

Maa, hemalē apsik inipanakmatpīlēken wekalējai, lome kolela hapon. Apsik tīpanakmai ija. kalēnanom, etī ekalēne etī ekalētop? Uhpak aptao Kalipono kunehak tīwētīwē Wajana me talanme tolopītom. Ēmelē tolopītom Wayaname. Masike inamolo uhpakatonom tīpanakmai ejahe mīu hapon katop, mīu hapon tīpanakmai ejahe tīkai inamolo, eheptētop walamuluimē mīu tīkai. Mēlēhenmatot kunehak masike pepta kumakaimēpo kunehak mēlē tīkai ekalēnanom. Masike enehenmatot, tīponēphe ejahe “enehenma, hakītēi enetohme” tīkaitot. Maa, tēkētselep kumakaimē, pepta wewe kumakaimē, pepta, peptamelalep peptamelaleplēken tēkētse ejahe, Wajanaja, lome tīpēlēphe tīpēlēphetot. Masike tēletaitot, ēhepītīnalep akētīnanom, lome eletakomohtao tīpunaīmēi mēlēlē katīp tētīlēmēi. Mījalē akētīhetot tēkētselep, tēletaitot tīpēlēphe. Moloinē mījalēle tītīlēmēi. Mījalē tēkētēmēi ejahelep. Malalē tīpēlēphetot tēletaitot mēlēlē katīp tētīlēmēi, ēnakētīlatot pētuku tētīlēmēi. Malonme mēlaptao tumēkhe tukuitom, tukui tumēkhe enehehe, tīkai. Mēlē tīpanakmai ejahe kawēna tīp towomitae *tototototo* tīkai kumakaimēpona. Masike tēhelekaptaitot *mmmmmm* tukuitom tumēkhe. “Īwaptao” tīkai tukuitom, mēkja tīpojīptēi. Wanma hemele antapek nai imna wanma mītokowaimējatai tīkaitot. “Emna nakētjai ahpela” tīkaitot. “ēmēhek! akētēkē!” Malalē tukuitom tumēkhe malalē ēhepītēna Wajanatom. Tēkētse

## THE EXPRESSION & PERCEPTION OF SPACE IN WAYANA

ejaha, apēnalanma, tēkētse eletalanma tēkētse tēkētse. Tapsik tētīhe etī julutom tētīhe apēnala tukui tēkētseleken. Moloinē tēhelephe wewe kumakaimē towomitai: “*ēkē*” tīkai, “*ēkē*” tīkai. Apēnala tukuitom akētīpēk, mēkja katīpīla. Malonme asimhak awomi tēwētīhe hemele tīnēlēphele towomitai “*ēkēkē*” tīkai, “*ēkēkē*” tīkai, “*ēkēkē*” tīkai. “*Aaaah*” tēwētuhmoi kumakaimētpē. Tukuija tēkētse. Malonme iwētuhmotīhwē tanīmhe tutuja, mēklēja tanīmhe iwētuhmotīhwē. *Sooooom*, tonamhe. Moloinē tupihe ejahe, tupihe ejahe, tupihe ejahe, wanma ēnenela. Hawele anumalē kokopsik tīpanakmāimēi tutuja “*tontontonton*” upak tanīmhe mēklēja, tēmene hapon. *Mmmm* tēnehemele ejahe. Ipokenma mīu hapon. Malonme mēlēkētōt Kaliponotom tētanopphetot tīkai ekalēnanom tētanopphetot, ēhmelē tētanophe ēhmelē tolopītome tētītopkome. Moloinē makatot tētīhe. Moloinē anumalē kokopsik aptao ēhmelē tītētōt tanuktaitot, ēhmelē maka, mēkpalēmetot tētīhe tolopītome, tīkai ekalēnanom. Masike pētulenma pētuletot pētulenma mēlēkomke jiwētānopītpītom tīkai ekalēnanom uhpak aptao. Tuwalēlanma iu lome ekalētoplēken tīpanakmai ija apsiklēken tīhulela man mēlē ekalētop. Wajanamela tēhalēitot, tolopītmetot tētīhetot, Wajanamela tētīhetot, ēhmelē mēhamkomekēken, kījapokotomelēken, ēhmelē kunolotome ēnikjamkomelēkentot tētīhe tīkai  
taanme ahpela, jolok eitop mēlē,  
Masike mēlē katīplēken mīn ekalē-

**Karen Hough**

ekalēnanom. Talanme ahpe jolok ētutop, anumhakēnma. top apsiklēken. Kolela. Maka.



# THE EXPRESSION & PERCEPTION OF SPACE IN WAYANA

Karen Hough





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Karen Hough

Thesis to obtain the degree of Master of Philosophy in Amerindian Studies at the University of Leiden. 2008.

**Supervisors:**

Dr. Eithne Carlin

Prof. Dr. Willem Adelaar

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The text on the front cover comes from the narrative *Kumakaimë* told by Kulepeman in Apetina, February 2007. It was recorded, transcribed and translated in collaboration with Kulepeman and Dr. Eithne Carlin in Apetina and used courtesy of Dr. Eithne Carlin. The photograph on the back cover shows the Tapanahoni River and dug-out canoes used daily by the Wayana.







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## ABBREVIATIONS AND SYMBOLS

→	acting on
√	root
1	1 <sup>st</sup> person
2	2 <sup>nd</sup> person
2POSS	2 <sup>nd</sup> person possessive
3	3 <sup>rd</sup> person
3COREF	3 <sup>rd</sup> person possessive coreferential
3PL	3 <sup>rd</sup> person plural
3POSS	3 <sup>rd</sup> person possessive
adj.LOC	adjacent locative
ANA	anaphoric
ANIM	animate
ASSERT	assertive
BEN	benefactive
CAUS	causative
CERT	certainty
COLL	collective
CONT.LOC	container locative
CONTACT.LOC	contact locative
COREF	coreferential
CYC	cyclic
DEEP.INT.LOC	deep interior locative
DESID	desiderative
DIM	diminutive
DIR	directional
DISC	discourse
DIST.PST	distant past
DP	demonstrative pronoun
DP.ANIM.ANA	demonstrative pronoun animate anaphoric
DP.ANIM.DIST	demonstrative pronoun animate distal

DP.ANIM.MED	demonstrative pronoun animate medial
DP.ANIM.PROX	demonstrative pronoun animate proximate
DP.INAN.ANA	demonstrative pronoun inanimate anaphoric
DP.INAN.DIST	demonstrative pronoun inanimate distal
DP.INAN.MED	demonstrative pronoun inanimate medial
DP.INAN.PROX	demonstrative pronoun inanimate proximate
EMPH	emphatic
FACS	facsimile
FACS.NOM	facsimile nominalizer
FRUST	frustrative
GOAL	goal
HESIT	hesitant
INAN	inanimate
INF.LOC	inferior locative
INST	instrumental
INT.LOC	interior locative
INTENS	intensifier
LIQ.LOC	liquid locative
LOC	locative
LOC.ADV.DIST	locative adverb distal unspecific
LOC.ADV.DIST.SP	locative adverb distal specific
LOC.ADV.MED	locative adverb medial unspecific
LOC.ADV.MED.SP	locative adverb medial specific
LOC.ADV.PROX	locative adverb proximate unspecific
LOC.ADV.PROX.SP	locative adverb proximate specific
MED	medial
MID	middle
NCERT	non-certainty
NEG	negative
NEG.PRTCL	negative particle
NF	non-finite
NOM	nominalizer



NOM.PL	nominalizer plural
PERL	perlative
PL	plural
POSS	possessive
POSS.PL	possessive plural
PP	postposition
PRES	present tense
PROX	proximate
PST	past tense
Q	question
Q.ANIM	animate question
Q.INAN	inanimate question
REFL	reflexive
SOU	source
SUP.CONTACT.LOC	superior contact locative
SUP.LOC	superior locative
TERM	termative
TMP.NOM	time, manner, place nominalizer
TR	transitive



# Preface & Acknowledgements



This thesis has been written as part of my final assessment in order to obtain my MPhil in Amerindian Studies at the University of Leiden. I commenced the BA course 'Languages and Cultures of Native Americans' due to an unexplainable fascination for the Inca ruins Macchu Picchu situated in Peru. It was during my second year that my specialization changed scientifically from an anthropological emphasis to one in ethno-linguistics and geographically from the Andes to Lowland South America, and Suriname in particular. Whether I should thank or curse Dr Eithne Carlin for her contagious enthusiasm for Suriname, and the Trio in particular, is still subject to much debate. However, this enthusiasm was to later lead me to the village of Apetina in February, 2007, where I conducted fieldwork on the expression and perception of spatiality in and by the Wayana, which forms the foundation of this thesis.

No one can ever prepare you for your first fieldwork session, particularly if it takes you to an isolated village in the depths of the Amazon rainforest. During the days leading up to my departure from Paramaribo I was confronted with how much we take for granted, here in the Western world. Suddenly I was forced to think about 'how long would a candle last', 'how much toilet paper does one use in a week' and 'what am I going to eat during the next 2 months?' - I never know what I want to eat today never mind plan 3 meals a day for the following 2 months. Final goodbyes also needed to be made with the home front evoking a feeling that I would never return to the world I knew, and in many ways I never did. Conducting fieldwork in such remoteness and in such a different environment changes your perception of the world forever, even after just 2 months.

As is discussed in section 3.2 it was to take a couple of weeks before I was acclimatized to my new surroundings and it seems as though I learnt more about myself than the Wayana language during this period. However, as the weeks passed my knowledge of Wayana and my subsequent acceptance into the village greatly increased, as did my enjoyment.

After approximately seven weeks, I left the village of Apetina to return to Paramaribo and thereafter home. I left with a feeling of sadness and excitement. Sadness as I was leaving a place where the people had accepted me into the community and where I had laughed so much my stomach muscles hurt and excitement at the prospect of returning to my own sense of home and the task that lay ahead of putting my findings onto paper.

The path taken in the journey of conducting fieldwork and the subsequent writing of a thesis is never travelled alone and there are several people whom I wish to thank for their assistance along the way. First and foremost I am deeply indebted to the village of Apetina who welcomed me into their community and assisted me in the learning and understanding of Wayana. In particular I wish to thank the Granman, Nowahe, for granting me permission to stay in the village; the Kuluwayak Foundation for my accommodation in the Kuluwayak community house and especially Johan for all the hours he spent helping me

## *Preface & Acknowledgements*

with the Wayana language; Johan: *ipok masala!* Also a special thanks to Samoe for all his assistance during my stay in Apetina, including the sending of extra food and the unforgettable emails from home. Other villagers I wish to separately mention for their varying levels of assistance. In no order of mentioning: Ulukwani for her contagious smile and ability to make me laugh every morning; Kuni for making the daily trips to the river unforgettable; Deppi for just being Deppi; Marius for his continuous jokes and his wife for the delicious pepper-water; and of course Ati, Malawa, Jakalika, Ronnie, Johan and their families. Also a special mention to Arnold for his never-ending ability to smile, his culinary delights and just being able to knock on his door anytime for a chit-chat. Finally and not least, thank you to all the pilots at MAF for flying me safely to and from Apetina.

A very special thanks to Dr. Eithne Carlin for her amazing support, enthousiasme and constructive feedback during the process of writing this thesis; but more importantly, thank you for the evenings spent in Apetina philosophizing over life, research and the Wayana and just for being as big a 'bloody eejit' as I am. Additionally thank you for granting me permission to use your maps of Suriname (cf. sections 1.33.1.).

On the home front, I wish to thank all my family and friends for understanding that I had to leave them for several months without contact and that on return I needed to lock myself away for weeks on end in order to write this paper. Thank you for teaching me to be selfish and a special thanks to Lea and Becky for always being there and the countless cups of coffee. A particular mention to my sister Bee who placed my fieldwork in its proper perspective making me cry with laughter in times of frustration, as only she can (cf. section 3.3.1.5).

At the University of Leiden I would like to thank Professor Willem Adelaar for his support and allowing me to follow my chosen path, and of course to Dr. Eithne Carlin. Also thanks to those at the Faculty of Archaeology who have adopted me as their own and their constructive criticisms during tutorials. In particular Jimmy for understanding what it is to conduct fieldwork in the middle of Suriname. I am also grateful to the Leids Universiteits Fonds for granting me a substantial grant in order to conduct such specific research in such an isolated area.

Finally, and by no means least a very special thank you to Hendrik for his undivided love, support and patience and especially for believing in me in a manner I wish I could; and just for being himself. This thesis would not have been possible without the support of all those mentioned. For any one I have forgotten my utmost apologies and again *ipok manai!*

# 1 Introduction

Nothing ever begins. There is no first moment; no single word or place from which this or any other story springs. The threads can always be traced back to some earlier tale, and to the tales that preceded that; though as the narrator's voice recedes the connections will seem to grow tenuous, for each age will want the tale told as if it were its own making. (Barker, 1999: 5)





## **1.1 Introduction**

The groundwork of this paper lies within the cross-disciplinary field of ethno-linguistics, a sub-domain of anthropological linguistics which places language in a wider social and cultural framework. As described by Foley (1997: 3):

Anthropological linguistics views language through the prism of the core anthropological concept, culture, and, as such, seeks to uncover meaning behind the use, misuse or non-use of language, its different forms, registers and styles. It is an interpretive discipline peeling away at language to find cultural understandings.

Since the end of the 19<sup>th</sup> century anthropologists and linguists have been concerned with the relationship between language and culture, and as in many scientific fields there is a division between relative and universal thought. In anthropology relative followers believe that culture and language should be studied and described within their own terms, rather than euro-centrally, whilst universalists emphasize that pan-human, innate, biological universals determine how cultural concepts are perceived and expressed. It is, however, impossible to give a simple definition as there are many nuances across the various scientific disciplines.

Franz Boas<sup>1</sup> was one of the most prominent figures concerned with the early theories of relativism. From this, the subsequent Boasian tradition emerged, which was to greatly influence the American school of structural linguistics and anthropology. However, even the most extreme followers of relativism believed in some universal properties of the mind, especially in the domain of spatiality (Ibid; 1997: 228). One of the earliest and most influential theories emerging from the Boasian tradition was the so-called Sapir-Whorf hypothesis which claimed that:

The structure of a given language will affect the way in which speakers of that language think. The implication of this is that people who speak different languages will think differently. (Barnard and Spencer; 2002: 499-500; cf. section 2.2.1)

In the 1940s the Sapir-Whorf hypothesis was generally rejected as the focus of linguistics switched more towards the correlation between language and worldview. Turning away from the idea that our perception of the world was determined by our language structure, anthropological linguists began to concentrate on folk linguistics<sup>2</sup>, whereby the study of how cultural groups classify their world and which taxonomies they used, became popular. (Ibid; 2002: 326)

---

<sup>1</sup> Currently the work of Boas has been reinterpreted and is again popular among linguists and anthropologists alike.

