A Grammar of Space in Baure

A Study on the Linguistic Encoding of Spatial Reference

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A Grammar of Space in Baure

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A Study on the Linguistic Encoding of Spatial Reference

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aan de Universiteit van Amsterdam
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List of Abbreviations

1	first person
2	second person
3	third person
ABS	absolute marker
AND	andative
APRV	approval
ART	article
ATTR	attributive
AUG	augmentative
CAUS	causative
CERT	certainty
CLF	classifier
COMP	complementizer
COP	copula
DEM	demonstrative
DER	derivational
DIM	diminutive
DISTR	distributive
DUR	durative
EMPH	emphatic
E.V	empty verb
F	feminine
INDF	indefinite
INTL	intentional
INTJ	interjection
INTS	intensifier
IRR	irrealis
LK	linker
LOC	locative
M	masculine
NEG	negative
NMLZ	nominalizer
PERF	perfect
PFV	perfective
PFV.RFLX	perfective and reflexive
PL	plural
PL.H	human plural
POSS	possessive
PRIV	privative
PROG	progressive
PTCP	participle
QNMLZ	quality nominalizer
QUOT	quotative
REAL	realis
RECP	reciprocal
REP	repetitive
SEQ	sequential
SG	singular
TRNSF	transformative
UNSP	unspecified
VEN	venitive
VLOC	verbal locative

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CHAPTER 1: INTRODUCTION

1.1 AIMS OF THE THESIS

Space and spatial relations are without doubt central to human thinking and human behavior. It is literally in every move we make, and spatial language is a fundamental part of everyday life. Many of our experiences and actions are somehow guided by spatial language, for example, in asking for directions, locating objects and communicating about plans, appointments, et cetera. The present study focuses on the key components of spatial language in Baure, a critically endangered Arawakan language spoken in the Bolivian Amazonia. The first objective is to identify and describe the central linguistic means used for spatial reference. The thesis provides a detailed overview of (1) the linguistic encoding of spatial relations, (2) spatial reference in describing motion events, and (3) deictic reference by means of demonstratives in Baure.

The linguistic encoding of spatial expressions, however, is not enough for guiding our actions. For the correct interpretation of any spatial language, systematic spatial knowledge is required that is to a wide extent commonly shared by the speakers. Therefore, the second aim of this study is to reveal the major patterns of the underlying semantics of the linguistic means identified, by studying their use in context.

Even though languages greatly vary in the way that spatial information is encoded, comparative research on spatial expressions has revealed general underlying conceptual structures (e.g. Levinson and Wilkins 2006). For a better understanding of the cognitive concepts underlying the expression of spatial relations, the greatest possible variety of languages needs to be studied. In recent research on the expression of spatial relations, a great number of non-Indo-European languages are taken into account. The geographical areas that researchers dealing with language and space have been focusing on include Austronesia (e.g. Cablitz 2006; Senft 1997) and Mesoamerica (e.g. O'Meara and Pérez Báez 2011). On the South American continent, research on language and space has been carried out on a number of languages, such as

Lokono (Rybka 2009, 2015), Wayana (Hough 2008), and Tiriyó (Meira 2006). However, spatial reference in languages of the southern branch of the Arawakan language family has not been studied in detail yet. By examining the patterns found in Baure, the present research broadens the scope of research on language and space, making it possible to integrate the Baure analysis in comparative research in the future.

1.2 THEORETICAL APPROACH

The present research builds on a substantial amount of research on language and space carried out over the past decades. Though the present study specifically focuses on the *spatial language* used by the Baure people, a significant part of the theoretical foundations finds its origin in research on language and thought, including *spatial thinking*. Early scholars working on this topic argued that the semantic structures of different languages have consequences for the way its speakers think and act, to the extent that each language may be claimed to be linked to a distinctive worldview (cf. Gumperz and Levinson 1996: 2, and references therein; Lucy 1992). In the mid-twentieth century, however, this view was rejected by the upcoming field of cognitive linguistics, which particularly focused on common traits in human thinking and the innate language faculty.

Within cognitive linguistics, a substantial amount of work is dedicated to the study of spatial expressions. One of the core questions in this research is whether spatial cognition is basically innate and universal or rather governed by cultural concepts. Linguists that take the universalist position (e.g. Jackendoff 1983; Landau and Jackendoff 1993), argue that spatial concepts are innate and that universal conceptual representations underlie the expression of spatial relations in all languages of the world. Other scholars, however, claim that the variety in the linguistic encoding of spatial relations challenges the universalist position. They argue that the underlying spatial concepts are, at least to a great extent non-universal, and rather culture-specific (e.g. Levinson 1997; Nuyts and Pederson 1997; Senft 1997).

Based on a detailed comparison of a wide range of different languages, Levinson and Wilkins (2006: 512–513) conclude that general patterns in spatial concepts can be found, but that these are rather abstract.[1] The patterns, as abstract as they may be, do show underlying hierarchies, types, and implicational scales that are driven by semantics. Instead of one universal representation of spatial concepts, a limited set of types seems to exist, and languages vary in the type or types they draw from this set. Levinson and Wilkins term their approach *semantic typology*, a field that uses formal distinctions as clues to the underlying semantics in order to explore similarities and differences in semantic concepts (2006: 512–513).

1.2.1 KEY CONCEPTS

In localizing objects or orienting oneself in the physical world, one of the crucial concepts is the three-dimensional structure of objects. The three dimensions include one vertical axis, the UP/DOWN-axis, and two horizontal axes, the FRONT/BACK-axis and LEFT/RIGHT-axis. Depending on the inherent properties of objects, these axes can be qualified as symmetrical or asymmetrical. For example, a ball has no intrinsic sides and its axes are all three symmetrical. A tree, on the other hand, has one asymmetrical axis, the UP/DOWN-axis, with the tree's roots down in the ground and its branches up in the sky.[2] Like trees, the human body has an asymmetrical UP/DOWN-axis, but unlike trees, human bodies show in addition asymmetry in their FRONT/BACK-axis. Asymmetrical axes are not necessarily inherent though, but may be assigned based on a typical function or direction of movement of an object. A car, for example, is assigned a front side according to its usual movement. Though a car's front side may have physical features for indicating the canonical direction of movement (e.g. the location of the driver's seat), other vehicles do not necessarily have those. A train, for instance, may be

---

[1] At the Max Planck Institute (MPI) for Psycholinguistics in Nijmegen a long-term research project on spatial relations was carried out. A summary of the findings can be found in Levinson and Wilkins 2006.

[2] Although trees have at least one asymmetrical axis, depending on the cultural conceptualization, the other axes may be regarded as asymmetrical as well. For example, Heine (1989) observed that the Maa people assign a front side and back side to trees based on their shape.

symmetrical in its physical shape and have no preferred direction of movement, yet while covering a certain trajectory from A to B, a front and back side may be assigned *ad hoc*. The symmetry or asymmetry of the three axes play a key role in the interpretation of spatial language (cf. Svorou 1993 for a discussion of this conceptual framework).

1.2.2 SPATIAL RELATIONS

One of the most basic uses of spatial language is to characterize a spatial relation between two objects. Following Talmy (1983, 2000a and 2000b), in the present study the object that is localized is called the Figure, and the reference object with respect to which the Figure is localized is called the Ground. This is illustrated in example (1) from Baure.

(1) *To kove' kwore' rapi-ye to mes.*

to	*kove'*	*kwore'*	*ro=api–ye*	*to*	*mes*
ART	dog	exist.3SG:M	3SG:M=under–LOC	ART	table

'The dog is under the table.' (DC-091122F)

In this example, the dog is the Figure, the object that is localized, and the table is the Ground, the object with respect to which the dog is localized. The relation between the Figure and the Ground is expressed by *rapi-ye*, consisting of the locative noun stem *–api* 'under' marked with the personal proclitic *ro=* (3SG:M) and followed by the general locative marker *–ye* (LOC).

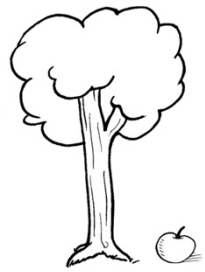
Even though theoretically any object can serve as a Figure or a Ground, it seems that both have a set of general characteristics. Whereas some objects are better candidates for serving as Figures, others are more easily identified as Grounds. For example, 'The bike is near the house' is a more expected way for localizing the bike than 'The house is near the bike' is for localizing the house. As Talmy puts it, Figures can be characterized as moving entities or conceptually movable, and its path, site, or orientation is conceived as a variable. The Ground, on the other hand, is a more stable entity, with a stationary setting with respect to which the Figure's path, site, or orientation is

characterized (see Talmy 2000a: 311–320 for more characteristics of Figure and Ground).

Locative expressions of this kind do not refer necessarily to a single unique location, but rather narrow down the search domain. In example (1), the search domain is limited in the vertical dimension by the table surface, and in the horizontal dimension by the table's legs. The dog can still be anywhere under the table though. This type of specification of the location of the Figure, the dog, thus involves an angular projection from the Ground object, the table. This is not the case for all locative expressions, though. In other instances, the Figure may be coinciding with the Ground, or be in contingency with it. This type of specification is non-angular and also known as a topological relation.

1.2.3 FRAMES OF REFERENCE

In order to localize the Figure based on an angular specification, a certain coordinate system is required. In comparative work involving languages from a variety of language families, the notion of 'frame of reference' (Levinson 2003; Rock 1990) is often used to describe the different types of spatial orientation frameworks used across languages of the world. In this line of research, three types of coordinate systems have been put forward: the absolute frame of reference that relies on fixed points in the landscape or cosmology, the relative frame of reference that makes use of the bodily coordinates of a speech act participant, and the intrinsic frame of reference that takes into account the inherent characteristics of a Ground object. Figure 1.1 (after Levelt 1996: 82) shows these three coordinate systems.



Absolute

The apple is to the east of the tree
★
The apple is to the west of the tree

Relative

The ball is to the right of the tree
★
The ball is to the left of the tree

Intrinsic

The pig is to the left of the fox
★
The fox is to the left of the pig

Figure 1.1: Localization in the three frames of reference.

Localization in the absolute frame of reference relies on fixed points in the surroundings. This can be a cardinal term, for instance east or west, or a landmark, such as sea-side or mountain-side. The Figure is localized with respect to the Ground and the exact spatial relation is expressed on the basis of this immovable point of reference (Anchor). For example, in 'The apple is to the east of the tree' the Figure (the apple) is localized with respect to the Ground (the tree) based on a cardinal term (east). The coordinate system is

anchored in the immovable point of reference. Since the Anchor is coincidental with an immovable point of reference, this way of expressing a spatial relation is irrespective of the position of the speech act participants, and irrespective of the Figure's orientation. If the speech act participants observe the same scene from the opposite side, the expression still holds. Likewise, a change in the orientation of the Figure does not affect the spatial relation. It makes no difference whether the man is facing the speech act participants or standing with his back turned to them.

The relative frame of reference relies on the bodily coordinates of the speech act participants and their own axes are mapped onto the Ground object. The Anchor is located in one of the speech act participants, in most cases the speaker. For example, in ‘The ball is to the right of the tree’, the Anchor lies in the speaker and the speaker's left and right are mapped onto the Ground (the tree). When the speech act participants observe the scene from the opposite side, the expression no longer holds, since the LEFT/RIGHT-axis of the speaker is then rotated and the ball is located to the left of the tree. Languages are known to vary in the manner of mapping the axes to the Ground, though.

The intrinsic frame of reference makes use of the intrinsic sides of the Ground object to localize the Figure. The Anchor is located in the scene itself, namely in the Ground. For example, in ‘The pig is to the left of the fox' the Anchor is located in the Ground object, the fox, and the fox' intrinsic left is used to localize the Figure, the pig. Observed from the opposite side, the Figure and the Ground maintain the same spatial relation with respect to each other. However, when the Anchor, thus the Ground object and the fox in this example, is rotated, the expression is no longer true, since the Figure, the pig, is then to the fox' right.

What is clear from the examples above, is that the Anchor can either coincide with the Ground (as in the intrinsic frame of reference) or not (as in the absolute and relative frames of reference). And the Anchor can be one of the speech act participants (relative) or not (intrinsic, absolute). In the absolute and relative frames of reference three primitives are involved: a Figure, a Ground, and an Anchor that is different from the Ground. The absolute and relative frame of reference are thus ternary. In the intrinsic frame

of reference, however, only two entities are involved, that is the Figure and the coinciding Ground and Anchor. It is therefore binary.

1.2.4 MOTION

Another main area of interest to researchers working on spatial language is the description of motion events. It has been observed that languages differ in the way they lexicalize the components that make up a motion event. One of the most influential typologies on the expression of motion events is the one proposed by Talmy (1983, 1991, 2000a, 2000b). Apart from the Figure and the Ground, Talmy identifies two other components that are included in the conceptualization of motion events; the path and the motion of the Figure. The Figure is the object that undergoes the motion, with respect to the reference object, the Ground. The Path is the trajectory that the Figure follows, or the site that it occupies. Talmy suggests that languages tend to lexicalize either Path in the main predicate that describes the event, and Manner in an additional clause, or they lexicalize Manner in the predicate and Path in a satellite. Talmy defines a satellite as "the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root" (Talmy 2000b: 102). This forms the basis for Talmy's two-way typology distinguishing Verb-framed languages from Satellite-framed languages.

The literature on motion events, however, shows that the typology proposed by Talmy does not hold for all languages.[3] Firstly, it has been noted that some languages encode both Path and Manner in the verb, without markers for subordination. This is typically the case in languages with serial verb constructions or co-verbs, as for example in Jaminjung (Schultze-Berndt 2006). In order to accommodate languages that lack a clear distinction between the grammatical forms in which Path and Manner are expressed, Slobin (2004) proposes to add a third type to the typology, the Equipollent-framed type. In Equipollent-framed languages, Path and Manner are expressed by equivalent grammatical forms, such as the multiple verbs in a serial verb

[3] See Beavers et al. 2010 for an overview of the literature and discussion of patterns found in a wide range of languages.

construction (Slobin 2004: 25). Cross-linguistic research has shown that not all languages can easily be subsumed in one of these three categories, as they often deploy strategies that are purported characteristic behavior of another type. In other words, Verb-framed languages do not necessarily lack the possibility to express Path in a satellite, and supposed Satellite-framed languages often also have verbs that encode Path. Likewise, Equipollent-framed languages do not necessarily completely lack the strategies employed in the other two types (cf. Beavers et al. 2010).

1.2.5 DEIXIS

Another major point of interest for research on language and space is the deictic anchorage of utterances (Fillmore 1997; Rommetveit 1968) and the linguistic encoding of deictic reference. Fillmore defines deixis as "those formal properties of utterances which are determined by, and which are interpreted by knowing, certain aspects of the communication act in which the utterances in question can play a role" (1997: 61). In other words, the exact referent of deictic expressions depends on the context in which a sentence is uttered, and on pragmatics. Deictic elements can refer for example to the persons involved in a certain communication situation (person deixis), to certain places (place deixis), or to temporal units (time deixis). Furthermore, the identification of a referent can be based on information in the discourse (discourse deixis), or based on social relationships between the speech act participants (social deixis) (Fillmore 1997: 61). Deictic expressions can be used to individuate referential objects, as is mostly the case with demonstratives for example (Hanks 2009: 10).

In most languages, person deictics, place deictics, and time deictics are relatively systematic and make up a closed class or paradigm, the forms of which are easily identified (Hanks 2009: 12–13). However, the identification of the deictic lexemes is only part of the picture. Cross-linguistic research has also shown that the traditional distance-based treatment of deictic expressions such as demonstratives and place adverbs does not hold for all languages. The use of deictic expressions can also be related to other factors, either linguistic

(e.g. evidentiality markers) or non-linguistic (e.g. gestures, visibility of the referent, etc.).

1.3 METHODOLOGY

Although Amazonian languages are among the least documented languages, quite some research has been done on Baure (see also Chapter 2, Section 2.3.1). Apart from missionaries' descriptions dating from the 18th century (Adam and Leclerc 1880), an extensive study on Baure was carried out by two linguists of the Summer Institute of Linguistics (SIL) in the 1950s and 1960s. The main results of this study were summarized in a tagmemic grammar (Baptista and Wallin 1967), and an article on Baure vowel elision (Baptista and Wallin 1968). From 2003–2006, Danielsen studied the Baure language for her PhD-research, the main outcome of which is a detailed description of Baure grammar (Danielsen 2007). From 2008 to 2013, the project 'The Documentation of Baure' was carried out by an interdisciplinary research team at the University of Leipzig. In this project, linguistic data as well as anthropological data is collected and stored in the DoBeS archive.[4] As a member of the documentation team, I have access to all data gathered in the project, as well as to most of the earlier work on Baure (see also Section 2.3.1 of Chapter 2)

Even though the research carried out before the start of this study offers a great starting point, additional data gathering was necessary for a detailed study of Baure spatial language. In the data available from previous studies, relatively few locative constructions appear. One reason for this is that the majority of the studies describe all aspects of the language, which inevitably leads to a less in-depth analysis of individual topics. Moreover, the locative constructions that are mentioned in the previous works often make use of a general locative marker only, which is used for describing prototypical or

[4] The DoBeS program (*Dokumentation Bedrohter Sprachen*) was financed by the Volkswagen Foundation, and initiated in 2000. More information on this research program can be found on http://www.dobes.mpi.nl. The data collections of the documentation teams working around the world are stored in The Language Archive hosted by the MPI for Psycholinguistics in Nijmegen (https://tla.mpi.nl).

expected relations (see also Section 3.1.1.1 of Chapter 3). More specific descriptions are only used when the general construction may lead to ambiguity, or when specifically asked for in contrastive situations. In order to be able to analyze the underlying concepts of spatial expressions in Baure, data are required that are collected by means of elicitation techniques specifically designed for this purpose.

In this section, first the type and amount of data collected for the present study are described (Section 1.3.1). In Section 1.3.2 more information is provided on the technical processing of the data, and Section 1.3.3 discusses the ethical issues that linguistic fieldworkers face.

1.3.1 TYPE AND AMOUNT OF DATA

The data on which the present study is largely based was collected during four periods of fieldwork, in 2008, 2009, 2010 and 2012. For practical reasons, I mostly stayed in Concepción de Baures for 2 to 3 months per visit, where approximately 90% of the data was collected. One of the practical reasons for staying in a one town is because of the complications in the transportation system. Traveling by road in lowland Bolivia is quite an undertaking due to irregular bus services, impassable roads in the rainy season, and frequent road blocks. The alternative, traveling by air, is relatively expensive, also irregular due to frequent schedule changes and changing weather conditions, and not the safest option, because every once in a while one of the Cessna planes crashes. Secondly, most of the speakers live in Concepción de Baures or the surrounding communities, and since they have been involved in (linguistic) research before, they are used to elicitation techniques, and to being recorded and/or videotaped. During two short trips to El Carmen in 2008 and 2010, approximately 10% of the total amount of data was gathered there. Since the Carmelito variant (spoken in El Carmen, see also Chapter 2) is slightly different from the variety spoken in Baures, it was interesting to compare the data, but the Carmelito data was insufficient for a full-fledged comparison, and the analyses presented here are therefore mostly based on the Baure data.

In Table 1.1 below, the data recorded are listed, separating 'elicitation' from 'natural speech'. Even though the boundary between the two is not always

clear-cut, the data collected can be roughly divided into data elicited by means of stimuli, and more natural speech including stories, personal histories, descriptions, and conversations (see also Sections 1.3.1.2.1 and 1.3.1.2.2).

Table 1.1: Overview of the type and amount of data.

Type of session		**Number of sessions**	**Total time (hh:mm:ss)**[5]
Elicitation	Space games	16	04:09:57
	Questionnaires	12	04:41:10
	Frog, where are you?	6	02:07:36
	Pear stories	3	00:56:51
	Other	42	15:55:37
Natural speech	Stories	26	09:39:39
	Local legends	13	03:02:02
	Personal histories	23	05:22:42
	Conversations	9	04:08:15
	Descriptions	9	01:31:05
Total		**159**	**51:35:08**

The data collection adds up to a total time of approximately 52 hours. The total number of recorded hours may seem extremely high, but it should be noted that in stories and personal narratives the number of locative constructions is very low, and in the elicitation sessions a lot of repetition occurs and detailed explanations in Spanish are often given. The sessions in which data that I had already transcribed roughly was corrected together with a speaker, add up to approximately 9 hours and are not listed in Table 1.1. In the case of longer, narrated texts (stories, personal histories, et cetera), the transcriptions were

[5] Even though the specification of the total time in hours, minutes, and seconds suggests a meticulous time registration, in most cases the total time of a recording was registered for this overview. Therefore, the actual total time may deviate from the time mentioned in the table by a few minutes.

corrected during several sessions with a speaker that was not the narrator. Corrections of shorter texts, separate sentences or certain grammatical constructions were usually done with the same speaker in the next session, before starting on a new topic. When several topics were covered in a single session, these are counted as separate sessions here.

The term 'elicitation' as it is used here refers to elicitation in a narrow sense, comparable to what Payne (1997: 266) defines as language samples that accomplish hypothetical communicative tasks. All data listed in Table 1.1 under this heading where gathered either in recording sessions that were guided by particular stimuli, or in sessions that were aimed specifically at one particular grammatical or conceptual topic. Natural speech[6] on the other hand was recorded in sessions in which no linguistic or cognitive task was carried out by the consultants, but the speakers were rather freely producing Baure speech instead.

The line between elicited data and natural speech is not always easily drawn and both categories overlap to a certain extent. Nevertheless, some generalizations can be made. Although initially elicited data usually consisted of inventories on a large array of topics (e.g. the space game sessions aimed at different types of topological relations), subsequent sessions based on the already gathered data, were used to complete paradigms and obtain true minimal pairs. Also, in many of the elicitation sessions listed here under 'other' metalinguistic issues were raised and speakers were questioned on pragmatic and semantic nuances. The sessions in which natural speech data was collected were more dynamic and uncontrolled. They shed more light on the actual use of the constructions in context and are richer in idiosyncrasy. Furthermore, the natural speech data tends to have longer sequences of Baure than the elicited data. Whereas the elicited data are mostly separate sentences or at most a few sentences in a sequence, the natural speech data have sequences of spoken Baure ranging from a few phrases up to 1-hour monologues in the case of some of the stories. However, some of the types of sessions listed here under 'natural

[6] Payne (1997: 366-369) contrasts 'elicitation' with 'text'. However, this does not seem an appropriate term in the case of Baure, since the language is not written by any of the members of the community. Therefore, the term 'natural speech' is preferred here.

speech' may not be very natural after all, for example when speakers were asked to give descriptions of certain processes (e.g. the making of manioc beer or chocolate paste) in front of the video camera.

An attempt was made to compile a balanced database in which speakers of both sexes and different ages are represented equally. However, this was not always possible. The great majority of the fluent speakers is female, which resulted in a higher number of recordings with female speakers than with male speakers. Also, it turned out that some speakers were more comfortable with task-based and guided interviews, while others had no difficulty in producing natural speech. As a result, the abilities of the speakers were taken into account when deciding on the type of session that was held. For example, not every speaker is equally competent in storytelling. Of the consultants that did tell stories, only two produced the stories completely fluently and in a narrative manner. On the other hand, some of the speakers are capable of carefully explaining the differences between constructions that others judge as meaning 'exactly the same thing'. One of the speakers was even so competent in analyzing the language structure that she could effortlessly produce complete paradigms based on regularity (e.g. noun incorporation in different types of verbs). Other speakers sometimes judged these constructions as ungrammatical or questionable at best. All of the primary data used for the analysis in this book was double-checked for verification, and consented on by more than one speaker.

1.3.1.1 Elicitation

As was mentioned before, the sessions listed as 'elicitation' in Table 1.1 were often guided by particular stimuli. The majority of the stimuli used in this study are stimuli familiar to researchers working on language and space. They consist of space games, questionnaires, and guided stories. Furthermore, I designed a number of additional elicitation techniques appropriate for eliciting data on the spatial language of the Baure. All of the stimuli used are described in more detail in the following sections.

1.3.1.1.1 Stimuli: space games and questionnaires

The space games and questionnaires used for this study were largely based on the stimuli designed by the Language and Cognition Group of the Max Planck Institute for Psycholinguistics in Nijmegen between 1992 and 2010.[7] Data on topological relations in small-scale Figure-Ground scenes were elicited using toy animals and objects placed in different configurations, in experiments also known as space games (Levinson et al 1992). For these matching games, two speakers are seated at a table next to each other, facing the same direction. They are separated by a screen, so that they cannot see the tabletop in front of the other participant. One speaker is assigned the role of Director and the other speaker is the Matcher. A certain scene consisting of toy objects placed in a specific arrangement is presented to the Director, who is then instructed to describe the scene. The Matcher is either supposed to identify the exact same scene on a picture, or asked to set up the scene in front of him using three-dimensional objects, based on the instructions of the Director. The participants are allowed to converse; in fact, this is stimulated. The matching games can be carried out by offering both participants the actual toy objects (object-object matching game), by showing both participants photos of the individual scenes (photo-photo matching game), or by presenting a photo to the Director and the actual objects to the Matcher (photo-object matching game).

In this research on Baure spatial relations, a number of different toy sets were used, with different characteristics. First, for the elicitation of spatial relations of objects with no intrinsic sides, a set of five differently shaped wooden blocks was used. These were all geometrical forms, such as a rectangle, a cube and a triangle. The wooden blocks also differed in color, and were mostly referred to with the particular color term (e.g. 'the red one' or 'the blue one').[8] Secondly, a set of toy animals was used for the elicitation of spatial relations of animate objects with intrinsic sides. All of the animals were familiar

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[7] See http://fieldmanuals.mpi.nl/ for a detailed description of all stimulus materials developed by the Language and Cognition Group.

[8] The set consists of a red cilinder, a green cube, a yellow cuboid and a blue prism. When used in drawings throughout this book, their difference in color is indicated by a difference in hatching.

to the speakers' daily lives, such as chickens, pigs and tortoises. Finally, a third set of different kinds of toys was used, consisting of smaller, movable objects that are more likely to represent Figures (e.g. people, fruits, cars, et cetera) as well as bigger, more stable objects that are more likely to be perceived as Grounds (e.g. houses, trees, et cetera).

The space games, as designed by the Language and Cognition Group of the Max Planck Institute for Psycholinguistics, are supposed to be carried out as described above, but this turned out to be quite a challenge during my work with the Baure people. First of all, it was very difficult to find two speakers who were available at the same time. Despite their age, most speakers take an active part in the logistics of the homestead (e.g. by taking care of their grandchildren or being responsible for preparing the daily meals), and in the economic welfare of the family (e.g. by earning money as a washer woman, by weaving hammocks for selling, or producing crops in the field). They have limited time to work with researchers, and appointments need to be fit in with their daily schedule, which is different for each speaker. Secondly, the Baure speakers are all elderly, and a number of them have difficulties with either their auditory or visual skills. Furthermore, many of the speakers have received little formal education, and are not used to carrying out cognitive tasks. It turned out to be quite challenging for most Baure speakers to identify spatial relations on a picture or photo. Therefore, the different configurations were often simulated using toy objects, or by describing a fictitious situation and then asking for a description of the location of a Figure. Especially this last technique may have caused a slightly higher number of resultative constructions instead of basic locative constructions. Since the purpose of carrying out the task with Baure speakers was not to make a cross-linguistic comparison based on the statistical analysis of the data (cf. Levinson and Meira 2003), but rather to obtain a detailed impression of the semantics underlying Baure spatial language, this bias was deemed acceptable. All in all, only two of the sessions mentioned in the table under ‘space games’, were carried out as described in the manual (total time 01:10:20). The other 14 sessions (total time 02:59:37) were usually sessions with one speaker only, in which I set up

contrasting scenes with the actual toy objects and asked the speakers to describe the different situations.

Additionally, the Topological Relations Picture Series (Bowerman and Pederson 1992) was used as a starting point to gather data on small-scale Figure-Ground scenes. A selection of the Topological Relations Picture Series was already used by Danielsen in her previous study on Baure. The picture series consists of 71 line drawings, each showing two objects in a particular topological relation. The Figure is designated by an arrow in the drawing and the speaker is asked to describe the Figure's relation with respect to the other object, the Ground. However, as with the matching games, the speakers could not always identify the indicated spatial relations easily on the two-dimensional pictures. As an alternative, the particular spatial relation belonging to the Topological Picture was elicited using three-dimensional objects imitating the scenes on the pictures, or with examples from real-life scenes familiar to the speakers. In this case, it was made sure that the scene was in contrast with another scene in order to elicit more detailed descriptions and not just a general locative construction (see also Chapter 3). In these sessions, the Topological Relations Picture Series were often taken as a starting point leading to interesting descriptions and discussions, and in none of them the complete series was run. In Table 1.1, these 14 sessions (total time 03:34:35) are therefore listed under ‘other elicitation’.

Two questionnaires used to gather data on verbs are the Motion Verb Stimulus (Levinson 2001) and the Picture Series for Positional Verbs (Ameka et al. 1999). The Motion Verb Stimulus contains 96 short, animated clips of motion events, such as a ball rolling towards a cloth and disappearing under it or a ball bouncing over a dyke. The speaker is asked to briefly describe the basic event. The Motion Verb Stimulus is divided in six subsets. In the come/go films the detailed semantics of the core COME and GO verbs are investigated as well as their relation to Source and Goal distinctions. The set of enter/exit films focuses on the semantics of these verbs and is used to distinguish durative translocation, change of location, and change of locative relation. The figure/ground films further elaborate on this theme. The fourth set is used to elicit descriptions of triad scenes and targets the verbal notions ENTER,

ASCEND, and GO UNDER. In the path set, different (complex) paths are shown and in the following set with manner films, different types of manner along these paths are explored. In the research on Baure, the Motion Verb Stimulus, or parts of it, was run six times with different speakers, adding up to a total time of 01:49:15. This includes two sessions in which the clips were shown on the computer screen and four sessions in which the scenes were presented with the use of toy objects, or with examples from the speakers' daily lives.

The Picture Series for Positional Verbs contains 68 pictures showing objects in specific configurations, such as standing up, lying down, or hanging, for which a small and constant set of Figures and Grounds is used. The Figures that are used have different characteristics, for example they are two-dimensional or three-dimensional (stick versus pot), they have canonical orientations or not (bottle versus ball), et cetera. The Grounds can be natural or artificial (rock versus table), be a container or a flat surface (basket versus table), or simply be the ground (e.g. earth or floor). Again, the speakers are asked to briefly describe the situation. This task proved to be extremely difficult for the Baure speakers, and it was always necessary to comment on the clips or pictures explaining the scenes, or exemplifying them using real life examples. The Picture Series for Positional Verbs was used in only three sessions (total time 01:26:01), including one session without showing the pictures but rather setting up the configurations with actual objects, or describing them.

For the elicitation of data on demonstratives, I used the questionnaire 'The 1999 demonstrative questionnaire: 'this' and 'that' in comparative perspective' (Wilkins 1999), which is designed to identify the range of use of some of the basic spatial demonstrative terms in the language under investigation. More specifically, it differentiates between speaker-anchored versus addressee-anchored terms, distance distinctions and distinctions in visibility. The 25 scenes presented in the questionnaire serve as a basis for the researcher to develop a task containing these different scenes in a context relevant to the speaker. For example, together with the speaker, I would imagine the situation that we are watching a football game together on the local playing field, talk about a ball in different places and would ask for descriptions of sentences like

'could you give me that ball back?', or 'is this a new ball?'. Additional hints on how to elicit data on demonstratives was taken from the questionnaire 'Deixis and demonstratives' (Levinson 1999). For example, in the sessions I would place two similar objects of different quality (e.g. old versus new, small versus big) on a tabletop, one further away from the speaker and ask the speakers what they thought of the objects (e.g. one is better than the other). The questionnaires on the use of demonstratives were used in three different sessions with a total time of 01:25:54.

1.3.1.1.2 Stimuli: guided stories

In order to elicit stories in a guided way, I used the book 'Frog, Where Are You?' (Mayer 1969). This word-less picture book has been widely used for linguistic elicitation to provide comparative data (cf. Levinson and Wilkins 2006). It is a story about a child that searches for his lost pet frog. The boy is accompanied by his pet dog, and together they first search inside the house and then outside in the woods. In the woods they meet a number of other animals, creeping out of holes or sitting in a tree. The scenes include a high number of scenes in which motion is involved, such as a deer throwing the boy that he is carrying on his antlers down over the cliff. Again, the use of this two-dimensional stimulus was sometimes challenging. Several speakers did not interpret the picture series as a continues story, but rather described each picture separately, as if it were unrelated to the previous pictures.

Other natural motion descriptions were elicited by using the movie known as the 'Pear Stories' film, which was designed for a comparative study of the verbalization of experiences (Chafe 1980).[9] The Pear Stories film is a 10-minute silent movie about children stealing fruits and is often used in linguistic research for comparative data. After viewing it once together with the speakers, they are asked to retell the story they watched. In this research on Baure it was used only three times.

[9] The movie can be watched on a website dedicated to a comparative study of Chinese dialects: http://www.pearstories.org/.

1.3.1.1.3 Other stimuli

Apart from the Topological Relations Picture Series already mentioned, the 42 sessions listed under 'other' in Table 1.1 include a variety of stimuli and tasks. I used a number of other books, not familiar to the research on space. One is a Bolivian school book for primary school children with short texts on different plants and animals, accounts of historical events and descriptions of people's daily activities. The speakers could easily relate to this book, because it includes many pictures of the environment in which they live, and describes activities that they are familiar with (e.g. on how to grow crops on a field). I made a selection of relevant topics and asked the speakers to retell the events described in Spanish and elaborate on the topic, for example by explaining which crops they grow themselves. Another book that I used frequently is a word-less children's book in which several mice paint each other until they end up in all kinds of different colors. This book was mainly used for the elicitation of body part incorporation and the use of classifiers.[10] Finally, I collected a series of line drawings showing people, activities, and landscapes and asked the Baure speakers to describe them in detail. On the go, I asked questions relevant for the research on spatial relations, such as putting a ring on a finger (picture of a woman), or putting one stone on top of the other (picture of someone laying bricks).

Furthermore, I developed two short (1-minute) Flash-movies myself, each displaying a different event. In one movie, a bird flies up to a fruit in a tree, picks it, which causes the fruit to fall down on the ground, and then it bounces away from the tree. After that the bird flies down to the ground landing next to the fruit and starts eating it. The other movie shows a boat floating in the river, hitting a rock and sinking. Just before the boat disappears completely under the water surface, a dolphin breaches toward the boat and pushes it ashore. These movies were specifically designed to elicit data on the use and incorporation of the two classifier-like locative noun stems (see also Chapter 3, Section 3.1.2.3) *–poe*, 'ground', and *–iso*, 'water'.

[10] The elicitation of data on the Baure classifier system was mainly carried out by Lena Terhart and Swintha Danielsen, which resulted in Terhart's MA thesis (Terhart 2009).

At the end of many sessions during the first field trips, I pretended to be lost not knowing my way around and asked for directions how to get to the house of the family I was staying at, and to other places in town. However, the town of Baures is constructed according to the colonial matrix structure and any point in town can be reached taking a maximum of two turns. More interesting were the sessions during which I went for a walk together with one of the speakers and we chatted along the way. They described the town, the different plants and buildings, and often included gossip about other people when we passed by their houses.

One task that I often combined with the Topological Pictures Series was to ask the speakers to describe an imaginary travel story. In the sessions, the speakers invented stories and acted them out with the toy objects that I had brought. For example, we would invent a story about a man going to his field to harvest, and I would ask for different types of route descriptions. First he gets into his boat, going down river and he needs to cross a lake and go left or right on a branch of the river. After getting out of his boat he has to walk, crossing creeks and going over hills, until he gets to his field. There he harvests his crops and puts them carefully in a basket, some next to each other, and others on top. After harvesting his crops, of course, he goes all the way back home in the opposite direction. Similarly, we invented stories about how we were walking through the woods and found a precious stone, which we then dropped on the ground, in the river, put in our pockets, et cetera. This kind of elicitation of spatial descriptions worked very well, because the actions were integrated in a meaningful event, and the speakers were able to relate to it.

Finally, I played games with the speakers several times. For example, we imagined how two children were playing hide-and-seek, hiding themselves and different objects in a number of places in and around the house. During one session where two speakers were present we even played a searching game together, in which one of the speakers hid a handkerchief and the other speaker and I went off to search for it. Meanwhile, the speaker who had hid the object gave us hints and directions on where to find it.

1.3.1.2 Natural speech

In contrast to the types of sessions presented in the previous sections, the sessions listed in Table 1.1 under 'natural speech' all contain data that were recorded in a more or less uncontrolled situation. Although the speakers were prompted initially, for example when asked to tell a story or describe a certain process, once they had started, this task was open-ended and the following speech flow mostly uninterrupted for several minutes up to an hour. In the sections below, the different types of recordings made of natural speech are described in more detail.

1.3.1.2.1 Stories, local legends, and personal histories

The stories, local legends, and personal histories discussed in this section cannot be assigned to clearly separated categories, but rather form a continuum with traditional stories on one extreme, and accounts of yesterday's events on the other. In between, the speakers' grandparents or local historical figures act as protagonists in the local legends, and personal histories are intertwined with legendary events, personalities or creatures.

In the DoBeS project, a considerable amount of stories was gathered and partly published in two storybooks *Chinepinev – Cuentos de los Baure* (PDIB 2010, 2014). The stories are an interesting and remarkably flexible genre. The stories contain elements from the local environment and culture, starring for example animals like the river dolphin and the jaguar, as well as elements from European tales, such as the Grimm's fairy tales (e.g. Hansel and Gretel). More importantly, the scenes that make up a story seem to be chosen from a larger set of possible scenes, and the actual outcome is different each time a story is told. Although a limited number of storylines can be identified, we collected several stories that started off with one storyline, and gradually moved over to another. The flexibility in scene selection is not restricted to scenes that are clearly identifiable as scenes from a narrative and exclusively used as such. In one of the recorded stories, the consultant started off with the description of an event in which I myself appeared, but I am perfectly certain that this event never happened. According to her account, she came to my house the night before, and we talked about a certain kind of insect (*chulupi*). At some point

she changes from referring to the two of us in the first and second person singular to the third person singular, and then continues telling a story about the fox Antonio. Whether this is regarded as part of the story, or rather as a confusing memory of an old lady, fact is that the introductory scene that I am part of is seamlessly woven into the beginning of the story.

The local legends are often linked to certain places or landmarks. For example, a series of local legends is linked to the number of large stones that are found in the area. According to the stories (also called *encantos* 'bewitchments'), the stones are actually people or spirits that try to connect to the living people, usually with evil intentions (e.g. for killing them).[11] Another frequent theme is that gold is buried under a rock or a tree, and only the people that are destined to find it can see it emanating a glowing light at night. This story goes back to earlier times when gold was extracted in the area and golden objects, such as jewelry, were abundant. Back then, there was no safer way to hide away precious commodities than by burying them, and rumor has it that many rich people buried their belongings in a place that only they knew. Another local legend closely linked to a certain period in time is the story of the *maripa*, a witch that eats people. According to this story, people used to set off to work in the rubber plantations during the rubber boom, and never came back, because they were eaten on the way. When this story is told by the speakers, it usually stars one of their grandparents, or other relative from the same generation. It offers a reasonable explanation of why so few people returned from the rubber plantations.

Sessions listed in Table 1.1 under 'personal histories' are accounts of events that happened during the speakers' lives. For example, many of the speakers still recall that groups of savage people[12] were living in the woods to the south of the village, which proved an excellent topic for elicitation. Although it is nearly impossible to establish the exact year, it must have been around

[11] See also Riedel (2012). Within the Baure Documentation Project, Franziska Riedel carried out her PhD research on the world view of the Baure people.

[12] It is not always clear from the stories to which ethnic group these people belong, and the speakers themselves mention different ethnonyms, such as the Yanaigua and the Jorá. Several studies mention the Sirionó and Jora living in the area surrounding the town of Baures (cf. Nordenskiöld 2003, Danielsen and Gasparini 2015).

mid-twentieth century, when the speakers were adolescents and young adults. They remember how these people were contacted, captured and 'tamed'[13] by one of the speakers' father. One of the speakers' son was killed by a member of a savage tribe who shot him with a bow and arrow. Quite a few speakers traveled especially from Baures to the town of El Cairo to see the captured people that were put on display there. Other accounts of personal histories include descriptions of fishing trips made in the past and descriptions of where the speakers used to live, their families, or trips to other villages and the rubber plantations. This type of session overlaps partly with description, for example in the case of descriptions of hunting trips. When the focus was more on description of the landscape or a particular process, I tagged the sessions as 'descriptions', but when it was more an account of an event that happened in the past, I listed them as personal history. Finally, the personal histories include accounts of recent trips. I made three trips with the speakers, one to a speaker's fields where he grows his crops, one with a speaker to San Fransisco, the village she used to live before and had not been back to for over 30 years, and one to a lake nearby the town of Baures, where a speaker's father used to produce bricks for building the town's church. On these trips, I made recordings with the speakers about the places that we passed by. During the session following the trip, I asked them to recount the trip we made and completed the data that I had already collected during the trip.

The stories, local legends and personal histories do not contain many locative constructions. Nevertheless, they offer good data for landscape descriptions and the use of determiners in a large scale setting. Also, I was able to check the route descriptions elicited in the sessions of imaginary travels (e.g. going uphill and downhill, traveling upriver and downriver) with similar descriptions used in a more natural context.

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[13] As indelicate as this may sound, these are the expressions that the Baure use when talking about these events (Spanish: *amansar*). In their accounts of the past, the speakers are often referring to the 'barbarians' (Spanish: *bárbaros*) as animals, as opposed to Christian people like the Baure.

1.3.1.2.2 Descriptions and conversational data

The sessions listed in Table 1.1 under 'descriptions' are mainly explanations on particular processes. They include descriptions of how to twine a straw hat, including information on the different types of grass that can be used for it, how to process cotton, from growing and harvesting the plant to spinning the wool ready to be used, and how to weave a hammock, including the different colors of dye that were used in former times and how they are made of natural products such as leaves and tree roots. The descriptions furthermore include explanations of how to make processed foods, such as manioc beer, chocolate paste and coffee.

As mentioned in the section above, the descriptions of landscape were often mixed with personal histories. However, in a number of sessions the landscape descriptions were the central topic and they were listed under 'descriptions' rather than under 'personal histories'. In addition, I tried to draw maps together with the Baure speakers several times, but unfortunately this turned out to be not very successful. Although the speakers have an excellent knowledge of the landscape and the surroundings of Baures, and are capable of describing it in extraordinary detail, we never managed to transfer this knowledge onto a paper sheet.

Finally, just over 4 hours of conversational data are listed in Table 1.1. Even though conversational data is extremely valuable and rich data, in the case of Baure it is nearly impossible to obtain. First of all, the speakers are no longer used to speaking the Baure language among each other, and therefore the conversational data is always somewhat artificial. Secondly, it is not so easy to get two speakers at the same place at the same time, for the reasons already mentioned above. Therefore, only a very limited amount of conversational data was collected for this study. In Table 1.1, the amount of conversational data is slightly overrepresented. These data include a session of 2 hours and 21 minutes recorded with three sisters in El Carmen, one of which is not a fluent Carmelito speaker. In this session, mostly Spanish is spoken, and in the parts where Carmelito is spoken many instances of code-switching to Spanish occur, which is interesting in its own right, but the session turned out to be hardly useful for the present study.

1.3.2 DATA RECORDING AND PROCESSING

All sessions were recorded on video, and separate audio-recordings of the whole session were made. Since the majority of the speakers I worked with were also Danielsen's consultants, and a number of them even worked with the linguists of the SIL in the 1950s and 60s, the speakers are relatively at ease when being recorded on video. The video data not only captures the exact set-up of the stimuli during the session, it also records non-linguistic expressions such as pointing gestures and facial expressions (e.g. lip pointing). The separate audio-recordings ensure a high (non-linear) quality of the data and are easier to handle in the transcription of the data. Backups of all recordings were saved on an external hard disk in the field, and later stored on the server used by the Baure documentation team. Initially, for each recording it was noted for each speaker which cardinal direction he or she was facing, but this custom was abandoned as soon as it became clear that the Baure do not use a spatial system based on cardinal directions in the absolute frame of reference.

In order to keep an overview of the collected data, store information about the contents of the recordings and interviews, and manage the workflow, all recorded sessions were listed in a relational database in Filemaker, which was used by all members of the Baure Documentation Project. Each session was given a unique name, consisting of the consultant's initials, a one-letter code for the type of recording if it was other than elicitation, the recording date (YYMMDD), and the initial of the researcher's first name. For example, session AD-N090124F is a recording with speaker AD who told a narrative on the 24rd of January 2009, and was recorded by Femmy Admiraal. Additionally, for the Carmelito and Joaquiniano data, a language code was added (e.g. NM&JM-C-N090111FP, for a Carmelito narrative with two speakers, NM and JM, recorded by Femmy Admiraal and Franziska Riedel on the 11th of January 2009). The session codes are also used throughout this book to identify the primary data from which an example is taken.

The relational database in Filemaker consists of three different tables, which are all linked to make sure that any alteration in one of the tables also shows up in the other ones that use information from the same fields. In the

main table all recorded sessions are listed, together with metadata information such as consultant's initials, recording date, session length, file format, et cetera. In a separate table more specific information on the consultants interviewed is stored. For each consultant, first and last names were noted, and, when known or traceable, the date of birth and place of birth of the consultant was added. Sometimes additional comments were added, for example if a consultant's spouse was a Baure-speaker as well, or if the speaker is a fluent speaker or should be regarded rather as a semi-speaker. Finally, record was kept of the workflow progress in the third table. Since the process of converting raw data into searchable (archive) material consists of different phases, in this workflow table it was specified for each recording whether it had already been transcribed, glossed, translated to English, and uploaded.

A first transcription of the recordings was done in ELAN, a program developed by the Max Planck Institute for Psycholinguistics in Nijmegen as an annotation tool.[14] For each speech act participant, a set of tiers was created. Each set consists of 6 tiers; one for Baure text, one for morpheme structure, one for abbreviated glosses, one for the Spanish translation, one for the English translation and one for additional notes. In the first transcription in ELAN, the Baure text was only translated to Spanish and then the file was exported to Toolbox, a multilevel storage system developed by the Summer Institute of Linguistics.[15] In Toolbox, a dictionary was created that contained not only translations from Baure to Spanish, English and German, but additional information, for example on the semantic domain and part of speech of a particular entry, as well. After some initial struggles with getting the formulae fully functioning, the interlinearization (automatic segmentation) in Toolbox worked reasonably well. However, due to the polysynthetic structure of Baure and the many homophonic morphemes, it was not possible to optimize this function further, and for many entries ambiguity selection needed to be done manually. After segmentation and glossing was done in Toolbox, the file was

[14] The tools developed at the MPI Nijmegen can be accessed and downloaded at their website: http://tla.mpi.nl/tools/tla-tools/

[15] More information on Toolbox can be found at the website of the Summer Institute of Linguistics: http://www.sil.org/computing/catalog/show_software.asp?id=79

exported back to ELAN and an English translation was added. This latter task was sometimes carried out by one of the student assistants in the Baure Documentation Project. The recordings of the sessions that were stored in the DoBeS archive were transcribed word by word in detail. From the other sessions, only the relevant sections dealing with spatial expressions were chosen and processed as described above. The sessions that were transcribed completely were uploaded to the DoBeS archive, where they are accessible for the general public. For uploading the data to the DoBeS archive, an IMDI file was created that contains the metadata of a session. This IMDI file was uploaded to the archive together with all the related files, and the metadata are displayed when consulting the data in the archive.

1.3.3 ETHICS AND BENEFITS FOR THE COMMUNITY

The members of the Baure Documentation Project have established firm relationships with various institutions in Baures. The local government in Baures has proven to be of important assistance in practical matters and supports further documentation of the language. The local schools, together with the *Subcentral Indígena de Baures*,[16] specifically requested assistance in the revitalization of the Baure language. The main local participants in the project are the speakers of the Baure language. They, and other local people directly involved in the project, are paid by the hour, according to common practice in similar language documentation projects. In addition, they receive other non-structural compensation when necessary, in the form of small gifts such as clothes, kitchen utensils, or by covering medical costs in case they get sick. The ethical issues for projects hosted at the University of Leipzig all fall under the universities ethics guidelines,[17] which are generally in agreement with the MPI ethics guidelines.[18] Any concerns about ethical issues raised in

[16] The *Subcentral Indígena de Baures* is a local body that looks after the political and economical interests of the indigenous people. It is the local subpart of the *Central de Pueblos Indígenas de Beni* (Centre of Indigenous People of Beni), which played a crucial role in obtaining land rights for indigenous groups in the 1980s and 1990s.

[17] The ethics guidelines of the University of Leipzig can be found on their website: http//www.uni-leipzig.de/~ff/ethicguidelines.html (in German).

[18] The ethics guidelines of the Max Planck Institute can be found on their website: http://www.eva.mpg.de/lingua/resources/ethics.php.

the community were taken seriously and discussed with the people involved. No sensitive information is made public, not only when this affects the speakers, but neither when it concerns others. It has been made clear that all collected materials, as well as the products that result from the documentation project, are intellectual property of the Baure speakers or Baure community.

1.4 STRUCTURE OF THE BOOK

This books starts off with a concise description of the historical background of the Baure ethnic population, the natural environment that the Baure inhabit, and a sketch of the linguistic background. This chapter serves to set the stage, both physically and historically, and provides the reader with crucial background information on Baure spatial language and cognition. In Chapter 3, a descriptive overview is given of the grammatical means that the Baure language has at its disposal for expressing spatial relations. The different types of locative noun phrases are introduced and special attention is paid to the locative noun stems. Furthermore, the different morphological processes playing a role in verb phrases expressing motion events are discussed.

The main results of this research are presented in Chapters 4 to 7. In Chapter 4, the underlying conceptual categories of locative noun phrases are analyzed. In particular, the different types of locative noun stems that are used in locative noun phrases, and their lexical and grammatical properties, are studied. Special attention is paid to the frames of reference employed for these static locative expressions. Chapter 5 focuses on the spatial concepts that underlie Baure verb phrases, more specifically verb phrases expressing motion events. Not only are the various components of motion expressions identified in a formal descriptive way, but moreover their semantic roles are identified and analyzed. In Chapter 6, the spatial components of articles, determiners and place adverbs are examined in detail. Finally, in Chapter 7, the findings of the present study are summarized and discussed, and the conclusions drawn from the research are presented.

CHAPTER 2:

GEOGRAPHICAL, HISTORICAL, AND LINGUISTIC BACKGROUND

Baure (ISO-code: brg) is an indigenous language spoken in the Bolivian lowlands in the department Beni. It is belongs to the southern branch of the Arawakan language family, and Baure itself consists of three varieties, which are all named after the town where they used to be spoken; Baure, spoken in Concepción de Baures,[19] Carmelito, spoken in El Carmen del Iténez, and Joaquiniano, spoken in San Joaquín. Figure 1.1 shows a map of Bolivia with the approximate location of these three towns. All three were originally founded with different groups of indigenous people of which the majority belonged to the Baure ethnic group. After centuries of oppression of indigenous people in Bolivia, in the last few decades a growing awareness for indigenous cultures and languages can be noted. As a result, the interest taken in the Baure language is noticeably increasing, and several initiatives have been initiated to preserve the linguistic and cultural heritage.

[19] The official name of the town is Concepción de Baures, but it is usually shortened and referred to as Baures.

Figure 2.1: Map of Bolivia and location of the three Baure towns.

This chapter contains a sketch of the geographical, historical and linguistic background of the Baure. Section 2.1 describes the geographical area that the Baure inhabit and provides an introduction to the challenging ecological environment and the human interaction with it. In Section 2.2, the historical background is presented briefly, from the pre-Columbian Baure settlements to the 20th century Baure. It is shown that today the Baure cannot be considered an ethnic group in a traditional sense. Nevertheless, they show strong social cohesion, and it is necessary to have a glance at the history in order to understand the present day Baure. The historical connection between the towns also sheds light on the development of the three different dialects of the Baure language group. The town of Baures, where the greater part of the research was carried out, is described in most detail. Finally, in Section 2.3, which is partially based on Admiraal 2012, the Baure language is introduced. An overview of the typological features is given, as well as a brief description

of Baure within the Arawakan language family. The speakers' competence and language attitudes are discussed, and special attention is paid to the language revitalization that can be noticed in the past few decades.

2.1 GEOGRAPHICAL BACKGROUND

The towns of Baures, El Carmen, and San Joaquín lie in the northeastern part of the Beni department, in the Bolivian Amazonia. The region is known as the Llanos de Mojos,[20] and comprises an area of approximately 150.00 square kilometers of tropical savannah (Block 1994: 11). Through the Llanos de Mojos, three major rivers are running from south to north, the water of which eventually flows into the Amazon river. To the north, the Llanos de Mojos is delimited by the Guaporé river,[21] which at the same time forms the border of Bolivia and Brazil. The Guaporé river originates in the Brazilian highlands and converges with the Mamoré river that cuts through the middle of the Llanos de Mojos. The Mamoré river and its tributaries form a natural connection between its origins in the Bolivian Andes highlands and the lowland of Amazonia (Block 1994: 12). The third river, the Beni river, originates in the highlands near La Paz and flows through the southwestern part of the Llanos de Mojos, after which it converges with the Madre de Dios river to form the Madeira river. Furthermore, the Llanos de Mojos is scattered with numerous big and smaller lakes, and a network of many creeks and small rivers characterizes the region.

[20] Mojos is alternatively spelled Moxos, and may have been derived from the word for scabies according to the eighteenth-century linguist Hervás y Panduro (Hervás y Panduro 1800: 246, cited in Block 1994: 16).

[21] Internationally, this river is usually referred to by its Brazilian name, the Guaporé river. In Bolivia, however, the same river is called the Iténez.

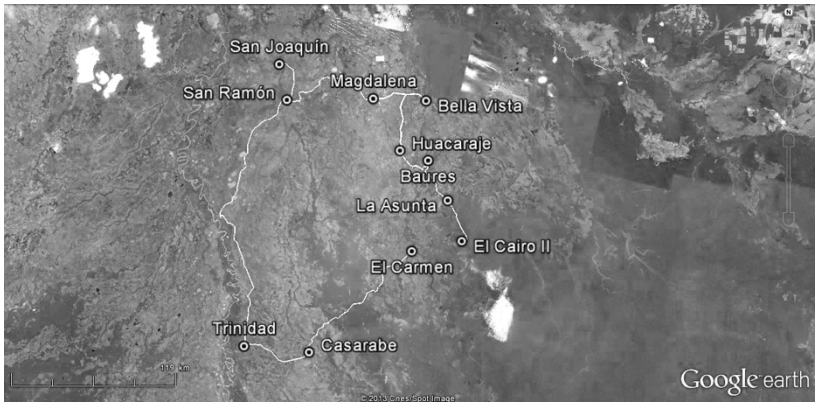

Figure 2.2: Map showing some of the main towns in the Beni department (after Riedel 2012: 58).

The climate in this part of lowland Bolivia is tropical hot and humid,[22] and weather conditions vary in the annual cycle of the rainy season and the dry season. The rainy season starts around October or November and the abundant rainfall, especially in December and January, causes the rivers to fill with water and rise even beyond the river banks. The wet grasslands gradually flood, until there are hardly any pieces of dry land left at the peak of the rainy season, around March or April. Many roads can then no longer be used by heavy traffic, or have disappeared completely. Around April or May, the heavy rainfall gradually stops, and the dry season commences. The water level of the flooded areas increasingly sinks, as does the water level of the rivers. During the dry season, roughly from May until October, several months may go by without a single drop of rain falling from the sky. In extremely dry years, the lack of water has devastating effects on the harvest as well as on the fish stock in the rivers and lakes, and on the living conditions of the live stock that is freely wandering about the area.

[22] The yearly average temperature is 26°C, with an annual rainfall of 1400-2200 mm (Szabó 1998a: 50).

Due to the heavy seasonal rainfall, the savannahs or open grasslands are flooded over an extensive period of time each year (Lathrap 1970: 34, 41). As a result, continuous forests are rare on the Llanos de Mojos and trees tend to cluster on slightly elevated areas (Eriksen 2011: 57). These elevated areas are called *islas*, 'islands', some of which are natural, and others are man-made. In the dry season it is the forestation that characterizes the islands, and lower parts are covered by grassland. In the rainy season, the lower parts flood, turning the *islas* into true islands surrounded by water. All in all, water management is a fundamental component of the lives of the people living in the Llanos de Mojos.

2.2 HISTORICAL BACKGROUND

As is the case for the entire pan-American continent, the arrival of the Spanish marks an important turning point in the history of the region now known as Bolivia. However, the region was inhabited long before the Spanish penetration. In Section 2.2.1 a sketch of the pre-Columbian settlements is given. Section 2.2.2 describes the Jesuits' presence in the region, in an era in which the towns of Baures, El Carmen, and San Joaquín were founded. Section 2.2.4 focuses on the contemporary Baure, and in 2.2.5 the town of Baures is described in more detail.

2.2.1 NATIVE POPULATION OF THE LLANOS DE MOJOS

Little is known about the people living in the Amazon area in the pre-Hispanic days, and the sources that are available mostly refer to the people that inhabit the Llanos de Mojos region without specifying which of the many ethnic groups is meant. The Arawakan groups probably arrived at the Llanos de Mojos traveling up the river system from central Amazonia. The Arawakan spread through the region may have begun as early as 3000 B.C., but there is a consensus that they certainly reached the Llanos de Mojos by 500 B.C. (Block 1994: 14; Lathrap 1970: 75). Archeological evidence suggests that the area was once densely populated, as shown by the numerous remnants of man-made adaptations to the landscape in the region (Crevels 2002: 9;

Erickson 2010; Nordenskiöld 2001: 259–263). The earliest descriptions of the region mention large populations inhabiting the Llanos de Mojos (Block 1994: 19; Denevan 1966: 116–117; Lathrap 1970: 161), which must have had a fairly complex organizational structure given the labor-intensive waterworks that they installed and maintained in order to control the seasonal changes in the water level (Lathrap 1970: 161).[23]

The various native societies living on the Llanos de Mojos shared many cultural practices and livelihood strategies. They were engaged in tropical forest horticulture, planting crops such as manioc, sweet potato, and maize for making the alcoholic beverage *chicha* (Block 1994: 23). They supplemented their diet with fish and meat obtained by hunting. Among the Baure, who were living close to the major rivers, fishing was a more important means of subsistence than hunting (Block 1994: 24). The societies on the Llanos de Mojos were organized in chiefdoms, in which the topmost position in the hierarchical structure was hereditary (Eder 1985: 106–107). They lived in small village units, in homesteads together with extended families consisting of consanguine as well as affinal kin. The villages were organized around a central *plaza*, where the communal drinking house was located. The Baure dwellings were different from the other groups', because they were surrounded by a palisade of sharpened logs and a deep trench (Block 1994: 26; Erickson 2010). It is said that the societies living on the Llanos de Mojos were remarkably sophisticated, especially with respect to their way of augmenting the agricultural potential of a landscape that is rather unfavorable for permanent settlements. The Baure were considered the most civilized of the societies contacted by the Jesuits (D'Orbigny 1880: 111; Eder 1985: 106), an attribute that the contemporary Baure still like to emphasize.

Around 1540, the Spanish conquerors arrived in the Bolivian Lowlands. Although the Llanos de Mojos was technically under Peruvian jurisdiction, the Spaniards entered the region from the east, instead of from the Peruvian side.

