be omitted.

(62)   *Kwabuli   puwaka se-he-kai-ø.*
          widow   pig   3PL-CAUS-eat-pig-3SG.O
          'They fed the widow pork.'

The fact that the incorporating verb in (61) is transitive can be established by the -*ko* suffix test as shown in (63). Suffixation of the -*ko* marker triggers the non-final allomorph -*ya* of the third singular object suffix in (63a). The perfective suffix

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[13]   *These constructions are similar to the ones with the completive aspect cited by Mithun (1984:850/51) for Ponapean (cf. Rehg 1981).*

may not attach directly to the compound stem as shown in (b).[14]

(63) a.   *Kwabuli   se-he-kai-puwaka-ya-ko.*
             widow   3PL-CAUS-eat-pig-3SG.O-PERF
             'They fed the widow pork.'

       b. * *Kwabuli   se-he-kai-puwaka-ko.*
             widow   3PL-CAUS-eat-pig-PERF
             'They fed the widow pork.'

As opposed to type II incorporation discussed in 10.3, Saliba type I constructions can generally not be transitivized by derivational morphemes. There are a few exceptional cases though, which are discussed in the following for the sake of completeness. In analytic clauses, the applicative stem *kaibwada-i* 'ask for' can choose between the addressee and the requested theme as its applied object, as shown in (64) and discussed in chapter 6.

(64) a.   *Ya-kaibwada-i-go.*
             1SG-ask.for-APP-2SG.O
             'I asked you (for s.th.).'

       b.   *Laisi pasolo labiu se-kaibwada-i-di.*
             rice parcel two   3PL-ask.for-APP-3PL.O/P
             'They asked for two packs of rice.'

Note that only one of the two participants, the addressee or the theme, can figure as an argument. That is, the applicativized stem *kaibwada-i* 'ask for' cannot be the head of a ditransitive clause where both participants, addressee and theme, are expressed as syntactic arguments. While the addressee can never be incorporated into the verb, the theme object can, as shown in (65). In (a) the noun *laisi* 'rice' is incorporated into the verb, in (b) it is the noun *moni* 'money'.

(65) a.   *Se-kaibwaba-laisi.*   b.   *Se-kaibwada-moni.*
             3PL-ask.for-rice   3PL-ask.for-money
             'They asked for rice.'   'They asked for money.'

The incorporating verb is generally intransitive and cross-recipient of the addressee as in (66) is ungrammatical.

(66)   * *Se-kaibwada-moni-gau.*
             3PL-asked.for-money-1SG.O
             'They money-asked me.'

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[14]   *The complex verb test would presumably show a transitive stem in the V₄ slot as in (i). I have no native speaker data on the complex verb test for this incorporating stem though. The example in (i) is constructed and has not been checked by a Saliba speaker.*

(i)   *Kwabuli   se-he-kai-puaka-uyo-i-ø.*
             widow   3PL-CAUS-eat-pig-back.again-3SG.O
             'They fed the widow pork again.'

Up to this point, the examples with *kaibwada* 'ask for' follow the general pattern for type I incorporation, but consider the following cases: for a number of speakers, the addressee of the request may precede the incorporating verb in the clause without being cross-referenced.

(67) *Mwane-gu   ya-kaibwada-moni.*
      spouse-1SG.P   1SG-ask.for-money
      'I asked my husband for money.'

In these cases, the clause is transitive since two participants, the addressee and the agent (the subject) are expressed as syntactic arguments. But the verb which heads this transitive clause is morphologically intransitive and the construction constitutes an instance of discord as discussed in chapters 3 and 12. Note, however, that other speakers rejected the construction in (67) and provided instead the clause in (68) in which the recipient is encoded as an adjunct marked by a postposition.[15]

(68) *Mwane-gu   unai   ya-kaibwada-moni.*
      spouse-1SG.P   PP.SG   1SG-ask.for-money
      'I asked my husband for money.'

A final exception in terms of transitivity marking involves the stem *baguna* '(go) first' which may be applicativized to express a meaning like 'lead' as in (69a). In (69b) noun stem *keda* 'path/way' is incorporated into the applicativized verb. The transitivity status of the verb does not change through the process of incorporation and the incorporating verb is still transitive.

(69) a. *Taumana   ya-baguna-i-di   (nige keda kabi-na   se-kata).*
         visitor   1SG-go.first-APP-3PL.O/P   NEG   way   nature-3SG.P   3PL-know
         'I lead the visitors (they don't know the way).'

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[15] *In addition, some speakers allow or require an applicative suffix (which implies an object suffix cross-referencing the addressee) on the incorporating verb with the noun* moni *'money' in (i).*

(i) *Mwane-gu   ya-kaibwada-moni-ei-ø.*
     spouse-1SG.P   1SG-beg-money-APP-3SG.O
     'I asked my husband for money.'

The construction is clearly exceptional and not productive since parallel examples with other incorporated nouns as in (ii) or with a different person object suffix as in (iii) are rejected. (Note that the point is not that laisi *'rice' cannot be incorporated, cf. (65a), but merely that the incorporating stem with* laisi *'rice' cannot be applicativized.)*

(ii) * *Mwane-gu   ya-kaibwada-laisi-ei-ø.*   (iii) * *Ya-kaibwada-moni-ei-go.*
         spouse-1SG.P   1SG-beg-rice-APP-3SG.O   1SG-beg-money-1SG.O-APP-2SG.O
         'I asked my husband for rice.'   'I asked you for money.'

The interesting point about these data is that the speakers which do allow or require the applicative suffix in (i) are quite consistent in their judgment.

b. *Taumana   ya-keda-baguna-i-di.*
visitor   1SG-way-go.first-APP-3PL.O/P
'I lead the visitors the way.'

The construction in (69b) is an interesting case because it deviates from the canonical pattern of incorporation in two ways. First, the incorporated noun is not a patient of the activity but a location. This is exceptional in Saliba but locations are attested cross-linguistically to be possible targets of type I incorporation (cf. Mithun 1984, Mosel & Hovdhaugen 1992 (§7.10), Zavala in prep.). Second, the incorporated nominal is not a syntactic argument of the verb in the corresponding analytic construction (neither of the underived verb nor of the applicativized one). This is, again, exceptional in Saliba and also cross-linguistically less common, but the incorporation of adjuncts or 'obliques' is nevertheless attested in a number of languages (e.g. Sapir 1911, Spencer 1995, Zavala in prep.) Even though, admittedly, the construction (69b) is a marginal phenomenon in that I am aware of only this single example, it is noteworthy for its potential impact on a syntactic treatment of noun incorporation.

10.2.3 SEMANTICS OF INCORPORATION

The semantics of noun incorporation have been widely discussed in the literature and Saliba clearly follows the main cross-linguistic patterns. Mithun (1984: 850) summarizes them as follows:

> … these constructions are generally used to describe activities or events whose patients are neither specific nor countable – e.g. habitual, ongoing, or projected activities; those done by several people together; or those directed at a non-specific part of a mass.

In terms of discourse function, incorporation generally results in the backgrounding of the incorporated noun in some ways (cf. Heath 1976: 202, Givón 1990: 626, Foley & Van Valin 1985: 344 consider it as a type of antipassive construction).

In this section, I discuss some of these semantic properties on the Saliba data. As laid out in 10.2.3.1 certain kinds of nouns are more likely than others to be incorporated while other types tend to never be incorporated at all. Incorporation constructions typically refer to habitual and/or repetitive activities and they tend to denote activities performed by several people directed at multiple objects as discussed in 10.2.3.2. The issue of referentiality and specificity of incorporated nouns is considered in 10.2.3.3.

10.2.3.1 Types of objects

The incorporated nouns in Saliba type I incorporation are almost exclusively patients of the activity denoted by the verb stem (an exception with an incorporated location was discussed in 10.2.2). This is also cross-linguistically the most common type of noun to be incorporated although incorporation of instruments, goals and locations, and even agents is also attested in the languages of the world (see for example Allen et al. 1984, Sasse 1984, Axelrod 1990, Wilhelm 1992, Cook and Wilhelm 1998, Zavala in prep.). As opposed to type II incorporation discussed below, type I incorporation has no specific formal class of nouns that can be incorporated into the verb. Proper nouns are never incorporated which is not surprising given that incorporation is generally a backgrounding device whereas proper nouns express highlighted information. Most commonly, incorporated nouns denote inanimate objects in Saliba, but animates are also attested as in (70).

(70)   *Se-puwaka-he-kai.*
         3PL-pig-CAUS-eat
         'They feed/raise pigs.' (lit. 'They pig-feed.')

There is a tendency in Saliba to incorporate superordinate terms rather than subordinates as demonstrated by the examples with the stem *deuli* 'wash' in (71) and (72). In (71a) the noun *kaleko* 'clothes' is incorporated into the verb. Incorporation of the subordinate terms *lulu* 'shirt' or *pilipou* 'trousers/pants' is not allowed as shown in (b) and (c).

(71) a.   *Ya-kaleko-deuli.*   b. *   *Ya-lulu-deuli.*
          1SG-clothes-wash   1SG-shirt-wash
          'I do the laundry.'   'I shirt-wash.'

          c. *   *Ya-pilipou-deuli.*
                 1SG-trousers-wash
                 'I trousers-wash.'

Similarly, in (72a) the noun *numa* 'house' is incorporated into *deuli* 'wash'. The incorporation of *kisini* 'kitchen' in (b) (as well as *dubu* 'church' and *sikulu* 'school') was rejected.[16]

(72)   *Se-numa-deuli.*   b. *   *Se-kisini-deuli.*
         3PL-house-wash   3PL-kitchen-wash
         'They house-clean.'   'They kitchen-clean.'

Besides these constraints on the incorporability of nouns, it is primarily a noun's involvement in a habitual activity. This is discussed further in the following

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[16]   *Note that the kitchen is traditionally in a separate small house and so* kisini *'kitchen' is a subordinate term of* numa *'house'.*

section.

10.2.3.2 Habitual activities, multiple objects, multiple subjects

Typically, type I incorporation denotes habitual and or repetitive activities performed by several people and directed at multiple objects. In Saliba, incorporation occurs especially when people talk about central areas of their life such as eating, drinking, gardening, and activities around the house. Among the most common nouns to be incorporated are *koya* 'garden', *niu* 'coconut' and *puwaka* 'pig'. Most Saliba people are subsistence farmers and live to a large extent on the products from their gardens. Coconut is traditionally used in manifold ways: it is an important food item, the shells and leaves are used to produce artifacts, and the meat is smoked and sold as copra. Pigs are raised as domestic animals and constitute a form of wealth. They play an important role in the formal interaction between families at weddings and other festivities.

But habituality alone is clearly not a sufficient condition for incorporation and not everything which is habitual is incorporable. An activity which might be habitual for a individual single person does not constitute a good candidate for an incorporation construction. The activities which are expressed by noun incorporation are typically recognized by speakers as "unitary, institutionalized activities" (Mithun 1984: 850). Incorporation constructions create labels for stereotypical activities which are considered salient enough to have their own name.

These conditions can pragmatically restrict the choice of the incorporated noun. Examples (71) and (72) showed the tendency to incorporate superordinate terms rather than subordinate ones. The following examples show that there can also be clear preferences in the choice between hyponyms. The verb stem *numa* 'drink' can incorporate a noun. Saliba people, habitually drink tea and noun *ti* 'tea' is the most often incorporated item into this verb stem. The clause in (73b) is the idiomatic expression for having breakfast or a light meal.

(73) a.   *Ti*   *ka-numa-ø.*   b.   *Ka-ti-numa.*
         tea   1EX-drink-3SG.O   1EX-tea-drink
         'We drank tea.'   'We tea-drank.'

Some speakers also allow incorporation of other nouns such as *gulai* 'soup' and *waila* 'water' into *numa* 'drink' as in (74) and (75), but speakers vary quite lot in their judgment of these examples.

(74)   ?   *Se-gulai-numa.*   (75)   ?   *Se-waila-numa.*
            3PL-soup-drink   3PL-water-drink
            'They soup-drank.'   'They water-drank.'

A number of noun stems denoting beverages are consistently rejected by speakers to be incorporated into the verb. Nouns like *kopi* 'coffee' or *kordiyal* 'cordial', both well known but less common (and less affordable) drinks, cannot be incorporated into *numa* 'drink' as shown in (76). Even after setting up a hypothetical habitual context where coffee was consumed every morning the incorporation of *kopi* 'coffee' was rejected.

(76) a.   *   *Se-kopi-numa.*   b. *   *Se-kordiyal-numa.*
              3PL-coffee-drink   3PL-cordial-drink
              'They coffee-drank.'   'They cordial-drank.'

In some instances, a further prerequisite for incorporation is not (only) habitual but also repetitive activity and, as an effect of that, the involvement of multiple objects and potentially multiple subjects. This is the case for a number of constructions denoting group activities in the garden such as *koy-deula* 'garden-clean' and *koya-deula* 'garden-terrace', but also and especially for the incorporation of *niu* 'coconut' into a number of verb stems. Certain compound stems with *niu* 'coconut' are immediately understood as referring to the production of copra (smoked coconut meat, which is sold for cash) although copra itself is not necessarily mentioned in the entire discourse. It is incorporation of the noun which triggers this interpretation. Examples are compound stems such as *niu-hesulu* 'coconut-pile', *niu-pulisi* 'coconut-husk', *niu-isi* 'coconut- split', and *niu-tutu* 'coconut-break'. These compound stems refer to the collective activity of gathering and husking piles of coconuts which are then broken open and smoked. Later the smoked meat is taken out of the shell and stuffed tightly into copra bags. This work typically goes on for several days and involves a whole group of people and masses of coconuts. The text example in (77a) refers to husking coconuts for copra production. The corresponding analytic construction in (b) also refers to the activity of husking coconuts, but is typically interpreted as referring to a smaller number of coconuts such as used for cooking or drinking.

(77) a.   *Se-niu-pulisi.*
           3PL-coconut-husk
           'They coconut-husked (to make copra).' (fishdial107)

     b.   *Niu   ye-pulisi-di.*
           coconut   3SG-husk-3PL.O/P
           'He husked the coconuts.' (e.g. to drink them)

The same contrast holds for the clauses in (78) where (a) refers to breaking and stuffing the coconut meat into copra sacks but (b) is more likely used to refer to breaking open coconuts for cooking or drinking.

(78) a. *Se-niu-tutu.*   b. *Niu   ya-tutu-di.*
3PL-coconut-hit   coconut 1SG-hit-3PL.O/P
'They pound and stuff coconut   'I break open (the) coconuts.'
meat into copra bags.'

Most Saliba incorporations are semantically completely transparent. But in the context of copra production certain compound stems begin to show signs of lexicalization and to acquire a specialized meaning by comparison to the corresponding analytic constructions. The constructions in (78a) and (b) do not only differ in aspects like repetition, plurality of objects and so forth, they (can) actually refer to different kinds of activities: (78a) refers to pounding and stuffing the smoked coconut meat into a copra bag by means of a stick, but (78b) refers to breaking open coconuts, for example with a bush knife. Similarly, the example in (70) where *puwaka* 'pig' is incorporated into *he-kai* 'feed' has acquired the meaning of 'raising pigs' rather than merely 'feeding pigs' as would be suggested by the sum of the parts.

10.2.3.3 Referentiality and specificity of incorporated nouns

It is generally claimed (at least by representatives of a lexical approach) that incorporated nouns are non-specific, non-individuated, and non-referential. I suggest this is also true for the Saliba data but, as I lay out below, the matter of referentiality remains essentially unsolved in that there are no straight forward tests to prove the referential or non-referential status of incorporated noun in Saliba. The non-referential status can merely be deduced from the fact that incorporated noun are non-specific and non-individuated. Evidence for the non-specific status of incorporated nouns is provided by examples like (79). The sentence can be completed by the incorporating verb in (79a), but the analytic construction in (b) was perceived as pragmatically weird and was rejected in this context because it refers to a specific tree.[17]

(79)   *Lahi   ya-lao kaiwa   ya-koi-ø   ...*
yesterday 1SG-go   tree   1SG-hit-3SG.O
'Yesterday I went to cut a tree ...

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[17]   *Note that there is nothing wrong with (79b) grammatically but that it is ruled out for pragmatic reasons. In an appropriate context such as (i) below the clause was accepted.*

(i)   *Ya-koi-kasaya-i-ø,*   *malaitom   ya-lao   ya-koi-uyo-i-ø.*
1SG-hit-in.vain-APP-3SG.O   tomorrow   1SG-go   1SG-hit-back/again-APP-3SG.O
'I tried in vain to cut it, tomorrow I'll cut it again.'

a.   ... *na   wau   ya-lao   ya-kaiwa-koi-uyo.*
          CONJ   today   1SG-go   1SG-tree-hit-back/again
       ...and today I went tree-cutting again.'

b. *? ... *na   wau   ya-lao   kaiwa   ya-koi-uyo-i-ø.*
          CONJ   today   1SG-go   tree   1SG-hit-back/again-APP-3SG.O
       ...and today I went and cut THE SAME tree again.'

From the fact that (79a) is sanctioned but (79b) is not, it can be deduced that the incorporated noun does not refer to a specific tree. Despite of such evidence, the issue of specificity and referentiality of incorporated nouns remains a subtle and difficult problem. As Mithun (1984: 859) remarks about incorporated nouns:

> ... they are unmarked for definiteness, number or case. This does not necessarily mean that they are indefinite or non-specific, but only that they are unmarked.

She (1986: 34) further states:

> Obviously it is not the case that they are never related to a referent. If I say that John 'hand-washed', there is little doubt that I have his own hands in mind.

Similar to Mithun's 'hand-wash' example, Saliba clauses with noun incorporation can help the identification of a specific set of objects. From the clause in (80) it can be inferred that a certain set of coconuts is talked about, namely those which are found in that specific location. Note however, that it is the place name which helps identify a specific set of referents and not the incorporated noun itself.

(80)   *Ka-lau   Kwalausai   ka-niu-pulisi.*
          1EX-go   Place.Name   1EX-coconut-husk
       'We go to Kwalausai to husk coconuts.'

It should also be noted that Saliba speakers generally accepted elicited examples like (81) and (82) with no difficulty (although they have not been encountered in natural speech). In these sentences, a pronominal affix of a following verb refers to a set of objects that is of the kind as described by the incorporated noun.

(81)   *Se-sada-wase   na   tamowai   se-hai-di-ko.*
          3PL-betelnut-search CONJ person   3PL-get-3PL.O/P-PERF
       'They betelnut-searched but someone had taken them already.'

(82)   *Se-niu-pulisi   na   nige   se-pulisi-he-gehe-di.*
          3PL-coconut-husk CONJ NEG   3PL-husk-CAUS-finished-3PL.O/P
       'They coconut-husked but they didn't husk all of them.'

Examples of this kind have been quoted to argue for the referentiality of incorporated nouns. However similar to (80), the interpretation of (81) and (82) is not necessarily a matter of referentiality at all but a matter of pragmatic inference This is especially true for languages like Saliba which do not require nominal expression of pragmatically inferable referents. As discussed by Mithun (1984, 1986), Cornish (1986), Mithun & Corbett (to appear), among others, incorporated nouns can help inference by restricting the scope of the expressed activity, but this

does not mean that they refer. "The fact that incorporated nouns can assist speakers in determining reference is not surprising and does not in itself prove that they are different in kind from the components of compounds." (Mithun & Corbett to appear).

The problematic fact is that although it is widely claimed that incorporated nouns are non-referential, hardly any source provides tests to prove this. The claim is generally deduced from the fact that incorporated nouns cannot take modifiers and that the constructions typically denote habitual activities involving objects which are neither specific nor countable. While I believe that such a deduction is in principle valid and probably holds for Saliba, I consider the discussion of these primary points (i.e. habitually, no modifiers, etc.) which are directly supported by the data as more relevant. The deduced claim about non-referentiality is not particularly interesting as long as it remains unfalsifiable.

10.3 TYPE II: EXTERNAL POSSESSION

The Saliba incorporation constructions that fall under Mithun's type II follow the same main principles described above for incorporation of type I. The incorporated noun loses its status as a syntactic argument and restricts the scope of the incorporating verb, and the compound stem expresses a single unitary concept. Mithun (1984) describes the main difference between type I and type II as their effect on the clause. While type I reduces the transitivity status of the verb and derives for example intransitive verbs from transitive ones, type II incorporation has an effect beyond the verb itself: it permits another participant to occupy the argument position that is "vacated" by the incorporated noun. She notes:

> When a transitive V incorporates its direct object, then an instrument, location, or possessor may assume the vacated object role. When an intransitive V incorporates its subject, another argument may be advanced to subject status. (Mithun 1984: 856)

In Saliba, constructions with instruments or locations are not attested but type II incorporation always involves a possessor which takes on the role of a core argument. Such constructions have been described in the literature as 'possessor ascension', 'possessor raising' or 'external possession'. I adopt the last term here since it does not imply transformational or movement processes and has become used as the most neutral and least theory-dependent label. External possession is cross-linguistically not restricted to noun incorporation. It is also commonly expressed by applicative constructions, where an affix sanctions the possessor as

an additional argument of the verb (cf. Zavala in prep.) or by dative-case marking of the possessor (cf. Koenig & Haspelmath 1997).[18] Payne and Barshi (1998) provide the following working definition:

> We take core instances of external possession (EP) to be constructions in which a semantic possessor-possessum relation is expressed by coding the possessor (PR) as a core grammatical relation of a verb and in a constituent separate from that which contains the possessum (PM). ... The possessor-possessum relationship cannot reside in a possessive lexical predicate such as *have*, *own* or *be located at* and the lexical verb root does not in have any other way have a PR within its core argument frame. Thus, despite being coded as a core argument, the PR is not licensed by the argument frame of the verb root itself ...

In Saliba EP constructions, an entity which is classified in the language as inalienably possessed is incorporated into the verb and the semantic possessor appears as the subject of the construction.[19] The corresponding analytic constructions show an intransitive verb with a possessed noun as its subject. That is, the possessor in the EP constructions holds the same syntactic relation to the verb as the possessed noun in the corresponding analytic construction. In (83a) the possessed noun *gado-gu* 'my throat' (or 'neck') occurs as the subject of the clause. In (b) *gado* 'throat' is incorporated and the first person possessor of the analytic construction is expressed as the subject of the incorporating verb. Overall, the transitivity status of the verb does not change but the possessor, which appears as a non-argument (it is a dependent of an argument) in (83a), is expressed as a core argument in (b). Only intransitive base verbs can enter these incorporation constructions (but they can be causativized, see 10.3.1).

(83) a.   *Gado-gu   ye-magu.*
            throat-1SG.P   3SG-low.tide
            'I'm thirsty.' (lit. 'My throat is low tide.')

    b.   *Ya-gado-magu.*
            1SG-throat-low.tide
            'I'm thirsty.' (lit. 'I'm throat-low tide.')

Note that there is no formal marking of a possessive relation in the EP construction in (83b), but this interpretation is promoted by the fact that the incorporated noun must normally be inalienably possessed and may not occur

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[18]   *For further references see e.g. Aissen (1980), Allen et al. (1990), Blake (1984), Munro (1984), Croft (1985), Schaefer (1995), Shibatani (1994), Payne (1997).*

[19]   *As a reminder, inalienably possessed nouns must carry a possessor suffix, as in (83a). With alienably possessed nouns, this suffix attaches to a possessive classifier preceding the noun.*

without a suffix denoting the possessor when it is not incorporated, and by the semantic correspondence to the analytic construction in (a).[20]

As opposed to incorporation of type I, Saliba EP constructions only ever show the internal order of N-V, and V-N ordering is not attested. This was discussed in 10.2.1 as evidence for Mithun's implicational hierarchy of incorporation types and their diachronic development. In EP constructions, not only the position but also the choice of noun underlies clearer constraints than discussed for type I incorporation above. Only person part terms (i.e. body part terms and more abstract concepts like *kamna* 'feeling' or *nuwa* 'mind') occur as incorporated nouns in Saliba EP constructions.[21] That means, only a subset of directly inalienably possessed nouns are incorporable. These must carry a possessive suffix when they occur as independent words. This is in line with the general cross-linguistic tendencies of incorporation as a mechanism for external possession: person parts are incorporated most commonly followed by other inalienably possessed nouns, while alienably possessed nouns are less commonly incorporated but are also attested cross-linguistically. The incorporating verb stems are based almost exclusively on stative class-1 roots (monovalent roots which cannot take the applicative)[22] and the constructions express states of the incorporated person parts (and their possessors). In (84a) the noun stem *kanma* '(physical) feeling' occurs as a possessed noun acting as the subject of the clause. It forms an expression with the stem *yababa* 'bad' which expresses a negative physical condition. In (b) *kanma* 'feeling' is incorporated into the verb and the possessor is encoded as the subject of the incorporating verb.

(84) a. *Mugaya   kamna-na   ye-yababa,   tamowai   kamna-na   ye-yababa.*
          crocodile feeling-3SG.P 3SG-bad   person   feeling-3SG.P 3SG-bad
          'The crocodile was exhausted and the man was exhausted.'
          (lit. 'Its/his feeling was bad.') (TbLaki63)

    b. *hekadi   se-kamna-yababa*
          some   3PL-feeling-bad
          'some feel bad' (church1 82)

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[20]   *For similar constructions in Samoan, Mosel and Hovdhaugen 1992 §4.2.1.6 propose an analysis as a head+modifier (N-V) construction and that the construction as a whole is verbalized. In Saliba, there is no evidence for verbalization of the compounds. The Saliba compound stems can in principle function as noun stems but the occurrences are predominantly verbal.*

[21]   *See Wilkins (1996) for discussion of the term 'person part' rather than 'body part'.*

[22]   *An exception with a class-2 root is discussed below.*

If the negative condition is emotional rather than physical, the noun *nuwa* 'mind' combines with the same stem *yababa* 'bad' in a parallel way. In (85a) *nuwa* 'mind' occurs as a possessed noun which functions as the subject of the verb. In (b) the noun is incorporated and the possessor is coded as the subject of the construction.

(85) a.   *sina-na-wa*   *nuwa-na-wa*   *ye-yababa*
         mother-3SG.P-PM   mind/heart-3SG.P-PM   3SG-bad
         'her mother was sad' (lit. 'her mother's mind was bad') (bagi52)

    b.   *Eh*   *kabo*   *Inue-wa*   *ye-nuwa-yababa*
         INTRJ   TAM   Name-PM   3SG-mind/heart-bad
         'Oh and Inue felt so sad

         lou-na-wao-wa   *sabi-di-ao.*
         brother-3SG.P-PL-PM   for-3PL.P-PL
         about her brothers.' (Tautela54)

The states expressed by the EP constructions may be temporary as in (84) and (85) or also in (86) and (87) or permanent as in (88) and (89).

(86) a.   *Ye-boga-sese.*   b.   *Boga-na*   *ye-sese.*
         3SG-belly-swollen   belly-3SG.P   3SG-swollen
         'He's full.'   'His belly is full.'

(87) a.   *Ye-gado-biga.*   b.   *Gado-na*   *ye-biga.*
         3SG-throat-soft   throat-3SG.P   3SG-soft
         'He's not thirsty.'   'He's not thirsty.'
         (lit. 'He's throat-soft.')   (lit. 'His throat is soft.')

(88) a.   *Ye-beya-kolakola.*   b.   *Beya-na*   *se-kolakola.*
         3SG-ear-deaf   ear-3SG.P   3PL-deaf
         'He's deaf.'   'His ears are deaf.'

(89) a.   *Ye-nima-buku.*   b.   *Nima-na*   *ye-buku.*
         3SG-hand-amputated   hand-3SG.P   3SG-amputated
         'He is arm/hand-amputated.'   'His arm/hand is amputated.'

The one exception where the incorporating stem is not based on a class-1 root involves the root *maluhi* 'laugh' of class 2 (monovalent roots which can take the applicative). As mentioned in chapter 4, *maluhi* 'laugh' belongs to a group of psychological verb roots which are somewhat transitional between stative and active verbs. In the text example in (90a), the noun *nuwa* 'mind' is incorporated into the stem *maluhi* 'laugh' and the participant which is encoded as the possessor in the analytic construction in (b) acts as the subject of the incorporating verb in (a).

(90) a.   *Ta-nuwa-malu-maluhi.*   b.   *Nuwa-da*   *se-malu-maluhi.*
         1INC-mind-RED-laugh   mind-1INC.P   3PL-RED-laugh
         'We are funny.'   'We are funny.'
         (lit. 'We mind-laugh.') (pearl:54)   (lit. 'Our minds are laughing.')

As with type I incorporation, EP construction refer to situations which are conceived culturally and linguistically as stereotypical activities and unitary

concepts. In (91) to (93), body part terms are incorporated into the stem *kamkamna* 'hurt'. The expressions refer to concepts like 'stomachache', 'headache', and 'backache'.

(91) a.   *Ya-boga-kamkamna.*   b.   *Boga-gu   ye-kamkamna.*
        1SG-belly-hurt   belly-1SG.P   3SG-hurt
        'I have a stomachache.'   'My belly hurts.'

(92) a.   *Ya-kulu-kamkamna.*   b.   *Kulu-gu   ye-kamkamna.*
        1SG-head-hurt   head-1SG.P   3SG-hurt
        'I have a headache.'   'My head hurts.'

(93) a.   *Ya-dagela-kamkamna.*   b.   *Dagela-gu ye-kamkamna.*
        1SG-back-hurt   back-1SG.P   3SG-hurt
        'I have a backache.'   'My back hurts.'

Further nouns that can be incorporated into *kamkamna* 'hurt' are, for example, *mata* 'eye' and *beya* 'ear'. But the incorporation constructions with *kae* 'foot' or *kawai* 'mouth/tooth' in (94a) and (95a) were rejected by Saliba speakers, as were incorporations of *gado* 'throat', *isu* 'nose', and *nima* 'hand'. In contrast, the analytic constructions with these nouns in (94b) and (95b) are grammatical, and parallel to examples (91) to (93) describe that the respective body part is in pain.

(94) a. *   *Ye-kae-kamkamna.*   b.   *Kae-na   ye-kamkamna.*
        3SG-foot-hurt   foot-3SG.P   3SG-hurt
        'He has a foot ache.'   'His foot hurts.'

(95) a. *   *Ye-kawa-kamkamna.*   b.   *Kawa-na   ye-kamkamna.*
        3SG-tooth-hurt   tooth-3SG.P   3SG-hurt
        'He has a toothache.'   'His tooth hurts.'

As with type I incorporation discussed above, external possession constructions have a tendency to lexicalize and lose their semantic transparency. Consider the incorporation example in (96a) which has lexicalized with the meaning 'be lazy', while the analytic construction in (b) has a radically different reading:

(96) a.   *Ye-nima-mwalo-mwaloi.*   b.   *Nima-na   ye-mwalo-mwaloi.*
        3SG-hand-RED-dead   hand-3SG.P   3SG-RED-dead
        'He's lazy.'   'His hand/arm is paralyzed.'
        (lit. 'He's hand-dead.')

Besides describing the physical states of body parts (and their possessors), EP constructions are especially used for referring to cognitive and mental processes, as well as to psychological and emotional states. The stem *nuwa* 'mind' is one of the most frequent nouns to be incorporated in such constructions. Most expressions of cognitive processes are formed by incorporation of this stem. Two examples were already given in (85) and (90) above. Constructions with *nuwa* 'mind' frequently involve metaphorical mapping of physical properties or processes such as *polohe* 'heavy', *bayao* 'strong', *bui* 'turn' to the domain of cognition and emotion as in (97) to (99) below. The incorporations in (97a) and

(98a) stem from text examples, the corresponding analytic constructions, for which speakers provided the same meanings are elicited. In (97a) *nuwa* is incorporated into *polohe* 'heavy', in (98a) it is incorporated into the stem *bui* 'turn' and in both cases, the possessor is encoded as the subject of the construction.

(97) a.   *hekadi se-nuwa-polohe*   b.   *Nuwa-di   se-polohe.*
           some   3PL-mind-heavy   mind-3PL.O/P 3PL-heavy
           'some are undecided'   'They are undecided.'
           (lit. 'some are mind-heavy') (c1:82)   (lit. 'Their minds are heavy.')

(98) a.   *se-lao-ma   se-nuwa-bui*   b.   *Nuwa-di   se-bui.*
           3PL-go-hither 3PL-mind-turn   mind-3PL.O/P 3PL-turn
           'they will come and repent'   'They repent.'
           (lit. 'they mind-turn') (c1:103)   (lit. 'Their minds turn.')

In (99) and (100) *nuwa* 'mind' occurs in constructions with the stems *bayao* 'strong' and *masahala* 'clear' respectively.

(99) a.   *Se-nuwa-bayao.*   b.   *Nuwa-di   se-bayao.*
           3PL-mind-strong   mind-3PL.O/P 3PL-strong
           'They are courageous.'   'They are courageous.'

(100) a. *Se-nuwa-masahala.*   b.   *Nuwa-di   se-masahala.*
           3PL-mind-clear   mind-3PL.O/P 3PL-clear
           'They realize.'   'They realize.'

In (101a) *nuwa* is incorporated into *dubu* 'sad' and in (102a) into *mode* 'worry/busy' (in this constructions, speakers preferred the verb stem to be reduplicated).

(101) a. *Se-nuwa-dubu.*   b.   *Nuwa-di   se-dubu.*
           3PL-mind-sad   mind-3PL.O/P 3PL-sad
           'They are sad.'   'They are sad.'

(102) a. *Se-nuwa-mode-mode.*   b.   *Nuwa-di   se-mode.*
           3PL-mind-RED-worry   mind-3PL.O/P 3PL-worry
           'They are distracted.'   'They are distracted.'

Both the EP construction and the analytic construction in (102) can be followed by an expression of the source for the distraction which is marked as an adjunct by the postposition *unai*. Consider example (103):

(103)   *Se-nuwa-mode-mode sobu   unai.*
           3PL-mind-RED-worry   dance   PP.SG
           'They are distracted by the dance/they are busy with the dance.'

In sum, EP constructions generally express temporary or permanent states of being. The ranges of expressions is limited by the constraint that only nouns denoting person parts, which are inalienably possessed, can enter these constructions. The resulting compound nouns vary in their degree of lexicalization.

10.3.1 TRANSITIVITY

In a number of cases, EP constructions are transitivized by the causative prefix.[23] Parallel to other examples of causativization (cf. chap. 7), the prefix introduces a causer as an additional argument in subject position. The subject of the intransitive input verb occurs as the object of the causativized verb. This means, through causativization the possessor occurs as the object of the construction, while in underived EP constructions it can only appear as the subject. Examples (104) and (105) correspond to (100) and (99) above. In (104a) *nuwa* 'mind' is incorporated into the verb stem *he-masahala* 'make clear' and the possessor is encoded as the object of the construction. In (b) the possessed noun *nuwa-di* 'their minds' functions as the object of the causativized predicate without incorporation.

(104)a. *Ye-he-nuwa-masahala-di.*
3SG-CAUS-mind-clear-3PL.O/P
'God clears their minds.' (lit. 'He makes them mind-clear.') (church2:46)

 b. *Nuwa-di   ye-he-masahala-di.*
mind-3PL.O/P   3SG-CAUS-clear-3PL.O/P
'He clears their minds.' (church1:84)

Parallel to this, in (105a) *nuwa* 'mind' is incorporated into the causative stem *he-bayao* 'make strong'. The corresponding analytic clause in (b) shows the possessed noun *nuwa-di* 'their minds' as the object of the verb.