<sup>2</sup> Folk linguistics is the study of how speakers view their own language (Barnard and Spencer, 2002: 326).

Following the ideas of Chomsky<sup>3</sup>, during the 1950's, many ethno-linguists shifted from Whorf's linguistic relativism to universalism. Chomsky propositioned a universal linguistic competence "*the universal human ability to generate and understand grammatical utterances*" (Ibid; 325). One of Chomsky's critics was Dell Hymes<sup>4</sup> who believed that language and culture are intrinsically interwoven and that language should "*be understood from within its own cultural and linguistic context*" (Hegeman, 1998). Hymes deflected from studying indigenous classification systems and concentrated instead on discourse believing, as several anthropologists do, that as individuals need cultural knowledge to understand the context and meaning of any discourse, it must therefore be culturally embedded (Barnard and Spencer Eds, 2002: 325).

Many other anthropologists, linguists and anthropological linguists such as Sahlins, Lucy, Goodenough, Leach and Lévi-Strauss, to name but a few, have studied the intrinsic relationship between culture and language. However, within the field of psycho- and anthropological linguistics there are many controversial debates concerning whether language shapes culture or culture language. Language and culture are separate entities which are intrinsically related, one cannot exist without the other and whilst this paper shows this relationship it does not participate in the afore-mentioned debate. Rather, the focus of this paper is to illustrate how spatiality is expressed within the Wayana language and how it gives us a greater understanding of the culture and philosophy of the Wayana, regarding concepts of spatial experience in particular. Whether perceived through structuralism, cognition, relativism or universalism many studies, as mentioned above, have portrayed that the linguistic characteristics, grammar and vocabulary of a spoken language reflect to a great extent the culture and worldviews of its native speakers. Therefore, logically speaking, in order to fully understand a language and its linguistic structures it is mandatory to study the culture of its speakers and in particular to try to understand their worldviews. The inverse is also true.

## 1.2 Structure of thesis

As previously mentioned, the focus of this paper is to present an overview on how spatiality is expressed and perceived by the Wayana. The subject of spatiality is especially interesting as:

Spatial thinking is deeply embodied in our every day lives and our understanding of space and spatial orientation are fundamental for human action and interaction (Senft, 1992: 2).

Following on the ideas that language and culture are intrinsically related, I attempt to portray how the expression of spatiality in Wayana allows us a

---

<sup>3</sup> Chomsky was an American linguist who proposed two universal grammar types: the conceptual and the computational system. The former system refers to meaning whilst he latter is concerned with the formal concepts and rules of grammar systems (Foley, 1997: 29).

<sup>4</sup> Before retirement Dell Hymes, Commonwealth Professor of Anthropology Emeritus taught Linguistic Anthropology, Native American Mythology, Ethno-poetics, Native American Poetry at the University of Virginia. He has published many books regarding linguistic anthropology.

glimpse into the philosophy and worldview of its speakers concerning how they perceive spatial concepts.

The following chapter, Chapter 2, discusses the theoretical setting under which this particular thesis and research falls. In this the study of spatiality, which dates back to Aristotle, is explored and placed in its historical context. Thereafter, the current debates regarding relativism and universalism within spatial orientation are discussed.

Chapter 3 describes the methodology applied in the field in order to obtain the corpus of linguistic data, on which this study is based. These data are analyzed in Chapter 4 which gives a detailed, linguistic description of the the expression of spatial notions in Wayana. Although a full grammar of the spatial language found in Wayana is not given, a detailed account of the spatial postpositions, locative adverbs, demonstrative pronouns and third person personal pronouns is presented.

The perception of space by the Wayana is explored in Chapter 5 and thereby placed within the ethnographic concept of landscape. The linguistic data given in Chapter 4 is further analyzed and placed within a cultural context, attempting to show how the perception and expression of spatiality in Wayana are interrelated.

The final and concluding chapter, Chapter 6, discusses the possibilities of further research within the domains of both spatiality and the Wayana in general. Before developing on these ideas a brief introduction to the Wayana is needed.

### **1.3 The Wayana**

The Wayana<sup>5</sup> are a small Amerindian group currently living in the dense tropical rainforests of Suriname, French Guiana and northern Brazil. Although there are many variations in the number of speakers remaining today it seems acceptable to presume that approximately 1200 live in the afore-mentioned areas.

The name Wayana, by which they are known today, is in reality a collective name for several ethnic groups who are believed to have merged in the 18<sup>th</sup> century. This probably occurred to increase their chances of survival due to warfare and the spread of European diseases for which they had no cure. Despite the many discrepancies within the written sources, as to which groups are to be included within this amalgamation (cf. Hurault, 1968; Boven et al. 2001; Camargo, 2005), it is assumed that the three largest groups included the Upului, Opagwana(i) and the Kuku(i)yana, the Fire-fly People, who are known as the “original” Wayana (Boven, 2006: 59).

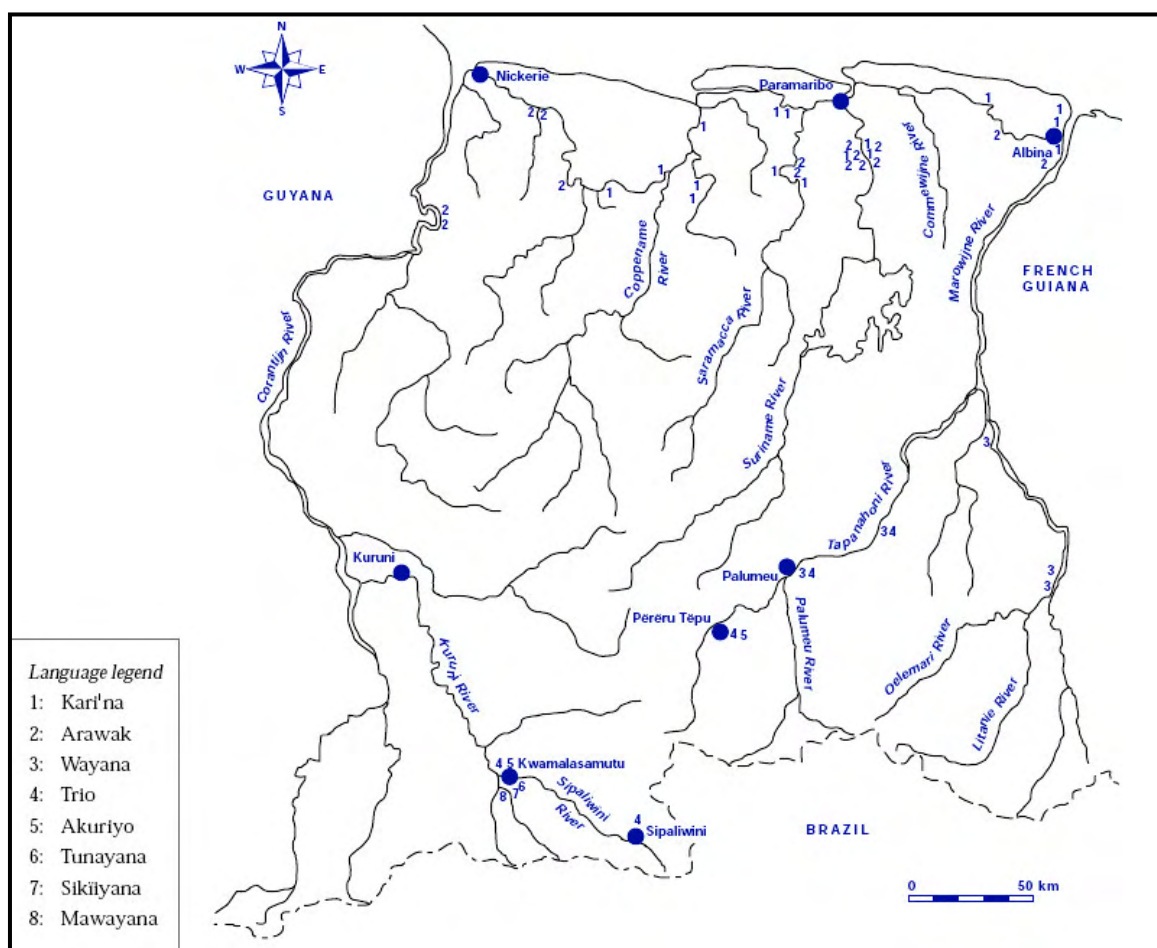
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<sup>5</sup> Ethnonyms for the Wayana and the Wayana language include: Alukuyana, Guayana, Oayana, Oiana, Oyana, Roucouyenne, Uaiana, Upurui, Wajana and Wayāna.

## Chapter 1: Introduction

Today the Wayana live along a total of five rivers, which are important sources for food, water and sanitation, and which additionally form important links with hunting grounds, gardens and other villages. Approximately 200 Wayana continue to reside in northern Brazil from where they originate, although they now seem, for the most part, to have merged linguistically with the Apalai. In Brazil they live in the state of Pará, along the banks of the Jarí and Paru Rivers; the latter of which forms the state border between Amapá and Pará.

Despite their Brazilian origins, the largest number of Wayana speakers can be found along Litani and Lawa Rivers, the latter of which partially forms the Suriname-French Guiana border. In the interior of Suriname approximately 400 Wayana continue to live along the Tapanahoni River (see Map 1.1) where they have resided since the mid 19<sup>th</sup> century. Here they are concentrated in the villages of Palumeu and Pîlëuimë (Apetina<sup>6</sup>), the latter of which is the focus of this paper.



**Map 1.1: Location of the Amerindian Groups in Suriname**

Source: Arends & Carlin Eds: *Atlas of the Languages of Suriname* (2002)

<sup>6</sup> This map has been taken from the Atlas of the Languages of Suriname (Arends & Carlin Eds. 2002) with kind permission from Dr. Eithne Carlin. Apetina is not marked on the map but is situated along the Tapanahoni River, downstream from Palumeu.

### **1.3.1 Wayana Language**

The Wayana language is a member of the Cariban language family<sup>7</sup>, which encompasses between 39 and 60<sup>8</sup> languages across South America (from the Colombian Andes through to the Guianas and Brazil). Although several of these languages are extinct, due to their relative isolation<sup>9</sup> from the Western world and the subsequent processes of acculturation, many are still actively spoken today. The inverse is true of the coastal groups of the Guianas, and South America in general, whose languages today are much less preserved due to their early contact and intense trading with the Europeans since the 16<sup>th</sup> century. Currently the effects of globalisation on indigenous languages and cultures are becoming increasingly visible among the groups of the interior. This unavoidable process was started by the introduction of new goods and ideas brought in from, and by, foreign groups through trade. This has resulted in lexical borrowing and linguistic adaptation. Despite these trends the Wayana language continues to be actively spoken today and it remains the dominant language in Apetina, where many Wayana are still predominantly monolingual.

The Cariban family is well known in the linguistic world due to its unique Object-Verb-Subject sentence construction, thought previously not to exist in languages (Carlin, 2002: 47). Furthermore the Cariban language family contains morphologically complex, agglutinative languages which:

Share a common lexical stock as well as an inventory of grammatical morphemes that exhibit different stages of development resulting in vast grammatical differences (Ibid).

The Wayana language is therefore rich in morphology and morphological processes. Grammatical functions are expressed through the use of affixes, primarily in the form of suffixes, rather than separate words as in many European languages. These affixes not only express functions as person, tense and topological relations to name but a few but also as nominalizers and verbalizers allowing the possibility of deriving verbs from nouns and vice versa. Through this, each word is capable of embodying a considerable amount of information and in turn expands the lexicon of the Cariban languages considerably (Ibid: 56). The focus of this paper lies predominantly in the rich postpositional system expressing topological relations.

### **1.3.2 Uhpak ‘long ago’ and hemalë ‘today’**

There are several different approaches and perceptions to take into account when reconstructing history, especially that of indigenous groups with no or few written records. This very subject is the cause of an ongoing debate between anthropologists and historians today in which anthropologists accuse

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<sup>7</sup> The internal classification of the family has not yet been adequately determined.

<sup>8</sup> The variations in numbers, depends upon the linguist responsible for the classification. There is much controversy in whether languages similar to one another should be classed as separate languages or as dialects.

<sup>9</sup> The villages of the interior are only accessible by boat or plane, leaving them fairly isolated from the outside world. The construction of roads would change everything considerably. Visitors to the villages must also have permission from the ruling ‘granman’ to be allowed to enter and stay in the village.

historians of being ethnocentric as they deny and ignore the worldviews, perceptions and oral history of the very people they are studying (Boven, 1998: 3). In effect a multi-disciplinary approach is needed, as all sources contribute to a fuller understanding of interpreting the past. The study of oral traditions<sup>10</sup> is, however, complicated. Misinterpretations can easily arise during the process of translation due to the extensive use of metaphors in oral traditions, and due to the differing philosophies and perceptions of concepts, such as time, between the narrator and researcher. This is also true of Amazonian oral traditions where the past and present are not discretely separated and where, culture-heroes and neighbouring groups are often portrayed as animals. This also allows us an insight into the transformational world of the Amazonian groups (cf. section 1.3.3). Below follows a brief description of the history of the Wayana.

Prior to the arrival of the Europeans it is believed that the Wayana originated<sup>11</sup> from the northern regions of the Amazon Delta. During this time the tropical lowlands of South America were inhabited by nomadic groups of foragers with few territorial claims (Carlin and Boven, 2002: 11). All groups shared a similar culture and lifestyle based on subsistence activities such as fishing, hunting, and the collecting and growing of plants (de Goeje, 1941: 74). At this time Wayana villages were small and widespread and were abandoned when local natural sources became exhausted or after the death of one of the leaders. There was much interaction between the Wayana and neighbouring groups who were perceived as both friend and foe.

Up to the mid 18<sup>th</sup> century the Wayana were renowned for being well organized masters in warfare and the specialization of *japoto* ‘military leader’ was very important within the Wayana community. Warfare constituted a fundamental part of the Wayanas’ social and cultural life as it was used to obtain women, seek revenge and settle trade disputes (Carlin and Boven, 2002: 22). According to oral traditions Kailawa, a legendary *japoto* ‘military leader’, was responsible for the very survival of the Wayana and their subsequent evolution from forest dwellers to river dwellers (cf. Boven: 2006: 65). It was also Kailawa, who eventually defeated the ‘water-monster’, Tulepe, who had prevented the Wayanas’ earlier migration northwards<sup>12</sup> (cf. Ibid: 68-69). Thereafter, the Wayana began their migration northwards into Suriname and French Guiana, which corresponded with the arrival of Europeans in the delta region of North Brazil in the 18<sup>th</sup> century. Although the Wayana had no direct contact with the

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<sup>10</sup> Oral traditions appear in various forms such as narratives, myths, spirit songs and ceremonial dialogue, and continue to constitute the basis for understanding, and piecing together, the cultures and histories of many indigenous societies today. They are passed on orally from generation to generation and are of vital importance to indigenous groups as they tell of and explain creation, the group’s history, cultural traits and the relationship of the people to their natural surroundings. Social memory based on oral traditions is dynamic and narratives change according to the context and reason for which they are told and who the narrator is. *Variety being so much more important than truth in her (narrator’s grandmother) opinion. More reliable she says. Truth changes. Variety remains constant* (Melville, 1997: 3).