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[23] Denevan (1966: 116-117) claims that the population of the Llanos de Mojos before European arrival should be estimated at 350.000. Block (1994: 19-22) supports Denevan's suggestion of a high population density of the region in the pre-Colombian times and a sharp decline after contact with the Spanish, but estimates that the total population of the Llanos de Mojos was around 35.000 around the time of arrival of the first Jesuits.

The expeditions launched from Asunción along the Atlantic coast first led to the foundation of Santa Cruz de la Sierra. This city, situated in what is now eastern Bolivia, became the starting point for numerous expeditions headed for *Gran Mojo*, allegedly a densely populated kingdom rich in precious metals. Initially, the Spaniards formed large expeditions trying to penetrate the Llanos de Mojos, but due to the failure of a number of these expeditions, the financial resources were no longer granted. In the first two decades of the 17th century, small exploration groups set out, consisting of independent men who teamed up, and profited from their expedition by splitting raided goods and by slave hunting. The very first Jesuits that arrived on the Llanos de Mojos joined these conquest bands as auxiliaries, not in the last place to attend the spiritual needs of the conquerors (Block 1994: 34). Despite various tries, the Spanish colonizers were not very successful in penetrating the savannah, and never managed to set up an effective administrative system there. In fact, after they realized that there were no precious metals to be found, the Spanish colonizers quickly lost their interest in the region. The Jesuits on the other hand, came to realize that the Indians provided an abundant number of souls to be saved and converted to Christianity. In the 1670s they carried out various evaluative visits to the Llanos de Mojos, and from 1675 on Fathers José del Castillo, Pedro Marbán and Cipriano Barace permanently stayed in one of the villages on the Mamoré river. Their persistence, both in their work with the native population, as well as in their efforts to convince the Jesuit Society's leaders to send men and supplies, finally resulted in the foundation of the first mission town in the Llanos de Mojos, Nuestra Señora de Loreto, in 1682 (Lehm Ardaya 1992: 50).

Thus, in the 17th and 18th century, it were the Jesuits who undertook the colonial enterprise on the Llanos de Mojos, rather than Spanish conquerors (Nordenskiöld 2003: 199; Saito 2007a: 446), but only until their expulsion by the Spanish Crown in 1767. In this short period, they had a remarkably big influence on the formation of the new local societies, and the remnants thereof are still clearly noticeable today. In the following sections, I will sketch the history of the three towns where Baure used to be spoken, from the arrival of the Spanish onwards, highlighting the Jesuit period and showing how the mission town structure formed the basis of today's society.

2.2.2 THE FOUNDATION OF BAURES, EL CARMEN, AND SAN JOAQUÍN

The colonization policy of the Spaniards was enforced equally in all conquered areas and involved resettlement of the population, segregation of the native population from the Spanish descendants, and the organization of town councils. However, the effect of the colonization in the highlands was different from that in the lowlands in the sense that whereas in the Andes the large chiefdoms were broken down into smaller, administrable, units, in the lowlands different ethnic groups were concentrated in towns in order to be able to administer them properly. Moreover, since the Spanish hardly succeeded in penetrating the lowlands, the Jesuit missionaries were the main representatives of the Spanish Crown (Saito 2007a: 446–448). This was also the case in two of the three towns where Baure used to be spoken.

The Baure were first contacted by Father Cipriano Barace, on one of his explorations to the northeast of Trinidad. After an initial hospitable welcome on his first expedition, a powerful Baure shaman grew hostile on Barace, and consequently, he was killed on his second expedition among the Baure (Block 1994: 43). As a retaliation act, the Spanish set out on an armed campaign against the Baure, killing a number of them, and taking 250 captives back to Santa Cruz with them (Block 1994: 43). Instead of calming down the Baure, this campaign rather encouraged their resistance and it took another two Jesuit expeditions before the first mission town among the Baure was founded. The town of Concepción de Baures, the main town where the Baure dialect is spoken today, was founded in 1708, at the site of a Pre-Colombian settlement, by a group of Jesuit missionaries led by Lorenzo Legarda (Altamirano 1979: 115). The Joaquiniano dialect used to be spoken in the town of San Joaquín, which was founded in 1709, shortly after the foundation of Baures, by Miguel Sánchez, one of the missionaries that formed part of the group that founded Baures the year before. San Joaquín was originally founded approximately 20 kilometers east of Baures, at the banks of the Río San Joaquín. However, at this site the mission of San Joaquín was frequently attacked by Portuguese slave hunters coming from the, now, Brazilian side of the Guaporé river, and the people suffered from several epidemics. Therefore, the mission was abandoned in 1796 and relocated westwards to its current location at the

banks of the Río Machupo, in the province Mamoré. The distance between the towns of Baures and San Joaquín is approximately 200 kilometers and two major rivers are separating the towns (D'Orbigny 1992: 196). The small town of El Carmen is the capital of the Carmelito dialect, and lies at the Río Blanco, approximately 80 kilometers south of Baures. In the case of El Carmen, the town was a new foundation which was not initiated by missionary actions in the first place. In 1792 the word was out in Baures that there was a group of unknown and not yet converted Indians living up the Río Blanco. This was a group of Chapacura that most probably had come from the Chiquitanía in the south. The then governor Zamora decided to organize an expedition in order to enslave the Indians and convert them to Christianity. In 1794, the missionary town of El Carmen was founded. Due to plagues, the town was relocated twice, until it was established at its current location in 1881. Although the precise locations of the former towns of El Carmen are not known, the resettlement was not as drastic as in the case of San Joaquín (Vidal Céspedes and Danielsen 2011: 8–12).

In the mission towns, different ethnic groups that formerly populated a whole region were forced to settle together, and live side by side. However, the ethnic groups remained segregated, and each occupied a different part of town and cultivated different parts of the land surrounding the town. It is even said that they celebrated mass separately, and were engaged in separate social events, such as making music or playing ball games (Saito 2007a: 460; Father Jorge Redelberger *pers.comm*.). In terms of demographic composition, the towns of Baures, El Carmen, and San Joaquín were mainly inhabited by people from the Baure ethnic group, but in all three missions, various other ethnic groups were involved as well. Despite the scarcity of reliable data on the exact number of people from different ethnic groups that formed part of the original population of the towns, for Baures it is reported by one of the first missionaries working there that confessions were taken in Mojo, Guarayo, Baure, Ticomero, Peroro, and Spanish (Mayr 2002: 62). In the case of El Carmen, it is clear that the town was originally founded with 314 people from Baures (presumably Baure people) and around 200 Chapacura (D'Orbigny 1992: 267). Later, in 1830, D'Orbigny reported a more diverse constitution of the town, also

including 230 Muchojeones (D'Orbigny 1992: 267). Apart from the diverse ethnic populations living in the towns, there was contact as well with other groups living in the region, of which the Itonama probably had the greatest influence. Even though the Sirionó were also a large population in the area surrounding the settlements, these seem to have had less influence than the Itonama (Danielsen 2010).

In Jesuit mission towns, the missionaries were not only responsible for the spiritual well-being of the local population recently converted to Christianity, they also organized and administered the town's economic welfare.[24] Like other missionaries, the Jesuits organized the villages around a central square where the church, decorated with detailed carved ornaments, and the house of the missionary were located (D'Orbigny, mentioned in Block 1994: 59). In the Jesuit period, the Baure worked in agriculture on the fields situated around the mission town, where they combined the growing of traditional crops with crops introduced by the missionaries (Block 1994: 57). They also attended the cattle introduced by the missionaries for meat produce and power supplies, and produced handicrafts (see Block 1994: 60). One of the institutions set up by the Jesuits, which still survives today in all three towns, is the *Cabildo Indigenal*.[25] Originally, the *Cabildo Indigenal* was a group of 12 men, headed by the *cacique*. They assisted the missionaries in organizing the collective work, transport and trade, and were especially responsible for keeping order and discipline in the mission town. During the Jesuit period, the *caciques* gained more and more power, and their authority lasted until well into the 20th century (D'Orbigny 1992: 219). Nowadays, their power is only symbolic, although they are still called upon to handle occasional fights or outbursts of public intoxication. The main task of the *Cabildo Indigenal* today concerns for

[24] In fact, Saito claims that the mission towns were almost completely independent administrative units governed by the missionaries. The taxes that were supposed to be paid to the Crown were cancelled out by the salaries that the Crown was supposed to pay the missionaries. The communal labor, to which the indigenous population was forced elsewhere in the colony, was also cancelled out, because the mission towns defended the border with Brazil against the Portuguese (Saito 2007a: 454–455).

[25] Around 1700 the Jesuit official Diego Francisco Altamirano visited the Llanos de Mojos to inspect the missions. Based on his findings, he drew up a model for the Jesuit missions and suggested, among other things, the establishment of the *Cabildo Indigenal*, and proposed to use one of the native languages as a lingua franca.

example the organization of the annual town festival, and their appearance in Catholic celebrations, such as on Good Friday in the Holy Week.

When the Jesuit missionaries arrived in the Bolivian lowlands to set up their mission towns and convert the local population, they were impressed with the linguistic diversity encountered there in a relatively small area.[26] Around the time of arrival of the missionaries, at the beginning of the 18th century, about 39 different languages were spoken, most of which were Arawakan languages (Crevels 2002: 9; De Orellana 1970). As was common practice in the colonization of South-America, the authorities, represented in this case by the missionaries, chose the most widely used indigenous language as a lingua franca. Although the demographic composition involved different ethnic groups in the towns of Baures, El Carmen, and San Joaquín, in all three the Baure formed the majority, and the Jesuits selected their language as lingua franca. Not only did they use it in mass and in the daily communication with the indigenous population, they also studied the language, and compiled the first word lists and descriptions of Baure grammar (see also Section 2.3.1). It is very likely that the works of the missionaries contributed greatly to a standardization of the Baure language (cf. Saito 2007b on language policy in the Jesuit mission towns in the Llanos de Mojos). By the end of the Jesuit period, the number of languages spoken in the region had been reduced considerably, and what was left was a town-based linguistic diversity where in each town a single language was spoken predominantly, often a different one from the dominant language spoken in neighboring towns.

In 1767 the Spanish Crown expelled the Jesuits from all Spanish territories, and ordered that the exiles were to be shipped to Spain as soon as possible. The decree was put in practice in the Llanos de Mojos in the same year, and the missionaries from the Baure missions left their towns, marking the end of the Jesuit era (Block 1994: 53).

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[26] One of the early missionaries reported that "every step, every village, and nations, there are different languages and it seems like the confusion of Babel spread over this land" (Cipriano Barace, in Saito 2007b: 352), and some of them even claimed it to be a work of the Devil, as cited by Saito (2007b: 352) from De Orellana: "it is quite credible that so much variety of languages is a trick of the Devil, who wanted to place one more obstacle in the way of the promulgation of the Gospel and, by this means, make the conversion more difficult".

2.2.3 FROM COLONY TO NATION STATE

After the expulsion of the Jesuits, the government tried to integrate the missions into the colonial society. In the Mojos area, a governor was appointed for the administration of the whole region, and clergymen were sent to the former mission towns to replace the priests (Saito 2005, 2007a). However, because of the large distances and the inadequate transportation and communication systems, the region remained relatively isolated. Due to the uncooperative attitude of the indigenous population towards the Spanish administrators, the Spanish never really took control over the region, and rebellions were frequent and violent. In this political turmoil, many different groups with different goals and expectations took part. While the Spanish rulers, which still had firm ties with the Crown, were struggling to maintain the authority, the native Indians revolted led by the *caciques*. In between, the growing classes of mestizos and literate, Spanish-speaking, natives became more and more powerful. It was in these days of conflict that independence was proclaimed in 1809, but the Bolivian state was actually not founded until 1825, by Simon Bolivar (cf. Gisbert et al. 1999).

According to Saito (2007a), it was in this period of political instability that the community-based ethnic identification, that is still observed today, arose.[27] He claims that the native societies were transformed under Jesuit rule, and that the resettlement of the native population played a crucial role in the process of ethnogenesis (Saito 2007a: 446–449). In the mission towns, the indigenous people that were working closest together with the Jesuits (e.g. as members of the *Cabildo Indigenal*, or as domestic servants in the Jesuits' household), learned to speak Spanish and some even learned to read and write. In later years these Spanish-speaking natives gained power, often as *caciques*, and became native leaders. In contact with each other, they came to identify themselves after the town they were from, such as Loretanos from Loreto, Trinitarios from Trinidad or Baures from Concepción the Baures. This

[27] Discussing the creation of Indian republics in Spanish South America, Saito (2007a: 449) claims that "we can safely say that even today community affiliation is the most important of all the collective identities they make use of". In the course of the project, the Baure documentation team noticed this as well, for example when people from Baures commented on the inferior quality of other towns' food, dances, etc., claiming theirs to be original and better.

was quickly picked up by their fellow townspeople, providing a collective identity as a distinct social group that they did not have before (Saito 2007a: 465–466).

Despite the political instability and the growing power of the indigenous leaders, in the years from the expulsion of the Jesuits until the early 19th century, life in the former mission towns did not change much. The French explorer Alcides d'Orbigny, who visited Baures in 1830, reports that the town had approximately 3000 inhabitants, and the people's main economic activity was the production of crops and handicrafts for their own use, as well as for exportation to the highlands (D'Orbigny 1992: 217). The relative isolation of the region only ended in the last quarter of the 19th century, when the rubber boom started to get a grip on the whole Beni department. The natural resources attracted settlers from Europe as well as from other parts of Bolivia, who invaded the region to exploit them. The rubber boom had a drastic demographic effect on the native population, since many of the indigenous people, men as well as women, left their homes to work in the rubber industry under very poor conditions, and many of them never returned. For Baures, this period was a very wealthy one, not in the last place because the Baure governor, Carmelo López, was elected prefect of the Beni department and moved the prefecture from Trinidad to Baures. In contrast, the demand for cheap labor in the rubber industry caused the depopulation of El Carmen, as described by Erland Nordenskiöld who visited the town in 1909. By then, there were almost exclusively women and children left in town, and most of the men had gone to work on the rubber plantations, either voluntarily or forced by the white settlers. The young women are reported to earn money selling their love to the white settlers, which was a better paid job than the one the men had in the rubber industry (Nordenskiöld 2003: 139–142).

2.2.4 THE BAURE TODAY

Since all three towns were founded by Jesuit missionaries, or administered by missionaries soon after the foundation in the case of El Carmen, the Jesuit heritage can still be noted clearly. The structure of the town still resembles the original structure, and new streets are built continuing the matrix-like model.

Today, the original role of the *Cabildo Indigenal* has been taken over by the governmental institutions, but the common Jesuit heritage can also be noted during the annual town festivals. The dances that are performed there are to a great extent the same in each of the three towns, and are also very similar to the dances performed in other communities in the Llanos de Mojos.[28] Some minimal differences can be observed, for example in the types of *tipoi* (women's dress), but since one sees *tipois* from other places in all three towns as well, this can hardly be regarded as a structural difference.

Nevertheless, due to the many years that have passed since the settlement of the towns, it is not surprising that the individual histories of the towns after their foundation led to differences in their respective cultural heritage. For example, the dance of the *Sopiri* is only performed in Baures. It is based on an episode in Baure history and the *Sopiri* represent the children of an actual *cacique*. Today, even brand new dances are invented, such as the *Baile de Chocolate*, and the *Misishawonoe*'.[29] In El Carmen the dances *La Salvez* and *Baile del Lagarto* are performed, which have probably been introduced by the Itonama. In San Joaquín, recently invented dances include the *Baile del Farol* and *Baile del Gato y los Ratones*. This latter one reminds of the Bolivian Hemorrhagic Fever which caused the death of approximately 30% of the population in the 1960s (Admiraal et al. 2011).

One of the most striking differences is found in the self-identification of the people. Today, the inhabitants of the three towns identify themselves as Baure, Carmelito, and Joaquiniano based on their place of birth (see also Section 2.2.3). However, a closer relationship between the inhabitants of Baures and El Carmen can be noticed. Many family ties exist between these

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[28] The dances of the *Macheteros*, the *Ciervos*, *El Sarao*, and *El Baile de los Judíos* performed in the towns where Baure used to be spoken are for example very similar to the dances performed in San Ignacio, Trinidad, or Santa Ana. In these towns, the majority of the inhabitants belonged to an ethnic group other than the Baure (Igancianos, Trinitarios, and Movima respectively). Nevertheless, the origin of the cultural heritage of each town lies for the larger part in the Jesuit period, and is therefore similar in all of them.

[29] In the case of the *Misishawonoe*', the creation of the dance was quite recent and it even seems to have been an effect of the presence of the Baure Documentation team in the village. The song *Misishawonoe*' was first taught to the children in Baure language classes in 2009 and was danced during the town's annual festival in December of the same year, even though it had not been observed before.

two towns, and people in general seem to know each other and have visited the other town. This is far less the case with San Joaquín. The census that was carried out by the documentation team in 2009 (see also Section 2.3.5), shows that the number of people living in Baures and surrounding communities that were born in El Carmen (25) is more than three times higher than the people born in San Joaquín (7). Obviously, the relatively short distance that separates El Carmen from Baures, compared to the distance that separates San Joaquín and Baures, plays a role here. It is clear from the documents written by the Jesuit priests that there was some contact between the towns. In the times that Baures and San Joaquín were still close to each other, it is known that people traveled from one place to the other, and helped each other out, for example with sowing and harvesting, and in times of crises. In those early days, the family ties between the ones that left to found the new towns and the ones that stayed in Baures were still strong. Also new family ties were made by marriage from one village into the other. Taking into consideration the individual development of San Joaquín and the migration of many people belonging to different ethnic groups into the town in the 20th century, the Joaquinianos today could be considered as a separate ethnic group (Szabó 2008: 355).

2.2.5 CONCEPCIÓN DE BAURES

The town of Baures is the capital of the municipality of Baures and has approximately 3000 inhabitants.[30] In the area directly surrounding the town of Baures lie the communities of Altagracia, San Calixto, Veremos, El Cairo, Jasiaquiri, Tujuré, and San Francisco (see Figure 2.3), which have approximately 1500 inhabitants in total. In the dry season the town and communities can be reached by road, and bus services run from Trinidad (the capital of the Beni department, see also Figure 2.1 and Figure 2.2) on a daily basis. When all goes well, it takes the overnight busses 12–16 hours to reach their endpoint in Baures. In the rainy season many roads flood, and transport by land is becoming more difficult. In this time of year, short-distance transport

[30] A census was carried out by the *Instituto Nacional de Estadística* (Bolivia's National Institute for Statistics) in November 2012 and a total of 6137 inhabitants were reported to live in the municipality. Approximately half of them lives in the town of Baures itself.

from and to the communities is done by river. Only when the water level is at its highest, which is not necessarily the case every year, boats come in from the city of Guayaramerim on the border with Brazil, carrying food supplies, gas, and other heavy cargo. In the rainy season Baures can still be reached by air, with a flight service of the *Transporte Área Militar* (Military Air Transport) twice a week, or by small Cessna plains which are privately-owned and operate only when there are enough passengers. However, since the airstrip in Baures is unpaved, flights may be cancelled or delayed in case of heavy rain fall.

Figure 2.3: Map showing Baures and its surrounding communities (after Riedel 2012: 58).

Over the past decade, the standard of living in the town of Baures has improved significantly. Nowadays, most of the households have basic sanitation and are connected to the town's centralized water supplies. Even though the system breaks down every now and then, and people have to fall back on their water wells still maintained in households, most of the time there is clean, drinkable, running water. Electricity is provided for the whole town by one generator, which is powered by a large combustion engine. It usually runs all day and is shut down only at night, approximately from 1 AM until 6 AM. There are two

primary schools in Baures, which almost all children attend. In the surrounding communities, small primary schools have been set up as well, some with only a handful of students and a single teacher. The secondary school in Baures provides higher education until the degree of *Bachiller* (high-school level), which is attended not only by the children from Baures, but also by the children from the surrounding communities. Other public services include a public phone and internet café (run by the state-owned company Entel), and a new hospital completed in 2011, which replaces the older deplorable, but functioning, one.

The economic activities of the Baure people can be subdivided into cattle herding and small-scale agriculture. Generally, the wealthier people own a ranch outside of town, where their cattle, mostly cows for meat produce, is attended by a paid majordomo. Less prosperous people usually own a small piece of land, either close to Baures or close to one of the communities, where they grow crops, such as rice, maize, manioc, and plantain. At their homestead in town, or at their hut on the field, they breed small animals, such as chickens, ducks, and pigs. Apart from cattle herding and agriculture, nearly everybody in town is involved in the harvesting, processing, and selling of wild cacao. Surrounding the villages, there are around 30 wild cacao forests, and chocolate harvesting time is a yearly economic boost. Some of the Baure chocolate is processed manually into chocolate paste, which is later dissolved in water and turned into a beverage never missing at supper time, but most of it is only dried and then exported. Elsewhere it is processed into high quality chocolate bars and other products.[31] Due to the growing recognition of the Baure chocolate, the town manifests itself as *Capital de Chocolate* (Chocolate Capital) since a couple of years.

[31] The chocolate from the Beni region is actually gaining fame as a fair trade product around the world, and according to experts, chocolate from this region is of price-winning quality (http://www.originalbeans.com/chocolate/beni-wild-harvest-66-bolivia/).

2.3 LINGUISTIC BACKGROUND

2.3.1 PREVIOUS RESEARCH ON BAURE

As is the case for many indigenous languages, the first linguistic data on Baure was gathered in the 18th century by missionaries working in the area. The missionaries Father Antonio Magio (1880 [1749]) and Francisco de Asis Coparcari (1880 [1767])[32] both wrote a short grammatical description of the language, of roughly 50 pages each. Despite the short length of the texts, the analysis is quite detailed and many morphemes are identified, though sometimes with a different analysis or grammatical label than seems appropriate nowadays. These grammars were published in 1880 (Adam and Leclerc 1880), together with a word list (around 400 words) collected by Alcides d'Orbigny around the mid-nineteenth century. Additional word lists appeared in the late 19th and early 20th century (Fonseca 1881; Nordenskiöld 2003). Another 22 religious texts in Baure, stemming from the Jesuit period including a few years after their expulsion, are stored in the archive of San Calixto in La Paz (Saito 2005), but unfortunately these are not accessible, and it is unclear what type of documents they are and which variety of Baure they are written in.

In the 1950s and 1960s, a detailed study of the Baure language was carried out by Priscilla Baptista and Ruth Wallin from the Summer Institute of Linguistics. They published a tagmemic grammar (Baptista and Wallin 1967) in a series of grammars of Bolivian indigenous languages (Matteson 1967), and an article on Baure vowel elision (Baptista and Wallin 1968). Furthermore, they elaborated a school book (Baptista and Wallin 1966a) for learning to read and write Spanish, especially aimed at Baure speakers. Additionally, they produced a number of booklets with Baure stories (Baptista and Wallin 1959,

[32] According to the editors, the name with which the grammar is signed is poorly legible, and they assume that it says Francisco de Asis Coparcari. However, no evidence can be found confirming the presence of a Jesuit missionary by that name working in the region. The editors assume that the grammar by Francisco de Asis Coparcari was written after the expulsion of the Jesuits, and it could have been the work of one of the priests that were sent to the area to continue the work of the expelled Jesuit missionaries.

1963a, 1966b) and Baure translations of Bible texts (Baptista and Wallin 1960, 1963b, 1966c, 1966d).

In an attempt to standardize the orthography for various lowland Bolivian indigenous languages, workshops were organized in the early 21th century by Colette Grinevald and Pilar Valenzuela. The workshops on the Baure orthography resulted in a booklet on the alphabet, produced in collaboration with two local teachers, Ferrufino Oni Pinaicobo and Julián Imanareico Cative, under the direction of the Bolivian Ministry of Education (Olivio et al. 2003). The teachers also received basic training as linguists to encourage them to keep working on the Baure language. One of them, Julián Imanareico Cative, nowadays directs the local institute for Baure language and culture (*Instituto de Lengua y Cultura Baure*).

In 2003, Swintha Danielsen started her PhD project on Baure at the University of Nijmegen in The Netherlands, which resulted in a reference grammar (Danielsen 2007) and an article on agreement in Baure and Kurripako (Danielsen and Granadillo 2007). Following her PhD research, Danielsen continued to work on Baure as a project leader of the DoBeS project 'The Documentation of Baure', hosted at the University of Leipzig in Germany. The project ran from 2008 to 2013 and aimed at collecting as much audio and video data as possible, representing all speakers (age- and gender-wise), as well as all different dialects of Baure, and provide a full transcription and morphosyntactic analysis of the data, accessible in the DoBeS archive.[33] During the project, Danielsen focused on the comparison of the different Baure varieties, and on comparative Arawakan studies (cf. Danielsen 2008, 2011a, Danielsen et al. 2011, 2013, among others).

2.3.2 ARAWAKAN LANGUAGES AND THE BAURE LANGUAGE GROUP

Baure belongs to the Arawakan language family,[34] one of the major language families in South America, which contains the largest number of languages in

[33] See the DoBeS website (http://www.mpi.nl/DOBES) for more information on the documentation program. The Baure materials can be accessed after having been granted permission to access the Baure part of the archive.

[34] Among linguists working on this language family, there is disagreement on the labeling of the family. Some scholars prefer the term 'Arawak' (e.g. Aikhenvald 1999), claiming that 'Arawakan'

South America (approximately 40 languages). It once spanned from the Carib islands down to the north of Argentina and Paraguay (Aikhenvald 1999: 65–71), but unfortunately many of the Arawakan languages already disappeared, and many others are seriously endangered. In the 18th century, it was observed that the Arawakan languages had a common genetic affiliation, and were given the family name Maipure by Father Gilij (1783), named after one of the now extinct languages of the family. In the late 19th century, this was followed up on, and the language family was renamed after one of the most important languages of the family, Arawak (Brinton 1891; Von den Steinen 1886). The language Arawak is spoken in the Guyana's and also known as Lokono.

Following the recent insights in the proposed subdivisions of the Arawakan languages (Aikhenvald 1999: 65–71; Danielsen 2008, 2013), Baure belongs to the southern branch of the Arawakan language family and is closely related to the Mojo languages (Ignaciano and Trinitario), to Terêna, and to Paunaka, only mentioning the ones still alive. As was mentioned before, Baure can be further subdivided in the three varieties; Baure, Carmelito and Joaquiniano. The assumption that all three are dialects of the same language is based on the fact that San Joaquín was originally a Baure mission, and El Carmen was founded with a substantial number of Baure people (Block 1994: 44; D'Orbigny 1992: 267). Nevertheless, Joaquiniano seems to have diverged substantially from the other two varieties, and as a result, some scholars claim that Joaquiniano is a separate Arawakan language (Rivero Pinto 2006; Szabó 1998b: 21), and yet others assume that Joaquiniano is a Mojo dialect (Fabre 2005: 46, 71). Although the historical connection between the towns and the language varieties is clear, the Joaquiniano dialect deviates most from the other two dialects Carmelito and Baure. It is, however, the dialect that is most closely related to the language documented by the Jesuits (Admiraal et al. 2011; Danielsen and Terhart 2014).

The crucial characteristic that sets apart Joaquiniano from Baure and Carmelito, is the preservation of a reality status system (cf. Elliott 2000). It

refers to a, nowadays refuted, classification that included a number of non-Arawakan languages. In this work, I use the term 'Arawakan', following a widely accepted practice (cf. Adelaar with Muysken 2004; Payne 1991), and referring to the core of the Arawakan languages that are established as belonging to the family.

distinguishes verbal irrealis from realis by a verb base final vowel *–a* instead of the default vowel (generally *–o*), as shown in the Joaquiniano example (1), and the contrasting example (2) from Baure.

Joaquiniano

(1) *¿Pke'ino pnika dreko?*

pi=ke'in–o	*pi=nik–a*	*dreko*
2SG=want–REAL	2SG=eat–IRR	food

'Do you want to eat food?' (PC-J-080928)

Baure

(2) *¿Piki'inow pinik tikorokoe'?*

pi=ki'ino–wo	*pi=nik*	*tikorokoe'*
2SG=want–COP	2SG=eat	guava.fruit

'Do you want to eat guava fruits?' (DC-090105F)

Joaquiniano shows a system similar to the one found in historical Baure data. However, due to the regular loss of final vowels (Baptista and Wallin 1968; Danielsen 2007: 51–55), Baure and Carmelito lost this general distinction of irrealis (final *–a*) versus realis (final *–o*), and today no marker for irrealis or realis can be detected. Remnants of the irrealis final *–a* are still present in contemporary Baure, for example in the irrealis suffix *–sha*.

One striking characteristic of Carmelito is the morphological tendency to isolation, which contrasts with Baure and Joaquiniano. For example, in Carmelito the privative *mo–* is used as a free standing particle for negative existential, whereas in Baure and Joaquiniano it is only found as a verbal prefix. This is illustrated in example (3) from Carmelito, and the contrasting examples (4) and (5), from historical Baure and Joaquiniano respectively.

Carmelito

(3) *Aw chas viti' mo to vichow to sor.*
aw *chas* *viti'* *mo* *to* *vi=cho–wo* *to* *sor*
not.like long.ago 1PL PRIV ART 1PL=know–COP ART soda
'Unlike in earlier times, we didn't know soda.' (NM-C-P090517P-1)

The examples (4) and (5) from historical Baure and Joaquiniano show the morphological construction of the privative as it is prefixed to predicates as a means of negation. It is no longer applied to verbs in contemporary Baure.

Historical Baure

(4) *Rimoki'inow.*
ri=mo–ki'ino–wo
3SG:F=PRIV–want–COP
'She did not want.' (Danielsen 2007: 188)

Joaquiniano

(5) *Ti Rosita koipo mojénubo.*
ti *Rosita* *koi–po* *mo–jeno–bo*
ART:F Rosita COP–PFV PRIV–good–COP
'Rosita is not well.' (Jarillo 2005: 28)

In modern Baure, the freestanding negative particle *nga* is used for the negation of verbs. However, in historical data, which is still preserved in today's songs, the privative prefix is used for productive negation of verbs. The data show a general tendency toward more isolation in all Baure dialects. However, this tendency is more advanced in Carmelito.

Considering the historical connection between the varieties, and the scarce data available on Joaquiniano, it is clear that the three dialects are closely related. Furthermore, they are substantially different from the other Arawakan languages in Bolivia. Danielsen and Terhart (2014) therefore propose the following subdivision of the South Arawakan languages into language groups.

ARAWAKAN

South Arawakan

Baure subgroup

Baure

Carmelito

Joaquiniano

Pauna subgroup

Paunaka

Paikoneka

Mojo subgroup

Trinitario

Ignaciano

Loretano

Javierano

Muchojeone

Terêna subgroup

Terêna

Kinikinao

Guané/Layana

Chané/Isoseño

Salumã/Enawené-nawé

Paresí subgroup

Paresí

Saraveka

Figure 2.4: The South Arawakan branch (after Danielsen and Terhart 2014).

2.3.3 TYPOLOGICAL SKETCH[35]

Baure is a polysynthetic, agglutinating language with little fusion. It is a head-marking and incorporating language and it is mainly suffixing. Although word order is relatively free in Baure, a preference for VSO is observed. Often

only one argument is realized, thus resulting in a VS or VO word order. The common underlying syllable structure is CV, but due to phonological processes, such as vowel elision, the surface structure may show a different pattern.

The verbal morphology is most complex and the number of verbal affixes adds up to at least 24. These are mostly suffixes and include different valency changing, aspectual, and modal affixes. On verbal predicates the subject is marked with a personal proclitic and the object is optionally marked by a personal enclitic on transitive verbs. This contrasts with the argument marking on non-verbal predicates, where the subject is marked by a personal enclitic, thus in the slot for object marking on transitive verbs.[36] Different levels of affixation are observed (see also Section 3.2.3 of Chapter 3), constraining both the linear order of the morphemes as well as the co-occurrence of morphemes in a verbal word. Baure has no case marking to distinguish the roles of the arguments of the verb. Baure shares a number of features with other Arawakan languages, such as the personal clitic forms and the position of marking S, A and O on the verb, formal and morphosyntactic similarities of verbal affixes, and the Proto-Arawakan attributive *ka–*, which is *ko–* in the Baure dialects, and privative *ma–*, which is *mo–* in the Baure dialects.

Unlike the verbal paradigm, the nominal morphology is relatively simple and there are only a few nominal suffixes, such as plural marking, the diminutive suffix and the locative suffix. Plural marking is not obligatory, and in fact often omitted, with the exception of nouns with human referents, on which the plural is always marked. Furthermore, Baure distinguishes between alienable and inalienable nouns. Typical inalienably possessed nouns are kinship terms and body parts. The possessor is marked by a personal proclitic and the order in possessive constructions with a nominal possessor is possessed-possessor. From the inalienably possessed nouns, free nouns may be derived by the absolute suffix *–ko* (ABS), and possessable forms may be derived from free nouns by means of the possessive suffix *–no* (POSS). Nouns are often

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[35] Only a brief typological sketch of Baure is given here, see Danielsen (2007) for an elaborate description of Baure grammar. The grammatical means that are relevant for spatial language are discussed in more detail in Chapter 3 of this book.

[36] Danielsen and Granadillo (2007) give a detailed description of argument marking in the two Arawakan languages Baure and Kurripako.

engaged in productive compounding forming different types of compounds among which are locative compounds and classifier compounds (Admiraal and Danielsen 2014). Baure has a rich classifier system with more than 30 classifiers, which are to a large extent grammaticalized. Classifiers are found in numerals, in nominal and adjectival compounds, incorporated into verbs, and in a number of cases these constructions are lexicalized (Terhart 2009).

2.3.4 ORTHOGRAPHY

The orthographical transcription used throughout this book has been developed in a series of workshops over the past 15 years. It was agreed upon by the speakers and the community, and it is now in the process of being acknowledged as the national standard orthography for the language. Baure has four phonemic vowels, /i/, /ɛ/, /a/, and /o/, represented in the orthography as <i>, <e>, <a>, and <o>, respectively. In words borrowed from Spanish, the grapheme <u> is sometimes used for the vowel /o/, especially in words that are common in both Spanish and Baure, and that do not take any Baure morphology (for example, *buen* from Spanish *bueno* 'well'). The Baure consonant inventory consists of the following phonemes: /h/, /j/ /k/, /m/, /n/, /p/, /r/, /s/, /ʃ/, /t/, /ʧ/, /v/, /w/, and /ʔ/. In the orthography, /ʧ/ is given as <ch>, /ʃ/ as <sh>, and /ʔ/ as <'>. Following local practice, /h/ is represented as <j>. In a few cases, allophones of the phonemes are reflected in the orthographic transcription. The voiceless consonants /k/, /t/, /ʧ/, and /p/ become voiced when following the nasals /m/ or /n/. This is especially frequent after the first person singular proclitic *ni=*. These voiced consonants are represented in the orthography as <g>, <d>, <zh>, and <b>. Finally, /f/, /l/, and /u/ occur only in words that were originally borrowed from Spanish. In the orthographic transcription, a hyphen is used for pragmatic enclitics, such as the quotative *-ji* and the exclamative *-nish*, and before the nominal locative suffix *-ye*. The Spanish rules for punctuation are followed, including the use of inverted question marks and exclamation marks.

2.3.5 SPEAKERS OF BAURE

Baure is a critically endangered language[37] and the speakers of Baure are all elderly people of the grandparental and great-grandparental generations. They are fully bilingual in Spanish, the dominant language in the region. According to the census carried out by the project 'The Documentation of Baure' in 2009 in the town of Baures and its surrounding communities, 56 people claim to have active knowledge[38] of the language. This number is based on self-assessment and only 17 people indicated that they can speak either very well or perfectly.[39] The competence of the 39 speakers that also regard themselves as Baure speakers ranges from semi-speaker capacity to only a few phrases. The number of Carmelito speakers is even lower. At the beginning of the Baure documentation project there were still six speakers, but at the time of writing this thesis only one of the Carmelito speakers is still alive. Joaquiniano only counts with semi-speakers, which are children of the speakers of Joaquiniano who do remember bits and pieces of the language spoken by their parents, but never spoke Joaquiniano actively themselves.

As is also observed by Krauss (2007: 6), the actual language ability of the last speakers of an endangered language may become an issue because of lack of practice. For Baure, even among the most fluent speakers a difference in language abilities is noticeable. Only one speaker possesses the art of story telling in such a magnificent way that she can produce a one-hour uninterrupted monologue. Roughly 5 or 6 other speakers also remember narratives, and can reproduce them, but much more hesitatingly, while the rest

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[37] See Krauss (2007: 1-8) on the classification and terminology for language endangerment.

[38] In the census, the people were first asked if they have any knowledge of the Baure language. The people that claimed to do so, were asked to assess their own abilities for understanding the language and for speaking it separately, according to a limited number of possible answers: *perfectamente* ('perfectly'), *muy bien, bastante* ('very well, considerably'), *muchas palabras y frases* ('many words and phrases'), *algunas palabras y frases* ('some words and phrases') and *no hablo* ('I don't speak'). Of the 74 people that claimed to have some knowledge, only those who claimed to speak the language are taken into account here, leaving out 18 people that only understand the language.

[39] In the census, the speakers were also asked their year of birth. Even though not all of them were sure about their year of birth and in some cases an estimate was made, 12 of the speakers that claimed to speak perfectly or very well were probably born in or before 1939.

of the speakers cannot produce any narratives.[40] In the Baure documentation project, determining the actual competence of individual speakers was never an issue, since with these low numbers, one cannot afford to discount any speaker. In fact, the data obtained from semi-speakers turned out to be a valuable addition to the documentation of the language. The use of classifiers was informally taken as one indication of the language ability. Whereas more fluent, usually older, speakers make use of the classifier system comprehensively, other speakers instead use the general classifier *–no* abundantly. This is regarded as 'improper Baure' by the more competent speakers. Differences in the speakers' abilities can also be observed in phonology (e.g. the omission of word-final *–i*, instead of palatalization of the preceding consonant) and in other morphological processes (e.g. the limited number of verbal suffixes used by semi-speakers).

Transmission of the Baure language from one generation to the next has been interrupted for several decades. Although there are few reliable sources on the use of the Baure language, it is clear that from the missionary period throughout the rubber boom in the early 20th century, Baure was actively spoken in town. Even foreigners or people who came from other parts of the country to settle in the towns learned the local language and passed it on to their children. Some of today's speakers are descendants of immigrants, but nevertheless learned Baure as a first language. Until well into the 20th century, the Baure language was still transmitted from one generation to the next and several thousand speakers were still reported in 1967 (see Table 2.1).

[40] Needless to say that this does not mean that they are less competent speakers; it only means that storytelling is a language ability that they don't have.

Table 2.1: Decline in the number of Baure speakers in the 20th century.

	Baure	**Carmelito**	**Joaquiniano**	**Total**
Baptista and Wallin (1967: 27)				5000
Key and Key (1967: 127)				3000-4000
INE[41] (2003)				67
The Documentation of Baure (2009)	54	5	5	64

In the 1950s and 1960s, the political climate in Bolivia was extremely hostile to indigenous languages. In schools, for example, it was prohibited to speak local languages. In those days, today's speakers were adolescents and young adults who started forming their families[42] and they stopped speaking Baure to their children. By that time, most of the population was already bilingual in Baure and Spanish and the latter gained popularity. Spanish took over more and more of the domains in which formerly Baure was spoken, such as communication within families and among peers. As a result, the language was no longer transmitted to the speakers' children, even though they did learn some of the language through the communication of grandparents and/or parents among themselves. Obviously, this also meant a breach in transmission to even younger generations, and today none of the children speaks Baure.

Nowadays, the Baure language is scarcely used in daily life. As was already mentioned, even the most fluent speakers do not speak the language on a

[41] Bolivia's national institute for statistics, the *Instituto Nacional de Estadística*, carried out a census in 2001 and published the results in the report *Características Sociodemográficas de la Población Indígena* (La Paz, 2003).

[42] Many speakers, 22 in total, were born between 1930 and 1939 and including the 4 speakers that were born between 1920 and 1929, this adds up to 26 speakers that were in their 20s and 30s around the mid-twentieth century. The 15 speakers that were born between 1940 and 1949 started forming their families even later, when the language was already spoken even less.

regular basis. Although a few speakers claim to speak Baure to each other in conversations, most often there are other people present and Spanish is spoken instead. The language use of the speakers is definitely rusty, and it may even be more appropriate to regard them as rememberers (Grinevald 2003) than as actual speakers, since they no longer speak the language actively. Nevertheless, they are still able to generate new sentences and their knowledge is not confined to remembering formulaic phrases (compare languages that Krauss (2007: 2) classifies as extinct). Apart from spoken communication, the language is hardly visible in the community, with the exception of a few phrases. For example, in a yearly election Miss Baures is chosen and awarded the title *Monchi Monik* ('beautiful girl').[43] In some cases, the presence of the documentation team in the village may have led to an increase in visibility of the language. This was probably the case of the song *Misishawonoe*', which was taught to the children in Baure language classes and was danced and sung during the presentation of traditional dances at the annual town fest the same year, even though it had not been presented there before (see Section 2.2.4, footnote 29). Within the community, the Baure language is often referred to as *dialecto*, 'dialect', even though people realize that it is unrelated to Spanish. Using the term 'dialect' is the common way of referring to indigenous languages in Bolivia and merely indicates its less formal status in comparison with the dominant language without making any claims about its affiliation as a dialect of a particular language.

2.3.6 LANGUAGE ATTITUDE AND LANGUAGE REVIVAL

Even though it is hard to give exact numbers, it is clear that many of the languages spoken in the world today are endangered to different degrees (see Brenzinger 2007; Moseley 2010, among others), and will disappear in the next century (cf. Crystal 2000; Grenoble and Whaley 2006). Over the past decades, along with the growing attention for indigenous populations and their cultural heritage, language revitalization programs have appeared all over the world.

[43] Even though everyone in town is familiar with this phrase, its use as the official title for Miss Baures is purely formulaic. *Monchi monik* is gender neutral, and actually means 'beautiful child', but no-one would interpret it as referring to a beautiful boy.

For Bolivia, counting both living and extinct indigenous languages, estimates range roughly from 40 to 55 (Adelaar with Musyken 2004; Danielsen and Hannß 2013; Lewis et al.; Moseley 2010). However, in line with the global tendencies, a considerable number of the still living Bolivian indigenous languages is critically endangered and may become extinct within the next few decades. The alarming rate at which Bolivian indigenous languages disappear has stimulated researchers to document and study these languages before they cease to be spoken. At the same time, Bolivian indigenous movements and national politics acknowledge the potential loss of indigenous languages, and strive to prevent this, each in their own way. In Bolivia today, the value of indigenous identities increased significantly and the revitalization of indigenous languages is encouraged.

In the new Bolivian constitution, accepted in 2009, Baure is mentioned as one of the 36 indigenous languages that are recognized as official languages, and it determines that all public officers are obliged to take courses in a local indigenous language.[44] In the same year a law was passed, introducing an educational reform that compels schools to offer bilingual education in Spanish and the local indigenous language. For some indigenous languages, this legislative impulse shows positive effects already, and language classes in Baure's close relative Trinitario, for example, are well on their way (Jesús Ojopi Chávez *pers.comm*.[45]). In trying to safeguard and promote traditions, the local government in Baures supports the documentation and revitalization of the language in every possible way. They assisted the Baure documentation team in propagandizing the project on the local television, and even contributed financially to the publication of two books (see also below). However, despite the relatively good institutional support and overwhelming communal support

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[44] *Constitución Política del Estado*, *Articulo 5* (Political Constitution of the State, Article 5). As part of a large project to make Bolivian politics more transparent to the public, the present Bolivian constitution is accessible online at http://bolivia.infoleyes.com/shownorm.php?id=469.

[45] Jesús Ojopi Chavez is a Baure man who works in Trinidad as an assemblyman in the departmental government of Beni. I am very grateful to him for the discussions we had on the introduction of indigenous languages in the institutional system of Bolivia. He helped me understand both the positive and negative effects of the legislation of revitalization efforts from a public officer's point of view.

that the Baure language receives, the achieved goals in the revitalization process are still very modest.

One of the main difficulties encountered in applying the educational reform is that none of the teachers of the local schools is a native Baure speaker, and none of the speakers is a qualified school teacher. Furthermore, teaching materials in the Baure language lacked completely. The Bolivian government does develop teaching materials in the local languages to a limited extent, but not for all languages. Nevertheless, in the elementary schools several language revival projects have been initiated. The teachers, even though they do not speak the language themselves, stimulate the children to learn some basic vocabulary and give them assignments for which they need to elicit language data from the elderly that do speak the language. By now, in most class rooms self-made posters with Baure texts relevant in a school context (e.g. *Jare' moestor*, 'Good morning teacher') are decorating the walls. At the annual school fair that marks the end of each school year, Baure glossaries with all the words that the children collected from the speakers are presented and thus shared with the parents and other people interested. The initiatives taken by the teachers are also transferred to the community at large, for example when children sing Baure songs at public school events, and at the annual town fest, which is partly organized by the schools.

The growing institutional support goes hand in hand with a more and more positive language attitude. The Baure are generally very proud of their cultural heritage, not in the last place because the Baure were supposed to be the most civilized of the ethnic groups that once populated the area. Along with traditional food and dances, the language is considered one of the characteristics with which the Baure like to distinguish themselves from other towns. The importance of revitalizing the language is not only stressed by the speakers, but also often commented on by other community members. Local non-governmental organizations that contribute to the popularization of the Baure language are the *Subcentral Indígena de Baures*, and the *Centro Cultural y Ambiental de Baures*.[46] For several years now, the *Subcentral Indígena* is trying

[46] The *Centro Cultural y Ambiental de Baures* (Cultural and Environmental Centre of Baures) was founded in 2010 and is financed by the Bolivian NGO *Fundación Amigos de la Naturaleza*

to get a language program started. They participate in regional initiatives for language revitalization and have received a substantial financial contribution from the government to do so. Unfortunately however, the instability of the organization and lack of decisive power has repeatedly led to postponing the activities. In the *Centro Cultural y Ambiental* a small exhibition based on the materials collected by the Baure documentation team was held. In addition, they offered their office space to the Baure documentation team teaching Baure to the children, and the staff of the center participated in these classes as well. The work of the center is promoted with commercials on the local radio, and in one of them the importance of the Baure language is stressed and people are encouraged to learn Baure from their grandparents.

The team members of the project 'The Documentation of Baure' have tried to make the collected materials available to the community and to assist the community in their initiatives for language revitalization as much as possible. In the course of the project several materials have been produced for the community. In 2010, the storybook *Chinepinev – Cuentos de los Baure* was published and distributed throughout the Baure community. The storybook entails a collection of stories, songs and personal narratives in Baure with Spanish translations. In 2014, a second and more elaborate version of the storybook was published (PDIB 2014). Especially for people living outside of Baures that have regular access to computer facilities and an internet connection,[47] a digital online Baure language course[48] is under constant development. The digital course consists of a vocabulary trainer and a description of the Baure grammar. The digital Baure language course is available online since 2010, and an offline version was distributed in the community in the same year. As an answer to the teachers' request to elaborate

(Foundation Friends of Nature). They are mostly organizing activities for children focusing on environmental issues.

[47] Currently, there is one computer centre facilitated by the local government, but in general, more and more computers are seen in town.

[48] The online Baure course is called '*Shi vikarow to vekori*', and currently consists of a vocabulary trainer and grammar sketch. Plans for further development include the addition of audio recordings of basic phrases for everyday use. The course is available at: http://www.uni-leipzig.de/~baureprj/activities/Shi_vikarow_to_vekori_2_1/Curso_Baure.htm.

teaching materials for the Baure language, a bilingual memory game[49] and a Baure course book[50] have been developed. The memory game consists of 35 sets of matching cards with drawings made by the children in Baures, and in each set, one card contains the Baure word and one card contains the Spanish word. The game is aimed mainly at the (younger) children, and is very easily accessible, for Baure speakers as well as for non-speakers, for (illiterate) adults as well as for (pre-school) children. The Baure course book (PDIB 2012) is developed specifically for teaching the Baure language in primary school. It is a basic introduction to the Baure language, and consists of an exercise book and a teacher's manual. It has been taken into account that the teachers are actually learners themselves and it is therefore assumed that neither the teachers, nor the students have any knowledge of the language. The exercise book contains 11 Chapters with exercises for the basic grammar topics such as pronouns, nouns, verbs and numbers. At the end of the book, a thematic vocabulary list is included, which covers kinship terms, body part terminology, food, animals, the natural surroundings, and vocabulary used in daily life in and around the house, such as domestic utensils. The teachers' manual is subdivided into two parts. The first part is related to the course book and contains the answers to the exercises and homework suggestions. The second part of the teachers' manual contains an elaborate description of Baure grammar, which the teachers can consult for more details on the topics treated in the course book. Finally, the teachers' manual includes an audio CD, on which the audio fragments for the exercises are recorded, as well as songs and a story in Baure. The materials produced by the Baure documentation team will hopefully enhance the knowledge of the language and help the Baure preserve this part of their cultural heritage.

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[49] The memory game was produced with financial support from the Endangered Language Fund.

[50] The course book was produced with financial support from the Foundation for Endangered Languages, the Alice Cozzi Heritage Language Foundation, and the Municipality of Baures (*Gobierno Autónomo Municipal de Baures*).

CHAPTER 3:

BAURE GRAMMATICAL RESOURCES FOR SPATIAL DESCRIPTION

In the description of location and motion, different morphosyntactic units come into play. In this chapter, the Baure grammatical resources for expressing location and motion are introduced, laying the groundwork for the following chapters. The chapter is subdivided into three parts. In the first part, the Baure locative noun phrase is introduced; its basic structure is presented and a closer look is taken at the locative noun stems and the different constructions in which they are used. Secondly, predicates used for expressing spatial notions are discussed. Not only are the most frequent motion verbs presented, but attention is paid to other elements that contribute to the spatial interpretation as well, such as preverbal particles, verbal suffixes, and incorporated nouns. In the final part, Baure articles, nominal and adverbial demonstratives are discussed.

3.1 LOCATIVE NOUN PHRASES

3.1.1 BASIC STRUCTURES

One of the core elements of Baure spatial language are the locative noun phrases discussed in this section. They are relevant not only for encoding static location, but also for encoding dynamic motion events. In Baure, one can answer the question *Where is X?*[51] by using one out of three types of constructions, which are basically three variants of a construction consisting of an existential/positional verb plus a locative noun phrase. The first, and formally the simplest construction is the basic locative phrase described in Section 3.1.1.1. The second construction, the locative possessive construction,

[51] Levinson and Wilkins call the predominant construction used to answer a Where-question the Basic Locative Construction (Levinson and Wilkins 2006: 15).

is introduced in Section 3.1.1.2, and the third type, a locative compound, in Section 3.1.1.3.

3.1.1.1 Locative marker

For marking location on noun phrases, Baure uses one general locative morpheme *–ye* (LOC). This locative morpheme does not specify the nature of the spatial relation, but rather marks location in general. The locative marker has an allomorph *–yi*, which is used as a verbal suffix and is further discussed in Section 3.2.2.2. The basic structure of the locative noun phrase is presented in Figure 3.1.

[[N] –LOC]
[[*jopi*] *–ye*]
[[jar] –LOC]
'in the jar'

Figure 3.1: Basic structure of a locative NP.

As was already observed by Danielsen (2007: 150–152), the locative marker is suffixed to free nouns, as in Figure 3.1, but it is also suffixed to possessed nouns. Example (1) shows locative marking on a possessed noun and example (2) shows locative marking on a possessed loan word from Spanish. Furthermore, the locative marker is suffixed to compounds as in example (3).

(1) *riwer-ye*
ri=wer–ye
3SG:F=house–LOC
'in her house' (CS-N081220F-1)

(2) *restansia-ye*
ro=estansia–ye
3SG:M=ranch–LOC
'at his ranch' (RP-N090127F-2)

(3) *inowok-ye*
ino–wok–ye
water–place–LOC
'in the water' (DC-091122F)

To a limited extent, the locative marker can also be suffixed to adverbs.[52] Danielsen (2007: 106) argues that this is ungrammatical, but there are a few examples in the database where the locative marker is directly attached to place adverbs, as shown in examples (4) and (5). However, example (4) was taken from the Baure song *Korpochi*, '*La Corpita*', and Danielsen (2007: 106, ft. 101) claims that this combination may only be possible here due to rhyme and rhythm.

(4) *ne'-ye*
ne'–ye
here–LOC
'here' (JP-040709S-1)

(5) *noiy-ye*
noiy–ye
there–LOC
'there' (RP-N090921FE-1)

[52] Baure adverbs are not easily distinguished from nouns, for example in the case of time adverbs that may also occur with a determiner (see also Danielsen 2007: 105-106).

The use of the locative marker suffixed to the place adverb *pake*, 'other side', and the time adverb *nakirok*, 'former times',[53] is lexicalized to a great extent and both adverbs seldom occur without the locative marker.

(6) *pake-ye*
pake–ye
other.side–LOC
'on/at/to the other side' (CS-N090126F)

(7) *nakirok-ye*
nakirok–ye
former.times–LOC
'in former times' (MD-081203F)

The locative marker can be followed only by clausal enclitics, the quotative *=ji*,[54] the exclamative *=nish*, and the approval marker *=ensh*, as in examples (8) to (10).[55]

(8) *jowoki-ye-ji*
jowoki–ye=ji
hole–LOC=QUOT
'in the hole, it is said' (RP-N090105F-1)

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[53] The translation 'in former times' is chosen because it reflects the locative and is closest to the Spanish translation that the speakers give for it, '*antes*'. It is often used as the introductory phrase to a narrative, and could also be translated more literary as 'once upon a time'.

[54] The quotative marker *=ji* is usually translated by the speakers as *dizque*, which is contraction of *dice que*, 'it is said that'. It is a characteristic of many variants of South American Spanish, and covers a range of meanings that are often invoked by evidential markers in indigenous languages, such as reported speech, quotation or inference (Aikhenvald 2012: 272–274). In Baure, the quotative *=ji* is nowadays mostly used in narratives, but Danielsen (2007: 378) argues that it may have been used as a type of evidential in direct speech as well.

[55] In the database there is also one example of the locative followed by the diminutive: *kofer–ye–chi*, jewelry.case–LOC–DIM, 'in the little jewelry box'. However, this is one single occurrence only and therefore not considered a regularly used construction.

(9) *nakirok-ye-nish*
nakirok–ye=nish
former.times–LOC=EXCLA
'Well, in former times' (RP-N090127F-1)

(10) *poewok-ye-ensh*
poewok–ye=ensh
ground–LOC=APRV
'on the ground indeed' (CS-N081220F-1)

The locative marker *–ye* expresses a prototypical or expected relation and makes no further specification of the exact type of relation (Danielsen 2007: 150). As such, it can be used to encode different types of spatial relations, as illustrated in examples (11) to (15),[56] which all show different spatial dimensions (cf. Levinson and Wilkins 2006: 9–10). Furthermore, it does not differentiate between animate and inanimate Grounds, places, objects or landmarks.

+ horizontal support

(11) *Kwe' nikirok mesi-ye.*
kwe' nikirok mesi–ye.
exist plate table–LOC
'There is a plate on the table.' (JI-030822S)

[56] Note the glossing of the positional verb *kwore'* in these examples. This positional (see also Section 3.2.1.3 of this chapter and Section 5.2.1.1 of Chapter 5) can be further segmented as *ko–wo–ro–i* (ATTR–COP–3SG:M–EMPH). The complete paradigm with the other person markers is given in Section 5.2.1.1 of Chapter 5. A related form *kwe'* also appears in a number of examples. *Kwe'* is not marked for person and can be used with both singular and plural subjects. The existential verbs of this paradigm are not segmented throughout this book, but glossed as a unit. Whereas *kwe'* is used for generic reference, the forms marked for person are used for more specific reference.

+ attachment

(12) *Kwe' to eponoe' etsie-ye.*
kwe' *to* *eponoe'* *etsie–ye*
exist ART leaf branch–LOC
'There is a leaf on the branch.' (LO-030829S)

+ complete containment

(13) *Kwoni pari-ye.*
kwoni *pari–ye*
exist.1SG house–LOC
'I am in the house.' (JI-030822S)

+ negative space

(14) *To jowoki kwore' pania'-ye.*
to *jowoki* *kwore'* *pania'–ye*
ART hole exist.3SG:M towel–LOC
'The hole is in the towel.' (RP-030912S)

+ encirclement

(15) *To korvat kwore' yakopi-ye.*
to *korvat* *kwore'* *yakopi–ye*
ART tie exist.3SG:M candle–LOC
'The tie is around the candle.' (LO-030829S)

The examples above all involve static location, but the general locative marker is also used in the expression of motion events for marking the different local roles Source, Goal, Path, and Place. Structurally, no difference is observed in the encoding of the local roles, as can be seen in examples (16) to (19).

Source

(16) *Navikop ndovian-ye.*
ni=aviko–po *ni=tovian–ye*
1SG=return–PFV.RFLX 1SG=neighbor–LOC
'I returned from my neighbor.' (RP-030901S)

Goal

(17) *Noechmikier ewokoe'-ye.*
no=ichmi–ko=ro *ewokoe'–ye*
3PL=put.up–ABS=3SG:M tree–LOC
'They put it up in the tree.' (MD-N090103F)

Path

(18) *Nokach wapoer-ye nojavich, ishkon noshimsha noiy.*
no=kach *wapoer–ye* *no=javich* *ishkon* *no=shim–sha* *noiy*
3PL=go river–LOC 3PL=paddle until 3PL=arrive–IRR there
'They paddled along the river, until they arrived there.'
(RP-N090921FE-1)

Place

(19) *Nijaviak wapoer-ye ach ikapokoe' narom*
ni=javiak *wapoer–ye* *ach* *ikapokoe'* *ni=arom*
1SG=swim river–LOC and nearly 1SG=drown
'I swam in the river and nearly drowned.' (DC-060404S)

As the examples above show, the locative marker itself only indicates that the argument to which it is suffixed needs to be interpreted as a component of the location or motion event, but it does not specify the nature of a spatial relation or the role of the argument in a motion event. The exact interpretation of the locative noun phrase to which the locative marker is suffixed depends on other factors than the linguistic encoding, such as context and pragmatics. In addition, the verb can give away essential clues on how to interpret the locative noun phrase. This is further discussed in Chapters 4 and 5.

3.1.1.2 Locative possessive noun phrase

Since the locative marker *–ye* encodes a wide range of different spatial relations, if the semantic content of a specific relation is encoded, this is done elsewhere in the phrase. Atypical or otherwise more specified spatial relations are encoded in a set of locative noun stems (Danielsen 2007: 152–154). The majority of the locative noun stems are inalienably possessed nouns, which are discussed below in Section 3.1.2, and can be used in two types of locative noun phrases. The first possibility is to form a locative possessive noun phrase consisting of a locative noun stem marked for person and followed by the locative marker, which is juxtaposed to the Ground-denoting noun, often preceded by an article or demonstrative. The general structure of this construction is given in Figure 3.2.

$$[[\text{PSN.PRCL}=\text{N}_{\text{locative}}\text{–LOC}]\ [\text{ART}\ \text{N}_{\text{ground}}]]$$

Figure 3.2: Basic structure of the locative possessive noun phrase in Baure.[57]

Example (20) shows the use of the locative noun stem *–api* 'under' and (21) that of *–imir* 'in front', a locative noun stem based on a body part term (see also Section 3.1.2.1 of this chapter).