(105)a. *Ye-he-nuwa-bayao-di.*
3SG-CAUS-mind/heart-strong-3PL.O/P
'He strengthen their minds/gives them courage.' (church2:47)

 b. *Nuwa-di   ye-he-bayao-di.*
mind-3PL.O/P   3SG-CAUS-strong-3PL.O/P
'He strengthen their minds/gives them courage.'

Besides these cases of causativization, there is one example of an EP construction that must be transitivized by the applicative suffix. The Saliba expression of 'forgetting' again involves the noun *nuwa* 'mind' and the verb stem *luluhi*, which I

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[23]   *Causativization of EP construction seems to be rather restricted. As discussed in chapter 7, the causative prefix typically expresses direct causation which is of a physical nature. But EP constructions often express cognitive/emotional processes which cannot easily be caused in this way. Note that both of the two text examples stem from a church sermon and the causer in these constructions is God. There is a possibility that these forms are artifacts from bible translation and borrowed from the Suau bible. Saliba and Suau are closely related and, presumably, Suau has parallel EP constructions to the Saliba ones discussed above.*

gloss 'forget' in lack of a better label.[24] It should be noted however that *luluhi* never occurs by itself in the data base and that the gloss 'forget' in fact applies to the whole expression of *nuwa* 'mind' plus *luluhi*. The analytic construction in (106) shows the possessed noun as the subject of the clause, cross-referenced by the subject prefix on the verb.

(106)   *Nuwa-gu ye-luluhi.*
          mind-1SG.P 3SG-forget
          'I forgot.' (lit. 'My mind forgot.')

Whatever was forgotten, i.e. what ever was not done, can be expressed in a following or preceding negative clause as in (107a) and (b). Note that there is no formal marking of a dependent relation between the clauses in these examples.

(107)a.   *Nuwa-gu ye-luluhi nige   susu   ya-tole-ø.*
            mind-1SG.P 3SG-forget NEG   milk   1SG-put-3SG.O
            'I forgot to put milk in.' (lit. 'My mind forgot, I didn't put milk in.')

    b.   *Nige susu   ya-tole-ø   nuwa-gu ye-luluhi.*
           NEG   milk   1SG-put-3SG.O mind-1SG.P 3SG-forget
           'I forgot to put milk in.' (lit. 'I didn't put milk in, my mind forgot.')

A text example of such a construction is presented in (108).

(108)   *Nuwa-gu   ye-luluhi   nige ya-hedede-di ...*
          mind-1SG.P   3SG-forget   NEG 1SG-tell-3PL.O/P
          'I forgot to tell about them ...'
          (lit. 'My mind forgot, I didn't tell about them') (Fishdial74)

Another way to express the concept of 'forgetting' is by incorporating *nuwa* 'mind' into the verb as in (109). In this case, the possessor is expressed as the subject of the incorporation construction, parallel to the EP constructions discussed previously. But in contrast to these constructions, the incorporating verb in (109) must be transitivized by the applicative suffix as in (a), the example in (109b) was rejected.[25]

(109)a.   *Ya-nuwa-luluhi-ei-ø.*   b. * *Ya-nuwa-luluhi.*
            1SG-mind-forget-APP-3SG.O   1SG-mind-forget
            'I forgot it.' (NB5:17)   'I forgot.'

The applied argument added by the applicative suffix refers to the entity or activity that was forgotten or not performed. In (110) the applied object is the noun *susu* 'milk' which precedes the verb in the canonical object position.

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[24]   *Possibly, a less active gloss like 'be forgetful' would capture the spirit of the construction more closely.*

[25]   *It should be noted that elicitation of these examples was quite difficult and speakers had a tendency to be inconsistent in their judgments. Interestingly, even a text example of* nua *'mind' plus* luluhi *'forget' was preceded by a number of false starts. Speakers do not seem quite settled in their grammaticality judgements of these constructions.*

The activity which was not performed is specified in the following clause.

(110)　　*Susu　　ya-nuwa-luluhi-ei-ø　　nige　　ya-hemaisa-ø.*
　　　　　　milk　　1SG-mind-forget-APP-3SG.O　NEG　　1SG-buy-3SG.O
　　　　　　'I forgot to buy milk.' (lit. 'I forgot the milk I didn't buy it.') (goi3:41)

Transitivization of the verb in the analytic constructions seems not possible and example (111) was generally rejected.

(111)　　*　*Nuwa-gu　　ye-luluhi-ei-ø.*
　　　　　　mind-1SG.P　　3SG-forget-APP-3SG.O
　　　　　　'I forgot it.' (NB5:17)

This means that, for this particular construction, the process of incorporation sanctions transitivization of the verb by means of the applicative. It is nevertheless unclear whether there is any functional or semantic difference between the EP construction and the corresponding analytic clause. For instance, speakers accepted both of the constructions in (112), the analytic clause in (a) and the incorporation construction in (b) without suggesting a semantic difference.

(112)a.　　*Hesa-na　　nuwa-gu　　ye-luluhi.*
　　　　　　name-3SG.P　mind-1SG.P　3SG-forget
　　　　　　'I forgot his name.'

　　　b.　　*Hesa-na　　ya-nuwa-luluhi-ei-ø.*
　　　　　　name-3SG.P　1SG-mind-forget-APP-3SG.O
　　　　　　'I forgot his name.'

10.4 TRANSITIONAL TYPE

There are a small number of examples in Saliba which are somewhat different from the previously discussed types of NI and which can be considered transitional between Mithun's type I and type II. Structurally, these constructions follow exactly the same pattern as type I incorporation and could in fact be considered a subtype of type I. But semantically they are very similar to type II incorporation and could be considered EP constructions in that a semantic possessor-possessum relation is expressed by coding the possessor as a core argument of the verb. Consider the examples in (113) to (119). In (113a) the noun stem *mata* 'eye' is incorporated into the verb stem *kabi* 'touch/make'. In (114a) the stem *nima* 'hand' is incorporated into *deuli* 'wash'. As in the EP constructions discussed in 10.3, the subject of the incorporating verb semantically holds a possessor relation to the incorporated noun.

(113)a.   *Ya-mata-kabi.*   b.   *Mata-gu*   *ya-kabi-di.*
        1SG-eye-touch   eye-1SG.P   1SG-touch-3PL.O/P
        'I wash my face.'   'I touch/wash my eyes.' [26]
        (lit. 'I eye-touch.')

(114)a.   *Ya-nima-deuli.*   b.   *Nima-gu*   *ya-deuli-di.*
        1SG-hand-wash   hand-1SG.P   1SG-wash-3PL.O/P
        'I hand-wash.'   'I wash my hands.'

There are however a number of crucial differences to the EP constructions discussed above. First, in (113) and (114) the possessor is already the subject in the analytic construction presented in (b) rather than becoming a core argument only through the process of incorporation. Second, the incorporating verb stems express activities rather than states and the verb in the analytic constructions are transitive. In addition, in contrast to the EP examples discussed in 10.3 above, but in line with type I incorporation, the process of incorporation does change the transitivity status of the construction: the verbs in (b) are transitive, the incorporating ones in (a) are intransitive. If (113) and (114) were structurally parallel to the transitivized EP constructions in (104) and (105) above, the semantic possessor of the incorporated noun would have to appear as the object and be cross-referenced by the object suffix on the verb. For (113) and (114) this would result in reflexive constructions since the object suffix would be coreferential with the subject prefix. But the constructed reflexive verbs in (115) and (116) are ungrammatical and (for reflexive constructions see chap. 14).

(115)   *   *Ya-nima-deuli-(uyo-i)-gau.*
             1SG-hand-wash-(back/again-APP)-1SG.O
             'I hand-wash myself.'

(116)   *   *Ya-mata-kabi-(uyo-i)-gau.*
             1SG-eye-touch/make-(back/again-APP)-1SG.O
             'I face-wash myself.'

These examples clearly show that (113) and (114) do not classify as type II incorporation and, as mentioned, structurally, (113) and (114) are parallel to type I constructions discussed in 10.2. The only difference is that the object noun in the analytic clause is an inalienably possessed person. Compare (113) and (114) to the type I construction in (117).

(117)a.   *Ya-kaleko-deuli.*   *Kaleko*   *ya-deuli-di.*
        1SG-clothes-wash   clothes   1SG-wash-3PL.O/P
        'I did the laundry.'   'I washed (the) clothes.'

Two further examples of this transitional type are presented in (118) and (119)

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[26]   *This example is a further instance of lexicalization: the analytic construction in (b) has a more literal and transparent reading than the incorporating verb in (a).*

where the noun *kawa* 'mouth/tooth' is incorporated into verbs with the stems *deuli* 'wash' and *he'a'a* 'clean' respectively.

(118)a.   *Ya-kawa-deuli.*   b.   *Kawa-gu   ya-deuli-ø.*
           1SG-tooth-wash   mouth-1SG.P 1SG-wash-3SG.O
           'I-tooth-brushed.'   'I brushed my teeth.'

(119)a.   *Ya-kawa-he-'a'a.*   b.   *Kawa-gu   ya-he-'a'a-ø.*
           1SG-mouth-CAUS-clean   mouth-1SG.P 1SG-CAUS-clean-3SG.O
           'I tooth-cleaned   'I cleaned my teeth
           (with betelnut skin).'   (with betelnut skin).'

In example (119), a noun stem is incorporated into the causative stem *he'a'a* 'clean (TR)' which is based on the intransitive stative stem *'a'a* 'clean'. Note that in this example the noun precedes the causative prefix. Conversely, the causativized EP constructions in (104) and (105) above show the reversed order of processes, in these cases the causative prefix precedes the incorporated noun. (They show causativization of incorporating stems rather than incorporation into causative stems.) That is, the order of processes is reflected in the order of morphemes.

The transitional type of incorporation construction is rather restricted and the presented examples are the only ones attested so far. Parallel constructions such as (120a) were rejected by speakers, possibly because the construction does not express a recognized, habitual, stereotypical activity.

(120)a. * *Ya-nima-boli.*   b.   *Nima-gu   ya-boli-ø.*
           1SG-hand-cut   hand-1SG.P   1SG-cut-3SG.O
           'I hand-cut.'   'I cut my hand.'

10.5 EVIDENCE FOR A LEXICAL ACCOUNT OF INCORPORATION

There has been an ongoing discussion in the linguistic literature about the nature of noun incorporation. The fundamental question which lies at the center of the discussion is whether noun incorporation is a lexical or a syntactic process.

The lexical approach has been argued most prominently by Mithun (1984, 1986, Mithun & Corbett to appear) but has also been supported by a range of other authors (see Sapir 1911, DiSciullo & Williams 1987, Rosen 1989, Velázquez-Castillo 1995a and b, Evans 1997, Zavala in prep.). The lexical approach basically treats incorporation as a type of compounding (DiSciullo & Williams 1987, Rosen 1989), that is as a word formation process rather than as syntactic generation of speech. The compound stems constitute new lexical items which are stored in the mental lexicon. Evidence in support of this claim is that, cross-linguistically, such

constructions classify as single morphologically complex verbs by language-internal criteria. In addition, unlike for the on-line production of sentences, speakers tend to show some awareness of when they create a novel combination of such noun-verb compounds (Mithun & Corbett to appear). Among the striking advantages of a lexical account is that it successfully accounts for semantic changes and lexicalization of such compound stems: "They are learned, stored, and accessed as units. As such, they may shift in meaning and function over time, without regard to their original components" (Mithun & Corbett to appear).

The most prominent representative of the syntactic approach is Baker (1988, 1995, 1996) but syntactic analyses of incorporation have also been proposed by Postal (1962) and Sadock (1980, 1985, 1986) among others. Following Baker's account, noun incorporation is a purely syntactic process and it "proves to be no more than the result of applying standard movement transformation to words rather than to full phrases" (Baker 1988: 1). In particular, he suggests that "the generalized transformation Move-Alpha applies to the head noun of a noun phrase, adjoining it to the verb and leaving behind a coindexed trace..." (1995: 6). In support, he cites evidence that the incorporated noun can be specific and referential, that the noun can be modified by 'stranded modifiers',[27] and that incorporation constructions can be paraphrased by corresponding analytic clauses. A further point which he brings forward in support of his analysis is that:

> This syntactic account of NI has the further advantage of accounting for one of the most important properties of noun incorporation: that fact that objects incorporate but subjects do not. (Baker 1995: 7)

Major criticisms of Baker's account of noun incorporation is that it cannot account for the fact that, cross-linguistically, incorporated nouns mostly cannot take any modifiers, that they tend to be non-specific and non-referential, and that, for example, proper nouns are generally not incorporated at all. In addition, the syntactic account completely fails to account for lexicalization, i.e. for the fact that incorporation constructions and their analytic counterparts are often not semantically equivalent. A further problematic fact is that there are incorporation constructions which have no analytic counterparts. Also, as mentioned above, there is the simple point that the compound stems which result from incorporation constitute lexical items which are part of the verbal lexicon (for all of these points

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[27]   Cf. Evans' discussion of Mayali (1997: 401/2, 1996) in response to this claim and also Rosen (1989).

cf. Mithun 1984, 1986, but in particular the in depth discussion in Mithun & Corbett to appear). Besides this, describing incorporation as a result of the generalized transformation Move-Alpha is argued to make the wrong predictions about which nouns can in principle be incorporated into the verb: this transformation would allow only objects of transitive verbs and subjects of unaccusative (patient-oriented) verbs to be incorporated.[28] But while it is clearly a cross-linguistic tendency that incorporation is restricted to such cases, incorporation of adjuncts,[29] subjects of unergative (agent-oriented) verbs, and even subjects of transitive verbs has been reported from a variety of languages (cf. Sapir 1911, Allen, Gardiner & Frantz 1984, Sasse 1984, Axelrod 1990, Polinski 1993, Wilhelm 1992, Spencer 1995, Cook & Wilhelm 1998, Evans 1997, Zavala in prep.).

I have adopted a lexical approach to Saliba noun incorporation here since it appears to be the only one which can account for the full range of cross-linguistic constructions that satisfy the definition of incorporation proposed at the beginning of this chapter. An evident problem for a syntactic approach is that lexicalization of the compound stems is a cross-linguistically typical phenomenon for incorporation constructions. The resulting semantic discrepancies between noun incorporation and the corresponding analytic clauses constitute a challenge for the syntactic approach as the meaning difference is not predictable by syntactic transformation.

While incorporation in Saliba largely follows cross-linguistically well attested patterns, there are certain aspects of the data which constitute an additional challenge to a syntactic analysis à la Baker. These aspects are: (a) the interaction with complex verbs, (b) the two different positions for incorporated nominals, and (c) the fact that incorporation is sensitive to semantic arguments of the verb.

As discussed in 10.1.4, incorporating stems can enter into complex verb constructions (chap. 5), or vice versa, complex verb stems allow incorporation of a

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[28] *The GB-internal claim is that only arguments that are sisters to the V can incorporate but not those which are sisters to the VP or which are headed by a preposition.*

[29] *The ad-hoc GB solution to incorporation of nouns which are marked by adpositions in the corresponding analytic constructions is postulating that they appear without the adposition in the D-structure.*

noun.[30] Consider the examples in (121) to (123) (some of which are repeated from 10.1.4). In all three cases, an incorporating verb stem occupies the V_1 slot of the complex verb followed by a further verb stem. Each of the examples build a single inflected word.

(121)   *Se-kabi-kabole-gehe.*   (122)   *Ye-kwateya-kuma-uyo.*
         3PL-touch-sago-finished   3SG-yam-plant-back/again
         'They finished making sago.'   'He planted yams again.'

(123)   *Ya-niu-tutu-sagu-i-ø.*
         1SG-coconut-hit/break-help-APP-3SG.O
         'I help him to pound coconuts.'

The fact that complex verb stems and noun incorporation can be combined clearly shows that these are processes of a similar nature. Both produce morphologically complex verb stems. The semantics of either type of construction may or may not be derived from the sum of their parts, depending on the degree of lexicalization of the compound stem.

The interaction of these two processes in Saliba is evidence against a syntactic account of noun incorporation as proposed by Baker and for the analysis as a lexical, word-formation process. The fact that, in Saliba, noun incorporation and complex verbs interact in the way they do suggests that either both processes are syntactic or both are lexical. The derivation of complex verbs (i.e. nuclear-layer serialization, chap. 5), however, is clearly a lexical process, and is considered as such also in Baker's (1989) account of verb serialization. From this follows that incorporation must be considered as a lexical process too.

The second challenge for a syntactic approach is that, for type I incorporation, there are two possible positions for an incorporated noun within the verb, preceding or following the verb stem. This is clearly problematic for an approach in which incorporating verbs are derived from analytic constructions by syntactic transformation. Into which slot a verb root can incorporate (as well as whether it can incorporate at all) is not predictable by its formal or semantic class. It is a feature which needs to be learned. It seems impossible to derive, for example, the different constructions in (124a) and (125a) by the same syntactic transformation since the corresponding analytic expressions have the same structure as shown in

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[30]   *Note that there is no clear evidence for the sequential order of the two processes. It is not clear whether nouns are incorporated into complex stems or incorporating stems enter complex verb constructions, or whether either ordering is in fact possible.*

(124b) and (125b) (all examples are repeated from 10.2.1 above).

(124)a.   *Se-**gulai**-numa.*   b.   *Gulai   se-numa-ø.*
       3PL-soup-drink   soup   3PL-drink-3SG.O
       'They soup-drank.'   'They drank soup.'

(125)a.   *Se-kai-**puwaka**.*   b.   *Puwaka se-kai-ø.*
       3PL-eat-pig   pig   3PL-eat-3SG.O
       'They ate pork.'   'They ate pork.'

Even more problematic for a syntactic account of incorporation are the Saliba examples in which a single verb stem allows incorporation into either of the two positions. With the stem *numa* 'drink' at least some speakers allows incorporation into either position as shown in (126).

(126)a.   *Ta-**ti**-numa.*   b.   *Ta-numa-**ti**.*
       1INC-tea-drink   1INC-drink-tea
       'We tea-drank.'   'We tea-drank.'

The verbs in (127a) and (128a) incorporate into different positions but their analytic counterparts have the same order of constituents as shown in (127b) and (128b).

(127)a.   *Se-**kaiwa**-koi.*   b.   *Kaiwa   se-koi-ø.*
       3PL-tree/wood-hit   tree/wood   3PL-hit-3SG.O
       'They tree-cut.'   'They cut a tree.'

(128)a.   *Se-koi-**bwayatu**.*   b.   *Bwayatu   se-koi-ø.*
       3PL-hit-kundu.drum   kundu.drum 3PL-hit-3SG.O
       'They played kundu drum.'   'They played kundu drum.'

Again, there is no way to predict which noun is to appear in which position. Both nouns hold the same syntactic relation to the verb in the analytic examples in (127b) and (128b). And even though they clearly differ in terms of affectedness, both nouns hold the same general semantic relation to the verb: that of a patient undergoing the activity. That is, the choice is not predictable on grammatical or semantic grounds and must ultimately be considered a lexical matter. In summary, faced with the Saliba N-V vs. V-N alternation in incorporation constructions, a syntactic approach to noun incorporation appears less and less attractive.

A further problem for the syntactic account of incorporation in Saliba is the fact that the process of noun incorporation is sensitive not only to syntactic arguments but also to semantic arguments of the verb. As discussed in 10.3.1, Saliba allows object incorporation into a number of intransitive base verbs as in (129) and (130) (repeated from 10.3.1). The examples show the intransitive stems *kuma* 'plant' and *wase* 'search' (based on monovalent roots of class 1, cf. chap. 4) with incorporated objects. Such roots were described as having a semantic object argument in chapter 3.4.1.

(129) *Ye-kwateya-kuma.*　　　　(130) *Ye-sada-wase.*
　　　　3SG-yam-plant　　　　　　　　　3SG-betelnut-search
　　　　'He yam-planted.'　　　　　　　　'He betelnut-searched.'

Interesting is also the example in (131) (repeated from (69) above) where the noun *keda* 'path/way' is incorporated into the verb.

(131) *Taumana　ya-keda-baguna-i-di.*
　　　　visitor　　1SG-way-go.first-APP-3PL.O/P
　　　　'I lead the visitors the way.'

In this case, the incorporated noun is not a patient of the activity but a location and, interestingly, the incorporated nominal is not a syntactic argument of the verb in the corresponding analytic construction (as shown in 10.3.1). The syntactic approach, however, rules out the incorporation of nouns which are not syntactic arguments of the incorporating verb.

10.6 SUMMARY

In this chapter, I introduced Saliba noun incorporation, which results in lexical items that inflect like single (verbal) units. The language exhibits two types of incorporation constructions following the cross-linguistic patters described by Mithun (1984) as type I (lexical compounding) and type II (external possession). A transitional type was discussed in 10.4 which structurally follows the pattern of type I but semantically shares features with type II constructions. A number of characteristics of the Saliba data support the analysis of incorporation as a lexical, word-formation process and speak against a syntactic account of the phenomenon. Among these criteria is the cross-linguistically common feature of lexicalization of the compound stems which. they tend to acquire a more specific meaning than their analytic counterparts. Besides this cross-linguistically common phenomenon, there are some language-specific features which provide evidence for incorporation as a lexical process: the interaction with complex verbs, the two distinct positions for incorporated nouns, and the fact that incorporation is sensitive to semantic arguments of the verb.

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INTRANSITIVE CLAUSES

In this and the following chapters, I describe transitivity as it is manifested on the clause level. The present chapter is not so much a description of Saliba intransitive clause than an introduction to the discussion of the clause level. The chapter should be understood as a pointer, recapitulating the previous discussion on intransitive verbs and clauses. I review below the types of verbs which may figure as the heads of intransitive clauses, following this, in chapters 12 and 13, I discuss transitive and ditransitive clauses respectively.

Word-level transitivity was defined in chapter 3 by the morphological marking on the verb and a given verb is morphologically either transitive or intransitive since maximally two arguments can be encoded by its pronominal affixes. Clause-level transitivity was defined by the overall number of syntactic arguments encoded in the clause. There is thus a two-way transitivity distinction on the word level, but a three-way distinction on the clause level. As a consequence, there can be two types of relationships between verb- and clause-level transitivity. In chapter 3, I coined the terms 'accord' and 'discord' to characterize these relationships. Since the pronominal affixes on the verb also count as expressions of syntactic arguments on the clause level, the transitivity status of the verb can be lower but never higher than that of the clause. The discord relation between verb and clause is therefore asymmetrical. In intransitive clauses, there can only be accord but never discord in transitivity status. By contrast, in transitive clauses there is a choice between accord and discord (chap. 12), and in ditransitive clauses there can only be discord (chap. 13).

As discussed in chapter 4, Saliba intransitive verbs tend to be underived and figure as the input to derivational processes. But there are also derived intransitives as presented in chapters 5 and 8 to 10. Saliba intransitive clauses can express activities or states depending on the verbs which feature as their heads. As discuss in 4.2.1, there are no clear cut morpho-syntactic parameters for the distinction between stative and active clauses, but a combination of several parameters allows a rough distinction. Prototypical stative roots can occur in an attributive function as nominal modifiers, while active roots cannot. Prototypical active roots can derive an agent noun and reduplicate to express an ongoing activity while

prototypical stative roots cannot. Examples (1) to (4) show intransitive clauses with stative verbs.

(1)   *Se-gwauyala.*
3SG-happy
'They are happy.'

(2)   *Lulu   ye-gagili.*
shirt   3SG-small
'The shirt is small.'

(3)   *Pasa ye-pane.*
flower 3SG-smell
'The flower smells.'

(4)   *Ye-nonoha.*
3SG-ready
'He is ready.'

Examples (5) to (8) show intransitive clauses with active verbs.

(5)   *Waga-wa ye-lao-ko.*
boat-PM   3SG-go-PERF
'The boat has gone.'

(6)   *Se-lage.*
3PL-arrive
'They arrived.'

(7)   *Ye-koipili.*
3SG-angry
'She's angry.'

(8)   *Ya-henamai.*
1SG-ask
'I asked.'

Underived heads of intransitive clauses can be based on monovalent roots as in (1) to (8) above but also on labile roots as in (9). With verbs based on labile roots the transitivity status of the clause is often not transparent due to the zero allomorph of the third singular object suffix (cf. 4.1, 12.2). Compare the intransitive clause in (9a) with the transitive clause in (9b) where the verb carries the zero suffix. An example with an overt object suffix is given in (9c).

(9)   a.   *Se-hedede.*
3PL-talk/tell
'They talked.'

b.   *Se-hedede-ø.*
3PL-talk/tell-3SG.O
'They said it/talked about it.'

c.   *Se-hedede-go.*
3PL-talk/tell-2SG.O
'They talked about you.'

Bivalent roots can feature in intransitive verbs only if they carry derivational morphology. The verbs in (10) and (11) are derived from bivalent roots by the *kai-* prefix (chap. 8). They express activities.

(10)   *Ya-lao ya-kai-deuli.*
1SG-go   1SG-KAI-wash
'I go and do the laundry.'

(11)   *Ka-kai-gwali.*
1EX-KAI-spear
'We spear fish.'

The verbs in (12) and (13) are derived by the resultative prefix *ta-* (chap. 9 and express states.

(12)   *Pilipou   ye-ta-pulisi.*
trousers 3SG-RESULT-tear
'The trousers are torn.'

(13)   *Galasi   ye-ta-kesi.*
glass   3SG-RESULT-break
'The glass is broken.'

Clauses with incorporating verbs are also generally intransitive (with a few exceptions cf. chap. 10). Intransitive clauses with type I incorporation are active as in (14), those with type II incorporation are stative as in (15).

(14)   *Se-koya-tudai.*   (15)   *Ya-kulu-kamkamna.*
             3PL-garden-dig   1SG-head-hurt
             'They garden-dig.'   'I have a headache.'

Intransitive clauses can also be headed by complex verbs (chap. 5) in which case they are typically active. Consider (16) and (17):

(16)   *Ya-numa-kasaya   na   sola   gado-gu   ye-magu.*
             1SG-drink-in.vain   CONJ   still   throat-1SG.P   3SG-dry
             'I drank in vain, I am still thirsty.'

(17)   *Ye-keno-wadam.*
             3SG-sleep/lie-hide
             'He hid (himself).' (ar3a:28)

Certain intransitive verbs may occur with an object argument as heads of transitive clauses. In chapter 3, I proposed that these verbs have a semantic object argument which may or may not surface syntactically. If no object NP is present, the clauses headed by such verbs are intransitive. The verbs in these clauses may be simplex as in (18a) or derived by the *kai-* prefix as in (19a). In (18b) and (19b) I present corresponding transitive clauses with outer-core objects. Constructions of this type are discussed in detail in chapter 12.

(18) a.   *Ye-kuma.*   b.   *Kwateya   ye-kuma.*
             3SG-plant   yam   3SG-plant
             'He planted.'   'He planted yams.'

(19) a.   *Se-kai-katu.*   b.   *Yama   se-kai-katu.*
             3PL-KAI-catch.fish   fish   3PL-KAI-catch.fish
             'They catch fish.'   'They catch fish.'

Certain types of intransitive clauses are conventionally interpreted as encoding events with two participants. In these clauses one participant is expressed as the intransitive subject but a second participant is pragmatically implied. In (20) and (21) an addressee or goal participant is implied by the directional suffix on the verb. The clauses involve path-encoding verbs such as verbs of communication and perception. From these, an intransitive complex verb stem is derived by a motion verb stem such as *lao* 'go' or *dobi* 'go down'. The use of intransitive clauses for encoding two-participant events is discussed in detail in chapter 14.

(20)   *Ye-hedede-lao-ma.*   (21)   *Ye-kita-dobi-wa.*
             3SG-tell-go-hither   3SG-see-go.down-thither
             'He told me.'   'He looked down to you.'

In sum, there is a variety of verbs which can head intransitive clauses. They were discussed in chapter 4 on the Saliba verb classes and in chapters 5 and 8 to 10 on derivational morphology. In general, intransitive clauses encode events with one principal participant, but in certain intransitive constructions a second participant is conventionally implied (chap.14).

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TRANSITIVE CLAUSES

In this chapter, I discuss the structure of Saliba transitive clauses. As introduced in chapter 3, the transitivity status of a clause can be the same or higher than the transitivity status of the head verb. This is due to the independent definitions of verb-level and clauses-level transitivity. Verb-level transitivity is defined on morphological grounds, while clause-level transitivity is defined by the overall number of arguments expressed in the clause, independent of whether or not they are cross-referenced. Transitive clauses headed by transitive verbs I have called instances of accord, those headed by intransitive verbs instances of discord in transitivity status between the clause and the verb level. With the notion of discord, I intend to account for examples like in (1) and (2), where a morphologically intransitive verb is preceded by an object NP. In (1), the intransitive verb *se-bahe* 'they carry' is preceded by the object noun *natu-di-ao* 'their children', in (2), the verb *ye-lao-liga* is preceded by the object *kai-wa* 'the food'.

(1)   *Natu-di-ao   se-bahe   se-lu   se-lao   nukula-ne.*
         child-3PL.O/P-PL   3PL-carry   3PL-go.in   3PL-go   bush-DET
         'They carry their children and go into the bush.' (oldtime3:112)

(2)   *Besi-na   kai-wa   ye-lao-liga*
         enough-3SG.O   food-PM   3SG-go-cook
         'So she cooked the food' (bagi116)

In section 12.1, I briefly describe clauses with accord. In Section 12.2, I give a more detailed account of transitive clauses with discord in transitivity status because these constructions are typologically of particular interest.

12.1 ACCORD IN TRANSITIVITY STATUS

The basic requirement for a transitive clause to be in a state of accord is that there are exactly two arguments expressed in the clause and that both arguments are cross-referenced on the verb. A clause is automatically in a state of accord if there are no lexically expressed arguments and the only arguments are those marked on the verb. This is the cases in (3) and (4).

(3)   *Ka-kita-di.*   (4)   *Ku-lapui-ya-ko?*
         1EX-see-3PL-O   2SG-hear-3SG.O-PERF
         'We saw them.'   'Have you heard it already?'

Clauses that feature a transitive verb plus one or two argument NPs are also instances of accord as long as the NPs are coreferential with the affixes on the verb, as in (5) and (6). In (5), the transitive verb is preceded by an object NP, in (6), by a subject NP.

(5)   *Ka-di   pasa   se-tole-di.*
        CL2-3PL.P   flower   3PL-put-3PL.O
        'They put on their decoration.' (nipunosi120)

(6)   *Loheya-wa laki-laki-na-wa   ye-hai-ø*
        boy-PM   RED-big-3SG.P-PM   3SG-take/get-3SG.O
        'The big boy got it' (a-r1c:23)

If both the subject and the object are expressed lexically the object noun appears between the subject and the verb as in (7).

(7)   *Maria   bisikete ye-kai-ø.*
        Name   biscuit   3SG-eat-3SG.O
        'Maria ate the biscuit.'

The internal morphological structure of the verb stem does not affect the accord (or discord) status of the clause. The verb can have a simplex transitive stem as in (5) and (6), or a morphologically complex stem as in (8) to (10). In (8), the verb stem is derived by the applicative suffix, in (9) by the causative prefix. Example (10) shows a transitive complex verb with the stems *hai* 'take/get' as V_1 and *gabae* 'away/off' as V_3 (see chap. 5).

(8)   *boxi-wa   ye-tabe-i-ø*
        box-PM   3SG-pull-APP-3SG.O
        'he pulled the box' (a-r3b: 34)

(9)   *madai ...   ta-he-yababa-di*
        lest   1INC-CAUS-bad-3PL.O
        'lest we spoil them' (daiduba9)

(10)   *ye-hai-gabae-ø*
        3SG-take/get-away/off-3SG.O
        'he took it out' (maus2b:12)

Roots of all verb classes can feature in transitive clauses with accord, some as simplex stems, others only in derived stems. Example (9) features a class-1 root, (8) a class-2 root, and (10) a root of class 3. A class-4 root occurs in example (3). The monovalent roots of classes 1 and 2 can only occur in accord clauses when they are transitivized, while bivalent and labile roots may occur as simplex stems. With this brief overview, I close the discussion of transitive clauses with accord and turn to clauses with discord, which are headed by intransitive verbs.

12.2 DISCORD IN TRANSITIVITY STATUS

In chapter 3, I have termed transitive clauses that feature intransitive verbs as their heads instances of discord in transitivity status. Clauses with discord are classified as transitive rather than as intransitive because they feature two core arguments: the subject and an object. According to the definition of argumenthood introduced in chapter 3, the objects of transitive clauses with discord classify as outer-core arguments. They are unlike inner-core arguments in that they are not cross-referenced on the verb, but they are also unlike adjuncts in that they are not marked by postpositions. Outer-core objects do not differ phonologically from inner-core objects and they occur in the same position. The status of outer-core objects is further discussed below. Transitive clauses with discord share features with both intransitive clauses and transitive clauses with accord: they share with intransitive clauses that the verb is morphologically intransitive, but they share with transitive clauses with accord that they feature two core arguments. Two examples of transitive clauses with discord were presented in (1) and (2) above.

It cannot be established for every given Saliba clause whether it constitutes an instance of accord or of discord. To identify clauses with discord, the transitivity status of the verb needs to be known, which is not always morphologically transparent. A clause with an object NP is an instance of accord if the verb is morphologically transitive, but an instance of discord if the verb is intransitive. This difference is difficult to determine in certain cases, due to the word-final zero allomorph of the third person singular object suffix. Roots from all four classes can occur as the head of a transitive clause with discord: monovalent roots of class 1 and 2, bivalent roots (class 3), and labile roots (class 4). For verbs based on certain roots, this distinction is problematic, for other roots it is not. The problematic cases concern labile roots. The crucial point is that, for verbs based on labile roots, it is only the presence or absence of an object suffix that distinguishes the transitive form of the verb from the intransitive one. This means that, for these verbs, there is a contrast between the ZERO object suffix and NO object suffix – a distinction which is difficult to operationalize. Consider, for example, the root *numa* 'drink'. It is labile and therefore it can occur without morphological derivation as either a transitive stem as in (11a), or intransitive stem as in (11b).

(11)   a.   *Se-numa-ø.*   b.   *Se-numa.*
             3PL-drink-3SG.O   3PL-drink
             'They drank it.'   'They drank.'

As discussed in the transitivity tests in chapter 4, there are certain environments in which the transitivity status of the verb is overt even if it is based on a labile root

(e.g. when it carries the *ko*-suffix) and clauses with discord can be identified. Nevertheless, for a given text example, if the transitivity status of the verb is not overt, cases of discord cannot be identified for verbs based on labile roots.

The identification of discord with verbs based on bivalent roots is less problematic. Simplex stems based on bivalent roots are always transitive and therefore they cannot be heads of transitive clauses with discord (since the head verb must by definition be intransitive). But bivalent roots are attested in discord clauses when they carry the detransitivizing *kai*-prefix. In these cases, the intransitive status of the verb is morphologically overt and cases of discord can be identified when such verbs are preceded by an object noun as in (12b).

(12) a. *Kumkum   ta-unui-di.*   b. *Kumkum   ta-kai-unui.*
          Fish.Name   1INC-catch/kill-3PL.O/P   Fish.Name   1INC-KAI-catch/kill
          'We catch *Kumkum* fish.'   'We catch *Kumkum* fish.'