<sup>11</sup> This is assumed through the information found in several sources including the Wayana’s own oral traditions. The majority of the Wayana today still know and can name their ancestors who originated along the Jari and Paru Rivers of northern Brazil (Boven, 1998: 3).

<sup>12</sup> Tulepe had prevented the Wayana crossing the Paru River which subsequently restricted their migration northwards (cf. Boven, 2006: 69).

Europeans at this time, they were indirectly affected and were forced to flee from the voracious attacks from the neighbouring Wayāpí, who had been armed by the Portuguese in order to capture slaves. Even the military supremacy of the Wayana was no longer sufficient to compete against them (Boven, 1998: 5). By the end of the 19<sup>th</sup> century the specialization of *japoto* had ceased to exist and it is no longer known by the Wayana today.

Reaching Suriname the Wayana were confronted with a new enemy, namely the Trio groups. The Trio were also nomadic in nature and had entered Suriname via the Tumuchumac Mountains from Samuwaka<sup>13</sup>. According to the oral traditions of both the Wayana and Trio there had been much contact between them, which was reason enough to wage several battles. At this time the Wayana had greatly declined in number due to the afore-mentioned warfare with the Wayāpí (Carlin and Boven, 2002: 22). However, this decline in population was also caused by other factors, such as disease. In the coastal regions there was much interaction and trading between the Europeans and the coastal Amerindians, who had subsequently formed a buffer between the Europeans and the groups of the interior. However, through trade many European influences had already filtered southwards into the Amazon, unfortunately this also included diseases to which the indigenous groups were neither resistant nor had a cure for.

It is believed that the Maroons, who had previously escaped from the plantations, began intensive trading with the Amerindian groups of the interior of Suriname from the 17<sup>th</sup> century onwards<sup>14</sup>. In order to enhance communication, and thus intensify trade, they developed a trade pidgin based on the languages of the Wayana, Kar'ina and Nyduka<sup>15</sup>. This was later replaced by Sranantongo. The institution of trade was based on mutual trust as repayment in goods could take up to a year, and being a *pawana* 'trade-partner' involved great responsibility. Today the term *pawana* commonly refers to the institution of friendship, which is also taken very seriously and comes with many responsibilities and commitments, but also with great honour (Ibid: 26). Around 1865 the Nyduka Maroons invited the Wayana to live along the Palumeu and Tapanahoni Rivers, subsequently the Wayana settled there, where they still live today (de Goeje, 1941: 73).

From the mid 20<sup>th</sup> century onwards, many developments changed the Amerindian way of life forever. Border and administration posts were set up along the Tapanahoni and Lawa Rivers, bringing with them more white administrators followed by missions and medical facilities (Boven, 1995: 4). The missionaries of the West Indian Mission began to concentrate their efforts on the groups of the interior, and established the village of Kawemhakan along the

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<sup>13</sup> Samuwaka was a village in the Pará state of Brazil where the Okomoyana, Aramayana, Pirëuyana, Maraso, Aramiso, Tiriyo and the Akijo groups met to discuss their future survival and where the decision was made separate and migrate northwards in search of better conditions (Carlin and Boven, 2002: 22).

<sup>14</sup> There are few records from this period of the groups of the interior one can only guess that trading commenced around this time.

<sup>15</sup> The Nyduka also created a trade pidgin based on their own language and that of the Trio groups.

Lawa River and polyclinics and schools along both sides of the Suriname-French Guiana border (Ibid).

Until the 1950s the majority of the Wayana continued to live in small villages populated by approximately 30-50 inhabitants. This rapidly changed after an influenza epidemic ravaged through Suriname during this period. Many Amerindians were affected, causing them to move to the missionary villages in search of medical aid. Since the 1950s-60s the Wayana have lived in and around these villages due to this available medical care. This migration actually aided the missionaries, as it facilitated the process of Christianization, but it also had many social implications such as daily conflicts. These conflicts have frequently resulted in the separation of families and the subsequent establishment of smaller camps around the larger villages.

The cutting of airstrips<sup>16</sup> within the vicinity of villages made the interior more accessible and aided the missionaries in establishing more missions and facilities. Despite all this, the Surinamese government still had no overview of what was happening in the interior, nor did it have the capacity to oversee any developments there. Everything remained in the hands of the missionaries until the War of the Interior broke out in the 1980s which resulted in the re-isolation of Amerindian villages and their resources. Many groups, including the Wayana, fled to French Guiana at this time. As described by Carlin and Boven (2002: 37-38):

The Amerindians became a pawn in the power struggle<sup>17</sup>... the War of the Interior was one of the most futile events in the entire history of Suriname involving the blatant misuse of Amerindians who had an even more inferior position in national politics than the insurgent Maroons.

Today the interior of Suriname is still generally neglected by the Surinamese Government who, whilst celebrating a multi-ethnic and multi-cultural society, fails to generate concrete governmental policies pertaining to indigenous peoples (cf. section 5.6).

Education facilities for the Amerindians of the interior are more or less nonexistent although recent, often community-based, projects are improving on this. In Apetina primary school education finally commenced in October 2006 and in October 2007 they celebrated the opening of their new school building which was realized by the Community Development Fund Suriname (CDFS). Schools are of great importance as they provide a means for the Amerindians to come into contact with the Dutch language and thereby the possibility to learn it<sup>18</sup>. Being the official language of Suriname, the Amerindians recognize the

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<sup>16</sup> This process was called Operation Grasshopper.

<sup>17</sup> This power struggle was between the military, led by Desi Bouterse and the Jungle Commandos led by Ronnie Brunswick (Carlin and Boven, 2002: 37).

<sup>18</sup> The primary school in Apetina is currently developing an adult programme providing the older generation access to education.



need to comprehend and speak Dutch in order to be able to understand and participate in national politics (Ibid: 39).

The situation in French Guiana is different to that of Suriname as the government has more favourable policies regarding indigenous peoples and social security benefits. These differences are causing an outward migration from Suriname to French Guiana and whilst national borders previously had little or no significance to the Wayana (Findlay, 1971), this perception is currently changing due to national politics. This is discussed in more detail in section 5.6.

The intrusion of Brazilian and Maroon loggers and gold diggers along the border of Suriname and French Guiana is also responsible for the recent outward migration towards French Guiana. The problems and consequences of this encroachment are in themselves worthy of an extended study. The fundamental problems are not simply the intrusion on, and the subsequent loss, of land but also the environmental implications which follow. These include not only the common problems of deforestation and soil erosion but, more seriously, mercury poisoning. Mercury, which is used during mining processes, contaminates the local food chain resulting in many illnesses, such as deformities at birth and Minamata disease. The influx of workers into the area is also causing social problems, mainly resulting from prostitution and the subsequent increase of sexually transmitted diseases, such as HIV. This in turn is causing social disintegration.

On a more positive note, Suriname is rapidly increasing in popularity as a tourist destination, particularly among eco-tourists<sup>19</sup>. Currently the villages of Palumeu and Apetina have eco-lodges offering the visitor a range of natural and cultural attractions. With tourism a balance needs to be found between the needs of the tourists, local community and the conservation of the environment to enable such projects to have a chance of survival. However in Palumeu discontent is growing within the local community as they have no control over the tourist trade. Although the eco-lodge offers some employment to the Wayana and Trio groups in Palumeu, the financial benefits remain minimal as higher functions are filled by people from Paramaribo and, more importantly, all profits return to the tour-operators and air carriers, SLM and METS rather than to the local community (www.suriname.wedd.de, 2007). Despite promises made by METS to reinvest in the village, until now any developments made have been solely for the benefit of the tourists rather than the inhabitants themselves.

A similar project is reaching completion in Apetina, offering the Wayana an alternative to the environmentally destructive occupations of logging and the trade of wild animals. This project has set up by the village foundation Kuluwayak who was awarded a substantial grant for tourist development by

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<sup>19</sup> I am using the term eco-tourism to differentiate it from other forms. However it is a term that is misused by many and despite all the best intentions, pure eco-tourism can never exist.

the United Nations Development Programme (UNDP). Unlike in Palumeu, the aim of the Apetina tourist project is to ensure that the community retains more of the generated profit through offering its own services, creating more income for the local community. This income is to be reinvested in future community based projects such as the further development of education.

Unfortunately tourism as a form of sustainable development rarely succeeds, but behaves more like a Trojan horse. Ideally tourism needs to remain small-scale in order to prevent the maximizing of the socio, cultural and environmental carrying capacities which leads to the subsequent deterioration of an (eco-)tourist destination. Although cultures are dynamic in nature and some form of acculturation is unavoidable, the Wayana need to maintain their own identity and environment. If their culture and environment disappear, the tourists will too. Tourism remains a risky trade as tourist destinations are susceptible to many exterior factors outside the control of the village. Despite the risks it is currently the most fitting opportunity for Apetina to create a new form of income. Hopefully, unlike in Palumeu, economic leakage should remain minimal.

The last century seems to have brought the greatest changes among the Wayana. The transition from a nomadic to sedentary existence means they seldom move and as a result game is becoming increasingly scarce around the villages. Not only are they forced to hunt further and further upstream but also their gardens need to be constructed further from the village due to soil exhaustion and erosion. The dependence on modern infrastructure like medical care, education, money and western goods has greatly increased, as has the awareness of the Wayana regarding their own situation. Development is paralleled with acculturation and the question remains whether this is ultimately constructive or destructive for the Amerindian peoples.

### **1.3.3 Cosmology**

The Amazonian world, and thus that of the Wayana is a complex one consisting of several different realities and cosmological layers existing side by side and influencing each other. Each cosmological layer is inhabited by humans, spirits and animals to which the same social structures and cultures are attributed as humans; for example they all live in *ëutë* 'villages' and animals categorize and spend their lives as humans do; namely hunting, fishing, and the like. The perception of cultural items differs across these categories as what humans see as blood, is pineapple or maize beer to the jaguar, and muddy waterholes to humans are perceived as ceremonial houses by the tapir (Viveiros de Castro, 1998: 478).

Within the perception of humanness, the word we translate as a "human being" also reflects the differences between our western thought and that of the Wayana, and how we each categorize the world. As described by Viveiros de Castro the Amerindian words we translate as "human" actually "*do not denote humanity as a natural species...[but refers] rather to the social condition of personhood*" (Ibid: 476). Translating such concepts as "human being" portrays

our own ethnocentric bias regarding humanity, thus ignoring the correct definition and conceptualization within Amerindian languages. In Wayana *Kalipono*<sup>20</sup> denotes ‘Amerindians’ in general and is often used in oral traditions to describe the Wayana people themselves, not as a species but as a people:

(1.1) kalipono        pëne-jo                kaimo-ta-tpë  
      people            piranha-COLL        dead.game-TERM-PST  
      the Piranha people’s former killing of the people (Wayana)  
      (Boven, 1995: 30)

(1.2) uhpak aptao<sup>21</sup> kalipono t-ënatka-i e-ja  
      early when people COREF-kill-NF 3-GOAL  
      during long ago he killed the people (Wayana)  
      (Ibid: 30)

It can be said that *kalipono* functions more as a collective pronoun than as a proper noun. As in other Amerindian languages<sup>22</sup>, it denotes a group sometimes larger than their own, where the members embody equal physical and cultural attributes. As discussed above animals and spirits share the same properties as humans without any linguistic differentiation. Following this, the term *kalipono* can also be used by animals and spirits within self-definition since they perceive themselves to be human beings on both a physical and cultural level (Ibid).

The numerous spirits existing within the Wayana community are able to manifest themselves in any animate form. This not only “*increases the virtual population of the world*” (Carlin and Boven, 2002: 12) but also shows again, that appearances can be deceptive. As acknowledged by Peter Rivière but later discussed by Eithne Carlin “WYSI(N)WYG (What you see is (not) what you get) in Amazonia” (Rivière, 1994; Carlin, 2002: 49). The shaman and members of the same category are the only ‘people’ who are able to perceive spirits, animals and humans as who they truly are. The shaman is able to look through the transformational outer layer, perceived as clothing, and see the soul of the being which remains constant. This soul forms the essence of all beings and can therefore not undergo transformation. The shaman is therefore the mediator between the different cosmological layers and populations. Communication with the spirit world is vital for successful hunting and the healing of sicknesses which are believed to result from angry spirits. It is this discrepancy between appearance and reality that is expressed by the facsimile - *me* (1.3) in Wayana.

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<sup>20</sup> The word *Kalipono* is derived from the Carib word *Kali*, which is believed to be the common place of origin. It is probable that *Kalipono* was the original name of the Cariban peoples (cf. Boven, 2006: 43-44, also for the debates surrounding this concept).

<sup>21</sup> I have adapted the original spelling of *upak aptau* by Karin Boven to *uhpak aptao*, following the spelling I adhere to throughout this thesis.

<sup>22</sup> For example in Trio the respective term is *witoto*, and in Makuna *masa*.

- (1.3) ekēmñē-psik    Wajana-me    t-ētī-he                    kaikui  
later-DIM            Wayana-FACS    COREF-become-NF    jaguar  
a little later the jaguar became (changed into) like the Wayana  
(Boven, 1995: 38)

Unlike our visually-focused society in which we generally perceive only tangible and physically visible objects to exist, within Amerindian societies, and notably those of Amazonia, the opposite is true. Whilst the Wayana and other Amazonian groups identify a basic uniform body it is the differences in bodies or outer clothing which signifies the differences in perception as described above. Amerindians perceive a unity of cultures and a multiplicity of natures whilst the opposite is true in the western world where we perceive a unity of nature and a plurality of cultures (cf. Descola, 1996). A significant difference between western and Amerindian cosmologies is portrayed here: within the philosophy of the western world the body is uniform whilst the soul differentiates, whilst within the philosophy of the Amerindians the opposite is true; the body differentiates whilst the soul is the major integrator (Viveiros de Castro; 1998: 479). So whilst in the 16<sup>th</sup> century the Spanish knew that Amerindians were human beings (according to our definition of the word) they were contesting whether they had a soul; the Amerindians knew the Spanish had a soul but questioned if their body was truly human.