(20) *Kwe' to tawe' ne' rapi-ye to mes.*

kwe'	*to*	*tawe'*	*ne'*	*ro=api–ye*	*to*	*mes*
exist	ART	ball	here	3SG:M=under–LOC	ART	table

'There is a ball here under the table.' (DC-090924F)

[57] Danielsen (2007) calls this type of noun phrase the 'partitive construction', and in Admiraal (2013) the more neutral term 'complex noun phrase' is used. However, given the current analysis of the locative noun stems as inalienable nouns, the term locative possessive construction is preferred here, because it best reflects the Baure.

(21) *Kwore' roemiri-ye to ewokoe'.*

kwore'	*ro=imir–ye*	*to*	*ewokoe'*
exist.3SG:M	3SG:M=in.front–LOC	ART	tree

'He is in front of the tree.' (DC-091122F)

The locative possessive noun phrase structurally resembles other possessive constructions in Baure. In (22) an example is given of a non-locative possessive construction, with the kinship term *–shechenev* 'children'.

(22) *to rishechenev ti misi*

to	*ri=shechenev*	*ti*	*misi*
ART	3SG:F=children	DEM1:F	cat

'the children of the cat' (HC-090122F)

In non-locative possessive noun phrases, the possessee is not necessarily marked for person, though. Likewise, not every locative noun stem in locative possessive noun phrases carries a personal proclitic, and some never do, such as *ani* 'above' (see Section 3.1.2.1).

Like many Amazonian languages, Baure distinguishes alienable from inalienable nouns, including kinship terms and body part terms in the latter category, which are the type of nouns known to be universally included in the class of inalienable nouns (Nichols 1992: 160), if a language makes such a distinction. In Baure, the locative noun stems expressing spatial relations, as well as nouns in constructions expressing part-whole relations, body part terms, and kinship terms are obligatorily marked for possession. This is consistent with the alienability hierarchy suggested by Nichols (1992: 160), presented in Figure 3.3.[58]

[58] In Baure, animal body parts and plant parts likewise belong to the class of inalienable nouns. Furthermore, there is a small class of inalienable nouns for which an alienable form may be derived by means of the absolute suffix *–ko* (e.g. *ro=toer*, 'his field' vs. *toerok*, 'field'). Additionally, there is an even smaller class of inalienable nouns that have suppletive forms, one obligatorily possessed and one unpossessable (e.g. *ro=wer* 'his house' vs. *pari* 'house')(see also Danielsen 2007: 118–125 on possession). These two types of nouns all seem to belong to what Nichols labels 'culturally basic possessed items' (1988: 572). These culturally basic possessed items are typically lower ranked in the implicational hierarchy than nouns expressing spatial relations.

kin term body part	>	part-whole term spatial relations	>	...

Figure 3.3: Implicational hierarchy of inalienably possessed nouns (after Nichols 1988: 572 and 1992: 160).

The internal structure of the locative possessive noun phrase could be described as the possessed noun being the head of the construction and the possessor noun the modifier. However, Hengeveld and Mackenzie (2008: 384) argue that a distinction should be made between possessive noun phrases in which a head noun is modified and possessive noun phrases in which the possessed noun is the nucleus, which selects an argument, the possessor noun. In contrast to most other nouns, inalienably possessed nouns are not avalent, but obligatorily select an argument. Following this approach, in (23), the possessed locative noun *–shiriwani*, 'behind', is the nucleus of the locative possessive noun phrase, which selects the possessor noun phrase to *ewokoe*', 'tree', as an argument.

(23) *roshiriwani-ye to ewokoe*'
ro=shiriwani–ye *to* *ewokoe*'
3SG:M=behind–LOC ART tree
'behind the tree' (DC-091122F)

3.1.1.3 Locative compounds

Apart from the basic and the possessive locative noun phrase, the locative noun stems can be used to form a compound, consisting of a Ground-denoting noun (N_{ground}) and a left-bound locative noun stem ($N_{locative}$). These types of constructions are noun compounds, consisting of two nominal roots to which

the locative marker is attached.[59] The general structure of the Baure locative compound is presented below in Figure 3.4.

$[N_{ground}\text{-}N_{locative}\text{-}LOC]$

Figure 3.4: Basic structure of the locative compound in Baure.

Example (24) shows the use of the locative noun stem *–api* 'under' and (25) shows the use of *–imir* 'in front' in a locative compound.

(24) *Kwore' ewokoe'api-ye.*
kwore' *ewokoe'–api–ye*
exist.3SG:M tree–under–LOC
'He is under the tree.' (GP-060312S)

(25) *Kwore' noiy resiamiri-ye.*
kwore' *noiy* *resia–imir–ye*
exist.3SG:M there church–in.front–LOC
'He is there in front of the church.' (HC-Q030913S)

Not all of the locative noun stems are attested as part of a compound (see also Section 3.1.3 of this chapter). Although it is possible that not the entire range of possibilities is reflected in the data set, it is clear that the compound construction is more restricted than the locative possessive noun phrase. Whereas all of the locative noun stems can be use in locative possessive constructions, some of the locative noun stems cannot be used in a compound construction.

Based on phonological criteria, such as change in stress pattern, and phonological rules that apply word internally and not at word boundaries (see

[59] The locative compound presented in Figure 3.4 is a compound of two nouns. Similarly, the locative marker can be suffixed to compounds consisting of a noun or adjective followed by a classifier (Admiraal and Danielsen 2014; Danielsen 2007: 151).

Danielsen 2007: 61–81), it is concluded that the locative constructions of this type should be regarded indeed as compounds. In compounds, primary stress is on the locative noun stem (usually penultimate syllable) and it occurs only once. In the complex noun phrase, however, both the locative noun and the noun referring to the Ground are stressed. This is shown in examples (26a) and (26b), in which the stressed syllable is underlined.

(26a) *ewokoe'<u>a</u>pi-ye*
ewokoe'–api–ye
tree–under–LOC
'under the tree' (RP-Q040706S-2)

(26b) *r<u>a</u>pi-ye to <u>ew</u>okoe'*

ro=api–ye	*to*	*ewokoe'*	
3SG:M=under–LOC	ART	tree	

'under the tree' (RP-Q040706S-2)

Furthermore, no pause is possible between the two nouns of a compound and it clearly forms a single phonological word. The stress patterns are the same in other (non-locative) compounds and possessive constructions. Examples of the stress patterns in a non-locative compound and possessive construction are given in (27a) and (27b) respectively.

(27a) *tiporek<u>po</u>'e*
tiporek–po'e
chicken–head
'chicken head'

(27b) *to ri<u>po</u>'e ti ti<u>po</u>rek*

to	*ri=po'e*	*ti*	*tiporek*
ART	3SG:F=head	ART:F	chicken

'the head of the chicken'

Among the syntactic criteria for compounds that are mentioned in the literature (cf. Booij 2005; Dixon and Aikhenvald 2002; Haspelmath 2002; Lieber and Štekauer 2009; Wälchli 2009; among others) are the impossibility to modify the constituents of the compound separately, and the impossibility to separate the compound. As for the locative compounds in Baure, it is quite complicated to study the possible modification of the compounds for practical reasons. Since the compound refers to an object region (Klein 1991, see also Chapter 4), which is a space demarcated by the Ground object, this is not easily modified from a semantic point of view. In the data base, there are no clear examples of locative compounds that are modified as a whole, nor examples of the modification of the nucleus of a locative compound. When the dependent is modified, the locative possessive noun phrase is used instead of the compound, as in example (28).

(28) *rapi-ye to ewokoe' chonok*
ro=api–ye *to* *ewokoe'* *chonok*
3SG:M=under–LOC ART tree big
'under the big tree' (HC-090122F)

Another syntactic criterion for identifying a compound as opposed to a phrase is that a compound is inseparable. For the Baure locative compounds, this criterion holds since they cannot be separated by another element inserted between the two nouns. In (29) an example is given of an ungrammatical compound with a plural marker between the two nominal components. Example (30) shows that breaking up the two components by adding a person marking to the locative noun stem also results in an ungrammatical construction.

(29) **ewokoe'nev'api-ye*
ewokoe'–nev–api–ye
tree–PL–under–LOC
'under the trees'

(30) **ewokoe'rapi-ye*
ewokoe' *ro=api–ye*
tree 3SG:M=under–LOC
'under the tree'

3.1.2 LOCATIVE NOUN STEMS

In the previous sections it was shown that the Baure locative noun stems are a type of inalienable nouns. In Baure, all nouns minimally consist of a root, but some nouns are analyzable as a root plus derivational morphology, which together form a noun stem. Noun stems include compounds with other noun roots or classifiers (Danielsen 2007: 115–116). Most of the locative noun stems are identical to their corresponding roots, except for the composed forms discussed in Section 3.1.2.2. These composed noun stems form a compound with the noun root *–wani* when used in locative possessive noun phrases. In order to cover the different forms with a single consistent term, all of the forms are referred to as locative noun stems throughout this work.

As in many languages, the two main origins of the Baure locative noun stems are body part terms and nouns denoting parts of the natural surroundings. Furthermore, there is a small class of locative noun stems of which the origin cannot be traced. The fact that the origins of spatial markers often lie in body part terminology and environmental landmarks is well known from the literature (e.g. Heine 1989; Svorou 1993). This process of semantic extension is presented in Figure 3.5. From designating the particular body part or landmark itself, its meaning gets extended to the relational part of the object, such as the use of the term for 'face' for the facade of a house, as shown in Figure 3.5. After further semantic extension, the body part term comes to indicate a location still in contact with the particular relational part, such as the strip of ground directly in front of a house. Eventually, after further semantic extension the particular body part term may refer to a region projected from the relational object part (Svorou 1993), the so-called 'object region' (Klein 1991).

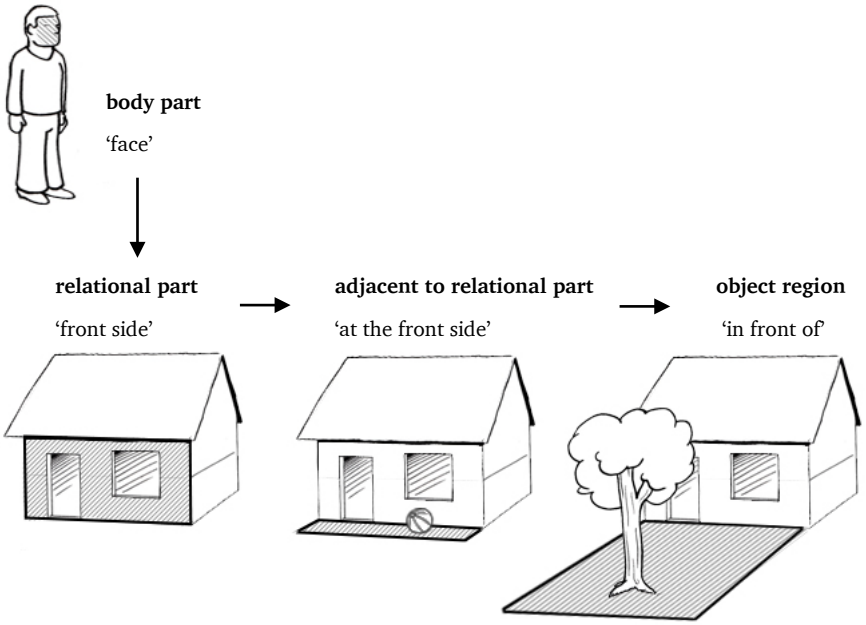

Figure 3.5: Semantic extension of body part terms to object regions.

In languages that use body part terms for spatial reference, this semantic extension from body part term to object region does not necessarily take place. For example, Brown observes that in Tzeltal the relational nouns based on body part terminology cannot be extended to indicate a region beyond the borders of the body or object (Brown 2006: 242–243). In Baure, it is unusual to refer to a relational part of an object with a body part term if no spatial reference is involved (e.g. 'paint the front side of the house').

In addition, not all of the body parts are necessarily involved in this process. In Baure, for example, only *–imir* 'face', *–chipi* 'back', and *–shirie*' 'heel' may be used to indicate an object region. The other body parts only refer to the proper body part, as in example (31a). Even when a body part that is not

used as a locative noun stem is marked with the locative marker, it does not refer to an object region. Example (31b) shows that a body part marked with the general locative marker denotes only a particular spot on the body part, in this case the shin.

(31a) *riparokori ti tiporekchi.*
ri=parokori *ti* *tiporek–chi*
3SG:F=shin ART:F chicken–DIM
'the little chicken's shin' (DC-081202SF)

(31b) *riparokori-ye ti tiporekchi*
ri=parokori–ye *ti* *tiporek–chi*
3SG:F=shin–LOC ART:F chicken–DIM
'on the little chicken's shin'

It is worth noting that the use of the locative noun stems in their possessed form or as part of a compound is not attested without the locative marker. In other words, the locative marker is obligatorily suffixed to any noun phrase containing a locative noun stem, and example (32) is thus ungrammatical.

(32) **rapi to mes*
ro=api *to* *mes*
3SG:M=under ART table
'the underside of the table'

The exceptions are, of course, those locative noun stems that are also used as noun stems without spatial reference, such as the body part terms *–chipi* 'back', and *–imir* 'face'.

(33) *rimiri-ye ti sopir*
ri=imir–ye *ti* *sopir*
3SG:F=in.front–LOC ART:F tortoise
'in front of the tortoise' (RP-091017F)

(34) *ti rimir ti sopir*
ti *ri=imir* *ti* *sopir*
ART:F 3SG:F=face ART:F tortoise
'the face of the tortoise' (RP-091017F)

In the sections below, the locative noun stems are presented according to their origin. After that, two specific forms are introduced; the composed forms and the classifier-like locative noun stems. Finally, the use of each locative noun stem in the locative possessive construction and the locative compound is discussed.

3.1.2.1 Locative noun stems and their derivation

The Baure locative noun stems derived from body part terms are listed below in Table 3.1. The table lists the body part term and the locative noun stem, which is in most cases the same in form.[60]

Table 3.1: Locative noun stems derived from body part terminology.

Body part term		**Locative noun stem**	
–chipi	'back'	*–chipi*	'on top'
–imir	'face'	*–imir*	'in front'
–shirie'	'heel'	*–shiri / –shiriwani*	'behind'

In Baure, the noun stems used in locative constructions based on body part terminology are *–chipi* 'back', *–imir* 'face', and *–shirie'* 'heel'. The semantic

[60] In order to make a distinction between the body part terms on the one hand, and the derived locative noun stems on the other, one could argue that the general locative marker *–ye* is part of the locative noun stems, resulting in *–chipiye*, *–imiriye*, and *–shiriwaniye*. In locative noun phrases, indeed these locative noun stems do not occur without the locative marker when they are used for spatial reference. In predicates, however, the locative noun stems are used without the locative marker. Therefore, no distinction is made in representation between the body part term and the derived locative noun stems. The glossing as a body part term or as a locative noun stem therefore depends on the semantics of each particular example.

extension of the body part term *–chipi*, 'back', to the spatial meaning 'on top' is modeled on the back of a quadruped animal (following the 'zoomorphic model', see Svorou 1993: 73–79). This particular body part term furthermore functions as a classifier for a roof or otherwise flat and raised surface (Danielsen 2007: 146; Terhart 2009: 44–45; see also Section 4.1.1.2 of Chapter 4). There may have been more body part terms in use in locative noun phrases. In the Baure data there are a few instances of, such as *–jeki* 'belly' used for the inside of a kitchen building, and *–pasiri*, 'nose', for the tip of a boat. Examples are given in (35) and (36) respectively. Since these examples are very rare in the database, and the body part terms seem to be used in a locative sense only with a limited set of Ground objects, they are not included in the analysis.

(35) *kosinjeki-ye*
kosin–jeki–ye
kitchen–belly–LOC
'inside the kitchen' (DC-091122F)

(36) *yashorpasiri-ye*
yashor–pasiri–ye
boat–nose–LOC
'at the bow of the boat' (RP-101014F)

The Baure locative noun stems derived from a landmark include two terms used for opposite spatial reference, namely 'sky' and 'ground', and a term connecting these opposites derived from 'trunk'. The forms are listed in Table 3.2.

Table 3.2: Locative noun stems derived from natural surroundings.

Environmental landmark		**Locative noun stem**	
ani	'sky'	*ani*	'above'
–poe	'ground'	*–poe / –poewani*	'down', 'beside'
–she	'trunk'	*–she*	'on top', 'along'

The locative noun stem *–poe* 'down' was probably derived from the nominal root *–poe*, which is still found in *poewok* 'ground/floor', for example (see also Section 4.1.2.2 of Chapter 4). It then got semantically extended, and in locative possessive noun phrases it is nowadays used for 'down' or 'beside'. When the noun root *–poe* is incorporated into verbs (see Section 3.2.3), it refers to a movement downwards. As can be observed in Table 3.2, these locative noun stems are not a completely homogenous group. Whereas most of the locative noun stems discussed above are inalienable nouns, the locative noun stem *ani* 'above' is not bound, and cannot be marked by a personal proclitic. The locative noun stem *–she* 'on top' is derived from an inalienable plant part and is not frequently used in noun phrases. Instead, it occurs mostly as a predicate base (see also Section 3.2.1.3).

Finally, there are two locative noun stems for which no lexical origin can be traced. Those forms are listed in Table 3.3.

Table 3.3: Locative noun stems without traceable origin.

Locative noun stem	
–api	'under'
ikiyiki	'middle'

In (26a) and (26b), examples of the bound locative noun stem *–api* 'under' were already presented. The locative noun stem *ikiyiki* is not bound and seems

to be a lexicalized form of a classifier compound (see Section 4.1.3.2 of Chapter 4). However, whereas the classifiers proper cannot be used in a locative possessive noun phrase, *ikiyiki* can be. The locative noun stem *ikiyiki* is found both with and without personal marker, as is observed in (37) and (38).

(37) *Ikiyiki-ye to yaskon.*
ikiyiki–ye *to* *yaskon*
middle–LOC ART yellow.one
'The yellow one (is) in the middle.' (LO&GP-090927F)

(38) *Rikiyiki-ye ti tiporek.*
ri=ikiyiki–ye *ti* *tiporek*
3SG:F=middle–LOC ART:F chicken
'The chicken (is) in the middle.' (RP-091017F)

Interestingly, when the locative noun stem *ikiyiki* is used with a personal proclitic, as in (38), the proclitic does not refer to the Ground objects as in the other locative possessive noun phrases, but to the Figure instead.

3.1.2.2 Composed forms

The locative noun stems *–poe* and *–shiri* in their possessed form combine with *–wani*, which denotes a general place (Danielsen 2007: 153).[61] In compounds, the use of *–wani* is sometimes rejected, as is shown by the ungrammaticality of example (39). The ungrammaticality is not due to the Spanish loan *mes* (*mesa* 'table'), since the compound with the Spanish loan *siy* (*silla* 'chair') was accepted. It remains unclear what the restrictions of the use of *–wani* in compounds are exactly and why (40) and (41) are considered grammatical and (39) is not. It should be taken into account though that, due to the limited use, the language is in decay, and the systematic and productive forming of compounds may be in decay as well.

[61] This may have been more productive representing one stage in the grammaticalization of the locative noun stems when the 'region' interpretation was still marked.

(39) **meshiriwani-ye*
mes–shiriwani–ye
table–behind–LOC
'behind the table' (DC-091122F)

(40) *siyshiriwani-ye*
siy–shiriwani–ye
chair–behind–LOC
'behind the chair' (RP-030912S)

(41) *paripoewani-ye*
pari–poewani–ye
house–beside–LOC
'beside the house' (DC-060415S)

In compounds and locative possessive noun phrases, the composed forms are used, *–shiriwani* and *–poewani*, but in other constructions only the locative noun stem is used and *–wani* is omitted. As was pointed out by Danielsen (2007: 153), *–wani* seems to mean a general 'place' or 'space'. It always forms a compound with the locative noun stems *–shiri*, 'behind' and *–poe*, 'down' when used in the locative possessive construction, thus resulting in *–shiriwani* and *–poewani*. Locative compounds with *–shiri* and *–poe* can be formed with or without *–wani*, and the basic forms are incorporated into verbs without *–wani* (see Chapter 5 on locative noun stems incorporated into verbs). In contemporary Baure *–wani* is no longer a productively used noun stem. In the data an example of *–wani* without *–shiri*, 'behind', or *–poe*, 'down' is found only once, which is presented in (42).

(42) *jornawani-ye*
joron–wani–ye
oven–place–LOC
'In the opening of the oven'[62] (DC-060415S)

In the historical data, however, *–bane* is mentioned as one of the particles, meaning 'after' (*después*) or 'behind' (*de atrás*) (Magio 1880: 26). Although in the historical sources only a few examples are given, all similar to the one presented in (43) where *–bane* is used in a temporal sense, the Jesuits' analysis suggests that *–wani* was still used productively in those days, and suffixed to possessed as well as unpossessed nominal roots.[63]

(43) *fiestabane*
'*después de la fiesta*'
'after the festivity' (Magio 1880: 26)

In the database there is one example in which the locative noun stem *–poe* is used in a compound without *–wani*, which is presented in (44). However, it is arguable whether in this case *–poe* is used as a locative noun stem. The speaker is talking about a frog sitting in a jar on the first page of the storybook 'Frog, Where Are You?'. With *jopipoe-ye*, she is referring to the bottom part of the jar, and not to the space surrounding the jar. In this case *–poe* is used as a classifier rather than as a locative noun stem (see Section 3.1.2.3).

(44) *jopipoe-ye*
jopi–poe–ye
jar–CLF[ground]–LOC
'on the bottom of the jar' (HC-090122F)

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[62] In Baures, most households still have a large clay oven behind the homestead. The opening is around 50 cm wide and 80 cm in height.

[63] In contemporary Paunaka, *–bane* is used as a past marker, which seems to have been grammaticalized from a cognate form of Baure *–bane*.

3.1.2.3 Classifier-like forms

In Baure, some of the locative noun stems show a great degree of similarity with the classifiers. Baure has a rich classifier system, with more than 30 classifiers, which are found in numerals, in nominal and adjectival compounds, incorporated into verbs. In a number of cases these constructions are lexicalized (Terhart 2009). Compounds formed with classifiers are morphosyntactically similar to locative compounds formed with the locative noun stems, and both can be seen as one type of structural compounding (Admiraal and Danielsen 2014). Examples (45a) and (45b) show the use of classifiers in a classifier compound with the noun *yaki*, 'fire' in the N_1 position, and in (46) a locative compound with the same N_1 is presented.

(45a) *yakopi*
yako–pi
fire–CLF[long&thin]
'candle'

(45b) *yakis*
yaki–so
fire–CLF[stick]
'firewood'

(46) *yakipoewani-ye*
yaki–poewani–ye
fire–beside–LOC
'beside the fire' (DC-060415S)

However, there are also significant differences between classifiers and locative noun stems. One of the key distinctions between locative noun stems and classifiers is that the latter cannot occur in a possessive noun phrase. Moreover, classifiers are used to classify and quantify nouns according to semantic criteria (Senft 2000: 21), and therefore always refer to a more or less tangible object. In contrast, the locative noun stems indicate a topological relation or refer to an object region, a space projected from the Ground object. In Sections 4.2.1 and 4.2.2 of Chapter 4 a comparison is made between Baure classifiers and locative noun stems.

A number of the bound lexemes that are described here as locative noun stems can also function as classifiers. In (47) *–chipi* is used as a classifier,

referring to a flat and raised surface, in this case the roof-like back of an armadillo.

(47) *pochipi*
po–chipi
other–CLF[flat&raised]
'the other (armadillo)' (GP-030916S)

The components of a noun compound generally denote a whole-part, possessor-possessed or modifier-noun relationship. When a classifier is used in a compound, the relation is most often a part-whole relationship, in which the classifier refers to the part and the N_1 to the whole. An example of this type of compound was already given in (44). In the case of a locative compound, however, the locative noun stem refers to a certain region surrounding the Ground, and thus forms no actual part of it.

3.1.3 DISTRIBUTION OF LOCATIVE NOUN STEMS

Locative noun stems are grouped together here for semantic reasons. However, from a structural point of view, it is a very heterogeneous group. As was mentioned in the sections above, whereas nearly all of the locative noun stems can be used in a possessive locative noun phrase, only some of them can also be used forming a compound. Even fewer locative noun stems can be incorporated into verbs, a process described in Section 3.2.3 of this chapter. The pattern that is found today may be the result of several independent processes, and it is not unlikely that it joins up with a more general tendency that the speakers seem to have a preference for more transparent isolating constructions and less synthetic ones (Admiraal et al. 2011; Danielsen 2014). In the historical data (Adam and Leclerc 1880), not all of the locative noun stems are mentioned, and the ones that are mentioned are called 'particles' by the missionaries.[64] In these data, examples of locative compounds are found,

[64] The missionary Antonio Magio refers to the inalienably possessed body parts as 'particles' (Magio 1880: 37–40), and Fransisco de Asis Coparcari lists the locative noun stems in his chapter on 'particles' together with classifiers and a number of verbal affixes (De Asis Coparcari 1880: 92–106).

but locative possessive noun phrases are not mentioned at all. However, this does not necessarily mean that Baure at that time completely lacked this type of construction. As was mentioned before, locative noun stems specify a spatial relation in more detail than the general locative marker *–ye*, and they only occur when a spatial relation is atypical, or otherwise requires specification. In all other cases, spatial relations are simply expressed by using the general locative marker *–ye*.

Today, we find that the locative noun stems are items with lexical as well as grammatical properties. The use of locative noun stems in locative possessive noun phrases and their use as a predicate base are taken as indications for their lexical status. As was discussed above, this sharply contrasts with the use of Baure classifiers, which are more grammatical elements. All in all, the distribution of the locative noun stems over the compound and the locative possessive noun phrase can be summarized as in Table 3.4.

Table 3.4: Baure locative noun stems.

Locative noun stem	**English translation**	**Possessed form**	**Compound**
ani	'above'	(not attested)	(not attested)
–api	'under'	*rapi-ye*	*mesapi-ye* 'under the table'
–chipi	'on top'	*rochipi-ye*	(not attested)
–imir	'in front'	*roemiri-ye*	*resia'miri-ye* 'in front of the church'
–poe	'down', 'beside'	*ropoewani-ye*	*yakipoewani-ye* 'beside the fire'
–she	'on top', 'along'	(not attested)	*nikorokshe-ye* 'on the plate'
–shiri	'behind'	*roshiriwani-ye*	*siyshiriwani-ye* 'behind the chair'

As was mentioned above, the locative noun stem *ani*, 'above' is not bound, and it cannot be marked for possession. It is found neither in compounds nor in locative possessive constructions. Furthermore, in Table 3.4 the locative compound with *–chipi*, 'on top' is listed as not attested, because of the lack of unambiguous examples. In the data, there are a couple of examples of compounds with *–chipi*, but in those cases it is used as a body part term, rather than as a locative noun stem.

3.2 LOCATIVE PREDICATES[65]

In the verbal domain Baure disposes of several different means to express motion and location. In this section, first the predicates used for expressing motion and location are described. They can be subdivided into frequently used motion verbs (Section 3.2.1.1), particles that have been derived from motion verbs (Section 3.2.1.2), and predicates that express location (Section 3.2.1.3), including predicates based on locative noun stems. In Section 3.2.2 the Baure verbal suffixes are presented. Finally, in Section 3.2.3 it is discussed how the locative noun stems can be incorporated into verbs, adding a locative component to the particular verb.

3.2.1 VERBS EXPRESSING MOTION AND LOCATION

Baure disposes of different grammatical resources that are used to express motion on the one hand, and location on the other hand. In the motion verb inventory, we find a number of highly frequent verbs that express deictic motion, one of which has given rise to a free standing motion particle. For expressing location, a nominal predicate can be used, as well as a general existential verb, or a predicate based on one of the locative noun stems. These different processes are discussed below.

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[65] This section on Baure locative predicates is largely based on Admiraal's paper "Baure Motion Events: Exploring the Grammatical Resources." In *Expresión de Nociones Espaciales en Lenguas Amazónicas*, edited by Ana María Ospina Bozzi, 61–84. Bogotá: Instituto Caro y Cuervo.

3.2.1.1 FREQUENT MOTION VERBS

Baure has one common cislocative verb, *–shim*, which can be translated as 'arrive'. Generally, this verb is used for motion towards the speaker, but it can also refer to motion to a location that the speaker considers as near, as opposed to a place further away from the speaker. In narratives it is used to refer to a location closer to where the main event is taking place in a particular episode. Example (48) shows the use of *–shim*, and *ne'*, 'here', refers to one of the villages as opposed to the bush where the savages used to live.

(48) *Ver noshim to woroiynev ne' Sandrosi-ye.*
ver *no=shim* *to* *woroiy–nev* *ne'* *Sandrosi–ye*
PERF 3PL=arrive ART savage–PL here San.Andres–LOC
'The savages arrived here in San Andres.' (DC-091009F)

Another motion verb found extremely frequently in the Baure data is the translocative verb *–kach*. It indicates motion away from the speaker or, as with the cislocative verb *–shim*, motion away from a place that the speaker considers as nearer than the place where the motion is directed to, as in example (49). In this case, *noiy* 'there' refers to the wild cacao forests surrounding the town of Baures.

(49) *Noiy to chindinev nokach nopapa.*
noiy *to* *chindi–nev* *no=kach* *no=papa*
there ART person–PL 3PL=go 3PL=harvest.bean
'The people go there to harvest beans.' (DC-090924F)

Furthermore, there is another verb for 'going' that not only refers to motion from one place to another, but includes a sense of manner. The verb *–yono* is often translated by the Baure speakers with the manner verb *andar* 'walk' in

Spanish. It is used for going in different manners though, including walking, floating, driving, and flying, as shown in examples (50) and (51).[66]

(50) *Viyonopa toerok-ye noiy Asperi-ye.*
vi=yono–pa *toerok–ye* *noiy* *Asperi–ye*
1pl=go–intl field–loc there Aspera–loc
'We go walking to the field there in La Aspera.' (LO&GP-090927F)

(51) *Narokiaw ne' yashor-ye niyonopa Awono-ye.*
ni=arokia–wo *ne'* *yashor–ye* *ni=yono–pa* *Awono–ye*
1SG=get.on–COP here canoa–LOC 1SG=go–INTL Bella.Vista–LOC
'I get on the boat here and go (by boat) to Bella Vista.' (CS-090925F)

3.2.1.2 Derived motion particles

From the translocative verb root *–kach* the freestanding preverbal particle *kach* was derived. In example (52) it is used with the motion verb *–siap*, 'enter', but it also occurs with other (non-motion) verbs. This particle often interacts with the suffix *–pa*, as a semantic equivalent, or both can occur in the same sentence, as in example (53).

(52) *Te jir kach rosiap.*
te *jir* *kach* *ro=siap*
DEM1:M man AND 3SG:M=enter
'The man is going to enter.' (DC-090930F-2)

(53) *Kach nojiropavi.*
kach *no=jirop–pa=vi*
AND 3PL=dance–INTL=1PL
'They went (in order to) dance with us.' (DC-091009F)

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[66] In the closely related languages Trinitario, Ignaciano and Paunaka *–yono/–yana* is the basic motion verb 'go' (Danielsen *pers.comm.*; Olza Zubiri et al. 2002; Terhart *in prep.*). See Section 5.2.3.2.1 of Chapter 5 for more details on this motion verb.

The meaning of the particle *kach* (AND) is not limited to motion, but may mark intention or future as well. In addition, when various elements interact, as in example (53), it is not always possible to tease apart the exact contribution of each individual element. The underlying semantics of the particle *kach* is discussed in more detail in Section 5.2.3.2.2 of Chapter 5.

Another freestanding particle that is used to indicate motion and/or intention is the intentional imperative particle *pa*. This particle was probably derived from the locative suffix *–pa* (see Section 3.2.2.1) and is mostly used in first and second person singular in direct speech (Danielsen 2007: 292). Even though it is infrequent in the database, Danielsen (2007: 292) gives the following examples.

(54) *Pa ndi' nikier*
pa *ndi'* *nik=ro*
go 1SG 1SG.eat=3SG:M
'I will (emphatic) eat it!' (RP&EC-040717S)

(55) *To pa pijirikashan nan siy-ye*
to *pa* *pi=jirik–a–sha–no* *nan* *siy–ye*
ART go 2SG=sit–LK–IRR–NMLZ over.there chair–LOC
'Go and sit over there on the chair!' (EU-N060322S)

3.2.1.3 Predicates expressing location

In most Arawakan languages any non-verb can be used predicatively (Aikhenvald 1999: 98–99). For Baure this was already observed by the Jesuit missionaries working on the language (Magio 1880: 5), and also confirmed in later studies (Danielsen 2007: 173). Nouns that are used predicatively may undergo verbal morphological processes, but this is not necessarily the case. In (56) this is demonstrated by an equational phrase and in (57) by a locative phrase, both of which are full sentences in Baure.

(56) *To Jorian ndori.*
to *Jorian* *ni=tori*
ART Julián 1SG=friend
'Julián is my friend.' (Danielsen 2007: 194)

(57) *To tawe' ne' mesapi-ye.*
to *tawe'* *ne'* *mes–api–ye*
ART ball here table–under–LOC
'The ball (is) here under the table.' (DC-091122F)

Although the locative phrase in (57) is a full sentence, and similar constructions do occur in the database, the more common way to form a locative phrase is by adding the existential verb, as in example (58).[67]

(58) *Kwore' roemiri-ye to ver.*
kwore' *ro=imir–ye* *to* *ver*
exist.3SG:M 3SG:M=in.front–LOC ART green.one
'It is in front of the green one.' (CS-090925F)

Furthermore, stative predicates can be derived from the locative noun stems. Examples are given in (59) and (60).

(59) *Rikiyikiaw*
ri=ikiyiki–a–wo
3SG:F=middle–LK–COP
'She (the chicken) is in the middle.' (RP-091017F)

[67] Danielsen (2007: 199) claims that there are no simple juxtapositions with a locative meaning in Baure, in which case (58) would be ungrammatical, and that the use of the existential is obligatory in locative clauses, as in (59).

(60) *Apikow te asol.*
api–ko–wo *te* *asol*
under–ABS–COP DEM1:M blue.one
'It is under the blue one.' (CS-090925F)

In section 5.1 of Chapter 5, nominal components in spatial predication are discussed in more detail.

3.2.2 VERBAL LOCATIVE SUFFIXES

3.2.2.1 COME AND GO

Apart from motion verbs referring to a motion event themselves, motion can be marked on verbs by means of the suffixes *–pa* (INTL) and *–pik* (VEN).[68] The suffix *–pa* (INTL) can have an intentional or directional meaning, 'moving away from the Ground'. The difference between the two is not always clear though (see Section 5.2.3.2.3). In contrast, the directional suffix *–pik* (VEN) indicates a motion towards the Ground. It is derived from the verbal root *–ipik*, 'come', which is not used frequently in contemporary Baure. One example of the use of this verbal root is given in (61).

(61) *Nikach ach nipikpow*
ni=kach *ach* *ni=ipik–po–wo*
1SG=go and 1SG=come–PFV.RFLX–COP
'I went and I came.' (CS-090925F)

These directional suffixes mainly attach to active verbs, as in example (62), but occasionally also occur with stative verbs, as in (63), or attached to a locative noun stem that is used as a predicate, as in (64). In (63), *–pik* (VEN) refers to the motion of climbing the tree.

[68] The suffixes *–pa* (INTL) and *–pik* (VEN) are used for a wide range of functions, including associated motion, deixis, direction, and in purpose constructions. Throughout this book, they are glossed consistently as INTENTIONAL and VENITIVE, after their most prominent functions as intentional and venitive respectively. See Section 5.2.3.2.3 of Chapter 5 for more details on these directional suffixes.

(62) *Naropikow to nen chindinev.*
no=aro–pik–wo to chindi–nev
3PL=fly–VEN–COP ART person–PL
'The people came flying (in an airplane).' (DC-081205F)

(63) *Narochow ewokoe'-ye, noemokapik.*
no=aroch–wo ewokoe'–ye no=imok–a–pik
3PL=climb–COP tree–LOC 3PL=sleep–LK–VEN
'They climbed up the tree, they went (there) to sleep.'
(MD-N090103F)

(64) *Eshiriwanapik tech showekon.*
e=shiriwani–a–pik tech showekon
UNSP=behind–LK–VEN DEM2:M jaguar
'And the jaguar came behind.' (MD-N081128LF)

3.2.2.2 Verbal locative suffix *–yi*

The general locative morpheme *–ye* has its counterpart in the verbal paradigm, *–yi* (VLOC). It is mainly used for locative subordination and interrogative clauses (Danielsen 2011b), as shown in examples (65) and (66) respectively.

(65) *Te mes vinikyiow.*
te mes vi=nik–yi–wo
DEM1:M table 1PL=eat–VLOC-COP
'The table at which we eat.' (DC-081205F)

(66) *¿Piviyeron?*
pi=vi–yi=ro–no
2SG=take.away–VLOC=3SG:M–NMLZ
'Where did you take it from?' (JP-040712S)

3.2.3 NOUN INCORPORATION AND INCORPORATION OF LOCATIVE NOUN STEMS

In Baure, as in many polysynthetic languages, noun incorporation is a very productive process (Admiraal and Danielsen 2014). The incorporated element directly follows the verb root and together they form the verb stem, to which additional verbal morphology can be attached. The surface structure of incorporation is presented in Figure 3.6.

$$[[\text{V}]_{\text{root}}\ \text{N/CLF}]_{\text{stem}}$$

Figure 3.6: Basic structure of a verb stem with an incorporated element.

The nominal roots that can be incorporated are all left-bound roots, including bound nouns, locative roots and classifiers. An example of an incorporated bound noun is given in (67). Example (68) shows the incorporation of a classifier.

(67) *Ndoripoiyow.*
ni=tori–poiy–wo
1SG=scratch–foot–COP
'I am scratching my foot.'
(literally: 'I am foot–scratching.') (DC-091122F)

(68) *Nipirisaw to yakis.*
ni=piri–so–a–wo *to* *yakis*
1SG=cut.in.pieces–CLF[wood]–LK–COP ART firewood
'I cut the firewood into pieces.' (RP-040720S)

As in other incorporating languages, when an argument is incorporated into a Baure verb, it is less definite and individuated as when it is overtly expressed. Therefore, an incorporated argument may be repeated as a full NP for specification, as in example (68) above.

In languages that exhibit noun incorporation, syntactic paraphrases of the particular verb plus the incorporated noun usually occur as well. However, the two constructions are not exact equivalents and the choice for one construction or the other is functionally motivated. In her article, Marianne Mithun (1984) distinguishes four types of noun incorporation: (I) lexical compounding, (II) manipulation of case, (III) manipulation of discourse structure, and (IV) classificatory noun incorporation.[69] In Baure, we find all four types and they are illustrated here briefly, before introducing the incorporation of locative noun stems.

Type I incorporation, lexical compounding, is by far the most frequent and it is found that if a language allows any incorporation, then it has at least lexical compounds (Aikhenvald 2007: 15; Mithun 1984: 848). In Baure, this type of incorporation is very productive, an example is given in (69).

(69) *Ndoripasiriow.*
ni=tori–pasiri–wo
1SG=scratch–nose–COP
'My nose is itching.' (RP-091109F)

Lexical compounding usually renders verbs that are interpreted as a conceptual unit and refer to a conventional or habitual activity. Although most of the lexical compounds in Baure are still fairly transparent, it is clear that these compounds do refer to a unitary state or activity. The literal translations of the Baure phrase in example (69) is 'I am nose-scratching'. However, the speakers translated them as a more unitary state: 'My nose is itching'.

The second type of incorporation involves manipulation of case and affects the syntactic structure of the clause. The incorporated lexical item is no longer a distinct argument of the clause and this allows a significant oblique argument to occupy the emptied slot. In Baure, this is especially common when body

[69] More recently, Aikhenvald (2007: 15–17) distinguishes these same four types, plus another one: incorporation of modifiers. Since in Baure modifiers are not incorporated, the distinction into four types as discussed in Mithun's original work is maintained here, including the corresponding labels.

parts are incorporated. In example (70) the possessor of the incorporated body part *–po'e* 'head' is marked in the object slot by the person marker *=ro*.

(70) *Nopiripo'ekier ach noemer eshe'-ye.*
no=piri–po'e–ko=ro *ach*
3PL=cut.in.pieces–head–ABS=3SG:M and
no=im=ro *eshe'–ye*
3PL=put=3SG:M trunk–LOC
'They cut off his head and put it on a trunk.' (DC-091009F)

The effect of the incorporation and possessor raising is that the possessor gains a more prominent position. For example, in (70) describing the situation this way, the speaker focuses more on the beheaded person that occupies the object slot than on the fact that they cut off his head and not some other body part.

Type III incorporation involves the manipulation of discourse, and it is used for adding background information or reducing the saliency of unimportant information. Type III incorporation is functional at the discourse level. Example (71) is part of a story about a man that went blind. One day, a boy appears on his door step and says he can cure the blind man. In the scene preceding the example, the child explains in detail how the man needs to cover his eyes with a piece of cloth before he will go to sleep that night.

(71) *"Pivejchapkishap ach pijinoek", rokichowor-ji tech monchi.*
pi=veja–chapo–kis–sha–pa *ach* *pi=jino–i–ko*
2SG=undo–cover–eye–IRR–INTL and 2SG=see–EMPH–ABS
ro=kich–wo=ro=ji *tech* *monchi*
3SG:M=say.do–COP=3SG:M=QUOT DEM2:M child
' "When you take it off, you will be able to see," said the child.'
(RP-N091122F-B)

Throughout the preceding section of the story, the cloth, as well as the man's eyes, appear several times as full noun phrases. Example (71) then, indicates a shift in focus. From this point onwards the main issue is no longer the cure

itself, but the result of it, namely the fact that the blind man will be able to see again. Because of that shift in attention, the cloth and the man's eyes are incorporated from that particular point in the story until the end – sometimes both at the same time, as in the example above.

Finally, some languages make use of classificatory incorporation, labeled Type IV in Mithun's typology (1984: 863). This type involves the incorporation of a general noun that serves to narrow down the scope of the verb, but often an external noun phrase is added to the phrase to specify the exact referent of the incorporated noun. Diachronically, this often results in a classificatory system. An example of Type IV incorporation in Baure is given in (72).

(72) *Nejepekow to jikoch.*

ni=eje–pe–ko–wo	*to*	*jikoch*
1SG=wash–CLF[spade.shaped]–ABS–COP	ART	knife
'I am cleaning the knife.'		(RP-040720S)

Cross-linguistic research has shown that incorporating languages typically incorporate intransitive subjects and direct objects, but often also instruments and locations (Aikhenvald 2007:19). In the Baure corpus, all of these are attested, but incorporation of an instrument is definitely rare. In comparison, Grounds as well as the locative noun stems are incorporated frequently. It seems that not all of the locative noun stems can be incorporated, though. The three locative noun stems that are incorporated most productively are the ones derived from body part terms: *–imir* 'in front', *–chipi* 'on top', and *–shiri* 'behind'. In addition, the locative noun stem *–poe*, 'down' is often attested, as an incorporated oblique argument as well as in lexicalized compounds. An example of the incorporated locative noun stem *–shiri* 'behind' is given in (73). Compare example (74) for the same verb root without incorporated noun.

(73) *Ropanshiriaw to simori.*
ro=pan–shiri–a–wo *to* *simori*
3SG:M=follow–behind–LK–COP ART pig
'He is following behind the pig.'
(literally: 'He is heel-following the pig.') (LO&GP-090927F)

(74) *"Nipanper¸" rokew-ji.*
ni=pan–pa=ro *ro=ke–wo=ji*
1SG=follow–INTL=3SG:M 3SG:M=E.V–COP=QUOT
' "I am going to follow him," he said.' (RP-N081126SL)

The noun stem incorporated into the verb in (73) describes the topological relation between the Figure and the Ground. That is, *–shiri* in (73) indicates that the Figure, a toy tortoise, is following behind the pig. In these cases, it is not one of the arguments of the verb that is incorporated, but the incorporated locative noun stem adds information on the spatial relation of the Figure and the Ground to the verb.

In examples (70) and (72) above, the incorporated elements, the body part *–po'e* 'head' and classifier *–pe* (CLF[spade.shaped]) respectively, are followed by the absolute morpheme *–ko*. In previous research, the presence of this morpheme was taken as the defining feature for distinguishing Ground incorporation from argument incorporation (Danielsen 2007: 209–212).[70] The absolute morpheme *–ko* indicates the involvement of another participant in the action, but verbs that have the suffix *–ko* are not necessarily transitive (Danielsen 2007: 241). The present research, however, will reveal a more complex pattern. Therefore, instead of taking *–ko* (ABS) as a defining feature, it is regarded here as an indication that some other entity is involved in the activity, or is 'included' in the words of Wise (1971: 113). However, it does not differentiate between different roles of the added argument, which can be a location, a beneficiary, or a physical object that is not necessarily used for the activity but is merely present, as in example (75).

[70] Danielsen also notes that the distinction between noun incorporation or classifier incorporation and Ground incorporation is not always clear (2007: 209-212).

(75) *Nijirikow te ndir kajawor.*
ni=jiri–ko–wo *te* *ndir* *kajawor*
1SG=sit–ABS–COP DEM1:M 1SG.POSS cotton
'I sat down with my cotton.' (RP-N091122F-2)

Chapter 5 focuses in more detail on Ground incorporation, the roles of the incorporated locative noun stems, and their exact contribution to the spatial meaning of the predicate.

3.3 ARTICLES AND DEMONSTRATIVES

In Baure, articles and demonstratives[71] have a relatively uncomplicated morphology, and both form small closed word classes. Danielsen (2007: 301–315) distinguishes the nominal demonstratives in terms of present, proximate, and distal, and also suggests a possible connection between the different degrees in the nominal demonstratives and the adverbial demonstratives. In addition, visibility and accessibility may come into play as well. In this section the articles and demonstratives are only discussed from a structural point of view. Their underlying semantics and their relation to each other are discussed in more detail in Chapter 6.

3.3.1 DEFINITE ARTICLES AND NOMINAL DEMONSTRATIVES

As was observed by Danielsen (2007: 310), the Baure articles and the nominal demonstratives not only seem to be phonologically related, but they also have many structural characteristics in common. Table 3.5 gives an overview of the articles and the demonstratives.

[71] Throughout this book, the term 'demonstratives' is used as an overarching term for nominal demonstratives (e.g. *this* and *that*), adverbial demonstratives (e.g. *here* and *there*) and verbal demonstratives (e.g. *do like this*). See Chapter 6 for a more detailed discussion on the terminology and the different types of demonstratives found in Baure.

Table 3.5: Baure definite articles and nominal demonstratives (after Danielsen 2007: 311).

Gloss	SINGULAR		PLURAL
	masculine	feminine	
ART	*to*	*ti*	*to*
DEM1	*te*		
DEM2	*tech*	*tich*	*to nech*
DEM3	*ten*	*tin*	*to nen*

Baure makes no grammatical distinction between masculine and feminine nouns. However, biological gender is marked. Nouns with a female animate referent usually, but not obligatorily, occur with the feminine article, and receive feminine person marking on verbs. The feminine article is the same as the feminine nominal demonstrative DEM1, and Danielsen actually argues that the use of the demonstrative as feminine article may have been triggered under the influence of Spanish (Danielsen 2007: 311).[72] In the plural, the masculine article is the same as the nominal demonstrative DEM1. The other plural forms of the nominal demonstratives, *nech* and *nen*, are obligatorily preceded the singular masculine article *to*. Plural marking is optional in Baure for plurals other than the ones with a human referent, and the plural nominal demonstratives are only used when the following noun is also marked for plural, as in example (76).

[72] One could take this hypothesis even further and argue that the masculine article may have been introduced or its use has been intensified under influence of Spanish. Aikhenvald (1999: 96) claims that in many Arawakan languages the third person pronouns are used as definite articles. In Baure, the feminine article *ti* may have been derived from the third person masculine pronoun *roti'*.

(76) *Noeyok to nech chindinev.*
no=iyok *to* *nech* *chindi–nev*
3PL=pierce ART DEM2:PL people–PL
'They shot the people.' (DC-091009F)

The position of the article and the nominal demonstrative is always NP initial and they may be followed by one or two modifiers before the head noun. The structure of a Baure NP of this type is presented in Figure 3.7.

[ART/DEM [MOD [N]]]

Figure 3.7: General structure of the Baure noun phrase.

An example of a noun phrase modified by the numeral *apin* 'two' is given in (77).

(77) *Neriki kwe' to nech apin kavinononev.*
neriki *kwe'* *to* *nech* *api–no* *ko–avinon–no–nev*
now exist ART DEM2:PL two–CLF[general] ATTR–husband–NMLZ–PL
'Now there were these two spouses.' (MD-N090103F)

Danielsen shows that modifiers may also follow the head noun, but that this occurs less frequently and with certain types of adjectives as modifiers only (see Danielsen 2007: 167–171 for more details on modification of nouns within the NP).

Articles and nominal demonstratives can precede possessed nouns, as shown in examples (78) and (79). In contrast with other inalienably possessed nouns (e.g. *rishechenev*, 'her children', in example (78)), the locative noun stems are never preceded by an article or a demonstrative.

(78) *To rishechenev ti tiporek.*[73]
to *ri=shechenev* *ti* *tiporek*
ART 3SG:F=children ART:F chicken
'The children of the chicken.' (HC-090122F)

(79) *Ach viaw tech rosoki.*
ach *via–wo* *tech* *ro=soki*
and 1PL.take.out–COP DEM2:M 3SG:M=seed
'And we removed its seed.' (HC-090122F)

In general, Baure articles and nominal demonstratives are used to individuate their referent, and when a noun phrase is used referentially, this is generally obligatory. This is shown with the contrasting examples (80) and (81). In (80) the speaker is referring to a recently founded town in the woods far off from Baures, at a place where the Baure did not use to go, because of the savages living in that area. The speaker makes the general statement that it is no longer an unsafe region, because the savages are gone and now civilized people are living there. In (81) the speaker refers to the people present at a wedding, where each guest congratulates the married couple after the ceremony.

(80) *Kwe' chindinev noiy.*
kwe' *chindi–nev* *noiy*
exist person–PL there
'There are people (living) there.' (RP-N090921FE-1)

(81) *Nokopshachow tekowon to nech chindinev noiy.*
no=kopshach–wo *tekowon* *to* *nech* *chindi–nev* *noiy*
3PL=congratulate–COP all ART DEM2:PL person–PL there
'All the people there congratulated (them).' (RP-N090127F-1)

[73] In the examples throughout this book *–shechenev*, 'children', is not segmented, although the plural suffix can still be identified. However, the singular form **–shech*, 'child', does not exist, and therefore *–shechenev* is glossed as a whole.

The nominal demonstratives can also have an anaphoric function and be used pronominally. Although these types of use are not relevant for the analysis of the use of nominal demonstratives for spatial reference, a few examples of this type are given in Chapter 6.

3.3.2 ADVERBIAL DEMONSTRATIVES

Baure adverbial demonstratives form a small class of morphologically simple lexemes. Table 3.6 lists the different forms and their analysis as suggested by Danielsen.

Table 3.6: Baure local adverbial demonstratives
(after Danielsen 2007: 302).

Gloss	**Analysis (Danielsen 2007: 302)**[74]	**Form**
here	present	*ne*'
there	proximate	*noiy*
over.there	distal (not visible)	*naka*'
there	used in contrast to 'here', stative, generic?, absent?	*nan*

The adverbial demonstratives occupy a relatively free position in the clause, but most frequently occur either following the verb. They are often, but not necessarily, followed by a more specific indication of the particular location that the adverbial demonstrative is referring to, such as the locative noun phrase in (82).

[74] In Danielsen's table (2007: 302) 'present' is understood as 'in presence of', and not as present tense. The question marks in the analysis of the adverbial demonstrative *nan* are maintained as in the original table.

(82) *Nokachpow noiy tikorakasiwok-ye.*

no=kach–po–wo	*noiy*	*tikorakas'i–wok–ye*	
3PL=go–PFV.RFLX–COP	there	guava.tree–place–LOC	

'They went there to the guava plantation.' (CS-N081220F-1)

The exact semantic difference between the different types of adverbial demonstratives is often unclear, and speakers may use the different forms in otherwise identical clauses. Examples (83) and (84) are two subsequent phrases in a story, both reflecting the direct speech of one of the protagonists. There are no indications that the speaker made a mistake (e.g. pause or hesitation) and is correcting herself after realizing it. In fact, the repetition of phrases is very frequent in Baure stories. In these cases, it remains unclear why the speaker chooses one form in one phrase and the other form in the consecutive phrase.

(83) *"Ver panoekpa noiy sorati-ye," rikichowor-ji.*

ver	*pi=anoek–pa*	*noiy*	*sorati–ye*
PERF	2SG=come.close–INTL	there	village–LOC

ri=kich–wo=ro=ji
3SG:F=say–COP=3SG:M=QUOT

' "You will come already close to the village there," she said to him.'
(RP-N090105F-1)

(84) *Ver panoekpa ne' sorati-ye.*

ver	*pi=anoek–pa*	*ne'*	*sorati–ye*
PERF	2SG=come.close–INTL	here	village–LOC

'You will already come close to the village here.' (RP-N090105F-1)

When comparing the use of the nominal demonstratives with the use of the adverbial demonstratives, Danielsen suggests a relation between the two. Whereas the demonstratives *te/ti*, DEM1, are mostly used in combination with the place adverb *ne'*, 'here', the demonstratives *tech/tich*, DEM2, are more often used in combination with the place adverb *noiy*, 'there'. The combined use of

the demonstratives and place adverbs is shown in examples (85) and (86). An analysis of the interaction between the nominal and the adverbial demonstrative in a single phrase is taken up in Section 6.3 of Chapter 6.

(85) *Kwe' te reiy ne' moes.*
kwe' *te* *reiy* *ne'* *moes*
exist DEM1:M king here blind
'There is this blind king here.' (RP-N090105F-1)

(86) *Ach nichakow tech marok noiy wasoki-ye.*
ach *ni=chak–wo* *tech* *marok*
and 1SG=pour–COP DEM2:M manioc.beer
noiy *waso–ki–ye*
there glass–CLF[bounded]–LOC
'And I pour that manioc beer into the glass there.' (DC-091122F)

3.4 SUMMARY

In this, a general overview was given of the grammatical means that the Baure language has at its disposal for expressing spatial relations. In the nominal domain, the locative noun stems play a crucial role in spatial reference. In the verbal domain, basic motion verbs, as well as the different morphological processes that occur in verb phrases expressing motion events influence the spatial interpretation of these events. In the following chapters, each of the grammatical means are analyzed in more detail. First, Chapter 4 focuses on the locative noun stems, and in Chapter 5 predicates expressing location and motion are studied. Finally, in Chapter 6, the nominal and adverbial demonstratives that are used for spatial orientation, and the interaction between them, are discussed

CHAPTER 4:

LOCATIVE NOUN PHRASES AND THEIR UNDERLYING DIMENSIONS

Now that the grammatical resources for spatial description in Baure have been introduced in the previous chapter, it is time to look at the different morphosyntactic units in more detail. This chapter focuses particularly on Baure locative noun phrases, and of the main elements that play a role in expressions of spatial relations; locative noun stems. The chapter discusses how the set of most frequently used locative noun stems are used in nominal phrases, and it studies their core underlying dimensions. The chapter is subdivided into three main parts. In Section 4.1, a closer look is taken at the semantics of the locative noun stems, and the possibilities for using them with different types of Grounds (animate vs. inanimate; Grounds with or without intrinsic sides). Section 4.2 focuses on the process of grammaticalization of locative noun stems, taking into account their lexical and grammatical properties, and offers an overview of how they are described in the historical sources. Finally, in Section 4.3, attention is paid to the interpretation of these linguistic encodings in the light of the theoretical approach of frames of reference.

4.1 A CLOSER LOOK AT THE SEMANTICS OF THE LOCATIVE NOUN STEMS

In the previous chapter, the locative noun stems and their use in different constructions were already introduced. This section studies them in more detail and deals predominantly with the semantics of the different types of locative noun stems; those derived from body part terminology (4.1.1), those derived from natural surroundings (4.1.2), and those with an unknown origin (4.1.3).

4.1.1 LOCATIVE NOUN STEMS DERIVED FROM BODY PART TERMINOLOGY

4.1.1.1 Locative noun stem *–imir* 'in front'

One of the locative noun stems that appears in the widest range of possible constructions in which the locative noun stems are found, is *–imir* 'in front'. Most often it appears in its phonologically reduced form *–mir*. Apart from having a locative meaning, it has not grammaticalized completely and it is still used as well for referring to the face itself as a body part.[75] This is shown in examples (1) and (2).

(1) *To chindinev ka'anomironev.*
to *chindi–nev* *ka'an–imir–nev*
ART person–PL animal–face–PL
'The people with animal faces.' (RP-N100920F)

(2) *Royotorekpaw roemiri-ye tech eponoenev.*
ro=yotorek–pa–wo *ro=imir–ye* *tech* *eponoe'–nev*
3SG:M=stick–INTL–COP 3SG:M=face–LOC DEM2:M leaf–PL
'The leaves stuck onto his face.' (RP-N040721S)

When *–imir* 'in front' is used in a locative construction, it appears with animate Grounds, thus Grounds that have an intrinsic 'front', as well as with inanimate Grounds. In locative constructions with animate Grounds, the semantics of the locative noun stem *–imir* is extended to the object region, projected from the body part (see Section 3.1.2 of Chapter 3). This means that the Figure is not necessarily in contiguity with, or directly adjacent to, the Ground. In these cases, the relation to the body part is still very transparent. In examples (3) and (4), *–imir* refers to the front-side (the side where the face is) of 'the tortoise' and 'you' respectively. The person cross-reference is indicated by the possessive markers *ri=* (3SG:F) and *pi=* (2SG).

[75] This contrasts for example with the highly grammaticalized term *ba*, 'face' in Tzotzil, which almost exclusively appears in locative constructions. For referring to the body part term itself, it is still used in ritual language, but in every-day language it was replaced by the compound *ti'ba*, 'face, forehead' (De León 1992: 580).

+ animate Ground

(3) *Kwore' rimiri-ye ti sopir.*

kwore'	*ri=imir–ye*	*ti*	*sopir*
exist.3SG:M	3SG:F=in.front–LOC	DEM1:F	tortoise

'He is in front of the tortoise.' (DC-090930F-1)

+ animate Ground

(4) *Pijinoek pimiri-ye.*

pi=jinoek	*pi=imir–ye*
2SG=search	2SG=in.front–LOC

'Look in front of you.' (DC-101008F)

Inanimate Grounds may also have an intrinsic front side. In locative constructions with inanimate Grounds that have intrinsic sides, *–imir* is used in a similar fashion as with animate Grounds. Example (5) shows how human body parts are mapped onto a house, assigning its 'face' to the side of the relational part of the house, there where the entrance from the street side is.

– animate Ground, + intrinsic sides

(5) *Roshim nan rowermiri-ye.*

ro=shim	*nan*	*ro=wer–imir–ye*
3SG:M=arrive	over.there	3SG:M=house–face–LOC

'He arrives there at the front of the house.' (DC-101008F)

Inanimate Grounds that completely lack an intrinsic front side, get assigned one, either based on their current use or dependent on the position of the speech act participants. For example, in (6) one could argue that the table has an intrinsic side because of its current placement. In this particular case it is a rectangular table put with one of the longer sides to the wall, creating a back side. This turns the opposite long side into the one where people usually sit at the table, which hence functions as its front side.

– animate Ground, – intrinsic sides

(6) *Roshipiripirik mesmiri-ye.*
ro=shipiripirik *mes–imir–ye*
3SG:M=roll table–in.front–LOC
'It is rolling in front of the table.' (DC-091122F)

In examples (7) and (8), however, the Ground objects do not have intrinsic sides, nor a specific arrangement based on which sides are assigned. The body part terms are therefore mapped onto the Ground objects on the basis of the position of the speech act participants. The mapping of bodily coordinates of speech act participants onto Ground objects is discussed in more detail in Section 4.3.2.2.