Unproblematic for the identification of discord clauses are verbs based on monovalent roots, since it can always be established whether they are transitive or intransitive. Stems based on class-2 roots are transitive if they carry the applicative suffix (and in this case they must also carry an object suffix). If the object suffix is the zero allomorph, the object suffix itself is not visible but the applicative is always overt. The verb in (13a) is transitive and carries the zero object suffix, this can be inferred by the presence of the applicative. The verb in (b) is intransitive as shown by the absence of the applicative marker. This clause is an instance of discord in transitivity status.

(13) a. *Bosa   ye-bahe-i-ø.*   b. *Bosa   ye-bahe.*
          basket   3SG-carry-APP-3SG.O   basket   3SG-carry
          'He carried a basket.'   'He carried a basket.'

Similarly, simplex stems based on class-1 roots are always intransitive and clauses with discord as in (14) can easily be identified.

(14)   *Ka-lao   koya.*
          1EX-go   garden
          'We go to the garden.'

The discord clauses in (11b), (12b), (13b), and (14) share that the object noun classifies as a semantic argument of the verb root. A semantic argument was defined in chapter 3 as one that CAN be expressed as a syntactic core argument of the underived inflected verb. This is the case for all three examples, independent of whether the verb in the discord clause itself is simplex or derived. The intransitive verb in (12b) is derived, but (12a) shows that the discord object CAN in fact occur as a core argument of the underived verb.

There are not only different types of verb roots which can figure in discord clauses, but also object nouns with different types of semantic roles. In most cases, discord objects are patients of 'agentive' verbs or verbs of transfer, as in (11b) to (13b), but also goals of motion verbs can occur in clauses with discord as in (14). While all discord objects classify as outer-core arguments, they can be distinguished in that outer-core patients occur in the canonical argument position preceding the verb, but outer-core goals follow the verb. Figure 3 in chapter 3 showed that outer-core goals have less core-argument features than outer-core patients, (in that they share less features with subject arguments). An overview of Saliba object types was presented in chapter 3.

Clauses in which morphologically intransitive verbs co-occur with lexical objects are a established phenomenon in Oceanic languages and have been treated in different ways in the literature. In 12.2.1, I discuss cases of discord in other Oceanic languages from the literature for comparison and in order to consider the Saliba data in the context of the larger language group. Following this, I discuss the Saliba discord clauses with outer-core patients in 12.2.2, and those with outer-core goal objects in 12.2.3.

12.2.1 Discord IN OCEANIC LANGUAGES

Constructions like the Saliba transitive clauses with discord are a well known phenomenon which has been reported from a number of Oceanic languages. In most cases, the intransitive verbs which feature in these constructions do have transitive counterparts and the choice between the intransitive and the transitive verb correlates with properties of the object noun. What exactly the crucial object properties are seems to vary across languages, but the properties most often discussed as relevant are definiteness and specificity. Crowley (1983: 278), for example, states about Oceanic languages in general:

> ... it is commonly the case that in Oceanic languages with a morphologically marked transitive/intransitive contrast, there is a difference in meaning relating to the definiteness of the object noun phrase.

For Proto-Eastern Oceanic, both Pawley (1972, 1973) and Clark (1973, 1976) reconstruct morphological transitivity marking as correlating with specificity of the object rather than with the mere presence or absence of an object noun. Also along the same lines, Ross (1988: 97) states:

> ... transitive verbs are distinguished from intransitive ones by the presence of a transitivizing suffix, ... and the absence of this marker marks a potential object as ... specific ...

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This means a morphologically intransitive verb may occur in a clause with an object NP if the object noun is non-specific. Being non-specific and indefinite, the nouns in such discord constructions obviously share features with incorporated nouns and, as a consequence, discord constructions are often described as instances of noun incorporation in the literature. However, according to the definition of noun incorporation proposed in chapter 10, an incorporated noun is morphologically part of the verb and this is not the case for objects in discord constructions, which have some morpho-syntactic independence (as discussed below).

In grammars and articles on specific Oceanic languages, one often finds short statements about the correlation between transitivity marking and definiteness or specificity of the object noun. For example, Wouk (1986) presents evidence that in Micronesian, Polynesian, and Melanesian languages the transitivity marking of the verb is not primarily determined by the number of arguments but by the status of the object. The object properties she reports as relevant are those associated with object individuation in the sense of Hopper and Thompson (1980), especially definiteness, specificity, and referentiality. Wouk shows that in many of the surveyed languages, specific, definite, or referential objects require the transitive form of the verb, while non-specific, indefinite, or non-referential objects can or must occur with the morphologically intransitive form.

Clauses with intransitive verbs and object NPs are also reported for Sinaugoro, a Papuan Tip Cluster language like Saliba. Taubershmidt and Bala (1991) state that specific objects are cross-referenced on the verb but non-specific objects are not. Thus, both morphologically transitive and intransitive verbs can occur with object nouns. In (15a) (their example 10, p. 4), the verb following the object noun is transitive as shown by the object suffix on the verb and the ergative marker following the free subject pronoun. In (15b) (their example 11), the verb is intransitive as shown by the absence of these markers.[1]

(15) a. *Au na forara a bubu lausi-a-to.*
SINAUGORO 1SG ERG sand 1SG.SUB pour spread-3SG.O-PERF
'I spilt the sand.'

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[1] *The form* au *'1SG' is a free pronoun, while* a *'1SG.SUB' refers to the "pre-verbal subject marker",* ERG *stands for ergative marker.*

b. *Au forara a bubu lausi-to.*
1SG sand 1SG.SUB pour spread-PERF
'I sand-spilt.'

According to Taubershmidt and Bala, the clause in (15a) with the transitive verb makes "reference to a particular object", while the clause in (b) with the intransitive verb "is describing a type of action" (p. 4). They state that non-specific objects cannot be cross-referenced on the verb, in other words, discord constructions are required if the object is non-specific.

For Tawala, another Papuan Tip Cluster language, Ezard (1991) describes that the presence of an object suffix on the verb "marks the object as referential...; its absence marks the [object] NP as generic" (p. 356/7). He presents the Tawala examples in (16) (his examples 17 and 18, p. 357) and states that the cross-referenced object in (16a) is specific, but the object in (b) which is not cross-referenced is non-specific.

(16) a. *Ta-nae Kama a polo ta-lugowad-i.*
TAVALA 1PL-go Name his pig 1PL-steal-3SG
'Let's go and steal Kama's pig.'

b. *Ta-nae polo ta-lugowada.*
1PL-go pig 1PL-steal
'Let's go pig stealing.'

Specificity or definiteness of the object noun clearly play a crucial role for the choice between morphologically transitive and intransitive verbs and thus between accord and discord constructions. But they are not the only relevant criteria as can be seen from a number of sources which treat discord constructions in a bit more detail. For example, Lichtenberk (1982, 1983) discusses constructions with morphologically intransitive verbs and lexical objects in Manam, another Oceanic language of Papua New Guinea. In Manam, this phenomenon is restricted to two classes of verbs, which Lichtenberk labels "verbs of mental disposition" and "verbs of excretion and secretion". The Manam verbs of mental disposition, i.e. verbs of 'liking', 'wanting' and 'knowing', all have a transitive and an intransitive form which each can occur with an object NP. With these verbs, only certain types of objects are cross-referenced. Lichtenberk (1982: 271) lists the following rules as determining the choice between the transitive and the intransitive verb.

1. If the direct object is both specific and higher-animal [basically humans and certain domestic animals], the transitive variant must be used.

2. If the direct object is both nonspecific and non-higher-animal, the intransitive variant must be used.

3. If the direct object is either nonspecific or non-higher-animal but not both, either the transitive or the intransitive variant may be used.

He suggests that the distinction between specific vs. nonspecific objects reflects the degree of 'individuation' of the object participants. The two Manam clauses in (17) exemplify the rules (Lichtenberk's examples (38) and (35)).[2]

(17) a. *Bóro ʒe u-rere-t-á'-di.*
MANAM pig this 1SG.RL-like-THC-TRANS-3PL(OBJ)
'I like these pigs.'

b. *Deparóbu u-rerére.*
rice 1SG.RL-like
'I like rice (in general).'

The object in (17a) is both specific and higher-animal and so the transitive form of the verb is required. Example (17b) shows the opposite case, the object noun is both non-specific and non-higher-animal and requires the intransitive form of the verb.

The second group of verbs which Lichtenberk discusses are verbs referring to bodily functions like urinating, defecating, sweating, spitting, vomiting, etc.. Again, these verbs have a transitive and an intransitive form in Manam and, again, both the transitive and the intransitive form can occur with an object NP. As opposed to verbs of mental disposition, for verbs of excretion and secretion, the crucial object feature is not specificity, but whether the object noun is cognate to the verb. Cognate objects are not cross-referenced on the verb but non-cognate objects are.[3] The Manam examples in (18) illustrate this point (Lichtenberk's examples (45) and (46)).

(18) a. *Áine patú i-tabé'a-r-a'-i.*
MANAM woman stone 3SG.RL-defecate-THC-TRANS-3SG(OBJ)
'The woman excreted the stone.'

b. *Áine tá'e i-tabé'a.*
woman feces 3SG.RL-defecate
'The woman defecated.' (i.e. produced some feces)

The non-cognate object *patú* 'stone' in (18a) requires the transitive verb, the cognate object *tá'e* 'feces' in (b) requires the intransitive verb. Lichtenberk states that the referents of cognate objects "are intimately bound up with, are the normal product of, the respective activities" (p.273). He suggests that cognate objects are less individuated than non-cognate objects, but he explicitly states that cognate objects are not necessarily non-specific. He states that the object in (18b) is both

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[2] *The abbreviations are: RL= realis, THC= thematic consonant, TRANS= transitivizer.*

[3] *Lichtenberk does not explicitly define his use of 'cognate', but the objects in his examples seem to be both morphologically and semantically cognate to the verb.*

cognate and specific: "it refers to the feces excreted by the mythical woman on a particular occasion and out of which Manam Island later came into being" (p. 273).

In his grammar of Boumaa Fijian, also Dixon (1988) discusses instances of what I have called transitive clauses with discord. He states that although generally an object can occur in a clause only if the verb is transitive, there are exceptions to this and there is a special group of verbs which can occur in their intransitive form with an object NP. These verbs "are all concerned with involving the object in an 'activity of motion'" (1988: 204) and Dixon specifically mentions the translation equivalents of 'pull' and 'push', 'lift up', 'carry on back', and 'carry on shoulders'. As opposed to the other sources quoted above, Dixon does not mention features of the object nouns, but aspectual properties of the clause as the defining criteria for the choice between transitive and intransitive verbs. He suggests that clauses with a transitive verb and an object NP refer "to an activity that has a definite result", but clauses with an intransitive verb and an object NP "could be used for just describing a general activity". As further relevant factors, he lists that the clauses with intransitive verbs tend to describe continuing activity and are used for "irrealis" ("any potential activity") but the clauses with transitive verbs are used for "realis" ("something that has been achieved", p. 203). He concludes:

> It seems clear that the contrast between a verb with and without [an object] suffix relates mostly to syntactic considerations (whether or not an object is referred to) but also to semantic matters (whether or not some result is achieved) and partly to pragmatic factors and niceties of discourse organization. (p. 204)

Besides the intransitive 'pull', 'push', and 'carry' verbs which may occur with an object noun, there is a type of construction which Dixon labels 'noun incorporation'. He reports that "incorporation is fully productive with only a few verbs" and that "most verbs can only incorporate ... their prototypical objects" (p. 227) and finally that the nouns in such constructions have a general, indefinite meaning. These constructions consist of the 'compound stems' of an intransitive verb and an object noun. It is, however, not quite clear exactly how these constructions actually differ from the discord clauses with the 'pull', 'push', and 'carry' verbs. The 'incorporated objects' cannot bear an article or be modified by a demonstrative but they can be possessed or modified by an adjective, and the object NP can consist of two nouns joint by 'or'. Dixon states:

> Although incorporation is usually just of a noun, it can involve a complete NP. We find *saqa.'e-dra.i'a* 'cook their fish', with incorporation of possessor ... Then there

is *'ana.waci.po'i* 'eat rolled taro leaves', with noun *waci* 'cooked taro leaves' and adjective *po'i* 'rolled'. (p. 227)

Clearly, these constructions do not classify as noun incorporation according to the definition proposed in chapter 10, where noun and verb stem must form a morphological unit. Dixon seems to define the Fijian constructions as incorporation entirely by the fact that the verb is intransitive. He does not mention any structural criteria which would justify to consider the two elements, noun and verb, a morpho-syntactic unit. On these grounds, I consider these examples as further cases of discord, featuring an object noun with a morphologically intransitive verb.

The most extensive and careful study of Oceanic discord constructions is Sugita's (1973) article, which compares constructions in four Micronesian languages. All four languages, Trukese, Ponapean, Kusaiean, and Marshallese, have VO word order and show instances of morphologically intransitive verbs followed by lexical objects. For Ponapean and Kusaiean, these constructions can be identified as noun incorporation by convincing morpho-syntactic evidence (which meets the criteria for noun incorporation as defined in chapter 10). In these cases, the verb and the noun stem build a single unit in that verbal suffixes attach to the postverbal noun rather than to the verb and nothing can intervene between the verb and the noun stem. Finally, with respect to derivational rules, the combination of verb plus noun behaves like a unit, namely like an intransitive verb. In Ponapean, this unity is additionally marked by internal morpho-phonemic processes. In contrast, in Trukese and Marshallese, verb and object noun are more loosely connected and do not constitute a morphological unit. These constructions are not instances of incorporation (neither by Sugita's definition nor by mine). In my account, they constitute instances of discord. Sugita considers the verbs of these constructions as 'semitransitive' (morphologically intransitive but followed by an object). Crucially, he states that the objects of 'semitransitive' verbs basically "have all the syntactic characteristics of objects of transitive verbs" (p.404). Verbal suffixes attach to the verb (rather than the postverbal object) and particles can intervene between the verb and the noun stem. Besides this, the object noun can be moved into a topic or focus position preceding the verb. As in the discord cases discussed above, in Trukese and Marshallese, the choice between the transitive and intransitive form of the verb correlates with features of the object noun. However, in these languages, neither definiteness nor specificity clearly distinguishes the

objects of transitive from those of intransitive verbs. Sugita shows that not all objects of intransitive verbs are indefinite or non-specific.[4] He suggests that a noun is definite if its referent is assumed to be known to both the speakers and the addressee, a noun is specific if its referent is known at least to the speaker. The objects of Trukese discord clauses can be bare or modified by a demonstrative, but they can never be modified by a numeral. In contrast, the objects of transitive verbs, can be modified by a demonstrative or by a numeral, but they can never occur bare without any modifiers. This means BOTH transitive and intransitive verbs allow definite objects modified by a demonstrative. The choice between transitive and intransitive verbs correlates with the contrast between an exhaustive vs. a partitive reading. When the verb is transitive, as in (19a), the object *kkónik* 'water' is interpreted as definite and exhaustive ('all the water'). When the verb is intransitive, as in (19b), the object is definite but has a partitive reading ('some of the water').

(19)	a.	*Wúpwe wúnúmi ewe kkónik.*	b.	*Wúpwe wún ewe kkónik.*
TRUKESE		I.will drink.it the water		I.will drink the water
		'I will drink the water.'		'I will drink some of the water.'

These Trukese examples show that definiteness cannot be the distinguishing feature between objects of transitive vs. those of intransitive verbs and the same facts apparently hold for Marshallese. Similarly, in terms of specificity there is no clear-cut distinction between the objects of transitive verbs and those of intransitive verbs. Sugita explains that the indefinite object of the transitive verb in (20) can have a specific or a non-specific reading.

(20)		*Wú mwochen pekkiiy emén macchang.*[5]
TRUKESE		I want shoot.it one.animate bird
		'I want to shoot a bird.'

He concludes that specificity of the object cannot be the defining factor for the choice between transitive and intransitive verbs either. Thus, following Sugita, neither definiteness nor specificity provide a clear-cut distinction between the objects of transitive verbs and those of intransitive verbs. Yet still, definiteness and specificity seem to play a role in the distinction between accord and discord constructions. To capture this distinction, Sugita (1973: 398) suggests the concept of "indeterminacy" (which is basically reminiscent of the notion of object

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[4] *Note, however, that Sugita does NOT show whether or not all objects of transitive verbs must be specific. Therefore, he dismisses the role of specificity as a defining parameter of discord possibly too early.*

[5] *The form* emén *consists of the numeral 'one' and an "animate" classifier.*

individuation, in the sense of Hopper and Thompson 1980).

> A transitive verb takes as its object noun phrases which refer to objects whose quantity or extent is limited or defined regardless of whether the noun phrases are specific or nonspecific. We shall say that transitive verbs take DETERMINATE noun phrases as objects. A semitransitive [i.e. morphologically intransitive] verb, on the other hand, takes as its objects noun phrases which refer to objects of "non-limited," but not necessarily "unlimited," quantity or extent, regardless of whether they are definite or indefinite. We say that semitransitive verbs take INDETERMINATE noun phrases as objects. (the emphasis is his).

One drawback of Sugita's study (and most of the other sources discussed) is that it does not provide any sense of the frequency of discord constructions. It remains unclear whether every transitive verb has an intransitive counterpart which can occur with an object NP, or whether 'semitransitive' verbs constitute a special class. The examples from Trukese and Marshallese which Sugita discusses show translation equivalents of high frequency verbs like 'cut', 'drink', 'eat', 'see', 'shoot', 'slap', and 'tear'.

In the examples discussed above, the choice between transitive and intransitive verbs, and therefore between clauses with accord vs. discord, correlates with properties of the object noun and/or with the characterization of the activity (e.g. in terms of aspect). It was reported that discord clauses tend to describe a type of action or an ongoing activity, while clauses with accord refer a specific instance of an action which has a definite result. The objects of discord clauses in the Oceanic languages discussed above were described as non-specific, indefinite, non-referential, generic, 'non-higher-animal' (inanimate, non-domestic animal, or non-human), prototypical, and/or cognate. The properties of objects in discord clauses largely correspond to Hopper and Thompson's (1980) parameter of 'individuation' which can be understood as a bundle of properties. For every object in the discord constructions discussed, some of the properties are relevant but not necessarily all properties are relevant in every single case. The object properties which are relevant vary across languages, but also across classes of verbs within a single language. For the Micronesian languages discussed by Sugita, neither definiteness nor specificity nor any other object property provides a clear distinction between the objects of transitive and those of intransitive verbs. In Manam, specificity is the crucial object feature for one group of verbs, but not for the second, for which the cognate status of the object is relevant. As a consequence, it is not possible to identify a single object feature as triggering transitivity marking in all the Oceanic languages discussed. And in some cases, even in a single language transitivity marking does not correlate consistently with a single object feature (e.g. in

Trukese and Marshallese).

In sum, as Wouk (1986: 135) states "[t]he most important parameter appears to be individuation of the patient". Objects of transitive clauses with discord are low in individuation and they share this with incorporated nouns. However, in contrast to incorporated nouns, discord objects are syntactically independent. For Trukese and Marshallese, Sugita (1973) states that they have all the syntactic properties of objects of transitive verbs. It is also noteworthy that they can be modified by demonstratives (though not numerals). Fijian discord objects show similar syntactic freedom, they can be possessed, modified by an adjective, or consist of nouns joint by a conjunction.

Two points are often not treated exhaustively in the sources reviewed above. One is whether discord constructions are merely allowed or in fact required with certain kinds of objects. The second point is whether discord constructions are allowed only with a specific small class of verbs or in fact with most members of the verbal lexicon. It appears that there is variation across languages whether discord constructions are allowed or required with objects that are low in individuation. In Sinaugoro and Tawala, non-specific objects seem to require the intransitive form of the verb. Similarly, in Manam, cognate objects of verbs of excretion and secretion seem to require the intransitive verb form. Objects of verbs of mental disposition require the intransitive form of the verb if they are both non-specific and non-higher-animal. But if the object is either non-specific or non-higher-animal (but not both) the verb may be transitive or intransitive.

As for the verbs which may occur in clauses with discord, in several languages they constitute a restricted set, but except for Manam, in none of the languages these verbs were described as a formally or semantically defined class. The discussion of Sinaugoro and Tawala does not mention any restriction to a specific small set. Similarly, the statements about the Oceanic family in general by Crowley (1983), Pawley (1972, 1973), Clark (1973, 1976), Ross (1988) imply that discord constructions are not restricted to a small class of verbs but occur with a large part of the verbal lexicon.

Above, I have shown that clauses with discord in transitivity status are a recognized phenomenon across Oceanic languages. Having laid out the main properties of discord constructions as discussed in the Oceanic literature, I now turn to take a close look at transitive clauses with discord in Saliba.

12.2.2 Discord WITH PATIENT OBJECTS

In Saliba there are cases of discord which correspond closely to the constructions in other Oceanic languages discussed above. In this section, I describe transitive clauses with discord whose object is a patient. I discuss the types of verbs, the status of the object, discourse tendencies, and other features of these constructions.

12.2.2.1 Types of verbs

Discord clauses whose object has the semantic role of patient can be headed by several types of verbs. The largest group is based on either monovalent roots (of class 2) or labile roots which show no special morphological marking but appear in their simplex intransitive form. A smaller group of verbs which may head discord clauses carries detransitivizing morphology. In most cases, these stems are derived by the *kai-* prefix (chap. 8), but in two instances, a stem is detransitivized by addition of a further verb stem, i.e. by building a complex verb stem. The heads of discord clauses whose stems are derived are based on bivalent roots, nominal roots, or precategorial monovalent roots, which are defective in that they cannot occur as underived intransitive stems. Besides the distinction between simplex and derived stems, the intransitive verbs which can occur with patient objects can further be divided into those which have transitive counterparts and those which do not. Most of them do, but in a few exceptional cases the verb has only an intransitive form and discord constructions are obligatory (section 12.2.4). Figure 1 presents an overview of the intransitive verbs which can occur in transitive discord clauses with patient objects.
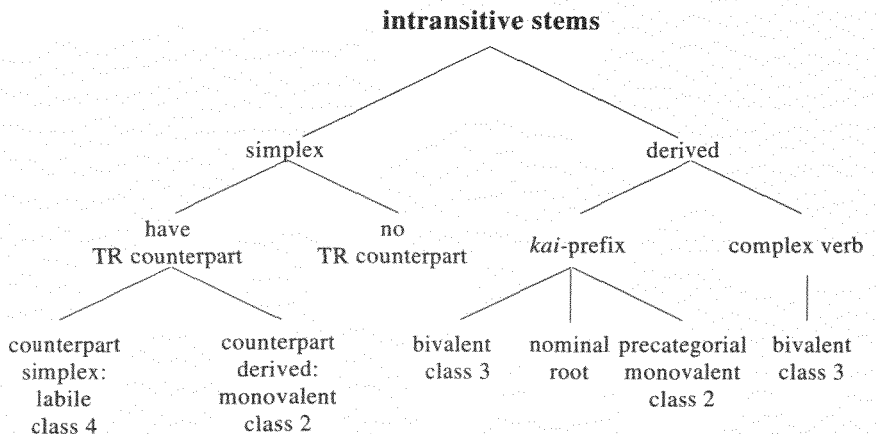
Figure 1   *Heads of transitive clauses with discord (patient objects)*

Figure 1 shows that roots from all classes but class one are attested as heads of transitive discord clauses with patient objects. This is in line with the suggestion raised in chapter 3 that the outer-core objects of clauses with discord constitute semantic arguments, since most class-1 roots (monovalent roots which do not allow the applicative suffix) are stative.[6] I suggested that an object is a semantic argument of a verb root if it can be encoded as a syntactic (inner or outer) core argument of the underived stem. This holds for the outer-core objects in discord clauses if the roots are labile and monovalent. It also hold if the roots are bivalent, since, although the intransitive stems in the discord clause are derived, the same patient object can occur as a core argument of the underived transitive stem. Problematic are heads of discord clauses derived by the *kai*-prefix from nominal roots. In theses cases, the discord object cannot be identified as a semantic argument because it cannot be encoded as a syntactic argument of the underived stem. The same holds for the precategorial monovalent roots, which can never occur as underived stems.

In (21) to (24) I list the stems which are attested in Saliba discord clauses with patient objects. Note that all of the lists are probably incomplete (especially that of the labile roots in (22) for the reasons outlined above). Underived intransitive stems are presented in (21) and (22). Derived intransitive stems are presented in (23) and (24).

The list in (21) shows intransitive stems whose transitive counterparts are derived by the applicative suffix. They are based on monovalent roots.

(21)
bahe	'carry'	*lagau*	'weed'
deula	'(make) terrace'	*lusa*	'shoot'
gala	'catch with net'	*sipwa*	'trap'
kaibwada	'ask for'	*tano*	'collect'
kailoya	'hunt'	*usa*	'put in'
kuma	'plant'	*wase*	'search'

The attested simplex intransitive stems whose transitive counterparts are underived are presented in (22), they are based on labile roots. This list is probably highly incomplete since discord constructions are particularly hard to identify with labile roots.

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[6] *In section 12.2.3, I also discuss cases of discord with active class-1 roots.*

(22) *daibi* 'clean (garden)' *keli* 'dig'
      huwa   'plant'   *numa* 'drink'
      kai   'eat'

The list in (23) shows the intransitive complex verb stems which are attested in discord constructions. The roots belong to different classes.

(23) *kabi-henaku* 'chase'
      kabi-tano   'pick clean'
      lao-liga   'cook'

Stems derived with the *kai-* prefix (in its detransitivizing function, cf. chap. 8) are presented in (24). Most are based on bivalent roots, some on precategorial monovalent roots, one is based on a noun root. Apparently none of them can occur as underived intransitive verb stems.

(24) *kai-biteli* 'hit'   *kai-keli*   'dig'
      kai-deuli   'wash'   *kai-sapi*   'slap'
      kai-gabu   'bake/burn' *kai-sikwa* 'poke'
      kai-gwali   'spear'   *kai-tuha*   'poison'
      kai-katu   'catch (fish)' *kai-unui* 'kill/catch'

As stated above, a problem for giving a full account of clauses with discord is that a verb's transitivity status is not always morphologically overt. The problems posed by labile roots where discussed above. The morphological tests which help identify a verbs transitivity status were introduced in chapter 4.

Examples with the *kai*-prefix were discussed in detail in chapter 8. In this section, I mainly discuss cases of discord with simplex intransitive verbs which do have a transitive counterpart (either simplex or derived), but I also include cases of derived intransitive stem which consist of complex verb stems. The exceptional cases of intransitive verbs which do not have transitive counterparts are discussed in section 12.2.2.4 below.

Some text examples of discord with simplex intransitive verbs are presented in (25) to (27).

(25) *Kita* *hinage* *puwaka* *ta-bahe* *ta-lao*
      1INC   also   pig   1INC-carry 1INC-go
      'We also carry pigs and go' (oldtime1:127)

E.g. *pick clean a freshly burned garden from the remains of the burned trees. Literally 'touch-collect'.*

(26)   *Kai   saha   unai   ka-usa.*
       food   what   PP.SG   1EX-put.in
       '(I'll tell her) what kind of food we put into it.' (basdial7)

(27)   *Sindu,   kwa-lao-ma   gogo-ne   kwa-tano!*
       Name   2PL-go-hither   things-DET   2PL-collect
       'Sindu, come and collect the things!' (edial143)

The cases where the heads of discord clauses are intransitive complex verbs include the forms *lao-liga* 'cook/do the cooking' which is derived from *liga* 'cook' and *kabi-henaku* 'chase' which is derived from *henaku* 'chase'. The two constructions are fairly idiosyncratic and the V_1 stems do not constitute productive means of detransitivization. While the V_1 stem *lao* 'go' in *lao-liga* 'cook' is intransitive, the V_1 stem *kabi* 'touch/reach' is in fact transitive. Also unlike in other complex verb, V_1 stems do not seem to contribute much to the semantics of the complex verb. The complex constructions are lexicalized to the extent that they are just intransitive versions of the simplex transitive stems. The clause in (28) is an instance of accord since it features a transitive verb with the stem *liga* 'cook'. The clause in (29) is an instance of discord since the intransitive stem *lao-liga* occurs with an object noun.

(28)   *ka-di   kai-te   kabo   ma-buse-na   kabo   ya-liga-ø*
       CL2-3PL.O/P   food-DET   TAM   with-shit-3SG.P   TAM   1SG-cook-3SG.O
       'I will cook their food together with shit' (tautela21)

(29)   *Besi-na   kai-wa   ye-lao-liga*
       enough-3SG.O   food-PM   3SG-go-cook
       'So she cooked the food' (bagi116)

Similarly, (30) shows a clause with accord and (31) one with discord, with the derived intransitive verb.

(30)   *Rascolo   labui-wa   ye-henaku-di.*
       rascals   two-PM   3SG-chase-3PL.O/P
       'He chased the two rascals.'

(31)   *Rascolo   ye-kabi-henaku.*
       rascals   3SG-touch-chase
       'He chased rascals.'

12.2.2.2 Characteristics of discord clauses with patient objects

The Saliba discord clauses with underived intransitive verbs and with complex verbs show the same tendencies as clauses with the *kai*-prefix (chap. 8) and as the discord constructions in the Oceanic literature discussed above. Below, I lay out the characteristics of the Saliba constructions and the status of their object argument.

Similarity to noun incorporation

First, the objects of discord clauses are clearly not morphologically incorporated into the verb. According to the definition of incorporation proposed in chapter 10, an incorporated noun is morphologically part of the intransitive verb and has no syntactic independence. In contrast, objects of discord clauses are syntactically independent which is immediately obvious from their position preceding the subject prefix on the verb. Besides this, the object may take a range of modifiers, and is thus clearly a phrasal unit. In (32), the object noun is marked by the clitic -*wa*. In (33), the object NP consists two adjectival forms *hekadi-wa pita-pitali-di-wa* 'some dry ones' which both carry the -*wa* clitic. The object in (34) is followed by a plural marked adjective.

(32)   *se-sagu-i-ø   waiwai-wa   se-usa-usa   bosa-wa   unai*
       3PL-help-APP-3SG.O   mango-PM   3PL-RED-put.in basket-PM   PP.SG
       'they helped him putting the mangoes into the basket' (pear2:37)

(33)   *kabo   heka-di-wa   pita-pitali-di-wa   ka-bahe   ka-likwa-di*
       TAM   some-3PL.O/P-PM   RED-dry-3PL.O/P-PM   1EX-carry   1EX-wear-3PL.O/P
       'we take some dry ones and wear them' (nogi11)

(34)   *kipukipu   edi   yama   gagili-di-ao   ka-bahe   kabo   ka-kai-unui*
       creek   PP.PL   fish   small-3PL.O/P-PL   1EX-carry   TAM   1EX-KAI-kill
       'in the creeks (we catch) small fish, we carry them and kill them' (fish9)

The object noun can also be possessed as shown in the two text examples in (35) and (36) (repeated from (1) above). (35) shows indirect (alienable) possession, involving a classifier, (36) shows direct (inalienable) possession where the possessive pronoun attaches directly to the noun (see chap. 2).

(35)   *Ye-bui-gabae-ø   yo-na   gandubuli   ye-bahe   ye-dikwa-uyo.*
       3SG-turn-away-3SG.O   CL1-3SG.P hunting.spear   3SG-carry   3SG-cross-back/again.
       'He dropped it, carried his hunting spear and crossed back over the mountain.' (tblaki65)

(36)   *Natu-di-ao   se-bahe   se-lu   se-lao nukula-ne.*
       child-3PL.O/P-PL   3PL-carry   3PL-go.in   3PL-go bush-DET
       'They'd carry their children and go into the bush.' (oldtime3:112)

In sum, the objects of discord clauses constitute full NPs and show the same syntactic characteristics as objects of accord clauses. They clearly do not meet the formal requirements of noun incorporation.

But, as discussed for the discord constructions of other Oceanic languages, they do share semantic/pragmatic features with incorporation. Many of the stems listed in (21) to (24) denote habitual activities which are prominent in day-to-day life and whose objects are low in features of individuation.

Status of objects: individuation, specificity

In a number of cases, the intransitive verbs in discord constructions only allow objects which are the prototypical undergoers of the denoted activity. For example, while the transitive stem *liga* 'cook' can basically take any noun as its object, the intransitive stem *lao-liga* 'cook' generally allows only the semantically cognate noun *kai* 'food' as in (37). (Some speakers also allow *laisi* 'rice' as the object of *lao-liga* 'cook' while some do not allow any object with this stem).

(37)   *Besi-na   kai-wa   ye-lao-liga*
         enough-3SG.O food-PM   3SG-go-cook
         'So she cooked the food' (bagi116)

Specificity of the object noun clearly plays a crucial role in the choice between accord and discord clauses in Saliba. For example in (38), it is the status of the object noun that distinguishes the clauses with the transitive and the intransitive verb.

(38) a. *Ti   ko-numa-ya-ko?*   b. *Ti   ko-numa-ko?*
          tea 2SG-drink-3SG.O-PERF   tea 2SG-drink-PERF
          'Did   you   drink   the   tea   'Did you drink tea already?'
          already?'

The object preceding the transitive verb in (a) is interpreted as specific. As a context for this question it was suggested that the speaker is inquiring about a cup of tea which he had previously poured for the addressee. i.e. 'Did you drink the tea already (that I had poured you)?' The object preceding the intransitive verb in (b) is interpreted as non-specific and a different context was suggested: 'Did you drink tea already (or shall I pour you a cup)?'

Similarly, the examples in (39) show that the object in the discord construction tends to be non-specific. The transitive form of the verb is used when talking about specific birds as in (a), but the intransitive verb is used if the object is non-specific as in (b).

(39) a. *Ya-lao   tem   noi   unai   manuwa   ya-sipwa-i-di.*
          1SG-go   DIST.DEM nest   PP.SG bird   1SG-trap-APP-3PL.O/P
          'I go and catch the birds in this nest.'

      b. *Ya-lao   manuwa   ya-sipwa.*
          1SG-go   bird   1SG-trap
          'I go and trap birds.'

A speaker suggested that in the discord clause in (b) the speaker does not know yet whether he will actually find any birds. Similarly, the object NP preceding the intransitive verb in (40) can only refer to a non-specific shirt and not to a specific one.

(40)   *Lulu   ya-wase.*
         shirt   1SG-search
         'I looked for a shirt.' (e.g. I wanted to buy one)

In 12.2.1 I raised the question of whether discord is merely allowed or in fact required if the object noun is non-specific. A problem in answering this question lies in the fact that definiteness and specificity do not need to be overtly marked on the noun in Saliba. The notions can be overtly marked by determiner clitics, demonstratives, or certain modifiers but this is not obligatory. As mentioned in chapter 2.4, a bare noun can have a specific or non-specific referent. This means that for a given text example it is not always possible to determine the specific or non-specific status of the object. However, from elicitations and discussions with speakers, it appears that – at least in the tested cases – non-specific nouns do not only allow but in fact require the intransitive form of the verb. In (41b) and (42b) with the non-specific object, speakers only allowed the intransitive verb and thus required a discord construction. The transitive verb form was only allowed in contexts where the object NP has a specific referent, as in (41a) and (42a) where the object is modified by a relative clause.

(41) a. *Waiwai-wa   ya-hemaisa-di-wa   ya-wase-nei-di.*   (*ya-wase*)
          mango-PM   1SG-buy-3PL.O/P-PM   1SG-search-APP-3PL.O/P   1SG-search
          'I'm looking for the mangoes that I bought.'

      b. *Ya-lao   maketi   waiwai   ya-wase.*   (*ya-wase-nei-di*)
          1SG-go   market   mango   1SG-search   1SG-search-APP-3PL.O/P
          'I went to the market and looked for mangoes.'