The multiple worlds of the Wayana are always present, interacting with the present day, visible world. As perceived by Overing (1995: 84):

The multiple world landscape is rather vague with no regard to time and space. It is easily fluid in that beings still penetrate other times and places, but in a transformed way.

This concept of transformation plays a significant role within Wayana oral history and culture and it is of paramount importance that such concepts are correctly communicated by the speaker to his listeners. The bringing across of false information questions the integrity and reliability of the speaker and in turn his/her position within the community. This information is grammatically encoded in Wayana, which has a system of verbal and nominal markings used to express reality, truth and the knowledge of the speaker, resembling the “*evidentiality, truth and knowledge*” system, postulated by Eithne Carlin in several of her publications regarding the Trio<sup>23</sup>. Successful communication, and thus harmony with one’s surroundings and community, can only be achieved if the speaker conveys that what he is telling to be fully truthful and thereby indicating if his knowledge is first or second-hand. (Carlin, 2002: 49) Herein the Cariban groups ‘follow<sup>24</sup>’ the philosophy of solipsism which predicates that the ego can only truly know and verify its own reality (Ibid: 70). Therefore no-one can ever state what someone else has seen or done with complete certainty.

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<sup>23</sup> See references for a list of these publications.

<sup>24</sup> ‘Follow’ as an analytical point of view, they are not active followers and do not denote themselves as such.

In conclusion, the comprehension and acceptance of “*the reality of a multiplicity of knowledges*” (Overing, 1990: 603) is of vital importance when attempting to understand and describe Amerindian cultural and linguistic systems, in this case that of the Wayana.

### **1.3.4 Previous Studies**

Since the end of the 19<sup>th</sup> century much linguistic and anthropological research has been conducted among the Wayana, resulting in several publications. Henri Coudreau, a French explorer and geographer, composed a wordlist for several languages including the Wayana which he later published in 1892. Later, at the beginning of the 20<sup>th</sup> century, C. H. de Goeje, a lieutenant in the Dutch Navy, was lent to the Dutch Royal Geographic Society (KNAG) to assist in the mapping of the interior of Suriname due to his great skills in this field. It was during these expeditions and one in 1937 succeeding his retirement, that de Goeje encountered the Trio and Wayana groups, enabling him to collect much linguistic and ethnographical data, which was later published<sup>25</sup>. After the seminal work of de Goeje, Walter S. Jackson conducted further linguistic research on the Wayana language in order to create a grammatical overview<sup>26</sup> for the missionaries of the Surinam Interior Fellowship of the West Indies Mission (Grimes, 1972). Unfortunately this overview remains incomplete with many discrepancies. Other missionaries working on the Wayana language include Ivan Schoen. Recently Petronila da Silva Tavares has written the fullest grammar of the Wayana language to date as a PhD thesis which is available online through the Rice University of Houston. Additionally, Elaine Camargo a linguist from the French school is currently working on the Wayana language. Unfortunately the French school of linguistics concentrates its studies on single aspects of a particular language rather than the language as a whole. Consequently their publications are generally inaccessible to audiences outside their own school, including the Wayana.

Dr Eithne Carlin of the University of Leiden is currently working on the Wayana language within her current project “Giving Them Back Their Languages”, which falls under the NWO endangered languages programme. The aim of her research is to create a full grammar of the Wayana language together with an ethno-linguistic profile.

To date there have been many anthropological studies on the Wayana people. Again de Goeje published extensive accounts on the Wayana culture at the beginning of the 20<sup>th</sup> century. De Goeje himself, however, was disappointed in how much ethnographical data he was able to collect due to the extensive time involved in learning the language:

Allereerst moest ik die taal verder onderzoeken en het gevondene mij eigen maken, om met de menschen te kunnen spreken...en vóór ik die taal meester was, liep mijn verblijf

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<sup>25</sup> De Goeje also collected many cultural items during these expeditions which he donated to the Royal Museum of Ethnology in Leiden (RMV).

<sup>26</sup> JE Grimes later published Walter S Jacksons work: A Wayana Grammar in “Languages of the Guianas” in 1972.

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bij de Oayana's ten einde. Daardoor zijn het slechts fragmenten van volkenkunde die ik hier heb aan te bieden (de Goeje, 1941: 72).

Regardless of his own ideas, his accounts give great insight into the Wayana culture prior to the arrival of the missionaries and other Western influences of the 20<sup>th</sup> century. Since then many other explorers and anthropologists have conducted research on the Wayana culture including D.G.A. Findlay, D.C. Geijskes, J.M. Hurault, E. Magaña and Daniel Schoepf<sup>27</sup>. In 2003 Jean Chapuis in collaboration with the late Hervé Rivière published an extensive book on the oral traditions of the Wayana recorded along both sides of the Upper Maroni River in French Guiana and Suriname. These oral traditions have been published in Wayana along with French translations and explanatory notes written by Chapuis (cf. Chapuis and Rivière, 2003).

Dr. Karin Boven an anthropologist from the Dutch school conducted research on the Wayana culture in the early 1990s which has recently resulted in her publication *Overleven in een Grensgebied, Veranderingsprocessen bij de Wayana in Suriname en French Guiana* (Boven, 2006). During her visits to the village of Kawemhakan on the Surinamese side of the Lawa River, she recorded several oral traditions of the Wayana. She later published a selection of these stories with a Dutch translation<sup>28</sup> and distributed a few copies among the Wayana themselves.

Unfortunately as is true for many indigenous societies, despite their enthusiasm for researchers to conduct research on their language and culture, the Wayana seldom have the opportunity to view, understand or benefit from these studies; a point that needs more attention by future researchers and something current projects are hopefully changing.

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<sup>27</sup> The majority of anthropological work carried out on the Wayana was conducted in Suriname and French Guiana due to the easier processes in obtaining research visas. Daniel Schoepf is one of the few of the aforementioned names who, has published accounts over the Wayana in Brazil.

<sup>28</sup> This publication is: *Over Jagers, Volken en Geesten in het Zuidelijk Bos: Wajana Nekalëtpitom/Wayana Verhalen*. Paramaribo 1995.

# 2 Theoretical Setting

A theory is more like a scientific law than a hypothesis. A theory is an explanation of a set of related observations or events based upon proven hypotheses and verified multiple times by detached groups of researchers. One scientist cannot create a theory; he can only create a hypothesis. ([www.wilstar.com/theories](http://www.wilstar.com/theories))





## **2.1 Introduction**

This chapter outlines the historical developments of spatial thinking and its surrounding theories, particularly those concerning spatial perception. Additionally a description of the various manners in which spatiality may be expressed linguistically is given.

## **2.2 History of developments in spatial thinking**

The study of spatial thinking has its foundations in classical Greek thought where the initial debates were concerned about whether space should be perceived as material or as a void. Aristotle was the first to break this line of thought and introduced the notions of reference point, landmark and ground into spatial thinking. These notions now form the basis of our contemporary concepts of 'frames of reference' (Levinson, 2003: 6-7). It was also Aristotle who posited that spatial orientation extends along six phenomenological dimensions left-right, front-back and up-down which all extend from the ego (Ibid: 7; cf. section 2.3.1) This relative, ego-centric and anthropomorphic bias has remained in spatial thinking until recently and has only in the past decade been seriously questioned by researchers of the Max Planck Institute for Psycholinguistics at Nijmegen, The Netherlands and by followers of neo-Whorfism such as Lucy<sup>29</sup> and Silverstein<sup>30</sup>.

Although Aristotle recognized the idea of absolute space it was not until the 17<sup>th</sup> century that an actual distinction between relative and absolute space was made by Issac Newton. Although Leibniz quickly dismissed his ideas as "*unnecessary metaphysics: space is no more than the relative notion of things*" (Ibid: 8), Newton's notion of absolute space remained and was further developed in the 18<sup>th</sup> century by the influential German philosopher, Immanuel Kant, who argued for its existence, assigning it to intuition. He enhanced on this theory by stating that the conception of absolute space could only be understood from our own phenomenological view of spatiality. Until recently this ego-centric, anthropomorphic and relative notion of spatial orientation was assumed to be a universal characteristic of spatial thinking. Even today the Kantian tradition continues to be upheld by many contemporary psychologists, cognitive scientists, and linguists despite the knowledge that it was founded on an Indo-European language bias. (Ibid: 10-12) This Kantian tradition and Indo-European bias will be discussed in more detail below in section 2.2.1.

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<sup>29</sup> Prof. John A Lucy is currently Professor at the Department of Comparative Human Development at the University of Chicago. His research interests include the role of language and grammatical diversity on thought and through cognitive psychology experiments and linguistic analysis he has reformulated the Principle of Linguistic Relativity (Foley, 1997: 211).

<sup>30</sup> Prof. Merrill Silverstein is currently Professor of gerontology and Sociology at the University of California. Her research on the Principle of Linguistic relativity is more traditional than that of Professor Lucy. However she also expands on the original theory into the linguistic field of pragmatics (Foley, 1997: 211).

### **2.2.1 The Principle of Linguistic Relativity**

The Boasian tradition of relativism emerged later from the philosophical ideas of Kant, and the subsequent theories of the neo-Kantian followers. Within this the German philosopher, Johann Herder, posited that:

Humans' experience and understanding differ to the extent that their languages do; each language and each culture reflecting the world in a particular way (Foley, 1997: 193).

Another German philosopher and linguist, Wilhelm von Humboldt, further developed the ideas of Herder positing language as an "*a priori framework of cognition*" (Ibid: 193) and thus influencing human thought and experience. He argued that linguistic diversity therefore meant cognitive diversity, however, he also believed in the existence of linguistic universals, especially within grammatical structures (Ibid: 194).

Frans Boas, one of the most prominent figures within early relativistic thinking, later expanded on the neo-Kantian ideas of Herder and von Humboldt. Like Kant, Boas posited that language had a "*classificatory function*" in that it organized "*our experience of the sensible world*" (Ibid: 194). Boas further elaborated on these ideas and emphasized the existence of linguistic diversity within such classification systems. Through the comparison of Native American and Indo-European languages Boas ascertained that spoken language only expresses part of a complete thought process and as different languages express different parts of this process, linguistic variation must exist. He concluded that languages express, but do not determine, thought; and that linguistic variation must be culturally determined rather than cognitively, as "*individual abilities do not vary across culture*" (Ibid: 195). Boas also postulated that classification was done on an unconscious level as the framework of a language is largely unknown by its speakers. One of the earliest and most influential theories emerging from the Boasian tradition was the so-called Sapir-Whorf hypothesis which posited that:

The structure of a given language will affect the way in which speakers of that language think. The implication of this is that people who speak different languages will think differently". (Barnard and Spencer Eds. 2002: 499-501)

Edward Sapir was a student of Boas who further developed the ideas of Boas, but within a more structural framework than his predecessor. Sapir perceived language as a "*formally complete system*" (Foley, 1997: 198), and the experienced world, and thereby classification, to be socially and culturally determined. In contrast to Boas, Sapir claimed that:

Only in language the full potential of thought is unfolded ... [and as] "grammatical categories vary across languages, resulting in mutual incommensurability, different languages must channel conceptual thinking in different ways (Ibid: 198).

Benjamin Whorf, educated as a natural scientist, based his “Principle of Linguistic Relativity<sup>31</sup>” hypothesis<sup>32</sup> on Einstein’s Principle of Relativity. According to Whorf, human spatial thinking is influenced by culture and language so therefore where languages differs, so does the conceptualization of spatial thinking. As he states:

Users of different grammars are pointed by their grammars toward different types of observations and different evaluations of externally similar acts of observation and hence are not equivalent as observers and must arrive at somewhat different views of the world (Levinson, 2003: 18).

Despite his hypothesis of linguistic relativity, Whorf’s perception of spatial concepts was universalistic in nature. He posited that:

Spatial conception is strongly informed by innate presumably biologically based, universals, so that it is essentially the same in all languages and cultures (Foley, 1997: 215).

This idea of universality is similar to the philosophies of Immanuel Kant in which he postulates that humans conceive space through a relativistic, egocentric and anthropomorphic bias, whereby the ego is the very centre of spatial thinking.

As mentioned above, in more recent times there has been a revitalization of the Boasian tradition and the Principle of Linguistic Relativity’. Unfortunately this also results in studies wherein linguistic diversity is approached with the impression that diversity lays in the complexity of languages, suggesting that less complex languages to be inferior and lacking knowledge to some degree. Everett (2005: 621-634) in his study of the Pirahã, gives an eurocentric account of how the lack of numerals, tense and colour and kinship terms in the Pirahã language must reflect the same lacking culturally. Unfortunately what is lacking, is rather the ability to look outside his own ethnocentric perception, in order to attempt to understand the language and culture of the Pirahã from an emic point of view. Despite a few studies of this nature the majority of ethno-linguists succeed in less ethno-centric analyses and still more are providing new evidence through cognitive experiments and cross-linguistic comparison, validating claims of linguistic and cognitive relativity (e.g. Lucy and Silverstein as those working at the Max Planck Institute for Psycholinguistics, such as Stephen Levinson).

### **2.3 Spatial orientation**

The following sub-sections concentrate on the theories and history surrounding the study of human spatial orientation and perception.

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<sup>31</sup> The Principle of Linguistic Relativity is also known as the Sapir-Whorf hypothesis.

<sup>32</sup> Followers of the Boasian tradition perceive his theory as a truism rather than a hypothesis.

### **2.3.1 The phenomenological bias**

Phenomenology, which can be dated back to Aristotle and, much later, the Kantian legacy (cf. section 2.2), has a long tradition within spatial thinking. According to this tradition, spatial orientation among humans is assumed to be solely relative, ego-centric and anthropomorphic in nature (Levinson, 2003: 10). According to phenomenology, our spatial framework is perceived from the ego from which several planes extend. Three axes are identified along these planes: the vertical plane provides us with the up-down axis and the horizontal plane with two axes, namely right-left and front-back (Foley, 1997: 215). Within this line of research it has been assumed that all languages are universal in that they perceive, and thus, express spatial orientation through relative, ego-centric and anthropomorphic concepts. This claim of a universal phenomenological bias within spatial orientation, has been solely founded on research on Indo-European languages and on our own western tradition and yet it has been accepted to be a truism in all disciplines of human sciences. Even within anthropology, universalistic thought has been predominant within the ideas of spatiality, and it was assumed that *“bodily experience is universally the basis for spatial thinking”* (Levinson, 2003: 13). Many anthropologists also posited that the spatial concepts of ‘left’ and ‘right’ were the *“primordial source of binary opposites”* and common in all cultures. (Ibid: 13).