– animate Ground, – intrinsic sides

(7) *Roemiri-ye te ewokoe'.*

ro=imir–ye	*te*	*ewokoe'*
3SG:M=in.front–LOC	DEM1:M	tree

'In front of the tree.'

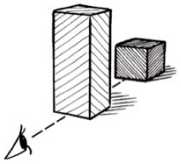
(DC-091122F)

– animate Ground, – intrinsic sides

(8) *Kwore' roemiri-ye to ver.*

kwore'	*ro=imir–ye*	*to*	*ver*
exist.3SG:M	3SG:M=in.front–LOC	ART	green.one

'He is in front of the green one.'



(CS-090925F)

4.1.1.2 Locative noun stem *–chipi* 'on top'

Similar to the derivation of *–imir* 'in front' from 'face', the locative noun stem *–chipi*, 'on top', is derived from *–chipi* 'back'. In fact, three noun stems were derived from this particular body part term, with different, though related,

meanings. Compare examples (9) to (11). In example (9), *–chipi* is used for 'back' when describing how a female monkey carries her baby on her back, and thus it refers to the proper body part. Example (10) is taken from a fragment of a session where the speaker describes a picture of a house with smoke coming out of the chimney. In this case *echipi* refers to the roof of the house. In example (11) *echpie'*[76] refers to an 'island', which is the common way to denote the higher parts in the landscape where the towns and woods are located.

(9) *Kwe' tich rijin richipi-ye.*
kwe' *tich* *ri=jin* *ri=chipi–ye*
exist DEM2:F 3SG:F=daughter 3SG:F=back–LOC
'There was her daughter on her back.'
('She carried her daughter on her back.') (HC-100920F)

(10) *Roepshow to kotiskon echipi-ye.*
ro=epshe–wo *to* *kotiskon* *echipi–ye*
3SG:M=appear–COP ART smoke roof–LOC
'Smoke is appearing from the roof.' (CS&EU-090123F)

(11) *Kwore' echpie'-ye te ewokoe'.*
kwore' *echpie'–ye* *te* *ewokoe'*
exist.3SG:M island–LOC DEM1:M tree
'The tree is on the island.' (RP-030912)

The overall meaning of the three nouns is a reference to a flat and raised surface. That all three of them belong to the same category of nouns is also supported by the fact that all three are quantified by *–chipi* used as a classifier for objects with a flat and raised surface, as exemplified in (12) to (14).

[76] The word *echpie'* for 'island' is probably the result of reanalyzing *e=chipi–ye*, UNS=back–LOC, meaning 'on the back' as on an 'island'.

(12) *Pochpish chomoror.*
po–chipi–sh *chomoror*
one–CLF[flat&raised]–one cockroach
'One cockroach.' (DC-081122L-1&2)

(13) *Te echipi asolchipi.*
te *echipi* *asol–chipi*
DEM1:M roof blue–CLF[flat&raised]
'The roof is blue.' (DC-081115L)

(14) *Niyonpashap noiy tech pochpie' echpie'.*
ni=yono–pa–sha–po *noiy* *tech*
1SG=go–INTL–IRR–PFV.RFLX there DEM2:M
po–chipi *echpie'*
other–CLF[flat&raised] island
'I will go hunting over there on that other island.' (RP-N030917S)

As was argued by Danielsen (2007: 146) the meaning of the root *–chipi* for 'back' was semantically extended to denote the roof of a house, and to the locative meaning 'on top'.[77] Further evidence for this process is that both *echipi* 'roof' and *echpie'* 'island', can be segmented into the bound form *–chipi* and the unspecified proclitic *e=*. Whereas *–chipi* 'back' almost never occurs with the unspecified proclitic but rather with one of the other personal proclitics, *echipi*, 'roof', almost never occurs with any of the other personal proclitics, and examples such as (15) are very rare in the database.[78]

[77] The house has been mentioned as an alternative lexical source for locatives, for example in Oceanic languages (Bowden 1991, cited in De León 1992: 572). For Baure, however, it is more likely that it was derived from the body part, as many of the other locative noun stems have been derived the same way.

[78] This is actually the reason why *echipi* 'roof' is not further segmented in the examples throughout this book. The same holds for *echpie'* 'island'.

(15) *Ach te rochipi te pari, kwon te tej.*

ach	*te*	*ro=chipi*	*te*	*pari*
and	DEM1:M	3SG:M=roof	DEM1:M	house

kwe=no	*te*	*tej*
exist=3PL	DEM1:M	tile

'And the roof of the house, there are tiles.' (DC-090126F)

Similar to *echipi* 'roof', in the case of *echpie'* 'island' the unspecified proclitic *e=* can still be identified in the form, but it never occurs with any of the other personal proclitics.[79]

When used for indicating a spatial relation between a Figure and a Ground, *–chipi* is used for 'on top', as in example (16).

(16) *siychipi-ye.*

siy–chipi–ye

chair–back–LOC

'on top of the chair' (Danielsen 2007: 154)

It is also possible to map the body part term *–chipi* onto inanimate Ground objects on the basis of the shape or function of the object. In (17), *–chipi* refers to the backrest of the chair itself. Here it is not used as a locative noun stem denoting an object region.

(17) *Vejarikier te moserkon ne' siychipi-ye.*

vi=jari–ko=ro	*te*	*moserokon*	*ne'*	*siy–chipi–ye*
1PL=stripe–ABS=3SG:M	DEM1:M	red	here	chair–back–LOC

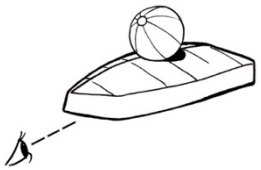
'We are putting the red (paint) here on the backside of the chair.'

(DC-100927F)

[79] One might question whether this is because it is ungrammatical, or impossible to conceptualize, since parts of the landscape cannot be possessed and *echpie'* is therefore never used with a possessive marker.

In the case of example (18), the body part term *–chipi* is mapped onto a canoe which is lying upside down on the shore. Thus, in this case it is referring to the underside of the canoe, which, in this position, forms a flat and raised surface with the ball lying on top of it. In other words, not the intrinsic sides of the canoe are taken into account for localizing the ball, but the temporal feature of the underside being a flat and raised surface because of the canoe's current position lying upside down.

– animate Ground, – intrinsic sides



(18) *To tawe' kwore' yashorechpi-ye.*
to *tawe'* *kwore'* *yashor–chipi–ye*
ART ball exist.3SG:M canoe–on.top–LOC
'The ball is on top of the canoe.' (DC-101008F)

The use of *–chipi* 'back' in a locative sense for 'on top' is only possible with a horizontally stretched shape creating a flat and raised surface. For objects with a vertically stretched shape, the locative noun stem *–she* is used for 'on top' (see Section 4.1.2.3).

4.1.1.3 Locative noun stem *–shiri* 'behind'

The locative noun stem *–shiri* 'behind' was derived from *–shirie'* 'heel'. Example (19) shows the use of *–shirie'* as a body part term without locative reference.

(19) *Noenaw to noshirie'.*
no=ina–wo *to* *no=shirie'*
3PL=use–COP ART 3PL=heel
'They are using their heels.' (LO&GP-101003F)

In locative compounds the noun stem *–shiri* occurs in the N_2 position comparable to *–imir* 'in front' and *–chipi* 'on top', but more often it forms a compound with *–wani* 'place'. Examples are given in (20) and (21) respectively.

(20) *Rokoepojiow siyshiri-ye.*
ro=ko–ipoji–wo *siy–shiri–ye*
3SG:M=ATTR–hide–COP chair–behind–LOC
'He is hiding behind the chair.' (RP-030912S)

(21) *Siyshiriwani-ye.*
siy–shiriwani–ye
chair–behind–LOC
'Behind the chair.' (DC-060415S)

In locative constructions, *–shiri* follows the same pattern as observed in the previous sections, in its use with animate and inanimate Grounds. With animate Ground objects, locative constructions indicate the object region projected from the side of the Ground where that particular body part is d. In the case of *–shiri*, that was derived from 'heel', this renders the interpretation 'behind'. An example of this type of use of *–shiri* 'behind' is given in (22).

+ animate

(22) *Riwow roshiriwani-ye to simori.*
ri=wo–wo *ro=shiriwani–ye* *to* *simori*
3SG:F=be–COP 3SG:M=behind–LOC ART pig
'She is behind the pig.' (CS-091028F)

In locative constructions that localize a Figure with respect to an inanimate Ground object that does have intrinsic sides, the body part term *–shiri* is mapped onto the Ground and it refers to the intrinsic backside region of the object. This is illustrated with example (23) where the entrance at the street side is taken as the intrinsic front side of the house, and the opposite site with the entrance from the back yard is considered the intrinsic backside of the house.

– animate, + intrinsic sides

(23) *Ne' roshiriwani-ye te niwer.*

ne'	*ro=shiriwani–ye*	*te*	*ni=wer*
here	3SG:M=behind–LOC	DEM1:M	1SG=house

'Here behind my house.' (DC-090924F)

In locative constructions with inanimate Grounds that have no intrinsic sides, *–shiri* 'behind' is mapped onto the Ground based on the position of the speech act participants, or based on the current use or position of the Ground object, as in examples (24) and (25). Example (24) is taken from the same session as example (6), in which the rectangular table was situated with one of the longer sides to the wall, creating an intrinsic front and back side based on where the people are usually seated at the table.

– animate, – intrinsic sides

(24) *Roshipiripirik ti tawe' roshiriwani-ye to mes.*

ro=shipiripirik	*ti*	*tawe'*	*ro=shiriwani–ye*	*to*	*mes*
3SG:M=roll	DEM1:F	ball	3SG:M=behind–LOC	ART	table

'The ball is rolling behind the table.' (DC-091122F)

In (25) the speaker indicates that a child is hidden behind the other wall, of which the front side is interpreted as the side on which the speech act participants are seated and 'behind' is thus the side that they have no visual access to. In this case, it was actually the wall facing the street side that was talked about, viewed from the courtyard behind the house. Example (25) shows that the intrinsic sides as they were attributed to a house in examples (5) and (23) are not very rigid, and they can be overruled by the position of the speech act participants. As an answer to the question where the child was hidden, the description as given in (25) was preferred over 'in front of the house'.

– animate, – intrinsic sides

(25) *Roshiriwani-ye te pochomoe'.*

ro=shiriwani–ye	*te*	*po–chomoe'*
3SG:M=behind–LOC	DEM1:M	other–wall

'It is behind the other wall.' (CS-090925F)

Similarly, in (26) and (27) sides are assigned to the Ground objects that have no intrinsic sides based on the position of the speech act participants. In (26) the Ground object is a blue rectangular wooden block placed in upright position and in (27) the Ground object is a tree. In both cases, *roshiriwani-ye* refers to the side opposite to the one that the speech act participants are facing, treating the Ground objects as if they themselves were facing the speech act participants (see Section 4.3.2.2 on the mapping of bodily coordinates onto the Ground).

– animate, – intrinsic sides

(26) *Roshiriwani-ye te asol.*

ro=shiriwani–ye	*te*	*asol*
3SG:M=behind–LOC	DEM1:M	blue.one

'It is behind the blue one.' (DC-090924F)

– animate, – intrinsic sides

(27) *Roejevipoekow ten rasoe' roshiriwani-ye te ewokoe'.*

ro=ejevipoek–wo[80]	*ten*	*rasoe'*	*ro=shiriwani–ye*
3SG:M=fall.down–COP	DEM3:M	orange	3SG:M=behind–LOC

te	*ewokoe'*
DEM1:M	tree

'The orange fell behind the tree.' (DC-091122F)

[80] The verb *–ejevipoek* can be further segmented into *ejevi–poe–ko* (fall–down–ABS), with the incorporated locative nouns stem *–poe* 'down'. Since the verb has no influence on the mapping of body part terminology onto the Ground object in this example, it is not segmented here. The incorporation of locative noun stems is discussed in detail in Chapter 5.

4.1.2 LOCATIVE NOUN STEMS DERIVED FROM NATURAL SURROUNDINGS

Another source for Baure locative noun stems is found in natural surroundings. The locative noun stems that were derived from natural surroundings all specify spatial relations in the vertical dimension. In the following sections, the three locative noun stems, *ani* 'above', *–poe* 'down' or 'beside', and *–she* 'along' or 'on top' are discussed.

4.1.2.1 Locative noun stem *ani* 'above'

As opposed to the locative noun stems discussed so far, the locative noun stem *ani* 'above' is not a bound form. In fact, Danielsen (2007: 153) argues that it is an obligatorily free form and it is not possible to use it in the N_2 position of a compound, as shown in examples (28) and (29). However, in the database it does appear in one compound in the N_1 position (see below).

(28) **siyani-ye*
syi–ani–ye
chair–above–LOC
'above the chair' (GP&LO-040725S)

(29) *ani-ye to siy*
ani–ye *to* *siy*
above–LOC ART chair
'above the chair' (GP&LO-040725S)

The meaning 'above' was derived from the Baure word for 'sky', although it is sometimes hard to make a distinction between the two. In (30), for example, *ani* could be interpreted both as 'sky', but as the locative construction for 'above' as well.

(30) *Ach to lechus kwore' ne' ani-ye ito rarow rojinoekow te monchi.*

ach	*to*	*lechus*	*kwore'*	*ne'*	*ani–ye*
and	ART	owl	exist.3SG:M	here	sky–LOC

ito	*ro=ar–wo*	*ro=jinoek–wo*	*te*	*monchi*
PROG	3SG:M=fly–COP	3SG:M=search–COP	DEM1:M	child

'And the owl is here in the sky/above, he keeps flying and searching for the child.' (HC-090122F)

Furthermore, the word *ani* is used for 'heaven', which was probably introduced by the Jesuit missionaries in the 18th century. Used as such, it is still often found in religious contexts, as shown in example (31).

(31) *Niyajarok nia' to won ani-ye*

ni=yajarok	*ni=ia'*	*to*	*wo–no*	*ani–ye*
1SG=pray	1SG=father	ART	COP–NMLZ	sky–LOC

'I pray to my father who is in heaven.' (RP-N091122F-2)

The projected region that can be covered by *ani* 'above' is quite extended. When used in a locative construction, *ani* can refer to the open space above a Ground object. In (32) the Anchor is d in one of the speech act participants, and the space in not limited, except for what lies beyond the human capacity to see. In (33) *ani* refers to the open space above the Ground object 'lake', and is more or less limited by the outer borders of the lake, vertically projected into the sky.

(32) *Pijinoek ani-ye.*

pi=jinoek	*ani–ye*
2SG=search	above–LOC

'Look above.' (GP-101010F)

(33) *To roeamokonoe kwore' ani-ye to chaki.*

to	*roeamokonoe*	*kwore'*	*ani–ye*	*to*	*chaki*
ART	cloud	exist.3SG:M	above–LOC	ART	lake

'The cloud is above the lake.' (RP-030912S)

While referring to the open space above a Ground object, the Figure not necessarily remains unattached. Example (34) was elicited as a description of a picture showing a lamp hanging from the ceiling over a table (Topological Relations Picture Series Nr. 13). The Figure 'lamp', which is not overtly expressed, receives vertical support from the ceiling, yet this vertical support does not influence its spatial relation with respect to the Ground object, the table.

+ vertical support

(34) *Kwore' ani-ye romikoekaw to mes.*

kwore'	*ani–ye*	*ro=mika–ko–a–wo*	*to*	*mes*
exist.3SG:M	above–LOC	3SG:M=illuminate–ABS–LK–COP	ART	table

'It is up there illuminating the table.' (MD-Q030914S)

In fact, it is also possible to use *ani* 'above', when the Figure is supported horizontally by the Ground. The utterance in example (35) was used to describe a configuration in which a blue wooden triangle was placed on top of a green cube.

– vertical support

(35) *Achow rom te asol kwore' ani-ye te ver.*

achow	*rom*	*te*	*asol*	*kwore'*
with	SEQ	DEM1:M	blue.one	exist.3SG:M

ani–ye	*te*	*ver*
above–LOC	DEM1:M	green.one

'And then the blue one is here on top of the green one.' (DC-090924F)

With respect to the flowing water of the rivers, *ani* 'above' is also used for 'up-river', as shown in example (36). In this case, it does not refer to a space above the Ground object, whether in contingency with it or not, but to the region on a higher altitude from which the river flows downstream. This way of referring to the river as a vertical path is not reflected in the verb *–chajamia* for 'going up-river' presented in example (37). The use of *ani* 'above' for up-river is possibly modeled on the Spanish '*río arriba*'.

(36) *Ani-ye te Jamarokin.*
ani–ye *te* *Jamarokin*
above–LOC DEM1:M Río.Negro
'Up the Río Negro.' (DC-090924F)

(37) *Kach rochajamiak.*
kach *ro=chajamia–ko*
AND 3SG:M=go.up.river–ABS
'He is going up-river.' (LO&GP-101003F)

As was pointed out at the beginning of this section, in compounds, *ani* can only be used in N_1 position. In fact, in the database there is only one compound containing *ani* 'above'. The lexeme *ani* itself is used for a story of a building,[81] as in (38). The compound with *ani* in N_1 position and *–api* 'under' in N_2 position means either 'multiple stories', or it refers to the whole building that has multiple levels, as in (39). In this example, *–api* is the locative noun stem, and not the numeral (compare example (38)), since the numeral is right-bound and never appears in the N_2 position of a compound. Moreover, a three-story building is referred to as *aniapi* as well, as shown in example (40).

[81] Generally, the houses in Baures only have one level, the ground level. However, in the beginning of the 20th century, the town's parish hall had two floors. In this building, the earliest school was located and some of the speakers remember going to school there.

(38) *Apin te ani.*
api–no *te* *ani*
two–CLF[general] DEM1:M above
'There are two floors.' (DC-101008F)

(39) *Aniapi-ye.*
ani–api–ye
above–under–LOC
'In the two–story building.' (LO-100926F)

(40) *Mbon aniapi.*
mbo–no *ani–api*
three–CLF[general] above–under
'Three stories.' (DC-101008F)

4.1.2.2 Locative noun stem *–poe* 'down'

The exact origin of the locative noun stem *–poe* 'down' remains unclear. In the historical sources this locative noun stem is found as *–pai* (Magio 1880: 29) or *–pay* (De Asis Coparcari 1880: 100). The locative noun stem *–poe* nowadays forms the basis of the derived noun *poewok* 'ground'. *Poewok* can refer to the surface of the ground with an unlimited extension (comparable to *ani*), as for example in (41), which was given as a hint to find a lost object. Alternatively, it can refer to a delimited piece of land, a parcel, as in example (42). In the latter use, it can be individuated by an article.

(41) *Pijinoek poewok-ye.*
pi=jinoek *poewok–ye*
2SG=search ground–LOC
'Look on the ground.' (GP-101010F)

(42) *Maiyow to poewokonev.*

maiy–wo	*to*	*poewok–nev*
many–COP	ART	ground–PL

'There are many lands (e.g. parcels).' (HC-1010090F)

As was mentioned before, when *–poe* is used in a locative construction, it combines with *–wani* 'place', resulting in *–poewani* 'beside'. In (43), an example of the use of *–poewani* in a locative possessive construction is given.

(43) *Ten kamion kwore' ropoewani-ye to simori.*

ten	*kamion*	*kwore'*	*ro=poewani–ye*	*to*	*simori*
DEM3:M	truck	exist.3SG:M	3SG:M=beside–LOC	ART	pig

'The truck is beside the pig.' (DC-101008F)

In the example (43) above, the animate Ground object, the pig, has intrinsic sides, and *ropoewani-ye* can refer to the left of the pig as well as to his right side. Similar to inanimate Ground objects that do have intrinsic sides, these sides are taken into account, irrespective of the position of the speech act participants. The examples in (44) and (45) always hold when the Figure is d at one of the intrinsic lateral sides of the Ground objects, no matter from what side the speech act participants observe the configuration.

– animate Ground, + intrinsic sides

(44) *Rokoshpoew ropoewani-ye te kar.*

ro=koshpoe–wo	*ro=poewani–ye*	*te*	*kar*
3SG:M=lie.down–COP	3SG:M=beside–LOC	DEM1:M	car

'He is lying down beside the car.' (DC-090930F-2)

– animate Ground, + intrinsic sides

(45) *Ten simori kwore' ropoewani-ye to bisiklet.*

ten	*simori*	*kwore'*	*ro=poewani–ye*	*to*	*bisiklet*
DEM3:M	pig	exist.3SG:M	3SG:M=beside–LOC	ART	bike

'The pig is beside the bicycle.' (DC-101008F)

However, with Ground objects that do not have intrinsic sides, the sides are assigned on the basis of the speech act participants' left and right side, usually the speaker's. In example (46) and (47), the speaker's bodily coordinates are mapped onto the Grounds, the red wooden block and the tree respectively. Should the speaker observe the same configuration from a different perspective, the sides assigned to the Ground objects change accordingly. In Section 4.3.2.2 the mapping of bodily coordinates onto Ground objects is discussed in more detail.

– animate Ground, – intrinsic sides

(46) *Ach ne' ropoewani-ye kwe' te moserkon.*

ach	*ne'*	*ro=poewani–ye*	*kwe'*	*te*	*moserokon*
and	here	3SG:M=beside–LOC	exist	DEM1:M	red.one

'And here the red one is beside it.' (DC-090924F)

– animate Ground, – intrinsic sides

(47) *Rojirikow ropoewani-ye to ewokoe'.*

ro=jirik–wo	*ro=poewani–ye*	*to*	*ewokoe'*
3SG:M=sit–COP	3SG:M=beside–LOC	ART	tree

'He is sitting beside the tree.' (RP-091109F)

4.1.2.3 Locative noun stem *–she* 'on top'

The locative noun stem *–she* is used for localizing the Figure when it is on top of the Ground and receives horizontal support from it. In contrast to the use of *–chipi* 'on top', the Ground does not necessarily have a flat and raised surface. The locative noun stem *–she* is derived from the word for trunk, *eshe'*, as shown as a free form in example (48).

(48) *Nopiripo'ekier ach noemer eshe'-ye.*

no=piri–po'e–ko=ro		*ach*	*no=im=ro*
3PL=cut.in.pieces–head–ABS=3SG:M		and	3PL=put=3SG:M
eshe'–ye			
trunk–LOC			

'They cut off his head and put it on a trunk.' (DC-091009F)

In fact, *eshe'* 'trunk' is analyzeable as the inalienably possessed form *e=she'*, UNSP=trunk. However, in contemporary Baure it does not occur with any of the other personal proclitics. In case of noun incorporation, as in example (49), it is the unpossessed form *–she'* that is incorporated.

(49) *Nijirishe'kow to eshe'.*

ni=jiri–she'–ko–wo	*to*	*eshe'*
1SG=sit–trunk–ABS–COP	ART	trunk

'I am sitting on the trunk.'
(literally: 'I am trunk-sitting the trunk.') (RP-091109F)

When it is used as a locative noun stem the phonologically reduced form *–she* is used, as in example (50). However, the use of *–she* in a locative compound does not seem to be very productive. In fact, it is not possible to use *–she* with certain nouns in the N_1 position of a locative compound, as indicated in the ungrammatical example (51).

(50) *Nimer nikirokshe-ye.*[82]

ni=imo=ro	*nikirok–she–ye*
1SG:M=put=3SG:M	plate–on.top–LOC

'I put it on top of the plate.' (RP-040709S)

[82] In this context, the speakers often mention the similar example *nikirokje-ye* 'on top of a pile of plates' (*nikirok–je–ye*; plate–DISTR–LOC). In this case, however, the distributive *–je* modifies the Ground *nikirok* 'plate', and not the nature of the spatial relation, as is the case with *–she* in example (50).

(51) **siyshe-ye*
siy–she–ye
chair–on.top–LOC
'on top of the chair' (RP-040709S)

The locative noun stem *–she* is not used very often in locative compounds or locative possessive constructions, but it is frequently found in a specific type of predicate, as in example (52) and (53). In fact, this type of predicate with the copula suffix *–wo* used as a predicate base for 'to be' is only found in locative constructions, and is discussed in more detail in Chapter 5.[83]

(52) *Rowoshechow te asol ach kwe' to ver rapi-ye.*
ro=wo–she–cho–wo *te* *asol*
3SG:M=be–on.top–PTCP–COP DEM1:M blue.one

ach *kwe'* *to* *ver* *ro=api–ye*
and exist ART green.one 3SG:M=under–LOC
'The blue one is on top and the green one is under it.'
(DC-090924F)

(53) *Ach to tawe' napiri' kwore' rowoshechowon.*
ach *to* *tawe'* *napiri'* *kwore'*
and ART ball also exist.3SG:M

ro=wo–she–cho–wo–no
3SG:M=be–on.top–PTCP–COP–NMLZ
'And the ball is there as well, it is on top.' (DC-090924F)

However, when *–she* is incorporated in other predicates or in a compound, it often does not have a locative meaning. Instead, it refers to an abstract concept of something long or stretched, like 'tall' in example (54). This does not

[83] It is argued here that in examples (52) and (53) the locative noun stem *–she* is incorporated and not the full form *eshe'*, 'trunk'. Regular morphophonological patterns show that when a morpheme with a final vowel /o/ is followed by a morpheme with initial /e/, the /o/ is dropped, which is not the case here (cf. Danielsen 2007: 70-72).

necessarily have to be in a vertical position, but can be horizontally stretched as well, as in (55). In this sense it is often found in relation to a stretched body of water, such as the river in example (55).

(54) *Roshim-ji tech monchi kotishen-ji.*
ro=shim=ji *tech* *monchi* *koti–she–no=ji*
3SG:M=arrive=QUOT DEM2:M child like.this–along–NMLZ=QUOT
'The boy arrived, like this tall, it is said.' (RP-N091122F-2)

(55) *Ese'she-ye tiow noiy nokotorekiyow.*
ese'–she–ye *tiow* *noiy* *no=kotorek–yi–wo*
stream–along–LOC COMP there 3PL=work–VLOC–COP
'Along the stream that is where they work.' (RP-N090921FE-1)

4.1.3 LOCATIVE NOUN STEMS WITHOUT TRACEABLE ORIGIN

4.1.3.1 Locative noun stem *–api* 'under'

The origin of the locative noun stem *–api* 'under' is unclear. In the grammar sketches written by the Jesuit missionaries, *ope* is mentioned[84] and the examples show a use in locative compounds similar to the use of *–api* in contemporary Baure (De Asis Coparcari 1880: 104; Magio 1880: 47). Today, this locative noun stem is found in compounds and in locative possessive noun phrases, as exemplified in (56) and (57).

(56) *Rosiap nitip'api-ye te ndit.*
ro=siap *ni=tip–api–ye* *te* *ndit*
3SG:M=enter 1SG=nail–under–LOC DEM1:M flee
'The flee entered under my nail.' (DC-091110F)

[84] Magio (1880: 47) actually calls *ope* a preposition, but then gives only examples in which it is postponed to nouns.

(57) *Ach te moserkon kwore' rapi-ye te kopajkon.*

ach	*te*	*moserokon*	*kwore'*	*ro=api–ye*
and	DEM1:M	red.one	exist.3SG:M	3SG:M=under–LOC

te	*kopajkon*
DEM1:M	sky.blue.one

'And the red one is under the sky–blue one.' (DC-090924F)

In locative possessive noun phrases, however, the personal marking of the locative noun stem *–api* 'under' is optional, and it is often found with only the locative marker attached, as in example (58).

(58) *Ach to moserkon kwore' api-ye.*

ach	*to*	*moserokon*	*kwore'*	*api–ye*
and	ART	red.one	exist.3SG:M	under–LOC

'And the red one is under (the blue one).' (DC-090924F)

In the examples above, the locative noun stem *–api* 'under' is used for describing Figures that are in contact with the Grounds above them. However, this is not necessarily the case. Example (59) describes a situation in which a couple of little chicken are hiding under a canoe, and shows that *–api* can also be used when the Figure is not in contingency with the Ground, thus indicating a region projected from the Ground.

(59) *Kwapen yashorapi-ye.*

kwo–pa=no	*yashor–api–ye*
exist–INTL=3PL	canoe–under–LOC

'They are under the canoe.' (HC-100920F)

The Figure does not need to be completely under the Ground and be fully covered by it. In example (24) in the previous chapter, repeated here as example (60), only part of the Ground, *ewokoe'* 'tree' is above the man, namely the tree crest. The rest of the tree, the trunk, is actually to the side of him. The part of the Ground that the Figure is under may even be only a very small part

of the Ground, as in example (61). In this case the Figure was d under the small strip of the overhanging roof that extends beyond the outer walls.

(60) *Kwore' ewokoe'api-ye.*
kwore' *ewokoe'–api–ye*
exist.3SG:M tree–under–LOC
'He is under the tree.' (GP-060312S)

(61) *Noiy pariapi-ye.*
noiy *pari–api–ye*
there house–under–LOC
'There under the house.' (RP-100930F)

In fact, the sense of 'under', in which part of the Ground is d above the Figure, may not be present at all. Example (62) was taken from an imaginary hide and seek game, and used for describing a situation in which a child was hiding behind a closed door.

(62) *Kwore' nan ewonokoe'api-ye.*
kwore' *nan* *ewonokoe'–api–ye*
exist.3SG:M over.there door–under–LOC
'He is there behind the door.' (DC-091122F)

4.1.3.2 Locative noun stem *ikiyiki* 'middle'

The locative noun stem *ikiyiki* 'middle' is a frequently used locative noun stem, but it is not attested in the N_2 position of compounds. In locative possessive phrases it is usually found without person marking on the locative noun stem, as in example (63), or without mentioning the Ground altogether, as in (64).

(63) *Te rekirok kwore' ikiyiki-ye to yashor.*

te	*rekirok*	*kwore'*	*ikiyiki–ye*	*to*	*yashor*
DEM1:M	calabash	exist.3SG:M	middle–LOC	ART	canoe

'The calabash is in the middle of the canoe.' (DC-101008F)

(64) *Nimosha to moserkon ikiyiki-ye.*

ni=imo–sha	*to*	*moserokon*	*ikiyiki–ye*
1SG=put–IRR	ART	red.one	middle–LOC

'I put the red one in the middle.' (CS-090925F)

When the locative noun stem *ikiyiki* is marked for possession, it agrees with the Figure, and not with the Ground as in locative possessive constructions with one of the other locative noun stems. Example (65) describes a line-up of three animals, in which the chicken was in the middle. This kind of person marking on *ikiyiki* is very rare in the database though. It is far more often used without a personal marker, as in the previous examples.

(65) *Rikiyiki-ye ti tiporek to ka'anonev.*

ri=ikiyiki–ye	*ti*	*tiporek*	*to*	*ka'an–nev*
3SG:F=middle–LOC	DEM1:F	chicken	ART	animal–PL

'The chicken is in the middle of the animals.' (RP-091017F)

Whether the Figure is marked on *ikiyiki* or not, it is shown in examples (63) through (65) above that the Ground can consist of either two separate loci, or one single entity. In example (65) the location of the Figure is described in terms of two unconnected objects, one animal on each side of the chicken. More commonly though, the Ground is one single entity, as in example (63), and the Figure is located in the center of that single object. This sense of the Ground being an entity with boundaries is reflected in the form *ikiyiki* itself. The locative noun stem *ikiyiki* can be further segmented into *ikiyi–*, 'middle', and *–ki*, CLF[bounded]. The first part, *ikiyi–*, is combined with other classifiers as well, as shown by example (66), as well as with some of the locative noun stems, such as *–poe*, 'down', in (67).

(66) *To nijashie' kwore' ikiyaki-ye.*
to *ni=jashie'* *kwore'* *ikiyi–aki–ye*
ART 1SG=hat exist.3SG:M middle–CLF[diameter]–LOC
'My hat is in the middle of the river.' (IM-030823S)

(67) *Ikiyipoe-ye te shonoki.*
ikiyi–poe–ye *te* *shonoki*
middle–down–LOC DEM1:M path
'In the middle of the road.' (DC-101008F)

The form *ikiyiki* itself in examples (63) trough (67) thus indicates that the Ground is conceived of as an entity with boundaries. In (65) specifically, the space occupied by the Figure is delimited by the outermost animals, and the line of animals is conceptualized as one single entity.

4.2 GRAMMATICALIZATION OF LOCATIVE NOUN STEMS

Studies on grammaticalization focus on a wide range of phenomena, and theoretical approaches vary from defining grammaticalization broadly as a framework, to using the term for specific processes in language change (see Campbell 2001; and Narrog and Heine 2011 for discussions on the definition of the field). In this section, the process of how the Baure locative noun stems arose, and how lexical or grammatical they are nowadays, is under consideration. For doing so, the classic definition of grammaticalization by Kurylowicz suffices: "Grammaticalisation consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one" (Kurylowicz 1975: 52). Despite of the discussions on how to delimit the field, which phenomena should be considered as grammaticalization and what the driving forces are behind these processes, the core and generally accepted definition is the tendency for lexical elements to develop into more grammatical elements over time.

This development is a diachronic process, which is best studied with data covering a long period of time. For Baure, however, the data are limited to only two periods in time: the mid-eighteenth century data collected by missionaries, and the descriptions of contemporary Baure in the work of SIL linguists Baptista and Wallin (1950s and 1960s) and the documentation team of the Baure project (2008–2013).

In Section 4.2.1 the properties of the locative noun stems as we find them in contemporary Baure are studied in detail. Their lexical properties (4.2.1.1) as well as their grammatical characteristics (4.2.1.2) are analyzed, in order to reveal how the individual locative noun stems can be ordered on a continuum from lexical to functional elements. Section 4.2.2 deals with the historical sources on Baure, showing the use of the locative noun stems in the 18th century, and with processes of grammaticalization beyond the locative noun stems that are also relevant for expressing spatial relations.

4.2.1 LEXICAL AND GRAMMATICAL PROPERTIES OF LOCATIVE NOUN STEMS

As described in Section 4.1 above, the Baure locative noun stems discussed in this chapter have different origins, and with respect to the different constructions in which they are used, they show characteristics of both lexical and grammatical elements. In this section, the lexical and grammatical characteristics of the locative noun stems are discussed, comparing them to free and bound nouns on the one hand, and to classifiers on the other.

4.2.1.1 Lexical properties of locative noun stems

Chapter 2, Section 2.3.3, presented a brief sketch of Baure nominal morphology. It was noted that both free and bound nouns can get a diminutive attached, and/or a locative suffix. They may also receive plural marking, but plural marking is optional and only obligatory for nouns with a human referent.

After the locative noun stems, the diminutive suffix and the plural marker cannot be used. The locative marker *–ye*, on the other hand, is obligatorily used on the locative noun stems, as well as on locative compounds with these stems in N_2 position. Furthermore, a free or bound noun can occur in a noun phrase

preceded by a determiner, adjective, or numeral (or a combination of those), but a locative noun stem cannot. An example with an independent noun is given below in (68) and with a bound noun in (69).

(68) *Riepshok tich powor eton.*
ri=epshok *tich* *powor* *eton*
3SG:F=be.born DEM2:F poor woman
'A poor woman was born.' (CS-N081220F-1)

(69) *Niwoyikow to nijashie'.*
ni=woyik–wo *to* *ni=jashie'*
1SG=make–COP ART 1SG=hat
'I am making my hat.' (LO-D081202LF)

For a comparison between free and bound nouns on the one hand, and locative noun stems on the other, it is more interesting to look at other morphological processes in which nouns are involved, and focus on how the different types of nouns are behaving with respect to these, such as possessive marking, incorporation, and the composition of compounds.

It turns out that the locative noun stems have very little in common with independent nouns. For example, whereas independent nouns cannot be marked for possession by a personal proclitic,[85] the locative noun stems are obligatorily marked by a personal proclitic, and whereas independent nouns cannot be incorporated into verbs, locative noun stems can be. Taking into account different types of compounding in Baure (cf. Admiraal and Danielsen 2014), further differences can be observed. While independent nouns are usually found in the N_1 position of a compound and rarely in the N_2 position, it is the opposite for the locative noun stems. They frequently serve as the N_2 of a (locative) compound, but rarely, if ever, as the N_1 in any type of compound.

[85] Free nouns are actually divided into optionally possessed nouns, which can occur either freely or with a personal proclitic, and unpossessable nouns. The latter cannot be marked with a personal proclitic at all and possession can only be indicated by a possessor pronoun (Danielsen 2007: 118–125).

As was pointed out in Chapter 3, the locative noun stems do have a lot in common with inalienably possessed nouns, such as kinship terms and body part terms. With the exception of *ani*, 'above', which cannot be marked for possession, the locative noun stems receive possession marking by a personal proclitic. Inalienable nouns are obligatorily marked for possession. Even if it is unclear or unspecified to whom they belong, the noun is marked by a prefix *e=* in the proclitic slot (cf. Danielsen 2007: 119–120). The locative noun stems are preferably marked for possession by a personal proclitic, though this is not as obligatory as for inalienable nouns. Only the locative noun stems derived from body part terminology always receive possessive marking. Examples as in (70) and (71) are not uncommon, but in the vast majority of the locative compounds and locative possessive noun phrases cross-reference is marked on the noun stem.

(70) *Ach kwe' to ver api-ye.*
ach *kwe'* *to* *ver* *api–ye*
and exist ART green.one under–LOC
'And the green one is below.' (DC-090924F)

(71) *Kwore' poewani-ye ti tiporek.*
kwore' *poewani–ye* *ti* *tiporek*
exist.3SG:M beside–LOC ART:F chicken
'He is beside the chicken.' (RP-091017F)

Furthermore, inalienably possessed nouns are incorporated into verbs, directly following the verb root. They go into the same slot as where the locative nouns stems, and classifiers, are incorporated. Incorporation is illustrated below for a bound noun in example (72), a classifier in (73), and a locative noun stem in (74).

(72) *Ndorisenokiow.*
ni=torik–senoki–wo
1SG=scratch–inner.ear–COP
'I am scratching in my ear.' (DC-091122F)

(73) *Nijiriarekow.*
ni=jiri–aro–i–ko–wo
1sg=sit–CLF[liquid]–DUR–ABS–COP
'I am sitting in the water.' (RP-091109F)

(74) *Ti sopir ripanshiripaw.*
ti *sopir* *ri=pan–shiri–pa–wo*
DEM1:F tortoise 3SG:F=follow–behind–INTL–COP
'The tortoise is following behind.' (HC-100920F)

Inalienably possessed nouns like kinship terms and body part terminology do not occur in the N_1 position of compounds. Just like the locative noun stems they do occur frequently in the N_2 position, as shown in example (75).

(75) *Tech rokotirow kowoiypoiy.*
tech *ro=kotir–wo* *kowoiy–poiy*
DEM2:M 3SG:M=have–COP horse–foot
'He has horse feet.' (RP-N090921FE-1)

Altogether, the set of locative noun stems is very similar to inalienable nouns and they are found in the same constructions as the ones in which inalienable nouns occur. Thus, they seem to be very lexical, but they have some grammatical properties as well. This is discussed in the next section.

4.2.1.2 Grammatical properties of locative noun stems

Locative noun stems are not only semantically different from other bound nominal roots, they also differ in their morphological behavior, and their use is generally more restricted. As mentioned above, locative noun stems do occur

in N_2 position of a compound, just like bound nouns on the one hand and classifiers on the other. In example (76) a compound with the locative noun stem *–api*, 'under', in N_2 position is presented, and in (77) a comparable compound with the bound noun *–esh*, 'meat'. In (78) a similar construction is shown, but with a more grammatical element in the N_2 position, namely the classifier *–po* 'multitude'.

(76) *simori'api-ye*
simori–'api–ye
pig–under–LOC
'under the pig' (HC-100929F)

(77) *simoriesh*
simori–esh
pig–meat
'pig meat' (DC-090930F-2)

(78) *moeishop*
moeish–po
papaya–CLF[multitude]
'papaya seed' (GP&LO-040721S)

However, unlike other bound nouns and classifiers, locative noun stems do not attach to right-bound adjectival or numeral roots, as exemplified with the ungrammatical example (79).

(79) **chapi-ye*
cho–api–ye
big–under–LOC
'under the big one'

Comparing the locative noun stems to inalienable nouns, an important difference is observed. In contrast to other bound nouns, including inalienable

nouns, locative noun stems cannot be individuated by any kind of determiner. Independent nouns are usually preceded by a determiner, even when the noun is preceded by a full personal pronoun, as in example (80). Bound nouns that are marked for possession by a personal proclitic can also be preceded by an article or by a demonstrative as shown in (81).

(80) *Kwe' tech rotir rosowok.*
kwe' *tech* *rotir* *rosowok*
exist DEM2:M 3SG:M.POSS rice.field
'There is his rice field.' (RP-N090127F-1)

(81) *Ten riaroni kopajkon.*
ten *ri=aroni* *kopajkon*
DEM3:M 3SG:F=clothes sky.blue
'Her clothes are sky blue.' (CS&EU-090123F)

Comparing the locative noun stems with classifiers, the main difference concerns their possibility to be marked for possession. The locative noun stems are preferably marked with a personal proclitic, as in example (82), although this is not obligatory for all of them. Classifiers, however, cannot be possessed, as shown by the ungrammaticality of (83b). This points out that classifiers are more grammatical elements than the more lexical locative noun stems, which pattern the same as inalienable nouns with respect to possession marking.

(82a) *ni'api-ye*
ni=api–ye
1SG=under–LOC
'under me'

(82b) *ri'api-ye*
ri=api–ye
3SG:F=under–LOC
'under her'
(RP-N040721S)

(83a) *mbopi*
mbo–pi
three–CLF[long&thin]
'three candles/lasso's/etc.'

(83b) **nipi*
ni=pi
1SG=CLF[long&thin]
'my candle/lasso/etc.'

4.2.1.3 Decreasing lexicality

In the previous two sections, the lexical and grammatical properties of the locative noun stems as a group were discussed. However, a closer look shows that there is quite some difference between the various locative noun stems. Table 4.1 gives an overview of the locative noun stems and indicates the nominal character of each one, according to the possibility to use them in certain constructions. The different constructions listed in the columns of Table 4.1 are ordered from the constructions in which the locative noun stem is referential on the left to constructions in which the locative noun stem is used spatially on the right. Constructions that are considered to make use of the referential character of the locative noun stems are those in which the locative noun stems refer to a physical item that can be individuated. A distinction is made into (1) constructions in which the locative noun stem is marked with a possessive marker referring to the Ground, (2) constructions in which the locative noun stem is marked with the unspecified marker *e=*, and (3) constructions in which the locative noun stem is not marked for possession at all.

Table 4.1: Lexical versus functional uses of locative noun stems.

		referential → **nonreferential/spatial**				
		independent noun	**compound**	**loc.poss.constr. (+ psn.prcl)**	**loc.poss.constr. (+UNSP)**	**loc.poss.constr (unmarked)**
lexical	*ani* 'sky'	+	–	–	–	+
	–imir 'face'	+	+	+	+	–
	–chipi 'back'	+	+	+	+	–
	–shiriwani 'behind'	–	+	+	+	+
	–poewani 'beside'	–	+	+	–	+
	–api 'under'	–	+	+	–	+
	–she 'on top' 'along'	–	+	–	–	–
	–poe 'down'	–	+	–	–	–
functional	*–shiri* 'behind'	–	+	–	–	–
	–ikiyiki 'middle'	–	–	–	–	+

There are only a few locative noun stems that are used as independent nouns, and only the two that have been derived from body part terminology can be preceded by a determiner. In fact, when the forms are used with a clear referential function, the spatial interpretation is only rendered by the locative marker *–ye*, and the lexeme itself is not a spatial marker. This is illustrated in example (84) in which *–imir* 'face' refers to a proper body part.

(84) *Roecharok te roemiri-ye*
ro=ech–aro–ko *te* *ro=imir–ye*
3SG:M=throw–CLF[liquid]–ABS DEM1:M 3SG:M=face–LOC
'He is throwing water in his face.' (GP&LO-081229FP)

On the most lexical end of the continuum are the body part terms *–imir* 'face', and *–chipi* 'back', and the lexeme *ani* 'sky', which are grouped together because they can all be used as an independent noun. However, comparing the examples (85) and (86), *–imir* 'in front' clearly refers to a spatial projection with respect to the Ground, but for *–chipi* this is not the case. For all examples in the database it can be argued that *–chipi* is referential rather than spatial (see also Sections 4.1.1.1 and 4.1.1.2).

(85) *roemiri-ye to simori*
ro=imir–ye *to* *simori*
3SG:M=in.front–LOC ART pig
'in front of the pig' (DC-090930F-1)

(86) *rochipi-ye to simori*
ro=chipi–ye *to* *simori*
3SG:M=back–LOC ART pig
'on the back of the pig/on top of the pig' (RP-091017F)

Moving a bit away from the lexical end of the continuum, we find the locative noun stems *–shiriwani* 'behind', *–poewani* 'beside', and *–api* 'under'. They group together because they do not occur as independent nouns with a referential

function, but they do occur in both compounds and locative possessive constructions. The locative noun stem *–shiriwani* behind' behaves somewhat different than the other two of that group, which pattern exactly the same. Of these three, *–shiriwani* is the only one that can be marked by the unspecified marker *e=*, as in example (87).

(87) *eshiriwani-ye to jir*
e=shiriwani–ye to jir
UNSP=behind–LOC ART man
'behind the man' (SIL3-N.005)

In fact, Table 4.1 shows that only the locative noun stems that are derived from body part terminology are found with the unspecified marker *e=*, but of those three, only *–shiriwani* can also be used without any possessive marking.

More towards the grammatical end of the continuum are the locative noun stems *–she* 'on top' or 'along', *–poe* 'down', and *–shiri* 'behind'. These three only occur in the N_2 position of compounds. Although there are only a few examples for each one in the database, they do not appear in any type of locative possessive construction. It is noteworthy that two of these, *–poe* and *–shiri*, have the composed alternatives *–poewani* and *–shiriwani*, which do occur in locative possessive constructions. In this sense the non-composed forms show a great deal of similarity with classifiers, which also occur in the N_2 position of compounds, but not as free forms, whether marked with a possessive proclitic or not. Although the referential character of locative noun stems and classifiers in these types of compounds is debatable, they still do determine the type of referent (see also Section 4.2.1).

Finally, *ikiyiki* 'middle' does not pattern like any of the other locative noun stems. In fact, it only occurs in one of the constructions taken into consideration here, the unmarked locative possessive construction. This shows that, although it is composed of at least one classifier (the final *–ki*, CLF[bounded], see also Section 4.1.3.2), it is more lexical than other classifiers, which cannot be used as free forms, with or without possession marking.

4.2.2 GRAMMATICALIZATION OF LOCATIVE NOUN STEMS

Cross-linguistically, there is evidence that spatial markers often originate from body part terms or landmarks (e.g. De León 1992; Heine 1989, 1997; Rybka 2009; Senft 2006; among others). The morphosyntactic structure that arises from it may differ though, ranging from prefixes (cf. Levy 1992 on Papantla Totonac), to postpositions (cf. Ameka 2006 on Ewe), or verbs (cf. Haviland 1992 on Tzotzil). As was shown already, the Baure locative noun stems were partially derived from body part terms. In this section, a closer look is taken at the historical evidence, sketching the probable process of grammaticalization.

4.2.2.1 Locative noun stems in historical sources

Although grammaticalization should be understood as a diachronic process, for Baure there is a lack of systematic diachronic data. The only historical data available are the grammars and word lists from the 18th century. In these historical sources, though, most of the locative noun stems found in contemporary Baure are indeed attested, albeit in a different spelling (e.g. <sc> where we would write <sh>, and <qu> where we would use <k>). Throughout this section, the examples from the historical sources are given with their Spanish translation as presented in these sources maintaining the original spelling. Subsequently, when they are analyzed according to our current knowledge of the language, the spelling is adapted.

In their grammars, the missionaries refer to the locative noun stems as 'particles', in the same way as they refer to elements that we would treat as suffixes. They note, though, that the particles can be attached to both verbs and nouns (De Asis Coparcari 1880: 106).[86] The only locative noun stems not found in the historical source are *–shiri* 'behind' and *ikiyiki* 'middle'. However, examples are given of the complex form *–siribane* for 'behind' (De Asis Coparcari 1880: 109). Both authors list *–qui* for 'inside' (De Asis Coparcari 1880: 101; Magio 1880: 35), what we find nowadays as the classifier *–ki* that forms the basis of *ikiyiki* 'middle', and what we analyze as 'CLF[bounded]'. The particles as they are found in the historical documents are listed in Table 4.2.

[86] De Asis Coparcari writes: "ya se ha dado fin .. pues pocas de ellas hay que sean puramente partículas y que no se componen con los verbos" (De Asis Coparcari 1880: 106).

Table 4.2: Locative noun stems in historical sources.

Contemporary Baure		**Historical sources**			
		Magio (1880 [1749])		**De Asis Coparcari (1880 [ca. 1767])**	
		form	**meaning**	**form**	**meaning**
body part terms	*–imir*	*miraico*	'before, in front (of), up front'[87]	*miray*	'in front of, in the presence of, before'[88]
	–chipi	*chapi*	'back'[89]	*chapi*	'roof'[90]
	–shiri				
	–shiriwani			*siribane*	'behind'[91]
natural surroundings	*ani*	*oqueani*	'heaven'[92]	*ani*	'above, high up'[93]
	–poe	*pai*	'ground, on the ground, over land'[94]	*pay*	'floor, ground'[95]
	–poewani			*paybane*	'close to, next to'[96]
	–she	*scie*	'over, on, on top'[97]		
unknown	*–api*	*ope*	'under'[98]	*ope*	'under'[99]
	–ikiyiki				

[87] On the particle *miraico* Magio comments: "Esta partícula pospuesta á los verbos (si tienen co final se les quita) significa «de antes, de antemano, delante, por delante»... ." (Magio 1880: 27). Although he analyzes *miraico* as a whole, his observation on what we analyze today as the absolute suffix *–ko* on verbs, suggests that *–mirai* (contemporary *–imir* 'in front') used to be incorporated in those days in the same way as it is nowadays.

[88] De Asis Coparcari describes the meaning of *miray* as follows: "Esta partícula significa « delante ó en presencia » cuando se usa con nombres y pronombres, ... Cuando se usa con verbos, significa « antes y por delante, etc. » ." (De Asis Coparcari 1880: 95).

In the historical grammars, *miraico* and *miray* are mentioned as particles with the meaning 'before', 'in the presence of', or 'in front'. Whereas Magio only gives examples with the particle incorporated in a verb, as shown in example (88), De Asis Coparcari presents examples as well in which *miray* is the N_2 in a compound, or used as a possessed noun, as in (89) and (90) respectively.[100]

Examples from missionaries' grammars	**Contemporary analysis**
(88) *niyonomiraico*	*ni=yono–mirai–co*
ir por delante	1SG=go–face–ABS
(Magio 1880: 27)	'go upfront'

[89] Magio notes that "..., *chapi* es partícula de espaldas... ." (Magio 1880: 39).

[90] De Asis Coparcari lists a compound with *–chapi* in N_2 position with the meaning 'roof': "...; *porichapiye* en el techo de la casa; ... ." (De Asis Coparcari 1880: 97–98)

[91] According to De Asis Coparcari, "« [p]ost » se explica también con *bane*, v.g.: post tergum *nisiribane*." (De Asis Coparcari 1880: 109).

[92] In the only example that Magio gives, *–ani* seems to be in the N_2 position of a compound: "...; para ir tu al Cielo, *ena piyonochobo oqueani*; ... ." (Magio 1880: 11). The compound *oqueani* can be segmented as *oque–ani,* over.there–sky (see also example (96)).

[93] De Asis Coparcari comments that "*Ani*, esta tambien significa: arriba, ó en el alto, y con ella explican el cielo." (De Asis Coparcari 1880: 109)

[94] Magio lists several examples with *–pai* and according to him "[e]sta partícula se pospone á los verbos y da significación de « tierra, en tierra, por tierra »." (Magio 1880: 29)

[95] De Asis Coparcari indicates that *–pay* "[s]ignifica ó denota accion sobre el suelo ó tierra." (De Asis Coparcari 1880: 100)

[96] About the complex form De Asis Coparcari states that "[i]nterpuesta la partícula *pay*, v.g.: *nipaybane* junto á mi, *pibaybane* junto ó cerca de ti; *repaybane*, etc." (De Asis Coparcari 1880: 97)

[97] In his list, Magio notes that "[e]stas preposiciones: *emoquiye*, *eye*, *hieye*, *escieye*, *scie*, pospuestas á varios nombres, significan « sobre, encima, supra », ..." (Magio 1880: 47)

[98] According to Magio "[e]sta preposición pospuesta á los nombres significa « debajo », ..." (Magio 1880: 47)

[99] De Asis Coparcari explains that *ope* "Significa « debajo de alguna cosa ». Su uso es con nombres y verbos." (De Asis Coparcari 1880: 104)

[100] This is probably also the reason why Magio takes the final syllable *–co* to be part of the particle. Presumably this is the absolute marker *–ko* found frequently after incorporated locative noun stems in contemporary Baure (see Chapter 5). On the basis of the available data it is unclear whether Magio was unaware of the use of the particle *mirai(co)* in combination with nouns or in a possessed form, or whether he didn't mention it for other reasons.

(89)	*pimiray*	*pi=mira–ye*
	en tu presencia	2SG=face–LOC
	(De Asis Coparcari 1880: 95)	'in your presence'

(90)	*eclesia miray*	*eclesia–mira–ye*
	delante de la iglesia	church–in.front–LOC
	(De Asis Coparcari 1880: 95)	'in front of the church'

It is striking that neither Magio nor De Asis Coparcari mention 'face' as a body part term. In fact, Magio lists *chaqui* for 'face' (Spanish: *frente*, Magio 1880: 38), but he does not give any further examples. In his wordlist, D'Orbigny does include *imira* with the French translation '*face*' (D'Orbigny 1880: 115).

In none of the Jesuit grammars *–chipi* or a related form is used for spatial reference. Magio specifically mentions that it means 'back' (Magio 1880: 39), and De Asis Coparcari gives only one example in which *–chapi* is used for 'roof'. This example is given here as example (91).

(91)	*porichapiye*	*pori–chapi–ye*
	en el techo de la casa	house–roof–LOC
	(De Asis Coparcari 1880: 97)	'on the roof of the house'

Although no form corresponding to *–shiri*, 'behind', is found in any of the historical sources, the compound *–shiriwani* is attested, with a Latin translation *post tergum*, as in the following example (De Asis Coparcari 1880: 109).

(92)	*nisiribane*	*ni=siri–bane*
	post tergum	1SG=heel–behind
	(De Asis Coparcari 1880: 109)	'behind my back'

Interestingly, he ascribes the 'behind' interpretation to the particle *bane*, and not to the body part term (De Asis Coparcari 1880: 109). Similarly, Magio (1880: 26) mentions *bane* as the particle that means 'behind' or 'after'.[101]

The locative noun stem *ani* is not discussed in detail in any of the historical documents. De Asis Coparcari mentions that it means 'above' or 'high up', and that it is used for 'heaven', but does not give any examples. In Magio's grammar sketch, *ani* occurs only once as the N_2 of a compound, in the example given here as (93). However, Magio does not discuss the use of *ani*, nor the meaning of the first part of the compound, *oque*. According to De Asis Coparcari, *oque* means 'over there' (De Asis Coparcari 1880: 108), which is represented in the analysis below.

(93)	*ena piyonochobo oqueani*	*ena*	*pi=yono–cho–wo*
	para ir tu al Cielo	so.that	2SG=go–PTCP–COP
			oque–ani
			over.there–sky
	(Magio 1880: 11)		'so that you go to heaven'

In both grammars, it is mentioned that when *–pai* is incorporated, it indicates that the action is situated on the ground or oriented towards it (De Asis Coparcari 1880: 100; Magio 1880: 29), and both give examples of incorporation. Furthermore, only Magio claims that *–pai* can also be attached to nouns, in which case it means that the particular ground or place has, or is producing, the animal or crop to which the N_1 of the compound refers.[102]

[101] Magio notes that "*[b]ane* pospuesta á nombres significa: « despues, de atras »." (Magio 1880: 26). In the closely related Arawakan language Paunaka, the suffix *–bane* is also used in this way, especially for marking temporal distinctions (Swintha Danielsen *pers.comm.*).

[102] In contemporary Baure the nominal root *–wok* has a similar function, e.g. *ros–wok*, rice–place 'rice field'. However, unlike the historical root *–pai* 'ground', the nominal root *–wok*, cannot be incorporated.

(94)	*choropai*	*choro–pai*
	tierra de maiz	maize–ground
	(Magio 1880: 29)	'maize land' or 'maize field'

(95)	*motaripai*	*motari–pai*
	tierra de vivoras	snake–ground
	(Magio 1880: 29)	'land of snakes'

De Asis Coparcari is the only one who mentions *–paybane*, meaning 'close' to or 'next to'. The examples he gives are all marked with a personal proclitic, as in (96).

(96)	*repaybane iglesia*	*re=pay–bane*
	cerca ó junto á la iglesia	3SG:M=ground–next.to
	(De Asis Coparcari 1880: 97)	'close to the church' or
		'next to the church'

The only form that could possibly be related to *–she* is found in Magio, who discusses what he calls prepositions meaning 'over', 'on top of', or 'above' (Magio 1880: 47). He illustrates the use of *scie* with only one example, given in (97), which may refer to a cloth lying over the table.

(97)	*emocoscie*	*emoco–scie*
	sobre la mesa ó barbacoa	table–over
	(Magio 1880: 29)	'over the table'

The particle *–ope* is listed in both Jesuit grammars, and examples are given in which *–ope* is the N_2 of a compound. Furthermore, De Asis Coparcari explicitly mentions that *–ope* can be used with verbs as well and gives a few examples. Examples (98) and (99) illustrate the use of *–ope* as it is described in the historical sources.

(98) *hoconoope* *hocono–ope*
debajo de la canasta basket–under
(Magio 1880: 47) 'under the basket'

(99) *niniopeco* *ni=ni–ope–ko*
comer debajo de alguna parte 1SG=eat–under–ABS
(De Asis Coparcari 1880: 104) 'eat underneath something'

The examples from the historical sources indicate that in those days, the locative noun stems were already in use as such. Moreover, they seem to appear in the same constructions as nowadays, namely in locative compounds and locative possessive constructions, and incorporated into verbs. Although the sources do not present examples of all three constructions for each and every locative noun stem, the pattern is clearly very similar to the one that is found today.

4.2.2.2 Beyond the locative noun stems

As was pointed out in Section 4.2.1.2., the locative noun stems show a great deal of similarity with the Baure classifiers with respect to their grammatical properties. This goes especially for the classifier *–ki*, which has the locative meaning 'enclosed'.[103] The Ground object needs to have an inner space where the Figure is located, as is exemplified in example (100).

(100) *Rosiap joronoki-ye.*
ro=siap *joron–ki–ye*
3SG:M=enter oven–CLF[enclosed]–LOC
'He (the boy) entered the oven.' (DC-091122F)

Structurally, this type of endocentric compounding with a classifier in the N_2 position is very similar to locative compounds, and both can be considered a

[103] Payne (1991: 384) reconstructs the form **Vku* for Proto-Arawakan, meaning 'container, cavity, hole'. In the historical Baure sources, the Jesuit missionaries mention *–qui* for 'inside, from the inside, on the inside' ("adentro, de dentro, por dentro", Magio 1880: 35), and examples are given of classifiers in nominal compounds as well as with numerals and adjectives.

subtype of nominal compounding (cf. Admiraal and Danielsen 2014). The noun root in N_1 position of nominal compounds consists of a free noun root, such as *kowoiy* 'horse' in (101a), or a bound noun root, such as *koshi–* 'motacú palm' in (101b). The components that appear in the N_2 position of nominal compounds include bound nouns, such as in *–poiy* 'foot' in (101a), and classifiers, such as *–'i'* (CLF[fruit]) in (101b). In both cases however, the referent of the compound is determined by the root in the N_2 position, the foot of the horse and the fruit of the motacú palm respectively.