(42) a   *Kai-wa   se-bahe-i-ø-wa   ya-wase-nei-ø.*   (*ya-wase*)
          food-PM   3PL-carry-APP-3SG.O-PM   1SG-search-APP-3SG.O   1SG-search
          'I'm looking for the food that I brought.'

      b. *Se-sae   koya   kai   se-wase.*   (*se-wase-nei*)
          3PL-go.up   garden   food   3PL-search   3PL-search-APP-3SG.O
          'They go up to the garden and look for food.'

As discussed for verbs with the *kai-* prefix in chapter 8, there is a fair amount of speaker variation in terms of which modifiers are allowed. Most consistently rejected are numerals and modifiers which entail singular number of the object noun. The objects of discord clauses may only be interpreted as plural. Modifiers which promote the individuation of the object noun, such as singular adjectival forms as in (43) or numerals as in (44) are not allowed with discord objects. Objects modified by such forms require the transitive version of the verb. The intransitive verbs given in parentheses where rejected:

(43)   *Ye-sae-ko   koya   laki-laki-na   ye-deula-i-ø.*   *(*ye-deula)*
         3SG-go.up-PERF   garden   RED-big-3SG.P   3SG-terrace-APP-3SG.O   3SG-terrace
         'He went up already to make terraces in the big garden.'

(44)   *Laisi   pasolo labui   se-kaibwada-i-di.*   (*se-kaibwada)*
        rice   parcel two   3PL-ask.for-APP-3PL.O/P   3PL-ask.for
        'They ask for two parcels of rice.'

As shown in (41) and (42) above, also, objects modified by relative clauses, were only sanctioned with the transitive form of the verb; they were rejected with the intransitive verbs (or vice versa: the intransitive verb form was rejected with relativized objects).

Interestingly, and again parallel to clauses with the *kai*-prefix, responses to demonstratives as modifiers of discord objects were less consistent. Most speakers rejected the discord clause in (45b), and only accepted the accord clauses in (45a), but occasionally speakers stated that a determined noun as in (45b) can occur as the object of the intransitive verb.

(45) a.   *Teina   waiwai-ta   kwa-usa-i-di.*
           PROX.DEM   mango-DET   2PL-put.in-APP-3PL.O/P
           'Put these mangoes in.'

     b. ?* *Teina   waiwai-ta   kwa-usa.*
           PROX.DEM   mango-DET   2PL-put.in
           'Put these mangoes in.'

Similar were the responses to the determiner clitic *-ne* which marks a noun phrase as definite. Most speakers rejected it when modifying the object of a discord clause but the responses were not uniformly negative (while with numerals and singular adjectival forms they clearly were). There is even a text example from spontaneous speech featuring the clitic *-ne* on the object noun of an intransitive verb. The root *tano* 'collect' in (46) is monovalent and the simplex stem without an applicative suffix is intransitive.

(46)   *Sindu,   kwa-lao-ma   gogo-ne   kwa-tano!*
        Name   2PL-go-hither   things-DET   2PL-collect
        'Sindu, come and collect the things!' (edial143)

In contrast to the varied responses to the determiner *-ne*, the clitic *-wa* seems to be more generally accepted as a modifier of discord objects. This clitic marks a noun as expressing given information, as discussed in chapter 2.4.1. There are several text examples in the database. Two were given in (37) and (33) above, a further one is presented in (47).

(47)   *waiwai-wa   se-usa-usa   bosa-wa   unai*
        mango-PM   3PL-RED-put.in basket-PM   PP.SG
        'they were putting the mangoes into the basket' (pear2:37)

Similar to Sugita's (1973) findings in Trukese and Marshallese, discussed in 12.2.1, these Saliba examples with determiners raise problems for the analysis of discord objects as non-specific. While there is a tendency for these objects to be

non-specific, specificity does not seem to hold as the distinguishing criterion between accord and discord clauses in all cases.

12.2.2.3 Discourse patterns

Having laid out the restrictions and requirements for objects of discord clauses (by drawing heavily on elicited data) I now turn to look explicitly at some text occurrences of transitive clauses with discord which feature patient objects. From all intransitive heads of discord clauses discussed above, only some are in fact attested with an object argument in the text collection (rather than in notes on conversations, or through elicitations). In the case of labile roots instances of discord can typically not be identified as such in text examples (see discussion above).

I am going to look at a small sample of stems which where chosen because (a) they occur in the text sample in both the transitive and the intransitive version and (b) they are attested in discord constructions in the data base. The stems are *bahe* 'carry', *usa* 'put it', *tano* 'collect', and *lao-liga* 'cook'. This sample of verbs may be too small to conduct a statistical analysis, but it can serve to show some tendencies about discourse patterns. In the following, I compare the distribution of the intransitive stems and their transitive counterparts, as well as the type of object NPs which can accompany them.

Types of objects

Table 1 gives an overview of the occurrences of the intransitive stems and the type of their objects if they have any. (The gray fields mark the categories which are shared with Table 2 below which shows the features of the corresponding transitive stems.)

INTRANSITIVE STEMS	total	bahe 'carry'	usa 'put in'	tano 'collect'	lao-liga 'cook'
overall occurrences	**101**	55	17	1	28
with object NP	**36**	23	10	1	2
unmodified objects	**15**	9	5	-	1
modified objects	**21**	14	5	1	1
possessed NP[†]	**7**	7	-	-	-
alienably possessed	**6**	6	-	-	-
inalienably possessed	**1**	1	-	-	-
clitic -wa	**11**	6	4	-	1
clitic -ne	**1**	-	-	1	-
plural adjective	**2**	2	-	-	-
saha 'what kind'	**1**	-	1	-	-
more than one modifier	**1**	1	-	-	-

Table 1   *Discourse occurrence of intransitive stems*

Note that the numbers do not add up to the total because some nouns take more than one modifier.

[†] Excluding possessive classifiers that occur without an object noun (see discussion of *lao-liga* 'cook' below).

There are overall 101 text occurrences of the intransitive stems *bahe* 'carry', *usa* 'put in', *tano* 'collect', and *lao-liga* 'cook'. In 36 instances, the intransitive verbs are preceded by object nouns and the clauses constitute cases of discord. Of these objects 15 are bare, unmodified nouns and 21 are modified in some way. The most common modifiers are the determiner clitic *-wa*, and possessive markers. Besides this, only few modifiers are attested, these are the determiner clitic *-ne*, the question word *saha* 'what (kind)' (in (27) above) and a plural marked adjectival form (in (34) above). In one case, the object is represented not by a noun but by the two plural adjectival forms *heka-di-wa pita-pitali-di-wa* 'some dry ones' which both carry the clitic *-wa* (e.g. (33)). This is the only case, where an object is marked by more than one modifier.

For comparison, Table 2 presents the counts from clauses with the corresponding transitive stems. (Again, the gray fields mark the categories which shared with Table 1 above).

TRANSITIVE STEMS	total	*bahe-i* 'carry'	*usa-i* 'put in'	*tano-i* 'collect'	*liga* 'cook'
overall occurrences	**218**	101	92	5	20
with object NP	**83**	56	20	1	6
unmodified objects	**30**	24	6	-	-
modified objects	**53**	32	14	1	6
possessed NP	**23**	15	3	-	5
alienably possessed	**16**	10	1	-	5
inalienably possessed	**7**	5	2	-	-
clitic *-wa*	**17**	9	8	-	-
clitic *-ne*	**7**	5	-	1	1
singular adjective	**5**	3	1	-	1
numerals	**4**	1	3	-	-
hesau 'other'	**3**	3	-	-	-
heka-di/-na 'some'	**2**	2	-	-	1
determiners *-ta, -te*	**2**	-	-	-	2
demonstrative	**1**	-	1	-	-
maudoidi 'all'	**1**	-	1	-	-
more than one modifier	**15**	7	4	-	4

Table 2   *Discourse occurrence of transitive stems*

Note that the numbers do not add up to the total because some nouns take more than one modifier.

There are 218 instances of the transitive stems *bahe-i*, *usa-i*, *tano-i,* and *liga* in the text corpus. In 83 instances the transitive verbs are preceded by an object noun. Of these objects, 30 are bare unmodified objects and 53 show some kind of modifier. Again, the most common modifiers are possessive markers and the clitic *-wa*. Further modifiers attested are the determiner clitic *-ne*, singular adjectival forms, numerals, *hesau* 'other',[8] and a few other determiner and quantifiers, In overall 15 instances, an object is marked by more than one modifier. For example, in (48) the object noun is modified by two adjectives, and in (49) it is marked by a possessive classifier and by a numeral.

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[8]   *This form functions as an singular indefinite article, typically introducing new participants into the discourse.*

(48)   *kaikaiwa   laki-laki-na   posi-posi-na   ye-bahe-i-ya-ma*
         stick   RED-big-3SG.P   RED-white-3SG.P   3SG-carry-APP-3SG.O-hither
         'he brought a large white stick' (a-r1a:29)

(49)   *Yo-na   bosa   labui   ye-bahe-i-di*
         CL1-3SG.P basket two   3SG-carry-APP-3PL.O/P
         'He carried his two baskets' (pear1b:10)

In sum, the text examples confirm the findings from elicitations that the objects of intransitive verbs are more restricted in the choice of modifiers in comparison to objects of transitive verbs. The latter are attested with a larger variety of modifiers, including modifiers with singular marking. But the text data also reveal a new point, namely that the objects of transitive verbs are much more likely than those of intransitive verbs to be marked by several modifiers at a time. In 15 cases (of the overall 83), the object of a transitive verb is multiply modified. For the objects of an intransitive verb this is the case in only a single instance (of the overall 36). Obviously, the more modifiers a noun takes, the smaller is the group of its possible referents, and the higher is the degree of individuation. This new finding confirms again the observation that the objects of the intransitive verbs tend to be less individuated than those of transitive verbs.

Further features

Besides the comparison of the intransitive and transitive stems as groups, there are some interesting points to be made about some of the individual pairs of transitive and intransitive stems. One of the most noticeable things in the text occurrences of *bahe* vs. *bahe-i* 'carry' is that the transitive stem *bahe-i* carries the directional suffix *-ma* 'hither, towards speaker' in many instances (35 of the 101 text occurrences). The intransitive stem *bahe* carries the directional suffix considerably less often (in 3 of the 55 occurrences). The directional suffix is a deictic morpheme that expresses directionality towards the speaker or deictic center (see chap. 14). The text example in (50) describes a scene in a short narrative in which the character brings a wooden stick to his friend. The transitive 'carry' verb is marked by the directional suffix *-ma* 'hither, towards speaker'.

(50)   *Ede   ye-lao   kaikaiwa   gagili-na   ye-bahe-i-ya-ma*
         PRSUP 3SG-go   stick   small-3SG.P   3SG-carry-APP-3SG.O-hither
         So he went and brought a small stick' (a-r:xx)

The example in (51) stems from a procedural text in which the speaker describes the weaving and use of the traditional baskets. The intransitive verb *ka-bahe* 'we carry' towards the end of the utterance describes how the full basket is carried home (the stem *lu-lage* conventionally refers to coming home from the garden). In this text, 'home' does not refer to a particular location, but to the home of whoever is coming back from the garden. The speaker is not referring to her own home in

particular (which is where the text was recorded), and so the 'carry' verb is not marked by the directional suffix *-ma* 'hither, towards speaker'.

(51) *Ka-lao   koya   kai   ka-usa   kwateya yo   huni   yo*
1EX-go   garden   food   1EX-put.in   yam   CONJ   taro   CONJ
'We go to the garden and load food, yams, taro,

kanuwa   ka-bahe   ka-usa   bosa-wa   unai
sweet.potato   1EX-carry   1EX-put.in   basket-PM   PP.SG
sweet potato, we load them into the basket,

kabo   ka-bahe   ka-lu-lage.
TAM   1EX-carry   1EX-go.through-arrive
then we carry it and go home.' (basket14)

An explanation for its unbalanced distribution of the directional suffix might follow from the fact that the transitive stem more often refers to actual concrete events which involve specific locations, among them that of the speaker.[9] The intransitive stem more often refers to habitual events, or to types of 'carrying' events, which are not bound to any concrete location.

In the comparison of *liga* vs. *lao-liga* 'cook' it is noticeable that the intransitive stem *lao-liga* is preceded by a possessive classifier in a number of cases (5 of 28 occurrences), but there is no overt possessed object in the clause. Furthermore, the intransitive verb never occurs with a classifier WITH an overt possessed object. In contrast to this, the transitive stem *liga* 'cook' is preceded by a classifier plus a possessed noun in 5 cases (of 20 occurrences) but never by a classifier without an overt lexical expression of the possessed object noun. Consider examples (52) and (53) where the intransitive verb is preceded by a classifier without an object noun.

(52) *Na   bena   ka-di   ya-lao-liga.*
CONJ   OBLI/COMP   CL2-3PL.O/P   1SG-go-cook
'And I have to cook for them.' (fish-dial108)

(53) *... ka-kai-gwali   na   kabo   ka-mai   ku-lao-liga*
1EX-KAI-spear   CONJ   TAM   1EX-1EX.P   2SG-go-cook
'...we'll go and spear fish and then you'll cook for us' (tautela40)

In the clauses with the transitive verbs in (54) and (55), the possessive classifier is followed by a lexical expression of the possessed object.

(54) *... ka-di   kai-te   kabo   ma-buse-na   kabo   ya-liga-ø*
CL2-3PL.O/P   food-DET   TAM   with-shit-3SG.P   TAM   1SG-cook-3SG.O
'... I will cook their food with shit' (tautela21)

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[9]   *I considered occurrences of the directional -ma 'hither' only and excluded -wa 'thither' from the count because it is unclear in a number of cases whether a form -wa on a give verb constitute the directional suffix or a homophonous morpheme.*

(55)　　*Oh　hakataki　ka-da　　kai-ta　　ma-buse-na　se-liga-ø!*
　　　　　INTRJ　it.is.just　CL2-1INC.P　food-DET　with-shit-3SG.P　3PL-cook-3SG.O
　　　　　'Oh Gee, they cooked our food with shit!' (tautela33)

It suggests itself that the clauses in (52) and (53) differ form those in (54) and (55) simply in that the possessed noun is omitted in the first cases but lexically expressed in the latter. But there are problems for this analysis and there is an alternative explanation. The possessive classifiers *yo-* and *ka-* (plus their pronominal suffixes) cannot only express possessive but also benefactive relations. The question is whether these are two interpretations of a single construction or whether the possessive and the benefactive expressions constitute distinct syntactic constructions. As I discuss in more detail in chapter 14, there is evidence that the two uses are in fact syntactically distinct. For one thing, the occurrences of the classifiers with vs. without overt objects are in complementary distribution, correlating with the transitive vs. intransitive status of the verbs. (Further evidence is presented in chap. 14.)

In the benefactive constructions the possessive pronoun on the classifier does not encode a dependent (the possessor) of a core argument (the possessed object), but an additional participant (a beneficiary) which is not a dependent of an object. Since the beneficiary cannot be cross-referenced on the verb, it does not classify as a syntactic argument but as an adjunct. According to this analysis, there is no omitted object in clauses like (52) and (53) but merely a benefactive adjunct. The clauses are intransitive rather than instances of transitive clauses with discord. For this reason, the examples of the possessive classifiers without object nouns are not counted as instances of object NPs and hence as indication of discord constructions. The problem is that there is no clear-cut distinction between the possessive and the benefactive construction because they are grammatically sanctioned in the same contexts. I discuss this further in chapter 14.

Co-occurring verbs

Besides the differences regarding the object nouns and the tendencies described for the pairs *bahe* vs. *bahe-i* 'carry' and *lao-liga* vs. *liga* 'cook' there are some general tendencies to be noticed about the distribution of the intransitive stems *bahe, usa, tano,* and *lao-liga* on the one hand, and their transitive counterparts on the other. Looking at the immediate context of clauses with the intransitive verbs, it is noticeable that, in many instances, the intransitive verbs are immediately followed by an intransitive motion verb within the same sentence. These motion verbs are based on stems like *lao* 'go', *dobi* 'go down', or *sae* 'go up', but also *lu* ᵇᵘ*bu* 'go away', and others. Examples of this were given in (35), (36),

and (51). Two further instances are presented in (56) and (57).

(56)   *Natu-di-ao   se-bahe   se-lu   se-lao   nukula-ne.*
               child-3PL.O/P-PL 3PL-carry   3PL-go.in   3PL-go   bush-DET
               'They carry their children and go into the bush.' (oldtime3:112)

(57)   *(Mugaya-wa)   tamowai-wa   ye-bahe   ye-dobi.*
               crocodile-PM   person-PM   3SG-carry 3SG-go.down
               'The crocodile took the man down.' (tblaki58)

Besides this, a sentence may contain more than one of the stems that can feature in discord constructions listed in (21) to (24) above. Two instances were presented in (51) and (34) above. Further examples are given in (58) and (59). In (58), the intransitive stems *lao-liga* 'cook' and *usa* 'put in' co-occur. Note that only the first clause with *lao-liga* 'cook' classifies as an instance of discord but not the clause with *usa* 'put in' since it does not feature an object noun.

(58)   *Besi-na   kai-wa   ye-lao-liga   ee sina-na-wa   ye-usa*
               enough-3SG.P food-PM   3SG-go-cook   DUR mother-3SG.P-PM   3SG-put.in
               'The mother cooked the food and put it in

               ye-gehe   kabo   natu-na-wa   ye-lupo-i-ø
               3SG-finished TAM   child-3SG.P-PM 3SG-trick-APP-3SG.O
               and then she tricked her child …' (bagi116)

In (59) the intransitive stem *bahe* 'carry' co-occurs in the same sentence with the stems *kai-gwali* 'spear (fish)', *kai-katu* 'catch (fish)', and *kai-gabu* 'bake/burn'.

(59)   *Ka-kai-gwali ye-lao   ye-kohi   kabo ka-kai-katu*
               1EX-KAI-spear   3SG-go   3SG-finished   TAM   1EX-KAI-catch
               'We finish spearing fish, we catch them,

               ka-bahe   ka-lao-ma   kabo hinage ka-kai-gabu.
               1EX-carry   1EX-go-hither TAM   also   1EX-KAI-burn
               carry them and bake them.' (fishing57)

In sum, there is a tendency for the intransitive stems which are attested in discord clauses to cluster together and co-occur in the same sentence (independent of whether the clauses are in fact cases of discord). Besides this, these verbs co-occur with other intransitive verbs such as motion verbs.

In comparison, the corresponding transitive stems *bahe-i, usa-i, tano-i,* and *liga* can also be followed by intransitive motion verbs (e.g. *lao* 'go', *dobi* 'go down', or *sae* 'go up') but they are less frequently so than the intransitive verbs. Besides this, in contrast to the intransitives, the transitive stems frequently co-occur with other transitive stems like *hai* 'take/get', *tole* 'put', *mose-i* 'give' (which do not have intransitive counterparts). Two examples are given in (60) and (61).

(60)   *bolo-wa   ye-hai-ø   ye-usa-i-ø*
               ball-PM   3SG-get-3SG.O 3SG-put.in-APP-3SG.O
               'he took the ball and put it in' (a-r3c:8)

(61) *bolo ye-bahe-i-ya-ma   ye-mose-i-ø*
      ball   3SG-carry-APP-3SG.O-hither   3SG-give-APP-3SG.O
      'he brought the ball and gave it to him' (a-r1a:25)

Also, parallel to the intransitives, the transitive version of the stems tend to co-occur with each other. Two examples are presented in (62) and (63). (62) shows the stems *tano-i* 'collect' and *tuha-i* '(poison with) poison root'. In (63) the stems *usa-i* 'put in' and *bahe-i* 'carry' co-occur.

(62) *Yama haya   meta   se-tuha-i-ø   ta-tano-i-ø*
      fish   Fish.Name PARTICLE 3PL-poison.root-APP-3SG.O 1INC-collect-APP-3SG.O
      'They poison the *haya* fish and we collect them' (fishdial133)

(63) *ta-usa-i-ø   ta-bahe-i-ø   ta-lao,   tem   dohagi*
      1INC-put-in-APP-3SG.O 1EX-carry-APP-3SG.O 1EX-go   DIST.DEM like
      'we put it in, we carry it and go, like that' (basdial9)

In sum, the transitive stems tend to cluster with other transitive stems in the same sentence, similar to the way the intransitive stems cluster together. So, although it is grammatically possible to have transitive and intransitive verbs together in the same sentence there is a preference for verbs with the same transitivity status to co-occur. Whether this preference is merely a discourse tendency or whether some of these clusters are in fact grammaticalized constructions is still an open question. Complex sentences of the type discussed above remind of serial-verb constructions or clause chains and indeed the Saliba constructions might possibly be described in those terms. But, as discussed in chapter 2.2.2, there are as of yet no formal criteria to describe such series of verbs or clauses as formally defined constructions. There is no morphological evidence of a hierarchical structure or dependency relation between these forms. Therefore, I describe these constructions here in the most neutral terms. A careful study of the distribution of these clusters of co-occurring verbs in the texts data base might reveal formal criteria to define them as specific constructions, e.g. as serialization or clause chaining. Such an investigation is outside the scope of the present study, and remains as a topic for future research.

In this section I discussed the general patters of transitive discord clauses with patient object and comparing them with the corresponding clauses with accord. I now turn to some exceptional cases of discord constructions where there is no corresponding construction with accord in transitivity status and the discord construction is obligatory.

12.2.2.4 Intransitive verbs that have no transitive counterpart

As mentioned, there are some exceptional cases where the intransitive heads of

discord clauses do not have transitive counterparts. In these cases, there is not alternative accord construction and the discord in transitivity status is obligatory, in contrast to the cases where the choice between discord and accord clauses is meaningful. The exceptions concern the verb stem *kata* 'know' and a number of verbs with noun incorporation.

Kata *'know'*

The construction with *kata* 'know' was already introduced in chapter 7. The stem is defective in that it is morphologically intransitive but it distributionally behaves like a transitive stem. For example, by means of the causative prefix, the stem *he-kata* 'teach' can be derived, which may occur as the head of a ditransitive clause (chap. 7). In contrast, causative stems derived from other intransitive verb stems can generally only occur as the heads of transitive clauses but not of ditransitive ones. Verbs with the stem *kata* 'know' virtually always take the possessed noun *kabi* 'nature/way' as their object. The logical object of *kata* 'know', that is the entity or fact which is known, is encoded as the possessor of the object noun *kabi*. In (64), the object NP consists of the possessor *pilipilidai* 'legend' and the possessed noun *kabi-na* 'its nature'.

(64)   *Iya   pilipilidai   kabi-na   ye-kata.*
        3SG.EMPH   legend   nature-3SG.P 3SG-know
        '*He* knows the story.' (I don't know it)
        (lit. 'He knows the story's nature.') (oldial112)

There are overall 45 instances of the verbs stem *kata* 'know' in the text sample, and in only two cases it is not preceded by *kabi* 'nature/way'. In turn, the noun *kabi* is only attested as the object of *kata* 'know' but not with other verb stems. Without the possessed object *kabi*, speakers found the sentence in (64) unacceptable as indicated in (65).

(65)   *   *Iya   pilipilidai   ye-kata.*
             3SG.EMPH   legend   3SG-know
             'He knows the story.'

The fact that the verb is morphologically intransitive can be shown by the *-ko* suffix test. The test shows that the verb does not carry the zero object suffix of the third person singular. The text example in (66) shows the perfect suffix *-ko* directly attached to the verb stem *kata*. If the verb was transitive, the non-final allomorph *-ya* of the object suffix would obligatorily occur between the verb stem and the perfect marker.

(66)   *Kabi-na   kwa-kata-ko   yo-na   lao-lao se-yababa.*
        nature-3SG.P   2PL-know-PERF CL1-3SG.P RED-go   3PL-bad
        'You already know that his ways are bad.' (tautela39)

The elicited example in (67) shows that the occurrence of the object suffix on the

verb is in fact ungrammatical.

(67)   *   *Kabi-na*   *ya-kata-ya-ko.*
            nature-3SG.P 1SG-know-3SG.O-PERF
            'I know it already.'

The same holds for the plural object suffix as shown in (68). Example (68a) is grammatical, the one in (b) with the object suffix on the verb is not.

(68) a   *Pilipilidai* *maudoi-di* *kabi-di*   *ye-kata.*
         legend   all-3PL   nature-3PL.O/P   3SG-know
         'He knows all the stories.'

   b. * *Pilipilidai* *maudoi-di* *kabi-di*   *ye-kata-di.*
         legend   all-3PL   nature-3PL.O/P   3SG-know-3PL.O/P
         'He knows all the stories.'

Since the stem *kata* 'know' is morphologically intransitive but it generally requires an object noun, clauses with *kata* 'know' constitute cases of discord. The object nouns is such clauses do not underlie the same restrictions as the objects of the discord clauses discussed above in terms of the degree of individuation.

Noun incorporation

The second type of exceptional cases where the intransitive head of a discord clause has no transitive counterpart concerns cases of noun incorporation. When a verb incorporates a noun stem, the resulting verb is generally intransitive and can no longer take an object suffix. Clauses with incorporating verbs are intransitive since they only express a single argument which is the subject. These clauses are instances of accord: an intransitive clause being headed by an intransitive verb. In a few exceptional cases – there are only two examples – a verb with an incorporated noun can be preceded by a further object NP which is not cross-referenced. The object classifies as a outer-core argument, the clause is transitive and constitutes an instance of discord. The two verb stems that allow these constructions are *he-kai* 'feed (CAUSE-eat)', and *kaibwada* 'ask for'. Consider the examples in (69) and (70).

(69)   *Kwabuli*   *se-he-kai-puwaka.*
         widow   3PL-CAUS-eat-pig
         'They fed the widow pork.'

(70)   *Pasta*   *se-kaibwaba-laisi.* [10]
         pastor   3PL-beg-rice
         'They asked the pastor for rice.'

As with *kata* 'know' there is not choice between an accord and a discord

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[10]   *Some speakers allow or even require cross-referencing of the addressee with this verb see chap. 10 for discussion.*

construction for these verbs, and the object nouns do not show the same restrictions in terms of degree of individuation as the discord objects discussed above.

To summarize, in a few exceptional cases, discord constructions are required because of morphological anomalies of the verbs. In these cases, where there is no choice between accord and discord constructions, there is no requirement for the discord objects to be low in individuation.

12.2.3 Discord WITH GOAL OBJECTS

There is a further type of discord construction which is of a rather different kind. The constructions involve a motion verb followed by an unmarked goal NP. Cross-linguistically, goals of motion verbs often have a special status morpho-syntactically. They are typically not expressed as syntactic arguments but, especially place names, are often not straightforwardly marked as adjuncts either. According to the definition of argumenthood in chapter 3, unmarked goal NPs classify as outer-core object arguments and clauses with intransitive motion verbs and unmarked goals constitute transitive clauses with discord.

There are several reasons to include unmarked goals into the category of syntactic objects. One is consistency in terminology and in the application of the definition of argumenthood. In terms of the defining features (cross-referencing and postpositional marking of the noun), the unmarked goal of motion verbs have the same status as the patients in the discord constructions above: they are not cross-referenced and represented by a bare NP.[11] Another reason to include unmarked goals in the definition of syntactic arguments is that, cross-linguistically, they indeed often share properties with both arguments and adjuncts. Also, by the definition introduced in chapter 3 they qualify as semantic argument of the motion verbs. Thus, like the patient of *bahe* 'carry' (cf. 12.2.2), the goal of e.g. *lao* 'go' is a semantic argument of the verb. In certain contexts, these semantic arguments can surface as syntactic arguments of the verb. The fact that the goals of motion verbs are quite different from prototypical objects is captured in the present approach in

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[11]   *It would be quite easy to exclude goal NPs from the definition of core arguments by the fact that they follow the verb while other object generally precede it. But note that this would also exclude the recipient in one of the syntactic frames of mose 'give' as discussed in chap. 13.*

a number of ways. As shown in Figure 3 of chapter 3, of all inner- and outer-core objects goals share the least features with subjects and the most features with adjuncts: they are not cross-referenced on the verb (and in fact cannot be) and follow the verb rather than preceding it. On the scale in Figure 3 (of chap. 3), they show the lowest degree of argumenthood.

In Saliba, the tendency to represent goals by unmarked NPs is not restricted to place names, or expressions like 'home', but it holds for a broader variety of goal expressions. The verbs which allow unmarked goal objects are path-encoding motion verbs, including *lao* 'go/travel', *dobi* 'go up' *sae* 'go up', *uyo* 'go back', *seuyo* 'go back up'[12], and the complex stem *dobi-uyo* 'go back down'. Consider examples (71) to (73) with place names as unmarked goal arguments.

(71)   *Ware   unai   kabo   ye-dobi   Suau.*
       Place.Name   PP.SG   TAM   3SG-go.down   Place.Name
       'He went from Ware down to Suau.'
       (lit. 'He was at Ware and went down to Suau.') (nipunosi:11)

(72)   *Kainini   unai   ka-seuyo   Sawasawaga.*
       Boat.Name   PP.SG   1EX-go.back.up   Place.Name
       'On Kainini, we went back up to Sawasawaga.' (emalet34)

(73)   *Se-henuwa   bena   ya-uyo   Kwatou.*
       3PL-want   OBLI/COMP   1SG-go.back   Place.Name
       'They wanted that I go back to Kwato.' (oba2:21)

Conventionalized expressions such as *magai* 'village/place' and *numa* 'house', which can both express the concept 'home', are also unmarked as shown in (74) and (75):

(74)   *ka-uyo   yo-ma   magai*
       1EX-go.back   CL1-1EX.P   village/place
       'we went back to our place' (emalet36)

(75)   *se-dobi-uyo   yo-di   numa*
       3PL-go.down-go.back   CL1-3PL.O/P   house
       'they went back down to their house' (mahabu42)

Further conventional expressions are *koya* 'garden', *nukula* 'bush/jungle' and *nagali* 'beach' (for toilette) as in (76) to (78).

(76)   *Ka-lao   koya   kabo   kai   ka-keli, ...*
       1EX-go   garden   TAM   food   1EX-dig
       'We go to the garden and dig for food...' (basdial 16)

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[12]   *This seems to be the lexicalized version of an originally bi-morphemic complex stem* *sae-uyo 'go.up - go.back'*

(77)   *Natu-di-ao*   *se-bahe*   *se-lu*   *se-lao*   *nukula-ne.*
         child-3PL.O/P-PL 3PL-carry 3PL-go.in 3PL-go bush-DET
         'They carry their children and go into the bush.' (oldtime3:112)

(78)   *Ya-dobi*   *nagali.*
         1SG-go.down beach/sand
         'I go down to the beach/I go to the toilet.' (oba2:68?)

But crucially, also common nouns denoting places can occur as unmarked NPs as in (79) to (81).

(79)   *Ya-dobi*   *maketi.*
         1SG-go.down market
         'I go down to the market.'

(80)   *Ya-lao*   *sitowa.*
         1SG-go   store
         'I go to the store.'

(81)   *se-dobi*   *isutete-ne*
         3PL-go.down point-DET
         'they went down to that point' (TBlakiB06)

In contrast to the path-encoding motion verbs, verbs expressing manner of motion with stems like *heloi* 'run', *kamposi* 'jump' etc. cannot occur with a goal argument. If there is a goal to be encoded, these verbs are typically followed by one of the path-encoding motion verbs with a following goal argument as for example in (82) and (83).

(82)   *se-wose*   *se-yale* *se-lao* *Samarai ...*
         3PL-paddle 3PL-row 3PL-go Place.Name
         'they paddled, they rowed to Samarai...' (Nipunosi 97)

(83)   *kabo*   *ka-wose,* *ka-sae*   *Lamawasi*
         TAM   1EX-paddle 1EX-go.up Place.Name
         'we'll paddle, we'll go up to Lamawasi' (olddial72)

Telic motion verbs like *lage* 'arrive' or *duna* 'arrive by water' cannot take unmarked goal argument either. With these verbs, the goal has to be marked by a postposition as in (84) and (85).

(84)   *Lahi*   *ya-lage*   *Samarai*   *unai.*
         yesterday 1SG-arrive Place.Name PP.SG
         'Yesterday I arrived on Samarai.'

(85)   *Se-loma* *ede* *Sidudu*   *unai*   *se-duna.*
         3PL-go   PRSUP Place.Name PP.SG   3PL-arrive
         'They came (this way) and arrive at Sidudu.' (yam28)

There is a further difference between patient and goal objects of discord constructions which I have not addressed yet. Generally, discord clauses with patient objects have corresponding transitive clauses with accord where the object is cross-referenced on the verb (but cf. 12.2.2.4). In contrast, for the discord constructions with goals objects, there are no alternative transitive clauses with

accord. The goal objects can never occur as inner-core objects, cross-referenced on the motion verb.[13] Thus, for these verbs there is no choice between transitive clauses with accord vs. discord. Nevertheless, there is a choice between accord and discord for motion verbs and their goals. The corresponding accord constructions, where the verb and the clause share the same transitivity status, are intransitive clauses in which the goal is encoded as a adjunct and marked by a postposition. Consider the following examples.

(86)   *se-lao-ma*   *yo-da*   *yanuwa-ta* *unai*
          3PL-go-hither   CL1-1INCL place-DET   PP.SG
          'they came to our place' (oldtime1:35)

(87)   *ku-lao-ma*   *te*   *yo-ma* *yanuwa-te* *unai*
          2SG-go-hither DET   CL1-1EX place-DET   PP.SG
          'you came here to our place'(oldtime3:80)

(88)   *memelahi* *kabo* *ku-lao-ma*   *yo-gu*   *numa-ne*   *unai*
          afternoon   TAM   2SG-go-hither   CL1-1SG   house-DET PP.SG
          'you'll come to my house in the afternoon' (TblakiB32)

(89)   *ye-dobi-dobi*   *ee*   *magai* *hesau-na*   *unai*
          3SG-RED-go.down DUR   place   other-3SG.O PP.SG
          'she went down down to another place' (bagi182)

(90)   *ye-pesa*   *ye-dobi-uyo*   *sina-na-wa*   *unai*
          3SG-exit   3SG-go.down-back mother-3SG.P-PM PP.SG
          'she went back down to her mother' (bagi24)

At the present stage of analysis, it is not quite clear what determines the choice between these discord and accord constructions, i.e. between transitive clauses (where the goal occurs as an argument) and intransitive clauses (where the goal occurs as an adjunct). No elicitations were conducted on these constructions and so speaker's judgments are not available.[14] It is quite noteworthy, however, that in the text examples with accord in (86) to (90), where the goal is marked by the postposition *unai*, all goal nouns are marked by modifiers. Furthermore, they are

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[13]   *Some of the path-encoding motion verbs simply do not have transitive counterparts, other do but then the transitive version of the verb does not choose a goal as its object but a concomitant (chap. 6).*

[14]   *In addition, analysis of database examples is complicated by instances like (i) and (ii) where the intonation pattern of the sentence is crucial for determining whether* unai *makes the goal of the initial motion verb or the location of the following verb.*

(i)   *se-lao*   *unai*   *se-keno-wadam*
          3PL-go PP.SG 3PL-lie/sleep-hide
          'they went there and hid' OR 'they went and hid there' ? (torres205)

(ii)   *ye-lao*   *unai*   *ye-keno*
          3SG-go PP.SG 3SG-lie/sleep
          'he went there and slept' OR 'he went and slept there' ? (tblaki86)

marked by exactly the types of modifiers which discord patient objects could typically not take – namely those which promote the individuation of the object (cf. 12.2.2). Besides possessive classifiers, the goals in (86) to (88) are marked by the determiner clitics *-ta*, *-te*, and *-ne*. The goal in (89) is marked by the modifier *hesau-na* 'the/another one' which may never modify an outer-core patient object. In (90) the goal is marked by the 'given' clitic *-wa* but more interestingly, the referent of the goal NPs is human. In contrast, the goals in the discord constructions in (71) to (83) are often unmarked or marked by a possessive classifier (but note that both in (77) and (81) they carry the determiner clitic *-ne*). These observations are clearly reminiscent of the difference between the discord and accord construction with patient objects. It appears that (non-)individuation of the goal correlates with the choice between its expression as outer-core object or as adjunct. This is also in line with the fact that in examples where the referent is human, the goal tends to be postpositionally marked. However, at this point, these observations are rather impressionistic and preliminary and the marking of goal participants in Saliba clearly deserves further study.