Recent research on non-Indo-European languages and cultures is presently changing these preconceptions. For example, researchers of the Max Planck Institute of Psycholinguistics in Nijmegen, the Netherlands, have found much evidence to challenge this universal theory of phenomenology in spatial thinking. They posit that spatial language and thinking differs greatly between languages and cultures. Through a series of cognitive, non-verbal tasks and cross-linguistic examination they conclude that space can be perceived, not only from a phenomenological perspective, but also absolutely, whereby the speaker expresses location through geographical axes extending from landmarks or cardinal directions rather than the ego. The axes used are dependent upon the surrounding environment and include upstream-downstream, uphill-downhill, seaward-landward or east-west coordinates. (Foley, 1997: 216; Levinson, 2003: 19)

### **2.3.2 Frames of reference**

Within spatial orientation the location of an object (Figure) is described in relation to a predetermined reference point or landmark (Ground). How this relationship is perceived is dependent upon our underlying coordinate systems (cf. section 2.3.1), which determine the frame of reference we use in our spatial orientation, and its subsequent expression. Three distinct frames of reference exist within spatial language, namely: the relative, intrinsic and absolute frame.

Relative frames of reference are viewer-centred and tend to be based on the phenomenological axes of left-right, front-back and up-down. It is based on a ternary system which uses three reference points to express the location of an object; namely the Figure, the Ground and the speaker. Thus the Figure is

described in relation to the Ground from the viewpoint of the speaker or perceiver. For example ‘the ball is to the left of the chair’ describes the location of the ball to be at the left side of the chair as perceived by the speaker, which is not necessarily the left side of the chair itself.

The intrinsic frame of reference uses a binary coordinate system and is object-based. Here the relation and description is determined by “*the ‘inherent features’, sidedness or facets of the object*” (Levinson, 2003: 32). For example ‘the ball is in front of the house’, describes the location of the ball to be at the actual front side of the house regardless of the position of the speaker/perceiver. This system varies cross-linguistically and can be function-based, as in English or shape-based as in Tzeltal (Ibid: 41).

The absolute system is also binary and the location of an object is specified in relation to a fixed landmark or direction. These parameters are generally determined by the surrounding environment, resulting in cross-linguistic variation. Cardinal points<sup>33</sup>, upstream-downstream<sup>34</sup>, uphill-downhill<sup>35</sup> and seaward-landward<sup>36</sup> bearings are predominantly found within this system. For example ‘the ball is downstream of the house’.

There is worldwide much diversity in how many, and which, frames of reference are used in spatial orientation and language. Certain peoples rely predominantly on just one frame whilst others may use two or all three. Through the examination of the cognitive and linguistic research carried out by, for example the Max Planck Institute for Psycholinguistics, it can be posited that the dominant frame of reference found in spatial language reflects the underlying coordinate system of its speakers. Languages with a predominantly intrinsic or absolute frame of reference generally perceive space through an absolute or allocentric spatial mapping; whilst speakers of languages using a predominantly relative frame of reference generally preside over a more phenomenological bias within their spatial orientation (Levinson, 2003: 54). Li and Gleitman argued against these ideas by positing that all humans, regardless of their native language, act from an absolute frame of reference when outdoors and a relative one whilst indoors. They concluded this without realizing that the tasks set by the Max Planck Institute were conducted both inside and out, and that it had no great affect on the results achieved (Ibid: 197), this was also the case by the Wayana. Although the focus of this paper and research was not to study cognition or the underlying spatial mapping of the Wayana, the topic can not be fully ignored. In the tasks conducted on the Wayana, location inside or outside had no influence on their spatial orientation.

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<sup>33</sup> In particular Australian aborigine languages and peoples use cardinal directions in spatial orientation and expression (cf: Levinson, 2003).

<sup>34</sup> The use of the upstream-downstream coordinate system is used among several Cariban groups such as the Wayana as discussed under section 2.3.2 and 4.3.9.

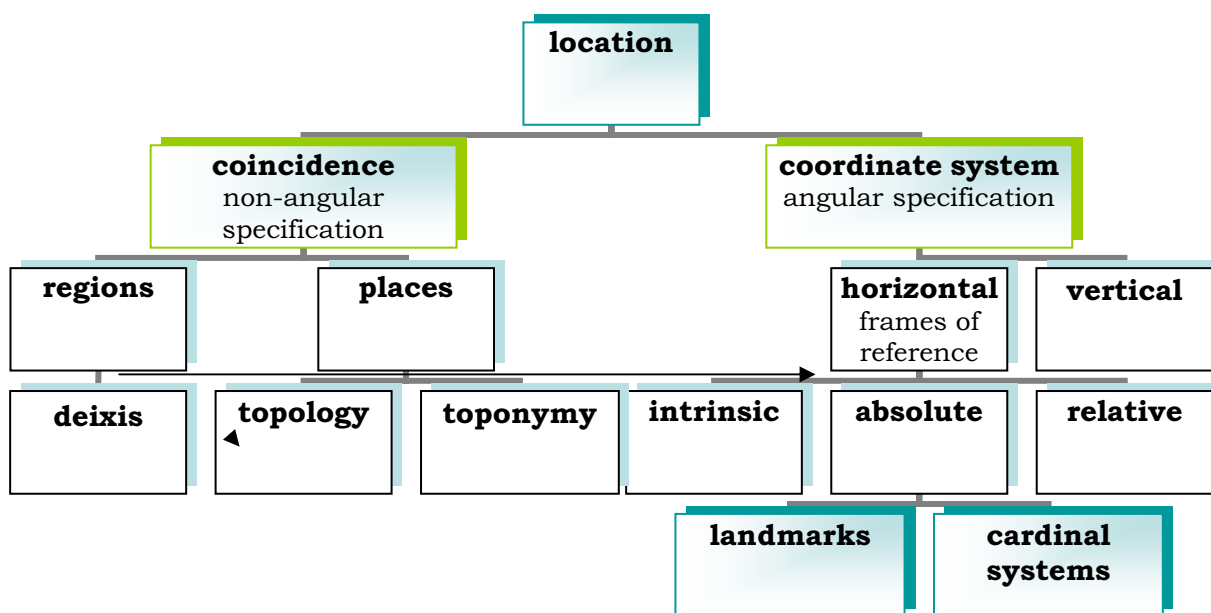
<sup>35</sup> This coordinate system is found among the Tzeltal Maya as described by Brown and Levinson (1993) and Levinson (1996).

<sup>36</sup> Many languages of the Pacific Islands, such as Tidore (cf: Miriam van Straden, 2000), use the seaward-landward coordinates to express the location of objects.

## 2.4 Spatial language

As explored above, despite previous universal claims based on the phenomenological bias of Indo-European languages, spatial orientation varies cross-linguistically. The focus of this thesis is to study and analyze spatial discourse as presented in the Wayana language, in order to gain more insight into their perceptions of the world, especially regarding spatial orientation. It is therefore important to understand the various possibilities of perceiving and expressing spatial orientation in general in order to fully comprehend the conception and perception of space among the Wayana.

The model below (Figure 2.1) has been taken from Levinson (2003: 66) and depicts the major semantic sub-fields within spatial language, some of which have been described above.



**Figure 2.1: Semantic sub-fields in spatial language**

In recent decades new, innovative linguistic and cross-linguistic research has challenged, not only the presumption of a universal phenomenological bias in spatial thinking (cf. section 2.3.1), but also the universalistic assumption that spatial concepts are expressed mainly through a single word class, that of adpositions (Ibid, 2003: 98). Results show that spatial notions are also present and expressed through other word classes such as adverbs, demonstrative pronouns, spatial nominals and locative verbs and that even languages exist which have no adpositions within their spatial language but use for example spatial nominals to express topological notions<sup>37</sup>. Strangely, the universalistic supposition that spatiality was confined to the word class of adpositions had

<sup>37</sup> This is true of Tzeltal, a Mayan language of Mexico (Cf. Levinson and Wilkins Eds., 2006: 74).

been based on studies of the Indo-European language stock, whilst even in these languages spatiality is expressed through several word classes.

### **2.4.1 Topology**

The simplest form of describing spatiality is through a study of the relation between the Figure and the Ground as expressed by the basic locative construction. In Wayana, this relation is expressed with the use of adpositions in the form of postpositions. Adpositions, and spatial nominals in those languages which lack adpositions, have an intricate relationship with the above-mentioned frames of reference as it determines how the relation between the Figure and the Ground is perceived and thus expressed. As described above, a ball can be found to the ‘left of a house’, to the ‘side of the house’, ‘south of the house’ or ‘downstream from the house’ depending on which frame is used. The ground is generally categorized and encoded by postpositions, or spatial nominals. Although it has been posited, for example by Talmy<sup>38</sup> (Levinson, 2003: 72), that these are “*neutral over shape, material or medium, angle and magnitude*” (Ibid), this universalistic view does not hold among the Cariban languages of the Amazonian region. The Wayana, for example, do distinguish between differing ground types within their postpositions, having separate postpositions expressing location in a general area, in a small contained space, in a large contained space, in a large boundless area and in water (cf: section 4.2.2 for a full list of spatial postpositions in Wayana).

### **2.4.2 Toponymy**

Toponymy is the least studied sub-domain of spatial language<sup>39</sup> to date, and is concerned with the study of place names especially with regards to their origin and meaning. This is perhaps the more interesting facet within toponymy as it allows us an insight into spatial onomastics and history of a particular group. Place names are often derived from the geographical location, environmental surroundings or historical events. The village of Apetina was originally two villages: Apetina and *Pilëuimë* ‘large arrow-cane’, which have now become joined. The name *Pilëuimë* originates from the large amount of a particular bamboo sort found at the location of the village, from which the Wayana previously made their arrows<sup>40</sup>.

### **2.4.3 Deixis<sup>41</sup>**

Spatial notions can also be expressed by deictic elements whereby the location of the Figure is expressed in relation to the speech act participants. Linguistic variation exists within the deictic system as some languages have a binary

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<sup>38</sup> Prof. Leonard Talmy is currently Professor Emeritus of Linguistics at the State University of New York. His main line of research is cognitive linguistics, especially concerning typologies and universals of semantic structure within natural-language semantics ([www.linguistics.buffalo.edu/people](http://www.linguistics.buffalo.edu/people)).

<sup>39</sup> Toponymy is actually a sub-domain of the study of onomastics, the study of origin and use of proper names.

<sup>40</sup> Today the bow and arrow has generally been replaced by the shot gun for the hunting of mammals and birds in the forest. A small bow and arrow continues to be used under the water to hunt a particular fish species.

<sup>41</sup> This paper is solely concerned with spatial or place deixis, and not other types such as emphatic, discourse, social or time deixis.

deictic system which expresses location to be proximal (near the speaker) or distal (away from the speaker) and others have a tertiary system which includes the medial parameter. Other languages are more detailed in their deictic system and include other parameters such as the audible-nonvisible as in Trio (cf. Carlin, 2004: 148-151). Deictic relations can be expressed through several word classes such as locative adverbs, personal pronouns and demonstrative pronouns or through verbs of motions; which word classes are used to express such relations varies cross-linguistically. The Wayana, for example, differentiate between the notion of 'there' being proximal, medial or distal on one level and being in a specific or non-specific location on another (cf. section 4.4 for a full overview of deictic system in Wayana). Deictic expressions are frequently accompanied by gestures which complement the utterance in direction and distance. The Wayana always point in the direction intended and generally the size of the gesture is in relation to the distance implied<sup>42</sup>.

## **2.5 Final remarks**

In this chapter the domain of spatial thinking, and the expression thereof through language, was discussed and placed in an historical context. Due to previous studies based on Indo-European languages with a strong phenomenological bias, the notion and expression of spatiality was claimed to be universal in all groups and languages. This universal thought was also evident outside the field of linguistics as even the great relativist thinkers within the social sciences, such as Boas and Whorf, also assumed an innate universal perception of space among cultures. Recent research over the past decades has resulted in a revival of the Boasian tradition of Linguistic Relativity, extending it into the domain of spatiality. Contemporary linguistic and cognitive research conveys how spatial language varies cross-linguistically, as does the underlying spatial perception. Not only is space perceived phenomenologically but there are three distinct frames of reference from which the location of the Figure may be perceived; this varies greatly cross-linguistically.

Thereafter, a condensed description of the sub-fields found in spatial language was given, allowing a glimpse into this large domain of spatiality in linguistics. This also differentiates from the previous idea that spatiality was expressed solely through the class of adpositions. In chapter 4 a more detailed account of the spatial language of the Wayana will be given. Due to the restrictions of a study and paper of this size, the main focus will be on topological relations and how the Wayana grammatically differentiate between various types of Ground. Firstly, a description of field methods used in the field to obtain the data on which this research is based is given in the following chapter, Chapter 3.

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<sup>42</sup> These were general observations made in the field, further research would ascertain whether there is a direct correlation to the type of gesture made and the distance of a location to the speaker. It has been suggested by Levinson (2003) that this is the case.