(101a)	*kowoiypoiy*	(101b)	*koshi'i'*
	kowoiy–poiy		*koshi–'i'*
	horse–foot		motacu.palm–CLF[fruit]
	'horse foot'		'motacú fruit'
	(RP-N090921FE-1)		(HC-040724S)

Furthermore, the classifier *–ki* is combined with a limited number of other classifiers, forming a complex classifier, which has a basic structure as presented in Figure 4.1.

[CLF1 + CLF2]CLF

Figure 4.1: Basic structure of complex classifiers.

The complex classifiers with *–ki* (CLF[enclosed]) as a CLF2 refer to the contents of the object referred to by CLF1, as in example (102). More examples of complex classifiers with *–ki* are given in Table 4.3.

(102) *Ach ndi', noiy paraki-ye nimok.*

ach	*ndi'*	*noiy*	*pari–aki–ye*	*ni=imok*
and	1SG	there	house–CLF[body.enclosed]	1SG=sleep

'And I, I sleep there inside the house.' (DC-090924F)

Table 4.3: Complex classifiers with *–ki*
(after Admiraal and Danielsen 2014).

Compound classifier	**Gloss**	**CLF1**	**+**	**CLF2**
–seki	CLF[oval.enclosed]	*–se* CLF[oval]		
–ajaki	CLF[pot.enclosed]	*–aja* CLF[pot]		
–chiki	CLF[round.enclosed]	*–chi* CLF[round]		
–eki	CLF[jug]	*–e* CLF[vegetable]	+	*–ki* CLF[enclosed]
–iki	CLF[container]	*–i* CLF[birds&fruit]		
–aki	CLF[body.enclosed]	*–a* CLF[body]		
–peki	CLF[pit]	*–pe* CLF[spade]		

Thus, whereas most of the forms used in locative noun phrases have identifiable lexical properties, the forms for referring to the inside of a Ground object are grammatical elements. On the fringe between lexical and grammatical is the locative noun stem *ikiyiki* ‘middle’. It was probably derived from the compound classifier *iki–iki*, CLF[enclosed]–CLF[enclosed], which lexicalized into the independent locative noun stem *ikiyiki*. Compared to the other locative noun stems though, *ikiyiki* is quite a functional element that can only be used in locative possessive constructions without cross-reference marking (see Table 4.1).

4.2.2.3 The hypothetical path

In the previous sections, it was shown that the locative noun stems have lexical as well as grammatical properties. The locative constructions in which these stems are used nowadays seem to have been in use already in the eighteenth century. Previous cross-linguistic research has shown that spatial nominals that are referring to body parts or environmental terms, commonly evolve into adpositions and possibly grammaticalize further into case-markers (cf. Heine 1997: 57–58; Kahr 1975; Levinson 2003: 102–104). In the case of Baure, the only available historical data do not provide clear diachronic evidence for such a process. However, looking at the synchronic data, it can be assumed that the Baure locative noun stems were also in the process of grammaticalizing into more functional elements. In this sense, two distinct processes can be observed.

On the one hand, the locative noun stems used as an N_2 in compounds form a continuum with classifiers that appear in the same position. The locative noun stem that resembles classifiers the most, is *–she* 'on top' or 'along'. Like classifiers, it can neither be used as an independent noun, nor as part of the locative possessive construction. In a number of compounds with *–she*, the locative noun stem seems to indicate the stretched shape of the Ground object rather than a spatial relation, as shown in example (103).

(103) *To shiye' royonopa wapoershe-ye.*

to	*shiye'*	*ro=yono–pa*	*wapoer–she–ye*
ART	fox	3SG:M=go–INTL	river–along–LOC

'The fox is going to walk along the riverside.' (GP-030921S)

In contrast to *–poe* 'down' and *–shiri* 'behind', *–she* cannot combine with *–wani* 'place' to form a composed locative noun stem that can be used in a locative possessive construction. In fact, the necessity to add *–wani* indicates that the stems *–poe* and *–shiri* themselves are not lexical enough to be used independently in a locative possessive construction.

At the same time, however, another process of grammaticalization can be observed in the diachronic data. Unmarked locative noun stems in locative possessive phrases tend to grammaticalize into adpositions. Whereas the

locative noun stems derived from body parts still need at least the unspecified prefix *e=*, the locative noun stems *–shiriwani* 'behind', *–poewani* 'beside', and *–api* 'under' may remain unmarked, as in examples (70) and (71) above, repeated here as (104) and (105). The lack of person marking indicates that these locative noun stems have a weaker relation to the Ground, and thus a more grammaticalized status.

(104) *Ach kwe' to ver api-ye.*

ach	*kwe'*	*to*	*ver*	*api–ye*
and	exist	ART	green.one	under–LOC

'And the green one is below.' (DC-090924F)

(105) *Kwore' poewani-ye ti tiporek.*

kwore'	*poewani–ye*	*ti*	*tiporek*
exist.3SG:M	beside–LOC	ART:F	chicken

'He is beside the chicken.' (RP-091017F)

As was indicated in Chapter 3, the use of the locative compound is more restricted than the use of the locative possessive construction. A possible explanation for the speaker's preference for the locative possessive construction is that it resembles Spanish prepositional phrases and is thus very transparent.

4.3 FRAMES OF REFERENCE

In this section it is further explored how Baure makes use of frames of reference, a notion that was already briefly introduced in Chapter 1. First of all, in Section 4.3.1 the difference between non-angular and angular specification is clarified. Since frames of reference are only employed when using angular specification, Section 4.3.2 discusses the four different frames of reference; the absolute frame of reference (4.3.2.1), the relative frame of reference (4.3.2.2), the intrinsic frame of reference (4.3.2.3), and the direct frame of reference (4.3.2.4).

4.3.1 NON-ANGULAR SPECIFICATION VS. ANGULAR SPECIFICATION

According to the distinctions made in the literature (see Levinson 2003: 34–61 for a summary), identifying a certain specific location in a wider space involves two semantic subfields: 'non-angular specification' (or 'coincidence') and 'angular specification' (or 'coordinate systems'). This subdivision is represented in Figure 4.2.

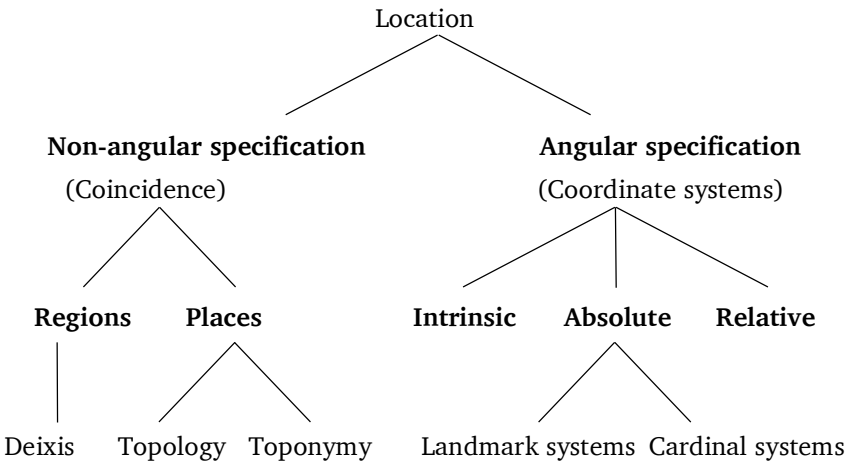


Figure 4.2: Non-angular and angular specification and their subtypes (after Levinson 2003: 66).

In the case of non-angular specification, the Figure and the Ground coincide and the interpretation of the spatial relation between the two does not require any coordinate system. Instead, the strategy for locating the Figure in non-angular descriptions is to mention a Ground or landmark in close contiguity with the Figure, and indicate that the Figure is to be found in that same place or its approximation. This type of relation between the Figure and the Ground is also known as a topological relation. Clear cases of this kind of non-angular specification include location in a certain place which can be described using a toponym, as in example (106), or a topological specification, as in (107).

(106) *Nokiew woroiy Santakrosi-ye.*

no=kie–wo	*woroiy*	*Santakrosi–ye*
3PL=E.V–COP	savage	Santa.Cruz–LOC

'They say there are savages in (the department of) Santa Cruz.'

(DC-091009)

(107) *Kwore' to monchi wotoki-ye.*

kwore'	*to*	*monchi*	*wotoki–ye*
exist.3SG:M	ART	child	hammock–LOC

'The child is in the hammock.' (DC-091122F)

In the case of angular specification, the relation between de the Figure and the Ground is a projective spatial relation. In order to identify the exact location of the Figure, a system of coordinates is employed (see Section 4.3.2).

The distinction between non-angular and angular specification is not necessarily reflected in the grammar. In Baure, for example, there is no morphosyntactic distinction between the two types of specification, and some of the locative noun stems can be used to indicate topological relations as well as projective relations. Example (108) shows the use of *–api* 'under' for a topological (non-angular) relation. In (109), the same locative noun stem is used for specifying a projective (angular) relation.

(108) *Vijarikier mesapi-ye.*

vi=jari–ko=ro	*mes–api–ye*
1PL=stripe–ABS=3SG:M	table–under–LOC

'We paint on the underside of the table.' (DC-100927F)

(109) *To tawe' kwore' mesapi-ye.*

to	*tawe'*	*kwore'*	*mes–api–ye*
ART	ball	exist.3SG:M	table–under–LOC

'The ball is under the table.' (DC-091122F)

4.3.1.1 Topological relations in Baure

Cross-linguistically, topological relations can be expressed in many ways, and interact with angular specification of location. The Baure descriptions of the various topological relations presented in this section were elicited using the Topological Relations Picture Series (Bowerman and Pederson 1992, see Section 1.3.1.1.1 of Chapter 1).[104] Examples (110) through (116) show the descriptions given for a subset thereof, in which the following contrasting dimensions were presented: 'horizontal support', 'adhesion', 'complete containment', 'vertical non-contact', 'under', and 'attachment by piercing'.

Picture 1

(110) *Ten posi kwore' mes-ye.*

ten	*posi*	*kwore'*	*mes–ye*
DEM3:M	cup	exist.3SG:M	table–LOC

'The cup is on the table.' (LO-030829S)

Picture 2

(111) *Te tikorokoe' kwore' rekirok-ye.*

te	*tikorokoe'*	*kwore'*	*rekirok–ye*
DEM1:M	guava.fruit	exist.3SG:M	calabash–LOC

'The guava fruit is inside the calabash.' (DC-101008F)

Picture 3

(112) *Te estamp kwore' sobri-ye.*

te	*estamp*	*kwore'*	*sobri–ye*
DEM1:M	stamp	exist.3SG:M	envelope–LOC

'The stamp is on the envelope.' (LO-030829S)

[104] As was pointed at in Chapter 1, many of the Figure-Ground-scenes of the Topological Relations Picture Series were already elicited during earlier research by Danielsen. For the current research only the scenes absent in Danielsen's database were elicited.

Picture 10

(113) *To risowe kwore' riwojis-ye.*

to	*ri=sowe*	*kwore'*	*ri=wojis–ye*
ART	3SG:F=ring	exist.3SG:M	3SG:F=finger–LOC

'The ring is on her finger.' (RP-030912)

Picture 13

(114) *To lampor kwore' ani-ye to mes.*

to	*lampor*	*kwore'*	*ani–ye*	*to*	*mes*
ART	lamp	exist.3SG:M	above–LOC	ART	table

'The lamp is above the table.' (RP-030912S)

Picture 16

(115) *To tawe' kwore' rapi-ye to siy.*

to	*tawe'*	*kwore'*	*ro=api–ye*	*to*	*siy*
ART	ball	exist.3SG:M	3SG:M=under–LOC	ART	chair

'The ball is under the chair.' (DC-091122F)

Picture 30

(116) *To korirok rosapikow to tikorie'.*

to	*korirok*	*ro=sapi–ko–wo*	*to*	*tikorie'*
ART	arrow	3SG:M–enter–ABS–COP	ART	calabash

'The arrow has entered the calabash.' (MD-Q030914S)

Picture 70

(117) *Noeyik tech tikorie'.*

no=iyik	*tech*	*tikorie'*
3PL=pierce	DEM2:M	calabash

'They pierced (shot) the calabash.' (DC-060418S)

As the examples above show, in Baure, non-angular spatial location is often expressed by means of the general locative marker *–ye* (LOC) without any

further specification (examples 110, 111, 112, and 113).[105] In contrast, for angular specification, the use of the locative marker alone is not enough. Instead, additional information on the location needs to be added in the form of locative noun stems. All situations, except for the apple on the skewer in (116) and (117), can be expressed by the basic locative construction using the general positional *kwore*' (exist.3SG:M). Within this set of basic locative constructions only two types of spatial relations are expressed differently, that is *ani-ye* for vertical non-support in example (114), and *rapi-ye* for 'under' in example (115). Pictures 30 and 70 are not described using the basic locative construction, but a resultative construction instead. This distribution of expressing topological relations in Baure is summarized in Figure 4.3.

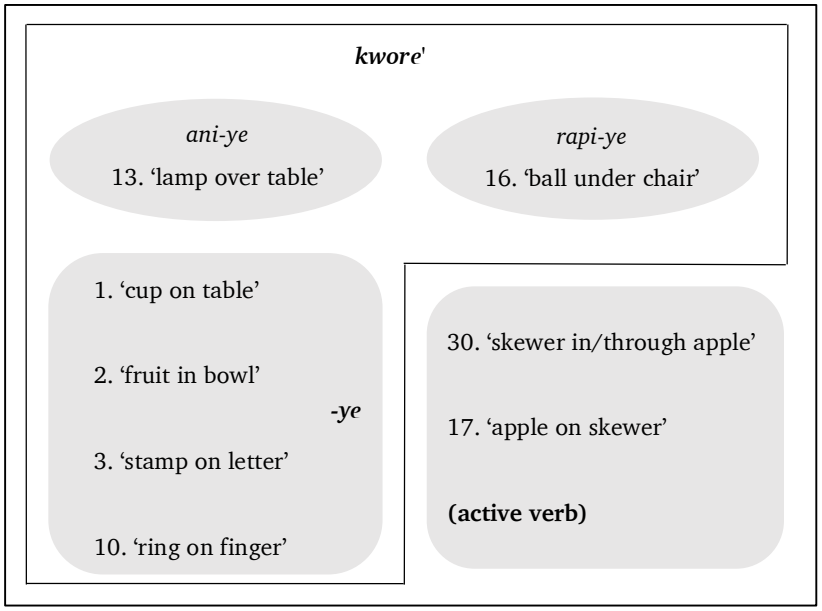


Figure 4.3: The grouping of topological notions in Baure.

[105] It should be noted that the general meaning of the locative marker *–ye* allows for most situations to be described with only *–ye*, whereas additional specification is certainly possible, but only added when the situation calls for it. This may be due to influence from Spanish. In fact, all scenes conflated in the *–ye* group in Figure 4.3 would by described with the Spanish preposition *en*, which is used for IN and ON (Bowerman 1996: 394). Comparative research on Spanish topological notions may reveal more similarities, but this is beyond the scope of this research.

Although different languages show different patterns (Levinson and Meira 2003; Levinson and Wilkins 2006), the pattern found in Baure does largely match the conclusions that were drawn from cross-linguistic research. The implicational hierarchy suggested by Levinson and Wilkins (2006: 519), and presented here in Figure 4.4, indicates that languages that use the Basic Locative Construction for a scene on the left, also use this construction for all scenes to the right.

Animate-Ground > **Figure-Pierced** > **Ground-Pierced** > **Adhesion** > **Core-Scenes**

ring on finger > apple on skewer > arrow in apple > stamp > cup on table;
fruit in bowl;
lamp over table;
ball under chair.

Figure 4.4: Implicational hierarchy across topological space
(after Levinson and Wilkins 2006: 519).

In Baure, the core scenes and the adhesion scenes are described using the basic locative construction. However, the leftmost topological relation in the hierarchy is described either by using the basic locative construction, or by a stative verb derived from a noun, such as *rikosowew*, 'she is with ring'. This latter construction is shown in example (118).

(118) *Ti eton rikosowew.*

ti	*eton*	*ri=ko–sowe–wo*
ART:F	woman	3SG:F=ATTR–ring–COP

'The woman is wearing a ring.'
(literally: 'The woman is with ring.') (RP-030912S)

4.3.2 ANGULAR SPECIFICATION

The second semantic subfield involved in identifying a particular location is angular specification, using coordinate systems. When a coordinate system is used, the Figure is localized by specifying a search domain in terms of the angle from a prominent Ground object at some distance removed from the Figure (Levinson 2003: 67). An angular specification makes use of a coordinate system in either the vertical or the horizontal dimension, and in both dimensions the different frames of reference can be detected. However, in the vertical dimension, locative descriptions tend to be largely unproblematic, and the three frames of reference largely overlap. In other words, the canonical position of an object (intrinsic frame of reference) often coincides with the speaker's perception in upright position (relative frame of reference) and the angle with respect to the Ground which is a landmark (absolute frame of reference). As is illustrated with example (119), it is usually not possible to distinguish between the three. In this case, it remains unclear which coordinate system is employed to specify the location of the Figure, the lamp. The specification of this particular dimension, vertical non-contact, may be based on the canonical position of the table (intrinsic frame of reference), the upright position of the speech act participants (relative frame of reference) or the absolute position of the landmark 'sky' (absolute frame of reference). The search domain for the Figure, however, is easily identifiable within all three systems of coordinates.

(119) *To lampor kwore' ani-ye to mes.*

to	*lampor*	*kwore'*	*ani–ye*	*to*	*mes*
ART	lamp	exist.3SG:M	above–LOC	ART	table

'The lamp is above the table.' (RP-030912S)

In the horizontal dimension, on the other hand, there exists no counterpart comparable to the fixed vertical axis, and angles need to be defined by other means. Cross-linguistic research has shown that the intrinsic frame of reference

seems to be used universally,[106] and adding the absolute or relative frame of reference to it is optional (Danziger 1999; Levinson and Wilkins 2006; Pederson et el. 1998). In the following section, the different systems of coordinates, or frames of reference, that are used in Baure are discussed in more detail.

4.3.2.1 The absolute frame of reference

Locative expressions for which the absolute frame of reference is used, rely on immovable points in the landscape or cosmology. This can either be a cardinal term, like east or west, or a landmark, like sea-side or mountain-side. The exact topological relation between the Figure and the Ground is expressed on the basis of the Anchor that is located in this fixed point in the surroundings of the scene, and an indication of the angle projected from the Anchor. In the absolute frame of reference, a change in the position of the speech act participants does not affect the truthfulness of the expression. The expression still holds when the speech act participants look upon the scene from a different angle. Similarly, the orientation of the Ground does not play a role and remains unspecified. For example, the utterance in (120) comes from a matching game during which two speakers were sitting at the same side of the table. However, even if one or both of them moved to the opposite side of the table and looked upon the configuration from that side, the utterance would still correctly describe the situation, because the angular specification is based on the absolute frame of reference.

(120) *Ten jir rowow rosiapiyow to ses.*

ten	*jir*	*ro=wo–wo*	*ro=siap–yi–ow*	*to*	*ses*
DEM3:M	man	3SG:M=be–COP	3SG:M=enter–VLOC–COP	ART	sun

'The man is there where the sun sets.' (CS&EU-101002F)

In contrast to what example (120) may suggest, in Baure it is not common to use the recurring position of the sun as seen from the earth as a landmark. In

[106] The Guugu Yimithirr language (Pama-Nyungan language family) is so far the only known exception to this rule (see Levinson 2003: 113–146).

fact, this phrase was uttered toward the end of the matching game, when the speakers started to come up with meticulous, but rather unnatural, descriptions in order to finally get a perfect match. Since the attempt failed in this case, the speakers, sitting indoors, engaged in a lively discussion on where exactly the sun rises and sets. Thus, although in Baure it is possible to formulate lexical descriptions based on the position of the sun, the systematic use of it as an Anchor in spatial expressions was not observed in natural unguided speech.

Other landmarks that one might expect to be used are cardinal terms or significant landmarks in the river network. The cardinal terms that are mentioned in the historical Baure data (Magio 1880: 45) seem to have been replaced completely by the Spanish equivalents, and today's speakers do not recognize the historical terms, except for one. Discussing the particle *–ira*, 'towards', Magio mentions *uvireira* for 'towards the south'.[107] The lexeme for south, *uvire*, is still found today in *vir*, meaning 'wind', and the derivation *virepi* (wind–CLF[long&thin]). The latter is used for referring to the seasonal cold winds that reach the Llanos de Mojos from Patagonia, in Spanish also known as *El Sur*. Since the Baure live in an environment where the interplay between land and water, and coping with the annual fluvial cycles are crucial for survival, it is plausible that landmarks related to the waterways play a role in spatial orientation. In Baure, however, there is no evidence in the data that such a system is used for expressing location.

4.3.2.2 The relative frame of reference

In the relative frame of reference, the bodily coordinates of the speech act participants are mapped onto the Ground object. The topological relation between the Figure and the Ground is based on the Anchor that is located in one of the speech act participants, in most cases the speaker. Thus, when the

[107] The other cardinal terms that Magio mentions are *reyanabairaira*, 'towards the east', *copeira*, 'towards the west' and *moyabaihoira*, 'towards the north' (Magio 1880: 45). Except for the suffix *–ira*, 'towards', these terms are not analyzable any further. This contrasts with the cardinal terms in the closely related Arawakan language Paunaka, which are all composed forms with the body part term *bÿke*, 'face' (e.g. *mane–bÿke*, 'morning–face' for east and *kupei–bÿke*, 'afternoon–face' for west). Interestingly, speakers of Paunaka do use the absolute frame of reference for expressing spatial relations based on the set of cardinal terms (Terhart, *in prep*.).

speaker observes the scene from the opposite side, the description is no longer satisfactory, since the axes of the speaker, and Anchor, are then rotated. In addition to the position of the speaker, the manner of mapping the bodily coordinates onto the Ground is essential for specifying a location. There are three different modes of mapping one's own bodily coordinates onto the Ground (cf. Levinson 2003: 84–89). First of all, the speaker's axes can be translated onto the Ground object without reflection or rotation, as is well described, for example, for Hausa (Hill 1982). As is illustrated with Figure 4.5a (after Levinson 2003: 88), in this type of translation analysis, the FRONT/BACK-axis as well as the LEFT/RIGHT-axis of the speaker correspond exactly to the axes of the Ground.

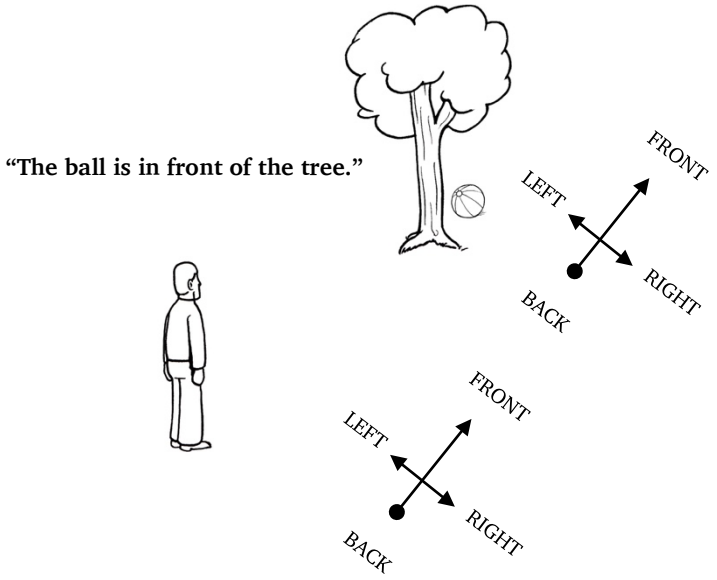


Figure 4.5a: Translational projection of speaker's axes onto the Ground.

Secondly, it is possible to map the bodily coordinates onto the Ground by means of reflection, as is represented in Figure 4.5b (after Levinson 2003: 86). In this case, the speaker is facing the Ground object as if it were his own reflection in the mirror, changing the orientation of FRONT/BACK-axis, but not the orientation of the LEFT/RIGHT-axis.

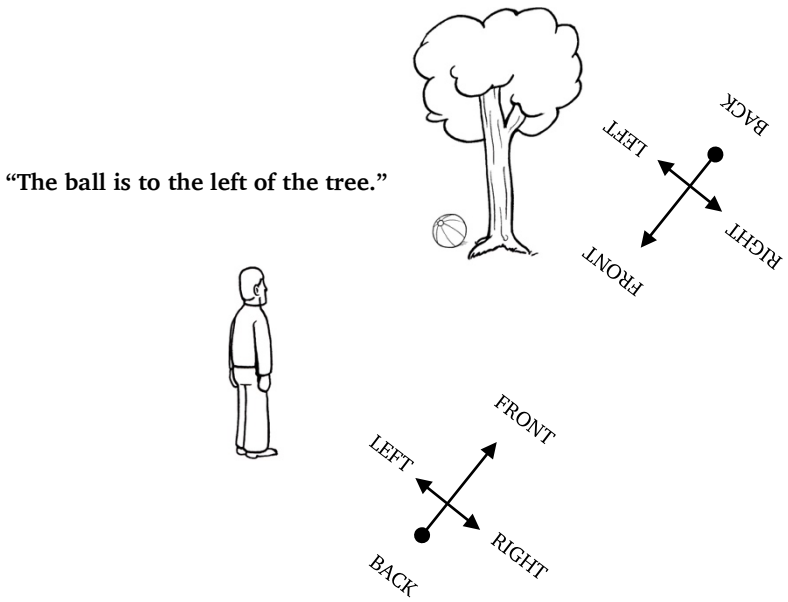


Figure 4.5b: Reflectional projection of speaker's axes onto the Ground.

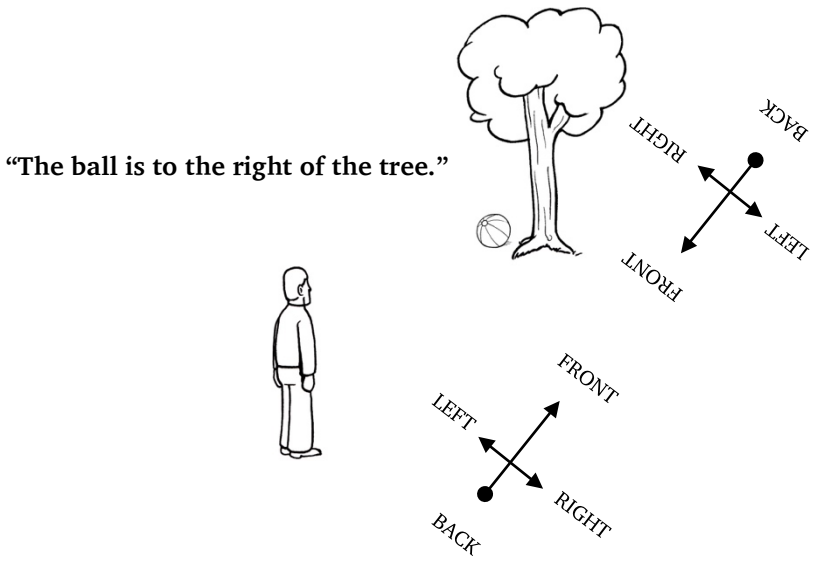


Figure 4.5c: Rotational projection of speaker's axes onto the Ground.

The third possible type of mapping is by rotation, as shown in Figure 4.5c (after Levinson 2003: 87). Both bodily axes are rotated 180° and projected onto the Ground as if it were an encountered speech act participant.

In Baure, the relative frame of reference is mostly used with Ground objects that do not have intrinsic sides, such as trees, toy building blocks, or balls. When the Ground has no inherent front and back side, the speaker's FRONT/BACK-axis is mapped onto it either as in the translation analysis or as the reflection/rotation[108] analysis. Examples (121) and (122) demonstrate the translation analysis used in the descriptions of the scenes in the corresponding pictures with *roemiri-ye* 'in front of'. In the translation analysis this means that, from the speaker's perspective, the Figure is further removed than the Ground, and less visible or not visible at all because the Ground is (partially) blocking the view. The front-side of the Ground is the side that is not visible to the speaker.

Translation analysis

(121) *Roemiri-ye to ewokoe'.*

ro=imir–ye	*to*	*ewokoe'*
3SG:M–in.front–LOC	ART	tree

'He (the man) is in front of the tree.'

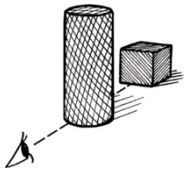
(DC-101011F-1)

(122) *To ver kwore' roemiri-ye te moserkon.*

to	*ver*	*kwore'*	*ro=imir–ye*
ART	green.one	exist.3SG:M	3SG:M–in.front–LOC

te	*moserokon*
DEM2:M	red.one

'The green one is in front of the red one.'



(LO&GP-091115F)

[108] In the reflection and rotation analysis, the FRONT/BACK-axis is mapped onto the ground in the same way. A distinction between the two analyses is only noticeable when discussing the mapping of left and right sides.

In a similar fashion, the translated FRONT/BACK-axis mapped onto the Ground results in descriptions with *roshiriwani-ye* 'behind', when the Figure is situated between the speaker and the Ground. The back-side of the Ground is the side that is directly viewed upon by the speaker. Examples (123a) and (123b) also show that rotating the Figure does not affect the description.

(123a) *Kwore' roshiriwani-ye to ewokoe'.*

kwore'	*ro=shiriwani–ye*	*to*	*ewokoe'*
exist.3SG:M	3SG:M=behind–LOC	ART	tree

'He (the man) is behind the tree.'

(DC-101011F-1)

(123b) *Kwore' roshiriwani-ye to ewokoe'.*

kwore'	*ro=shiriwani–ye*	*to*	*ewokoe'*
exist.3SG:M	3SG:M=behind–LOC	ART	tree

'He (the man) is behind the tree.'

(RP-101014F)

Interestingly, apart from the translation analysis, Baure speakers also use the reflection/rotation analysis with Grounds that have no intrinsic sides. In examples (124) and (125) this is shown for 'in front' and in examples (126) and (127) for 'behind'. In these cases, the Ground is taken as if it were an encountered speech act participant. The front-side of the Ground is the side that is directly visible to the speaker and the back-side is not.

Reflection/rotation analysis

(124) *Roemiri-ye to ewokoe'.*

ro=imir–ye	*to*	*ewokoe'*
3SG:M–in.front–LOC	ART	tree

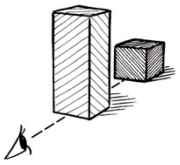
'It (the fruit) is in front of the tree.'

(DC-091122F)

(125) *Kwore' roemiri-ye to ver.*

kwore'	*ro=imir–ye*	*to*	*ver*
exist.3SG:M	3SG:M–in.front–LOC	ART	green.one

'It (the yellow one) is in front of the green one.'



(CS-090925F)

(126) *Kwore' tech rokora roshiriwani-ye to ewokoe'.*

kwore'	*tech*	*ro=kora*
exist.3SG:M	DEM2:M	3SG:M=partner

ro=shiriwani–ye	*to*	*ewokoe'*
3SG:M=behind–LOC	ART	tree

'His friend is (hiding) behind the tree.'

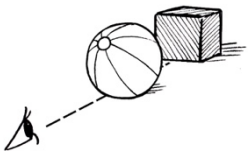
(DC-091122F)

(127) *Ach to ver roshiriwani-ye to tawe'.*

ach	*to*	*ver*
and	ART	green.one

ro=shiriwani–ye	*to*	*tawe'*
3SG:M=behind–LOC	ART	ball

'And the green one is behind the ball.'



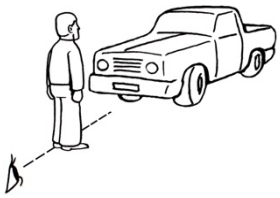
(DC-090924F)

During matching games, however, the use of either the translation analysis or the reflection/rotation analysis was a frequent point of discussion. In the case of example (122) above, the director and the matcher disagreed on the orientation of the FRONT/BACK-axis, which led to a non-match. As it turned out during the discussion of this non-match, the matcher, and speaker in this example, translated her own bodily axes onto the Ground without reflection or rotation (Figure 4.5a above). The director, however, had described the configuration mapping his FRONT/BACK-axis onto the Ground as in a canonical encounter (Figures 4.5b and 4.5c above). Although the matcher conceded to the director's perspective on this particular situation, she continued to use the translation analysis throughout the rest of the session.

The use of both the translation analysis as well as the reflection/rotation analysis may be due to the language shift from Baure to Spanish. A tentative

scenario is that Baure speakers used to apply the translation analysis, but along with the shift to Spanish they have partly shifted to the use of the reflection/rotation analysis, which causes some confusion. The most fluent speakers use both the translation analysis and the rotation/reflection analysis with a slight preference for the translation analysis. The rotation/reflection perspective typically occurs after a Spanish explanation or it was given as a translation of a Spanish phrase, whereas in continuous Baure speech they relied more often on the translation analysis. Less fluent speakers, on the other hand, tend to use the reflection/rotation analysis almost exclusively. The fact that the translation analysis may have been used much more in former times is further supported by a few examples in which the speakers apply this even when Grounds do have intrinsic sides and are facing the speaker with their intrinsic front side, such as example (128).

(128) *Roeshomow roshiriwani-ye te kamion.*
ro=ishom–wo *ro=shiriwani–ye*
3SG:M=stand–COP 3SG:M=behind
te *kamion*
DEM2:M truck
'He is standing behind the truck.' (RP-101014F)



From the examples above it is clear that the speakers map their own FRONT/BACK-axis onto the Ground either as in the translation analysis (Figure 4.5a above) or as in the rotation/reflection analysis (Figures 4.5b and 4.5c). To determine whether the rotation or the reflection analysis is employed, it is necessary to take the mapping of the speaker's LEFT/RIGHT-axis into account. Interestingly though, the terms for 'left' and 'right' were only used by the speakers when they were explicitly asked for them. Otherwise, they seem to prefer the more general specification *ropoewani-ye* 'beside', as in example (129).

(129) *Kwore' ropoewani-ye te ewokoe'.*

kwore'	*ro=poewani–ye*	*te*	*ewokoe'*
exist.3SG:M	3SG:M=beside–LOC	DEM2:M	tree

'He is (lying) beside the tree.'

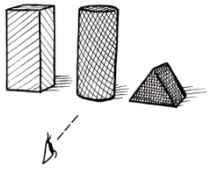
(DC-101011F-1)

When the speakers were explicitly encouraged to use the Baure terms for left and right with Grounds without intrinsic sides, they do so as in examples (130) and (131).

(130) *Kwore' ikiyiki-ye te moserkon ach sap-ye kwe' te yaskon.*

kwore'	*ikiyiki–ye*	*te*	*moserokon*
exist.3SG:M	middle–LOC	DEM1:M	red.one
ach	*sap–ye*	*kwe'*	*te*	*yaskon*
and	left –LOC	exist	DEM1:M	yellow.one

'The red one is in the middle and to the left there is the yellow one.'

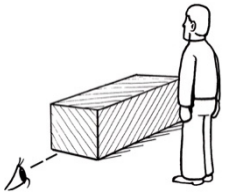


(DC-090924F)

(131) *To jir kwore' koyan-ye te yaskon.*

to	*jir*	*kwore'*
art	man	exist.3sg:m
koyan–ye	*te*	*yaskon*
right–loc	dem2:m	yellow.one

'The man is to the right of the yellow one.'



(DC-101011F)

Examples (130) and (131) show that the speakers map their own LEFT/RIGHT-axis onto the Ground and the two extremes of the axis remain pointing in the same direction. However, whether the axis is projected as in the translation analysis or the reflection analysis (Figures 4.5a and 4.5b above) remains uncertain, because the direction of the extremes of the LEFT/RIGHT-axis is the same in both analyses.

4.3.2.3 The intrinsic frame of reference

As was described in the previous section, the relative frame of reference is used with Grounds that have no intrinsic sides. When the Ground object does have a canonical orientation, the intrinsic frame of reference is preferred. In the horizontal plane, animate Grounds get assigned human bodily axes, with the front side of the FRONT/BACK-axis on the side where their face is, and the back side of the axis where their spine or bottom is. The right of the LEFT/RIGHT-axis is located at 90° rotated clockwise from the front side, and the left side is found at 90° counterclockwise.

With inanimate Grounds the intrinsic features may be based on other criteria such as function or most salient direction of movement. In the case of houses, as in example (132), the front side is assigned to the side with the main entrance, usually the one facing the street.

(132) *Kwore' roemiri-ye to pari.*

kwore'	*ro=imir–ye*	*to*	*pari*
exist.3SG:M	3SG:M=in.front–LOC	ART	house

'The man is in front of the house.'

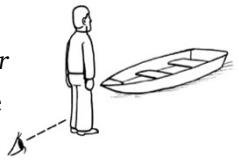
(RP-101014F-1)

Example (133) shows that the front side of the canoe is assigned to the tip of the canoe, which indicates the canonical direction when the canoe is moving.

(133) *Roeshom roemiri-ye to yashor.*

ro=ishom	*ro=imir–ye*	*to*	*yashor*
3SG:M=stand	3SG:M=in.front–LOC	ART	canoe

'He (the man) is standing in front of the canoe.'



(RP-101014F)

Regardless of whether the Ground is animate or inanimate, in the intrinsic frame of reference the location of the Figure is most frequently indicated by means of the locative noun stems that are derived from body part terms. The body part terminology is mapped onto the Ground, and from the relational

part of the Ground objects the spatial search domain is projected. This results in the four search domains as presented in Figure 4.6 below. In the case of *roemiri–ye* 'in front of' and *roshiriwani–ye* 'behind', the search domain is usually well-defined (search domains A and C).[109] However, any search domain projected to an intrinsic left or right side is harder to localize. Although Ground objects with intrinsic features get assigned a LEFT/RIGHT-axis based on human bodily coordinates, the actual terms for left and right are hardly used in Baure. Instead, the speakers usually opt for *–poewani-ye* 'beside', as in example (129) above, and they do not specify which side exactly. Thus, search domains B and D are both referred to mainly by *ropoewani-ye*, and only rarely described in terms of 'left' and 'right'. The most common Baure terms for the projected search domains are given in Figure 4.6 as well.

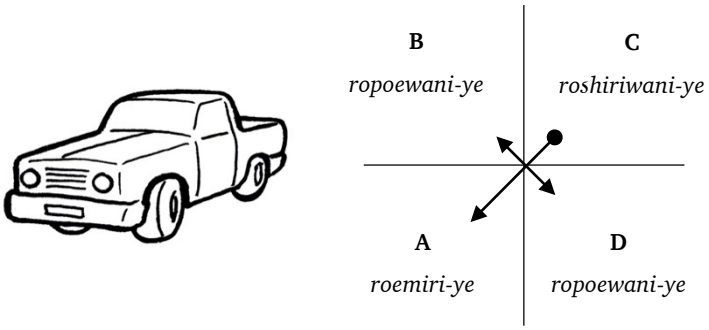


Figure 4.6: Projected search domains in the horizontal plane.

For locative expressions using the intrinsic frame of reference, the orientation of the Figure does not affect the nature of the spatial relation, but the orientation of the Ground does. Since the intrinsic features of the Ground object are taken into account to identify the location of the Figure, the Anchor is located in the Ground itself. In (134) for example, the Anchor is located in

[109] Although the search domains located at the intrinsic front and back side of a Ground are usually indicated by *roemiri-ye* 'in front of' and *roshiriwani-ye* 'behind', sometimes the speakers also used *ropoewani-ye* 'beside'. In other words, *ropoewani-ye* has a very broad meaning and the search domain indicated by it may extent to all sides of the Ground object.

the Ground, which is the pig, and the canoe is located to the pig's intrinsic left side.

(134) *To yashor kwore' sap-ye.*

to	*yashor*	*kwore'*	*sap–ye*
ART	canoe	exist.3SG:M	left–LOC

'The canoe is to the left (of the pig).' (LO&GP-091115F-1)

When the entire configuration is rotated 180°, the pig and the canoe maintain the same spatial relation to each other. This is illustrated in Figure 4.7a and 4.7b. However, when the Ground object is rotated while the Figure remains in place as in Figure 4.7c, the orientation of the inherent sides changes, and the expression as in (134) is no longer true.

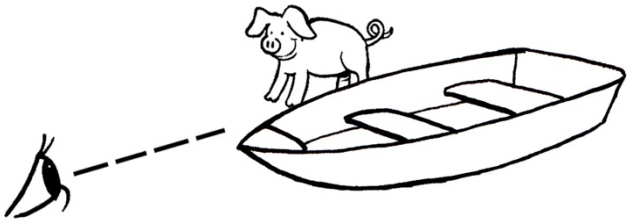


Figure 4.7a: Configuration of the pig and canoe.

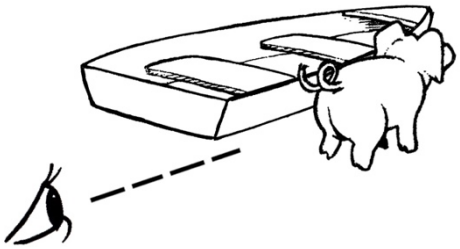


Figure 4.7b: Rotation of the configuration of the pig and canoe.

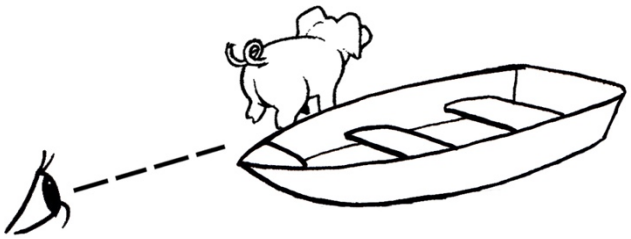
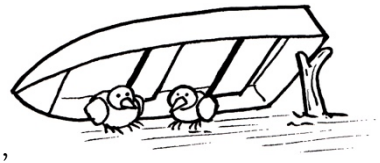


Figure 4.7c: Rotation of the Ground object only.

The orientation of the Ground is thus specified based on its internal coordinates, as opposed to the absolute and relative frame of reference in which the orientation of the Ground is specified based on external coordinates (cf. Levinson 2003: 55). However, in Baure this only applies to locative expressions dealing with the horizontal plane. In the vertical plane, the actual orientation is taken into account, instead of the canonical orientation. Thus, in example (135), *–api* 'under' does not refer to the underside of the canoe, which is the canonical bottom that is under the water surface in floating position, but to the side that is carved out and where people would sit when traveling in the canoe.

(135) *Kwapen yashorapi-ye.*
kwo–pa=no *yashor–api–ye*
exist–INTL=3PL canoe–under–LOC
'They (the chicks) are under the canoe.'



(HC-100920F)

Coming back to the orientation sensitivity of the Ground in the horizontal plane, the lack of use of external coordinates can easily lead to confusion. In the matching games, for example, speakers often experienced difficulties in distinguishing their descriptions of configurations as in Figure 4.7a from configurations as in 4.7b above. Since the spatial relation between the Figure and the Ground remains the same under a rotation of 180° speakers often specified the distinction between the two possibilities by adding information

in the relative frame of reference. A common strategy to describe whether the Figure and the Ground are facing the speaker or not is by adding a motion verb of coming or going to the description, as in (136).

(136) *Kwe' ti tiporek sap-ye to shiye', ach ver nokach.*

kwe'	*ti*	*tiporek*	*sap–ye*	*to*
exist	DEM1:F	chicken	left–LOC	ART

shiye'	*ach*	*ver*	*no=kach*
fox	and	PERF	3PL=go

'There is the chicken on the left of the fox, and they are leaving.'

(LO&GP-090927F)

The use of body part terms for referring to the intrinsic sides of Ground objects and their corresponding search domains in locative expressions may have been used more productively. In example (137), the body part term *–jeki* 'belly' is mapped onto the canoe.

(137) *To jir kwore' chorejeki-ye to yashor.*

to	*jir*	*kwore'*	*chore–jeki–ye*	*to*	*yashor*
ART	man	exist.3SG:M	edge–belly–LOC	ART	canoa

'The man is (standing) to the side of the canoe.' (DC-101008F)

The compound *chore–jeki* 'edge–belly', indicates a projected space from the belly to the side. The search domain is somewhat comparable to the search domain when *–poewani* 'beside' would be used (see Figure 4.6). However, whereas *chorejeki* may only be used with Grounds that have intrinsic sides onto which body part terms can be assigned, *–poewani* has a much wider use. Not only may the locative noun stem *–poewani* also be used with Grounds that lack intrinsic sides, it also involves a search domain that is much wider than the restricted *chorejeki*, which can only be used when the Figure is really at the side of the Ground at the place of the assigned belly. Nowadays, however, this type of composed locative nouns with a body part term in the N_2 position is

very scarce. The compound *chorejeki* is the last remaining instance of this type, and therefore it is not taken as a systematic strategy in Baure.

4.3.2.4 The direct frame of reference

The distinction into the three frames of reference discussed in the sections above, relies on the orientation of the Ground, the Anchor and the viewpoint of the speech act participants. Summarizing the different types, a frame of reference can be said to be ternary or binary, depending on whether the Anchor is the Ground, or a part of it, or whether the Anchor and the Ground are two separate entities. The characteristics of each of the ternary frames of reference are presented schematically in Table 4.4 (after Danziger 2010: 170).

Table 4.4: Ternary frames of reference

	Allocentric (Anchor ≠ SAP)	**Egocentric (Anchor = SAP)**
Ternary frames of reference (Anchor ≠ Ground)	Absolute frame of reference	Relative frame of reference
	The milk is to the east of the kettle.	*The milk is to the right of the kettle.* (From the speaker's perspective)

In the two ternary frames of reference, the absolute and the relative frame of reference, the Anchor is not a part of the Ground, and thus three entities are involved in the expression of a spatial relation; the Figure, the Ground and the Anchor. In case of the absolute frame of reference, the Anchor is not positioned in one of the speech act participants, but in an immovable point in the surrounding landscape or cosmology, in other words, it is allocentric. In

contrast, the relative frame of reference places the Anchor in the speaker, and is thus egocentric.

When the Anchor is the same as the Ground, or part thereof, the frame of reference that is used is binary, involving only two entities. The characteristics of the binary frames of reference are presented in Table 4.5 (after Danziger 2010: 170).

Table 4.5: Binary frames of reference.

	Allocentric (Anchor ≠ SAP)	**Egocentric (Anchor = SAP)**
Binary frames of reference (Anchor is (part of) the Ground)	Object–centered frame of reference	Direct frame of reference
	The milk is at the spout of the kettle.	*The milk is in front of me.* (With reference to speaker's own front)

In the intrinsic and the direct frame of reference, the Anchor is (part of) the Ground, and therefore the only two entities engaged in the spatial relation are the Ground/Anchor and the Figure. In the allocentric intrinsic frame of reference, the Ground/Anchor is not one of the speech act participants, whereas in the egocentric direct frame of reference the Ground, Anchor and speech act participants are one and the same entity.

In the three-way subdivision of frames of reference (Levinson 1996, 2003; Pederson et al. 1998) the object-centered and the direct frame of reference would both be considered under the intrinsic frame of reference.[110]

[110] Even more distinctions may be made within that frame (see O'Meara and Pérez Báez 2011: 843 for a schematic overview).

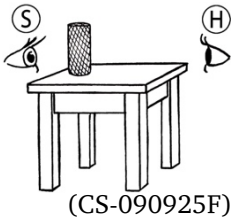
Typologically, the types that fall under intrinsic often occur in the same languages (Bohnemeyer 2011: 898).

As was shown in the previous sections, Baure speakers only make use of the relative frame of reference when the Ground is an inanimate object that has no intrinsic sides. For the vast majority of spatial descriptions however, the Ground is an object or entity with intrinsic sides. In these cases, the object-centered frame of reference is used for localizing the Figure. Only in a few cases is it possible to argue that Baure speakers use the direct frame of reference. For Baure, the clearest example of a conflated Anchor and Ground with one of the speech act participants is given in (138).

(138) *Kwore' to moserkon nimiri-ye.*

kwore'	*to*	*moserokon*	*ni=imir–ye*
exist.3SG:M	ART	red.one	1SG=in.front–LOC

'The red one is in front of me.'



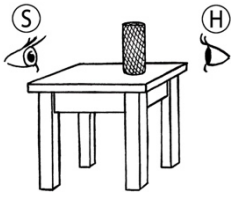
(CS-090925F)

However, in the direct frame of reference, it is unclear whether the rotation of the speaker does affect the adequacy of the description. Although the utterance in example (138) is no longer true when the speaker turns around, this could also be due to the orientation of the Ground/Anchor. Since in example (138) the Ground/Anchor and the speaker are a single entity, it is unclear whether it is the rotation of the speaker that causes the inadequacy of the description, or the rotation of the Ground/Anchor. In (139) however, it is clear that the orientation of the speaker is irrelevant for locating the Figure. Only when the Ground/Anchor is rotated, in this case the hearer, the nature of the spatial relation between the Figure and the Ground is changed.

(139) *Ach neriki kwore' pimiri-ye.*

ach	*neriki*	*kwore'*	*pi=imir–ye*
and	now	exist.3SG:M	2SG=in.front–LOC

'And now it is in front of you.'



(CS-090925F)

Looking at the linguistic evidence from Baure, it does not seem relevant to make a distinction between the object-centered and direct frame of reference. Whether the Anchor is one of the speech act participants or not, the system of coordinates that is employed to localize the Figure is the same. The coordinates are projected from the Ground/Anchor, making use of its intrinsic sides. In all cases, the locutions are subject to the same rotation sensitivity, namely that of the Ground/Anchor. Thus, there is no reason to assume that for spatial descriptions as in (138) and (139) a different frame of reference is used than for a spatial description as in (140).[111]

(140) *Ach kwore' roemiri-ye to jir.*

ach	*kwore'*	*ro=imir–ye*	*to*	*jir*
and	exist.3SG:M	3SG:M=in.front–LOC	ART	man

'And it (the red one) is in front of the man.' (RP-101014F)

4.4 SUMMARY

In this chapter, the conceptual categories underlying the locative noun phrases are described. In particular, it is shown that each of the locative noun stems is found primarily in particular constructions, and that the set of locative noun stems as a whole displays a wide structural variation. The constructions in which they are found nowadays, seem to a large extent the same though, as the constructions that were identified by the missionaries in the eighteenth century. The differences in the lexical and grammatical properties of the different locative noun stems suggest that they represent different stages of grammaticalization.

The description of topological relations in Baure requires only the use of the general locative marker *–ye*. Whereas additional specification is certainly

[111] It should be noted though that this research on Baure spatial descriptions focuses on the linguistic encoding of spatial relations, and experimental non-linguistic problem solving tasks were beyond the scope of this research. It is possible that more detailed study on Baure spatial cognition will show that the distinction is relevant, as it seems to be for speakers of a number of Mesoamerican languages (see the contributions to the special issue on *Frames of reference in Mesoamerican languages* of Language Sciences ((Vol. 33) 2011)).

possible, it is only added in case of an atypical relation, or ambiguous situation. For angular specification of a spatial relation between a Figure and a Ground, the locative noun stems are used always to delimit the search domain. It turns out that Baure speakers favor the use of the intrinsic frame of reference when describing a spatial relation with respect to an object that has inherently assigned sides, such as a front side or back side based on canonical movement of a vehicle. However, when describing a spatial relation with respect to an object that is symmetrical, in form or function, speakers of Baure project their own bodily coordinates onto the object in question.

CHAPTER 5:

PREDICATES USED FOR EXPRESSING LOCATION AND MOTION

As was briefly pointed out in Chapter 3, Baure uses both nominal and verbal roots in predication. Therefore, this chapter is divided into two parts. The first part, Section 5.1, deals with nominal components in predication. It discusses nominal roots that serve as a predicate base directly as well as complex predicate bases, and incorporated nominal roots. In the second part, Section 5.2, verbal components used in predication are presented. After a brief account of verbs used for expressing static location, this part focuses mainly on the various verbal elements of translational motion events.

5.1 NOMINAL COMPONENTS IN PREDICATION

Nominal components are used in different types of locative predication. In Section 5.1.1 locative noun stems as used in simple predicate bases are discussed, and Section 5.1.2 describes locative nouns used in complex predicate bases. Section 5.1.3 is dedicated to predicates with incorporated nouns. After a brief sketch of the theoretical framework, the incorporation of Baure locative noun stems is discussed.

5.1.1 LOCATIVE NOUN STEMS IN SIMPLE PREDICATE BASES

Although the locative nouns stems are used frequently in predication, only few of them can function as a predicate base by themselves. Examples (1) and (2) illustrate these contrasting constructions. In example (1) the complex locative noun stem *–poewani* 'beside' is used in a possessive locative construction, whereas in (2) the same locative noun stem is used as the predicate base for *roepoewanowori*.

(1) *To shiye' rokokorow poewani-ye ti tiporek.*
to *shiye'* *ro=koko–ro–wo* *poewani–ye* *ti* *tiporek*
ART fox 3SG:M=RECP–DER–COP beside–LOC DEM1:F chicken
'The fox is beside the chicken.' (RP-091017F)

(2) *Rokokorow ropoewanowori.*
ro=koko–ro–wo *ro=poewani–wo=ri*
3SG:M=RECP–DER–COP 3SG:M=beside–COP=3SG:F
'He (the fox) is beside her (the chicken).' (RP-091017F)

As noted in example (2), when the locative noun stem is used as a predicate base, the Figure is marked on the predicate with a proclitic, in the subject slot for verbal predicates. The Ground is marked with an enclitic, which is the object slot for verbal predicates and the subject slot for non-verbal predicates (see Section 2.3.3 of Chapter 2). The marking thus follows the same pattern as on verbal predicates, and not as on nominal predicates. This possibility to be used as a verbal predicate, clearly sets the locative noun stems apart from other nominal elements, that always display the marking as nominal predicates.

A predicate with a locative noun stem as its predicate base is often part of a series of verbs. Like *–poewani* 'beside' in example (2), the locative noun stem *–api* 'under' in example (3) forms the basis of a predicate that is the second in a series of verbs. Whereas in (2) the preceding verb is a stative verb, in (3) it is a motion verb (see Section 5.2.3.2 on Path of motion).

(3) *Rosiap apikow to royashoron.*
ro=siap *api–ko–wo* *to* *ro=yashoron*
3SG:M=enter under–ABS–COP ART 3SG:M=canoe
'He enters under his canoe.' (RP-091106F)

5.1.2 LOCATIVE NOUN STEMS IN COMPLEX PREDICATE BASES

In addition to predicates in which the locative noun stems by themselves function as the predicate base, Baure has two predicate types in which the

locative noun stems are part of a complex predicate base. The two roots with which the locative noun stems combine to form a complex predicate base are *–wo* 'be' (Section 5.1.2.1) and *–koko* (RECP) (Section 5.1.2.2). Both forms are also used as the suffixes *–wo* (COP) and *–koko* (RECP). The structure of these complex predicate bases is given in Figure 5.1.

$[\text{V-N}_{\text{locative}}]$

Figure 5.1: Basic structure of a complex predicate base.

Structurally, the complex predicate base is similar to predicates with an incorporated locative noun stem. However, in contrast to predicates with incorporated locative noun stems that are mostly motion verbs (see Section 5.1.3), the predicates discussed in this section all refer to a state of being in a certain place or position. These complex predicate bases are conceptualized as a single unit, which is supported by the fact that the complex predicate base still has an open slot that can be occupied by an incorporated classifier, as in example (4).

(4) *Rowochipiarechow.*
ro=wo–chipi–aro–cho–wo
3SG:M=be–on.top–CLF[liquid]–PTCP–COP
'He is on top of the water.' (DC-091110F)

5.1.2.1 Complex predicate bases with *–wo* 'be'

The copula morpheme *–wo*, (COP) can also serve as a predicate base meaning 'to be' in a locative sense. As was observed by Danielsen (2007: 223), this predicate base is generally used in unmarked locative subordination. The copula suffix *–wo* may then be attached to the predicate base, as is shown in example (5).

(5) *Noshimsha noiy rowow to or.*
no=shim–sha *noiy* *ro=wo–wo* *to* *or*
3PL=arrive–IRR there 3SG:M=be–COP ART gold
'Then they arrived there where the gold was.' (RP-N090921FE-1)

In addition, the verb base *–wo* is regularly used in locative phrases describing spatial relations, sometimes as a simple verb base, as in examples (6) and (7), but most often as a complex verb base, as in examples (8) through (13) below.

(6) *Kwore' nimiri-ye rowow sap-ye.*
kwore' *ni=imir–ye* *ro=wo–wo* *sap–ye*
exist.3SG:M 1SG=in.front–LOC 3SG:M=be–COP left–LOC
'It is in front of me and to the left.' (CS-090925F)

(7) *Rowow ani-ye.*
ro=wo–wo *ani–ye*
3SG:M=be–COP above–LOC
'It is on top.' (CS-090925F)

The verb base *–wo* can combine with most of the locative noun stems and form a complex predicate base. Examples of the locative noun stems derived from body parts are given in examples (8) and (9).

(8) *Rowomirichow to kopajkon.*
ro=wo–imir–cho–wo *to* *kopajkon*
3SG:M=be–in.front–PTCP–COP ART sky.blue.one
'It is in front of the sky blue one.' (LO&GP-090927F)

(9) *Neriki ver rowoshiriwanchow te karit te jir.*
neriki ver *ro=wo–shiriwani–cho–wo* *te* *karit*
now PERF 3SG:M=be–behind–PTCP–COP DEM1:M car
te *jir*
DEM1:M man
'And now the man is behind the car.' (DC-090930F-2)

Comparable to the constructions with the locative noun stems as a predicate base (Section 5.1.1), the Figure is marked in the subject slot of verbal predicates. The Ground is either explicitly mentioned, or marked as an object on the (verbal) predicate. The latter situation is illustrated in the contrasting examples (10) and (11).

(10) *Rowoshiriwanchowori.*
ro=wo–shiriwani–cho–wo=ri
3SG:M=be–behind–PTCP–COP=3SG:F
'He is behind her.' (DC-091110F)

(11) *Riwoshiriwanchowor.*
ri=wo–shiriwani–cho–wo=ro
3SG:F=be–behind–PTCP–COP=3SG:M
'She is behind him.' (RP-091109F)

In a similar fashion, the predicate base *–wo* 'be', can combine with the locative noun stems *–api* 'under' and *–she* 'on top'.

(12) *Te yaskon napiri' rowo'apichowor te moserkon.*
te *yaskon* *napiri'* *ro=wo–api–cho–wo=ro*
DEM1:M yellow.one also 3SG:M=be–under–PTCP–COP=3SG:M
te *moserokon*
DEM1:M red.one
'The yellow one is also under the red one.' (DC-090924F)

(13) *Ach te tawe' rowoshechow.*

ach	*te*	*tawe'*	*ro=wo–she–cho–wo*
and	DEM1:M	ball	3SG:M=be–on.top–PTCP–COP

'And the ball is on top.' (DC-090924F)

The three locative noun stems that are not found in constructions with a complex predicate base with *–wo*, are *ani* 'above', *ikiyiki* 'middle', and *–poewani* 'beside'. For *ani*, this comes as no surprise, as it was already shown in Chapter 4 that *ani* is a free noun, and the most lexical of the locative noun stems. It cannot receive person marking, nor engage in compounding or be incorporated. The other two exceptions, *ikiyiki* and *–poewani*, are the ones that occur as simple predicate bases, which was illustrated in Section 5.1.1. Finally, *–api* 'under' is found as a simple predicate base as well as in a complex predicate base with *–wo* 'be'.