To summarize, the goal arguments of path-encoding motion verbs can be place names, or conventionalized expressions like 'home', but also proper nouns denoting places. Alternatively the discord objects can be expressed as adjuncts of intransitive clauses (which accord in transitivity status) and the choice between the accord and the discord constructions is possible determined by similar factors as discussed for patient objects in 12.2.2. Cross-linguistically, place names, and goals more generally, are typically not expressed as syntactic arguments of motions verbs, but they are often morphologically unmarked, i.e. they are not clearly marked as adjuncts either. The Saliba marking of goals is in line with this cross-linguistic tendency: the outer-core goals of motion verbs are unlike inner-core arguments in that they cannot be cross-referenced on the verb, but they are unlike adjuncts in that they are not postpositionally marked. While unmarked goals of motion verbs classify as syntactic arguments according to the definitions in chapter 3, they do rank as low in syntactic objecthood on the scale in Figure 3 (of chap. 3). They appear at the right-most end of the scale and share more features with adjuncts than with subjects.

12.3 SUMMARY

In this chapter, I discussed the structure of Saliba transitive clauses and the type of verbs that features as their heads. Transitive clauses were defined by the presence

of two syntactic arguments. They can be headed by morphologically transitive or intransitive verbs. Transitive clauses headed by transitive verbs I have termed cases of accord, those headed by intransitive verbs cases of discord in transitivity status between the word and clause level. Clauses with discord are typologically of particular interest within the description of Saliba. I have distinguished two types of clauses with discord, those with outer-core patient objects and those with outer-core goals.

Discord clauses with patient objects tend to express habitual, daily-life activities. In these clauses, attention is drawn to the activity itself rather than to the object of the action. The objects of these clauses are low in the properties associated with individuation as described by Hopper and Thompson (1980). They tend to be non-specific, cognate, prototypical objects of the activity described. This low degree of individuation is reflected in the restricted set of modifiers these objects allow in comparison to objects of clauses with accord and also in that they are less likely to take more than one modifier.

Not all parameters of individuation are equally relevant across the objects of discord constructions and it was not possible to establish one single defining property distinguishing accord and discord objects. Specific objects tend to require transitive verbs, and typically do not feature in discord constructions. But there are exceptions to this in Saliba and other Oceanic languages and specificity of the object noun does not seem to provide a clear-cut criterion for all cases.

In Saliba and apparently other Oceanic languages, there does not seem to be a formally or semantically defined class of verbs which are allowed in discord constructions. The verbs often denote activities which are habitually performed in day-to-day life and they can feature monovalent, bivalent, and labile verb roots, as well as noun roots.

The question arises whether discord constructions are merely allowed or in fact required with objects which are non-specific or non-individuated in other ways. In at least some of the Saliba examples, non-specific objects require intransitive verbs and thus require a discord construction. It could not be established whether this tendency generally holds across discord clauses with patient objects since neither specificity nor a verb's transitivity status is always overtly marked.

The finding that non-specific objects may require discord in transitivity status is

potentially of great interest. Studies of Oceanic discord constructions reviewed in 12.2.1 tend to focus on the properties of clauses with discord rather than finding a common denominator for clauses with accord. For example, Sugita (1973) dismisses specificity as the defining feature between accord and discord clauses because he can show that not all discord object are non-specific. What he does not investigate is whether all accord objects possibly need to be specific. Such an approach is based on the assumption that clauses with discord rather than those with accord are the marked constructions – and also this study has not been free of this bias. This assumption is nourished by intimate knowledge of transitivity marking in the European languages. However, as highlighted throughout the thesis, there appears to be a basic typological difference in the marking of transitivity between Oceanic languages and languages of the European type. The latter classify as fundamentally transitive while I have argued that Oceanic languages classify as fundamentally intransitive. The assumption that clauses with discord are typologically marked is possibly skewing the analysis of transitivity marking in Oceanic. It is conceivable that in fact accord clauses are the typologically marked constructions – after all they are the ones which are marked morphologically. Or possibly neither accord nor discord constructions are marked with respect to each other. Such considerations clearly need to be taken into account in future studies more than they have been in the past.

The second type of transitive clauses with discord show objects with the semantic role of goal. These clauses include intransitive path-encoding motion verbs with an unmarked goal argument. The Saliba tendency of encoding motion verbs and their goals by discord constructions is in line with the cross-linguistic tendency of expressing place names and goals more generally by unmarked NPs, diverting from the normal marking of adjuncts. Discord clauses with goal objects do not have corresponding transitive clauses with accord since goals may never be cross-referenced by an object suffix on these verbs of motion. The corresponding accord constructions are intransitive clauses where the goal is encoded as a adjunct and marked by a postposition. It could not be clearly established what determines the choice between the transitive discord and the intransitive accord constructions, but there is preliminary evidence that similar criteria are relevant – relating to individuation of the goal – as for discord clauses with patient objects.

DITRANSITIVE CLAUSES

In ditransitive clauses, the relationship between word-level and clause-level transitivity is always one of discord. Discord was defined in chapter 3 as the situation when the transitivity status of the clause is higher than that of the verb which occurs as its head. Due to the level-bound definition of transitivity (chap. 3), there are no morphological ditransitive verbs in Saliba. Word-level transitivity was morphologically defined by the number of cross-referenced arguments on the verb and, since there are only two pronominal slots on the verb, morphologically, verbs are either intransitive or transitive. Thus, all ditransitive clauses are headed by morphological transitive verbs and thus, in ditransitive clauses, discord in transitivity status is obligatory. The ability or lack of ability of a verb to occur in certain types of clauses, with a certain number of arguments, is explicitly not part of the definition of word-level transitivity. In the terminology proposed in chapter 3, I distinguish between a verb's morphological marking and its distributional abilities. The benefit of this distinction is that it allows us to consider the valence and transitivity features of a linguistic unit on the level on which they are manifested — and the expression of three syntactic arguments is manifested only on the clause level.

Of course, the statement that Saliba has no ditransitive verbs needs to be qualified: in terms of their morphological marking, Saliba verbs are intransitive or transitive. One can, however, distinguish between transitive verbs which can feature as heads of ditransitive clauses, and those which cannot. Thus, the traditional notion of a ditransitive verb translates into the terminology applied here, as a (morphologically) transitive verb which can occur as the head of ditransitive clauses.

This terminological distinction is motivated by a number of factors. For one thing, it is not possible to predict on any single level of analysis (except the clause level) which transitive verb can in fact feature as the head of a ditransitive clause and which cannot. On the root level, a root's valence alone does not predict whether or not a verb may head a ditransitive clause. The head of ditransitive clauses may be

based on bivalent, labile, or monovalent roots.[1] On the word-level, one cannot predict a verb's occurrence in ditransitive clauses by its morphological marking either, since certain transitive verbs can head ditransitive clauses, while others with the same morphological marking cannot. Most heads of ditransitive clauses are derived by the causative prefix, but the causativization of base intransitive and of base transitive verbs produces verbs which are identical in morphological structure. Consider the causativized verbs in (1a) (derived from a transitive stem) which can head a ditransitive clause with (1b) (derived from an intransitive stem) which cannot.

(1) a. *Ye-he-kai-di.*   b. *Ye-he-gigibwali-di.*
         3SG-CAUS-eat-3PL.O/P   3SG-CAUS-hot-3PL.O/P
         'He fed them.'   'He heated them up.'

In addition, it is not predictable which base transitive stem can be causativized and which cannot (cf. chap. 7 semantics of the causative prefix). In order to predict a verb's potential to be the head of a ditransitive clause, information from both the root level and from the word level is needed. Only if the verb root's valence and the derivational properties of the verb are known is a prediction possible. It is only when it is known that the base transitive stem (with a bivalent, labile, or applicativized monovalent root) is causativized that one can predict that the derived verb will be able to feature in ditransitive clauses. The only single level on which it can be observed that a verb can occur with three arguments is the clause level. It is a verb's distributional ability which justifies a label like 'ditransitive', but, as mentioned word-level transitivity is defined by morphological features.

Furthermore, the verbs which may feature in ditransitive clauses do not obligatorily require three syntactic arguments. At least some of them can also feature in what I analyze as transitive clauses. Consider the clauses in (2) to (4) which feature two morphologically expressed arguments.

(2)   *Ya-he-kai-di-ko.*   (3)   *ye-he-kita-lobai-di*
        1SG-CAUS-eat-3PL.O/P-PERF   3SG-CAUS-see-find-3PL.O/P
        'I fed them already.'   'he makes them understand' (c1:84)

(4)   *Ya-he-kata-di.*
        1PL-CAUS-know-3PL.O/.P
        'I taught them.'

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[1]   *Monovalent roots are first applicativized and then causativized (cf. 13.1.1).*

As I discuss below, the verbs in these examples can head ditransitive clauses. In each example a second object could be added making the clause ditransitive. But whether an object NP is omitted but implied or whether there simply is no second object is a matter of context (cf. 13.2). In sum, the verbs which can head ditransitive clauses do not necessarily need to and this is further motivation for the terminology used here.

Finally, I do not label the (potential) heads of ditransitive clauses 'ditransitive verbs' for consistency in the terminology, because of the parallels with transitive clauses headed by morphologically intransitive verbs. The level-bound definition of transitivity was introduced partly in order to distinguish transitive clauses headed by transitive verbs from those headed by (morphologically) intransitive verbs (chaps. 3, 12). Calling the heads of ditransitive clauses 'ditransitive verbs' would be inconsistent with the distinction between heads of transitive clauses.

In contrast to word-level transitivity, the transitivity status of clauses was defined in chapter 3 by the number of syntactic arguments. Arguments were defined and distinguished from adjuncts as stated in Def 1 and Def 2 below (repeated from chap. 3):

Def 1 | A participant is an inner-core argument if it is cross-referenced by one of the pronominal affixes on the verb (optionally it may also be present as an NP).

Def 2 | A participant is an outer-core argument if it is (optionally) expressed as a bare NP in the same clause but not cross-referenced on the verb.

In contrast to this, adjuncts are marked by postpositions (with the exception of some temporal nouns). In the case of ditransitive clauses, two participants are encoded as inner-core arguments, marked on the verb by the pronominal affixes (additionally they can be expressed as bare NPs). A third participant is expressed as an outer-core argument, as a bare NP which is not cross-referenced on the verb.

In Saliba, cross-referencing of arguments is sensitive to the distinction between primary and secondary objects described by Dryer (1986), who shows that languages differ in how they treat the objects of ditransitive constructions. Dryer's analysis is based on the observation that, in many languages, what is traditionally considered the "direct object" encodes a different participant in transitive clauses than in ditransitive clauses. Cross-linguistically, the referent of the "direct object"

in a transitive clause is commonly encoded as the "indirect object" in a ditransitive clause. Based on this, Dryer defines a primary object as the "direct object" in a transitive clause or the "indirect object" in a ditransitive clause. A secondary object is the "direct object" of a ditransitive clause. This distinction is valid for the parameter of object agreement in Saliba. As I show below, in transitive clauses, the patient (the affected or transferred entity, as discussed in chap. 4) is cross-referenced by the object suffix on the verb. But in ditransitive clauses, it is not the patient but the recipient/causee which is cross-referenced, the patient being expressed as an outer-core argument and not cross-referenced.

In example (5), the causing agent and the causee (inner-core/primary object) are cross-referenced by the pronominal affixes on the verb. In addition, the causee is expressed lexically by the NP *puwaka* 'pig'. The patient (outer-core/secondary object), the question word *saha* 'what', is also expressed as a bare NP but not cross-referenced on the verb.

(5)   *Puwaka-ne   saha   se-he-kai-di?*
         pig-DET   what   3PL-CAUS-eat-3PL.O
         'What did they feed the pigs?'

The outer-core object in Saliba ditransitive clauses is generally the affected or transferred patient (but cf. 13.1.2). It immediately precedes the verb and if it co-occurs with a lexically expressed inner-core argument it follows the inner-core argument. In (6), the outer-core object NP *niu* 'coconut' is preceded by the inner-core object *puwaka-ne* 'the pigs'.

(6)   *Puwaka-ne   niu   se-he-kai-di.*
         pig-DET   coconut   3PL-CAUS-eat-3PL.O
         'They fed the pigs coconuts.'

Following the definition of arguments presented in Def 1 and 2, the outer-core objects of ditransitive clauses have the same formal status as outer-core objects of transitive clauses (i.e. of transitive clauses with discord, chap. 12). But there are some crucial differences between the two types of NPs. Outer-core objects of transitive clauses are generally non-individuated: they tend to be non-specific, are restricted to plural referents, and can occur with only a small set of modifiers. In contrast, the outer-core objects of ditransitive clauses are not restricted in any way. They may be individuated or non-individuated, can have singular or plural referents, and they can take all types of modifiers.

What distinguishes outer-core objects of ditransitive clauses from those of transitive clauses is that in ditransitive clauses the outer-core objects cannot be cross-referenced simply for structural reasons. There are maximally two slots for

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pronominal affixes on any verb and so the third argument of a ditransitive clause cannot be cross-referenced. In contrast, for the objects of transitive clauses there is a choice to encode them as inner- or outer-core, they may or may not be cross-referenced. As discussed in chapter 12, the choice between these two expressions is meaningful and has communicative content.[2] The cross-referencing of the object tells us something about its status in the discourse. Since in ditransitive clauses this choice is not present, the expression of the object participant as outer core does not have communicative value in itself. That is to say that transitive clauses show discord by choice but ditransitive clauses show discord entirely due to structural constraints. For the patients of ditransitive clauses, the contrast between individuated vs. non-individuated objects etc. is generally not expressed. Thus, the term 'outer-core argument' applies to nominals with quite different status. They are grouped together on the basis of their formal marking (cf. chap. 3)

In section 13.1 below, I introduce the class of Saliba verbs which can feature as the heads of ditransitive clauses. In 13.2, I discuss some discourse tendencies and their consequences for the analysis of ditransitive clauses. Finally in 13.3, I summarize the main points raised in this chapter.

13.1 HEADS OF DITRANSITIVE CLAUSES

In this section, I investigate the class of verbs which can occur as the head of ditransitive clauses. All of these verbs are transitive in terms of their morphological marking, and all of them are morphologically complex. They are derived by the causative prefix (13.1.1) or (more rarely) by the applicative suffix (13.1.2).

13.1.1 VERBS DERIVED BY THE CAUSATIVE PREFIX

The causative prefix *he-* can derive transitive verb stems from noun stems, intransitive verb stems, and from transitive verb stems (chap. 7). Only in the last case can the resulting transitive verb occur as the head of a ditransitive clause. Compare the examples in (7) and (8). Examples (7a) and (8a) are transitive. (7b) and (8b) are intransitive. The transitive clauses show simplex transitive stems, the

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[2]   *With a few exceptions of intransitive verbs which have no transitive counterparts, cf. chap. 12.*

verbs in the ditransitive clauses in (7b) and (8b) are derived by the causative prefix.

(7) a. *Bisikete-wa   ya-kai-ø.*
biscuit-PM   1SG-eat-3SG.O
'I ate the biscuit.'

b. *Puwaka-ne saha se-he-kai-di?*
pig-DET   what   3PL-CAUS-eat-3PL.O
'What did they feed the pigs?'

(8) a. *Te! iya   tautau-wa   ye-tole   na   ya-kita-ø.*
DET 3SG.EMPH   picture-PM   3SG-put-3SG.O CONJ 1SG-see-3SG.O
'Like this, she puts the film in and I see it.' (daiduba24)

b. *Tautau-ne kabo   ya-he-kita-go.*
picture-DET TAM   1SG-CAUS-see-2SG.O
'I'll show you the picture.' (hirte2:7)

The examples demonstrate that the cross-referencing of objects is sensitive to Dryer's (1986) distinction between primary and secondary objects rather than to the grammatical relations of direct and indirect object. In the transitive clauses in (7a) and (8a), the object suffix cross-references the patient. In the ditransitive clauses in (7b) and (8b), it is the recipient/causee which is cross-referenced and the patient appears as an outer-core argument (the secondary object) expressed as a bare NP. The clauses in (7a) and (8a), are represented in Schema 1.
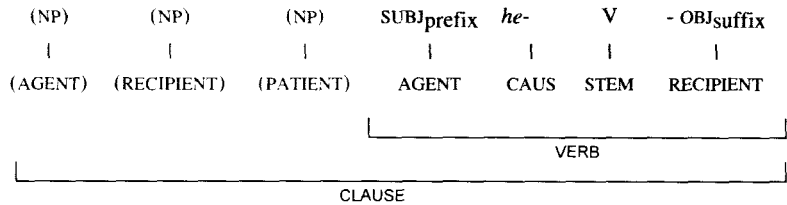
Schema 1   *Ditransitive clauses with causative verbs, object suffix = recipient*

Verbs that can head ditransitive clauses form a rather restricted set in Saliba since many transitive stems do not allow derivation with the causative prefix. This is due to the semantic restrictions of the causative prefix to express a specific kind of direct causation. It entails a physically active role for the causer, in the sense that the causer leads the action. For example, the clause in (9) with the stem *he-numa* 'CAUS-drink' entails physical manipulation of the type that the causing agent holds a cup and puts it on the child's lips.

(9) *Natu-gu   ti   ya-he-numa-o.*
child-1SG.P tea 1SG-CAUS-drink-3SG.O
'I made my child drink tea.'

As discussed in chapter 7, these semantic constraints on the interpretation of the causative prefix restrict the derivation of novel causative verbs which could appear as the heads of ditransitive clauses.

The heads of the ditransitive clauses discussed in (5) to (9) above are all derived from simplex transitive stems (based on bivalent or labile roots). Apart from these, also causativized complex verbs (chap. 5) can feature in ditransitive clauses. The clauses in (10a) and (11a) show the underived complex stems, the clauses in (10b) and (11b) show the causative stems which can head ditransitive clauses.

(10) a. *se-kita-lobai-ø*　　　　　　　b. *ye-he-kita-lobai-di*
　　　　　3PL-see-find-3SG.O　　　　　　　　3SG-CAUS-see-find-3PL.O/P
　　　　　'they realize it' (church1:99)　　　'he makes them understand' (c1:84)

(11) a. *Gulai   ya-numa-tonogi-ø.*　　　b. *Gulai   ya-he-numa-tonogi-go.*
　　　　　soup   1SG-drink-try-3SG.O　　　　soup   1SG-CAUS-drink-try-2SG.O
　　　　　'I tried the soup.'　　　　　　　'I made you try the soup.'

In a few instances, the heads of ditransitive clauses are derived from monovalent roots or noun roots. In these cases, first, a transitive verb stem is derived from the intransitive stem (or noun stem) by means of the applicative suffix, then the applicative stem is causativized. Two examples are presented in (12) and (13). Examples (12b) and (13b) show the verbs as heads of ditransitive clauses where they carry both affixes (for further discussion of these constructions cf. chap. 7).

(12) a. *Bosa   ya-bahe-i-ø.*　　　　　　b. *Bosa   ku-he-bahe-i-gau.*
　　　　　basket 1SG-carry-APP-3SG.O　　　　basket 2SG-CAUS-carry-APP-1SG.O
　　　　　'I carried the basket.'　　　　　'Load the basket on my back.'

(13) a. *Bagi   ye-gado-i-ø.*　　　　　　b. *Bagi   ye-he-gado-i-gau.*
　　　　　necklace 3SG-throat -APP-3SG.O　　necklace 3SG-CAUS-throat-APP-1SG.O
　　　　　'She put on a bagi (necklace).'　　'She put the bagi on my neck.'
　　　　　　　　　　　　　　　　　　　　　　(lit. 'She necked me the bagi.')

A further stem which can head ditransitive clauses is based on the root *kata* 'know'. This root is exceptional in that it has both monovalent and labile/bivalent features (cf. 12.2.2.4). It formally qualifies as monovalent since, as a simplex stem, *kata* 'know' cannot take an object suffix and is therefore intransitive. But functionally and distributionally, it behaves like a bivalent root in that the causativized stem *he-kata* 'teach' can occur as the head of a ditransitive clause, which other causative verbs derived from intransitive base verbs cannot. Example (14) shows the causativized stem *he-kata* 'CAUS-know' as head of a ditransitive clause.

(14)　　　*Kalina   Saliba   kwa-he-kata-gau.*
　　　　　language   Place.Name 2PL-CAUS-know-1SG.P
　　　　　'You taught me Saliba.'

The types of verbs attested as heads of ditransitive clauses discussed in this section can be classified as verbs of cognition/perception, verbs of carrying/wearing, and verbs of eating/drinking. The attested examples are based on the stems *he-kata* 'l', *he-kita* 'show', *he-kita-lobai* 'make understand' (verbs of

cognition/perception); *he-bahe-i* 'make carry', *he-naba-i* 'make carry on head', *he-likwa* 'make wear', *he-gado-i* 'put on neck' (verbs of carrying/wearing); *he-kai* 'feed', *he-numa* 'make drink', *he-kai-tonogi,* and *he-numa-tonogi* 'make taste' (verbs of eating/drinking). The derivation of novel verbs beyond the listed set is restricted by the semantics of the causative prefix.

13.1.2 VERBS DERIVED BY THE APPLICATIVE SUFFIX

In only two cases are the heads of ditransitive clauses derived by means of the applicative suffix. Both of them can be classified as verbs of transfer, the stems are *kainauya-i* 'give as gift' and *mose-i* 'give'. As discussed in chapter 6, the Saliba applicative suffix generally derives transitive verb stems from intransitive ones or from noun stems, but it cannot attach to transitive base stems.

13.1.2.1 *kainauya-i* 'give as gift'

The simplex form *kainauya* occurs as a noun stem with the meaning 'gift/present'. Consider the example in (15).

(15) | *Na* | *kabo* | *kainauya* | *saha* | *ku-mose-i-ø* | *siya* | *udiedi?* |
|------|-------|-----------|--------|-------------|-------|---------|
| CONJ | TAM | gift | what | 2SG-give-APP-3SG.O | 3PL.EMPH | PP.PL |

'Then what gift will you give to them?' (oldtime2:13)

From this noun stem, the applicative suffix derives the transitive verb stem *kainauya-i* 'give as gift'. In contrast to the causativized verbs discussed in 13.1.1, verbs with the stem *kainauya-i* can occur in two different syntactic frames. The frames differ in whether the recipient or the patient of the transfer event is cross-referenced by the object suffix. In the first case, when the recipient occurs as the cross-referenced object, the verb can occur as the head of a ditransitive clause, as in (16).

(16) | *Teina* | *lulu* | *ka-gu* | *kaha* | *ye-kainauya-i-gau.* |
|------|-------|--------|-------|-------------------|
| PROX.DEM | shirt | CL2-1SG.P | sibling | 3SG-gift-APP-1SG.O |

'My sister gave me this shirt as a gift.' (nb7:64)

The 'giving' expressions in which the stem *kainauya-i* encodes the recipient by its object suffix can be represented as in Schema 2. The argument structure of these clauses is parallel to the clauses headed by causativized verbs discussed in 13.1.1 (presented in Schema 1).

(NP)	(NP)	(NP)	SUBJprefix	-*kainauya*	- *i*	- OBJsuffix
|	|	|	|	|	|	|
(AGENT)	(RECIPIENT)	(PATIENT)	AGENT	V	APP	RECIPIENT

VERB
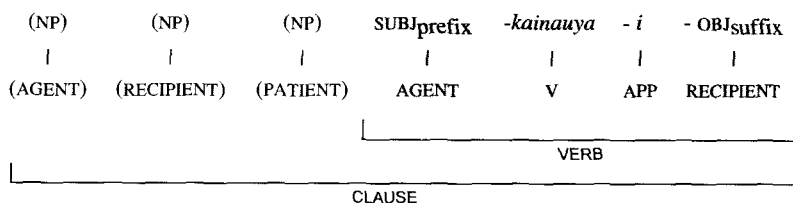
CLAUSE

Schema 2   *Ditransitive clauses with* kainauya-i *'give as gift', object suffix = recipient*

When the patient of the 'giving' event is cross-referenced by the object suffix, the recipient may not occur as an (inner or outer) core argument, but it can optionally be expressed as an adjunct, marked by a postposition. Thus, when the patient is cross-referenced, only two participants can be encoded as arguments and the clause is transitive. An example is presented in (17) where the recipient is marked by the general (singular) locative postposition *unai*.

(17)   *U-kainauya-i-ø   ka-m   kaha   unai!*
         2SG-gift-APP-3SG.O   CL2-2SG.P   sibling   PP.SG
         'Give it to your sister!'

The agent and the patient are expressed as inner-core arguments by the pronominal affixes on the verb (and optionally as preceding bare NPs). The recipient is optionally expressed as an adjunct, marked by a postposition. It typically follows the verb, occurring in the same position as the goal of motion verbs. The 'giving' expressions in which *kainauya-i* cross-references the patient can be represented as in Schema 3.

(NP)	(NP)	SUBJprefix	- *kainauya*	- *i*	- OBJsuffix	(PP)
|	|	|	|	|	|	|
(AGENT)	(PATIENT)	AGENT	V	APP	PATIENT	(RECIPIENT)
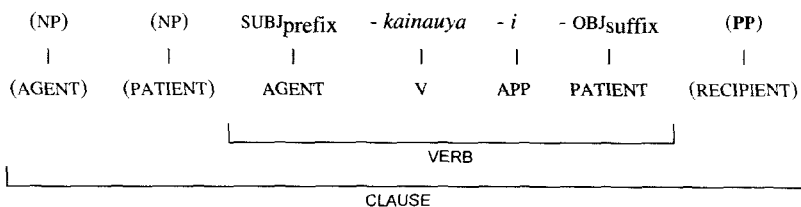
VERB

CLAUSE

Schema 3   *Transitive clauses with* kainauya-i *'give as gift', object suffix = patient*

There is no evidence as to which of the two frames presented in Schema 2 and Schema 3 is more frequent for the stem *kainauya-i* 'give as gift'. But, all verbs which can figure in ditransitive clauses may occur in a frame where the recipient/causee is cross-referenced and the patient is expressed as an outer-core argument and most verbs of this group (i.e. the causativized ones) can only occur in this frame (cf. 13.1.1 above). Based on the comparison with these other verbs, I

consider the frame presented in Schema 2 as the basic frame of *kainauya-i* 'give as gift' and the one in Schema 3 as an alternation of it.[3]

13.1.2.2 *mose-i* 'give'

The second stem that is derived by the applicative suffix and which can occur as the head of ditransitive clauses is the stem *mose-i* 'give'. Consider the example in (18).

(18)   *Bosa   kesega   ye-mose-i-di.*
         basket one   3SG-give-APP-3PL.O
         'He gave them one basket.'

While the stem *kainauya-i* 'give as gift' was derived by the applicative from a noun stem, the status of the root *mose* is unclear since it never occurs as a simplex stem, either as a verb or as a noun stem. The root is only attested in transitive verb stems. Example (19), where *mose* occurs as a simplex verb stem without the applicative suffix, is ungrammatical.

(19)   * *Ye-mose.*
         3SG-give
         'He gave.'

The fact that the final *-i* vowel is indeed the applicative suffix and not part of the root can be observed in complex verbs such as (20) and (21), where *mose* 'give' is followed by a transitive verb stem (the applicative can only occur on the last stem of a complex verb cf. chap. 5).

(20)   *Moni   ye-mose-gabae-ø.*   (21)   *Moni   ye-mose-uyo-i-ø.*
         money 3SG-give-off/away-3SG.O   money 3SG-give-back/again-APP-3SG.O
         'He gave the money away.'   'He returned the money.'

As opposed to the stems previously discussed, the stem *mose-i* can feature in three different syntactic frames. Again, the frames differ in whether the recipient or the patient of the transfer is cross-referenced on the verb, but also in whether a non-cross-referenced recipient is expressed as an argument or as an adjunct.

The stem *mose-i* 'give' can occur in the same two syntactic frames as *kainauya-i* 'give as gift' presented in Schema 2 and Schema 3. In the first case, the recipient is cross-referenced on the verb and the patient occurs as the secondary object preceding the verb. An example was presented in (18) above. The structure of the clause and its head can be sketched as in Schema 4 (parallel to Schema 2).

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[3]   *That is I consider the alternation between Schema 2 and Schema 3 to be an instance of what Dryer (1986) describes as 'antidative' rather than as 'indirect object advancement'.*

```
(NP)        (NP)        (NP)     SUBJprefix   – mose   – i   – OBJsuffix
 |           |           |           |          |       |        |
(AGENT)  (RECIPIENT)  (PATIENT)    AGENT        V      APP    RECIPIENT
                                    L_____J
                                                  VERB
         L_____J
                                    CLAUSE
```
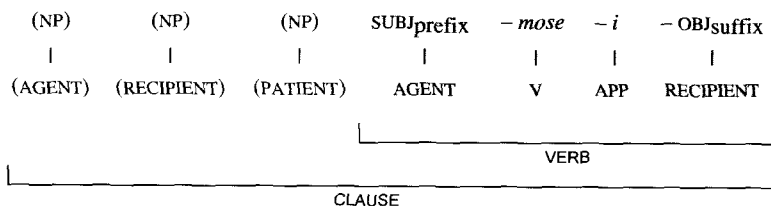
Schema 4   *Ditransitive clauses with* mose-i *'give', object suffix = recipient*

Alternatively, just as with *kainauya-i* 'give as gift', the stem *mose-i* 'give' can cross-reference the patient. Consider the question and answer pair in (22). The object suffix on the verb shows number agreement with the patient *bosa-wa labui* 'the two baskets', and not with the recipient *ka-gu kaha* which is singular.[4]

(22) Q: *Bosa labui-wa   haedi?*
           basket two-PM   where
           'Where are <u>the two baskets</u>?'

    A: *Ya-mose-i-<u>di</u>-ko   ka-gu   kaha-wa   unai.*
          1SG-give-APP-3PL.O-PERF   CL2-1SG.P sibling-PM   PP.SG
          'I gave <u>them</u> to my sister.'

The answer in (22) can be represented as in Schema 5 (parallel to Schema 3).

```
(NP)        (NP)     SUBJprefix   – mose   – i   – OBJsuffix     (PP)
 |           |           |          |       |        |            |
(AGENT)  (PATIENT)     AGENT        V      APP    PATIENT     (RECIPIENT)
                                    L_____J
                                              VERB
         L_____J
                                    CLAUSE
```
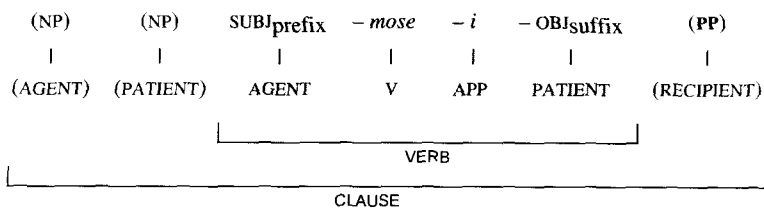
Schema 5   *Transitive clauses with* mose-i *'give', object suffix = patient*

Clauses with this structure are transitive: only two participants, the agent and the patient, are expressed as arguments. The recipient participant is expressed as an adjunct, marked by a postposition. As in Schema 3, the recipient PP tends to follow the verb as shown in example (22). But the recipient can also be fronted and precede the verb as in the text example in (23).

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[4]   *Human nouns are obligatorily marked for number. If the recipient in example (22) had a plural referent the form ought to be* ka-gu kaha-<u>o</u>, *with the plural suffix on the noun cf. chap. 2).*

(23)   *Wau*   *America*   *udiedi*   *ka-mose-mose-i-di*
           now/this   America   PP.PL   1EX-RED-give-APP-3PL.O/P
           'We were giving them to the Americans'   (ww2:41)

Again, based on the comparison across the verbs which can feature in ditransitive clauses, I consider Schema 4 as the basic frame of *mose-i* 'give' and the one in Schema 5 as an alternation of it.

Besides these two frames, parallel to the ones presented for *kainauya-i* 'give as gift', the stem *mose-i* 'give' can occur in a third syntactic frame. When the patient is cross-referenced by the object suffix, the recipient can be expressed by a bare NP rather than PP as in Schema 5. That is, the recipient can be expressed as a core argument and the clause is ditransitive. Thus, in ditransitive clauses with *mose-i* 'give' either the recipient or the patient can occur as the primary object. But *mose-i* 'give' is the only stem attested in this type of construction. Consider the question and answer pair in (24).

(24) Q: *Bosa*   *labui-wa*   *haedi?*
           basket   two-PM   where
           'Where are <u>the two baskets</u>?'

     A: *Ya-mose-i-<u>di</u>-ko*   *ka-gu*   *kaha-wa.*
           1SG-give-APP-3PL.O-PERF   CL2-1SG.P sibling-PM
           'I gave <u>them</u> to my sister.'

Again, the object suffix on the verb shows number agreement with the patient *bosa-wa labui* 'the two baskets'. But as opposed to (22) above, the recipient is expressed as a bare NP rather than by a postpositional phrase. The clauses can be represented as in Schema 6.

(NP)	(NP)	SUBJ_prefix	$-mose$	$-i$	$-$OBJ_suffix	(NP)
(AGENT)	(PATIENT)	AGENT	V	APP	PATIENT	(RECIPIENT)
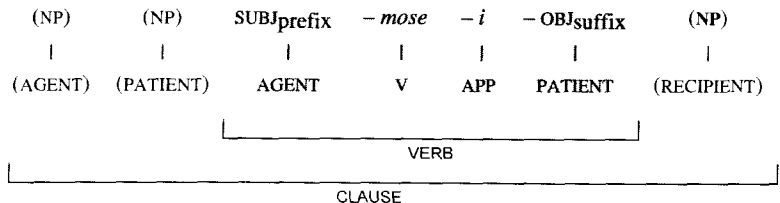
Schema 6   *Ditransitive clauses with* mose-i *'give, object suffix = patient*

As I discuss in 13.2 below, there is a tendency to express maximally one lexical argument per clause. In the case of *mose-i* 'give', this tendency has the consequence that only in the rarest cases can the syntactic frame of the clause be identified. For most text examples of *mose-i* 'give', it is unclear in which of its three syntactic frames (cf. 13.1.2.2) the verb actually occurs. The omitted nouns could be either arguments or adjuncts, and it is not clear which participant is

cross-referenced by the object suffix on the verb. In the text examples in (25) to (28), both the patient and the recipient are third person singular, and this means that either argument could be cross-referenced by the object suffix.[5]

(25) *Bolo ye-bahe-i-ya-ma na ye-mose-i-ø*
   ball 3SG-carry-APP-3SG.O-hither CONJ 3SG-give-APP-3SG.O
   'He brought the ball and gave it to him' (absrel1a:25)

(26) *Tabu dimdim kwa-mose-mose-i-ø, nige ye-henuwa-ø*
   PRHIB white.person 2PL-RED-give-APP-3SG.O NEG 3SG-like/want-3SG.O
   'Don't speak English with her, she doesn't like it'
   (lit. 'Don't give her white people['s language]') (olddial92)

(27) *Bosa ku-mose-i-ø!*
   basket 2SG-give-APP-3-SG.O
   'Give him the basket!'