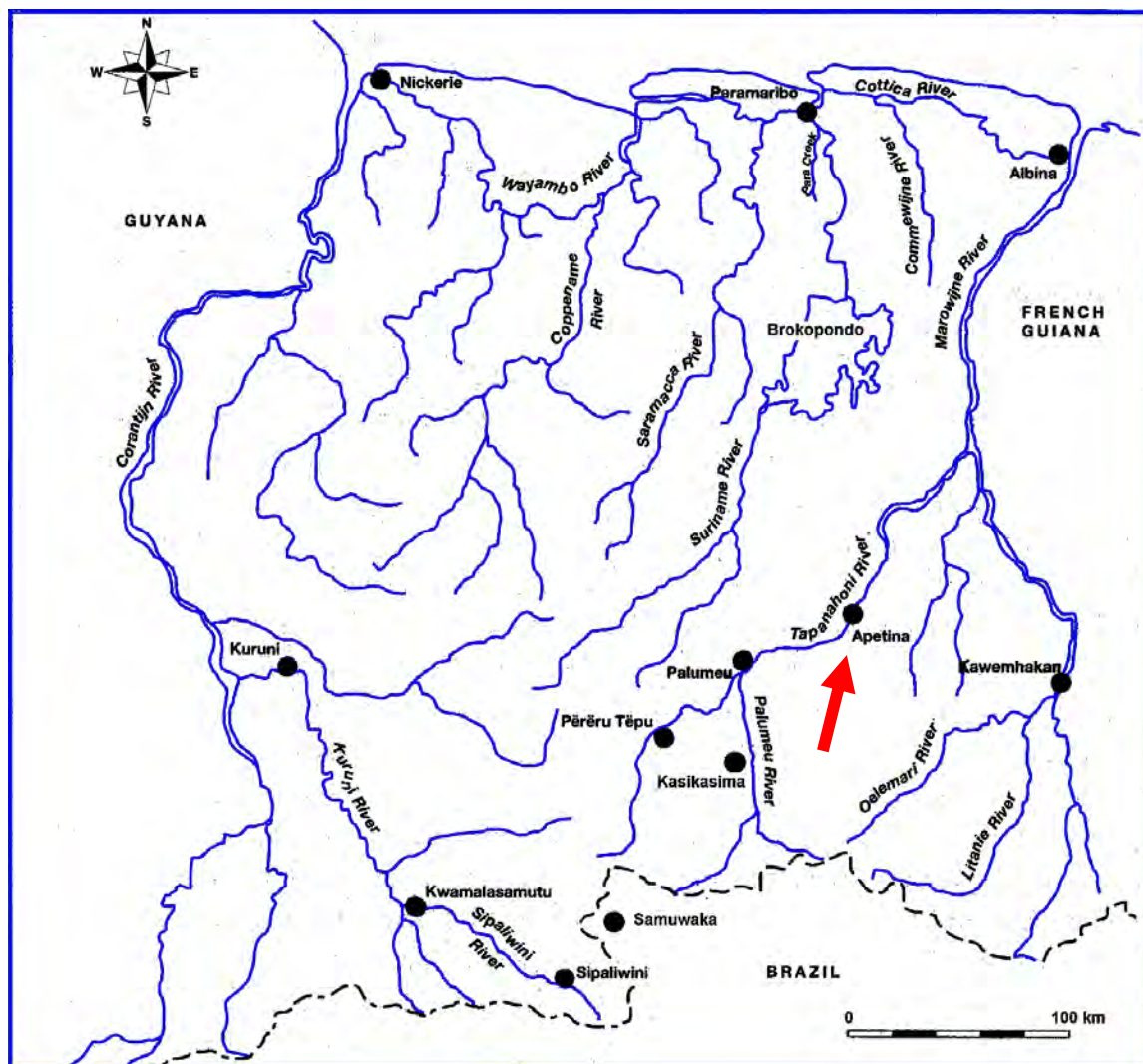
# 3 Methodology

Without method, we are left with chance. Chance is the opposite of method and we would have a very disorganized world without methods and techniques. But, what is “Method”? Unfortunately method is a very ambiguous word. It’s so ambiguous that it has been widely misused and misinterpreted in the fields of science and knowledge. ([www.scientificmethod.com](http://www.scientificmethod.com))



### 3.1 Introduction

This chapter firstly outlines the terms and conditions that apply to empirical research in general before giving a description of the actual methodology applied during this particular fieldwork session. This was carried out in February and March, 2007 in the village of Apetina, Suriname (cf. Map 3.1).



**Map 3.1: Location of Apetina, Suriname**

*source: Dr. Eithne Carlin*

The main aim of this research was to analyze the grammar surrounding topological relations in Wayana (cf. Figure 2.1, section 2.4), whereby the emphasis lay on acquiring an overview of the rich postpositional system existing in Wayana spatial language. Additionally an insight into the deictic system, existent in the locative adverbs, third person pronouns and the

demonstrative pronouns, was to be obtained and analyzed. In order to understand the grammar surrounding spatiality in Wayana, an analysis of the frames of reference used in the perception and expression of space was also essential. A description of the linguistic, cognitive and ethnographic methodology used is given below.

### **3.2 Empirical research**

Without a doubt, the ideal way of conducting linguistic research is by living for a long period among the speakers of the chosen language of study, allowing the language to be experienced in its daily context. However, in the field many factors influence how data is acquired and the subsequent quality and quantity of that which is collected; including the background of the researcher, the length of time spent in the field and the willingness and educational background of the speakers. A short overview is given below of certain factors which may influence the collection of data in the field, with special reference to my own experiences in Apetina.

An often underestimated problem is the phenomenon of ‘culture shock’ and the affects it can have on both the collection and the analysis of data. The greatness of its affects depends on many factors such as the character and background of the researcher as well as the remoteness and type of community visited. In order to study indigenous languages, researchers often live for longer periods in remote villages, in difficult climates with sparse supplies and resources. Our own concepts of hygiene, privacy and accepted social behaviour may differ greatly from those of the community visited. Although it is essential to know as much as possible about the people whose language is going to be studied, often text book descriptions fall short of how it is experienced in reality. It is important to set realistic goals as to what can be achieved in the field during the time available, and more importantly a flexible mind is needed in order to deal with the unexpected on both a personal and professional level.

Being a researcher also brings responsibility with it, responsibility towards the community and the speakers of the language. It is important to treat the local community as you would like to be treated yourself, approaching them therefore with respect rather than as study objects. One needs to realize that as a researcher, one is taking local knowledge from the community and since many have reciprocity as one of their canons, one needs to act accordingly. In the past this philosophy of reciprocity has often been misused, consciously or unconsciously, and mistrust has come in its place. A researcher in the field needs to be aware of the effects his/her work has on the community and what he/she can do in return for the knowledge gained. Researchers should always keep in mind: what does the local community wish to gain from his/her research?

The choice of field assistants can be a delicate subject as local politics needs to be understood and respected. Both the Wayana and the Trio live in the village of Apetina. However, being a Wayana village the Wayana have a higher social status than the Trio and this needs to be taken into consideration in order to

avoid possible social implications resulting from feelings, such as jealousy. The members of the two Trio families who reside in Apetina are fluent in Wayana and many Wayana are also proficient in Trio. Due to this, one had to be aware of linguistic differences between the two languages and how they sometimes unconsciously get mixed during conversation. All data therefore always needed to be double-checked, which should be common practice in field linguistics; unfortunately this is not always the case. Hierarchies among families also needed to be understood on a political and social level. Taking notes whilst speaking to one family and not the other could also lead to feelings of jealousy resulting in social conflicts, which particularly arose during parties where great quantities of cassava beer is consumed.

Gender also plays a role within villages and thus in the choice of field assistants. In Apetina the women are responsible for almost all household tasks leaving them unavailable for fieldwork participation most of the day. Being a woman also had consequences as working with predominantly male assistants could cause jealousy among the family. Another point worthy of consideration was that of language. A vernacular language is needed in order to understand the studied language on a higher level and it accelerates and facilitates the process of collection and learning. On arrival in Apetina my command of spoken Wayana was minimal and so I needed an assistant who was also proficient in Dutch. This narrowed down the possibilities of suitable field assistants greatly as few Wayana can speak Dutch at a reasonable level.

Other aspects that affected fieldwork within Apetina were those of seasons, weather and local parties. My fieldwork was conducted during the short dry season in February and March. During this time the majority of the fields had already been cleared and planted resulting in an increase of available free time. A consequence of this was that was therefore an ideal time to visit relatives in other villages or to travel to Paramaribo for supplies. As a result the population of the village was considerably diminished during my stay. This extra freetime available and the increased wealth in the village resulted in a higher frequency of parties and the subsequent consumption of cassava beer. As one can imagine little fieldwork could be conducted at these times. Weather conditions also affected fieldwork in the sense that certain conditions were favourable for certain types of fishing and hunting and could not be ignored. At such moments almost all the men in the village simultaneously left and could be seen either fishing along or in the river, or returning hours later from the forest with game after a successful hunting session. As a researcher, one can easily forget that the local inhabitants have a daily life which needs to continue whether research is to be conducted or not.

A final cause of distraction was the arrival of visitors in the village. Being a relatively isolated village, visitors seldom arrived and when they did the whole village stopped, turning all attention to the new arrivals. During my fieldwork period the CDFS (cf. section 1.3.2) was busy with the construction of a new school which greatly increased the frequency of flights and visitors. This

decreased the research time available on a linguistic level but increased possibilities for participation and observation. The building of the school also influenced by choice of field assistants as several Wayana who were also proficient in the Dutch language had been employed by the CDFS to help with the construction of the school.

### 3.3 Methodology

In the following sections an overview of the actual linguistic and ethnographic methodology used in Apetina is given.

#### 3.3.1 The collection of linguistic data

There are several methods for collecting linguistic data resulting in the accumulation of a variety of forms of language; namely elicited answers, natural spoken language and narrative styles. In reference to the quality of the data collected, all three forms have both advantages and disadvantages of which researchers need to be aware. Language used in oral traditions is often less conventional than that found in general everyday conversation. It is often rich in metaphors which are often misunderstood by the researcher, resulting in incorrect translations and analysis. Ideally, natural language should be the primary source and should be collected under various conditions and contexts. However, whether all data are suitable for use<sup>43</sup>, needs to be discussed with the actors. Elicitation is inevitable and can be especially useful for obtaining paradigms of, for example, verbs and possessed nouns. Despite these advantages one must also be aware of the restrictions elicitation brings as the data is often what you ask for rather than natural. In Apetina all forms of data were collected using the methods described in the following sections following the introduction of my main assistant, Johan.

My main field assistant was Johan (Figure 3.1), who was about 33 years old<sup>44</sup> and besides his family commitments was also a tour guide for tourists arriving in the village. His proficiency in Dutch was of a reasonable level which helped with translation. Despite a great lack of education in the village Johan could read and write which was helpful during the transcription of audio recordings. We worked generally on a



Figure 3.1: Johan

<sup>43</sup> As natural language often includes personal conversations which may be private in nature, the researcher needs to be aware of the consequences of making such data public.

<sup>44</sup> Until recently the phenomenon of birthdays and actual age was unknown and unimportant among the Wayana, and indeed other Amazonian peoples. With the increased influences of the western world and the coinciding bureaucracy such information is becoming increasingly important. Additionally with the growth of capital wealth the number of possible festivities has also increased and birthdays are becoming increasingly important. Despite all this, the majority of the Wayana only know approximately which year they were born and several appear just to pick a random date on which to celebrate it.

daily basis during the week for up to two hours a day. As the Wayana are not used to mental work of such a kind, two hours was the maximum that could be worked intensively per day.

### **3.3.1.1 General conversation and elicitation**

Data collection began with simply walking around the village and stopping by various houses making ‘small talk’ and asking villagers what they were doing and what certain items were. In this manner I could collect wordlists of everyday items and learn to construct simple sentences on which I could later elaborate. This method became part of my daily routine. The quantity and quality of data collected varied from day to day depending on my own state of mind and that of the villagers, as some days people were more open than others to giving information. I tried to check all data with at least one other Wayana during the course of my stay. The learning of new words and concepts laid the basis for further elicitation but one needs to be aware that the answers are not always natural but often what the speaker thinks you want to hear.

### **3.3.1.2 The Topological Relations Picture Series**

The Topological Relations Picture Series from Melissa Bowerman, of the Max Planck Institute for Psycholinguistics in Nijmegen, was used in short elicitation sessions with a few speakers on different occasions. The book consists of simple pictures denoting a Figure-Ground relationship (Figure 3.2 and Figure 3.3) and is devised to show all forms of relations expressed within language. For each picture the Wayana speaker was asked where the highlighted object (shaded grey) was in relation to the Ground. Although the data collected were mainly in the form of short elicited sentences, it did give a good insight into the various postpositions used to express topological relations in Wayana, and in their perception of spatial orientation. Again this method opened up other possibilities of elicitation and conversation. The obtained answers were checked with other speakers in the village. Creativity was sometimes needed as some pictures depicted western objects still relatively unknown to the Wayana, such as a telephone hanging on a wall and a garden hose.



**Figure 3.2: Example from Topological Relations Picture Series**



**Figure 3.3: Example from Topological Relations Picture Series**

### **3.3.1.3 Personal stories**

As the data collected from elicitation is limited, I recorded short narratives in the form of short personal stories from my main field assistant Johan. After making an audio recording of his narrative, the story was immediately transcribed through replaying the tape and writing out and translating each word with the help of Johan. Whilst transcribing the texts I also used elicitation

techniques to obtain paradigms of unknown nouns and verbs and to ascertain which postpositions could be used with which nouns, providing me with extra data. The collecting of stories provided me with more natural, flowing language rather than short elicited sentences which are inevitable in the beginning of learning a foreign language.

### 3.3.1.4 Collection of oral traditions



**Figure 3.4: Kulepeman and Dr. Eithne Carlin at work**

This was conducted in collaboration with Dr. Eithne Carlin who collected oral traditions from storyteller Kulepeman (Figure 3.4) and a traditional healer, Same. The same technique was used as described above to record and transcribe the stories and an extra video recording was made having the added value of capturing gestures which are important within the telling of oral traditions. It is vitally important to have a vernacular language in order to obtain the best understanding of the text which is often rich in metaphors. Although the context of such stories may be lost to a certain extent as they are being told through a

monologue rather than interactively, much linguistic and ethnographic data can still be gleaned from such sources.

### 3.3.1.5 Photo-object matching task

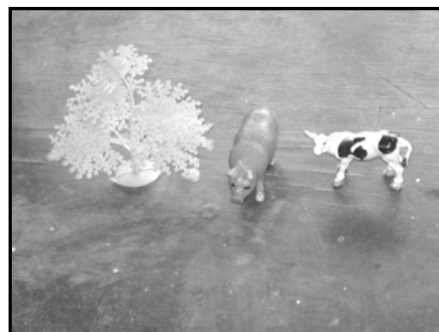
The Max Planck Institute of Psycholinguistics in Nijmegen designed a ‘space games kit’ by which to determine the underlying spatial mapping and frames of reference used by native speakers. The kit consists of several ‘games’ or tasks, the majority of which are designed to determine cognitive processes rather than the collection of linguistic data. Although I also conducted the recall-memory task (cf. section 3.3.2.1) to ascertain the underlying coordinate system of the Wayana, the main aim of this research was to collect as much topological, linguistic data as possible. In order to achieve this, the photo-object matching task was the most suitable for my needs as it is designed to show a wide variety of topological relations. The Wayana have a relatively large system of postpositions<sup>45</sup> denoting topological relationships between Figure and Ground. The main goal in conducting the photo-object matching task was therefore to analyze this postpositional system and to determine which postpositions are attached to which category of nouns. Eventually the objective is to investigate why the Wayana have such a rich system and how it reveals the manners in which they perceive the world around them.

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<sup>45</sup> Cf. section 4.2.2 for a complete overview of the spatial postpositions in Wayana. In the data collected, I attested 27 locatives, the majority of which also encompass a directional counterpart. Not included in this number are the perlatives *-ilě* and *-lo* and the source marker *-ině*.