As demonstrated with the examples above, the complex predicate bases consisting of *–wo* 'be' and one of the locative noun stems are always followed by the participle suffix *–cho*. One of the functions of this multifunctional suffix is that of deriving transitive verbs from intransitives (Danielsen 2007: 242–243). In the case of the complex locative predicates discussed here, a projected spatial relation is described. This means that the position of the Figure is projected from the Ground. This requires an increased valency of the predicate, realized by the *–cho* (PTCP). The Ground entity can then be explicitly mentioned in a full noun phrase, as in examples (8) and (9), or marked with an enclitic in the object slot of the predicate, as in examples (10), (11), and (12).

5.1.2.2 Complex predicate bases with *–koko* (RECP)

The second type of complex predicate base is composed of the reciprocal *–koko* and one of the locative noun stems. In this case, we are dealing exclusively with angular, projected spatial relations. The two locative noun stems found in a complex predicate base with *–koko* are *–imir*, 'in front', and *–poewani* 'beside' shown in the examples below. Examples (14) and (15) are interpreted as 'being mutually in front of each other', and 'being mutually next to each other', respectively.

(14) *Te simori rokokoromirow ti sopir.*
te *simori* *ro=koko–ro–mir–wo* *ti* *sopir*
DEM1:M pig 3SG:M=RECP–DER–in.front–COP ART tortoise
'The pig is face to face with the tortoise.' (DC-090930F-1)

(15) *To kopajkon rokokoropoewanow to yaskon.*
to *kopajkon* *ro=koko–ro–poewani–wo* *to* *yaskon*
ART sky.blue.one 3SG:M=RECP–DER–beside–COP ART yellow.one
'The sky blue one and the yellow one are beside each other.'
(LO&GP-090927F)

In fact, it can be argued that these should not be regarded as expressing spatial relations, but instead as lexical descriptions of very specific situations. It turns out that non-spatial constructions with *–koko* as predicate base seem to be very productive, especially with body parts. Although the configurations in examples (16) through (18) are not encountered in everyday situations and may be difficult to conceptualize, the lexical expressions were given without hesitation.

(16) *Rokokoropoiyowor.*
ro=koko–ro–poiy–wo=ro
3SG:M=RECP–DER–foot–COP=3SG:M
'They are with their feet towards each other.' (DC-090930F-1)

(17) *Rokokorojekiwor.*
ro=koko–ro–jeki–wo=ro
3SG:M=RECP–DER–belly–COP=3SG:M
'They are with their bellies towards each other.' (RP-091017F)

(18) *Nokokorochokonokow.*
no=koko–ro–chokon–ko–wo
3PL=RECP–DER–ear–PTCP–ABS–COP
'They are with their ears towards each other.' (RP-091109F)

5.1.3 ADDING SPATIAL INFORMATION BY MEANS OF NOUN INCORPORATION

5.1.3.1 Ground incorporation

Spatial information can be added to nearly any type of verb, transitive as well as intransitive, and active as well as stative, by means of noun incorporation. In Chapter 3, Section 3.2.3, it was shown that Baure displays all four types of noun incorporation that are described in the literature. Here, the focus lies on adding spatial information to a verb by means of noun incorporation. At this point, incorporation of a Ground entity should be distinguished from incorporation of a locative noun stem referring to a spatial relation. Example (19) shows the incorporation of the Ground noun *–she'* 'trunk' into the intransitive verb *–jiri* 'sit'.

(19) *Nijirishe'kow to eshe'.*
ni=jiri–she'–ko–wo *to* *eshe'*
1SG=sit–trunk–ABS–COP ART trunk
'I am sitting on the trunk.' (RP-091109F)

This example of noun incorporation is analyzed as a Type II incorporation (see Section 3.2.3 of Chapter 3), because the incorporation causes a change in the syntactic structure. The Ground noun referring to the location where the Figure is sitting is emphasized, raising it from an oblique argument position into an object position. Therefore, in example (19), the repeated locative argument *eshe'¸* 'trunk', is not marked for location by the locative suffix *–ye*. In comparison, example (20) presents the same locution without noun incorporation. In this case, the Ground noun *eshe'* 'trunk' does receive locative marking.

(20) *Nijirikow to eshe'-ye.*
ni=jiri–ko–wo *to* *eshe'–ye*
1SG=sit–ABS–COP ART trunk–LOC
'I am sitting on the trunk.' (RP-091109F)

In addition to the incorporation of the Ground noun, a classifier referring to the Ground noun may be incorporated. An example is given in (21), in which the classifier *–aro* (CLF[liquid]) is coreferential with the Ground *inowok* 'water'.

(21) *Nijiriarekow inowok-ye.*
ni=jiri–aro–ko–wo *inowok–ye*
1SG=sit–CLF[liquid]–ABS–COP water–LOC
'I am sitting in the water.' (DC-091110F)

As can be concluded by the locative marking on the Ground noun *inowok* 'water', in this case the syntactic structure was not manipulated. Instead, we are dealing with classificatory incorporation here, referred to as Type IV in the literature (Mithun 1984). Following this analysis, in example (22) *–poe* is considered a classifier, and not a locative noun stem. In examples (22) and (23), the classifiers *–poe* (CLF[ground]), and *–moe* (CLF[mud]),[112] specify the location where the subject is sitting. In these cases, the full locative adpositions may be overtly expressed, as in (22), or it may be omitted as in (23).

(22) *Nijiripoekow poewok-ye.*
ni=jiri–poe–ko–wo *poewok–ye*
1SG=sit–CLF[ground]–ABS–COP ground–LOC
'I am sitting on the floor.' (RP-091109F)

(23) *Nijirimoekow.*
ni=jiri–moe–ko–wo
1SG=sit–CLF[mud]–ABS–COP
'I am sitting in the mud.' (RP-091109F)

In the examples above the absolute marker *–ko* is obligatorily suffixed to the intransitive verb root *–jiri* 'sit', including example (20) where no element is

[112] Technically, *–moe* 'mud' is not a classifier but a repeater, which is a certain subclass of classifiers (see Terhart 2009: 41–44). For the present analysis, making this distinction is not relevant, therefore the more generic term 'classifier' is used here also for *–moe* 'mud'.

incorporated. Recall that the absolute morpheme indicates that some other participant than the core arguments is involved in the action (see Section 3.2.3 of Chapter 3). The verb root *–jiri* 'sit' almost always occurs with the absolute morpheme, because there is usually a location involved, or implied when it is not overtly expressed. The exceptions in the database involve, slightly odd, phrases, for example when the subject of the verb is sitting on one of its own body parts. An examples of this reflexive relation is given in (24). In this case, the incorporated object is part of the subject, and no other participant is involved in the event. Therefore, the use of absolute morpheme *–ko* is not required.

(24) *Rojirishokoverap.*
ro=jiri–shokover–pa
3SG:M=sit–bottom–INTL
'He is going to sit down on his bottom.' (RP-091109F)

In the case of *–poe* 'down' and *–chipi* 'on top', it is not always easy to distinguish classificatory incorporation, where the incorporated element is coreferential with the Ground, from incorporation of the locative noun stem, where the incorporated element is specifying a spatial relation that is projected from the Ground. The following section first discusses the incorporation of locative noun stems and then aims at establishing criteria for defining the distinction between the two types of incorporation.

5.1.3.2 Incorporation of locative noun stems

In addition to the incorporation of a Ground noun, it is possible to incorporate a locative noun stem, providing spatial information about the action expressed by the verb. Compare the verb phrases with the intransitive verb *–pino* 'flee' in the following examples:

(25) *Nopinow tech woroiynev moej.*
no=pino–wo *tech* *woroiy–nev* *moej*
3PL=flee–COP DEM2:M savage–PL CERT
'The savages surely fled.' (DC-091009F)

(26) *To ajinev nopinokier.*
to *ajinev* *no=pino–ko=ro*
ART children 3PL=flee–ABS=3SG:M
'The children fled from him.' (AD-N081231F)

(27) *Nopinomirikien.*
no=pino–imir–ko=no
3PL=flee–in.front–ABS=3PL
'They fled from them.' (MD-N090103F)

Example (25) above shows the intransitive verb *–pino* 'to flee' only marked with a personal proclitic indicating the subject. The person from whom the subject is fleeing may be marked in the object slot, as in example (26), but in that case the absolute suffix *–ko* is obligatorily added to the verb stem. Intransitive verbs of this type can also incorporate nouns conveying spatial information, as is illustrated with the incorporated locative noun stem *–imir*, 'in front' in example (27). In this case, *–imir* specifies a spatial relation, and can not be regarded as Ground incorporation. It refers to the space projected from the Ground, and not to the body part of the person that the subject is fleeing from. The incorporation of the locative noun stem has no consequences for the syntactic structure. The only difference in comparison to the intransitive verb in (25) is the addition of the absolute suffix *–ko*. This suffix enables the marking of an object from which the subject is fleeing. Note however, that this is also obligatory when no incorporation takes place, as in example (26). Thus, the incorporated locative noun stem in example (27) adds spatial background information to the activity without affecting the syntactic structure. Semantically, it implies that the subject escaped.

Similar to this strategy for intransitive verbs, spatial information may be added to transitive verbs by means of noun incorporation. This is illustrated with the transitive verb *–pan* 'follow' in examples (28) and (29).

(28) *Te jir ropanow to roper kove*'.

te	*jir*	*ro=pan–wo*	*to*
DEM3:M	man	3SG:M=follow–COP	ART

ro=per	*kove*'
3SG:M=domesticated.animal	dog

'The man is following his dog.' (HC-090122F)

(29) *Ti sopir ripanshiriaw to simori.*

ti	*sopir*	*ri=pan–shiri–a–wo*	*to*	*simori*
DEM3:F	tortoise	3SG:F=follow–behind–LK–COP	ART	pig

'The tortoise is following behind the pig.' (LO&GP-090927F)

As in the previous examples with the intransitive verb *–pino*, the incorporation of the locative noun stem does not affect the syntactic structure in example (29). In contrast to the intransitive verb in the previous examples, however, the absolute morpheme *–ko* is not added, because the verb *–pan*, 'follow', is already a two-place verb and the incorporated locative noun stem does not add an extra participant to the activity.

It is clear that the incorporation of locative noun stems into the intransitive and transitive verbs in the examples (27) and (29) above are not used for manipulation of the syntactic structure. The primary function of the incorporation is not to cause changes in the argument structure and the incorporated noun does not leave a vacant position that can be occupied by another argument to put it more into focus. This means that they cannot be analyzed as incorporations of Type II. The examples, however, do not provide indisputable evidence either for Type I incorporation, lexical compounding, or Type III, manipulation of discourse structure. In order to put forward an unambiguous analysis, they should be studied in more detail in different discourses, which is beyond the scope of this work. However, following Mithun

(1984: 863), Type III incorporation is taken here as a lexical process. This means that speakers are aware of the lexical innovation when they use a certain combination of a verb and a noun. Type I incorporation, on the other hand, involves more established combinations that describe an institutionalized activity. Since the combinations with both verbs, *–pino* 'flee' and *–pan* 'follow', are attested quite often, also in descriptions of decontextualized configurations in elicitation, these do not seem to be lexical innovations. Therefore, I prefer to analyze the constructions in examples (27) and (29) as Type I incorporations.

As was mentioned above, the difference between incorporation of a classifier or a locative noun stem, is not always easily made, especially if *–chipi* is involved. The noun stem *–chipi* 'back' can either refer to the body part of an animal or human, to the roof of a building, or indicate the spatial relation 'on top'. In addition, it is used as a classifier for flat and raised surfaces, such as animals with a roof-like back, such as tortoises or armadillos. Following the analysis outlined above, in example (30) *–chipi* is analyzed as a classifier, that is coreferential with the O argument, *ti sopir* 'the tortoise'. This is an unambiguous case of Type IV classificatory incorporation with a transitive verb.

(30) *Te simori rojishochipiaw ti sopir.*
te *simori* *ro=jish–chipi–a–wo*
DEM1:M pig 3SG:M=smell–CLF[flat&raised]–LK–COP
ti *sopir*
DEM1F tortoise
'The pig is smelling the tortoise.' (DC-090930F-1)

Classificatory incorporation of *–chipi* into an intransitive verb often occurs in reference to climbing on top of the roof of a house, as in example (31). The incorporated element is not a classifier, but the phonologically reduced form of *echipi* 'roof'.

(31) *Rarochipikow te jir.*
ro=aro–chipi–ko–wo *te* *jir*
3SG:M=climb–roof–ABS–COP DEM1:M man
'The man climbed onto the roof.' (DC-090930F-2)

Like in the previous examples of incorporation of a Ground into intransitive verbs, in example (31) the absolute suffix *–ko* is obligatory in order to indicate that some entity other than the subject is involved in the activity. This is not only the case when *–chipi* is incorporated, but also when another noun is incorporated in that same position, as *ewokoe*' 'tree' in example (32). In both cases, the incorporated element is coreferential with the location onto which the subject is climbing. In the syntactic equivalent of the phrase this constituent would be marked by the general locative marker *–ye*.

(32) *Raroewokoek.*
ro=aro–ewokoe'–ko
3SG:M=climb–tree–ABS
'He climbed up the tree.' (DC-091122F)

Not all cases with incorporated *–chipi* are analyzed as classificatory incorporation or incorporation of a Ground, though. In case there is no argument involved that can be referred to with the classifier for flat and raised surfaces, the interpretation of incorporated *–chipi* as a classifier is ruled out, as is the case in (33) and (34). It is not coreferential with the pig, because the classifier used for pigs is the classifier *–a* (CLF[animal]) that is used for most four-legged animals.

(33) *Rishomchipiawor to simori.*
ri=ishom–chipi–a–wo=ro *to* *simori*
3SG:F=stand.up–on.top–LK–COP=3SG:M ART pig
'She is standing on top of the pig.' (DC-090930F-1)

(34) *Rarochipiaw to simori.*

ro=aro–chipi–a–wo	*to*	*simori*
3SG:M=climb–on.top–LK–COP	ART	pig

'He climbed on top of the pig.' (DC-090930F-2)

In these two examples, *–chipi* can not refer to the body part 'the back of the pig' either, because in that case the possessor, the pig, would be raised and that would require the absolute suffix *–ko*. After excluding these two options, the only possible analysis left is the spatial interpretation. In this sense, the construction in (33) and (34) is similar to the one presented as example (31) and the incorporated locative noun stem simply adds spatial information to the verb phrase. It is therefore analyzed as Type I incorporation, lexical compounding, and not as classificatory incorporation. This analysis is supported by the fact that this particular combination is also used for 'to copulate', clearly a unitary and institutionalized activity.

5.1.3.3 Summary

Summing up the observations made in the previous sections, we can conclude that in Baure adding spatial information to a predicate by means of incorporation involves two strategies: Ground incorporation and incorporation of a locative noun stem specifying a spatial relation. The function of Ground incorporation may be of Type II, manipulating the syntactic structure of the phrase, or of Type IV, when a classifier is incorporated that is coreferential with the Ground noun.

Type II

Intransitive verb root	**Transitive verb root**
ni=jiri–she'–ko–wo	(not attested)
1SG=sit–trunk–ABS–COP	

Type IV

Intransitive verb root	**Transitive verb root**
ni=jiri–aro–ko–wo	*ro=jish–chipi–a–wo*
1SG=sit–CLF[liquid]–ABS–COP	3SG:M=smell–CLF[flat&raised]–LK–COP

By means of incorporation of a locative noun stem, information about the spatial relation between the Figure and the Ground can be added to transitive as well as intransitive verbs. Whereas these once may have been used for manipulating the discourse structure by adding background information or reducing the saliency of unimportant information (Type III), the examples found in the present study suggest that nowadays they should be regarded as lexical compounds (Type I). In fact, they seem to be established combinations now with a semantics that is slightly different from the verb root without the incorporated element.

Type I

Intransitive verb root	**Transitive verb root**
no=pino–imir–ko=no	*ri=pan–shiri–a–wo*
3PL=flee–in.front–ABS=3PL	3SG:F=follow–behind–LK–COP

The examples presented in the previous sections show that Ground incorporation usually requires the absolute suffix *–ko*, because an element other than the verb's core argument(s) is involved. This obligatory use of *–ko*, however, is not restricted to verbs with incorporated nouns, but is present in many other cases where an additional participant plays a role in the activity expressed by the verb. Incorporation of a locative noun stem, on the other hand, does not require the absolute suffix *–ko*, by itself, although it may be present for example when a participant other than the subject of an intransitive verb is involved.

5.2 VERBAL COMPONENTS IN SPATIAL PREDICATION

Apart from nominal components, Baure makes use of verbal components in spatial predication, especially in motion events. In this second part of the chapter, these verbal components are discussed.

Recall that according to Talmy's influential typology, the four main components that are included in the conceptualization of motion events are (i) the Figure, (ii) the Ground, (iii) the Path and (iv) the Motion of the Figure. The Figure is the object that is localized or undergoes the motion, with respect to a reference object, the Ground. The Path is the trajectory that the Figure follows, or the site that it occupies. The Motion component refers to both motion and location. Talmy furthermore notes that a Motion event can be associated with an external Co-event that is used to express most often Manner or Cause (Talmy 2000b: 25–26). This can be represented schematically as follows:

(35)	*Manner*	*Cause*
a. *Motion*	The pencil rolled off the table.	The pencil blew off the table.
b. *Location*	The pencil lay on the table.	The pencil stuck on the table (after I glued it).

(Talmy 2000b: 26)

In these examples, the pencil is the Figure and the table is the Ground. The Path components are expressed in ‘on’ (site) and ‘off’ (trajectory) and the Motion components in verbs, which can be actual motions (rolled and blew) or localizations (lay and stuck).

In fact, in Talmy's definition a basic motion event “consists of one object moving or located with respect to another object” (Talmy 2000b: 25). It includes, thus, static location as well as motion. Here, this line of reasoning is followed, though a slightly different subdivision is chosen. Section 5.2.1 deals with static location, discussing existential and positional verbs in Baure. In Section 5.2.2, the expression of motion without displacement from one location to another is described (self-contained motion), before discussing

motion with displacement from one location to another (translational motion) in Section 5.2.3.

5.2.1 STATIC LOCATION

In Section 5.2.1.1 the existential verb *kwe'* is discussed, including its use as a general positional. After that, more specific positionals are presented in Section 5.2.1.2.

5.2.1.1 Existential

As was already pointed out in the previous chapters, in the basic locative construction Baure often makes use of the general existential verb *kwe'¸* 'there is', or one of its related forms. The existential verb *kwe'* can be further segmented into *ko–wo–i'*, ATTR–COP–EMPH.[113] This form has no person marking, and can be used with singular male and female subjects as well as with plural subjects, as is shown in examples (36) through (38).

(36) *Kwe' te pari.*

ko–wo–i'	*te*	*pari*
ATTR–COP–EMPH	DEM1:M	house

'There is a house.' (CS&EU-090123F)

(37) *Kwe' tich ripiri.*

ko–wo–i'	*tich*	*ri=piri*
ATTR–COP–EMPH	DEM2:F	3SG:F=sibling.of.same.sex

'There is her sister.' (HC-100920F)

(38) *Kwe' chindinev noiy.*

ko–wo–i'	*chindi–nev*	*noiy*
ATTR–COP–EMPH	people–PL	there

'There are people there.' (RP-N090921FE-1)

[113] Segmentation of *kwe'* is only done in this particular section. Since it has evolved into a general existential, elsewhere it is glosses as 'exist'.

It is possible, however, to add person marking to the existential predicate. The non-verbal predicate on the basis of the attributive prefix *ko–*, receives person marking in the form of enclitics, according to the Baure strategy for marking non-verbal predicates. The complete paradigm of forms including person marking is given in Table 5.1.

Table 5.1: The existential predicate with person marking (after Danielsen 2007: 200).

	Singular	**Plural**
1	*kwoni*	*kwovi*
2	*kwovi*	*kwoiy*
3:M	*kwore'*	*kwone'*
3:F	*kwori*	

The unmarked form *kwe'* is used for more generic reference, often with subject noun phrases without a determiner, as in example (38). It is also used for introducing an object or a character in a story, without previous reference to the particular object or character, as in example (37). The contrast between the use of the use of *kwe'* for generic reference and a marked form for more specific reference is clearly observed in example (39).

(39) *Kwe' ti tiporek¸ kwori noiy ropoewani-ye to yashor.*

ko–wo–i'	*ti*	*tiporek*	*ko–wo=ri*	*noiy*
ATTR–COP–EMPH	DEM1:F	chicken	ATTR–COP=3SG:F	there

ro=poewani–ye	*to*	*yashor*
3SG:M=beside–LOC	ART	canoa

'There is a chicken, she is there beside the canoe.' (HC-100920F)

Given the specificity of locative phrases it is not surprising that the forms with person marking are used more often in spatial descriptions than the general existential *kwe*' without person marking.

5.2.1.2 Positional verbs

Baure does not have a rich set of positional verbs for distinguishing the exact orientation of a Figure. The only distinction that is made is a distinction along the vertical and the horizontal axis. These two contrastive positions are only relevant for Figures that have a stretched outline comparable to the vertical axis of the human body. When the shorter side of the Figure is supported directly by the Ground, this renders the 'standing' interpretation, whereas the 'lying' interpretation is caused by direct support of the longest side of the Figure.

The two main positional verbs in Baure, corresponding to the horizontal and vertical axis respectively are *–koshpoe* 'lie down' and *–ishom* 'stand'. However, *–ishom* is in fact an active verb, meaning 'stand up' as it is used in example (40), or 'straighten up' in example (41).

(40) *Vishom ranjare.*
vi=ishom *ro=ane–jare*
1PL=stand.up 3SG:M=be.close–light
'We got up at dawn.' (MD-081203F)

(41) *¡Pishomomok!*
pi=ishom~mo–ko
2SG=stand.up~mo–ABS
'Straighten up!' (DC-081202SF)

In both examples above the verb is active and indicates that the subject is bringing itself in a vertical upright position. The stative positional interpretation is invoked by adding the stative suffix *–wo*, as exemplified in (42) and (43).

(42) *Ach vishomow noiy kaye-ye.*
ach *vi=ishom–wo* *noiy* *kaye–ye*
and 1PL=stand.up–COP there street–LOC
'And we were standing there on the street.' (CS-090925F)

(43) *To jir roeshomomokow.*
to *jir* *ro=ishom~mo–ko–wo*
ART man 3SG:M=stand.up~mo–ABS–COP
'The man is standing upright.' (RP-091017F)

The use of the positional verb *–ishom* 'stand up' is most common with human subjects, although the use with non-human or inanimate subjects does occur. It is much rarer though and usually indicates a marked situation. In example (44) the speaker describes a situation pictured in a storybook where two mice are standing upright instead of on their four feet. Example (45) was elicited by contrasting two wooden rectangular blocks, one with its shortest side supported by the table ('standing up') and the other with the longer side on the table ('lying down').

(44) *Mapia kajashnev noeshomow.*
mapi–a *kajash–nev* *no=ishom–wo*
two–CLF[animal] mouse–PL 3PL=stand.up–COP
'Two mice are standing upright.' (DC-081202SF)

(45) *Jeni, roeshomow to yaskon.*
jeni *ro=ishom–wo* *to* *yaskon*
yes 3SG:M=stand.up–COP ART yellow.one
'Yes, the yellow one is standing upright.' (CS-090925F)

The verb *–ishom* 'stand up' can incorporate a locative noun stem, similar to the verbs described in Section 5.1.3. The incorporated locative noun stem adds specific information about the exact location of the subject, such as in example (46), where a man is standing in front of a tortoise.

(46) *Roeshomirikow ti sopir.*
ro=ishom–imir–ko–wo *ti* *sopir*
3SG:M=stand.up–in.front–ABS ART:F tortoise
'He is standing in front of the tortoise.' (RP-091017F)

In the horizontal dimension, the main verb for indicating that the longest side of the Figure is supported by the Ground, is *–koshpoe*, 'lie down'. An example is given in (47).

(47) *Rokoshpoew poewok-ye.*
ro=koshpoe–wo *poewok–ye*
3SG:M=lie.down–COP ground–LOC
'He is lying on the ground.' (DC-090924F)

A closer look at this verb reveals that this verb is in fact a lexicalization with the attributive prefix *ko–*. The locative noun stems involved are *–she* 'on top' or 'along' and *–poe* 'down', and together they result in the meaning of 'lying down'. Following that analysis, the verb *–koshpoe* can be segmented further into *–ko–she–poe* (–ATTR–along–down). This segmentation, however, is quite artificial, because the verb root is lexicalized. Therefore, throughout this book *–koshpoe* is taken as a verb root and is not segmented in the glossed examples.

This type of construction is not uncommon in Baure. Danielsen (2007: 238–240) shows how the attributive prefix *ko–* functions as a verbalizer with nominal roots. An examples that Danielsen presents for this use of the attributive prefix is given here as (48).

(48) *Ver rokeyon.*
ver *ro=ko–eyon*
PERF 3SG:M=ATTR–wife
'He is married.' (Danielsen 2007: 238)

In a similar way, the attributive *ko–* is prefixed to some of the locative noun roots. In (49) an example is given of this type of construction with locative noun root *–poe* 'down'.

(49) *Rokopoek ewokoe'-ye to aren.*

ro=ko–poe–ko	*ewokoe'–ye*	*to*	*aren*
3SG:M=ATTR–down–ABS	tree–LOC	ART	bird

'The bird came down from the tree.' (CS-090925F)

In example (50) it is shown how *–koshpoe* is used for indicating the position of a Figure with respect to another Ground than the face of the earth, the table. The lexicalized verb root can incorporate another noun stem similar to the constructions with incorporated nouns as described in Section 5.1.3 above. This is shown in example (51), with the incorporated classifier *–aro* (CLF[liquid]), and in (52) with the incorporated locative noun stem *–imir* 'in front'.

(50) *Rokoshpoew mes-ye.*

ro=koshpoe–wo	*mes–ye*
3SG:M=lie.down–COP	table–LOC

'He is lying on the table.' (DC-090924F)

(51) *Rokoshpiarekow, ne' inowok-ye.*

ro=koshpoe–aro–ko wo		*ne'*	*inowok–ye*
3SG:M=lie.down–CLF[liquid]–ABS–COP		here	water–LOC

'He is lying down in the water, here in the water.' (DC-090930F-2)

(52) *Rokoshpoemirikowor.*

ro=koshpoe–imir–ko–wo=ro

3SG:M=lie.down–in.front–ABS–COP=3SG:M

'He is lying down in front of it (the wheelbarrow).' (DC-090930F-2)

In contrast to the positional *–ishom* 'stand', *–koshpoe* 'lie down' is often used with non-human subjects including inanimate subjects, as with the wooden blocks used for elicitation in example (53).

(53) *Jeni¸ rokoshpoew te moserkon.*
jeni *ro=koshpoe–wo* *te* *moserokon*
yes 3SG:M=lie.down–COP DEM1:M red.one
'Yes, the red one is lying (down).' (DC-090924F)

5.2.2 SELF-CONTAINED MOTION

Recall that in Talmy's definition (2000b: 25) a basic motion event consists of one object moving or located with respect to a reference object. In the previous section, Baure expressions of static location were discussed. Before turning to motion events that result in displacement of the Figure (translational motion), this section briefly introduces self-contained motion. In contrast to translational motion events (see Section 5.2.3), in self-contained motion events the subject keeps its basic or average location (Talmy 2000b: 35). In other words, self-contained motion events do not necessarily result in a change of place of the subject. Examples of verbs used in this type of motion events are verbs such as 'swim' and 'run'. These verbs are considered Place oriented here. Place oriented verbs denote a motion activity, but they do not necessarily imply a change of location. In examples (54) and (55) the motion activities ('dance' and 'roll' respectively) do not require a displacement, but rather describe movement whereas the subject remains *in situ*.

(54) *Ver maiyorow yijiropow yiti' moej Maloki-ye.*
ver *maiy–ro–wo* *yi=jirop–wo* *yiti'* *moej* *Maloki–ye*
PERF much–DER–COP 2PL=dance–COP 2PL CERT Malocas–LOC
'You certainly danced a lot in Las Malocas.' (LO-D081202LF)

(55) *Roshipiripirik to tawe' poewok-ye*
ro=shipiripirik *to* *tawe'* *poewok–ye*
3SG:M=roll ART ball ground–LOC
'The ball is rolling around on the ground.' (DC-091122F)

In both cases the locative noun phrase indicates the location where the motion activity takes place, 'Las Malocas' (a local bar) and 'the ground' respectively. These motion verbs indicate movement of the subject in a certain place, but do not indicate displacement, and the subject remains in its 'average' location. More examples of Place oriented verbs in Baure are listed in Table 5.2.

Table 5.2: Examples of Place oriented verb roots in Baure.

Baure	**English**
–asoeyek	'turn around'
–epa	'wrap around'
–esporiach	'turn around'
–ishom	'get up'
–javiak	'swim'
–jirop	'dance'
–shipiripirik	'roll'

5.2.3 TRANSLATIONAL MOTION

In contrast to the self-contained motion described in the previous section, translational motion does imply a change in location. In this section, Baure translational motion events are discussed with a focus on Manner of motion (Section 5.2.3.1), Path of motion (Section 5.2.3.2) and Grounds in motion events (Section 5.2.3.3). One of the main considerations in this section is the place in the phrase at which these different components are expressed. According to Talmy's typology, in Verb-framed languages Path is encoded in the predication, whereas Manner is expressed in an additional clause or

gerund. Satellite-framed languages, on the other hand, express Manner in the verb and leave the Path to be expressed in satellites.[114]

However, the literature on motion events in different languages shows that this two-way typology does not cover all patterns found (cf. Schultze-Berndt 2006). Therefore, in order to accommodate languages that lack a clear distinction between the grammatical forms in which Path and Manner are expressed, a third type was suggested, the Equipollent-framed type. In Equipollent-framed languages Path and Manner are expressed by equivalent grammatical forms, such as the multiple verbs in a serial verb construction (Slobin 2004: 25). As will be shown below, Baure tends to pattern with the Verb-framed language, but also employs a number of strategies that are characteristic for Satellite-framed languages and Equipollent-framed languages.

5.2.3.1 Manner of motion

Taking Talmy's definition as a starting point, a basic motion event consists of the components Figure, Ground, and Path. In other words, Manner is optional and is not an inherent part of every motion event. In Baure, Manner is usually expressed in a verb. Manner verbs are often used to provide background information to the main event. In example (56), the first clause, *ito rarow* 'while he keeps flying' adds the information that the owl is flying during the main event of searching the boy.

(56) *Ito rarow rojinoekow te monchi.*

ito	*ro=ar–wo*	*ro=jinoek–wo*	*te*	*monchi*
PROG	3SG:M=fly–COP	3SG:M=search–COP	DEM1:M	child

'While he (the owl) keeps flying, he is looking for the boy.'

(HC-090122F)

[114] Recall that Talmy defines satellites as follows: "It is the grammatical category of any constituent other than a noun-phrase or a prepositional-phrase complement that is in a sister relation to the verb root. It relates to the verb root as a dependent to a head" (Talmy 2000b: 102).

In translational motion events, manner verbs are often accompanied by a component indicating Path. This can be a main verb with which the manner verb forms a serial verb construction, indicating one single event, without any connectors or marking of subordination (see Danielsen 2007: 427–430 for more details on Baure verb serialization). Examples of this type of construction are given in (57) and (58). In (57) the motion verb *–kach* 'go' is followed by the manner verb *–javich* 'paddle' and in (58) the same motion verb appears in serialization with *–pino* 'flee'.

(57) *Nokach wapoer-ye nojavich.*
no=kach *wapoer–ye* *no=javich*
3PL=go river–LOC 3PL=paddle
'They went by river, paddling.' (RP-N090921FE-1)

(58) *Rokachpow ropinop.*
ro=kach–po–wo *ro=pino–po*
3SG:M=go–PFV.RFLX–COP 3SG:M=flee–PFV.RFLX
'He went (away and) fled.' (Danielsen 2007: 428)

A second possibility for specifying information on Path in relation to a manner verb is by adding one of the directional suffixes to it. In example (59), the manner verb *–javich* 'paddle' expresses the manner of motion whereas the directional suffix *–pik* (VEN) specifies the Path of the motion.

(59) *Nojavichipik to etonanev achow to jiranev.*
no=javich–pik *to* *eton–anev* *achow* *to* *jir–anev*
3PL=paddle–VEN ART woman–PL.H with ART man–PL.H
'The women as well as the men came paddling.' (RP-N090921FE-1)

The directional suffixes *–pa* and *–pik* are discussed in more detail in Section 5.2.3.2.3 below.

5.2.3.2 Path of motion

According to Talmy's typology, one of the major distinctions between languages is the packaging of Path in motion events. As was mentioned above, Verb-framed languages tend to encode Path in the verb, whereas in Satellite-framed languages Path is expressed in satellites. A well-known example is the contrast between 'floating into' in English and '*entrar flotando*' in Spanish, as in the examples below.

(60) *La botella* ***entró*** *a la cueva (flotando).*

la	*botella*	*entró*	*a*	*la*	*cueva*	*flotando*
the	bottle	moved–in	to	the	cave	floating

'The bottle floated into the cave.'

(Talmy 2000b: 49, typeface adapted)

(61) *The bottle floated* ***into*** *the cave.*

the	*bottle*	*floated*	*into the*	*cave*
the	bottle	move WITH-THE-MANNER-of[floating]	into the	cave

In the Spanish example in (60), the Path (in bold) is conflated with the motion verb *entrar* 'enter', whereas Manner (underlined) is expressed by the satellite *flotando* 'floating'. In contrast, in the English example in (61), Manner is expressed in the main verb 'float', and Path is expressed by the satellite 'into'. Spanish is thus typically characterized as a Verb-framed language, whereas English is a Satellite-framed language.

Baure tends to patterns with Verb-framed languages, like Spanish. Examples (62) and (63) present the basic Baure verbs for entering and exiting, *–siap* and *–etoro* respectively.

(62) *Rosiap ropeni-ye.*

ro=siap	*ro=peni–ye*
3SG:M=enter	3SG:M=cave–LOC

'He went into the cave.' (RP-N030912S)

(63) *Te monoki roetorok noiy jowoki-ye*

te	*monoki*	*ro=etoro–ko*	*noiy*	*jowoki–ye*
DEM2:M	owl	3SG:M=exit–ABS	there	hole–LOC

'The owl came out of the hole.' (DC-120228F)

A closer look at the Baure lexicon reveals that the language indeed has a high number of motion verbs that include a Path component. Consider the following sequence of phrases that describe the cliff-scene of the frog story (Mayer 1969).[115]

(64) 1. *Rarochow te ropo'e-ye te monchi.*

ro=aroch–wo	*te*	*ro=po'e–ye*	*te*	*monchi*
3SG:M=climb–COP	DEM2:M	3SG:M=head–LOC	DEM2:M	child

'The child climbed on top of his (the deer's) head.'

2. *Ver roshim ne' echowonkoe'-ye,*

ver	*ro=shim*	*ne'*	*echowonkoe'–ye*
PERF	3SG:M=arrive	here	cliff–LOC

'They already arrived here at the cliff,'

3. *ach to monchi roeposopoekow koech te kajaw roeshom.*

ach	*to*	*monchi*	*ro=iposopoe–ko–wo*	*koech*
and	ART	child	3SG:M=drop.down–ABS–COP	because

te	*kajaw*	*ro=ishom*
DEM2:M	deer	3SG:M=stand

'and the child fell on the ground because the deer halted.'

[115] The frog story is a word-less storybook often used in research on motion events. It tells the story of a boy who is looking for his pet frog and depicts many motion scenes (see also Section 1.3.1.1.2 in Chapter 1).

4. *Roeposopoekow kakiwok-ye.*
   ro=iposopoe–ko–wo *kakiwok–ye*
   3SG:M=drop.down–ABS–COP woods–LOC
   'He fell on the ground into the woods.'

5. *Inowok-ye roejevipoekow te monchi.*
   inowok–ye *ro=ejevipoe–ko–wo* *te* *monchi*
   water–LOC 3SG:M=fall.down–ABS–COP DEM2:M child
   'The child fell into the water.'

6. *Roeposopoekow ach rachpesaw.*
   ro=iposopoe–ko–wo *ach* *ro=acho–pes–a–wo*
   3SG:M=drop.down–ABS–COP and 3SG:M=have–leg–LK–COP
   'He hit the ground and had his legs (up in the air).'

7. *Ach ver roetorokpaw inowok-ye.*
   ach *ver* *ro=etoro–ko–pa–wo* *inowok–ye*
   and PERF 3SG:M=exit–ABS–INTL–COP water–LOC
   'And he came out of the water.'

(DC-120228F)

In this fragment of the story, the speaker describes a series of sequential motion events. In all of the scenes, the Path of motion is not encoded in a separate satellite, but is expressed in the motion verb itself. In the first line, for instance, the verb *–aroch* 'climb on' implies the notion of 'going up'. It indicates the Path only, and does not provide any information on the Goal or whether the Goal is reached. It may mean that the motion event ends at the top of the Goal, such as the stone in example (65). But it may also mean that the Path ends at some part of the Goal that is not further specified, as in (66). In this example, a monkey was sitting somewhere halfway up the tree, hidden in the leaves.

(65) *Ver rarochow koji-ye.*
ver *ro=aroch–wo* *koji'–ye*
PERF 3SG:M=climb–COP stone–LOC
'He climbed on top of the stone.' (HC-090122F)

(66) *Ewokoe'-ye ani-ye kwone', narochow ewokoe'-ye.*
ewokoe'–ye *ani–ye* *kwone'* *no=aroch–wo* *ewokoe'–ye*
tree–LOC above–LOC exist.3PL 3PL=climb–COP tree–LOC
'They are up in the tree, they climbed up the tree.' (HC-100920F)

The representation of *–aroch* 'climb on' as a single verb root is slightly misleading. As it turns out, this verb can be further segmented into the verb root *–aro* and the suffix *–cho* (PTCP). However, the verb root *–aro* has a different meaning. Compare examples (65) and (66) above with (67).

(67) *Narow to nen josernev.*
no=aro–wo *to* *nen* *joser–nev*
3PL=fly–COP ART DEM3:PL fly–PL
'These flies are flying.' (RP-091109F)

In fact, the intransitive verb *–aro* 'fly' should be interpreted as expressing the state of 'being up', which involves self-contained motion, but not necessarily translational motion. This verb is typically used with subjects that are up and moving in the sky, such as flies, birds and airplanes. Therefore, it is translated to Spanish as the manner verb '*volar*' (hence the English gloss 'fly').

In order to render the interpretation of a translational motion event ('moving up') with the verb root *–aro*, the Goal needs to be specified on the verb in one way or another. One option for deriving a transitive motion verb is by means of the suffix *–cho* (PTCP), which results in *–aroch* 'climb on'. Another option is to include the Goal by means of an incorporated nominal root. This may be a full noun, such as *ewokoe'* 'tree' in example (32) above repeated here as (68), or a classifier, such as *–ki* (CLF[bounded]) in example (69).

(68) *Raroewokoek.*
ro=aro–ewokoe'–ko
3SG:M=climb–tree–ABS
'He climbed the tree.' (DC-091122F)

(69) *Narokiaw yashor-ye.*
no=aro–ki–a–wo *yashor–ye*
3PL=climb–CLF[bounded]–LK–COP canoa–LOC
'They embarked on the boat.' (GP&LO-090126F)

This strategy of including a specification of the Goal on the verb root results in the reading of a translational motion event including Path. Many of the verbs of this kind include the nominal root *–poe* 'down', which indicates the end of the Path trajectory. Nowadays, the verb roots without the Path component either have different meanings (recall the contrast between the verbs *–aro* 'be up' and *–aroch* 'climb on') or they are not attested without the Path component in contemporary Baure.

In addition to verb roots that denote a translational motion activity, Baure has several means of adding a translational motion reading to other verbs. The sections below focus on two of these strategies. In Section 5.2.3.2.1, a number of basic motion verbs are discussed that are used in serialization with other verbs including verbs denoting static location or self-contained motion. Thereafter, the preverbal particles that were derived from frequently used motion verbs are discussed in Section 5.3.2.2.2. Finally, in Section 5.3.2.2.3 the directional suffixes *–pik* (VEN) and *–pa* (INTL) are discussed.

5.2.3.2.1 Deictic motion verbs

Baure has a number of frequently used deictic motion verbs that imply translocation. These are verb roots that all include a Path component in their semantics without having to add this component by means of an incorporated noun root (compare examples (68) and (69) above). Examples of such verb roots that include a Path component are given in (70) through (74).

(70) *Rikach kakiwok-ye.*
ri=kach *kakiwok–ye*
3SG:F=go woods–LOC
'She went to the woods.' (HC-090122F)

(71) *Viyonopa toerok-ye noiy Asperi-ye*
vi=yono–pa *toerok–ye* *noiy* *Asperi–ye*
1PL=go–INTL field–LOC there the.Aspera–LOC
'We will go to the field there in the Aspera.' (LO&GP-090927F)

(72) *Ver vishim ne' te ewokoe' chowokcha.*
ver *vi=shim* *ne'* *te* *ewokoe'* *cho–wok–cha*
PERF 1PL=arrive here DEM1:M tree big–tree–AUG
'We arrived here at the big tree.' (DC-090126F)

(73) *Enevere panoekpa noiy sorati-ye, ishkon pishim.*
enevere *pi=anoek–pa* *noiy* *sorati–ye*
tomorrow 2SG=come.close–INTL there village–LOC
ishkon *pi=shim*
until 2SG=arrive
'Tomorrow you will approach the village over there, until you arrive.'
(RP-N090105F-1)

(74) *"Enevere navikop", rokichowor-ji.*
enevere *ni=avik–pa* *ro=kich–wo=ro=ji*
tomorrow 1SG=return–INTL 3SG:M=say.do–COP=3SG:M=QUOT
' "I will come back tomorrow," he said to him.' (AD-N081231F)

The verb root *–kach* 'go' is the basic and most widely used translocative verb root. It implies a Path away from the current location of the subject, as shown in example (70). At first sight, the verb root *–yono* 'go', presented in example (71), seems to have a similar meaning, but there is a subtle difference between the two (see below). The verb root *–shim* 'arrive' in example (72) explicitly

includes reaching the end point of the Path trajectory, in this case the big tree. The verb root *–anoek* means 'come close' in the sense of 'approaching' and suggests that the subject is moving along a Path while reducing the distance between himself and the supposed end point, such as the village in example (73). Finally, the verb root *–avik* 'return', in example (74), implies a translational motion along a Path of which the point of departure and the arrival point coincide.

Combinations of two path verbs in serialization are rarely found in the database, with the exception of combinations including the verb root *–kach* 'go'. Usually, when two path verbs do occur in the same clause, they describe two different sequential events. They are often linked by a conjunction, as in example (75), or one of them is marked for subordination, for example with the nominalizer *–no*, as in example (76). Or they may be coordinated without any marking for subordination.

(75) *Ach ver vishim ach varochop.*
ach *ver* *vi=shim* *ach* *vi=aroch–pa*
and PERF 1PL=arrive and 1PL=climb–INTL
'We arrived and we climbed up.' (DC&JS-091028F)

(76) *Koyan-ye pikach ach pavikoeshapow rikiepikopon ne' sap-ye.*
koyan–ye *pi=kach* *ach* *pi=avik–i'–sha–po–wo*
right–LOC 2SG=go and 2SG=return–EMPH–PFV.RFLX–INTL–COP
ri=ke–pik–po–no *ne'* *sap–ye*
3SG:F=E.V–VEN–PFV.RFLX–NMLZ here left–LOC
'You went to the right and you returned coming here from the left.'
(DC-090924F)

The verb root *–kach* 'go' on the other hand, is used often in serialization, including verb series of two or more path verbs. Examples of serial verb constructions with *–kach* plus another path verb are given in (77) through (79).

(77) *Ver rokach rokopoek.*
ver *ro=kach* *ro=kopoek*
PERF 3SG:M=go 3SG:M=come.down
'He is going down.' (RP-091106F)

(78) *Ach ver rokach rarochow.*
ach *ver* *ro=kach* *ro=aroch–wo*
and PERF 3SG:M=go 3SG:M=climb–COP
'And he is climbing up.' (RP-091106F)

(79) *Rokach royonopoek.*
ro=kach *ro=yono–poe–ko*
3SG:M=go 3SG:M=go–CLF[ground]–ABS
'He went away by foot.' (RP-091106F)

Similarly, combinations of a path verb and a manner verb are rare, except for combinations with *–kach* 'go'. If this type of verb series occurs, the motion verbs are used to add a Path component to the events. Example (80) shows a verb series with the path verb *–kach* 'go' and the manner verb *–javich* 'paddle'. In example (81), the manner verb *–pinokia* 'run' is marked with the venitive suffix *–pik* (see Section 5.2.3.2.2 below), and then followed by the path verb *–shim* 'arrive'.

(80) *Nokach nojavich wapoer-ye.*
no=kach *no=javich* *wapoer–ye*
3PL=go 3PL=paddle river–LOC
'They went paddling by river.' (RP-N090921FE-1)

(81) *Ach ropinokiapik roshim pari-ye.*
ach *ro=pinokia–pik* *ro=shim* *pari–ye*
and 3SG:M=run–VEN 3SG:M=arrive house–LOC
'And running he came to arrive at his house.' (DC-091009F)

As was mentioned above, Baure has a second translocative verb, *–yono* 'go'. It is often translated by the speakers as 'to walk', especially when *–poe* (CLF[ground]) is incorporated, as in example (83). In both examples below, the Spanish translation is presented as it was given by the speakers.

(82) *Vetorok niwer-ye ach viyonopa.*
vi=erotorok *ni=wer–ye* *ach* *vi=yono–pa*
1PL=leave 1SG=house–LOC and 1PL=go–INTL
'Salimos de mi casa y fuimos a caminar.'
'We left my house and went for a walk.' (DC&JS-091028F)

(83) *Viyonopoek.*
vi=yono–poe–ko
1PL=go–CLF[ground]–ABS
'Vamos caminando.'
'We are going by foot.' (DC-091003F)

In previous research on Baure (e.g. Danielsen 2007) the verb root *–yono* was analyzed as 'to walk' while the combination with the incorporated noun root, *–yonopoe*, was analyzed as 'to walk barefoot'. However, it turns out that the verb root *–yono* does not necessarily involve walking. Compare the verb root as it is used in the following examples.

(84) *¿Ver piyonopaw Jasiakir–ye?*
ver *pi=yono–pa–wo* *Jasiakir–ye*
PERF 2SG=go–INTL–COP Jasiaquiri–LOC
'Did you go to Jasiaquiri?' (GP&LO-090126F)

(85) *“Ach neriki nga viyonopa”, rikichowon to nech rishechenev.*

ach	*neriki*	*nga*	*vi=yono–pa*	*ri=kicho–wo–no*
and	now	NEG	1PL=go–INTL	3SG:F=say.do–COP–3PL

to	*nech*	*ri=shechenev*
ART	DEM2:PL	3SG:F=children

‘ “And now we will not go anymore”, she said to her children.’

(CS-N081220F-1)

In example (84), the speaker asks whether the addressee already went to Jasiaquiri. This is a nearby town, at approximately 10 km distance from the town where the session took place. Although some people walk this distance, it is more common to go by bike or motorbike. The speaker certainly did not mean to ask about the manner in which the journey was made (e.g. walking or by bike), but only wanted to know whether the addressee had already visited the town of Jasiaquiri. Example (85) comes from a story in which a poor sister used to go over to work in her rich sister's house, but now that she found out that the rich sister treated her children badly, she does not want to go anymore. In this example, the verb root *–yono* ‘go’ is negated. Again, what is negated is not the manner in which they used to go to the rich sister's house, but the entire event of going over there. Another example in which the subject is clearly not walking is presented in (86). Here, the speaker describes how she used to travel by canoe to the nearby town of Bellavista.

(86) *Narokiaw ne' yashor-ye ach niyonopa awon-ye.*

ni=aro–ki–a–wo	*ne'*	*yashor–ye*
1SG=go.up–CLF[bounded]–LK–COP	here	canoa–LOC

ach	*ni=yono–pa*	*Awon–ye*
and	1SG=go–INTL	Bellavista–LOC

‘I embarked here on the canoe and went to Bellavista.’ (CS-090925F)

The three examples above of the use of the verb root *–yono* clearly show that it encompasses a broader meaning than was previously assumed and given by the speakers. Therefore, in this research it is glossed as ‘go’. The difference

between *–kach* and *–yono*, which both mean 'to go' is a subtle one. While *–kach* stresses more the start of the action (e.g. leaving the house), *–yono* focalizes the trajectory or the end point. The verb root *–kach* 'go', in examples (70) and (76), indicates the starting point of the action. This is even clearer in the serial verb constructions in examples (77) through (80). In contrast, *–yono* 'go', in example (85) highlights the trajectory, and the end point in examples (84) and (86).

5.2.3.2.2 Preverbal particles derived from motion verbs

Two of the basic motion verbs discussed in the previous sections were the source for a preverbal particle. The basic translocative verb *–kach* 'go' is not only the most widely used path verb, it is also one of the few from which a preverbal particle was derived (see also Danielsen 2014). Example (87) shows two clauses in a sequence. In the first clause the verb root *–kach* is used and in the second clause the andative particle *kach*.

(87) *Vikach ne' las sink. Kach viyonop, vishim.*

vi=kach	*ne'*	*las*	*sink*	*kach*	*vi=yono–po*	*vi=shim*
1PL=go	here	ART	five	AND	1PL=go–PFV.RFLX	1PL=arrive

'We left here at five. We were going, (then) we arrived.'

(LO&GP-090927F)

The particle *kach* (AND) can not only be combined with motion verbs such as the translational motion verb *–siap* 'enter', in example (88), or the self-contained motion verb *–javiak* 'swim' in example (89), but with any other verb, as is shown in examples (90) and (91).

(88) *Te jir kach rosiap.*

te	*jir*	*kach*	*ro=siap*
DEM1:M	man	AND	3SG:M=enter

'The man is going to enter.' (DC-090930F-2)

(89) *Ver kach rojaviak.*
ver *kach* *ro=javiak*
PERF AND 3SG:M=swim
'He went to swim.' (DC-091110F)

(90) *Kach vijinoekpa.*
kach *vi=jinoek–pa*
AND 1PL=search–INTL
'We are going to search.' (CS-N081220F-1)

(91) *Kach riwon to nen rishechenev.*
kach *ri=won* *to* *nen* *ri=shechenev*
AND 3SG:F=send ART DEM3:PL 3SG:F=children
'She was going to send her children.' (CS-N081220F-1)

Danielsen (2007: 270) notes that whereas the verb root *–kach* indicates translational motion, the particle *kach* has a wider use in marking the beginning of an event, or intentional and future events. In fact, this function is not restricted to the particle. The verb root *–kach* is also used occasionally for indicating intentionality or a future event. In example (92) the subject, a man, already arrived at the tree that he is going to fell and the translational motion of going to that place is already concluded. The verb *rokach* in the subsequent phrase does not imply motion but rather expresses the intention of the man that he is going to fell the tree.

(92) *Ver roshim kakiwok-ye ach rojinoekow tech ewokoe'.*
ver *ro=shim* *kakiwok–ye* *ach* *ro=jinoek–ow*
PERF 3SG:M=arrive woods–LOC and 3SG:M=search–COP

tech *ewokoe'*
DEM2:M tree
'He arrived in the woods and he is looking for the tree.'

Rokach roejevipoekier.
ro=kach *ro=i–ejevipoek=ro*
3SG:M=go 3SG:M=CAUS–fall.down=3SG:M
'He is going to fell it.' (DC-091110F)

Similarly, in (93) there is no translational motion involved in the event. The speaker only describes the future event of making manioc starch for the town's annual fest.

(93) *Ver ranoekpaw te visorinopi ach vikach vikamari.*
ver *ro=anoek–pa–wo* *te* *vi=sorinopi*
PERF 3SG:M=come.close–INTL–COP DEM1:M 1PL=song.of.the.village

ach *vi=kach* *vi=kamari*
and 1PL=go 1PL=make.chicha
'The village fest is nearing and we are going to make *chicha*.'
(MD-081203F)

The second motion verb from which a particle was derived is the verb *–avik* 'return'. Danielsen (2007: 283) argues that the verb root was used in serialization first and then grammaticalized into a preverbal particle. From this particle, the adverb *avik* was derived. The position of the particle *avik* is always preverbal, and in this sense it resembles verb serialization. In contrast, the position of the adverb *avik* 'again' is much freer. An example of the preverbal particle *avik* is given in (94) and (95) shows an example of the adverb *avik* 'again'.

(94) *Avik riepkoener, avik ronik.*
avik *ri=epkoen=ro* *avik* *ro=nik*
REP 3SG:F=serve=3SG:M REP 3SG:M=eat
'She served him again, he ate again.' (RP-N090105F-1)

(95) *Ver vikachpikpow ne' visori-ye avik.*
ver *vi=kach–pik–po–wo* *ne'* *vi=sori–ye* *avik*
PERF 1PL=go–VEN–PFV.RFLX–COP here 1PL=village–LOC again
'They came here to the village again.' (DC-091003F)

Although the forms of the particle and the adverb are homophonous, their functions are different. The preverbal particle marks the repetition of the action of the verb that follows it. In example (94), 'serving' and 'eating' are repeated actions. The adverb *avik* 'again' in (95) indicates that the speaker and her companions came back to town again after having been away for some time harvesting chocolate in the woods.

These particles that were derived from motion verbs do not play a major role in translational motion events. The grammaticalized forms are not used for indicating motion, but are used as TAM markers instead.

5.2.3.2.3 Directional suffixes

Baure has two directional verbal suffixes: *–pa* (INTL) and *–pik* (VEN). Strictly speaking, the term 'directional' is used here as a cover term, because in Baure these suffixes fulfill a wide range of functions, including direction, intentionality, associated motion and purpose.

The venitive suffix *–pik* (VEN) combines with active as well as stative verbs that are not motion verbs, in order to add a motion component. Examples are given in (96) and (97).

(96) *Roetoekapikow.*
ro=itoek–a–pik–wo
3SG:M=stay–LK–VEN–COP
'He came and stayed.' (DC-090924F)

(97) *Nopiriakpikow ne' Vistoria-ye.*
no=piria–ko–pik–wo *ne'* *Vistoria–ye*
3PL=cut–ABS–VEN–COP here Lake.Victoria–LOC
'They came to cut (the trees) here at Lake Victoria.' (DC-091009F)

In the examples above the suffix *–pik* (VEN) adds a sense of motion to the event. However, although there is translational motion involved, it is not the main event, but rather associated motion.[116] Descriptions with these kinds of active and stative verbs focus on the action expressed by the verb itself and the motion plays only a minor role.

The directional suffix *–pik* (VEN) furthermore combines with path verbs as well as manner verbs. In both cases it provides more specific information of the path component in the translational motion event. The combination of a path verb and the directional suffix *–pik* (VEN) is found very frequently. On verbs expressing translational motion, this suffix specifies the path of the motion, by indicating its direction. In (98) for example, the verb *nosiapikow* does not only describe the translational motion event of entering the village, but by adding the directional suffix it also indicates the direction of the motion towards the deictic center, in this case the speaker's current location.

(98) *Ach to nen ajinev nosiapikow ne' sorati-ye.*
ach *to* *nen* *ajinev* *no=siap–pik–wo* *ne'* *sorati–ye*
and ART DEM3:PL children 3PL=enter–VEN–COP here village–LOC
'And the children came entering the village here.' (DC-091009F)

With a similar reading, the directional suffix *–pik* (VEN) attaches to other motion verbs as well, as illustrated by examples (99) through (101).

(99) *Ver yavikopikow¸ nishechenev.*
ver *yi=avik–pik–wo* *ni=shechenev*
PERF 2PL=return–VEN–COP 1SG=children
'You returned, my children.' (CS-N090126F)

[116] While related languages like Trinitario and Paunaka have separate suffixes for marking associated motion (see Rose 2015; and Terhart *in prep* respectively), Baure does not. It is therefore not regarded as a separate grammatical category, but as one of several functions of the directional suffixes.

(100) *Kach noyonapik ajinev.*

kach	*no=yon–a–pik*	*ajinev*
AND	3PL=go–LK–VEN	children

'The children went away.' (CS-N081220F-1)

(101) *Ver vikachpikopow varopikopow.*

ver	*vi=kach–pik–po–wo*	*vi=aro–pik–po–wo*
PERF	1PL=go–VEN–PFV.RFLX–COP	1PL=go.up–VEN–PFV.RFLX–COP

'We went and came by boat.' (DC-090924F)

In example (101) the venitive suffix *–pik* (VEN) is combined with a path verb that has an andative reading, *–kach* 'go'. Though this may seem a combination of two contrastive directions, it is extremely productive. It combines the perspective of the subject, in this case the event of 'going' away from one point to another, with the relative position of the speaker, towards whom the action is headed. In example (101), the speaker relates how she and her husband, the subject 'we' in the example, used to go to the woods to harvest chocolate. At this particular stage in the story, she tells how they embarked on the boat and brought the harvest back to town. The deictic center to which the venitive *–pik* (VEN) makes reference is the location of the speaker's house, where the conversation takes place.

The second directional suffix is *–pa* (INTL), which is not only used as a directional, but primarily as an intentional suffix. When it is used as a directional, it contrasts with *–pik* (VEN), as is shown in example (102) and (103).

(102) *Rimokopa posare-ye¸ rimokow noiy.*

ri=imok–pa	*posare–ye*	*ri=imok–wo*	*noiy*
3SG:F=sleep–INTL	other.place–LOC	3SG:F=sleep–COP	there

'She went (away) to sleep in another place, there she slept.'

(CS-N081220F-1)

(103) *Tiow noiy noemokapik.*

tiow	*noiy*	*no=imok–a–pik*
COMP	there	3PL=sleep–LK–VEN

'It is there that they came to sleep.' (MD-N090103F)

However, it is not always easy to distinguish the interpretation of *–pa* as a directional from the interpretation as an intentional marker. Often the context reveals whether or not any translational motion is involved or not, as is the case in example (104). This phrase describes how a man, after climbing up the roof, has fallen asleep there.

(104) *Ver roemokopaw te jir.*

ver	*ro=imok–pa–wo*	*te*	*jir*
PERF	3SG:M=sleep–INTL–COP	DEM1:M	man

'The man already went to sleep.' (DC-090930F-2)

In fact, comparing the analysis of the directional suffix *–pa* (INTL) with the analysis of the basic motion verbs *–kach* 'go' and *–yono* 'go', and the preverbal particle *kach* (AND) as described in the previous sections, a distribution of functions is revealed. While the verb *–yono* emphasizes the trajectory followed in the translational motion event, *–kach* stresses the start of the trajectory. At the same time, while the preverbal particle *kach* is primarily used for indicating the direction of the motion and less frequently for indicating intention, it is the other way around with the suffix *–pa*. This suffix is primarily used for marking intention and is only occasionally interpreted as a directional marker.

5.2.3.3 Grounds in translational motion events

In motion events, different parts of the clause determine the interpretation of the description of the event, such as the verbal component and verbal suffixes described in the sections above. This section focuses on the Grounds in the expression of translational motion events in Baure. As mentioned in the previous chapters, with respect to the encoding of local roles, Baure does not distinguish Goal, Source, Path, and Place. They are all marked only by the

general locative marker *–ye*. Therefore, the particular role of that locative phrase in the clause is determined by other factors. In Baure, both Source and Goal are seldom expressed in relation to a single motion verb.[117] Example (105) presents one of the few exceptions found in the database, in which *ventani-ye* refers to the Source of the motion and *–poe* to the Goal of the motion.