Also in (28) one cannot determine whether the lexically expressed recipient is the inner-core or the outer-core object.[6]

(28) *Kaikaiwa ye-hai-ø ye-lao-ma ede*
   stick 3SG-take/get-3SG.O 3SG-go-hither PRSUP

   yo-na golowa-wa ye-mose-i-ø.
   CL1-3SG.O younger.bother-PM 3SG-give-APP-3SG.O
   'He got a stick, came and gave it to his small brother.' (absrel1c:18)

In order to determine in which syntactic frame the verb appears, both the recipient and the patient would have to be expressed lexically in the clause. In this way, their status as arguments or adjuncts could be identified. However, even then the identification of which of the two objects is cross-referenced (i.e. the distinction between Schema 4 and Schema 6) is impossible, because both are generally third person.[7] Obviously, the vagueness about the choice between the three frames is reinforced by the fact that the stem *mose-i* 'give' can only refer to 'giving' events with third person recipients.

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[5] *Since no participant is expressed lexically in the clause with* mose-i, *example (25) could be an instance of either of the three frames presented in 13.1.2.2. But also the examples in (26) and (27), where the patient is expressed lexically, could be instances of either of the three frames because the patient occurs as an argument in all three schemata.*

[6] *The example could be an instance of either Schema 4 or Schema 6 since in both frames the recipient is an argument.*

[7] *To elicit the different frames and illustrate them in 13.1.2.2 I constructed clauses where the patient and the recipient participant are distinct in number and where the number is overly marked. As mentioned in chapter 2, NPs with plural reference can at times be cross-referenced by singular pronouns. I ruled this out by using modified number marked NPs which are generally cross-referenced by a plural object suffix.*

I have shown that the stem *mose-i* 'give' is exceptional in two respects: it is based on a defective root (which obligatorily takes the applicative) and it can occur in three syntactic frames. It is unusual also beyond these properties in that it is restricted to expressions of 'giving' which involve a third person recipient. The stem *mose-i* 'give' cannot refer to 'giving' involving first or second person recipients. It forms a suppletive paradigm with another stem which, in turn, is restricted to 'giving' events involving first or second person recipients.

13.1.2.3 The paradigm of 'give'

Intuitively, of all types of events, 'giving' events are among the most likely to be expressed by ditransitive clauses. They are prototypical instances of events with three participants and one might say that, semantically, they require an agent, a transferred patient object, and a recipient. However, as I show below, in Saliba not all three participants are invariably encoded as syntactic arguments and thus the clauses referring to 'giving' events are not invariably ditransitive.

In Saliba, the concept of 'giving' is expressed by two incomplete paradigms of 'give' verbs. One stem is used for 'giving' to a first or second person, the other for 'giving' to a third person. The clauses with these two verbs differ in argument structure: one may be ditransitive or transitive, the other one is invariably transitive.

As mentioned above, the stem *mose-i* 'give' can only refer to 'giving' to a third person recipient. 'Giving' towards a first or second person recipient is expressed by the stem *le* 'give' (which obligatorily carries a directional suffix). This verb stem is in turn restricted in its use and cannot refer to 'giving' events with third person recipients. Thus, each of the two stems can only build a partial paradigm. The two incomplete paradigms of *mose-i* 'give' and *le* (plus directional) 'give' complement each other to form a single suppletive paradigm. In this paradigm, the suppletion depends on the grammatical person of the recipient. Examples (29) to (32) show the Saliba translation equivalent of a conjugation paradigm of 'give' as in the sentence 'He gave X one basket'.

(29)   *Bosa   kesega   ye-le-ya-ma.*   1st PERSON RECIPIENT
         basket   one   3SG-give-3SG.O-hither
         'He gave me/us one basket.'

(30)   *Bosa   kesega   ye-le-ya-wa.*   2nd PERSON RECIPIENT
         basket   one   3SG-give-3SG.O-thither
         'He gave you (SG/PL) one basket.'

(31)   *Bosa   kesega   ye-mose-i-ø.*   3rd PERSON SINGULAR RECIPIENT
         basket one   3SG-give-APP-3-SG.O
         'He gave him/her one basket.'

(32)   *Bosa   kesega   ye-mose-i-di.*   3rd PERSON PLURAL RECIPIENT
         basket one   3SG-give-APP-3PL.O
         'He gave them one basket.'

This paradigm is interesting in several respects. For one thing, it is quite unusual that one can deduce information about the grammatical person of a participant (first/second vs. third person) from the bare uninflected root. The paradigm shows stem suppletion depending on the grammatical person of the recipient. This is noteworthy given Bybee's (1985) work which shows that suppletion along the person agreement line is cross-linguistically the rarest case, and is only sparsely attested in the languages of the world.

Besides this, although the paradigm appears to be split according to the person agreement with the recipient, the verbs with *le* 'give' in (29) and (30) do not in fact inflectionally agree with the recipient participant. As I show below, *le* 'give' cannot pronominally cross-reference the recipient and this participant is not encoded as a syntactic argument.

Both stems are morphologically defective. The stem *mose-i* 'give' does not allow first or second person object suffixes. The examples in (33) are ungrammatical. Speakers rejected them and, instead, provided the forms in (34) with *le* 'give'.

(33) a. * *Ye-mose-i-gau.*   b   * *Ye-mose-i-go.*
            3SG-give-APP-1SG.O   3SG-give-APP-2SG.O
            'He gave me s.th.'   'He gave you s.th.'

(34) a   *Ye-le-ya-ma.*   b.   *Ya-le-ya-wa.*
            3SG-give-3SG.O-hither   1SG-give-3SG.O-thither
            'He gave it to me.'   'I gave it to you.'

The stem *le* 'give' is morphologically defective in that it cannot occur without a directional marker shown in (35a) and (b). It is the only stem which takes the directional suffixes obligatorily.[8]

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[8]   *The stem is further defective in only allowing third person object suffixes. The examples in (i) and (ii) show that first and second person object suffixes are ungrammatical. This is also the case if they are followed by a directional marker as in (b).*

(i)   a. * *Ye-le-gau.*   b.   * *Ye-le-gau-ma.*
            3SG-give-1SG.O   3SG-give-1SG.O-hither
            'He gave me.'

(35) a. * *Ye-le-ø.*   b. * *Ye-le-di.*
         3SG-give-3SG.O   3SG-give-3PL.O
         'He gave it.'   'He gave them.'

Crucially, as I discuss in chapter 14, other transfer verbs also take the directional suffixes to indicate a recipient. But in those cases, the verbs imply a third person recipient through pragmatic implication by the absence of a directional marker. This option is not present in the case of *le* 'give', since a directional suffix is required.

The argument structure of clauses with *mose-i* 'give' was discussed in detail in 13.1.2.2. For comparison, the argument structure of clauses with *le* 'give' is represented in Schema 7.

(NP)	(NP)	SUBJ$_{prefix}$	$-le$	$-$ OBJ$_{suffix}$	$-$ DIRECTIONAL
(AGENT)	(PATIENT)	AGENT	V	PATIENT	(RECIPIENT)
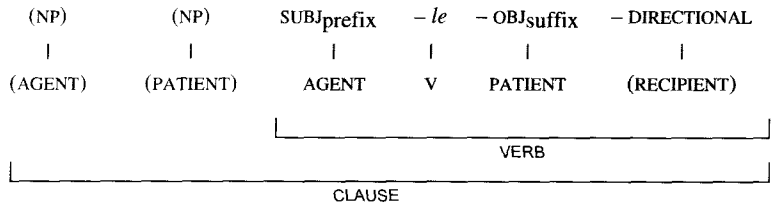
VERB

CLAUSE

Schema 7   *Transitive clauses with* le *'give', object suffix = theme*

Generally, the suffixes *-ma* 'hither, towards speaker' and *-wa* 'thither, not towards speaker' express the directionality of an event. But, as I discuss in chapter 14, on certain verbs (e.g. verbs of transfer) they are by convention interpreted as indicating the recipient of the transferred patient object. While, in principle, the semantics of *-wa* allows an interpretation as either 'away from speaker' or 'towards addressee', with the stem *le* 'give' only the second interpretation is possible. That is to say that by means of the directional suffixes, a person distinction of the recipient is implied. However, the directionals do not have the same status as pronominal affixes and they do not refer to an argument of the clause. Among other criteria, the recipient is encoded as an adjunct by a

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(11) a. * *Ye-le-go.*   b. * *Ye-le-go-wa.*
         3SG-give-2SG.O   3SG-give-2SG.O-thither
         'He gave you.'

Such a gap in the object inflection is otherwise not attested for Saliba transfer verbs (except for mose-i *'give').*

postposition if it is lexically expressed in the clause.[9] The directional markers and their role in referring to event participants are discussed in more detail in chapter 14.

The claim that examples (29) to (32) build a conjugation paradigm may be disputable since the clauses not only feature morphologically different verb stems but also differ in argument structure. The suggestion that the verbs build a suppletive paradigm implies that they have the same meaning. But given the difference in argument structure, the question arises whether the verbs can actually be semantically equivalent, or whether they perhaps express slightly different meanings or are used by different speakers. Elicitations with speakers and the analysis of text examples show that there is no difference in dialect or idiolect and that the two stems do not refer to different event types. Both stems are used by the same speakers and they are indeed used to refer to the same set of real world events. The choice between the stems reflects a difference in perspective: *le* 'give' is used if the recipient is a speech act participant, *mose-i* 'give' is used if it is not. Hence, the same event can be described with either verb depending on who is speaking. The text examples in (36) and (37) stem from the same text by the same speaker, and they in fact refer to the same situation. The examples differ in that (36) describes the situation from the speaker's own perspective and the recipient is a third person. In (37), the speaker takes on the perspective of the recipient and states the same request by switching to direct speech.

(36)   *Tabu   dimdim   kwa-mose-mose-i-ø,   nige   ye-henuwa-ø*
       PRHIB   white.person   2PL-RED-give-APP-3SG.O   NEG   3SG-like/want-3SG.O
       'Don't speak English with her, she doesn't like it (lit. 'Don't give her white people['s language]') (ot:xx)

(37)   *i-wane ...   nige   ya-henuwa-ø   dimdim   kwa-le-ya-ma*
       3SG-say   NEG   1SG-like-3SG.O   white.person   2PL-give-3SG.O-hither
       'she said "I don't want you to talk English to me"' (ot:xy)

Similarly, in (38) a single event is described from two perspectives: child X requests something from his sister and addresses her with (38a) encoding himself as the recipient. Their mother, supporting the request, addresses the sister with (38b) referring to X (who is not a speech act participant) as the recipient.

(38) a.   *Ku-le-ya-ma!*   b.   *Ku-mose-i-ø!*
X to sister: 2SG-give-3SG.O-hither   mother: 2SG-give-3SG.O-hither
             'Give it to me!'   'Give it to him!'

---

[9]   *For further discussion of why the directionals cannot be considered expressions of syntactic arguments see Margetts (in prep.).*

So, although the verbs based on *mose-i* and *le* differ in their morphological structure and in their argument structure, they are indeed equivalent in their meaning, and the verbs in (29) to (32) can indeed be considered a suppletive paradigm. [10]

The two different argument structure patterns within a single paradigm raise some interesting theoretical questions. For example, in the literature on language acquisition certain theories crucially assume a universal alignment between event types and syntactic structures across languages, i.e. for example between transfer events ('give') and ditransitive clauses. There are two competing hypotheses which have been termed the syntactic (e.g. Gleitman 1990) vs. semantic (e.g. Pinker 1987, 1989) 'bootstrapping' proposals about language acquisition. They are concerned with whether children acquire the semantics of a verb by observing the syntactic structures in which it occurs (e.g. the number of arguments) or whether they proceed in the opposite way. Assuming a single basic meaning 'give' in both of the Saliba constructions, the question arises how can the child project two expressions with distinct argument structures? Conversely, how can the child infer a unitary meaning of 'giving' from two syntactically distinct constructions?

Obviously, the suppletive paradigm of 'give' is an exceptional case both cross-linguistically and in Saliba. However, the mismatch between the number of event participants and the number of syntactic arguments (as in transitive clauses encoding 'giving' events) is systematic in Saliba as I discuss in chapter 14.

13.2 DISCOURSE TENDENCIES

A crucial point in the analysis of clause-level transitivity is that the verbs which can head a ditransitive clause do not formally require three arguments. For example, the clauses in (2) to (4) above express two arguments and there is no reason to assume that they require an outer-core object expressing a patient. Other verbs generally seem to strongly imply three participants even if there is no outer-core object expressed in the clause. The question is how to distinguish between clauses in which the absence of an overtly expressed (argument) participant is meaningful, and clauses in which it is not. Or, as Fillmore (1977: 64) puts it:

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[10] *For further discussion of the semantic equivalence of the 'giving' expressions see Margetts (in prep.).*

> Sometimes some aspect of an event or situation is a part of the speaker's and the hearer's understanding of the meaning of the sentence, yet there is nothing in the sentence which expresses it; and sometimes the absence of a constituent in the surface sentence reflects the absence of the associated notion from the conceptualization that is being communicated.

In Saliba, as in many languages it is arguable in which case an object NP is omitted in the clause but must be understood and in which case there simply is no object. The distinction is a valid one, but since it is not manifested in the structure of the clause I treat it as a matter of event representation rather than a difference in transitivity status of clause. (The representation of events with different numbers of participants is discussed in chap. 14.)

In Saliba discourse, omission of lexical arguments is the default situation. There is a general tendency of expressing maximally one lexical argument per clause, and clauses with two are quite rare. The language follows what Du Bois (1987) describes as the One Lexical Argument Constraint. Clauses with three lexical arguments are pragmatically and in terms of discourse structure extremely infelicitous. Speakers are very hesitant to accept sentences with more than two lexical arguments and questions about the acceptability of sentences like (40) typically cause elaborate discussions. People are aware that both (39a) and (b) are grammatical, and there is a sense that (40) SHOULD be. Nevertheless, most speakers are clearly not at ease with this clause type, to the extent that I hesitate to consider them grammatically sanctioned.

(39) a. *Wawaya-o-ne   puwaka   se-he-kai-di.*
child-PL-DET   pig   3PL-CAUS-eat-3PL.O
'The children fed the pigs.'

    b. *Puwaka-ne   saha   se-he-kai-di?*
pig-DET   what   3PL-CAUS-eat-3PL.O
'What did they feed the pigs?'

(40) *? *Wawaya-o-ne   puwaka   niu   se-he-kai-di.*
child-PL-DET   pig   coconut   3PL-CAUS-eat-3PL.O
'The children fed the pigs coconuts.'

Thus, in Saliba texts there is a tendency to distribute the expression of participants over several clauses. For example, the stem *he-numa* 'CAUS-drink' can in principle occur as the head of a clause with two lexical object arguments as in (41), but Saliba speakers are more likely to use two clauses each with a single lexical NP such as (42a) or (b) rather than one clause with two lexical NP as in (41).

(41)   *Natu-gu   ti   ya-he-numa-ø.*
        child-1SG.P tea   1SG-CAUS-drink-3SG.O
        'I made my child drink tea.'

(42) a.   *Ti   ya-ini-ø   na   natu-gu   ya-he-numa-ø.*
           tea   1SG-pour-3SG.O CONJ child-1SG.P 1SG-CAUS-drink-3SG.O
           'I poured some tea and made my child drink.'

     b.   *Natu-gu   ye-lao-ma   na   ti   ya-he-numa-ø.*
           child-1SG.P 3SG-go-hither CONJ tea   1SG-CAUS-drink-3SG.O
           'I called my child and made it drink tea.'

Some text examples are presented in (43) and (44). In (43) only the causee *gagili-na-wa* 'the small one' is expressed lexically in the clause with *he-likwa* 'make wear', the patient NP *lulu-wa* 'the shirt' is expressed in a preceding clause as the object of *hai* 'take/get'.

(43)   *lulu-wa   ye-hai-ø   ede   ye-mose-i-ø*
        shirt-PM   3SG-take/get-3SG.O   PRSUP   3SG-give-APP-3SG.O
        '(when) he got the shirt, he gave it to him

        gagili-na-wa   ye-he-likwa-ø
        small-3SG.P-PM   3SG-CAUS-wear-3SG.O
        and made the small one wear it' (absrel1c:23)

The same structure is found in (44). In the final clause with *mose-i* 'give' only the recipient *yona golowa* 'his younger brother' is expressed lexically. The patient of the 'giving' event is introduced two clauses earlier, again as the object of the stem *hai* 'take/get'.

(44)   *Kaikaiwa ye-hai-ø   ye-lao-ma   ede*
        stick   3SG-take/get-3SG.O   3SG-go-hither   PRSUP
        'He got a stick, came,

        yo-na   golowa-wa   ye-mose-i-ø.
        CL1-3SG.O younger.bother-PM 3SG-give-APP-3SG.O
        and gave it to his small brother.' (absrel1c:18)

The described Saliba discourse tendency of distributing the expression of participants over several clauses bears some resemblance to what has been described as clause chains in the non-Austronesian languages of Papua New Guinea. See chapter 2.2.2 for a brief discussion of the problems in identifying such constructions and in formally distinguishing them from, for example, coordinate clauses.

13.3 SUMMARY

In this chapter, I have investigated the structure of Saliba ditransitive clauses. According to the level-bound definitions of transitivity in chapter 3, all ditransitive clauses are headed by morphologically transitive verbs. As a consequence, all ditransitive clauses constitute instances of discord in transitivity status between the

word and the clause level.

The verbs which feature as heads of ditransitive clauses are generally derived by the causative prefix and can be based on bivalent, labile, or monovalent roots. In one instance, a verb is based on a noun root (*kainauya* 'gift/present'), in another exceptional case it is based on a root (*mose* 'give') which could not be classified. The heads of ditransitive clauses include verbs of cognition/perception, verbs of carrying/wearing, verbs of eating/drinking (derived by the causative 13.1.1), and verbs of transfer (derived by the applicative 13.1.2).

Verbs which feature as the heads of ditransitive clauses are attested in three different syntactic frames. Ignoring the internal morphological structure of the verbs (i.e. derivation by causative or applicative), the frames can be summarized as in schemata A to C below. Only two of the frames, those of schemata A and C, constitute ditransitive clauses. The frame in B is transitive since only two participants can be expressed as arguments, the third participant can optionally be expressed as an adjunct.

All verbs discussed in section 13.1 above (except for *le* 'give') can occur in schema A (summarizing schema 1, 2, and 4 above), where the recipient/causee is expressed as the inner-core object cross-referenced on the verb. The patient is expressed as the outer-core object and appears as a bare NP preceding the verb.

Schema A	(NP)	(NP)	(NP)	SUBJ$_{prefix}$	V	– OBJ$_{suffix}$
	(AGENT)	(RECIPIENT)	(THEME)	AGENT	STEM	RECIPIENT CAUSEE
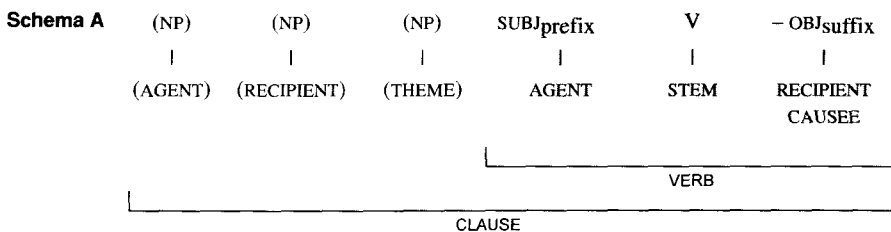
VERB

CLAUSE

Most heads of ditransitive clauses (all those derived by the causative) can in fact only occur in this frame and allow no alternation (except for lexical expression or non-expression of the patient argument). Only the two transfer verbs which are derived by the applicative allow alternation with the second frame where the patient is cross-referenced and the recipient occurs as a postpositionally marked adjunct. The recipient PP typically follows the verb, occurring in the same position as the goals of motion verbs. Clauses with this structure are invariably transitive since only two participants are expressed as arguments. The frame is schematized

in B (summarizing schema 3 and 5 above).

Schema B

(NP)	(NP)	SUBJprefix	V	– OBJsuffix	(PP)
│	│	│	│	│	│
(AGENT)	(THEME)	AGENT	STEM	THEME	(RECIPIENT)

VERB

CLAUSE
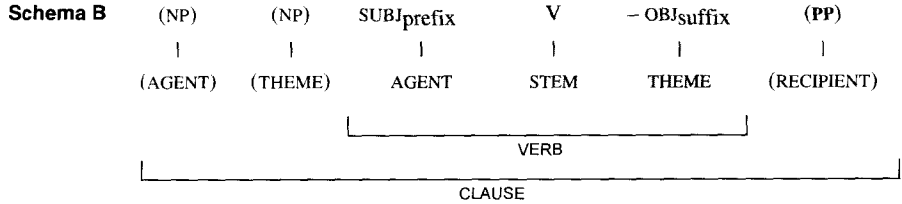
Of the two transfer verbs, only the stem *mose-i* 'give' can occur in a third frame schematized in C (repeated from schema 6 above). In this construction, it is again the patient which is cross-referenced on the verb but the recipient is expressed as an outer-core argument (rather than an adjunct as in B). The recipient NP typically follows the verb, again occurring in the same position as the goals of motion verbs. Clauses with this frame are ditransitive.

SCHEMA C

(NP)	(NP)	SUBJprefix	V	– OBJsuffix	(NP)
│	│	│	│	│	│
(AGENT)	(THEME)	AGENT	STEM	THEME	(RECIPIENT)
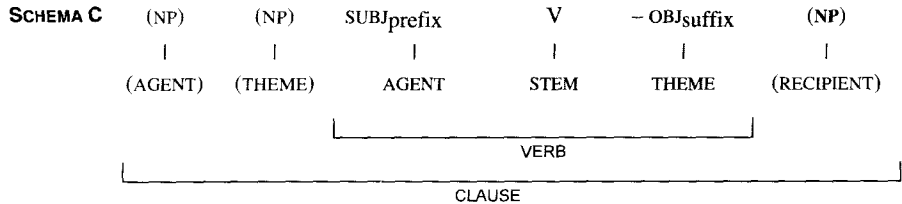
VERB

CLAUSE

Since all verbs which can head ditransitive clauses can occur in frame A and most verbs can in fact only occur in this frame, I consider A as basic and B and C as alternations of this basic frame. The alternation in B is an instance of what Dryer (1986) termed an 'antidative' construction. The alternation in C is only attested by a single verb. It is not only exceptional in Saliba but it also seems to be cross-linguistically uncommon.[11]

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[11]   *In his discussion on secondary object constructions, Dryer (1986) makes no reference to clauses where the secondary object is a recipient.*

EVENTS AND THEIR PARTICIPANTS

The discussion of valence and transitivity in the preceding chapters has mainly focused on three structural levels of the grammar: the root, the word, and the clause level. In this chapter I take a look at a further level: the conceptualization and linguistic encoding of events. On this level pragmatics plays a crucial role besides the syntax and semantics of the linguistic constructions. I use the term 'event' here as a pretheoretical notion and do not attempt a formal definition of this concept. I suggest that an event (e.g. a 'giving' event) can be thought of as a situation occurring in the real world (e.g. someone handing something to someone else). As necessary (but not sufficient) criteria, an event can be thought of as involving event 'participants' (used here as an equally pretheoretical notion) and as being located in time (cf. Bohnemeyer ms.). As opposed to roots, words, and clauses, events are not a structural unit of a language. Therefore the relation between clauses and the events they describe is of a less direct nature than the relation between the structural levels discussed in the preceding chapters. However, similar to the relations among these structural levels of the grammar, there are some regularities between the morpho-syntactic structure of clauses and the types of events they describe. In this chapter I investigate some of these correspondences between clauses and events and in particular those between the transitivity status of a clause and the number of event participants.[1]

In the following discussion of one, two, and three-participant events, I show that the number of syntactic arguments expressed in the clause does not directly reflect the number of event participants encoded or implied in the clause. The number of participants to which reference is made depends as much on conventional interpretation, that is on pragmatic factors, as on the syntactic argument structure

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[1]   *Note that either cross-linguistically or in Saliba there is no necessary one-to-one relation between clausehood and eventhood. As pointed out in chapter 22.2, there are constructions which resemble (core-layer) verb serialization or clause chaining which is to say that there might be cases of many-to-one mapping between clauses on the one hand and events on the other. This area of Saliba grammar clearly requires further study. For the purpose of the discussion in the present chapter, I will assume a rough alignment between clausehood and eventhood.*

of the clause. Because of this, there is no one-to-one mapping between the number of event participants and the transitivity status of the clause. As a general tendency, it appears that Saliba clauses can encode a greater number of event participants than they have syntactic arguments, but not fewer (reflexive clauses are a counter example to this tendency, see 14.3.1). This is similar to what has been described for the discord relations between word-level and clause-level transitivity (chaps. 3, 11 to 13). I have shown that a clause can feature more but never fewer arguments than are cross-referenced on the verb and therefore the transitivity status of the clause maybe higher but never lower than that of the verb. Clauses with discord were described as a clause-level manifestation of fundamental intransitivity: they reflect the language's sensitivity to notions such as object individuation and aspect in the expression of transitivity. Similarly, I argue that the relation between clause-level transitivity and the number of event participants described below can be considered a further manifestation of fundamental intransitivity in Saliba. In short, certain two-participant events can be represented by intransitive clauses and certain three-participants events, for example events denoting the transfer of an object (e.g. 'giving'), tend to be represented by transitive clauses in Saliba (cf. chap. 13). Thus, the alignment between the transitivity status of the clause and the number of event participants seem quite different from the better studied European languages, where, for example, transfer events tend to be expressed by ditransitive clauses. The alignment between syntactic structures and the real-world events they describe is, however, assumed to be cross-linguistically universal in parts of the linguistic literature. The assumption of such a universal alignment plays a crucial role, for example, in the literature on language acquisition.[2] Gleitman (1990) explicitly states for transfer events:

> Verbs that describe externally caused transfer or change of possessor of an object … fit naturally into sentences with three noun phrases … This is just the kind of transparent syntax/semantics relation that every known language seems to embody … the component 'transfer' is inserted into a verb's semantic entry in case it is observed to occur in three noun-phrase structures. (p. 30)

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[2] *E.g. in the two debated "bootstrapping" hypotheses, which are concerned with whether children acquire the semantics of a verb by observing the syntactic structures in which it occurs (e.g. the number of arguments) or whether they proceed in the opposite way, from semantics to syntax (see e.g. Gleitman 1990, Pinker 1987, 1989).*

> The first proviso to the semantic usefulness of syntactic analysis for learning purposes is that the semantic/syntactic relations have to be materially the same across languages. (p. 35)

As discussed shortly in more detail, this does not hold for the encoding of transfer events in Saliba (see also Margetts in prep.). Crucially, I suggest that the nature of the relation between syntactic arguments and the number of event participants correlates with the typological parameter of fundamental (in)transitivity. This would mean that Saliba is not an exception to a cross-linguistic tendency, but rather that the European-style alignment (for example between transfer events and ditransitive structures) is not in fact universal. The lack of such an alignment may possibly be predictable by the parameter of fundamental (in)transitivity. Similar to the characteristics of fundamental intransitivity on the root, word, and clause level, the tendency of Saliba clauses to express fewer syntactic arguments than there are event participants seems to be shared by other members of the Oceanic language family.[3] It is beyond the scope of this thesis to investigate this hypothesis in detail, but I bring forward some evidence in the discussion below. A more careful study of this topic would surely be a worthwhile topic for future research.

In chapters 11 to 13 I mostly described cases where the transitivity status of the clause (i.e. the number of syntactic arguments) corresponded to the number of participants involved in the event.[4] In this chapter I focus on cases where the number of event participants is higher (or lower, in the case of reflexives) than the number of arguments expressed in the clause. It should be noted however that in the following discussion I only consider cases in which there is linguistic material present in a clause which can be interpreted as encoding or implying a participant (in addition to those expressed as arguments). I am not concerned here with cases of ellipsis or where world knowledge alone suggests that there are further participants involved in the event than there are arguments in the clause (e.g.

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[3]   *The converse tendency seems to hold for Kwa languages. Essegbey (1999, to appear) describes for Ewe that certain events which would typically be considered as having a single participant such as 'running' or 'swimming', are expressed by transitive clauses with verbs that take an 'inherent' complement, e.g. 'swim' might be expressed as 'swim water', where 'swim' is formally a transitive verb and 'water' its object. This may be considered evidence that Kwa languages are fundamentally (or extremely) transitive. For discussion of transitivity in these languages see e.g. Avolonto 1995, Emenajo 1975, Manfredi 1991, Nwachukwu 1985, 1987.*

[4]   *The cases of discord presented in these chapters refer to the relation between verb level and clause level (and not to the relation between clause level and events).*

intransitive expressions of 'eating' which necessarily imply something to be eaten). Furthermore, I primarily discuss cases where the implied participants are animates (typically recipients or addressees). I do not look in detail at the range of participants which can be encoded as adjuncts by means of postpositions. At several points I introduce postpositions which can encode animate participants, but in these cases they typically combine with the pragmatic strategies with which I am primarily concerned. Saliba postpositions generally tend to encode locations, sources, goals, cause, or directionality. A brief overview is provided in chapter 2.

In sum, this chapter does not attempt a complete survey of event representation in Saliba. Rather, the focus is on a specific aspect, the relation between clause-level transitivity and event participants, which relates to the discussion in the preceding chapters. In section 14.1, I introduce the strategies which are available in Saliba for referring to three-participant events. Following this, I discuss two-participant events in section 14.2 and one-participant events in 14.3 with a focus on reflexive constructions.

14.1 THREE-PARTICIPANT EVENTS

As discussed in chapter 13, the number of Saliba verbs that can head a ditransitive clause is very restricted. The set consists almost exclusively of verbs derived by the causative prefix. The derivation of novel causative verbs is restricted by the requirement that the causing agent physically manipulates the causee. I have discussed that the Saliba inventory of verbal lexemes consists largely of monovalent roots (chaps. 3 and 4) and that derivational processes which can derive heads of ditransitive clauses are extremely limited (chaps. 7 and 13). As a consequence, the construction of ditransitive clauses can be considered a 'labor-intensive' process and other strategies for expressing events with three participants might be preferred. Indeed, there are other strategies, besides ditransitive clauses, which are regularly employed for expressing three-participant events in Saliba. One productive strategy involves the use of directional suffixes, a second involves the use of possessive classifiers. These alternative strategies are a core part of Saliba grammar and in fact more frequent than ditransitive constructions. As discussed in chapter 13, even the concept of 'giving', which one might consider a prototypical case of a three-participant event, can be expressed by a transitive verb carrying a directional suffix. Saliba ditransitive clauses were discussed in detail in chapter 13. In this chapter I focus on the other two strategies, the use of directional suffixes (14.1.1) and possessive classifiers (14.1.2).

14.1.1 DIRECTIONAL SUFFIXES

One of the prominent and productive strategies for referring to non-argument participants (i.e. event participants that are not expressed as syntactic arguments) involves the use of directional markers. Directional morphemes with meanings like 'hither' and 'thither' are a widespread characteristic of Austronesian languages. The Saliba forms are *-ma* and *-wa* and they are suffixes to the verb. On intransitive verbs they attach directly to the stem, on transitive verbs they follow the object suffix. The form *-ma* entails directionality towards but not necessarily to the speaker.[5] This means the form is used independently of whether the described path actually reaches the speaker and whether or not it ends there. I gloss *-ma* as 'hither, towards speaker'. The form *-wa* entails directionality not towards speaker but not necessarily away from speaker in that it can be used in situations where no reference is made to the speaker and the speaker's location is irrelevant. Depending on the opposition into which the directionals engage, and which I discuss shortly, *-wa* can be interpreted as 'away from speaker' or 'towards addressee'. I gloss the form as 'thither, not towards speaker'.

The semantics of the directional suffixes, and the system of oppositions in which they engage can be illustrated with examples of the general motion verb stem *lao* 'go, travel'.[6] The stem *lao-ma* 'come' is in opposition with the simplex stem *lao* 'go, travel', and through this opposition *lao*, which is not inherently directional, acquires a default interpretation of motion 'not towards speaker' or motion 'away from speaker'. Besides this, *lao-ma* 'come' is also in opposition with the stem *lao-wa* 'go thither' which – by virtue of the directional suffix – entails motion 'not towards speaker'. Depending on context, 'not towards speaker' can be interpreted as 'away from speaker' or as 'towards addressee'. In the latter case, a three way opposition arises between *-ma* 'towards speaker', *-wa* 'towards addressee', and the absence of a directional marker, which is by default interpreted as 'towards third person'. There are, thus, two alternative interpretations of the Saliba directional

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[5] *The entailed path is actually towards the speaker OR DEICTIC CENTER. For simplicity, I generally talk about 'speaker' as short for 'speaker or deictic center' in the following.*

[6] *For the analysis of the directional suffixes I used among others the elicitation tool designed by Wilkins (1993) for the comparison of the use and semantics of COME and GO expressions. The application of this tool, and results for two languages, Mparntwe Arrente (Pama-Nyungan) and Longgu (Oceanic), are described in Wilkins and Hill (1995).*

system. They are sketched in Figure 1. The two-way opposition sketched in (A) is the one entailed in the semantics of the morphemes, i.e. 'towards' vs. 'not towards speaker'. Figure 1 (B) schematizes the three-way opposition that arises when the absence of a directional marker is interpreted as the third member of the opposition with a meaning of 'towards third person'. In this case, -*ma* still expresses directionality 'towards speaker', but -*wa* is interpreted as 'towards addressee'.

(A) **(B)**
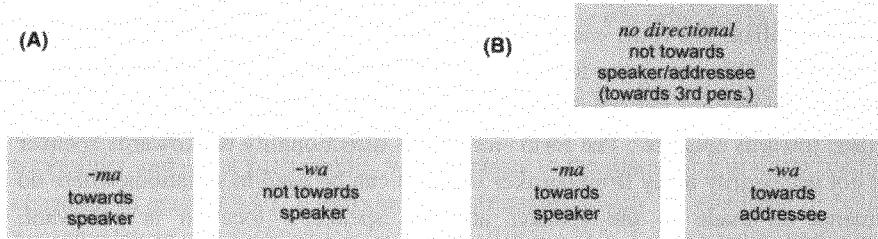
Figure 1   *Interpretations of the directional suffixes*

In a given use of a Saliba directional marker, it is not entirely predictable which of the two oppositions is understood or intended. The crucial question is what (if anything) determines the preference for either of the two interpretations of the directional system in a given context. Wilkins and Hill (1995: 242) mention that motion scenes may differ in whether or not they involve or imply a destination point. It appears that the involvement of a destination point, such as a goal or recipient, is also what influences the interpretation of the Saliba directionals. If no destination point is implied in the motion event, it seems that the preferred reading of the form -*wa* is 'away from speaker' as in Figure 1 (A); if a destination is implied, the preferred interpretation is 'towards addressee' as in (B).