The original photo-object matching task is conducted between two native speakers, one of whom is given a set of photographs depicting a predetermined arrangement of plastic trees, farm animals and men; and the other is given a set of these actual figurines. The participant in possession of the photographs has to instruct the other to place the figures so they match the alignment in the given photograph. To ensure that the necessary results are obtained, the speakers are placed side by side, separated by, in this case, a large cloth obstructing their view of the other participant and their actions. When they believe the arrangement matches that on



**Figure 3.5: Example of layout of figurines during the photo-object matching task**

the photograph, the instructor examines the result and corrects where necessary. In the field it was discovered that the figures did not completely match those on the photograph and so the task was slightly adapted to avoid any complications that may arise. Instead both participants were given the exact same set of plastic figurines and I prearranged those of the instructor so they coincided with the various arrangements on the original photographs (cf. Figure 3.5). The task was enacted using eight different compositions and both participants took it in turns to instruct the other to arrange his figurines in the same manner as his own<sup>46</sup>. The task was recorded and later transcribed and translated in the field with the help of both participants<sup>47</sup>.

A few problems arose during the enactment of the task. The figurines themselves were already alien to the Wayana, and even more so as they depicted western farm animals. This led to much confusion but also hilarity as the ‘cow’ was referred to as *kaupsik* ‘little cow’, *kapau* ‘deer’ and *molikipsik* ‘little horse’ (cf. (1.1)).

- (1.1) kau-psik    enik-pena-psik    kapau  
          cow-DIM    Q.ANIM-HESIT-DIM    deer  
          the little cow, what-do-you-call-him, deer

The pig was referred to as *pëinëkë-imë*, (pig-AUG) literally ‘very large pig’, which is the terminology the Wayana use to refer to domesticated pigs, differentiating them from the wild boars found in the forest. The small plastic trees were generally named *wewe* ‘tree’ and *paja* ‘grass’. However, on a few occasions they referred to them as *wewe-ptile* ‘stunted tree’ or *paja-ptile* ‘stunted grass’, demonstrating that they had no ability to grow any further. Further complications arose as the ‘cow’ had a crooked neck which was confusing regarding the concept of ‘facing’.

<sup>46</sup> Although the photo-object matching task was adapted and actually became an object-object matching task, I continue to refer to it as the photo-object matching task in this thesis as it is based on that particular task of the Max Planck Institute.

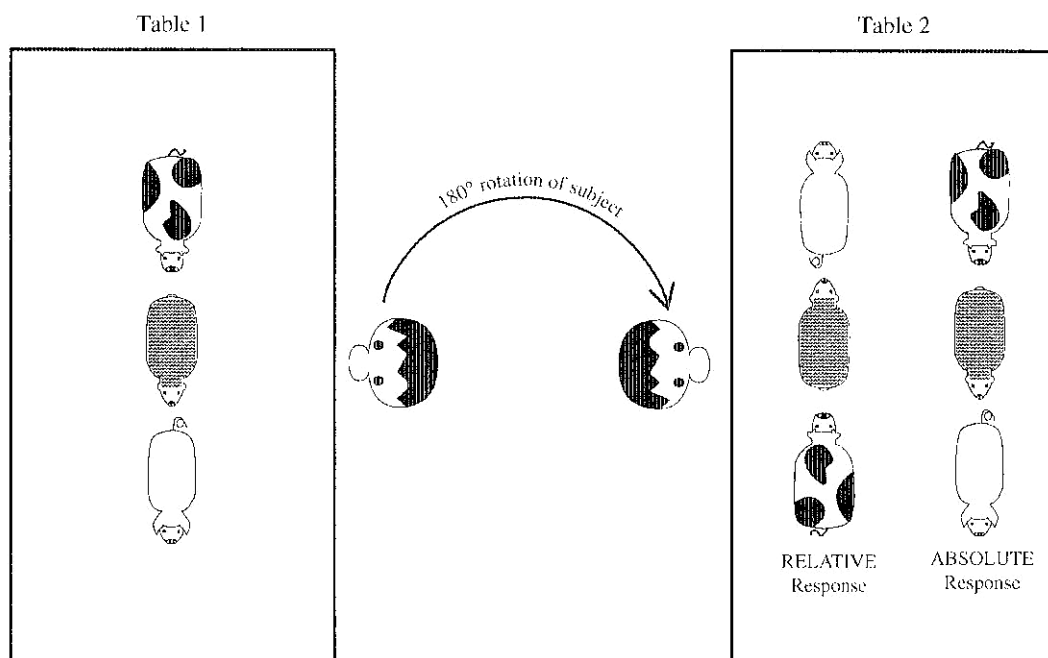
<sup>47</sup> Part of the data collected from this task can be found in the Appendices.

The task did, however, also produce a lot of interesting linguistic and ethnographic data that otherwise might not have been encountered. Other advantages included the obtaining of a rich corpus of topological data, the ability to understand the underlying frames of reference used by the Wayana and the collection of ethnographic data through observation. However, such tasks also have a few disadvantages that one needs to take into consideration. The kit is designed for a certain purpose and therefore you achieve a certain goal, as the test is not completely natural in character the linguistic data is also less natural. Although the spontaneous interaction between both participants was natural and contained interesting linguistic and ethnographic data, the collected data needs to be placed within a larger context and used in combination with other data obtained from other sources in order to create a representative overview of the language in general.

### 3.3.2 The collection of cognitive and ethnographic data

#### 3.3.2.1 Recall memory task

As previously stated the main focus of this paper is not to analyze cognition although it can also not be ignored when dealing with spatiality. As a small test, I conducted the ‘recall-memory task’, as designed by the Max Planck Institute of Psycholinguistics, to further strengthen ideas on the underlying spatial mapping of the Wayana.



**Figure 3.6: Recall Memory Task - Animals-in-a-Row**

Source: Levinson. 2003. *Space in Language and Cognition: Explorations in Cognitive Diversity*.

The ‘recall-memory task’, or ‘animals-in-a-row’ test, involves the placing of three plastic figurines in a row and asking the participants to remember how the figurines, in this case plastic animals, are placed. Subsequently, the participants are revolved by 180° and asked to reconstruct the arrangement they have just observed. I conducted this test among 8 different speakers of Wayana from varying ages and genders. 100% gave the absolute response which shows their underlying mapping to be allocentric, or absolute. Speakers of western languages with a relative or phenomenological bias give a relative result as depicted in Figure 3. (Cf. Levinson, 2003: 158-159).

### **3.3.2.2 Ethnographic data**

In order to place the linguistic data within a broader social and cultural context, the collection of ethnographic data was also required. Although the amount of data that can be collected in such a relatively short period of time is limited, I aimed to accumulate as much as possible in the time available to me. Methods used to achieve this included the conducting of interviews, the collecting of life-histories, observation and participation.

The interviews I collected were generally conducted under informal circumstances, and provided me with some valuable data, the quality of which increased towards the end of my stay. At this time my relationships with the villagers had strengthened and my proficiency in Wayana had greatly increased, resulting in more valuable data. It became evident that by not directly asking what you wanted to know, the more useful the accumulated data became, often the posing of direct questions resulted in the Wayana responding from within a particular role; one they believed you wished them to play. Interviews always need careful analysis as many factors need to be taken into account, such as who, why, when, under what conditions, and the like.

The aim of collecting life-stories was predominantly to acquire linguistic data with a more natural, flowing character, but much ethnographic data could also be gleaned from such exercises. Life-stories mainly concern everyday life within the village so when third parties are involved, one must be aware of what is being told and why. Everything needs to be placed within its own social and cultural context.

During my stay in Apetina, a large amount of valuable data was obtained through observation. This varied from observation during linguistic tests, to the observation of everyday life around the village. Living in the community house provided me with an excellent base from which to observe daily life. During the final weeks of my stay the frequency of participation also increased and included assisting in the preparation of cassava, which is of great importance in the community<sup>48</sup>. Additionally, during the participation of family meals much information was obtained concerning cultural aspects, social structures and

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<sup>48</sup> As stated by Karin Boven: “*het spreken van de taal en het kunnen bewerken en waarderen van cassava bleken ... belangrijke aspecten van het Wayana zijn*” (2006: 6); speaking the language and being able to process and appreciate cassava appeared to be important aspects of being Wayana’.

underlying relationships. Obviously observation is subject to subjectivity but through literature, experience and common sense much becomes apparent.

### **3.4 Conclusion**

Regardless of a relatively short stay among the Wayana of Apetina, I managed to collect a large corpus of linguistic and ethnographic data on which to base this study. The analysis of this data will assist me in obtaining a deeper understanding on how the Wayana perceive and experience space. As is true of any fieldwork, there are however, aspects I would change and improve during my next visit. During the analysis of the data collected during the photo-object matching task the value a video recording would have had became apparent. Many gestures and non-verbal communication can be collected with such recordings. Through experience, my field methods improved during my stay, this allows me to begin my next field work from a better position professionally and personally. By returning to the same village a greater relationship of trust will automatically be achieved which greatly enhances the quality and quantity of data collected. The most important condition for doing research in an indigenous community, I believe, is to treat local behaviours, hierarchies and above all the people with great respect. Only by perceiving the Wayana as subjects rather than objects, can a healthy working relationship be obtained and the most valuable data, be collected.

# 4 Linguistic Analysis

Everything that we have so far seen to be true of language points to the fact that it is the most significant and colossal work that the human spirit has evolved - nothing short of a finished form of expression for all communicable experience. This form may be endlessly varied by the individual without thereby losing its distinctive contours; and it is constantly reshaping itself as is all art. Language is the most massive and inclusive art we know, a mountainous and anonymous work of unconscious generations. (Edward Sapir)



## **4.1 Introduction**

As described in section 2, there is great variation worldwide in how space is perceived, and thereby expressed, in language. In Wayana spatiality is expressed lexically across several word classes, namely: spatial postpositions, locative adverbs and demonstrative pronouns. This chapter deals in detail with the morphology and semantics of these three word classes. Due to the focus and limitations of this paper, I concentrate solely on the morphological and semantic characteristics of spatial expression in Wayana, rather than giving a full grammatical analysis which would otherwise include phonology and syntax<sup>49</sup>.

The examples given in the following sections are taken from the data obtained during the ‘photo-object matching game’ (cf. section 3.3.1.5) and elicitation exercises based on the ‘Topological Relations Picture Series’ (cf. section 3.3.1.2). The main purpose of conducting these tasks was to collect a large array of spatial postpositions, which was successful as displayed in the following sections. In cases where examples have been taken from narratives, the source is noted below.

## **4.2 Postpositions**

Adpositions constitute a closed, heterogeneous word class. They must always take a complement in the form of a noun, noun phrase or pronoun. Postpositions are adpositions which follow their complement together forming postpositional phrases. The function of the postposition is to link its complement with the rest of the clause or sentence expressing a variety of semantic and syntactic relations.

### **4.2.1 Postpositions in Wayana: introduction**

According to Tavares (2006: 267), Wayana has 53 attested postpositions which are used to express semantic and syntactic relations representing notions of spatiality (in, on, at), temporality (when), relations (with, by), emotions or perception (afraid, angry, know) and other concepts such as the facsimile, instrumental, desiderative, and intensifier. In this paper I concentrate solely on the Wayana postpositions expressing spatial notions of location, direction, source and path. Prior to describing the semantics of each spatial postposition, I first give a concise morphological analysis of the postpositional word class in Wayana.

### **4.2.2 Spatial Postpositions**

Although the majority of the spatial postpositions (cf. Table 4.1) in Wayana are complex<sup>50</sup> in nature I treat them, in particular the locatives, as a whole throughout this thesis.

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<sup>49</sup> For those readers wishing to gain an insight into other aspects of Wayana, see the grammatical overviews of Jackson (1972) and Tavares (2006).

<sup>50</sup> Simplex postpositions are those composed of one morpheme whilst complex postpositions are composed of several morphemes functioning as one concept.

<b>LOCATIVE</b>	<b>GLOSS</b>	<b>TRANSLATION</b>	<b>DIRECTIONAL</b>
-po	LOC	general location on/in/at	pona
-jao	INT.LOC	contained in small demarcated area	-jak(ë)
-(h)tao	CONT.LOC	contained in large demarcated area	-(h)tak(ë)
-nao	LOC	contained in large, boundless area	-nak(ë)
-k(u)wao	LIQ.LOC	contained in liquid	-k(u)wak(ë)
loptao	deep.INT.LOC	contained deep inside, non-visible	loptak(ë)
ekatao	beside.LOC	beside	ekatak(ë)
ina	adj.LOC	at the side of, adjacent to	ina
awotao	rib.LOC	at the ribs	awotak(ë)
awopo	crossways.LOC	crossways	awopona
ahmotao	clear.space.LOC	clear space	ahmotak(ë)
lamnao	middle.LOC	in the middle of	lamnak(ë)
pole	align.LOC	in alignment with	pole
-pëk(ë)	CONTACT.LOC	unsupported contact	pëkëna
epoi	SUP.LOC	above: no contact	
uhpo	SUP.CONTACT.LOC	above: contact	uhpona
ahpo	back.LOC	on back of	ahpona
opine	INF.LOC	beneath	
opikai	INF.LOC	beneath	
em(ïn)patio	face.LOC	in front of/facing	em(ïn)patak(ë)
waliktao	behind.LOC	behind	waliktak(ë)
aktuhpoi	upstream.LOC	upstream	aktuhpona
ametai	downstream.LOC	downstream	ametak(ë)
etatopo	bank.LOC	on riverbank	etatopona
talihnao	outside.LOC	outside	talihnak(ë)
mitao	base.LOC	at base of	
wala	around.LOC	around	
-ilë	PERL	along, through	-
-lo	surface.PERL	along, over	-
-inë	SOU	source	-

Table 4.1: Spatial postpositions in Wayana

Additionally, Wayana has a number of derived postpositions, the majority of which consist of the lexicalization of the postposition with its nominal complement (cf. Tavares, 2006: 348):



*etato* + *po* → *etatopo*                      on the other side of the river  
*emi* + *pata* + *po* → *empatao*                facing

Unfortunately there remain several cases whereby the origin remains unclear resulting in lexicalized forms such as:

*ekatao*                beside, next too  
*lamnao*<sup>51</sup>            in the middle of

Orthographically, whether postpositions are written attached to their host or as a separate word depends on the speaker and his/her level of education. Several Wayana over the age of 35 have had basic schooling. However, during the War of the Interior, which raged from 1986-1992, the majority of schools in the interior were closed, leaving the subsequent generations without education. In October 2006, the primary school was re-established in Apetina and all children above the age of four attend five mornings a week. Many Wayana take the orthography of the bible to be the correct form of written Wayana, however, a systematic writing system is yet to be developed and followed by all speakers. In the examples given in the following sections, discrepancies may arise in the writing of the postpositions. In all cases I have followed the orthography of the speaker from which they come.

Many spatial postpositions in Wayana may be inflected for person, reflexivity and collectivity, and may also take other markers expressing location, negation, frustration and intensification (cf. section 4.2.2.1. and Tavares, 2006: 247-8). An outline is given below of the morphology of the spatial postpositions and Table 4.2 gives an overview of the order in which affixes and enclitics may occur on spatial postpositions, as found in the available data.