(105) *Roeposopoekow ventani-ye.*
ro=iposopoek–wo *ventani–ye*
3SG:M=drop.down–COP window–LOC
'He is falling down from the window.' (DC-120228F)

One factor that influences the correct interpretation of the locative noun phrase in motion events is pragmatics. In examples (106) and (107) there is no formal distinction between the two locative noun phrases.

(106) *Viyonop cheje'-ye.*
vi=yon–po *cheje'–ye*
1PL=go–PFV.RFLX rock–LOC
'We were walking on top of the rock.' (LO-090929F)

(107) *Viyonopa toerok-ye.*
vi=yono–pa *toerok–ye*
1PL=go–INTL field–LOC
'We are going to the field.' (LO&GP-090927F)

The context reveals that in example (106) the locative noun phrase indicates a Place, while in (107) it refers to the Goal. Though both examples describe a motion event, in (106) we are dealing with self-contained motion, whereas (107) describes translational motion. In (106) the speaker is telling about the time he went to a nearby rock, the Cerro Mercedes. After climbing up, they

[117] The fact that Source and Goal are not often found in relation to a single verb was observed for South American Spanish as well (Slobin 1996: 203).

were strolling around on top of this flat table mountain, before descending again. In contrast, in example (107), the speaker explains the trajectory of an upcoming trip to his field, on which he invited my colleague and me to join him. In this motion event the field is the Goal. Although the intentional suffix *–pa*, may in some cases invoke a Goal interpretation, in this case it indicates that the event is yet to take place (intentional).

Additionally, a local role is not marked differently from a means or instrument. In example (108) the locative noun phrase indicates the Goal of the event, whereas in (109) *yashor-ye* 'by boat' refers to the means of transportation.

(108) *Nameri kakiwok-ye.*
no=am=ri *kakiwok–ye*
3PL=take=3SG:F woods–LOC
'They took her to the woods.' (DC-091009F)

(109) *Namer yashor-ye.*
no=am=ro *yashor–ye*
3PL=take=3SG:M canoa–LOC
'They took him in the boat / by boat.' (RP-101019F)

The second factor that contributes considerably to the correct interpretation of the local role of the locative noun phrase in a motion event is the verb. This is illustrated with examples (110) and (111), with an obvious contrast between *–siap* 'enter' and *–etorok* 'leave'.

(110) *Nisiap niwer-ye.*
ni=siap *ni=wer–ye*
1SG=enter–COP 1SG=house–LOC
'I went into my house.' (DC-091013F)

(111) *Vetorok niwer-ye.*
vi=etorok *ni=wer–ye*
1PL=leave 1SG=house–LOC
'We left my house.' (DC&JS-091028F)

In some cases, though, a slight difference can be observed using a single verb. In one case the locative noun phrase may refer to the Goal, whereas in others it refers to the Source. This contrast is illustrated with examples (112) and (113).

(112) *Roejevipoekow poewok-ye.*
ro=ejevipoek–wo *poewok–ye*
3SG:M=fall.down–COP ground–LOC
'He fell down on the ground.' (RP-091106F)

(113) *Roejevipoekow te ewokoe'-ye.*
ro=ejevipoek–wo *te* *ewokoe'–ye*
3SG:M=fall.down–COP DEM1:M tree–LOC
'It (the fruit) fell down from the tree.' (DC-091013F)

In (112) the ground is the Goal, and in (113) the tree is the Source. The latter is more individualized than the first, namely by the demonstrative *te*. Although the verb can be combined with locative noun phrases with roles other than Goal, this is an unusual situation and requires extra marking. In this particular case, it suggests that a Goal is a more inherent part of the motion event expressed by the verb *–ejevipoek*, 'fall down'.

In the following sections, different types of translational motion verbs are discussed and their canonical orientation towards a Ground with a certain role. A distinction is made between Goal oriented motion verbs (Section 5.2.3.3.1), and Source oriented motion verbs (Section 5.2.3.3.2).

5.2.3.3.1 Goal oriented motion verbs

In Baure, we find a relatively high number of verbs that are Goal oriented, compared to the number of Source oriented verbs. These Goal oriented verbs are path verbs that indicate a translational motion ending at the Ground entity. The Ground entity is marked with the general locative suffix *–ye*. Examples of Goal oriented verb roots are given in (114) and (115), with the verbs *–arokia* 'climb up' and *–viapa* 'take to' respectively.

(114) *Rarokiaw te kamion-ye.*
ro=arokia–wo *te* *kamion–ye*
3SG:M=climb.into–COP DEM1:M truck–LOC
'He climbed into the truck.' (DC-091110F)

(115) *Piviapa tiporeknev Asperi-ye.*
pi=viapa *tiporek–nev* *Asperi–ye*
2SG=take.to chicken–PL the.Aspera–LOC
'You take chickens to the Aspera.' (LO&GP-090927F)

The locative phrases in the examples above, *kamion-ye* and *Asperi-ye*, are interpreted as the end point of the trajectory along which the translational motion takes place.

In Table 5.3 more examples of Goal oriented verbs are presented. Here, only verbs expressing translational motion are listed, although other types of verbs may be Goal oriented too, such as *–ech* 'throw at' in example (116).

(116) *Roechapek te ropo'e-ye.*
ro=ech–ap–ko *te* *ro=po'e–ye*
3SG:M=throw.at–bone–ABS DEM1:M 3SG:M=head–LOC
'He threw a bone at his (the dog's) head.' (GP&LO-081229FP)

Table 5.3: Examples of Goal oriented motion verb roots in Baure.

Motion verb	**English translation**
–aroch	'climb on'
–arokia	'get on'
–epik	'come to'
–ishkon	'go until'
–kach	'go to'
–siap	'enter into'
–shim	'arrive at'
–viapa	'take to'
–yono	'go to'

One particular type of Goal oriented verbs are those with the incorporated locative noun stem *–poe*. These are always specifically oriented downwards to the ground. They are listed separately in Table 5.4.

Table 5.4: Goal oriented verbs with the locative noun stem *–poe* 'down'.

Displacement	**English translation**
–ejevipoek	'fall down'
–iposopoek	'drop down'
–iyoshpoek	'stumble down'
–koshpoe	'lie down'

Verbs of this kind are highly lexicalized, and for most of these verb roots no examples are found without the incorporated locative noun stem. This is for example the case with *–iposopoe* 'drop down', which is presented in example (117). The lexicalization of the verb root together with the locative noun stem can further be noticed in examples like the one in (118) where a toy man stumbled and fell down, not onto the ground, but onto the roof of a car.

(117) *Ach roeposopoekow poewok-ye.*

ach	*ro=iposo–poe–ko–wo*	*poewok–ye*
and	3SG:M=come–down–ABS–COP	ground–LOC

'And he fell down (after being pushed).' (DC-091013F)

(118) *Ach neriki ver roejevipoekow ten.*

ach	*neriki*	*ver*	*ro=ejevi–poe–ko–wo*	*ten*
and	now	PERF	3SG:M=fall–down–ABS–COP	DEM3:M

'And now he fell down.' (DC-091013F)

5.2.3.3.2 Source oriented motion verbs

In Baure only a small number of verbs are Source oriented. An example of a source oriented motion verb is *–etorok* 'come out', presented in example (119).

(119) *To sipori ito roetorokow jopi-ye.*

to	*sipori*	*ito*	*ro=etorok–wo*	*jopi–ye*
ART	frog	PROG	3SG:M=come.out–COP	jar–LOC

'The frog is getting out of the jar.' (HC-090122F)

More examples of Source oriented verbs are listed in Table 5.5.

Table 5.5: Examples of Source oriented motion verbs in Baure.

Displacement	**English translation**
–avik	'return from/to'
–ejvirik	'take out'
–etorok	'come out'
–via'	'take out'

The interpretation of *–avik* 'return' depends on pragmatic factors. It can combine with locative noun phrases indicating a Goal, as well as a Source.

Formally, there is no distinction between the two phrases, as is observed when comparing example (120) with (121).

(120) *Navikop ndovian-ye.*
ni=aviko–po *ni=tovian–ye*
1SG=return–PFV.RFLX 1SG=neighbor–LOC
'I returned from my neighbor.' (RP-030901S)

(121) *Navikop ʂorati-ye.*
ni=aviko–po *ʂorati–ye*
1SG=return–PFV.RFLX village–LOC
'I returned to the village.' (MD-081112L)

While in (120) the speaker explains that she just came back from her neighbor, in (121) the speaker narrates about the time when he came back to the village after being away for some time. The former use, as in (120), is the more common one, though.

The discrepancy between the number of Goal oriented verbs and the number of Source oriented verbs is not very surprising, since the Goal is more salient than other elements in motion events. When Goal is overtly expressed, the trajectory, and perhaps even the Source, can be inferred and need not to be lexicalized (Ungerer and Schmidt 1996; see Stefanowitsch and Rohde 2004 for a corpus based analysis of the Goal bias).

5.3 SUMMARY

In this chapter, the nominal and verbal elements used in predicates expressing location and motion are described. The nominal components of these predicates include the same locative noun stems mentioned, which serve either as a predicate base or as an incorporated nominal element. The incorporated elements may be coreferential with the Ground entity, or be a specification of the spatial relation between the Figure and the Ground.

The verbal components of predicates expressing location and motion include verb inventory used for describing translational motion events consisting of a relatively small set of positional verbs, and a number of very frequent motion verbs. In addition, the different components of a translational motion event are considered in this chapter: Path, Manner and Ground. In Baure, the Path of a translational motion event is usually encoded in the verb root itself, whereas Manner is expressed elsewhere in the phrase. In this sense, Baure tends to pattern with the so-called Verb-framed languages.

CHAPTER 6:

SPATIAL ORIENTATION BY MEANS OF NOMINAL AND ADVERBIAL DEMONSTRATIVES

In this Chapter, the use of nominal and adverbial demonstratives for spatial orientation is discussed. In particular, I study their role in place deixis and the way in which these elements interact with each other, and with non-deictic organization of space. The definition of demonstratives used here largely follows the terminology as used by Dixon (2003). Demonstratives can be subdivided into three different categories: nominal, local adverbial, and verbal demonstratives. Nominal demonstratives, like 'this' or 'that', point to an object, and make up an NP together with a noun or pronoun. In many languages they can be used independently as well, as a full NP. Local adverbial demonstratives, such as 'here' and 'there', point to a particular place or location and usually occur alone. Verbal demonstratives are verbs of the type 'do it like this', and can occur on their own or together with a lexical verb. Demonstratives seem to exist in all languages across the world (Diessel 2013: 245; Dixon 2003: 62), however, not all three types are represented in each language. Whereas every language seems to have nominal and local adverbial demonstratives,[118] verbal demonstratives are often absent in a language (Dixon 2003:62–63). In Baure, nominal and local adverbial demonstratives occur very frequently. In addition, one stative verbal construction is attested that has a deictic function. The different types of demonstratives in Baure are introduced in Section 6.1.

Nominal, local adverbial and verbal demonstratives have different functions, and one of them is the deictic function.[119] Demonstratives used for place deixis designate spatial locations relative to anchor points in the speech

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[118] There is only one known exception. The Jul'hoan language (Khoisan) appears to lack nominal and local adverbial demonstratives (Dixon 2003: 69).

[119] Throughout this chapter, 'deixis' is used in a narrow sense to refer to the extralinguistic pointing function of demonstratives, and personal pronouns and temporal adverbs are not included (see also Dixon 2003 on the terminology as it is used here).

event (Anderson and Keenan 1985: 277; Levinson 1983: 79). Thus, the interpretation of the lexical element is extralinguistic and variable, dependent on the specific context in which it is used. The main anchor point in the speech event is the deictic center. In many cases the deictic center is the speaker, but it may also be the hearer, though this is less common (Anderson and Keenan 1985: 277). The deictic center may also be projected somewhere else, as is often the case in narratives, for example.

Although this chapter deals exclusively with the deictic functions of demonstratives in Baure, a number of other functions are worth mentioning here as well. One of the other functions of demonstratives is the discourse function. Within the discourse, demonstratives can indicate a referent that is mentioned elsewhere in the discourse (Dixon 2003: 83–84; Levinson 1983: 67–68). The reference is anaphoric when the referent is already mentioned prior to the demonstrative, and cataphoric when the referent is mentioned afterwards. It is worth noting that the Baure nominal demonstratives *tech* and *tich*, DEM2, are used primarily for structuring the discourse, and hardly ever have a deictic function. In discourse, the DEM2 forms are used for introducing a new person or topic, and for introducing a subordinate clause. As pointed out by Danielsen (2007: 313), these forms are typically used for introducing new characters in narratives, as in example (1).

(1) *Nakirok-ye tech joven ponshowore', moeron.*
nakirok–ye *tech* *joven*
ancient.times–LOC DEM2:M youngster

po–no–sh–wo=ro–i' *moeron*
one–CLF[general]–one–COP=3SG:M–EMPH orphan
'Once upon a time there was this boy all alone, an orphan.'

Repen tech roea', ach rachor tich ren.
ro=epen *tech* *ro=ia'* *ach* *ro=acho=ri*
3SG:M=die DEM2:M 3SG:M=father and 3SG:M=have=3SG:F

tich *ro=en*
DEM2:F 3SG:M=mother
'His father died, and he (only) has a mother.' (RP-N090105F-1)

In some languages demonstratives are used to substitute entire clauses or fragments of the discourse. In Baure, when reference is made to an entire clause or fragment with a nominal demonstrative it is usually followed by a nominalized verb, making up a relative clause or complement clause (see Danielsen 2007: 397–412 on clause combining). In example (2), the speaker refers to the whole conversation that just took place with the complement clause *tech vikoyepiach*.

(2) *Ver etovi tech vikoyepiach.*
ver *eto=vi* *tech* *vi=koyepia–cho*
PERF finish=1PL DEM2:M 1PL=communicate–PTCP
'We finished our conversation.' (CS-091113F)

The subordinate clause may be introduced by the cleft construction *tiow* 'this is', to give it more emphasis. The demonstrative is used for then identification or recognition (Dixon 2003: 84–85; Himmelmann 1996), as in example (3).

(3) *To lechus kwore' ne' ewokoe'-ye, tiow te roepikow te monchi.*
to *lechus* *kwore'* *ne'* *ewokoe'–ye* *tiow*
ART owl exist.3SG:M here tree–LOC COMP

te *ro=ipik–wo* *te* *monchi*
DEM1:M 3SG:M=be.afraid–COP DEM1:M child
'The owl is sitting in the tree, that's why the boy is afraid.'
(HC-090122F)

Turning back to the deictic functions of demonstratives now, many languages distinguish between proximal and distal interpretations of demonstratives. However, this traditional distance-based treatment of deictic expressions reflects only part of the typological picture. The use of demonstratives and place adverbs for place deixis can also be related to other factors, either linguistic (e.g. evidentiality markers) or non-linguistic (e.g. gestures, visibility of the referent, etc.). Even in languages that are considered as having a distance-based system the actual use may be influenced by additional factors. It was argued, for example, that in English the choice of a nominal or local adverbial demonstrative is affected by visibility, ownership, and familiarity (Coventry et al. 2014: 62–63).

In this Chapter, the use of nominal and local adverbial demonstratives for place deixis in Baure is studied. Section 6.1 briefly recapitulates the formal characteristics of nominal, adverbial, and verbal demonstratives. After that, in Section 6.2, the use of the nominal and adverbial demonstratives for place deixis is addressed. Section 6.3 then focuses on the relation between the forms of both classes, and illustrates how nominal and adverbial demonstratives interact with each other. Finally, in Section 6.4, I discuss how the demonstratives interact with non-deictic spatial organization.

6.1 FORMAL CHARACTERISTICS OF DEMONSTRATIVES

In this section, the formal characteristics of Baure demonstratives are presented. Apart from the nominal (Section 6.1.1) and adverbial demonstratives (Section 6.1.2) that were already mentioned in Chapter 3, verbal demonstratives (Section 6.1.3) are discussed here as well.

6.1.1 NOMINAL DEMONSTRATIVES IN BAURE

As was mentioned in Chapter 3 (Section 3.3), Baure nominal and adverbial demonstratives both form a small closed word class and the forms of both classes have a relatively simple morphology. Baure demonstratives and adverbs are listed in Table 3.5, repeated here as Table 6.1.

Table 6.1: Baure definite articles and nominal demonstratives (after Danielsen 2007: 311).

Gloss	SINGULAR		PLURAL
	masculine	feminine	
ART	*to*	*ti*	*to*
DEM1	*te*		
DEM2	*tech*	*tich*	*to nech*
DEM3	*ten*	*tin*	*to nen*

In Baure, nominal as well as local adverbial demonstratives occur very frequently. In addition to place deixis, Baure demonstratives provide some qualitative information about the referent. The feminine forms are used for biologically female referents, mainly for humans. As is evident from Table 6.1, for the feminine and plural forms the article and DEM1 forms are homophonous. Danielsen suggests that the use of the DEM1:F form *ti* as an article for, mainly human, referents, may be inspired by the Spanish article system. Meanwhile the gender neutral article *to* may also be used for female referents. For the plural forms no distinction is made between the article and the DEM1 form (Danielsen 2007: 311).

6.1.2 ADVERBIAL DEMONSTRATIVES IN BAURE

Usually, nominal and local adverbial demonstratives in a single language make the same spatial distinctions (Dixon 2003: 87). However, in Baure we find three types of specification for demonstratives, and four types for local adverbial demonstratives, suggesting a difference in cutting up spatial distinctions. Table 6.2 lists the Baure local adverbial demonstratives, that were already given in Table 3.6 in Chapter 3.

Table 6.2: Baure local adverbial demonstratives
(after Danielsen 2007: 302).

Gloss	**Analysis (Danielsen 2007: 302)**[120]	**Form**
here	present	*ne'*
there	proximate	*noiy*
over.there	distal (not visible)	*naka'*
there	used in contrast to 'here', stative, generic?, absent?	*nan*

In her analysis, Danielsen subdivides place adverbs into present, proximate and distal, and possibly generic or absent (Danielsen 2007: 302). In addition, a formal relation is suggested between the demonstratives *te/ti* (DEM1), and the place adverb *ne'* 'here', as well as between the demonstratives *ten/tin* (DEM2), and the place adverb *nan* 'there' (Danielsen 2007: 303). Furthermore, Danielsen points at a possible relationship between the use of the nominal demonstratives on the one hand and the local adverbial ones on the other. Whereas the demonstratives *te/ti* (DEM1) are mostly used in combination with the place adverb *ne'* 'here', the demonstratives *tech/tich* (DEM2) are more often used in combination with the place adverb *noiy* 'there'. This analysis is taken up further in Section 6.3.

6.1.3 VERBAL DEMONSTRATIVES AND MANNER ADVERBIAL DEMONSTRATIVES

Cross-linguistically, verbal demonstratives are relatively rare (Dixon 2003: 62). Dixon describes verbal demonstratives as "verbs with demonstrative meaning, involving deictic reference to an action" (Dixon 2003: 72). The particular action may be an actual action or an action mimicked by the speaker.

[120] In Danielsen's table (2007: 302) 'present' is understood as 'in presence of', and not as present tense. The question marks in the analysis of the adverbial demonstrative *nan* are maintained as in the original table.

In the strictest sense, Baure does not have a productive verbal root with the meaning ‘do like this’. However, in contemporary Baure there is one type of fossilized construction that seems to have the function of a verbal demonstrative for referring to the stative equivalent of the verbal demonstratives mentioned by Dixon, namely *kienan* ‘be like this’. Example (4) shows the use of *kienan* ‘be like this’.

(4) *Woyikwon tech sipori-ensh tech ropes kienan.*
woyik–wo–no *tech* *sipori=ensh*
make–COP–NMLZ DEM2:M frog=APRV

tech *ro=pes* *kienan*
DEM2:M 3SG:M=leg be.like.this
‘What is the frog doing with legs like this.’ (EU-N060322S)

Although *kienan* ‘be like this’ is usually found as a fossilized form without any further marking, in a few occasions in the database it receives person marking in the form of a proclitic, as in example (5). It is not found with any other verbal morphology, and is thus certainly not a productively used verbal root.

(5) *Noka jenowor tech rojirokoch, rokienan tech ropes-ensh.*
noka *jeno–wo=ro* *tech* *ro=jiroko–cho*
NEG good–COP=3SG:M DEM2:M 3SG:M=sit–PTCP

ro=kienan *tech* *ro=pes=ensh*
3SG:M=be.like.this DEM2:M 3SG:M=leg=APRV
‘He wasn't sitting well having legs like that.’ (EU-N060322S)

In fact, *kienan* or *–kienan* is probably a nominalized form of the empty verb root *–ke* (E.V). Its use as a relative clause modifying a head noun comparable to the modification of *marip* ‘witch’ by *nikon chindinev* ‘eater of people’ as shown in example (6), may have been the source for the present-day use of *kienan*.

(6) *Kwe' tin marip nikon chindinev.*

Kwe'	*tin*	*marip*	*nik–no*	*chindi–nev*
exist	DEM3:F	witch	eat–NMLZ	person–PL

'There is that witch that eats people.' (Danielsen 2007:401)

In contrast to example (6), however, the type of modification by *kienan* as in (4) and (5) is extralinguistic and requires a mimicking gesture or common understanding of what 'like this' covers.

In addition to this fossilized verbal construction, there exists one adjective that can be said to have a demonstrative function. When the right-bound adjective *koti–*,[121] meaning 'like this', is followed by the noun stem *–she* 'along', it is usually accompanied by a gesture indicating the exact height of the noun that it is attributed to. An example is given in (7).

(7) *Roshim-ji tech monchi kotishen-ji.*

ro=shim=ji	*tech*	*monchi*	*koti–she–no=ji*
3SG:M=arrive=QUOT	DEM2:M	child	like.this–along–NMLZ=QUOT

'They said that that boy, like this size, arrived.' (RP-N091122F-1)

As is the case with *kienan*, it appears only a few times, and is probably not used productively anymore. Therefore, both constructions are not taken into account in the following analysis of Baure demonstratives.

6.2 SEMANTIC FEATURES OF BAURE DEMONSTRATIVES

After presenting the formal characteristics of the Baure demonstratives in the previous section, this section focuses the use of the nominal and adverbial demonstratives for place deixis, in Section 6.2.1 and 6.2.2 respectively.

[121] The adjective is possibly related to the verb *kotir–* have. Like many adjectives, it was derived by means of the nominalizer *–no*. (see Danielsen 2007: 161–164 for more details on this type of adjective)

6.2.1 SPATIAL ORGANIZATION BY MEANS OF NOMINAL DEMONSTRATIVES

6.2.1.1 Nominal demonstratives: DEM1 forms *te* and *ti*

Comparing the occurrence of the three types of nominal demonstratives (DEM1, DEM2, and DEM3) in the database, it becomes clear that the DEM1 forms are most frequently used. Not surprisingly, we also find the greatest variety of functions for these particular forms.[122] First of all, the DEM1 forms are widely used for indicating objects on a tabletop space within arms' reach. In the elicitation sessions with this set-up, the speakers were able to reach the objects that made up the different configurations, and often they were actively participating in rearranging the objects. In these situations, they used either the article, as in example (8) or one of the nominal demonstratives of the DEM1 set, as in example (9).

(8) *To ver rowo'apechpa.*
to *ver* *ro=wo–api–cho–pa*
ART green.one 3SG:M=be–under–PTCP–INTL
'The green one is below.' (LO&GP-090927F)

(9) *Ach te yaskon napiri' rowo'apichowor te moserkon.*
ach *te* *yaskon* *napiri'*
and DEM1:M yellow.one also
ro=wo–api–cho–wo=ro *te* *moserokon*
3SG:M=be–under–PTCP–COP=3SG:M DEM1:M red.one
'And this yellow one is also below this red one.' (DC-090924F)

As indicated by Danielsen, the alternating use of articles and DEM1 forms in reference to objects on the table directly in front of the speakers, suggests that these forms have the least pointing function of the Baure nominal demonstratives (Danielsen 2007: 312). However, in contrast to what Danielsen

[122] Due to the similarity between the article and nominal DEM1 forms for feminine and plural referents, it is not always clear from the examples which interpretation is the most appropriate. For the sake of clarity, in this section only examples of the DEM1 masculine are given.

supposes while labeling these forms as 'present', the DEM1 nominal demonstratives do not necessarily have a referent that is present or directly visible. They may also be used to refer to objects that are closely linked to the speaker, for instance because they are possessed by the speaker. In example (10) the speaker uses a nominal demonstrative of the DEM1 set to refer to the glasses that are in her possession, yet not present and visible, but stored away in a cabinet in the other room.

(10) *Napasha te nijachkis.*

na–pa–sha	*te*	*ni=jachkis*
bring.with–INTL–IRR	DEM1:M	1SG=glasses

'I will get my glasses.' (DC-081202SF)

The close linkage to the speaker is not limited to possession. In addition, when talking about the past, speakers may use the DEM1 nominal demonstratives to refer to a familiar object used in a habitual activity, as shown in example (11).

(11) *Vikopo'eyipa te tinaj.*

vi=ko–po'e–yi–pa	*te*	*tinaj*
1PL=ATTR–head–VLOC–INTL	DEM1:M	jug

'We would carry this jug on our head.' (GP-101010F)

The use of the DEM1 nominal demonstratives for indicating familiar yet not directly visible referents, can be extended to a larger geographical space as well. In example (12), the speaker refers to her own house as well as to the neighbors' house with the DEM1 nominal demonstrative *te*.

(12) *Roshiriwani-ye te niwer kwo te rower to Losia.*

ro=shiriwani–ye	*te*	*ni=wer*	*kwo*
3SG:M=behind–LOC	DEM1:M	1SG=house	exist

te	*ro=wer*	*to*	*Losia*
DEM1:M	3SG:M=house	ART	Lucio

'Behind my house there is this house of Lucio.' (DC-090924F)

Even on a larger geographical scale the DEM1 forms can still be used. In these cases, however, the referents are still very well known to the speakers and they are fairly certain that at the moment of speaking these landmarks still exist, even if they are outside their visible range. Therefore, in route descriptions within the town of Baures such as example (13), the referential landmarks are usually specified with a nominal demonstrative from the DEM1 set as well.

(13) *Ach pipijap te jospital, pikach pikiepon ne', ito pijinoekpikpow te plas-ye.*

ach	*pi=pija–pa*	*te*	*jospital*	*pi=kach*
and	2SG=pass–INTL	DEM1:M	hospital	2SG=go

pi=ke–pa–no	*ne'*	*ito*
2SG=E.V–INTL–NMLZ	here	PROG

pi=jino–i–ko–pik–po–wo	*te*	*plas–ye*
2SG=see–EMPH–ABS–VEN–PFV.RFLX–COP	DEM1:M	square–LOC

'And you pass by the hospital, you go there, until you come to see the town square.' (DC-090924F)

When talking about familiar locations, the referent for which a nominal demonstrative of the DEM1 set is used, can be even further removed from the speaker at the time of utterance, such as a nearby ranch or town. In example (14) the speaker uses the DEM1 nominal demonstrative to refer to a ranch located a couple of kilometers outside of the town of Baures, which he passes by almost every single day when he is on his way to his fields. Similarly, example (15) shows how the speaker refers to the town of San Francisco with the nominal demonstrative *te*. Even though this town is located some 15 kilometers away, it is the place where the speaker grew up and where her son still owns a house and has his fields.

(14) *Kach vipijik te estansia, viyonop.*

kach	*vi=pijik*	*te*	*estansia*	*vi=yono–po*
AND	1PL=pass	DEM1:M	ranch	1PL=go–PFV.RFLX

'We will pass by this farm, while going.' (LO&GP-090927F)

(15) *Jeni¸ tiow te raviow te San Fransisik.*

jeni	*tiow*	*te*	*ro=avi–wo*	*te*	*San.Fransisik*
yes	COMP	DEM1:M	3SG:M=live–COP	DEM1:M	San.Francisco

'Yes, it is the case that he (my son) lives in San Francisco.'

(DC-090924F)

6.2.1.2 Nominal demonstratives: DEM2 forms *tech* and *tich*

Whereas the DEM1 nominal demonstratives are used for reference to objects that are close to the speaker, either in actual distance or in perceived distance, the nominal demonstratives of the DEM2 set, *tech* and *tich*, seem to have a smaller range of functions. First of all, they are hardly used in the elicitation sessions where the speakers are talking about the different configurations of objects directly in front of them on the table. In the few cases of the use of DEM2 nominal demonstratives when referring to these objects within reach, they were used for indicating the contrast between an object that was closest to them, marked with a DEM1 form, and an object that was further away. However, the objects may be very close to each other and be both within arms' reach of the speaker. In the case of example (16), both cups were very close to each other, but one was slightly closer to the speaker than the other.

(16) *Te verese kwore' noiy ranoekow tech asolse.*

te	*ver–i'–se*	*kwore'*	*noiy*
DEM1:M	green.one–EMPH–CLF[oval]	exist.3SG:M	there

ro=anoek–wo	*tech*	*asol–se*
3SG:M=come.close–COP	DEM2:M	blue–CLF[oval]

'This green cup came there close to that blue cup.' (HC-100920F)

In addition, the DEM2 forms indicate referents that are invisible, and are not linked to the speaker in one of the ways described in the section above. This can be, for instance, one of the outer walls of the house that is not visible from the room that the speakers currently occupy, as in example (17), or the gold

and silver treasure which is supposedly buried underneath a big rock in the middle of town, as in example (18).

(17) *Noiy pakonoki-ye kwe' tech pakchomoe'.*
Noiy *pako–no–ki–ye* *kwe'*
there other.side–NMLZ–CLF[bounded]–LOC exist

tech *pako–chomoe'*
DEM2:M other.side –wall
'There on the other side, there is that wall on the other side.'
(DC-090924F)

(18) *Noiy koji'-ye kwe' tech rotir or ach plat.*
noiy *koji'–ye* *kwe'* *tech* *rotir* *or* *ach* *plat*
there stone–LOC exist DEM2:M 3SG:M.POSS gold and silver
'There underneath the rock is his gold and silver.' (HC-090122F)

In addition, the DEM2 nominal demonstratives are used to make a general statement about an event or situation that the town's people are talking about, but in which the speaker plays no particular role, such as the game that was hunted by someone else, or the quality of this year's harvest, in examples (19) and (20) respectively.

(19) *Ver nampikow tech showekon, nijinokier, chacha tech showekon.*
ver *no=am–pik–wo* *tech* *showekon*
PERF 3PL=bring–VEN–COP DEM2:M jaguar

ni=jino–ko=r *cho–a–cha* *tech* *showekon*
1SG=see–ABS=3SG:M big–CLF[animal]–AUG DEM2:M jaguar
'They brought in that jaguar, I saw it, that jaguar was really big.'
(HC-090122F)

(20) *Cheje'wapa tech kakawnev.*
cheje'–wapa *tech* *kakaw–nev*
pile–TRNSF DEM2:M cocoa.pod–PL
'A lot of cocoa pods (this year).' (DC-090924F)

When the DEM2 nominal demonstratives are used for reference to locations further removed from the speaker in a wider geographical space than their direct surroundings, it implies that this place is far off or difficult to reach. In the route description in example (21) below, the speaker describes in detail the rather far and difficult travel to the community of El Cairo II.

(21) *Pijik tech jekoewok, ach pisiapow noiy ese'se-ye kwator poent.*
pi=pijik *tech* *jekoewok* *ach* *pi=siap–wo* *noiy*
2SG=pass DEM2:M countryside and 2SG=enter–COP there

ese'se–ye *kwatro–poent*
stream–LOC four–bridge
'You pass that countryside and you enter a stream there with four bridges.'

Tech poent ramopi noiy pijik pake-ye,
tech *poent* *ro=am=pi* *noiy* *pi=pijik* *pako–ye*
DEM2:M bridge 3SG:M=bring=2SG there 2SG=pass other.side–LOC
'That bridge takes you there passing to the other side,'

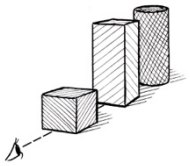
tiow to rowow tech sorati, to Kaire.
tiow *to* *ro=wo–wo* *tech* *sorati* *to* *Kaire*
COMP ART 3SG:M=be–COP DEM2:M village ART Cairo
'that's were that village is, El Cairo.' (RP-091106F)

6.2.1.3 Nominal demonstratives: DEM3 forms *ten* and *tin*

Similar to the DEM2 forms, the DEM3 nominal demonstratives are used for reference to objects on the tabletop space directly in front of the speakers only

when their location is contrasted with other objects. For instance, in example (22), the speaker responds to the question where the red wooden block is.

(22) *Ten kaiyron noiy, roshiriwani-ye te yaskon.*

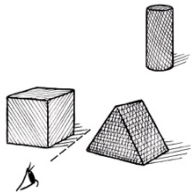


ten	*kaiyro–no*	*noiy*	
DEM3:M	last–NMLZ	there	
ro=shiriwani–ye	*te*	*yaskon*	
3SG:M=behind–LOC	DEM1:M	yellow.one	

'That last one there, behind the yellow one.' (CS-090925F)

In this case, the speaker uses the DEM3 form *ten* to make explicit that the red wooden block is the very last one in a row, behind the yellow block. This is even clearer in example (23). In this case, the distance between the red block, on the one hand, and the other two, on the other hand, was relatively large, whereas the green one and the blue one were close together.

(23) *Kwe' to moserkon pimiri-ye ach roshiriwani-ye ten veron achow ten asol.*



kwe'	*to*	*moserokon*	*pi=imir–ye*
exist.3SG:M	ART	red.one	2SG=in.front–LOC
ach	*ro=shiriwani–ye*	*ten*	
and	3SG:M=behind–LOC	DEM3:M	
ver–no	*achow*	*te*	*asol.*
green–NMLZ	with	DEM3:M	blue.one

'There is the red one in front of you and behind is that green one with that blue one.' (CS-090925F)

The examples above show that actual distance plays a major role in the choice of the nominal demonstrative. However, additional factors are observed as well. The nominal demonstratives of the DEM3 set can be used to create a perceived distance between the speaker and the referent on purpose. This is illustrated with examples (24) and (25). Although the pig in (24) and the dogs in (25) were within sight at 4 to 5 meters' distance, the speakers chose to use

the DEM3 nominal demonstrative in order to display an emotional distance to the animals.

(24) *Nowerochow tin simori kokonoewori.*
no=wer–cho–wo *tin* *simori* *kokon–i–wo=ri*
3PL=medicine–PTCP–COP DEM3:F pig worm–DUR–COP=3SG:F
'They are giving medicine to that pig that has worms.' (RP-091109F)

(25) *Apia'wor to nen niper kove'nev.*
api–a–wo=ro *to* *nen*
two–CLF[animal]–COP=3SG:M ART DEM3:PL

ni=per kove'–nev
1SG=domesticaded.animal dog–PL
'There are two dogs (I have two dogs).' (HC-090122F)

In contrast to the examples (24) and (25), in which the referent is an animal, a DEM2 nominal demonstrative is used in case no perceived distance is implied, for example when the referent is a family member. This is shown in example (26), where the speaker explains how she is living in her house together with her grandson. The grandson that is referred to with a DEM2 nominal demonstrative, is playing around the house, at a couple of meters' distance, but within sight.

(26) *Ndi' kawernow ne', ach kwe' tech nij.*
ndi *kawer=no–wo* *ne'* *ach* *kwe'*
1SG with.house=3PL–COP here and exist

tech *ni=ij*
DEM2:M 1SG=grandchild
'I am the house-owner here and then there is my grandchild.'
(DC-090924F)

A similar manifestation of perceived distance was observed when speakers described scenes of pencil drawings to each other in a matching game. In this

case, the DEM3 nominal demonstratives were used predominantly, which suggests that the stimuli were perceived as unreal or unconnected to the speakers. Example (27) shows this kind of manifestation of perceived distance.

(27) *Kotokonow ten richajaji ten mosermon.*
kotokon–wo *ten* *ri=chajaji* *ten* *moser–mo–no*
clamp–COP DEM3:M 3SG:F=hair DEM3:M red–CLF[cloth]–NMLZ
'Her hair is clamped with a red cloth.' (CS&EU-090123F)

The DEM3 nominal demonstratives also function for intentionally indicating disapproval. This use of the DEM3 forms is similar to the use of the Spanish demonstrative *aquel*, 'that', for expressing negative sentiment about the referent. Example (28) shows how the speaker subtly judges the behavior of his peers who refuse to drink the traditional medicine with which the speaker and his wife have cured themselves from many diseases.

(28) *Ikaroek to nen vipirinev nga noki'inow ner to viwoyipiaw viti'.*
ikaroek *to* *nen* *vi=piri–nev* *nga*
therefore ART DEM3:PL 1PL=sibling.of.same.sex–PL NEG

no=ki'in–wo *no=er* *to* *vi=woyik–pi–a–wo* *viti'*
3PL=want–COP 3PL=drink ART 1PL=make–QNMLZ–LK–COP 1PL
'That's why our brothers don't want to drink the thing we are making ourselves.' (LO-D081202LF)

As the analysis above shows, various features of the referent influence the choice of a certain nominal demonstrative in Baure. Whereas the DEM1 nominal demonstratives are used predominantly for signaling referents on a tabletop space, within sight and within arms' reach of the speakers, the DEM2 and DEM3 forms are only used in this context for illustrating a contrast in distance. One of the main functions of the DEM2 nominal demonstratives is related to discourse. Therefore, these forms are mostly found in narratives to introduce characters and for cross-reference later in the story. Finally, the DEM3 nominal demonstratives are used to describe referents that are out of sight and out of

reach, or otherwise absent. The use of the DEM3 forms may also imply a negative sentiment or disapproval towards the referent.

6.2.2 PLACE DEIXIS BY MEANS OF LOCAL ADVERBIAL DEMONSTRATIVES

In Baure, we find four different local adverbial demonstratives, each with a particular function. The position of adverbial demonstratives in a phrase is relatively free, but they are often followed directly by a noun marked with the general locative marker *–ye* (Danielsen 2007: 301). This noun phrase is usually a further specification of the exact physical location indicated by the adverbial demonstrative. Examples are given in (29) and (30).

(29) *Kwe' ne' ewokoe'poewani-ye.*
kwe' *ne'* *ewokoe'–poewani–ye*
exist here tree–beside–LOC
'It is here beside the tree.' (DC-101011F)

(30) *Nowow noiy ewokoe'api-ye.*
no=wo–wo *noiy* *ewokoe'–api–ye*
3PL=be–COP there tree–under–LOC
'They are there under the tree.' (HC-100920F)

As was mentioned before, a basic subdivision of the four local adverbial demonstratives can be made on the basis of distance (Danielsen 2007: 301–303). Figure 6.1 represents this subdivision schematically.

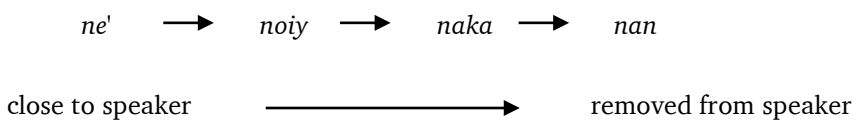


Figure 6.1: Degrees in Baure local adverbial demonstratives.[123]

[123] In addition to *naka*, the derived forms *nakon* and *nakash* are found in Baure. However, they are used extremely seldom, and occur in the database only 6 times and not at all, respectively.

The distance-based subdivision becomes particularly clear when the adverbial demonstratives are used in contrast, as in example (31). In this example, the speaker explains that one of her daughters lives 'here' in the house where the interview takes place, another one lives a couple of blocks away, another one on the other side of town, and the last one in the community of Altagracia, located approximately 4 kilometers from the town of Baures. For each child living a bit further away than the one mentioned earlier, she uses another adverbial demonstrative.

(31) *Ti ponosh ne' ach ti pon noiy, ti pon nan, ti pon Altagrasia-ye.*

ti	*po–no–sh*	*ne'*	*ach*	*ti*
DEM1:F	one–CLF[general]–one	here	and	DEM1:F

po–no	*noiy*	*ti*	*po–no*
other–CLF[general]	there	DEM1:F	other–CLF[general]

nan	*ti*	*po–no*	*Altagrasia–ye*
over.there	DEM1:F	other–CLF[general]	Altagrasia–LOC

'One here and another one there, another one over there, another one in Altagracia.' (AD-N081231F)

However, distance is not the only kind of referential information that is conveyed in the adverbial demonstratives. Here, their functions are explored in more detail, taking into account that distance may not only be physical, but emotional, perceived, or desired as well, and considering other important dimensions such as presence, visibility, and accessibility.

6.2.2.1 Local adverbial demonstrative *ne'*

In comparison to the other adverbial demonstratives, the adverbial demonstrative *ne'* refers to a location relatively close to the speaker. Therefore, and to avoid confusion with the glossing of the nominal demonstratives, *ne'* is

When consulted, the speakers could not explain their motivation for using these forms instead of *naka*, and indicated that they mean the same. See Danielsen (2007: 303) for a similar observation.

glossed throughout this work as 'here'.[124] In its most basic use, this adverbial demonstrative renders a distance-based interpretation, referring to a location that coincides with the place where the speech event takes place. In example (32) as well as in (33), the speaker uses *ne'* 'here' for referring to the physical place where their own house is located, while the respective speech events are taking place at that same location.

(32) *Ach ndi' kawernow ne'.*
ach *ndi* *kawer–no–wo* *ne'*
and 1SG with.house–NMLZ–COP here
'And I am the house-owner here.' (DC-090924F)

(33) *Yishim ne' to mapin.*
yi=shim *ne'* *to* *mapi–no*
2PL=arrive here ART two–CLF[general]
'And the two of you arrived here.' (CS-091113F)

Similar to the use of the nominal demonstratives of the DEM1 set, the use of the adverbial demonstrative *ne'* 'here' is not limited to the exact coordinates of where the speech event takes place, but rather includes the extended surroundings that the speaker feels familiar with. This may include for example the whole town as a single point of reference, as in (34), or the small harbor Centinela that lies just outside of the town at the river bank of the Río Negro, as in (35).

(34) *Ver vikachpikpow ne' visori-ye avik.*
ver *vi=kach–pik–po–wo* *ne'* *vi=sori–ye* *avik*
PERF 1PL=go–VEN–PFV.RFLX–COP here 1PL=village–LOC again
'We came back here to our village again.' (DC-091003F)

[124] The speakers translate the adverbial demonstrative *ne'* usually with Spanish *aquí* 'here'.

(35) *Varokiaw ne' Sandineri-ye.*
vi=arokia–wo *ne'* *Sandineri–ye*
1PL=go.up–COP here Centinela–LOC
'We embarked here at the Centinela harbor.' (DC-091003F)

The wider geographical interpretation of *ne'* 'here' is especially clear when this adverbial demonstrative is used in contrast with *noiy* 'there'. In such cases, the contrasting adverbial demonstratives may be mentioned both, as in the description of a travel trajectory 'from here to there' in example (36). Example (37) describes how chocolate is harvested in the woods surrounding the village and afterwards transported to the town itself and dried there. The contrasting region farther away, i.e. the woods, is not mentioned explicitly, but deducible from the context.

(36) *Iyowon ne' wapoer-ye ishkon noiy, poseskonesh.*
Iyowon *ne'* *wapoer–ye* *ishkon* *noiy* *po–seskone–sh*
from here river–LOC until there one–day–one
'From the river here until there (takes) one day.' (DC-090924F)

(37) *Achow rapikopow ach roshim ne' ka morose.*
achow *ro=apik–po–wo* *ach* *ro=shim* *ne'*
with 3SG:M=bring–PFV.RFLX–COP and 3SG:M=arrive here
ka *moro–se*
INDF be.dry–CLF[oval]
'He brings (the chocolate) with him and he arrives here to dry it.'
(DC-090924F)

The wider geographical region with which the speaker still feels familiar can be quite large, and varies from speaker to speaker as well as from one speech event to the other. In example (38), *ne'* 'here' is used to refer to a nearby Baure community at approximately 10 kilometers from the main town. Example (39), on the other hand, shows that in this case the town of Bellavista that lies roughly 50 kilometers north of Baures, is still considered 'here'. It was

originally populated predominantly by Baure people, though, and is still visited regularly by people from Baures. It is therefore considered familiar territory, although nowadays it belongs to a different municipality.

(38) *Anoekon ne' Kairi-ye.*
anekon *ne'* *Kairo–ye*
close.to here El.Cairo–LOC
'[They came] close to here, to El Cairo.' (DC-091009F)

(39) *Ach pon namop ne' Awon-ye.*
ach *pon* *no=am–po* *ne'* *Awon–ye*
and other 3PL=take–PFV.RFLX here Bellavista–LOC
'And they took another one here to Bellavista.' (DC-091009F)

The geographical area referred to by *ne'* 'here' may even be extended to regions beyond the Baure territory. Example (40) was taken from a testimony on how groups of savages were roaming about in the woods around the town of Baures, and eventually caught and brought to the towns. One of them was taken to Magdalena, a town approximately 60 kilometers northwest of Baures, that was originally populated predominantly by Itonama people. In contrast to the savage nomads, the Itonama are considered civilized people. In addition, the town of Magdalena is located along the road to Trinidad, a road that is familiar to and often traveled by almost every Baure. The town is included in this case in the geographical area described as 'here'.

(40) *Ach pon namonap ne' Tonami-ye.*
ach *pon* *no=am–no–pa* *ne'* *Tonami–ye*
and other 3PL=take–NMLZ–INTL here Itonama–LOC
'And another one they took here to the Itonama.' (DC-091009F)

In addition to its function for demarcating a geographical location, the adverbial demonstrative *ne'* 'here' is used in a more general sense. In example (41), 'the woods' is a fairly undefined region and only added to provide

background information on the event of sitting on a stalk. In example (42), the speaker imagines himself climbing the rock Mercedes, a rock that everybody in Baures has heard about, but the speaker himself has never seen.

(41) *Nijiriso'ikow ne', kakiwok-ye.*
ni=jiri–so'i–ko–wo *ne'* *kakiwok–ye*
1SG=sit–stalk–ABS–COP here woods–LOC
'I am sitting on the stalk here in the woods.' (RP-091109F)

(42) *Kach varochop ne' cheje'-ye.*
kach *vi=aroch–po* *ne'* *cheje'–ye*
and 1PL=climb–PFV.RFLX here rock–LOC
'We are going to climb the rock here.' (LO-090929F)

In the examples above, the adverbial demonstrative *ne'* 'here' is used for demarcating the location where the subject is situated at the time of the activity indicated by the verb, because the subject needs to be physically present to be carrying out the action. These findings join up with Danielsen's analysis of *ne'* as a locative adverb indicating 'present' in the sense of physical presence (Danielsen 2007: 302). This analysis is even more clearly illustrated in the contrasting examples (43) and (44). Whereas in (43) the adverbial demonstrative *ne'* 'here' is used because the subject has already arrived at the river and is presently washing her feet there, in (44) the use of the adverbial demonstrative *noiy* 'there' implies that the subject has not yet arrived at the river bank.

(43) *Nisipapoiyrekow ne' wapoer-ye.*
ni=sipa–poiy–aro–ko–wo *ne'* *wapoer–ye*
1SG=wash–foot–CLF[liquid]–ABS–COP here river–LOC
'I am washing my feet here in the river.' (DC-091013F)

(44) *Nisipapapow noiy wapoer-ye.*

ni=sipa–pa–po–wo	*noiy*	*wapoer–ye*
1SG=wash–INTL–PFV.RFLX–COP	there	river–LOC

'I am going to wash myself there in the river.' (DC-091013F)

Even though the use of *ne'* 'here' requires a physical presence of the subject at the location indicated by the adverbial demonstrative in the cases above, the location that it refers to is not necessarily visible to the speaker at the time of the speech event. In the case of example (45), the speaker was sitting inside her house with her back towards the backyard where the kitchen is located in a separate building.

(45) *Kwore' ne' kosinjeki-ye tech monchi.*

kwore'	*ne'*	*kosin–jeki–ye*	*tech*	*monchi*
exist.3SG:M	here	kitchen–belly–LOC	DEM2:M	child

'The child is (hiding) here inside the kitchen.' (DC-091122F)

Finally, apart from referring to the physical space in and around the town of Baures, the adverbial demonstrative *ne'* 'here' is also the adverbial demonstrative that is used mostly in describing configurations on a tabletop. The type of scene descriptions as in examples (46) and (47) are often accompanied by a pointing gesture.

(46) *To yaskon kwore' ne' roshimosha roshiriwani-ye.*

to	*yaskon*	*kwore'*	*ne'*	*ro=ishim–sha*
ART	yellow.one	exist.3SG:M	here	3SG:M=be.upright–IRR

ro=shiriwani–ye
3SG:M=behind–LOC

'The yellow one is here standing behind it.' (CS-090925F)

(47) *Achow rom te asol kwore' ne' ani-ye te ver.*

achow	*rom*	*te*	*asol*	*kwore'*	*ne'*	*ani–ye*
with	IMM	DEM1:M	blue.one	exist.3SG:M	here	above–LOC

te	*ver*
DEM1:M	green.one

'Now the blue one is here on top of the green one.' (DC-090924F)

Similarly, when describing pictures or scenes from a storybook, the speakers frequently use the adverbial demonstrative *ne'* 'here' in combination with a pointing gesture, as in example (48) from the frog story.

(48) *To sipori ito retorokow ne' jopi-ye.*

to	*sipori*	*ito*	*ro=etorok–wo*	*ne'*	*jopi–ye*
ART	frog	PROG	3SG:M=leave–COP	here	jar–LOC

'The frog is getting out of the jar here.' (HC-090122F)

6.2.2.2 Local adverbial demonstrative *noiy*

In terms of distance, the adverbial demonstrative *noiy* 'there' defines a location removed a little further away than *ne'* 'here'. It is used in general statements for referring to a location that the speaker considers at some, physical or perceived, distance. This is often a geographical area clearly distinct from the location where the speech event takes place. In the following examples, the speakers illustrate the living conditions in areas other than the town of Baures, such as the community El Cairo II at the shore of the lake Victoria in example (49), and the forest where nomadic Sirionó people used to live in (50).

(49) *Kwe' kochopon noiy chaki-ye.*

kwe'	*kochopon*	*noiy*	*cho–aki–ye*
exist	caiman	there	big–lagoon–LOC

'There are caimans in the lake there.' (RP-101019F)

(50) *Nerikikoe' noyonoyiow te chindinev noiy montania-ye.*

Neriki–ikoe'	*no=yono–yi–wo*	*te*	*chindi–nev*
now–EMPH	3PL=go–VLOC–COP	DEM1:M	person–PL

noiy	*montania–ye*
there	forest–LOC

'There were really people roaming around there in the forest.'

(DC-091009F)

The adverbial demonstrative *noiy* 'there' is also used for defining a more specific location, and individuating that particular area from the rest of the environment. In this sense, *noiy* 'there' has a pointing function, as demonstrated in example (51).

(51) *Noiy te kaya rikaweriow tich ren te Anger.*

noiy	*te*	*kaya*	*ri=kaweri–wo*	*tich*
there	DEM1:M	street	3SG:F=with.house–COP	DEM2:F

ro=en	*te*	*Anger*
3SG:M=mother	DEM1:M	Angel

'There in this street Angel's mother had her house.' (HC-1010090F)

In many of the cases in which the speakers use *noiy* 'there', a contrast is involved between a location closer to the speaker and the location further away referred to with *noiy*. This contrast may be implicit or derived from the context. In (52) for example, the speaker has just explained that she is living in the house where the conversation takes place, and that the hammock that we are sitting next to is where she sleeps. She then continues telling that her grandchild is sleeping in the adjacent room, in the same house, although his parents sleep in a different building next to the house we are sitting in.

(52) *Ach ne' paraki-ye roemok te nij.*
ach *ne'* *paraki–ye* *ro=imok*
and here room–LOC 3SG:M=hammock

te *ni=ij*
DEM1:M 1SG=grandchild
'And here in the room is my grandchild's hammock.'

Aw to nech reronanev noemokow noiy pombe-ye.
aw *to* *nech* *ro=iron–anev* *no=imok–wo*
not.like ART DEM2:PL 3SG:M=parent–PL.H 3PL=sleep–COP

noiy *po–mbe–ye*
there other–CLF[flat]–LOC
'Not like his parents who sleep in the other house.' (DC-090924F)

Not surprisingly, the adverbial demonstrative *noiy* 'there' often occurs with verbs of motion that indicate a transition from one location to the other. One of the reference points is located further away, either the Source from which the motion originates as in example (53), or the Goal to which the motion activity is headed as in example (54).

(53) *Nikach naper noiy, popi-ye.*
ni=kach *ni=apa=ro* *noiy* *po–pi–ye*
1SG=go 1SG=bring.with=3SG:M there other–CLF[long&thin]–LOC
'I am going to bring it from there from the other island.'
(LO-D081202LF)

(54) *Vikach noiy, kach vikotorekpoey.*
vi=kach *noiy* *kach* *vi=kotorek–pa–yi*
1PL=go there AND 1PL=work–INTL–VLOC
'We went there to work there.' (DC-091003F)

A similar contrast between two points of reference located at different distances from the deictic center, is observed in route descriptions. This is

demonstrated in example (55), where the point of departure is referred to by *ne'* 'here' and the point of arrival with *noiy* 'there'.

(55) *Pikach ne' ndovirikia' kach noiy rokopoekyi to aron.*

pi=kach	*ne'*	*ndovirikia'*	*kach*	*noiy*
2SG=go	here	straight	AND	there

ro=kopoek–yi	*to*	*aro–no*
3SG:M=come.down–VLOC	ART	fly–NMLZ

'You go straight from here, going there where the plane lands.'

(CS-090925F)

On a smaller scale, the adverbial demonstrative *noiy* 'there' is likewise employed when a contrast between the location of various objects is described. Examples (56) shows that the speaker uses *noiy* 'there' for defining the location of the last object furthest removed from the speaker on a tabletop space, which is the last one in a row.

(56) *Te verese kwore' noiy ranoekow tech asolse.*

te	*ver–se*	*kwore'*	*noiy*
DEM1:M	green.one–CLF[oval]	exist.3SG:M	there

ro=anoek–wo	*tech*	*asol–se*
3SG:M=come.close–COP	DEM2:M	blue–CLF[oval]

'The green cup came there close to the blue cup.' (HC-100920F)

However, relative distance is not the only criterion involved in differentiating between the adverbial demonstratives *ne'* 'here' and *noiy* 'there'. One factor that plays a major role as well is visibility. This is demonstrated with examples (57) and (58). In (57), the speaker explains that various newborn chicks are sitting under their mother's wings. Although the mother chicken is clearly visible and within reach from the position of the speaker, we are unable to see the little chicks. Similarly, in (58), something fell into a pot of *chicha* and the speaker is standing right next to the pot, stirring the *chicha* in order to find the lost object that is hidden from view.

(57) *Nowow apikow noiy ti neron.*

no=wo–wo	*api–ko–wo*	*noiy*	*ti*	*no=iron*
3PL=be–COP	under–ABS–COP	there	DEM1:F	3PL=parent

'They are there under their mother's wings.' (CS-091028F)

(58) *Nijinoekow noiy kijevikoki-ye.*

ni=jinoek–wo	*noiy*	*kijev–koki–ye*
1SG=search–COP	there	pot–inside–LOC

'I am searching for it there inside the pot.' (DC-091122F)

Also, when an event takes place at a location that is currently out of reach and out of sight from the position of the speaker, but other sensory information leaves no doubt that something is happening nearby, *noiy* 'there' is used. In example (59), the speaker concludes that the neighbor next door is making *chicha*, judging from the sound of a grinding wheel.

(59) *Ach tich eton noiy riwoyikow marok, riarikow to choros.*

ach	*tich*	*eton*	*noiy*	*ri=woyik–wo*	*marok*
and	DEM2:F	woman	there	3SG:F=make–COP	chicha

ri=arik–wo	*to*	*choros*
3SG:F=grind–COP	ART	corn

'And that woman there is making *chicha*, she is grinding the corn.' (HC-090122F)

In addition, the choice of a particular adverbial demonstrative can serve as a discourse strategy to manipulate the interpretation of an utterance. By choosing the more distal adverbial demonstrative *noiy* 'there', the speaker indicates a certain emotional distance to the location. This may be used for example to describe an unknown or unfamiliar territory, as in the examples below. In (60), the speaker describes the territory that used to be inhabited by nomadic people and in (61) she explains how someone took them there to visit this part of the woods, previously unknown to them, and considered dangerous to enter.

(60) *Kwe' noiy nowerowononev tech woroiynev.*

kwe'	*noiy*	*no=wer–wo–no–nev*	*tech*	*woroiy–nev*
exist	there	3PL=house–COP–NMLZ–PL	DEM2:M	savage–PL

'It was there where the savages had their houses.' (DC-091009F)

(61) *Visiaponow ese'-ye ach noiy vikach, ramapovi noiy kakiwok-ye.*

vi=siap–no–wo	*ese'–ye*	*ach*	*noiy*	*vi=kach*
1PL=enter–NMLZ–COP	stream–LOC	and	there	1PL=go

ro=am–po=vi	*noiy*	*kakiwok–ye*
3SG:M=bring–PFV.RFLX=1PL	there	woods–LOC

'We entered the stream and there we went, he brought us there to the woods.' (DC-090924F)

In the conversation from which example (62) was taken, the speaker emphasizes the long travel distance from the town of Baures to the town of Huacaraje by river. The towns are located only approximately 20 kilometers apart and transport by road is quick and available on a daily basis. However, both towns are situated at the riverbank of two different rivers, and traveling from one town to the other by water requires a detour via the town of Bellavista where these two rivers come together. Therefore, traveling by river takes substantially longer, and the speaker stresses this perceived distance by using the adverbial demonstrative *noiy* 'there'.

(62) *Averarechow noiy tech wapoer, ishkon noiy Warakon-ye.*

avero~re–cho–wo	*noiy*	*tech*	*wapoer*
far~re–PTCP–COP	there	DEM2:M	river

ishkon	*noiy*	*Warakon–ye*
until	there	Huacaraje–LOC

'It is far there by river, until there at Huacaraje.' (DC-091003F)

Finally, the choice of an adverbial demonstrative may depend on the narrating style of a speaker. Examples (63) and (64) both describe an encounter with a dangerous wild animal in the woods, but whereas (63) remains a fairly dry

statement of consecutive events, (64) is taken from a conversation in which the speaker represents the encounter as part of an animated and lively story, heavily accompanied by gestures.

(63) *Kwore' ewokoe'-ye ach viti' vipijikow noiy shonoki-ye,*
kwore' ewokoe'–ye ach viti' vi=pijik–wo noiy shonoki–ye
exist.3SG:M tree–LOC and 1PL 1PL=pass–COP there path–LOC
'There was a tree and we were passing by there on the path,'

ach to leon kwore' ani-ye.
ach to leon kwore' ani–ye
and ART lion exist.3SG:M above–LOC
'and the jaguar was up above.' (HC-090122F)

(64) *Tiwe viti' shonoki-ye ach to showekon ne'.*
tiwe viti' shonoki–ye ach to showekon ne'
but 1PL path–LOC and ART jaguar here
'But we (were) on the path and the jaguar was here.' (DC-090103F)

6.2.2.3 Local adverbial demonstrative *nan*

After *ne'* 'here' and *noiy* 'there', *nan* is considered the adverbial demonstrative that refers to a location more remotely removed from the speaker. In order to capture this succession, it is glossed as 'over there'. However, the difference between *noiy* 'there' and *nan* 'over there' is difficult to pin down (Danielsen 2007: 302), and distance does not always seem to be the distinguishing factor between the two. Danielsen (2007: 302) suggests that stativity of the verb may be of importance, but the present research shows that *nan* 'over there' occurs with stative verbs such as *kwore'* 'to be' in example (65), as well as non-stative verbs, such as *–ikomori* 'to kill' in example (66).