In the three-way opposition sketched in Figure 1 (B) the directional suffixes are conventionally interpreted as referring to a participant of the event, typically a recipient (or an addressee, see 14.2). Saliba speakers by default interpret the clauses in (1), which refer to transfer events, as differing in the person of the recipient participant.

(1)   a.   *Leta-wa   ye-hetamali-ya-ma.*
                letter-PM   3SG-send-3SG.O-hither
                'He sent the letter to me/us.'

        b.   *Leta-wa   ye-hetamali-ya-wa.*
                letter-PM   3SG-send-3SG.O-thither
                'He sent the letter to you (SG/PL).'

    c.   *Leta-wa*   *ye-hetamali-ø.*[7]
            letter-PM   3SG-send-3SG.O
            'He sent the letter to him/her/them.'

In these examples the directionals (and their absence) are by convention interpreted as referring to event participants. But in contrast to pronominal affixes, the directionals cannot express certain distinctions which are consistently made in all Saliba pronominal paradigms. The participants which are introduced by the directionals are not specified for number or for the distinction between first person plural inclusive and exclusive.

Besides this lack of specification with respect to number and the distinction between inclusive and exclusive, the meaning of clauses like the ones in (1) is open in a more general sense. The suffixes can be interpreted as indeed implying a recipient, but also as merely denoting a direction or goal. After all, the entailment of the forms is only directionality 'towards speaker' or 'not towards speaker'. As a consequence, the clause in (2) has a general or vague meaning in that it can refer to a situation where the speaker is indeed the recipient of the theme but also a situation where the speaker simply describes a transfer event which ends in a location nearby.

(2)   *Bosa-wa* *ye-bahe-i-ya-ma.*
           basket-PM   3SG-carry-APP-3SG-hither
           'She brought me/us the basket.' (speaker = recipient)
           'She brought the basket here.'   (speaker = observer of event)

There are various strategies to resolve the vagueness of such clauses and to reinforce the implied reference to a recipient. Some of these are discussed towards the end of this section.

It should be noted that the directionals do not express syntactic arguments of the clause but merely make indirect reference to a recipient by pragmatic inference. Evidence against their interpretation as marking syntactic arguments includes the following: (a) the participants implied by these form cannot appear as unmarked NP in the clause and if they feature as NPs these are marked as adjuncts; (b) these participants cannot be cross-referenced by pronominal affixes on the verb; (c) the directionals seem overall derivational rather than inflectional in nature; and (d) considering the directional as expressions of arguments would lead to

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[7]   *Note that the -ø suffix is the word-final allomorph of the object suffix and does not stand for the absence of a directional marker. The directionals trigger the non-final allomorph -ya of the third person singular object suffix.*

overgeneralizations such that stems like *lao-ma* 'come' would have to be considered morphologically transitive. A detailed discussion of these and other points is presented in Margetts (in prep.). Here, I illustrate only one of the main points, namely the fact that the participants implied by the directional suffixes (or by their absence) must be marked as adjuncts if they are overtly expressed in the clause. The complex postposition *kali*-PRONOUN-*wai* (or *kali*-PRONOUN-*ena*) 'to/towards' marks the referent of the pronoun as a goal or recipient (chap. 2.5.3.3). In (3), the first person recipient implied by the directional suffix -*ma* is additionally marked (and specified in terms of number) by the first person singular possessive pronoun -*gu* in the complex postposition.

(3)   *Leta-wa ye-hetamali-ya-ma   kali-gu-wai.*
           letter-PM   3SG-send-3SG.O-hither   KALI-1SG.P-PP
           'He sent the letter to me.'

In (4) the absence of a directional marker implies a third person recipient. This recipient is explicitly expressed by a postpositional phrase with the general 'locative' postposition *unai* which, again, marks the preceding noun as an adjunct.

(4)   *Leta-wa   ye-hetamali-ø Maria   unai.*
           letter-PM   3SG-send-3SG.O   Name   PP.SG
           'He sent the letter to Maria.'

As a reminder, there are no verbs in Saliba which subcategorize for a postpositionally marked NP and postpositions invariably mark adjuncts but never syntactic arguments (chap. 3). In summary, the directional markers (or their absence) imply a recipient but they are not expressions of syntactic arguments.

After this introduction of the directional suffixes I now discuss the kinds of transitive verbs which can take the suffixes, and the type of events to which these clauses can refer. The directional suffixes typically occur with transitive verbs which entail or imply a transferred object, as in (5) to (10). Examples (5) to (7) show stems that are transitivized by the applicative suffix -*I*, and (8) to (10) show underived transitive stems. The examples in (a) presents the verbs without a directional, the verbs in (b) carry the suffixes -*ma* or -*wa*.

(5) a. *Ye-tabe-i-ø.*   b. *Ye-tabe-i-ya-ma.*
         3SG-pull-APP-3SG.O   3SG-pull-APP-3SG.O-hither
         'He pulled it.'   'He pulled it hither.'

(6) a. *Ye-bahe-i-ø.*   b. *Ye-bahe-i-ya-wa.*
         3SG-carry-APP-3SG.O   3SG-carry-APP-3SG.O-thither
         'He carried it.'   'He brought it thither.'

(7) a. *Ye-woya-i-ø.*   b. *Ye-woya-i-ya-ma.*
         3SG-lead-APP-3SG.O   3SG-lead-APP-3SG.O-hither
         'He led it.'   'He led it here.'

(8) a. *Ye-hetamali-ɸ.*   b. *Ye-hetamali-ya-wa.*
         3SG-send-3SG.O   3SG-send-3SG.O-thither
         'He sent it.'   'He sent it thither.'

(9) a. *Ye-duwui-ɸ.*   b. *Ye-duwui-ya-ma.*
         3SG-dive.for-3SG.O   3SG-dive-3SG.O-hither
         'He dived for it.'   'He dived and got it hither.'

(10) a. *Ye-tu-ɸ.*   b. *Ye-tu-ya-wa.*
         3SG-throw-3SG.O   3SG-throw-3SG.O-thither
         'He threw it.'   'He threw it thither.'

Besides transfer verbs such as (5) to (10), the directionals can also occur with certain stems that do not entail a transferred object. In these instances it is the directional suffix itself that adds a 'path-encoding' meaning component to the transitive verb. In this sense the directionals can be said to derive transfer verbs. Consider the verbs in (11) to (13):

(11)   *Molisi ye-unui-ya-ma.*
         Name   3SG-catch-3SG.O-hither
         'Morris caught it for me.' (ditrQ98)

(12)   *leiyaha   hesau kwa-boli-ya-ma   na   ye-kita-ɸ*
         pandanus   other 2PL-cut-3SG.O-hither CONJ 3SG-see-3SG.O
         'cut a pandanus leaf and bring it so she can see it' (edail164)

(13)   *yo-m   leta   gagili-na   ya-kuli-ya-wa*
         CL1-2SG.P letter small-3SG.P 1SG-write-3SG.O-thither
         'I wrote you a short letter' (tbletter97)

The sentences in (11) to (13) can be paraphrased by (11') to (13').

(11')   *Ye-unui-ɸ   ye-le-ya-ma.*
         3SG-catch-3SG.O 3SG-give-3SG.O-hither
         'He caught it and gave it to me.' (ditrQ98)

(12')   *Kwa-boli-ɸ   kwa-bahe-i-ya-ma.*
         2PL-cut-3SG.O 2PL-carry-APP-3SG.O-hither
         'Cut it and bring it here.'

(13')   *Ya-kuli-ɸ   ya-hetamali-ya-wa.*
         1SG-write-3SG.O 1SG-send-3SG.O-thither
         'I wrote it and sent it to you.'

These paraphrases consist of a sequence of two verbs, the first showing the same stem as the corresponding verb in (11) to (13) but without the directional suffix. The second verb is a transfer verb such as 'give', 'send', or 'bring' (which typically include a directional suffix). This means the verbs in (11) to (13) describe roughly the same situations or events as the bi-clausal constructions in (11') to (13'), which express the action on an object by one verb but the subsequent transfer of this object by another.

Speakers vary in their acceptance of the directionals on transitive verbs which do not entail or imply a transferred object. Examples (14a) and (15a) below elicited varying responses from speakers, but all speakers accepted the paraphrases given in (b).

(14) a. *? *Keke ye-gabu-ya-ma.*
cake   3SG-bake-3SG.O-hither
'She baked me a cake.'

b. *Keke ye-gabu-ø   na   ye-bahe-i-ya-ma.*
cake   3SG-bake-3SG.O   CONJ   3SG-carry-APP-3SG.O-hither
'She baked a cake and brought it to me.'

(15) a. *? *Puwaka   se-gwali-ya-ma.*
pig   3PL-spear-3SG.O-hither
'They speared me a pig.'

b. *Puwaka   se-gwali-ø   na   se-bahe-i-ya-ma.*
pig   3PL-spear-3SG.O   CONJ   3PL-carry-APP-3SG.O-hither
'They speared a pig and brought it to me.'

To summarize, verbs of transfer generally allow the directional suffixes and by conventional interpretation the suffixes are taken as referring to a third (recipient) participant. The third participant is not a syntactic argument of the clause. Transitive verbs which do not entail transfer of an object vary as to whether they can take a directional suffix to imply a third participant. What exactly governs or constraints the acceptability of the directional suffixes on (non-transfer) transitive verbs remains to be discovered by future research.

There are various means to reinforce the implication of a recipient participant as the intended reading of the directional suffixes and of the clauses as encoding events with three participants. One strategy is to explicitly express a recipient in addition to the directionals by a postposition. Two examples were already presented in (3) and (4). A further example with the complex postpositions *kali-PRONOUN-ena* 'to/towards PRONOUN' is given in (16).

(16) *Ka-gu   u-kai-gwali ...   ku-bahe-i-ya-ma   kali-gu-ena.*
CL2-1SG.P   2SG-KAI-spear   2SG-carry-APP-3SG.O-hither   KALI-1SG.P-PP.SG
'Spear some for me and bring them to me.' (tblaki51)

As a further discourse strategy, the recipient reading can be reinforced by taking up the implied recipient as the subject in a following clause as the controlling agent acting on the object which was transferred, as in (17).

(17) *Yo-na   wiki-ta   hinage   ye-le-ya-ma   ta-hepaisowa-ø.*
CL1-3SG.P   week-DEM   also   3SG-give-3SG.O-hither   1INC-use-3SG.O
'He (God) gave us his week to use.'
(lit. 'He gave his week hither, we use it.') (church1:22)

The directional suffix -*ma* 'hither, towards speaker' indicates that the transfer expressed by the verb takes place towards the location of the speaker. The subject prefix of the following verb shows the speaker in control of the object after the transfer is completed. From this it can be inferred that the speaker was indeed the recipient of the object.

Finally, a very productive strategy is to combine the use of a directional marker with another strategy for encoding three-participant events involving possessive classifiers (discussed in the following section). As discussed below, possessive constructions can be interpreted as expressing a possessor or as referring to a recipient/beneficiary. The directional suffixes in turn can be interpreted as referring to a recipient or as expressing a directionality or goal. Their combination promotes the one reading which they share, the expression of a recipient/beneficiary participant. Consider (18):

(18)   *Yo-gu   leta   ye-hetamali-ya-ma.*
         CL1-1SG.P letter   3SG-send-3SG.O-hither
         'She sent me a/my letter.'

The directional suffix -*ma* 'hither, towards speaker' expresses transfer of the theme towards speaker. The possessive suffix -*gu* on the possessive classifier expresses a first person singular possessor of the transferred theme. Thus combined, the two strategies can express fairly unambiguously a recipient/beneficiary participant. Some text examples which combine both constructions are presented in (19) to (21); a further example was given in (16) above.

(19)   *Oh   kagutoki   ka-gu   labiya ko-hai-ya-ma*
         INTRJ my.thanks   CL2-1SG.P sago   2SG-take/get-3SG.O-hither
         'Oh thank you, you gave me sago' (tblaki28)

(20)   *yo-gu   medolo   se-le-ya-ma*
         CL1-1SG.P medal   3PL-give-3SG.O-hither
         'they gave me a medal' (oba3:1)

(21)   *yo-m   leta   gagili-na   ya-kuli-ya-wa*
         CL1-2SG.P letter   small-3SG.P   3SG-write-3SG.O-thither
         'I wrote you a short letter' (tbletter97)

Possessive classifiers as a productive strategy of encoding a third event participant are discussed in detail in the following section. The use of directional markers for this purpose as discussed in this section is clearly not an exclusive feature of Saliba. On the contrary, constructions like 'carry hither' or 'take hither' as expressions for concepts like 'bring' or 'give' are attested in various Oceanic languages as well as in other languages families.

14.1.2 POSSESSIVE CLASSIFIERS

The second major strategy for the linguistic encoding of three-participant events involves the use of possessive classifiers. Saliba has three types of possessive constructions which were briefly introduced in chapter 2. The constructions which are relevant for the present discussion are the indirect or 'alienable' expressions in which the possessed noun is preceded by a classifier which obligatorily carries a suffix referring to the possessor.[8] The choice between the two classifiers *ka-* and *yo-* basically distinguishes edible items (*ka-*) from inedible ones (*yo-*), although some abstract concepts, items of clothing, as well as a few kin terms also occur in the "edible" *ka-* category. In Oceanic languages, possessive constructions are more commonly used than might be familiar from the study of European languages. In Saliba, as in a number of other languages, the possessive classifiers can participate in a benefactive and a possessive construction. It can be a point of debate whether these constitute indeed two grammatically distinct constructions or a single construction with two readings. For Saliba, as I discuss towards the end of this section, there is some evidence that the expression of possession and that of benefaction indeed constitute distinct grammatical constructions but that the distinction between the two is difficult to draw. One can assume a grammaticalization process between the two uses of the classifiers with the possessive use as the source construction which expanded to encoding benefaction. An especially opaque context for distinguishing the two uses constitute clauses with transitive verbs and classifiers which are followed by an overt object noun. For many of such clauses, both interpretations, possessive and benefactive, are equally possible. The meaning difference is vague because the notions of possessor of an object and beneficiary of an action typically coincide. Typically, if the beneficiary is not the possessor of the object prior to the expressed action it will be the possessor after the action is completed. The clause in (22) shows a possessed noun as the patient of the transitive verb *ini* 'pour'. The possessive suffix on the classifier can be interpreted as denoting (a) the possessor of the object 'tea', (b) as the beneficiary of the act of 'pouring', or (c) as the recipient of the object.

(22)   *Ka-m   ti   ya-ini-ɸ?*
          CL2-2SG.P tea   1SG-pour-3SG.O
          'Shall I pour you some tea?' (lit. 'I pour your tea?')

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[8]   *I generally use the term 'classifier' both as referring to the classifier morpheme itself, as well as to the combination of a classifier morpheme PLUS its possessor suffix.*

The notions of possessor, beneficiary, and recipient coincide in the sense that the intended communication is successful which ever of the three readings is intended by the speaker and which ever reading is understood by the addressee. One can speak here of a 'bridging context' in the sense of Evans and Wilkins (1998: 5).

> ... polysemy ... is typically preceded by a phase where meaning B is only contextually implicated but not yet lexicalized as a distinct sense... In these contexts, which we term *bridging contexts*, speech participants do not detect any problem of different assignments of meaning to the form because both speaker and addressee interpretations of the utterance in context are effective, functionally equivalent (if semantically distinct).

This situation seems to hold for the possessive vs. benefactive reading of the Saliba classifier forms. As I discuss below, there are certain contexts where the two readings start to pattern differently which provides evidence for them to be grammaticalized into to two syntactically discrete but semantically related constructions. Example (23) is structurally parallel to (22). Again, the possessive suffix on the classifier can be interpreted in three ways. It can refer to the possessor of the theme, to the beneficiary of the action, or again to the recipient.[9]

(23)   *Yo-gu   puwaka ku-unui-ø.*
         CL1-1SG.P pig   2SG-kill/catch-3SG.O
         'Catch my pig /catch a pig for me.'

It is important to note, that sentence (23) can refer to a specific pig which the speaker indeed owns, but as commonly, the sentence may express the request to catch a (wild) pig. That is *yogu puwaka* 'my pig' can refer to a pig that is not possessed prior to the act of catching it. The sentence can be paraphrased in English as a) 'Do something to my pig (catch it)', or b) 'Do something to a pig so that it becomes mine (catch it)'. The same holds for example (24) where the act of buying bread brings it into the possession of the possessor referent.

(24)   *Ku-lao ka-gu   pwalawa   ku-hemaisa-ø!*
         2SG-go   CL2-1SG.P bread   2SG-buy-3SG.O
         'Go and buy bread for me/buy my bread!'

In short, one can say that the possessive constructions have extended to refer to future possessive relations. A crucial prerequisite for the benefactive/recipient

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[9]   *Note that there is no grammatical necessity for the notions of possessor and beneficiary to coincide. In the example in (17), the possessor of the object is not the beneficiary or recipient of the metaphorical transfer event but the source (the 'giver'). In this example, only the possessive but not the benefactive reading of the possessive classifier is allowed.*

interpretation seems to be that the notion of possession does not seem to entail definiteness or specificity.

Croft (1985) refers to possessive constructions with a benefactive reading such as (22) to (24) as cases of "indirect object 'lowering'". With this term, he applies the traditional movement metaphor and implies that a participant, which could be encoded as a core argument in a parallel construction, is expressed as a non-core participant. Croft (1985: 41) states "[i]ndirect object lowering is the realization of a recipient or benefactive argument as the possessor of the direct object NP." For Saliba, it has to be noted that the term "lowering" is misleading since the "lowering" expressions are the default constructions and there is no alternative expression with these verbs in which the recipient or beneficiary would be expressed as a core argument. Mosel (1984: 172) states about this type of construction in Tolai also an Oceanic language of Papua New Guinea:

> The beneficiary may also be signified by a possessor phrase, if it is understood that the beneficiary owns or will own what is affected or produced by the action, or that it is determined for the beneficiary ...

A further Saliba example is given in (25) where there is again no implication that the speaker owns the coconuts or the tree which is climbed.

(25)   *Ka-da   niu   ye-mwalae-ø.*
        CL2-1INC.P   coconut   3SG-climb-3SG.O
        'He climbed (and got) coconuts for us.'

The referent of *kada niu* 'our (drinking) coconuts' does not in fact exist prior to the act of somebody climbing for them (and turning any coconuts from a tree into 'our drinking coconuts'). The sentence is perfectly fine in a context such as (26), where the non-existence of *kada niu* 'our (drinking) coconuts' is explicitly stated.

(26)   *Nige   ka-da   niu   na   kabo   ye-laoma*
        NEG   CL2-1INC.P coconut   CONJ   TAM   3SG-come
        'We didn't have any coconuts and then he came

        ka-da   niu   ye-mwalae-ø.
        CL2-1INC.P   coconut   3SG-climb-3SG.O
        and climbed/got some coconuts for us.'

Naturally, all kinds of verbs allow their object to be a possessed noun, but only certain verbs allow an interpretation of the possessor as a beneficiary and as the recipient of the object. Croft (1985: 44) describes as a requirement that "the possession relations which hold are affected by the event itself. Generally, the benefactor ... comes into possession of the ... object by virtue of the event described by the main verb". This is the case in (22) to (26) but not in (27).

(27)   *Yo-gu   waga   ye-kita-ø.*
         CL1-1SG.P boat   3SG-see-3SG.O
         'He saw my boat.' (* 'He saw a boat for me.')

For this example, only the possessive but not the benefactive reading is possible. This is because the benefactive use of the classifiers has not (or not yet) grammaticalized to the extent that it could express purely 'deputative' benefaction, such as doing something (not involving an object) in someone's place or on someone's behalf. Example (28) with the classifier followed by an intransitive motion verb was generally considered unacceptable.

(28)   *   *Yo-gu   ku-lao!*
              CL1-1SG.P 2SG-go
              'Go instead of me/go in my place!'

Nevertheless, in their benefactive use, the possessive classifiers can occur with intransitive verbs, but only with those intransitives which have transitive counterparts (essentially with the same verbs which can occur in transitive discord clauses with patient objects, chap. 12). In (29) and (30) possessive classifiers occur with intransitive verbs and without a possessed noun.[10]

(29)   *Yo-da   ku-hede-hedede!*
         CL1-1INC.P 2SG-RED-tell
         'Tell us something/tell stories for us!' (lit. 'Ours you tell!')

(30)   *Ka-di   ya-lao-liga.*
         CL1-3PL.P 1SG-go-cook
         'I cook for them.' (lit. 'Theirs I do the cooking.')

As mentioned, it is arguable whether there is a single general meaning of the possessive construction open to different interpretations or whether there are two distinct syntactic constructions. In Saliba, there is evidence that they indeed constitute distinct grammatical constructions whose meanings have a vague boundary. This evidence suggests that, in the possessive construction the classifier with the possessive suffix is a determiner and dependent of the object – the possessor. But in the benefactive construction, the classifier with its possessive suffix can be analyzed as an adjunct, denoting the beneficiary of the action. The great difficulty for distinguishing the two uses should be clear from the above discussion of transitive verbs with possessed objects. Even the clauses in (29) and (30) above do not constitute evidence that the two readings or constructions are syntactically distinct. They show classifiers without possessed nouns and with intransitive verbs, but a possessive construction would be grammatically sanctioned in this context too: (a) nouns can freely be omitted if context allows

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[10]   *The stem* lao-liga *is intransitive and never allows an object prefix. The stem* hedede *could in theory be transitive or intransitive, but cf. the discussion below.*

and (b) certain intransitive verbs can occur with (outer-core) object arguments. Thus, it is in principle possible to drop the object in a possessive construction or to add an object to a benefactive construction as in (29') and (30').

(29')   *Yo-da*   *pilipilidai*   *ku-hede-hedede!*
        CL1-1INC.P   story/legend   2SG-RED-tell
        'Tell us a story/tell stories for us!' (lit. 'Tell our story!')

(30')   *Ka-di*   *kai*   *ya-lao-liga.*
        CL1-3PL.P   food   1SG-go-cook
        'I cook food for them.' (lit. 'I cook their food.')

As a consequence, the two constructions expressing possession vs. benefaction cannot be distinguished by the presence or absence of an object noun or by the transitivity status of the verb. The evidence suggesting that the benefactive use of the classifier is grammaticalized as a separate construction has to be of a different kind. One piece of evidence comes from clauses with noun incorporation. In (31a) the possessive NP *kada niu* 'our coconut' precedes the verb. In (31b) the noun stem is incorporated but the possessive classifier still precedes the verb.

(31)   a.   *Ka-da*   *niu*   *ye-mwalae-ø.*
           CL2-1INC.P   coconut   3SG-climb-3SG.O
           'He climbed (and got) coconuts for us/he climbed our coconut.'

       b.   *Ka-da*   *ye-niu-mwalae.*
           CL2-1INC.P   3SG-coconut-climb
           'He coconut-climbed FOR US.'

Incorporated nouns can generally not take any modifiers and this is the only case where a modifier seems to be "stranded" before the verb. The construction has a clearly benefactive reading and the possessive classifier expresses the notion 'for us' rather than a possessive relation 'ours'. This implies that the classifier does not in fact modify the incorporated nominal as such but constitutes an adjunct to the clause expressing the beneficiary of the action. Another piece of evidence involves word order. Example (32) shows the question word *saha* 'what' in the preposed topic position but the possessive classifier occurs in the position immediately preceding the transitive verb.

(32)   *Saha*   *kabo*   *yo-m*   *ya-duwa-i-ø?*
        what   TAM   CL1-2SG.P   1SG-give.as.gift-APP-3SG.O
        'What will I give you as a present?' ('What will I give to you?') (nb1:109)

In possessive constructions the order of classifier and possessed noun is generally fixed and only the NPs as a whole could be moved into the topic position. Example (32) suggests that the classifier and noun do not build a single constituent but that the classifier has the syntactic status of an adjunct (rather than a

determiner of the object noun *saha* 'what').[11] Further evidence comes from comparison with other Oceanic languages, where the benefactive use of the possessive classifiers has also been recognized as a separate construction. For example for Tolai, Mosel (1984) describes possessive classifiers denoting a beneficiary under the category of 'adjuncts'. Finally, further evidence is also provided by the distribution in discourse of the possessive classifiers with vs. without an overt possessed object noun. I have shown that the intransitive verbs in (29) and (30) can also appear with overt possessed object nouns which showed that not only the benefactive but also the possessive construction is grammatically sanctioned with these verbs. However, as reported in 12.2.2.1, there is a clear tendency for classifiers without an overt possessed object to occur with intransitive verbs, but for classifiers with possessed objects to occur with transitive verbs. This means, while clauses as in (29') (30') are grammatically sanctioned they do not in fact occur in natural discourse while clauses like (29), and (30) do. This discourse pattern suggests that the possessive use and the benefactive use of the classifiers differ syntactically in that intransitive verbs are more likely to occur with the benefactive construction than with the possessive one (this does not hold vice versa however, as discussed above). To summarize, in the possessive construction, the possessive classifiers have the syntactic status of dependent/determiner of an object argument, while in the benefactive construction, they have the status of an adjunct. But the meaning distinctions between the two constructions is typically vague.

14.1.3 SUMMARY: THREE-PARTICIPANT EVENTS

Compared to events which are encoded by ditransitive clauses (chap. 13), the meaning of constructions with directionals or possessive classifiers tends to be open to at least two readings. The directional constructions are open to be interpreted as encoding a recipient participant or as simply expressing directionality. Example (33) was presented as (2) above and is repeated here for convenience.

(33)   *Bosa-wa   ye-bahe-i-ya-ma.*
         basket-PM   3SG-carry-APP-3SG-hither
         (a) 'She brought me/us the basket.'
         (b) 'She brought the basket here.'

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[11]   *Note however that benefactive constructions do not generally allow the word order in (32). This order is possibly restricted to question words. Further research will be necessary on this topic.*

Similarly, constructions with the possessive classifiers are open as to whether they express the possessor of an object or the beneficiary of an action (typically the recipient of the object). The clause in (34) has a reading in which the possessive suffix on the classifier denotes the (original) possessor of the object and another where it denotes the recipient (or possessor to be).

(34)　　　*Yo-na　leta　ya-hetamali-ya-ko.*
　　　　　　CL1-3SG.P letter　1SG-send-3SG.O-PERF
　　　　　　'I sent the/a letter for her already.'
　　　　　　(a) 'I sent her a letter.' (i.e. I sent a letter to her)
　　　　　　(b) 'I sent/posted her letter.' (e.g. which she wrote)

Constructions with the possessive classifiers are usually vague only when they occur out of context (e.g. in an elicitation situation). In natural discourse, the intended reading is generally clarified by the linguistic and extra-linguistic context. Some strategies of reinforcing an intended reading were introduced in 14.1.1.

The fact that three-participant events are typically represented by transitive clauses rather than by ditransitive ones relates to some of the characteristics of fundamental intransitivity discussed for the root and the verb level. The inventory of verbal lexemes consists largely of monovalent roots (chaps. 3 and 4) and only one of the transitivity-increasing processes, namely causativization, allows transitive verbs as input. The output are morphologically transitive verbs which can occur as the heads of ditransitive clauses (chaps. 7 and 13). But while causativization is a very productive process with intransitive input verbs, it is very restricted when the input verbs are transitive. It is attested with ten or so verbs and novel derivations are not readily accepted, so the morphological tools available in the language for deriving heads of ditransitive clauses are extremely limited. The use of directional suffixes and possessive classifiers as means of encoding events with three participants can be seen as alternative, compensating strategies.

Besides these major strategies involving causativization, directional suffixes, and possessive classifiers, there are further ways to encode events with three participants. One construction involves noun incorporation as in examples (35) and (36), which show morphologically intransitive verbs with an incorporated object but a second object precedes the verb as an outer-core argument.

(35)　　　*Mwane-gu　ya-kaibwada-moni.*
　　　　　　spouse-1SG.P　1SG-ask.for-money-1SG.O
　　　　　　'I asked my husband for money.'

(36)   *Kwabuli   se-he-kai-puwaka-ø.*
         widow   3PL-CAUS-eat-pig-3SG.O
         'They fed the widow pork.'

In contrast to the three strategies discussed above, noun incorporation is not a productive strategy for encoding three-participant events and there are only a couple of examples with these two verb stems (for discussion see chap. 10). Finally, another way of encoding event participants is obviously to expresses them as adjuncts in the clause and I have argued that this is in fact the case for the benefactive constructions discussed in 14.1.2. In 14.1.1, I also discussed adjuncts marked by postpositions such as *kali*-pronoun-*wai* (or *-ena*) 'to/towards PRONOUN' and the general postposition *unai* marking various functions including locations and instruments (cf. chap. 2.5.3.3).

14.2 TWO-PARTICIPANT EVENTS

In 14.1 I showed that transitive clauses with directional suffixes on the verb are also productively employed to express events with three participants. Similarly, certain two-participant events can or must be encoded by intransitive clauses in which one participant is expressed as a syntactic argument the other being implied by the directional suffix of the verb. Consider examples (37) and (38).

(37)   *Ye-hedede-lao-ma.*   (38)   *Ye-kita-dobi-wa.*
         3SG-tell-go-hither   3SG-see-go.down-thither
         'He told me.'   'He looked down to you.'

The clauses involve path-encoding non-motion verbs such as verbs of perception and communication. From these verbs, an intransitive complex verb stem is derived by a motion verb stem such as *lao* 'go' or *dobi* 'go down' which occurs in the directional (V_3) slot of the complex verb (chap. 5). While the derived complex verb with *lao* 'go' can take the directional suffixes, the simplex verbs of perception or communication cannot. The examples in (39) and (40) were rejected.

(39) * *Ye-hedede-ma.*   (40) * *Ye-kita-wa.*
         3SG-tell-hither   3SG-see-thither
         'He talked hither.'   'He looked thither.'

As discussed in 14.1.1, the three-way opposition between *-ma, -wa,* and the absence of a directional marker is by convention interpreted as referring to the person distinction of a participant which is not expressed as an argument of the clause. In the paradigm in (41) the absence of a directional suffix is interpreted as marking directionality towards a third person.

(41)   a.   *Ye-kaikewa-lao-ma.*
           3SG-stare-go-hither
           'He stared over here to me/us.'

        b.   *Ye-kaikewa-lao-wa.*
           3SG-stare-go-thither
           'He stared over to you.'

        c.   *Ye-kaikewa-lao.*
           3SG-stare-go
           'He stared over there to him/her/them.'

While in the three-participant events discussed in 14.1.2 the implied participant is a recipient or beneficiary, in the intransitive constructions introduced here the implied participant is an addressee or goal. The constructions, again, have a general meaning open to interpretation. The directionals (or their absence) can encode a participant or simply the directionality of the action. The interpretation ultimately depends on the context of the utterance. The implication of a second participant seems to be stronger with verbs of communication, for example with the stem *hedede* 'tell' in (38), than with verbs of perception as in (37) and (41). This difference can be attributed to the pragmatics of the event types, i.e. to the fact that perception events do not necessarily imply two animate participants while communication events, such as talking, typically do. Another difference between the expressions with *hedede* 'tell' and perception verbs like 'see' or 'stare' in (37) and (41) lies in the semantic roles of their object arguments when the verbs are transitive. Compare the object roles in (42a) to (44a) to the implied participants of the intransitive complex verbs in (42b) to (44b).

(42)   a.   *Ye-kita-gau.*   b.   *Ye-kita-lao-ma.*
           3SG-see-1SG.O   3SG-see-go-hither
           'He saw me.'   'He looked over to me.'

(43)   a.   *Ye-kaikewa-gau.*   b.   *Ye-kaikewa-lao-ma.*
           3SG-stare-1SG.O   3SG-stare-go-hither
           'He stared at me.'   'He stared over to me.'

(44)   a.   *Ye-hedede-gau.*   b.   *Ye-hedede-lao-ma.*
           3SG-tell-1SG.O   3SG-tell-go-hither
           'He talked about me.' (*'He told me.')   'He told me.'

The transitive verbs in (a) express a second participant by the pronominal object suffix, i.e. as a syntactic argument. The intransitive complex verbs in (b) only imply a second participant by means of the directional suffix. While for the perception verbs in (42) and (43) the role of this second participant is essentially the same in the transitive and intransitive constructions (stimulus/goal), this is not the case for *hedede* 'tell' in (44). The object suffix in (44a) refers to the patient/topic talked about, while the directional suffix in (b) encodes the addressee. In fact, there is no alternative construction in Saliba expressing the addressee of

hedede 'tell' as a syntactic argument, (44b) is the default way of saying 'he told me'. Whatever is said typically follows the complex verb in direct speech as in the text example in (45).[12]

(45)　　*Ya-hedede-lao-wa-ko　　ena　　ku-sae-sae ...*
　　　　　1SG-tell-go-thither-PERF　　COND　2SG-RED-go.up
　　　　　'I told you already, if you're going up

　　　　　tabu　　...　　ku-lao keda loha-wai
　　　　　PRHIB　　　　　2SG-go　way　long-DIR
　　　　　don't go too far away' (bagi26)

Another verb of communication encoding the addressee by means of the directional suffixes is based on the stem *walo* 'talk' in (46).

(46)　　*Nige　ye-walo-lao-wa.*
　　　　　NEG　　3SG-talk-go-thither
　　　　　'He didn't talk to you.'

Unlike *hedede* 'tell', the stem *walo* never occurs as a simplex stem and thus it can not build a transitive verb parallel to (44a).

A further way of encoding the addressee of *hedede* 'tell' is by means of the benefactive construction with the possessive classifier *yo-* discussed in 14.1.2. Consider the clause in (47).

(47)　　*Yo-da　　　　ku-hede-hedede!*
　　　　　CL1-1INC.P　　2SG-RED-tell
　　　　　'Tell us something/tell stories for us!'

In 14.1.2 I have reviewed evidence for the benefactive use of the classifiers to be syntactically distinct from the possessive one. Thus, example (47) can be analyzed as an intransitive clause with a benefactive adjunct expressing a second participant besides the subject prefix on the verb. The same holds for the clause in (48).[13]

(48)　　*Ka-di　　ya-lao-liga.*
　　　　　CL1-3PL.P　1SG-go-cook
　　　　　'I cook for them.'

To summarize, certain two-participant events are encoded by intransitive clauses where only one of the participants is expressed as a syntactic argument. The second event participant is implied by a directional suffix or encoded as a benefactive adjunct.

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[12]　　*Young speakers educated in English are apparently starting to use* hedede *'talk/tell' with an addressee as the object and* ya-hedede-go *is at times taken to mean 'I told you' which is ungrammatical according to older speakers.*

[13]　　*As discussed in 14.1.2, these clauses can alternatively be analyzed as transitive clauses (with discord) whose possessed object nouns are omitted.*

14.3 ONE-PARTICIPANT EVENTS

In chapter 11 I described the relation between word-level and clause-level transitivity in intransitive clauses. In Saliba there can be more arguments in the clause than are cross-referenced on the verb but not vice versa. As a consequence intransitive clauses can not show discord but only accord in transitivity status. A similar tendency holds for the relation between clause-level transitivity and the number of participants in an event. Events with one participant are generally expressed by intransitive clauses. The major exception to this tendency are reflexive constructions, where a single participant is described as both the agent and the patient of the action.