(65) *Kwore' nan pon mesapi-ye, kaiyromesaw.*
kwore' *nan* *po–no* *mes–api–ye*
exist.3SG:M over.there other–CLF[general] table–under–LOC
kaiyro–mes–a–wo
last–table–LK–COP
'It is over there under the other table, the last table.' (DC-101008F)

(66) *Ripikow nan noekomorikiri.*
ri=ipik–wo *nan* *no=ikomori–ko=ri*
3SG:F=be.afraid–COP over.there 3PL=kill–ABS=3SG:F
'She was afraid that they were going to kill her over there.'
(DC-091009F)

Comparing these examples with the examples from the previous sections, the difference between the use of *noiy* 'there' and *nan* 'over there' is not clearly demarcated. Example (65) as well as (56) above, show that all three of the demonstratives make reference to an object located as the last one in a row. Similarly, in example (66) *nan* 'over there' refers to an unknown and unfamiliar territory, just like *noiy* 'there' in examples (60) and (61) above. In the database, many examples occur with both forms and no observable difference between the phrases, as is the case with examples (43) and (44) above, repeated here as (67), and example (68), where the speaker was asked to translate the same phrase various times.

(67) *Nisipapapow noiy wapoer-ye.*
ni=sipa–pa–po–wo *noiy* *wapoer–ye*
1SG=wash–INTL–PFV.RFLX–COP there river–LOC
'I am going to wash myself there in the river.' (DC-091013F)

(68) *Nisipapap nan wapoer-ye.*
ni=sipa–pa–po *nan* *wapoer–ye*
1SG=wash–INTL–PFV.RFLX over.there river–LOC
'I am going to wash myself over there in the river.' (DC-091013F)

Likewise, in the description of a series of consecutive events, speakers choose *noiy* 'there' in some of the cases and *nan* 'over there' in others, even though the location referred to is the same. This is shown in examples (69) and (70) which are utterances from the same conversation shortly following each other.

(69) *Roejewesaw to ndir koji' nan kijevikoki-ye.*

ro=ejewe–iso–a–wo	*to*	*ndir*	*koji'*
3SG:M=fall–CLF[liquid]–LK–COP	ART	1SG.POSS	stone

nan	*kijev–koki–ye*
over.there	pot–inside–LOC

'My stone fell into the pot over there.' (DC-091122F)

(70) *Nijinoekow noiy kijevikoki-ye.*

ni=jinoek–wo	*noiy*	*kijev–koki–ye*
1SG=search–COP	there	pot–inside–LOC

'I am searching for it there inside the pot.' (DC-091122F)

What does seem to play an important role is visibility of the location. This does not necessarily mean visibility from the current position of the speaker at the time of utterance, but a more general visibility. A location that is somewhat hidden from immediate sight, even when standing close to it, is referred to by *nan* 'over there'. In example (71) and (72) the speaker describes how construction workers are digging alongside and behind the church, in order to place the concrete foundation for a new building. Then, in example (73), she continues to describe that they are also working inside the church, for which she uses the adverbial demonstrative *nan* 'over there'. The area designated by *nan* 'over there' is not directly visible from the outside.

(71) *Nosoespoekow ne' chorejeki-ye to resia'.*

no=soes–poe–ko–wo	*ne'*	*chore–jeki–ye*	*to*	*resia*
3PL=dig–CLF[ground]–ABS–COP	here	edge–belly–LOC	ART	church

'They are digging here alongside the church.' (DC-101008F)

(72) *Nosoespoekow ne' roshiriwani-ye to resia'.*
no=soes–poe–ko–wo *ne'* *ro=shiriwani–ye*
3PL=dig–CLF[ground]–ABS–COP here 3SG:M=behind–LOC
to *resia*
ART church
'They are digging here behind the church.' (DC-101008F)

(73) *Nosoespoekow nan paraki-ye to resia'.*
no=soes–poe–ko–wo *nan* *paraki–ye*
3PL=dig–CLF[ground]–ABS–COP over.there in.the.house–LOC
to *resia*
ART church
'They are digging over there inside the church.' (DC-101008F)

In other words, although it seems to be impossible to draw a clear line between the two adverbial demonstratives *noiy* 'there' and *nan* 'over there', one can say that the ideal circumstances for using *nan* 'over there' is a location that is not immediately visible. In these cases, a clear preference for *nan* 'over there' is observed. Especially the combination with the general stative verb *kwore'* 'exist' always results in the use of *nan* 'over there' instead of *noiy* 'there', as is clear from many examples from hide-and-seek games, such as (74) and (75).

(74) *Kwore' nan ewonokoe'api-ye.*
kwore' *nan* *ewonokoe'–api–ye*
exist.3SG:M over.there door.frame–under–LOC
'He is over there behind the door.' (DC-091122F)

(75) *Kwore' nan kamapi-ye.*
kwore' *nan* *kam–api–ye*
exist.3SG:M over.there bed–under–LOC
'He is over there under the bed.' (DC-091122F)

6.2.2.4 Local adverbial demonstrative *naka*

Finally, the adverbial demonstrative *naka* is the least frequent one. For the use of this adverbial demonstrative, movement rather than distance seems to be an important criterion. Therefore, *naka*, and its variations *nakon* and *nakaʂh*, are glossed as 'to there' throughout this book. Examples of *naka* 'to there' are presented in (76) and (77), which are both descriptions of walks outside the town of Baures undertaken previously with the respective speakers.

(76) *Kach viyonop ne' ach vikopoekap naka pake-ye.*
kach *vi=yon–po* *ne'* *ach* *vi=kopoek–pa*
and 1PL=go–PFV.RFLX here and 1PL=come.down–INTL
naka *pako–ye*
to.there other.side–LOC
'We go from here and we are going down there on the other side.'
(LO-090929F)

(77) *Yishimnow ne' koech viyonopap naka aki-ye.*
yi=ʂhim–no–wo *ne'* *koech* *vi=yono–po–pa*
2PL=arrive–NMLZ–COP here because 1PL=go–PFV.RFLX–INTL
naka *aki–ye*
to.there lagoon–LOC
'You came here because we were going to go to the lagoon over there.' (CS-091113F)

Although (76) and (77) indicate a location at a couple of kilometers distance of the place where the speakers are situated at the time of the utterance, this is not always the case. In examples (78) and (79) the adverbial demonstrative *naka* 'to there' refers to the place where the speaker is sitting at the time of the conversation, after describing a movement to this particular place coming from some other location further removed. Thus, unlike Danielsen's suggestion that this adverbial demonstrative refers to a place in a non-visible far distance (Danielsen 2007: 302), *naka* 'to there' may refer to a location at any distance of the speaker if a movement is headed in that direction. The adverbial

demonstrative *naka* ‘to there’ is mostly found in combination with expressions of cislocative motion.

(78) *Ach eneverepikow ravikopow rokachpik naka sorati-ye.*
ach *enevere–pik–wo* *ro=avik–po–wo* *ro=kach–pik*
and next.day–VEN–COP 3SG:M=return–PFV.RFLX–COP 3SG:M=go–VEN
naka *sorati–ye*
to.there village–LOC
‘And when tomorrow comes, he returns coming here to town.’
(GP&LO-081229FP)

(79) *Neriki ver nokachpikow naka.*
neriki *ver* *no=kach–pik–wo* *naka*
now PERF 3PL=go–VEN–COP to.there
‘Now they came here.’ (HC-1010090F)

Furthermore, evidence from a narrative indicates that *naka* ‘to there’ implies a certain vagueness about the exact location that is referred to. The speaker translated example (80) as ‘she is singing over there somewhere’,[125] and the storyline suggested that the fictive character was going to go searching for her over there where the sound came from.

(80) *Kwori naka riakow.*
kwo=ri *naka* *ri=ak–wo*
exist=3SG:F to.there 3SG:F=sing–COP
‘She is singing over there somewhere.’ (CS-N090126F)

Summarizing the dimensions underlying the various adverbial demonstratives, it is clear that distance and visibility play a major role and movement to a lesser degree. Distance includes not only physical distance, but may involve emotional distance as well, or perceived distance and thus accessibility.

[125] In Spanish her exact words were “está por ahí cantando, decía en el dialecto”.

6.3 INTERACTION BETWEEN LOCAL ADVERBIAL DEMONSTRATIVES AND NOMINAL DEMONSTRATIVES

In utterances in which one of the local adverbial demonstratives occurs, frequently one or more noun phrase is modified by one of the nominal demonstratives.[126] Although local adverbial demonstratives often occur together with a nominal demonstrative, this is not always the case,[127] and nouns may just as well be preceded by an article, as in example (31) above. Not surprisingly, the local adverbial demonstrative *ne*' 'here', is usually combined with a nominal demonstrative from the DEM1 set, *te* or *ti* 'this', while *noiy* 'there' most frequently occurs together with one of the DEM2 forms *tech* or *tich* 'that'.[128] The local adverbial demonstrative *nan* 'over there' is found with all three types of nominal demonstratives, and *naka* 'to there' seems to occur with all three as well, although the low frequency makes it impossible to draw clear conclusions. Despite the clear patterns in co-occurrence and the referential connections between the local adverbial demonstratives on the one hand, and the nominal demonstratives on the other, they cannot be considered each other's equivalent (see Dixon 2003: 71). This section focuses on the interaction between the various nominal demonstratives in combination with the adverbial demonstratives referring to the same location where the nominal referent is located.

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[126] It should be noted that the numbers of occurrences given in this section are relatively small, and no attempt is made to present a statistical analysis. Moreover, the database includes elicitation sessions with tasks explicitly designed for eliciting demonstratives, resulting in a higher number of occurrences than in natural speech. In addition, the database includes narratives in which demonstratives are used with an anaphoric function instead of their deictic functions.

[127] In the database, *ne*' 'here' occurs together with a nominal demonstrative in 163 out of a total of 419 utterances in which this local adverbial demonstrative is found, *noiy* 'there' occurs together with one of the nominal demonstratives 155 times out of 401 utterances, *nan* 'over there' is found together with a nominal demonstrative in 22 out of 74 utterances, and *naka* 'to there' occurs together with a nominal demonstrative in 6 of the 16 utterances.

[128] *Ne*' 'here' is found 103 times with a DEM1 form, 40 times with a DEM2 form and 20 times with a DEM3 form, and *noiy* there occurs with a DEM1 form in 36 utterances, with a DEM2 form in 112 utterances and with a DEM3 form in 7 utterances.

6.3.1 INTERACTION BETWEEN THE NOMINAL DEMONSTRATIVES AND THE ADVERBIAL DEMONSTRATIVE *NE'*

When the location involved is the place where the current speech event takes place, and the speaker is talking about an object directly accessible, the most natural choice of wording is the combination of the local adverbial demonstrative *ne'* 'here', and the nominal demonstrative DEM1 *te* 'this'. Example (81) shows this combination for a location and an object that are directly within sight and within arms' reach, the chair that the speaker is sitting on and a piece of chewing gum in her hand. Example (82) demonstrates that the location may cover a slightly larger space, as long as it is still familiar to the speaker, as is her own house in this case.

(81) *Nimer ne' siyapi-ye te ndir chiklet.*
ni=im=ro *ne'* *siy–api–ye* *te*
1SG=put=3SG:M here chair–under–LOC DEM1:M
ndir *chiklet*
1SG.POSS chewing.gum
'I put my chewing gum here under the chair.' (DC-101008F)

(82) *Ach ver ne' pasoeyekpow te pari.*
ach *ver* *ne'* *pi=asoeyek–po–wo* *te* *pari*
and PERF here 2SG=turn.around–PFV.RFLX–COP DEM1:M house
'And (when you are) here you walk around the house.' (DC-101011F)

A combination of the local adverbial demonstrative *ne'* 'here' and the nominal demonstrative *te* 'this' is also used frequently for describing pictures or configurations of toys on a tabletop, as in examples (83) and (84) respectively. In both cases the situation described is directly in front of the speaker, within arms' reach and clearly visible.

(83) *Kwe' te jir ne' ramonow te rotir bisiklet.*

kwe'	*te*	*jir*	*ne'*	*ro=am–no–wo*	*te*	*rotir*	*bisiklet*
exist	DEM1:M	man	here	3SG:M=take–NMLZ–COP	DEM1:M	3SG:M.POSS	bike

'There is this man here holding his bike.' (DC-090126F)

(84) *Aiy, te ewokoe' rowow ne' echipi-ye.*

aiy	*te*	*ewokoe'*	*ro=wo–wo*	*ne'*	*echipi–ye*
INTJ	DEM1:M	tree	3SG:M=be–COP	here	roof–LOC

'Aiy, the tree is here on the roof.' (DC-090126F)

When the utterance is part of a series of utterances, speakers may choose to use a nominal demonstrative from the DEM2 set in combination with the local adverbial demonstrative *ne'* 'here' instead of a DEM1 form. Whereas examples (83) and (84) were single utterances describing one individual situation, examples (85) and (86) are part of lengthier description of consecutive events.

(85) *Ver roshim ne' kakiwok-ye ach rojinoekpa tech ewokoe'.*

ver	*ro=shim*	*ne'*	*kakiwok–ye*	*ach*	*ro=jinoek–pa*	*tech*	*ewokoe'*
PERF	3SG:M=arrive	here	woods–LOC	and	3SG:M=search–INTL	DEM2:M	tree

'He arrived here in the woods and he is searching for that tree.'
(DC-091110F)

(86) *Tiow ne' roemokopoekiyow tech yakisonev.*

tiow	*ne'*	*ro=imo–kopoek–iy–wo*	*tech*	*yakis–nev*
COMP	here	3SG:M=CAUS–come.down–VLOC–COP	DEM2:M	stick–PL

'It is here that he puts the sticks on the ground.' (DC-091110F)

Often there are multiple locations involved in a single utterance, and although not all of the locations are situated at the same geographical distance, the

speaker may refer to all of them with the local adverbial demonstrative *ne'* 'here' or a nominal demonstrative from the DEM1 set. However, as is shown in (87), in order to contrast the different locations, it needs to be specified that the location referred to by the adverbial demonstrative is not the same as the locations referred to with the DEM1 nominal demonstrative.

(87) *Neriki nokach ne', te pon siringasowok.*
neriki *no=kach* *ne'* *te* *pon* *siringasowok*
now 3PL=go here DEM1:M other rubber.tree.plantation
'Now they went from here to this other rubber tree plantation.'
(DC-091009F)

Alternatively, the speaker may choose to mark the location expressed in the noun phrase by a DEM2 nominal demonstrative. In that case, no additional marking is needed to indicate that the particular location is different from the location indicated by the local adverbial demonstrative. This is illustrated in example (88).

(88) *Piki'inow pikach wapoer-ye pitovirikia' ne' tech kaye Worivar.*
pi=ki'in–wo *pi=kach* *wapoer–ye* *pi=tovirikia'* *ne'*
2SG=want–COP 2SG=go river–LOC 2SG=go.straight here
tech *kaye* *Worivar*
DEM2:M street Bolivar
'If you want to go to the river, it is straight from here to that street Bolivar.' (CS-090925F)

As was already observed in Section 6.2.1, a speaker may deliberately choose a nominal demonstrative to express a manifestation of perceived distance or detachment. This is also possible in combination with the local adverbial demonstrative *ne'* 'here' when the event that is talked about takes place at, or close by, the current location of the speaker, yet the object designated by the phrase is not closely linked to the speaker, as in examples (89) and (90).

(89) *Tiow ne' nijinokopa to nech waknev.*

tiow	*ne'*	*ni=jinok–pa*	*to*	*nech*	*wak–nev*
COMP	here	1SG=see–INTL	ART	DEM2:PL	cow–PL

'It was here that I went to see those cows.' (DC-091003F)

(90) *Rokiepon tech nower ne'.*

ro=ke–po–no	*tech*	*no=wer*	*ne'*
3SG:M=E.V–PFV.RFLX=3PL	DEM2:M	3PL=house	here

'He built them their house here.' (HC-1010090F)

Occasionally, speakers choose to demonstrate even more detachment or even resentment by using a nominal demonstrative of the DEM3 set in combination with the local adverbial demonstrative *ne'* 'here'. This is shown in examples (91) and (92).

(91) *Nga noshimow ne' sorati-ye, koech ne' to nen chindinev.*

nga	*no=shim–wo*	*ne'*	*sorati–ye*	*koech*	*ne'*
NEG	3PL=arrive–COP	here	village–LOC	because	here

to	*nen*	*chindi–nev*
ART	DEM3:PL	person–PL

'They did not arrive here at the village, because of those people here.' (DC-091009F)

(92) *Apia'wor ne' to nen niper kove'nev.*

api–a–wo=ro	*ne'*	*to*	*nen*
two–CLF[animal]–COP=3SG:M	here	ART	DEM3:PL

ni=per	*kove'–nev*
1SG=domesticated.animal	dog–PL

'I have two dogs here.'
(literally: 'They are two my dogs here.') (HC-090122F)

6.3.2 INTERACTION BETWEEN THE NOMINAL DEMONSTRATIVES AND THE ADVERBIAL DEMONSTRATIVE *NOIY*

The local adverbial demonstrative *noiy* 'there' is not found very frequently in combination with a nominal demonstrative of the DEM1 set, compared to the combination of *noiy* 'there' and a DEM2 nominal demonstrative. When the noun phrase to which the local adverbial demonstrative refers is marked with a DEM1 form, the location is a place in the direct surroundings familiar to the speaker, and it receives little emphasis in the utterance. An example thereof was already given in (51), repeated here as (93). In example (93) as well as in (94), the speaker specifies the location referred to by *noiy* 'there' by additionally signaling the particular street with a gesture or a street name.

(93) *Noiy te kaya rikaweriow tich ren te Anger.*

noiy	*te*	*kaya*	*ri=kaweri–wo*	*tich*
there	DEM1:M	street	3SG:F=with.house–COP	DEM2:F

ro=en	*te*	*Anger*
3SG:M=mother	DEM1:M	Angel

'There in this street Angel's mother had her house.' (HC-1010090F)

(94) *Ach pikiepon noiy te kaye Linar.*

ach	*pi=ke–pa–no*	*noiy*	*te*	*kaye*	*Linar*
and	2SG=E.V–INTL–NMLZ	there	DEM1:M	street	Linares

'And you go there onto this street Linares.' (DC-090924F)

More often, however, the choice for the DEM1 nominal demonstrative is motivated by discourse structure. It typically refers to a topic already introduced, such as the gold in example (95), or to a location already mentioned, such as the path in (96).

(95) *Tiow noiy noviaw te oron.*

tiow	*noiy*	*no=via–wo*	*te*	*oron*
COMP	there	3PL=take.away–COP	DEM1:M	gold

'It was there that they were extracting this gold.' (LO-100926F)

(96) *Roshim noiy ikiyopi-ye te shonoki-ye ach roejemo'in.*

ro=shim	*noiy*	*ikiyi–pi–ye*	*te*
3SG:M=arrive	there	middle–CLF[long&thin]–LOC	DEM1:M

shonoki–ye	*ach*	*ro=ejomo'in*
path–LOC	and	3SG:M=rest

'He arrived there in the middle of this street and rested.'

(DC-091110F)

More frequently though, the local adverbial demonstrative *noiy* 'there', is found in combination with a nominal demonstrative of the DEM2 set. As was suggested above, the DEM2 nominal demonstratives play a major role in structuring discourse, they appear especially often in narratives, also in combination with the local adverbial demonstrative *noiy* 'there', as shown in example (97).

(97) *Ver rojareporeiy avik noyonporeiyow, ishkon noshim noiy tich pari ti'imb.*

ver	*ro=jare–poreiy*	*avik*	*no=yono–poreiy–wo*
PERF	3SG:M=dawn–REP	again	3PL=go–REP–COP

ishkon	*no=shim*	*noiy*	*tich*	*pari*	*ti–mbe*
until	3PL=arrive	there	DEM2:F	house	small–CLF[flat]

'As it dawned once again they went going, until they arrived at the small house.' (MD-N090103F)

The frequent occurrence of this combination, in narratives as well as for spatial deixis, suggests that it is a very natural choice. This is not surprising, since their underlying dimensions largely overlap. Both the local adverbial demonstrative *noiy* 'there' and the DEM2 nominal demonstratives are used for referring to locations that are not immediately visible to the speaker, and to which they are not personally attached. Especially when the effort it takes to reach the particular location is emphasized, *noiy* 'there' and *tich/tech* 'that' are the most adequate demonstratives. The location to which the demonstratives refer, may be relatively close, within town for example, as in (98). In this case *noiy* and

tich have a strong pointing function similar to what was shown with example (51) in Section 6.2.2.

(98) *Noiy tich seniora Angelik-ye.*
noiy *tich* *seniora* *Angelik–ye*
there DEM2:F Mrs. Angelica–LOC
'There at Mrs. Angelica's.' (CS-090925F)

The same combination is also used for deixis to locations that are slightly further removed, such as the immediate surroundings of the town in example (99), in which the speaker refers to a particular spot where we crossed the river during an excursion a couple of days earlier.

(99) *Vishim noiy echore-ye tech in, ach ver vipijarek noiy tech vipijinokiach.*
vi=shim *noiy* *e–chore–ye* *tech* *in* *ach* *ver*
1PL=arrive there UNSP–edge–LOC DEM2:M water and PERF

vi=pij–aro–ko *noiy* *tech* *vi=pijinokia–cho*
1PL=pass–CLF[liquid]–ABS there DEM2:M 1PL=cross–PTCP
'We arrived there at the edge of that water, and passed there at our crossing.' (CS-091113F)

Similar to what was shown in the previous sections, a combination of the local adverbial demonstrative *noiy* 'there' and a nominal demonstrative of the DEM2 set can also refer to a location situated in the larger surroundings. In examples (100) and (101) the demonstratives refer to the place where two rivers conjoin and the place where a ranch is situated respectively, both at approximately 50 kilometers distance from the town of Baures.

(100) *Nokomirachkokow noiy tech wapoer.*
no=komirach–koko–wo *noiy* *tech* *wapoer*
3PL=meet–RCPC–COP there DEM2:M river
'The rivers come together there.' (RP-091106F)

(101) *Tech estansia ikiyipoekow noiy jekewokoe'-ye.*

tech	*estansia*	*ikiyi–poe–ko–wo*	*noiy*	*jekoewok–ye*
DEM2:M	ranch	middle– CLF[ground]–ABS–COP	there	countryside–LOC

'That ranch lies there in the middle of the countryside.' (RP-101019F)

Finally, the local adverbial demonstrative *noiy* 'there' seldom occurs together with a DEM3 nominal demonstrative. The few examples in the database suggest that the combination is used for referring to a location at some distance from the place where the conversation is taking place and that is hidden from direct sight, as in example (102).

(102) *Noepjikow noiy ten simori'api-ye.*

no=ipojik–wo	*noiy*	*ten*	*simori–api–ye*
3PL=hide–COP	there	DEM3:M	pig–under–LOC

'They are hiding there underneath the pig.' (HC-100929F)

6.3.3 INTERACTION BETWEEN THE NOMINAL DEMONSTRATIVES AND THE ADVERBIAL DEMONSTRATIVES *NAN* AND *NAKA*

While the frequency patterns of occurrence of *ne'* 'here' with the DEM1 forms and *noiy* 'there' with the DEM2 forms suggest a strong connection between these local adverbial demonstratives on the one hand and the corresponding nominal demonstratives on the other hand, no strong evidence is found that the local adverbial demonstratives *nan* 'over there' and *naka* 'to there' are preferably combined with one or more of the nominal demonstratives. When they occur together, in most cases it is not clear whether there is any interaction between the local adverbial demonstrative and the nominal one. In examples (103) and (104) the speakers describe a picture. It remains unclear whether the local adverbial demonstrative *nan* 'over there' refers to the whole sheet with the picture on it, rather than to the location of the path and tie respectively.

(103) *Rokachow nan te shonkip-ye.*

ro=kach–wo	*nan*	*te*	*shonkip–ye*
3SG:M=go–COP	over.there	DEM1:M	street–LOC

'He went there along this path.' (GP&LO-090126F)

(104) *Neriki ten rotir korvat nan kopajkon.*

neriki	*ten*	*rotir*	*korvat*	*nan*	*kopajkon*
now	DEM3:M	3SG:M.POSS	tie	over.there	sky.blue

'Now his tie there (is) sky blue.' (CS&EU-090123F)

In the remaining examples, the interaction between the nominal demonstrative and *nan* 'over there' or *naka* 'to there' is minimal and mainly motivated by the discourse structure. In example (105), the location that the speaker is referring to with the local adverbial demonstrative *naka* 'to there' is a rather vague description of 'somewhere there in the woods', and the use of the DEM2 nominal demonstratives for the subject and object of the phrase is unrelated to the location. In example (106), the speaker describes a scene from a picture book, about a boy that was already introduced in the story before, marked with a nominal demonstrative of the DEM3 set, and his friend who is newly introduced in this particular phrase and therefore marked with a DEM2 nominal demonstrative. Again, the marking with the nominal demonstratives reflects the discourse structure and is unrelated to the location referred to with the local adverbial demonstrative *nan* 'over there'.

(105) *To nech jiranev naka noekomorikier to nech woroiynev.*

to	*nech*	*jir–anev*	*naka*	*no=ikomorik=ro*
ART	DEM2:PL	man–PL.H	to.there	3PL=kill=3SG:M

to	*nech*	*woroiy–nev*
ART	DEM2:PL	savage–PL

'Those men killed those savages over there somewhere.'

(DC-091009F)

(106) *Rojinoekowor ten monchi tech rokora nan roshiriwani-ye to ewokoe'.*

ro=jinoek–wo=ro	*ten*	*monchi*	*tech*
3SG:M=search–COP=3SG:M	DEM3:M	child	DEM2:M

ro=kora	*nan*	*ro=shiriwani–ye*	*to*	*ewokoe'*
3SG:M=partner	over.there	3SG:M=behind–LOC	ART	tree

'That child is searching for his friend there behind the tree.'

(DC-091122F)

6.4 INTERACTION BETWEEN BAURE DEMONSTRATIVES AND NON-SPATIAL DEICTIC ORGANIZATION

In the previous sections, the analysis of the Baure nominal and adverbial demonstratives focused on their role in spatial deixis. However, it was already observed that other semantic features are involved as well, such as visibility which is strictly speaking not a spatial distinction, but a perceptual one. Another function that is frequently discussed in the literature in relation to demonstratives is temporal deixis. This section explores the historical connections between local adverbial demonstratives on the one hand, and temporal adverbs on the other in Section 6.4.1., and the temporal distinctions underlying the Baure local adverbial demonstratives in 6.4.2.

6.4.1 FORMAL RELATION BETWEEN ADVERBIAL DEMONSTRATIVES AND TEMPORAL ADVERBS

As was discussed in Section 1.2.5 of Chapter 1, the deictic anchorage of an utterance does not only take place in the spatial domain, but also in the temporal domain. Temporal deictic expressions situate an event relative to a deictic center in a temporal sense, namely the moment of speaking. However, spatial and temporal deixis are far from being unrelated. Apart from the temporal features of adverbial demonstratives described in the previous section, another, more formal, relation is found in the means of expressing spatial and temporal deixis in Baure.

In contemporary Baure, the majority of the temporal adverbs seem to have an internal morphological structure, and may have been derived (Danielsen

2007: 304). Examples (107) and (108) show the use of *neriki* 'now', which can express 'right now, at this very moment' as well as 'in present times, nowadays', and 'then'.

(107) *Neriki ver kach narochipia ti simori.*

neriki	*ver*	*kach*	*no=ar–chipi–a*	*ti*	*simori*
now	PERF	AND	3pl=climb–back–LK	DEM1:F	pig

'Now they are climbing onto the pig's back.' (HC-100929F)

(108) *Aw neriki nga woroiywapa.*

aw	*neriki*	*nga*	*woroiy–wapa*
not.like	now	NEG	savage–TRNSF

'Now there are no savages anymore.' (DC-091009F)

In examples (109) and (110), the use of the temporal adverbs *nanan* 'later' and *nakirok* 'ancient times' is illustrated.

(109) *Ach ver nanan roemonoekpa.*

ach	*ver*	*nanan*	*ro=imonoek–pa*
and	PERF	later	3SG:M=sell–INTL

'And later he is going to sell it.' (DC-090924F)

(110) *Nakirok-ye noenow to kajonev te janapa'.*

nakirok–ye	*no–in–wo*	*to*	*kajon–nev*	*te*
ancient.times–LOC	3PL=be.like–cop	ART	case–PL	DEM1:M

janapa'
cedar.board

'In the old days the cases were made of cedar board.'

(CS-N081220F-1)

Danielsen furthermore suggests that the temporal adverb *neriki* 'now' may be related to the adverbial demonstrative *ne'* 'here', and that the temporal adverbs

nanan 'later', and *nakirok*[129] 'ancient times' have been derived from the adverbial demonstratives *nan* 'over there' and *naka* 'to there' respectively. Figure 6.2 shows the possible underlying structures of these temporal adverbs.

A. *ne'* → *neriki*
neriki
ne'–ro–i–ki
here–DER–EMPH–CLF[bounded]

B. *nan* → *nanan*
nanan
nan~an
over.there~INTS (Danielsen 2007: 304)

C. *naka* → *nakirok*
nakirok
naka–iro–ko
to.there–?–ABS (Danielsen 2007: 304)

Figure 6.2: Underlying structure of three derived temporal adverbs.

Analogous with the analysis of *neriki* as *ne'–ro–iki* (here–DER–CLF[bounded]) 'now', the unspecified morpheme *–iro* in Danielsen's analysis of *nakirok* may be related to the derivational morpheme *–ro*, that is used predominantly for temporal subordination. The hypothesis that these temporal adverbs were derived from local adverbial demonstratives is supported by the historical data, which suggest that this was indeed a productive process. In the Baure sources from the 18th century, De Asis Coparcari lists *nereiquei* with the Spanish

[129] The temporal adverb *nakirok* is exclusively found with the locative suffix *–ye* attached, resulting in *nakirok-ye* 'in ancient times'.

translation *ahora* 'now', as well as *neyecopei* for *esta tarde* 'this afternoon', and *neyatoi* for *esta noche* 'this night' (1880: 108). These latter two temporal adverbs can be analyzed as *ne–ye–copei* 'here–LOC–afternoon', and *ne–yatoi* 'here–night' respectively. Furthermore, the same source presents both *naca* and *noco* translated as *allá* 'there' (1880: 108).

6.4.2 TEMPORAL FEATURES OF LOCAL ADVERBIAL DEMONSTRATIVES

In Baure, local adverbial demonstratives and nominal demonstratives are independent lexemes that receive no morphological marking of any kind, except for the optional emphatic marker. Despite this lack of marking of temporal distinctions on the local adverbial demonstratives, in some cases they do leave room for a temporal interpretation. The distinction between the spatial and the temporal interpretation is not always clear, though. The temporal interpretation of the local adverbial demonstratives becomes clearer when the objects on the tabletop are being reorganized. In example (111a), the speaker first describes the position of the pig and the tortoise behind it. Then, she turns around the pig, and describes the configuration as in (111b). The pig is still placed in the same location, only its posture relative to the speaker and the tortoise has changed. The contrast, thus, is not a spatial issue. There is a contrast in the temporal domain though: at the time of the first utterance the pig faces one direction, and at the time of the second utterance it is facing the other direction. Therefore, the interpretation of the adverbial demonstrative *ne'* is temporal 'now' rather than spatial 'here'.

(111a) *Te simori kwore' ne' ach roshiriwani-ye kwe' ti sopir.*

te	*simori*	*kwore'*	*ne'*	*ach*	*ro=shiriwani–ye*
DEM1:M	pig	exist.3SG:M	here	and	3SG:M=behind–LOC

kwe'	*ti*	*sopir*
exist	DEM1:F	tortoise

'That pig is here and behind it is the tortoise.' (DC-090930F-1)

(111b) *Roesporiachow te simori ne'.*

ro=esporiach–wo	*te*	*simori*	*ne'*
3SG:M=turn.around–COP	DEM1:M	pig	here

'The pig has turned around now.' (DC-090930F-1)

This temporal interpretation also explains why *ne'* 'here' does not always refer to a location in narratives. In example (112a), the local adverbial demonstrative *ne'* 'here' and the locative noun phrase *eshenokoe'-ye* 'at the river bank' are unlikely to be interpreted as referring to a single location, because of the word order of the phrase. If they were referring to the same location, the locative adverbial demonstrative would directly precede the locative noun phrase, and the natural order would be '*Ver noshim ne' eshenokoe'-ye*', as in example (112b).

(112a) *Ne' ver noshim eshenokoe'-ye.*

ne'	*ver*	*no=shim*	*eshenokoe'–ye*
here	PERF	3PL=arrive	river.bank–LOC

'Now they arrived at the river bank.' (RP-N090921FE-1)

(112b) *Ver noshim ne' eshenokoe'-ye.*

ver	*no=shim*	*ne'*	*eshenokoe'–ye*
perf	3pl=arrive	here	river.bank–loc

'They arrived here at the river bank.' (RP-N090921FE-1)

6.5 SUMMARY

Summarizing the main findings presented in this chapter, it is clear that a strong connection exists between the local adverbial demonstrative *ne'* 'here' and the DEM1 nominal demonstratives *te* and *ti* 'this', and between the local adverbial demonstrative *noiy* 'there' and the DEM2 nominal demonstratives *tech* and *tich* 'that'. For these pairs the present analysis confirms Danielsen's assumption (2007: 302) that a relation exists between the nominal and adverbial demonstratives. In addition, it was shown that the main features

underlying the demonstratives are distance, both spatial and emotional, and visibility. In case of the adverbial demonstrative *naka*, 'to there', movement plays a role as well. When nominal and adverbial demonstratives co-occur in an utterance, there is little interaction between the two, and the interpretation usually remains the same as when the demonstratives occur in isolation.

CHAPTER 7:

CONCLUDING REMARKS AND FUTURE OUTLOOK

The main objectives of the present research were (1) to identify and describe the fundamental linguistic means that Baure disposes of to encode spatial reference, and (2) to reveal the major patterns of the underlying semantics of the linguistic means identified. These objectives were achieved by a careful consideration of the use of the grammatical devices in context.

The main grammatical devices or spatial grams used for describing spatial relations between a Figure and a Ground in Baure are the locative noun stems. These locative noun stems are derived from body part terms as well as from environmental landmarks. Whereas the locative noun stems that are derived from body part terms are used primarily for spatial relations on the horizontal axis, the locative noun stems derived from environmental landmarks are used mainly for describing spatial relations on the horizontal axis. All of the locative noun stems are used for angular specification as well as for non-angular specification. Despite the similarity in their semantic function, structurally, the locative noun stems show more diversification. After a comparison of their grammatical and lexical properties, it was concluded that the locative noun stems represent different stages of grammaticalization. Although there are indications that the lexically derived locative noun stems are grammaticalizing into suffixes, the data also show that heavy use of the locative possessive construction may lead to grammaticalization of some of the locative noun stems that occur without possession marking into prepositions.

In order to interpret spatial relations between a Figure and a Ground, one or more systems of coordinates are used. Baure speakers exclusively use the intrinsic frame of reference with Grounds that have inherent front and back sides, regardless of whether the Ground is animate or inanimate. With Grounds that do not have asymmetrical axes, and thus no inherent front or back side, the relative frame of reference is chosen. This is in accordance with the patterns

found cross-linguistically that languages universally make use of the intrinsic frame of reference and optionally add the absolute and/or relative frame of reference. However, when using the relative frame of reference, the bodily coordinates of the speaker are projected onto the Ground in different ways. Since the Baure speakers use the translation analysis as well as the reflection and rotation analysis, this can lead to ambiguities in the interpretation of the spatial relation.

Turning to predicates used for expressing location and motion, both nominal and verbal elements play a role. The same locative noun stems that are used for expressing spatial relations between a Figure and a Ground serve for expressing location or translational motion, either as a predicate base or as an incorporated nominal element. In addition, Baure disposes of a verb inventory consisting of a relatively small set of positional verbs, and a number of very frequent motion verbs. In Baure, Path is usually encoded in the motion verb itself, whereas Manner is attested in satellites of different kinds. In this sense, Baure tends to pattern mainly with Verb-framed languages. Grounds in events expressing static location or translational motion are marked with the general locative marker. In translational motion events, typically only one type of Ground occurs in a phrase, such as a Goal or Source. When relevant, other Grounds involved in the event are mentioned in separate phrases. Some motion verbs are oriented toward a Ground with a specific role, and contribute greatly to the interpretation of the Ground as for example a Goal or Source.

Finally, Baure makes use of a series of nominal and adverbial demonstratives that are used for encoding spatial orientation. The nominal demonstratives show a three-way system, but spatial distinction is not the primary factor that distinguishes the three. While the nominal demonstratives of the DEM2 set seem to function predominantly to structure discourse, the other two sets, DEM1 and DEM3, are used for spatial, deictic reference. However, apart from physical distance, emotional distance as well as visibility play an important role. The adverbial demonstratives show a four-way system, indicating differences in physical distance, emotional distance, and visibility. In addition, one of the adverbial demonstratives, *naka*, seems to be used mostly in motion events.

One of the conclusions that can be drawn from the present study, is that in many ways the patterns found in contemporary Baure only display part of the picture. As described in Chapter 2, Baure is a highly endangered language with only a small number of speakers left. These speakers, all elderly, are not using the language on a day-to-day basis anymore, and may be regarded more appropriately as rememberers instead of speakers. The lack of language use undoubtedly influences the language as a system. This process of decay is acknowledged by the speakers themselves, who repeatedly stated that the language that their parents and grandparents used to speak was the proper Baure and much more eloquent than their own way of speaking. The fluency of the speakers in Spanish and the dominance of this language in daily life may have contributed to a diminished use of the full morphosyntactic possibilities that the spatial grammatical devices have to offer. In addition, in the semantic domain, bleaching is observed of the concepts underlying the spatial language. This explains, for example, the ambiguity in the use of the translational versus the rotation/reflection analysis when mapping bodily coordinates onto a Ground with symmetrical axes. It may have very well been the case in former days that one of the mapping strategies was much more salient. However, the scarcity of spatial language mentioned in historical sources from the 18th century as well as in the descriptions from the mid 20th century, does not allow drawing any decisive conclusions on this matter. In order to find out whether the inconsistencies and simplifications found in the contemporary Baure data are indeed the result of influence from the dominant language Spanish, a systematic comparison between the underlying semantic patterns of the spatial grams in local Spanish and Baure should be made.

The present research is intended as a point of departure, an initial foundation, on which subsequent research on Baure spatial language can build. This thesis concentrates on *spatial language* rather than *spatial thought*. With research techniques carefully designed for studying spatial cognition, the scope of research could be broadened and conclusions could be drawn on Baure spatial thinking. Especially promising future research should involve comparative data from languages closely related to Baure, in order to reveal similarities and differences in spatial language as well as the conceptualization

of space. In addition, the data already collected may serve as primary data for other research, such as for example a comparison of the coding of motion events in the Frog story. With this work, I hope to have contributed significantly to a better understanding of the linguistic encoding of spatial information in Baure and have put down a firm foundation that serves as a basis for future research.

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A Grammar of Space in Baure

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A Study on the Linguistic Encoding of Spatial Reference

The present study focuses on spatial language in Baure, a critically endangered Arawakan language spoken in the Bolivian Amazon. The first aim is to identify and describe the linguistic means of the Baure language that are used for spatial reference. However, for the correct interpretation of the linguistic encoding of spatial expressions, systematic spatial knowledge is required, which is to a wide extent commonly shared by the speakers. Comparative research has shown that despite great variation in the manner in which spatial information is encoded linguistically, patterns can be identified in the underlying conceptualization. Therefore, the second aim of this study is to reveal the major patterns of the underlying semantics of the linguistic means by studying their use in context.

Baure (ISO-code: brg) is an indigenous language spoken in the Beni Department of Bolivia, which belongs to the southern branch of the Arawak language family. The Baure language once consisted of the three dialects Baure, Carmelito, and Joaquiniano, each of which is named after the town where the dialect was spoken originally. The latter two are now virtually extinct, with one remaining speaker in the case of Carmelito and a handful of rememberers in the case of Joaquiniano. The Baure dialect under consideration in this study is spoken in Concepción de Baures and is classified as critically endangered. There are approximately 50 speakers, including semi-speakers, mostly over 70 years of age. Transmission of the Baure language to younger generations has come to a hold several decades ago; younger generations have shifted to using Spanish exclusively, and even the Baure speakers are no longer using the language on a day-to-day basis. This lack of language use, and the bilingualism of the speakers, has undoubtedly influenced the language as a system. In recent years, active language revitalization programs, have been designed on a national level, and are currently being implemented.

This book is organized in seven Chapters. In the introductory chapter, the methodological approach is set out, and the basic theoretical concepts are

introduced. Though the present study specifically focuses on the *spatial language* used by the Baure people, a significant part of the theoretical foundations finds its origin in research on language and thought, including *spatial thinking*. In addition, the research methods are described in this chapter, focusing particularly on the fieldwork techniques used for collecting data on the linguistic encoding of space.

Chapter 2 provides a concise description of the historical background of the Baure ethnic population, the natural environment that the Baure inhabit, and a sketch of the linguistic background. This chapter serves to set the stage, providing the reader with crucial background information that is relevant in Baure spatial language and cognition.

In Chapter 3, a descriptive overview is given of the grammatical means that the Baure language has at its disposal for expressing spatial relations, before they are analyzed in more detail in the following chapters. In the nominal domain, the different types of locative noun phrases are presented and special attention is paid to the locative noun stems that play a prominent role in the linguistic encoding of space in Baure. In the verbal domain, basic motion verbs are introduced, as well as the different morphological processes that occur in verb phrases expressing motion events.

The main outcomes of the research are presented in Chapters 4 to 7. Chapter 4 focuses on the underlying conceptual categories of locative noun phrases. In particular, the lexical and grammatical properties of the different locative noun stems that are used in locative noun phrases are analyzed in detail. It is shown that each of the locative noun stems is found primarily in particular constructions, and that the set of locative noun stems as a whole displays a wide structural variation, despite the similarity in their semantic function. The data show that the locative noun stems represent different stages of grammaticalization. Additionally, in this chapter attention is paid to the sets of coordinates (frames of reference) that are used to interpret the linguistic encodings of spatial relations correctly. It turns out that Baure speakers favor the use of the intrinsic frame of reference when describing a spatial relation with respect to an object that has inherently assigned sides, such as a front side or back side based on canonical movement of a vehicle. However, when

describing a spatial relation with respect to an object that is symmetrical, in form or function, speakers of Baure project their own bodily coordinates onto the object in question, corresponding to the relative frame of reference.

In Chapter 5, the nominal and verbal elements used in predicates that express location and motion are described in detail. The same locative noun stems mentioned above serve for expressing location or translational motion, either as a predicate base or as an incorporated nominal element. In addition, Baure disposes of a verb inventory used for describing translational motion events consisting of a relatively small set of positional verbs, and a number of very frequent motion verbs. Apart from the verb root, the different components of a translational motion event are considered in this chapter: Path, Manner and Ground. In Baure, the Path of a translational motion event is usually encoded in the verb root itself, whereas Manner is expressed elsewhere in the phrase. In this sense, Baure tends to pattern with the so-called Verb-framed languages. It is also shown that some motion verbs are oriented toward a Ground with a specific role, such as Goal or Source.

In Chapter 6, the nominal and adverbial demonstratives that are used for spatial orientation are discussed. It is argued that distance is not the primary factor to distinguish the nominal demonstratives in a three-way system. Whereas one of them seems to function predominantly to structure discourse, the other two are not only used for spatial reference, but for indicating emotional distance and visibility as well. The adverbial demonstratives show a four-way system that indicates differences in physical and emotional distance, and visibility. Additionally, one of the adverbial demonstratives seems to express a sense of motion.

Finally, in Chapter 7, the outcomes of the present study are summarized and discussed. The findings suggest that the semantic patterns found underlying contemporary Baure spatial language possibly do not show the full beauty of the system as it once was, partly due to the precarious state that this highly endangered language finds itself in, and the prevalent use of the dominant language Spanish. Nevertheless, the study intends to offer a better understanding of the linguistic encoding of spatial information in Baure, laying the groundwork for future research.

EEN GRAMMATICA VAN RUIMTE IN HET BAURE

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EEN STUDIE NAAR DE TAALKUNDIGE CODERING VAN RUIMTELIJKE VERWIJZINGEN

Deze studie richt zich op ruimtelijke taaluitingen in het Baure, een Arawak taal gesproken in het Boliviaanse Amazonegebied die met uitsterven bedreigd wordt. Het eerst doel van de studie is om de taalkundige middelen in kaart te brengen die in het Baure gebruikt worden om verwijzingen naar de ruimte om ons heen uit te drukken. Echter, voor de juiste interpretatie van die talige verwijzingen naar ruimte is systematische ruimtelijke kennis vereist, die voor een groot deel bekend is bij alle sprekers. Talen verschillen van elkaar in de wijze waarop de ruimtelijke informatie grammaticaal wordt uitgedrukt, maar vergelijkend onderzoek heeft aangetoond dat, ondanks deze variatie, patronen te vinden zijn in de onderliggende conceptualisatie. Daarom is het tweede doel van deze studie het onthullen van de belangrijkste semantische patronen die de basis vormen van de talige verwijzingen naar ruimte in het Baure. Om dit doel te bereiken wordt het gebruik van de taalkundige middelen in verschillende contexten bestudeerd.

Het Baure (ISO-code: brg) is een inheemse taal die gesproken wordt in het Boliviaanse departement Beni en behoort tot de zuidelijke tak van de Arawak talen. Het Baure bestond vroeger uit de drie dialecten Baure, Carmelito en Joaquiniano, die alle drie vernoemd zijn naar het dorp waar ze oorspronkelijk werden gesproken. De twee laatstgenoemde zijn nu praktisch uitgestorven, met slechts een spreker van het Carmelito en een handvol mensen die zich het Joaquiniano nog enigszins kunnen herinneren. Het Baure dialect waarover dit proefschrift gaat, wordt gesproken in Concepción de Baures en wordt beschouwd als ernstig bedreigd. Er zijn nog ongeveer 50 sprekers, inclusief de semi-sprekers, die veelal ouder dan 70 zijn. Er is al enige tientallen jaren geen sprake meer van overdracht van het Baure aan jongere generaties; jongere generaties spreken uitsluitend Spaans en zelfs de Baure sprekers gebruiken het Baure niet meer dagelijks. Dit gebrek aan actief gebruik van de taal, en de tweetaligheid van de sprekers, heeft ongetwijfeld invloed gehad op de taal als

systeem. In de afgelopen jaren zijn er op nationaal niveau revitaliseringsprogramma's voor inheemse talen in het leven geroepen, die momenteel in de praktijk worden gebracht.

Dit boek bestaat uit zeven hoofdstukken. In de inleiding wordt de methodologie besproken en worden de belangrijkste theoretische concepten geïntroduceerd. Hoewel dit proefschrift specifiek gaat over *ruimtelijk taalgebruik* in het Baure, is een aanzienlijk deel van het theoretische kader gebaseerd op onderzoek naar taal en denken, waaronder *ruimtelijk denken*. Daarnaast worden in dit hoofdstuk de onderzoeksmethoden beschreven, met nadruk op de veldwerktechnieken die gebruikt zijn om specifieke data te verzamelen over de taalkundige uitdrukking van ruimte.

Hoofdstuk 2 biedt een beknopte beschrijving van de historische achtergrond van de Baure als etnische groep en van de natuurlijke omgeving waarin de Baure wonen, en het schetst de taalkundige achtergrond. Dit hoofdstuk bevat cruciale achtergrondinformatie die relevant is voor het bestuderen van taal en cognitie in het Baure.

In hoofdstuk 3 wordt een beschrijvend overzicht gegeven van de grammaticale middelen waarover het Baure beschikt om ruimtelijke relaties uit te drukken, voordat deze in meer detail worden geanalyseerd in de volgende hoofdstukken. In het nominale domein gaat dit hoofdstuk in op de verschillende soorten locatieve naamwoordgroepen, met speciale aandacht voor locatieve naamwoordstammen die een prominente rol spelen in het uitdrukken van verwijzingen naar ruimte in het Baure. In het verbale domein komen zowel de fundamentele bewegingswerkwoorden aan bod, als de verschillende morfologische processen die binnen werkwoordgroepen voorkomen bij het uitdrukken van bewegingen.

De belangrijkste uitkomsten van het onderzoek zijn beschreven in de hoofdstukken 4 tot en met 7. Hoofdstuk 4 richt zich op de onderliggende conceptuele categorieën van locatieve naamwoordgroepen. Met name de lexicale en grammaticale eigenschappen van de naamwoordstammen die in locatieve naamwoordgroepen voorkomen, worden in detail behandeld. Het onderzoek toont aan dat iedere locative naamwoordstam voornamelijk in bepaalde constructies wordt gebruikt en dat de verzameling als geheel grote

structurele variatie vertoont, ondanks de overeenkomsten in semantische functies. De data laten zien dat het gebruik van de locatieve naamwoordstammen verschillende fases van grammaticalisatie weergeven. Daarnaast wordt in dit hoofdstuk aandacht besteed aan coördinatiesystemen (*frames of reference*) die de sprekers van het Baure gebruiken om taalkundige uitdrukking van ruimtelijke relaties correct te interpreteren. Baure sprekers blijken een voorkeur te hebben voor het intrinsieke coördinatiesysteem wanneer ze een ruimtelijke relatie beschrijven ten opzichte van een object dat over intrinsieke kanten beschikt, zoals de voorkant of achterkant gebaseerd op de beweging van een voertuig. Wanneer ze daarentegen een ruimtelijke relatie beschrijven ten opzichte van een symmetrisch object, in vorm of functie, dan projecteren sprekers van het Baure hun eigen lichamelijke coördinaten het betreffende object, wat correspondeert met het relatieve coördinatiesysteem.

Hoofdstuk 5 gaat in op de nominale en verbale elementen die deel uitmaken van predicaten die locatie of beweging uitdrukken. Dezelfde locatieve naamwoordstammen die hierboven genoemd zijn, dienen voor het uitdrukken van locatie of beweging, ofwel als predicaatstam dan wel als geïncorporeerd nominaal element. Daarnaast beschikt het Baure over een serie werkwoorden die beweging beschrijven, bestaand uit klein aantal positionele werkwoorden en een aantal veelvoorkomende werkwoorden van beweging. Naast de werkwoordstam worden ook de verschillende delen van een bewegende gebeurtenis in dit hoofdstuk onder de loep genomen: *Path*, *Manner* en *Ground*. In Baure wordt het *Path* van een verplaatsende beweging meestal uitgedrukt in de werkwoordstam zelf, terwijl *Manner* elders in het zinsdeel is gecodeerd. Daarmee volgt het Baure het patroon zoals in de zogenaamde *Verb-framed* talen. Tot slot toont dit hoofdstuk aan dat sommige werkwoorden van beweging gericht zijn op een *Ground* met een specifieke rol, zoals *Goal* of *Source*.

In hoofdstuk 6 worden de nominale en adverbiale aanwijzende voornaamwoorden besproken die gebruikt worden voor ruimtelijke oriëntatie. Het onderzoek laat zien dat afstand niet de primaire factor is om de verschillende nominale aanwijzende voornaamwoorden van elkaar te onderscheiden in het drieledige systeem. Terwijl een van de nominale

aanwijzende voornaamwoorden voornamelijk wordt gebruikt om structuur aan te brengen in het discours, worden de andere twee niet alleen gebruikt voor ruimtelijke verwijzingen, maar ook om emotionele afstand en zichtbaarheid aan te geven. Daarnaast lijkt een van de adverbiale aanwijzende voornaamwoorden vooral een beweging van de referent te impliceren.

Tot slot worden in hoofdstuk 7 de uitkomsten van het onderzoek samengevat en besproken. De bevindingen suggereren dat de semantische patronen die aan de ruimtelijke taal in het hedendaags Baure ten grondslag liggen mogelijk niet het systeem weergeven zoals het ooit was. Dit lijkt deels het gevolg van de kritieke toestand waarin deze bedreigde taal zich bevindt en van het overheersend gebruik van het Spaans, de dominante taal in de regio. Toch hoopt deze studie een beter begrip van de taalkundige uitdrukking van ruimtelijke informatie in het Baure te geven, en daarmee een basis te bieden voor toekomstig onderzoek.

UNA GRAMÁTICA DE ESPACIO EN BAURE

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UN ESTUDIO SOBRE LA CODIFICACIÓN LINGÜÍSTICA DE REFERENCIA ESPACIAL

El presente estudio enfoca en el lenguaje espacial en baure, un idioma en alto peligro de extinción, que es hablado en la Amazonía Boliviana. El primer objetivo es la identificación y la descripción de los recursos lingüísticos que el Baure posee para hacer referencia al espacio rodeándonos directamente. Para poder interpretar correctamente la codificación lingüística de expresiones espaciales, todos los hablantes necesitan aplicar el mismo sistema de conocimientos espaciales. Aunque existe gran variación entre idiomas en la manera en que se codifica información espacial lingüísticamente, investigaciones comparativos mostraron que sí se puede identificar patrones en las conceptualizaciones latentes. Entonces, el segundo objetivo de este estudio es revelar los patrones principales en la semántica que está debajo los recursos lingüísticos. Se pretende realizar este objetivo estudiando el uso de los recursos lingüísticos en contexto.

El baure (ISO-code: brg) es un idioma originario hablado en el departamento de Beni, Bolivia, que pertenece a la rama sur de la familia lingüística Arawak. Antes, el idioma baure consistía en los tres dialectos baure, carmelito y joaquiniano, cuales fueron nombrados según el pueblo donde se lo hablaba originalmente. Hoy en día, los dos dialectos mencionados últimos son prácticamente extinguidos, con un solo hablante del carmelito y algunos personas que se recuerdan algo del joaquiniano. El dialecto baure, considerado en esta obra, es hablado en Concepción de Baures y fue clasificado como idioma en peligro crítico de extinción. Aún quedan unos 50 hablantes, incluyendo los semi-hablantes, que mayormente tienen más de 70 años de edad. La transmisión del baure a las generaciones más jóvenes ha sido interrumpido desde hace varias décadas: las generaciones más jóvenes hablan castellano exclusivamente e incluso los hablantes del baure ya no lo usan diariamente. El escaso uso del idioma, y el bilingüismo de los hablantes, sin duda ha influido sobre el idioma como sistema. En los últimos años, programas

de revitalización de idiomas originarios han sido propuestos a nivel nacional y éstos son implementados actualmente.

El presente libro cuenta con siete capítulos. En la Introducción, se presenta la metodología y se introducen los principales conceptos teoréticos. A pesar de que este estudio se concentra específicamente en *lenguaje espacial* usado por los hablantes del baure, gran parte de los fundamentos teóricos originan de investigaciones sobre lenguaje y pensamiento, incluyendo *pensamiento espacial*. Además, en este capítulo se describen los métodos de investigación con enfoque en técnicas de trabajo de campo usadas exclusivamente para coleccionar datos sobre la codificación lingüística del espacio.

El Capítulo 2 presenta una descripción concisa del fondo histórico de la población de los Baure, del entorno natural que habitan los Baure, y un bosquejo del fondo lingüístico. Este capítulo sirve para proporcionar al lector la información crucial y relevante para el análisis del lenguaje y cognición espacial en el baure.

En el Capítulo 3, se ofrece un panorama de los recursos gramaticales del que el idioma baure dispone para expresar relaciones espaciales, antes de analizarlos en más detalle en los capítulos siguientes. En el dominio nominal, se introducen los diferentes tipos de frases nominales locativas con mayor atención a las raíces nominales locativas. Éstas desempeñan un papel prominente en la codificación de referencia espacial en el baure. En el dominio verbal, se describen tanto los verbos básicos de movimiento, como los diferentes procesos morfológicos que ocurren en frases verbales que expresan movimiento.

Los resultados principales de este estudio se presentan en los Capítulos 4 a 7. El Capítulo 4 se dedica a las categorías conceptuales implícitas de las frases nominales locativas. En particular, se analizan en detalle las propiedades lexicales y gramaticales de las raíces nominales locativas usadas en frases nominales locativas. Se demuestra que cada raíz nominal locativa se usa en construcciones particulares, y que el conjunto de las raíces nominales locativas exhibe una gran variación estructural, a pesar de las similitudes en su función semántica. Los datos indican que las raíces nominales locativas representan diferentes fases de gramaticalización. Además, en este capítulo se analizan los

sistemas de coordenadas (*frames of reference*) usados para interpretar correctamente la codificación lingüística de relaciones espaciales. Resulta que los hablantes del baure favorecen el uso del sistema intrínseco cuando describen relaciones espaciales con respecto a un objeto que tiene ciertos lados asignados inherentemente, como ser la parte delantera o la parte trasera de un vehículo. Sin embargo, al describir una relación espacial con respecto a un objeto simétrico, en forma o en función, los hablantes del baure proyectan las coordenadas de sus propios cuerpos al objeto en cuestión, correspondiente al sistema relativo.

En el Capítulo 5, se describen en detalle los elementos nominales y verbales usados en predicados que expresan locación y movimiento. Las mismas raíces nominales locativas mencionadas anteriormente sirven para expresar locación o movimiento desplazado, sean usadas como base del predicado o como elemento nominal incorporado. Además, el baure dispone de un inventario de verbos usados para describir movimientos desplazados, consistiendo en una serie, relativamente pequeña, de verbos posicionales y algunos verbos de movimiento usados muy frecuentemente. Aparte de las raíces verbales, este capítulo considera diferentes componentes de movimientos desplazados: *Path*, *Manner* y *Ground*. En baure, el *Path* de un movimiento desplazado normalmente es codificado en la misma raíz verbal, mientras que *Manner* se expresa en otra parte de la frase. En este sentido, el patrón que exhibe el baure coincide con el patrón encontrado en idiomas considerados como *Verb-framed*. Además, se muestra que algunos de los verbos de movimiento se orientan hacia *Grounds* con un papel específico, como ser el *Goal* o *Source*.

En el Capítulo 6, se delibera sobre los demostrativos nominales y adverbiales usados para orientación espacial. Se argumenta que la distancia no es el factor principal para distinguir los demostrativos nominales en el sistema con tres dimensiones. Mientras que uno de los demostrativos nominales parece servir principalmente para estructurar el discurso, los otros dos no solamente se usan para hacer referencia espacial, sino también para indicar distancia emocional y visibilidad. Los demostrativos adverbiales muestran un sistema con cuatro dimensiones que indica diferencias en distancia física y emocional,

y visibilidad. Además, uno de los demostrativos adverbiales parece implicar un sentido de movimiento.

Finalmente, en el Capítulo 7, se recapitulan los resultados del presente estudio. Los resultados sugieren que los patrones semánticos implícitos del lenguaje espacial en el baure de hoy en día, posiblemente no reflejan la grandeza del sistema como fue antiguamente. Esto se debe en parte al estado delicado en que se encuentra el idioma y el uso prevaleciente del castellano, el idioma dominante en la región. Sin embargo, la presente obra intenta ofrecer un mejor entendimiento de la codificación lingüística de información espacial en baure y aspira servir como punto de partida para futuras investigaciones.