14.3.1 REFLEXIVE CONSTRUCTIONS

Reflexive actions in which a single participant figures simultaneously as an agent and a patient can be expressed by morphologically transitive verb in Saliba.[14] There are two strategies in Saliba for expressing reflexive actions and typically the two are combined. One involves a preceding verb with the stem *bom* 'self/alone', as in (49), The other involves derivation of a complex verb with the stem *uyo* 'go back/again', as in (50).[15]

(49)   *Ya-bom   ya-kita-gau.*
         1SG-self/alone 1SG-see-1SG.O
         'I saw myself.'

(50)   *Ya-kita-uyo-i-gau.*
         1SG-see-go.back/again- APP-1SG.O
         'I saw myself.'

Each of the two constructions has another basic use beside the expression of reflexives. The construction with *bom* 'self/alone' simply stresses that only one agent is involved.

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[14]   *It should be noted, however, that actions which may be encoded in European languages by reflexive constructions are often expressed in Saliba by simple intransitive verbs (e.g. 'wash', 'comb', 'shave' etc.). I do not consider such verbs as reflexive here since they cannot participate in what I describe as the morpho-syntactic reflexive constructions. See Mosel 1991b for discussion on this topic.*

[15]   *Reciprocal construction are also based on complex verbs with* uyo *'go back/again'. In addition, a prefix* hai- *typically occurs.*

(i)   *Se-**hai**-koi-koipili-uyo-i-di.*   (ii)   *Se-**hai**-bai-baiwai-uyo-i-di.*
        3PL-RECIP-RED-angry-back/again-APP-3PL.O/P   3PL-RECIP-RED-stare-back/again-APP-3PL.O/P
        'They are angry with each other.'   'They are looking at each other.'

Cf. Lichtenberk 1985, 1991 on reciprocal constructions.

(51)   *Ye-bom   ye-he-yababa-ø.*
        3SG-self/alone   3SG-CAUS-bad-3SG.O
        'He alone/himself screwed it up.'

Complex verbs with the stem *uyo* 'go back/again' generally express repetition of an action.

(52)   *Ya-kita-uyo-i-ø.*
        1SG-see-go.back/again-3SG.O
        'I saw it again.'

The preference for either of the two constructions or their combination to express reflexivity seems to depend partly on the person of the agent/patient. With a first or second person participant the pronominal suffixes are in principle sufficient to establish coreference of agent and patient. For third person participants the coreference must be explicitly highlighted. With third person participants the complex verb construction with *uyo* 'go back/again' are potentially ambiguous between a reflexive and a repetition reading.

(53)   *Ye-mose-uyo-i-ø.*
        3SG-give-go.back/again-3SG.O
        'He gave himself.' (in a religious context e.g. 'to God')
        'He gave it back.'

(54)   *Ye-he-yababa-uyo-i-ø.*
        3SG-CAUS-bad-go.back/again-APP-3SG.O
        'He got himself into trouble (he made himself bad).'
        'He screwed it up again (he made it bad).'

The combination of the two strategies helps to emphasize the reflexive meaning. Two examples are presented in (55) and (56).

(55)   *Siya   se-bom   se-he-yababa-uyo-i-di.*
        3PL.EMPH   3PL-self/alone   3PL-CAUS-bad-go.back/again-APP-3PL.O/P
        'They got themselves into trouble (made themselves bad).'

(56)   *Ye-bom   ye-nuwatu-uyo-i-ø   nige   ye-nuwatu-i-da.*
        3SG-self/alone   3SG-think-go.back/again-APP-3SG.   NEG   3SG-think-APP-1INC
        'He only thinks about himself, he doesn't think of us.'

14.4 SUMMARY

In this chapter I investigated some aspects of the relation between clause-level transitivity and the number of event participants. I have shown that there is no direct correspondence between the number of event participants and the transitivity status of the clause. The relation is indirect in that not all participants need to be expressed as syntactic arguments. I have introduced two main strategies (besides the use of postpositions) of referring to non-argument participants in Saliba. The first involves the directional suffixes *-ma* 'hither, towards speaker' and *-wa* 'thither, not towards speaker', which by conventional interpretation are

understood as pointing out a recipient or addressee in certain constructions. The second strategy involves possessive classifiers introducing a beneficiary or recipient. Both of these strategies are not uncommon in Oceanic languages and future research might investigate to what extent the tendency described for Saliba holds for the Oceanic language family more generally.

I have shown that in Saliba, by default, one-participant events are represented by intransitive clauses (chap. 11), the only exception being clauses with reflexive verbs, which are formally transitive (14.3.1). Two-participant events can be represented by transitive clauses (chap. 12) or by intransitive clauses as discussed in 14.2. Three-participant events are typically encoded by transitive clauses as introduced in 14.1, only those which include a component of causation tend to be expressed by ditransitive clauses (chap. 13). Considering these relations from the point of view of clause types one can summarize that intransitive clauses typically refer to one-participant events but they can also make reference to events with two participants. Transitive clauses typically refer to two-participant events but they can also encode events with three participants and, in the case of reflexive verbs, even to events with a single participant. Ditransitive clauses can only refer to three-participant events. Figure 2 schematizes these relations.
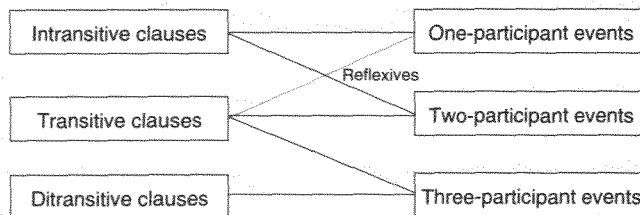

Figure 2   *Alignment between clause-level transitivity and number of event participants*

I have argued that the portrayed relation between clause-level transitivity and the number of event participants is a further feature of the fundamentally intransitive nature of the language.

CONCLUSION

In this thesis I have presented a morpho-syntactic description of Saliba verbs and simple verbal clauses. Special emphasis throughout the study has focused on the manifestations of valence and transitivity on different structural levels of Saliba grammar. I have proposed a typological characterization of the language based on these manifestations and suggested that this characterization can be extended to the Oceanic language family as a whole.

The study was presented in three parts. Part one presented the introduction to the language and the topic of the thesis (chapters 1 to 3). In chapter 3, I introduced the relevant definitions and the distinction between the structural levels of the grammar. Part two (chapter 4) discussed the root level and the valence-based verb classes of Saliba. Part three (chapters 5 to 10) introduced word-level transitivity and the derivational processes which can alter it. Part four (chapters 11 to 13) discussed clause-level transitivity and its relation to the word level. Finally, part five (chapter 14) was concerned with the relation between clause-level transitivity and the number of principal event participants.

Transitivity is generally expressed in the verbal morphology and syntactic structure of a language but it can also be manifested in discourse structure and in strategies of event representation. In addition, the notion of transitivity can also be considered from a semantic perspective. For linguistic description and theory, it is vital to tease apart the manifestations of transitivity in these different domains. In this thesis I have described and defined morphological (word-level) and syntactic (clause-level) transitivity independently using discrete morpho-syntactic features, located on different structural levels of the grammar. Saliba, like most Oceanic languages, has constructions which belong to a gray area of transitivity marking in showing both intransitive and transitive features. Such clauses have been described in the literature as varying in the degree of transitivity compared to straightforward intransitive or transitive clauses. In this study, I attempted a more explicit approach, showing that, on a given structural level, these constructions have either intransitive or transitive features (or transitive and ditransitive ones) but never both. The scalar appearance of transitivity can thus be accounted for by the interplay between the structural levels of the grammar. In addition, in 3.4.1 I

proposed a morpho-syntactically-based definition of (certain) semantic arguments. Such arguments may or may not surface as syntactic arguments of the verb. The notion of semantic arguments is closely related to the distinction between 'close' and 'remote' objects of transitivized verbs discussed in the Oceanic literature. Close objects qualify as semantic arguments of the underived verbs while remote objects do not. I have shown that certain areas of Saliba grammar are sensitive not only to syntactic but also to semantic arguments of a verb. Relevant areas are transitivity marking of complex verbs (chap. 5), the lexical expression of objects (chap. 6), and noun incorporation (chap. 10).

In chapter 3, valence and transitivity were defined independently on three structural levels: the root-, word-, and clause-level. I use the term 'valence' exclusively for the domain of the verb root, the term 'word-level transitivity' for the verb stem and inflected verb, and the term 'clause-level transitivity' for the domain of the clause. Each of these terms is defined by features from the respective structural level. Root-valence refers to the inherent relational need or ability of a verb root to take a certain number of core arguments. The valence of a root can be observed in its distributional behavior, that is in its ability to occur as an underived stem in transitive and/or intransitive verbs. Word-level transitivity is defined by the morphological features of the inflected verb. A given verb is morphologically either transitive or intransitive since a maximum of two arguments can be marked by its pronominal affixes. Clause-level transitivity is defined by the number of syntactic arguments expressed in the clause. The distributional ability of a verb to appear as head of intransitive, transitive, or ditransitive clauses was explicitly excluded from the definition of word-level transitivity. There are morphologically intransitive verbs in Saliba heading transitive clauses as well as morphologically transitive verbs heading ditransitive clauses (chapters 3, 12, 13). There are thus different types of relationships between the three structural levels. The relation between root valence and word-level transitivity may be direct or derived: in the latter case, morphology is added which influences the transitivity status of the verb. Similarly, there are two possible relations between word- and clause-level transitivity. For these relations, I introduced the terms 'accord' and 'discord'. There is accord if verb and clause have the same transitivity status. There is discord if the transitivity status of the verb differs from that of the clause. The Saliba cases of discord are not random but follow a clearly restricted pattern. Following the level-bound definitions of transitivity, the transitivity status of the verb can be lower but never higher than that of the clause. As a consequence, in intransitive clauses there is always accord

in transitivity status; in transitive clauses there can be either accord or discord; but in ditransitive clauses there is always discord between word- and clause-level transitivity (since, morphologically, there are no ditransitive verbs in Saliba). In chapter 12, I discussed discord relations in transitive clauses, which are a well known phenomenon within the Oceanic language family. The critical parameter for the choice between accord and discord constructions in transitive clauses with patient objects is the degree of individuation of the object noun. In chapter 12.2.3, I showed the structural similarity between such constructions and discord clauses with goal arguments. I presented preliminary evidence that, similar to patient objects, the degree of individuation of the goal may determine the choice between accord vs. discord constructions. I also showed the structural similarity between transitive clauses with discord and ditransitive clauses (which always have discord). Both types of constructions include an outer-core object argument. The difference between these constructions is that in transitive clauses, there is a choice between accord and discord, while in ditransitive clauses discord is structurally required.

As a further area of linguistic description, I included the domain of event representation (chap. 14). I showed that a similar tendency as on the word- and clause-level holds for the relation between clause-level transitivity and the number of event participants. In Saliba, the number of syntactic arguments is often lower than the number of principal event participants. The relations between the levels are schematized in Figure 1. The lines connecting the units across the different levels can be read directionally from left to right as indicating the participation of the lower-level unit in the construction of the higher-level unit.
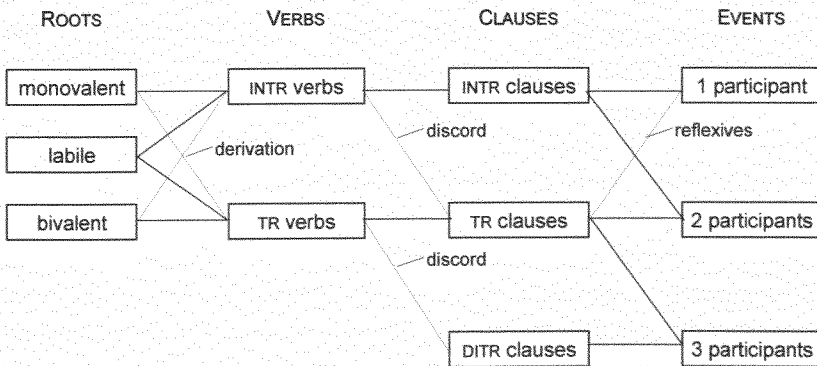

Figure 1   *Relationships between the levels*

Studies of Oceanic languages often approach clauses with discord as the typologically marked constructions in comparison to clauses with accord. Such an approach is influenced by the knowledge of transitivity marking in European-style languages where discord constructions are uncommon. However, as highlighted throughout the thesis, there is a basic typological difference between Oceanic languages and languages of the European type in the manifestations of transitivity and the role it plays in grammar. European languages have been classified as fundamentally transitive while I have argued that Oceanic languages are fundamentally intransitive. There is therefore a risk of skewing the analysis of transitivity marking in Oceanic languages by the a priori assumption that clauses with discord are typologically marked. English and related languages are often implied as the base of comparison for linguistic description. But cross-linguistically, possibly neither accord nor discord constructions are typologically marked with respect to each other. In fundamentally intransitive languages, it might be argued, the full range of properties associated with high transitivity à la Hopper and Thompson is necessary to push the clause over the threshold into full transitivity marking at both the word and the clause level. Thus perhaps discord constructions, in which an intransitive verb occurs with an object NP, are in fact not the marked cases in languages which are fundamentally intransitive. If this is the case, linguistic analysis should not only focus on the features of discord clauses but also look for the common denominator across clauses with accord rather than taking these constructions for granted as the default case. Such considerations need to be taken into account in future research on constructions with both transitive and intransitive features in Oceania as well as cross-linguistically.

Following the work by Nichols (1982, 1984a, 1984b), Drossard (1990, 1991), and Haspelmath (1993), fundamental (in)transitivity can be considered as a major parameter according to which languages may differ typologically. A classification in terms of this parameter can be based on a number of criteria on the different linguistic levels. On the root level, languages may differ in their inventory of verb roots. Fundamentally transitive languages have mostly bivalent roots and relatively few monovalent ones, while fundamentally intransitive languages have a predominantly monovalent root inventory. Related to this, on the word level, languages differ in their inventory of derivational rules. The derivational processes of a .fundamentally intransitive language are geared for accepting intransitives as input and producing transitives as output. Thus, the productive rules in fundamentally transitive languages are mainly detransitivizing (roots being mostly

bivalent). The derivational rules in fundamentally intransitive languages are mainly transitivizing (roots being mostly monovalent). On the clause level, languages differ in the criteria which govern transitivity marking. In fundamentally transitive languages, relatively few transitive parameters need to be present to trigger transitive marking of a clause, while in fundamentally intransitive languages many transitive features have to be present to trigger transitive marking. For fundamentally transitive languages, the mere presence of two arguments may be sufficient. But fundamentally intransitive languages typically show sensitivity in transitivity marking to parameters such as those listed by Hopper and Thompson (1980) e.g. TAM distinctions and the degree of individuation of the object. In addition to the structural criteria suggested in the literature, I have proposed that fundamental intransitivity is also manifested on the level of event representation. Saliba clauses tend to have fewer syntactic arguments than there are participants involved in the event. The number of participants to which reference is made depends as much on pragmatic factors as on syntactic structure and there is no one-to-one mapping between the number of event participants and the transitivity status of the clause. The fundamentally intransitive features which I have discussed for Saliba on the different levels are summarized in Table 1.

LEVEL	CHARACTERISTICS	CHAPTER
root	the inventory of roots is predominantly monovalent and labile (both types occurring as underived intransitive verbs).	4
word	the most productive derivational processes are transitivizing, detransitivizing morphology is typically restricted to a small set of stems.	5 to 10
clause	sensitivity of transitivity marking to object individuation resulting in clauses with discord.	11 to 13
event	use of directional suffixes and possessive classifiers to encode non-argument event participants.	14

Table 1   *Fundamentally intransitive features of Saliba*

Future research will no doubt discover further typological features correlating with the parameter of fundamental (in)transitivity. A promising area of investigation would be, for example, the behavior of denominal verbs, which in English (a fundamentally transitive language) typically behave like transitive verbs (Clark and Clark 1979). In Saliba denominal verbs generally behave like intransitives, taking transitivizing morphology to derive a transitive stem.

At various points (especially chaps. 3 and 12), I have presented evidence that the Oceanic language family as a whole may be located towards the fundamentally intransitive pole of a cross-linguistic transitivity scale. At this stage, the findings are still preliminary and a definitive classification of Oceanic is pending further research. However, I showed that a characterization in terms of fundamental (in)transitivity can account for a number of seemingly unrelated typological features which have long been recognized in the Oceanic language family. Among these features are (a) that many verbs have both a transitive and an intransitive form, the transitive form being derived from the intransitive one by a transitivizing suffix; (b) that transitivity marking is sensitive to individuation of the patient and/or TAM distinctions; (c) that possessive constructions and directional markers are used to express non-argument participants such as beneficiaries and recipients.

Linguistic theory is still largely modeled on languages of the European type, taking patterns found in these languages as the typological default. This bias has a considerable effect on cross-linguistic analysis and linguistic theory in distorting the picture of which features of a languages are typologically marked. There is therefore a need within the field of linguistics to identify typological parameters for a more neutral classification of languages. The findings of this thesis suggest that fundamental (in)transitivity is one such parameter which has considerable predictive power as a typological metric for linguistic classification.

Saliba Texts

1. THE HAIR-CUTTING CUSTOM (BY SINEBADA DEHENI LEHEBOTI)[1]

Wawaya	*yalahao*	*meta*	*sinana*	*tamana*	*se hekasisiyei*
wawaya	yalahao	meta	sina-na	tama-na	se-hekasisi-ei
child	firstborn	PARTICLE	mother-3SG.P	father-3SG.P	3PL-respect-APP

meta	*kuluna*	*taba*	*nige*	*se boli.*
meta	kulu-na	taba	nige	se-boli
PARTICLE	hair-3SG.P	IR	NEG	3PL-cut

The firstborn son has to be respected by his parents and so they won't trim his hair.

Kuluna	*nige*	*se boli*	*na*	*ye lauwee*	*tamana*	*yo*	*sinana*
kulu-na	nige	se-boli	na	ye-lao-ee	tama-na	yo	sina-na
hair-3SG.P	NEG	3PL-cut	CONJ	3SG-go-DUR	father-3SG.P	CONJ	mother-3SG.P

puwaka	*yo*	*kai*	*yo*	*se nonoha*	*se lauma*	*se tole*	*se lauliga.*
puwaka	yo	kai	yo	se-nonoha	se-lao-ma	se-tole	se-lao-liga
pig	CONJ	food	CONJ	3PL-prepare	3PL-go–hither	3PL-put	3PL-go-cook

They won't trim his hair until his father and mother prepare a pig and food, bring it, and cook it.

Ehh	*kabo*	*yona*	*babadao*	*kulunawa*	*se boli*	*kabo*
ehh	kabo	yo-na	ba-bada–o	kulu-na-wa	se-boli	kabo
INTRJ	TAM	CL1-3SG.P	RED-uncle-PL	hair-3SG.P-PM	3PL-cut	TAM

kaiwa	*se suwa*	*maiyadiyao*	*se kaikai*	*se kaikai*	*gogo.*
kai–wa	se-suwa	maiya-di-yao	se-kai-kai	se-kai-kai	gogo
food-PM	3PL-serve	with.3PL-3PL.O/P-PL	3PL-RED-eat	3PL-RED-eat	together

And then his uncles (his mother's brothers) come and cut his hair and then they serve the food and they all eat. They eat together.

Eh	*kabo*	*se lau.*	*Yauwedo.*
eh	kabo	se-lao	yauwedo
INTERJ	TAM	3PL-go	thanks/hello

And then they go. Thank you.

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[1] *Note that in these texts the zero allomorph of the 3SG.O suffix is not marked in the* ⸢ *⸣sses since it cannot be determined for all stems when it is present and when it is not.*

2. THE STORY OF TAUKULUPOKAPOKA (BY TAUBADA JOHN SONE)

Taubada	*hesana*	*Taukulupokapoka.*
taubada	hesa-na	Tau-kulupokapoka
old.man	name-3SG.P	man-Name

There was a man called Tau Kulupokapoka.

Kana	*waila*	*hesana*	*Yagwalilapai.*
ka-na	waila	hesa-na	ya-gwali-lapai
CL2-3SG.P	fresh.water	name-3SG.P	1SG-spear-hole

His water was called Yagwalilapai ('I make a hole').

Kabo	*kana*	*wailawa*	*ye sala*	*ye gehe*	*ye numa*
kabo	ka-na	waila-wa	ye-sala	ye-gehe	ye-numa
TAM	CL2-3SG.P	fresh.water-PM	3SG-dig	3SG-finished	3SG-drink

'oh	*waila',*	*eh*	*kabo*	*i dahalai.*
oh	waila	eh	kabo	i-dahalai
INTRJ	fresh.water	INTRJ	TAM	3SG.IR-go.away

He dug for his water, and he drank, 'oh water' he said and then he left.

Kabo	*Saliba*	*wekuna*	*maudoina*	*kabo*	*ye hetu*	*kabo,*
kabo	Saliba	weku-na	maudoi-na	kabo	ye-hetu	kabo
TAM	Place.Name	stone-3SG.P	all.of-3SG.P	TAM	3SG-shake	TAM

ye hesulu	*ye dobiei*	*ye dobiei*	*ye dobiei*	*ee,*
ye-hesulu	ye-dobi-ei	ye-dobi-ei	ye-dobi-ei	ee
3SG-spread	3SG-go.down-APP	3SG-go.down-APP	3SG-go.down-APP	DUR

eh	*Yauladim*	*unai,*	*bena*	*ye talinikawasiei*	*Samarai.*
eh	Yauladim	unai	bena	ye-talini-kawasi-ei	Samarai
INTRJ	Place.Name	PP.SG	OBLI/COMP	3SG-line.up-cross-APP	Place.Name

Now he made tremble all Saliba stones, he threw the stones down, down, down, to Yauladim, he wanted to line them up across to Samarai.

Eh	*kabo*	*ye tu,*	*weku*	*hesau*	*ye hai*	*ye-tu.*
eh	kabo	ye-tu	weku	hesau	ye-hai	ye-tu
INTRJ	TAM	3SG-throw	stone	other	3SG-take/get	3SG-throw

He threw one, he took another one and threw it.

Ye tu	*hesana*	*ede*	*Hatukeleu,*	*ye dobi*	*ye talu*
ye-tu	hesa-na	ede	hatukeleu	ye-dobi	ye-talu
3SG-throw	name-3SG.P	PRSUP	Fish.Name	3SG-go.down	3SG-land

He threw one, its name was Hatukeleu, it went down and landed.

Eh	*hesau*	*ye hai*	*ye tuyoi,*		*hesana*	*ede*	*Hatubailawa,*
eh	hesau	ye-hai	ye-tu-uyo-i		hesa-na	ede	hatubailawa
INTRJ	other	3SG-take/get	3SG-throw.back/again-APP		name-3SG.P	PRSUP	Fish.Name

na	*Lugaluga*	*ye sugulage*	*'Taukulupokapoka*
na	Lugaluga	ye-sugu-lage	Tau-kulupokapoka
CONJ	Name	3SG-enter-arrive	man-Name

kam	*waila*	*Tauhau*	*ye numa'*	*(Taukulupokapoka:)*	*'Ooh*
ka-m	waila	Tauhau	ye-numa	Tau-kulupokapoka	ooh
CL2-2SG.P	fresh.water	Name	3SG-drink	man-Name	INTRJ

ede	*kabigu*	*ye kata*	*eh*	*nigele?'*	*ye dahalai.*
ede	kabi-gu	ye-kata	eh	nigele	ye-dahalai
PRSUP	nature/way-1SG.P	3SG-know	INTRJ	NEG	3SG-go.away

And he took another one and threw it, its name was Hatubailawa, then Lugaluga came out and said 'Taukulupokapoka, Tauhau drank your water', (Taukulupokapoka said:) 'Oh, how come he's just taking my things? (lit. does he know my ways or what?)' and he left.

Kowa	*Lugaluga*	*ko dahalai*	*ede*	*ko sae*	*ede*
kowa	Lugaluga	ko-dahalai	ede	ko-sae	ede
2SG.EMPH	Name	2SG.IR-go.away	PRSUP	2SG.IR-go.up	PRSUP

ko hedehedede	*'Tauhau*	*teina*	*taki*	*u gelu,*
ko-hede-hedede	Tauhau	teina	taki	u-gelu
2SG.IR-RED-tell	Name	this/here	just/only	2SG go.on.board

Taukulupokapoka	*ye saema*	*ye-yatuhemwaloigo',*
Tau-kulupokapoka	ye-sae-ma	ye-yatu-he-mwaloi-go
man-Name	3SG-go.up-hither	3SG-break-CAUS-dead-2SG.O

eh	*kabo*	*Tauhau*	*ku gelu.*
eh	kabo	Tauhau	ku-gelu
INTRJ	TAM	Name	2SG-go.on.board

Then you Lugaluga left and went up and you said 'Tauhau, you get on your boat right now. Taukulupokapoka is coming up and he will kill you', so you Tauhau took your boat and left.

Taukulupokapoka	*ku saewabwala,*	*Tauhau*	*ugeluko,*
Tau-kulupokapoka	ku-sae-wa-bwala	Tauhau	u-gelu-ko
man-Name	2SG-go.up-??-trick/lie	Name	2SG-go.on.board-2SG.IR

ede	*ye dobiuyo*	*ede*	*naniwa*	*Lugaluga*	*unai*	*ye*
ede	ye-dobi-uyo	ede	naniwa	Lugaluga	unai	ye
PRSUP	3SG-go.down-back/again	PRSUP	something	Name	PP.SG	3SG

ye hedehededelau,	*i wane*	*'Lugaluga*	*ku saesae*	*yom*	*kuduline*
ye-hede-hedede-lao	i-wane	Lugaluga	ku-sae-sae	yo-m	kuduli-ne
3SG-RED-tell-go	3SG.IR-say	Name	2SG-RED-go.up	CL1-2SG.P	mountain-DET

unai	ku tuli,	ku tulihai	ku babawa
unai	ku-tuli	ku-tuli-hai	ku-ba-bawa
PP.SG	2SG-sit.down	2SG-sit.down-take/get	2SG-RED-stay

nige	gonowana	haedi	kabo	ko lau'.
nige	gonowa-na	haedi	kabo	ko-lao
NEG	ability-3SG.P	where	TAM	2SG.IR-go

Taukulupokapoka went up – but you were tricked, Tauhau had left already. Taukulupokapoka went back down and said to Lugaluga, 'Lugaluga, you will go up to your mountain, there you will sit, you will sit there forever, you will stay there and you won't be able to go anywhere!'

Eh	Lugaluga	ye hedede	ye wane	'kowa	Taukulupokapoka	kabo
eh	Lugaluga	ye-hedede	ye-wane	kowa	Tau-kulupokapoka	kabo
INTRJ	Name	3SG-tell	3SG-say	2SG.EMPH	man-Name	TAM

gium	ye tole	doha	nawaya'.
giu-m	ye-tole	doha	nawaya
tail-2SG.P	3SG-put	like	kangaroo

So Lugaluga said 'And you, Taukulupokapoka you will grow a tail like a kangaroo'.

Eh	Taukulupokapoka	hinage	giuna	ye tole	doha	nawaya,
eh	Tau-kulupokapoka	hinage	giu-na	ye-tole	doha	nawaya
INTRJ	man-Name	also	tail-3SG.P	3SG-put	like	kangaroo

unai	huyawa	iyalawa	meta	se iyala
unai	huya-wa	iyala-wa	meta	se-iyala
PP.SG	time/weather-PM	fight/war-PM	PARTICLE	3PL-fight/war

Taukulupokapoka	ye sobulage	ye dobi	ye sobu.
Tau-kulupokapoka	ye-sobu-lage	ye-dobi	ye-sobu
man-Name	3SG-dance-arrive	3SG-go.down	3SG-dance

And really Taukulupokapoka got a tail like a kangaroo, in this war they fought, Taukulupokapoka came out dancing, he went down and danced.

Ye sobu	na	se iyala-hai	na	doha	ye mwasiou,
ye-sobu	na	se-iyala-hai	na	doha	ye-mwasiou
3SG-dance	CONJ	3PL-fight-take/get	CONJ	like	3SG-smoke

eh	kabo	se lau	se iyala.
eh	kabo	se-lao	se-iyala
INTRJ	TAM	3PL-go	3PL-fight

He danced and they kept fighting and it was like it was smoking (because they were casting spells), and so they fought.

Na	se iyalahai	na	nige	ye mwasiou	taba	nige
na	se-iyala-hai	na	nige	ye-mwasiou	taba	nige
CONJ	3PL-fight-take/get	CONJ	NEG	3SG-smoke	if	NEG

se lau	*se iyala*	*meta*	*se mwaloi.*
se-lao	se-iyala	meta	se-mwaloi
3PL-go	3PL-fight	PARTICLE	3PL-dead

They kept fighting, but if there was no smoke they wouldn't go and fight because then they would die (When they cast spells smoke came out of their bodies and that means they would win, if no smoke was coming from the spell, they were not hot enough and they know they would die if they fought.)

Eh	*Taukulupokapoka*	*yona*	*storyte*	*tenem.*
eh	Tau-kulupokapoka	yo-na	story-te	tenem
INTRJ	man-Name	CL1-3SG.P	story-DET	that

And that's the story of Taukulupokapoka.

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SAMENVATTING

In dit proefschrift presenteer ik een morfosyntactische beschrijving van werkwoorden en eenvoudige zinnen met werkwoorden in Saliba, een West-Oceanische taal die behoort tot de Suauische familie van de Papua Tip Cluster (Cooper 1975, Ross 1988). Door de gehele studie ligt bijzondere nadruk op het voorkomen van valentie en transitiviteit op verschillende structurele niveaus binnen de Saliba grammatica. Ik stel een typologische karakterisering voor van de taal gebaseerd op deze verschijnselen en ik presenteer de hypothese dat deze karakterisering kan worden toegepast op de hele familie van Oceanische talen. Dit proefschrift bestaat uit vijf delen. Deel 1 introduceert de Saliba taal en het geeft tevens een inleiding op het onderwerp van dit proefschrift (hoofdstukken 1 tot en met 3). In hoofdstuk 3 worden de belangrijke begrippen gedefinieerd en wordt een beschrijving gegeven van de te onderscheiden structurele niveaus binnen de grammatica. Deel 2 beschrijft de klassen van werkwoorden op basis van valentie (hoofdstuk 4). Deel 3 van dit proefschift geeft een overzicht van transitiviteit op woordniveau en de derivationele processen die deze kunnen wijzigen (hoofdstukken 5 tot en met 10). Deel 4 beschrijft transitiviteit op zinsniveau en de relatie met het woordniveau (hoofdstukken 11 tot en met 13). Tot slot handelt deel 5 over de relatie tussen transitiviteit op zinsniveau en het aantal deelnemers in de primaire handeling ('principal event participants'). In eerste instantie is in deze studie gekozen voor die methodes die vereist zijn bij de beschrijving van de gegevens. Er is echter ook gekozen voor methodes die rekening houden met de typologische karakteristieken van de taal en de mogelijkheid bieden om een vergelijking te maken met andere talen. Aan de basis van de gebruikte aanpak liggen (a) het onderscheiden van drie structurele niveaus in de grammatica en (b) het toepassen van morfosyntactische definities op een consistente en systematische manier over deze verschillende niveaus. Transitiviteit wordt in het algemeen uitgedrukt in de verbale morfologie en de syntactische structuur van een taal, maar het kan ook naar voren komen in de structuur van gesprekken en in de strategieën voor het weergeven van gebeurtenissen. Bovendien kan het begrip transitiviteit ook worden beschouwd vanuit een semantisch perspectief. Het is essentieel voor een linguistische theorie en beschrijving om een helder onderscheid te maken tussen transitiviteit in deze verschillende velden. In dit proefschrift worden respectievelijk morfologische (woordniveau) en syntactische (zinsniveau) transitiviteit apart beschreven en gedefinieerd, met behulp van discrete morfosyntactische eigenschappen op verschillende structurele niveaus van de grammatica.

Zoals de meeste Oceanische talen kent Saliba zinnen die behoren tot een grijs gebied van het markeren van transitiviteit doordat deze zowel intransitieve als transitieve eigenschappen hebben. Dergelijke zinnen worden in de literatuur beschreven door de mate van transitiviteit, in plaats van alleen in termen van intransitief of transitief. In deze studie heb ik getracht te werken volgens een meer expliciete aanpak, door aan te tonen dat dergelijke zinsconstructies binnen een structureel niveau hetzij intransitieve, hetzij transitieve eigenschappen hebben (dan wel transitief en ditransitief), maar niet beide. Het scalaire uiterlijk van transitiviteit kan zodoende verklaard worden door het samenspel tussen de verschillende structurele niveaus in de grammatica

Op verschillende plaatsen (in het bijzonder in de hoofdstukken 3 en 12) toon ik aan dat de gehele familie van Oceanische talen zou kunnen worden gekarakteriseerd door de fundamenteel intransitieve pool van een cross-linguistische schaal van transitiviteit. In dit stadium gaat het nog om voorlopige conclusies en een definitieve klassificering van de Oceanische talen vraagt om verdere studie. Nietttemin toon ik aan dat een karakterisering in termen van fundamentele transitiviteit een verklaring biedt voor een aantal ogenschijnlijk niet-samenhangende typologische eigenschappen waarvan het bestaan al langere tijd bekend is in de familie van Oceanische talen. Het gaat hierbij om onder andere (a) het feit dat veel werkwoorden zowel een transitieve als een intransitieve vorm kennen, waarbij de transitieve vorm wordt afgeleid van de intransitieve vorm door een suffix; (b) het feit dat de markering van transitiviteit gevoelig is voor individuatie van het object en/of TAM verschillen; (c) het gebruik van bezittelijke zinsconstructies en richtingsaanduidende markeringen om niet-argument deelnemers aan te geven, zoals begunstigden en ontvangenden.

Linguistische theorie is nog altijd grotendeels vormgegeven op basis van de Europese talen, waarbij patronen uit deze talen worden gebruikt als typologisch uitgangspunt. Het aanhouden van dit uitgangspunt heeft belangrijke gevolgen voor cross-linguisische analyse en linguistische theorie vanwege een vervorming van het beeld van welke eigenschappen van een taal typologisch gemarkeerd zijn. Zodoende is er behoefte in de linguistiek om te komen tot topologische parameters die leiden tot een meer objectieve classificering van talen. De conclusies in dit proefschrift duiden erop dat fundamentele intransitiviteit een van de parameters is die een aanzienlijke voorspellende waarde hebben als een typologische maatlat voor de classificatie van talen.

CURRICULUM VITAE

Anna Margetts (née Keusen) studied Linguistics and Phonetics at the University of Cologne, Germany and the State University of New York (SUNY) at Buffalo, USA. She received her M.A. in linguistics in 1994 from SUNY Buffalo after completing a thesis on a discourse particle in Cayuga (Northern-Iroquoian). After this she worked as a research assistant at the University of Cologne until 1995 when she was offered a stipend for a dissertation project from the Cognitive Anthropology Research Group (now Language and Cognition Group) at the Max Planck Institute for Psycholinguistics in Nijmegen, the Netherlands. She started field work in Papua New Guinea in 1995 and conducted the research which is presented in this thesis. She is currently preparing post-doctoral research at the MPI in Nijmegen.

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