Pronominal prefixes	<b>ROOT</b>	spatial suffixes/ NOM	Plural suffix	NEG	ASSERT	FRUS	only
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**Table 4.2: Morphological structure of spatial postpositions**

#### 4.2.2.1 Morphology of spatial postpositions

This following section gives an overview of the morphology of the spatial postpositions in Wayana. Firstly the morphology of the actual postposition is illustrated, followed by a morphological analysis of how postpositions may be inflected for person, number and reflexivity. Finally an overview of the extra morphology in the form of affixes, postpositions and enclitics expressing a variety of concepts, is given.

<sup>51</sup> According to Tavares, it is possible that *lamnao* is derived from *lami* 'belly' and *nao* 'boundless container locative'.

### 4.2.2.1.1 Locatives

Stative locatives consist of two parts: a morpheme expressing the location types followed by the stative ending. Stative locatives may end in *-o*, *-po*, *-i*, *-a*, *-ë* and *-e*, with the majority ending in *-o* as given in Table 4.3. The first four locatives *-jao*, *-(h)tao*, *-nao* and *-k(u)wao* denote the four basic locative distinctions within Cariban languages, namely containment in a small demarcated area, in a large demarcated area, in a boundless, open area and in water (Derbyshire, 1999: 43).

LOCATIVE	GLOSS	TRANSLATION
<i>-jao</i>	INT.LOC	contained in small demarcated area
<i>-(h)tao</i>	CONT.LOC	contained in large demarcated area
<i>-nao</i>	LOC	contained in large, boundless area
<i>-k(u)wao</i>	LIQ.LOC	contained in liquid
<i>loptao</i>	deep.INT.LOC	contained deep inside, non-visible
<i>ekatao</i>	beside.LOC	beside
<i>awotao</i>	rib.LOC	at the ribs
<i>ahmotao</i>	clear.space.LOC	clear space
<i>lamnao</i>	middle.of.LOC	in the middle of
<i>em(in)patio</i>	face.LOC	facing
<i>waliktao</i>	behind.LOC	behind
<i>talihnao</i>	outside.LOC	outside
<i>mitao</i>	base.LOC	at the base of

**Table 4.3: Stative locatives ending in *-o***

The following table (Table 4.4) shows the five postpositions ending in *-po*. Semantically, they express location ‘on’ a flat surface and/or ‘in’ a general area, rather than in a contained space and they differ morphologically from the locatives ending in just *-o*, as will be described in the following sections (cf. subsections under section 4.2.2.1). They seem to form their own semantic and morphological category within the locatives.

LOCATIVE	GLOSS	TRANSLATION
<i>-po</i>	LOC	general location on/in/at
<i>uhpo</i>	SUP.CONTACT.LOC	above: contact
<i>ahpo</i>	back.LOC	on back of
<i>awopo</i>	crossways.LOC	at crossways from
<i>etatopo</i>	bank.LOC	on the (opposite) riverbank

**Table 4.4: Stative locatives ending in *-po***

Locatives ending with the marker *-i*, express general location in a specific direction such as *aktuhpoi* ‘upstream’, *ametai* ‘downstream’ and *epoi* ‘above with no contact’ and *opikai* ‘beneath’ (cf. Table 4.5). It is possible that this

marker is part of a perlocative form as the semantics of this group could translate as a locative or perlocative.

LOCATIVE	GLOSS	TRANSLATION
<i>aktuhpoi</i>	upstream.LOC	upstream
<i>ametai</i>	downstream.LOC	downstream
<i>epoi</i>	SUP.LOC	above: no contact
<i>opikai</i>	INF.LOC	beneath

**Table 4.5: Stative locatives ending in -i**

Only two spatial postpositions were attested with the stative marker *-a* (cf. Table 4.6).

LOCATIVE	GLOSS	TRANSLATION
<i>ina</i>	adj.LOC	at the side of
<i>wala</i>	around.LOC	around

**Table 4.6: Stative locatives ending in -a**

Again, only two postpositions were found with the stative ending *-ë* (cf. Table 4.7).

LOCATIVE	GLOSS	TRANSLATION
<i>pëk(ë)</i>	CONTACT.LOC	unsupported contact
<i>opinë</i>	INF.LOC	underneath

**Table 4.7: Stative locatives ending in -ë**

The final *-ë* of the postposition *-pëk(ë)* ‘unsupported contact’ is dropped when *-pëk(ë)* is word final. When other morphology is added, it occurs as its full form. This form of reduction is common within the Cariban languages (cf. Carlin, 2004: 185). Finally, just one locative was attested with the ending *-e*: the locative *-pole* ‘in alignment with’. No locatives were found in the data ending on *-u* or *-ĩ*.

Tavares (2006) divides the locative postpositions into three categories: containment, surface and away. The suffix *-wë* is posited as the basic locative ending denoting containment; which according to Meira, is etymologically the same element as *-o* (Meira, 2006: 317). Tavares also distinguishes the surface postpositions as morphologically different to the container locatives. However, she posits that they occur without an extra locative ending, thus marking them with *-ø* (Tavares, 2006: 277). Her categorization of what she expresses as ‘away’ postpositions, correlate with those I morphologically distinguish as ending with *-i*. According to Tavares the ‘away’ postpositions are formed with the ending *-je* (Ibid). However, in the data collected among the Wayana of Apetina these suffixes are used solely in when extra morphological data is taken on by the stem postposition rather than being the standard spatial suffix. In the data collected I could only find examples of *-wë* when locatives were followed by the

negation marker *-la* (4.1) and (4.2) and the source postposition *-inē* (4.3). It is likely that the *-je* and *-wē* endings noted by Tavares are the formative forms of the *-i* and *-o* endings, respectively, found in my data.

(4.1) wewe\_psi<sub>k</sub> i-lamnao katip i-lamnao-wē-la<sub>lep</sub>  
 tree\_DIM 3-middle.LOC like 3-middle.LOC-LOC-NEG\_FRUS  
 like in the middle the little tree, not completely in the smiddle

(4.2) ěw-ekatao hapo-n tii-kē ěw-ekatao-wē-la<sub>lep</sub>  
 2-beside.LOC like-NOM do-IMP 2-beside.LOC-LOC-NEG\_FRUS  
 you put them like one beside you, not completely beside you!

(4.3)<sup>52</sup> tepu-elī t-ěne-i<sup>53</sup> kanawa-jao-wē-inē  
 rock-top COREF-see-NF boat-INT.LOC-LOC-SOU  
 they can see Tepu Top from inside the boat

There are no attested cases of *-wē* occurring with other spatial postpositions, for example with the perlocative *-ilē*: ‘by boat’ *kanawa-ilē* \**kanawa-wē-ilē*. It is probable that the *-wē* ending originally constituted the full form of the locative postpositions and that it has now become reduced to *-o*. It appears that *-wē* is only used today when the stative locatives are followed by certain affixes, rather than functioning as a standard locative suffix morpheme as posited by Tavares.

Tavares attributes the same properties of *-wē* to the suffix *-je* denoting away, which is etymologically the same as *-i*. In the data collected in Apetina the only example found of this particular suffix was in combination with the source suffix *-inē* (4.4). As in the above examples the ‘away’ morpheme mentioned by Tavares (Tavares, 2006: 278) appears to have become lexicalized. There are no other examples with other postpositions to verify if the negated form of *aktuhpoi* would be \**aktuhpo-je-la*.

(4.4) ø-umēkē-mē-ja-i aktuhpo-je-inē kanawa-ilē  
 1→3.1TR-come-CYC-PRES-CERT upstream.LOC-LOC-SOU boat-PERL  
 I come back from upstream by boat.

The third distinction made by Tavares is that of surface postpositions which take the spatial suffix *-ø*. Postpositions which fall under this category are, for example, *-po* ‘general surface locative’, *ahpo* ‘superior back locative’ and derived postpositions ending in *-po*, such as *ekatopo* ‘on river bank’. Indeed these

<sup>52</sup> This example was taken from a narrative told by Johan regarding the daily programme which is set out for tourists visiting Apetina.

<sup>53</sup> The *t-√-i* construction forms part of the evidentiality system in Wayana. A speaker must always state whether what he is saying is first-hand or second-hand information. As this is grammatically marked, rather than semantically, it conveys how important this philosophy is in the Wayana world. This philosophy fits into the ‘truth and knowledge system’ as posited by Dr. Eithne Carlin in several of her publications (cf. Appendix B: references, for a list of these publications). The Trio language has a similar construction, however there it is only used as the past non-witnessed, evidential form. In Wayana this is also the case and it is frequently used within oral traditions and other narratives. However, the same construction also functions as a reportative and can therefore be used in the second person without any extra inflection. For further information see also Carlin (1999; 2002; 2004).

postpositions take no extra suffix markings when extra morphology is added, as seen in example (4.5). These postpositions correlate to those found in Table 4.4 which form their own category morphologically and semantically among the locatives.

- (4.5) masike mëlë-po-ø-inë mëwihnë-no pëkëna  
 therefore DP.INAN.MED-LOC-LOC-SOU that.side-NOM alone  
 therefore, from it, the one on its own, on that side

#### 4.2.2.1.2 Directionals

The majority of the locatives explained in the above sections have a directional counterpart which denotes movement of the Figure into, onto or to the Ground, dependent on its nature. The directionals also consist of the basic morpheme expressing location type, followed by a directional ending. Spatial locatives occurring with the stative ending *-po* take the directional ending *-na*. Those ending in *-o*, take the directional ending *-k(ë)*, which is reduced to *-k* when word final. If the directional ending is followed by further morphology, the full form *-kë* is used (4.6).

- (4.6) mëlë alë-kë\_le\_psiik i-lamna-kë\_psiik\_lëken  
 DP.INAN.MED take-IMP\_INTENS\_DIM 3-middle.of-DIR\_DIM\_only  
 take it a little, only a little to the middle

These two directional forms show a general morphological and semantic distinction (cf. Table 4.8).

LOCATIVE	GLOSS	DIRECTIONAL
<i>-jao</i>	INT.LOC	<i>-jak(ë)</i>
<i>-(h)tao</i>	CONT.LOC	<i>-(h)tak(ë)</i>
<i>-nao</i>	LOC	<i>-nak(ë)</i>
<i>-k(u)wao</i>	LIQ.LOC	<i>-k(u)wak(ë)</i>
<i>loptao</i>	deep.INT.LOC	<i>loptak(ë)</i>
<i>ekatao</i>	beside.LOC	<i>ekatak(ë)</i>
<i>awotao</i>	rib.LOC	<i>awotak(ë)</i>
<i>ahmotao</i>	clear.space.LOC	<i>ahmotak(ë)</i>
<i>lamnao</i>	middle.of.LOC	<i>lamnak(ë)</i>
<i>em(in)pao</i>	face.LOC	<i>em(in)patak(ë)</i>
<i>waliktao</i>	behind.LOC	<i>waliktak(ë)</i>
<i>talihnao</i>	outside.LOC	<i>talihnak(ë)</i>
<i>mitao</i>	base.LOC	
<i>-po</i>	LOC	<i>-pona</i>
<i>uhpo</i>	SUP.CONTACT.LOC	<i>uhpona</i>
<i>ahpo</i>	back.LOC	<i>ahpona</i>
<i>awopo</i>	crossways.LOC	<i>awopona</i>
<i>etatopo</i>	bank.LOC	<i>atatopona</i>

Table 4.8: Directionals ending in *-k(ë)* and *-na*

A summary of the locative endings and their directional counterparts has been placed in Table 4.9 below.

locative	directional
-Vo	-Vk
-po	-pona
-e	-e
-ë	-ë
-a	-a

**Table 4.9: Endings of locative and directional postpositions**

Of the group of locatives ending in *-i*, there are no examples in my data of a directional form for *epoi* ‘above’ or *opikai* ‘beneath’. Tavares has one example where *epoi* takes the directional *-na*: *Tamoo tīthe juputpū epona* ‘(He/She) placed his hands above my head.’ (Tavares, 2006: 287) The environmental postpositions denoting upstream and downstream each take different directional endings. *Ametai* ‘location downstream’ takes the directional ending *-k(ë)* as *ameta-k(ë)*; whilst *aktuhpoi* ‘location upstream’ follows the pattern of the *-po* type surface locatives, resulting in *aktuhpo-na*. As expected the stative locative ending *-i* is replaced by the directional endings.

There is no example of a directional counterpart of *opinë* ‘underneath in the data, however, *-pëk(ë)* ‘contact locative’ takes the directional marker *-na*. The full form is used with the directional counterpart (4.7).

- (4.7) heinë-no            paja-pëkë-na            i-wehe            t-ëtī-he  
 this.side-NOM        grass-CONTACT.LOC-DIR        3POSS-anus        COREF-become-NF
- kopīnī-tak  
 bush-DIR  
 the one on this side, his anus becoming to touching the grass, to the bush

The postposition *pole* ‘in alignment with’ appears to have the same form for both the locative and directional counterparts as the distinction is only visible at a semantic level rather than morphological one. However, closer analysis shows that the postposition *pole* is perlocative in nature when used with verbs of motion (4.8).

- (4.8) tī-pata-pole            tī-të-i  
 3COREF-village-align.DIR        COREF-go-NF  
 he went at right angles to his village  
 (Kulepeman, Apetina 2007)

There are as yet no attested examples of directionals for the remaining locatives ending in *-a*; namely *ina* ‘at the side of’ and *wala* ‘around’.

### 4.2.2.1.3 Pronominal prefixes

The pronominal prefixes found on postpositional morphology are identical to those used to express possession on nominals. The different allomorphs within the paradigm are determined by person and whether the postposition is C-initial (cf. Table 4.11) or V-initial (cf. Table 4.12); a summary of the full paradigm is given below in Table 4.10. Only three postpositions are inflected with *e-* functioning as the personal prefix for the third person and *të-* with the co-referential. These are *-po* ‘general location in, on, at’, *pole* ‘in alignment with’ and *wala* ‘around’ (cf. Table 4.13 and Tavares, 2006: 271).

Person	C-initial	V-initial	Plural
<b>1</b>	ĩ-	j-	
<b>2</b>	ë-	ëw-	-he
<b>3</b>	i-/e-	ø-	-he
<b>Coref</b>	tĩ-	t-	-he
<b>1+2</b>	ku-	k-	-he
<b>1+3</b>	emna i-	emna ø-	

Table 4.10: Pronominal prefixes for postpositions

Person	C-initial	Plural
<b>1</b>	i-loptao	
<b>2</b>	ë-loptao	ë-loptao-he
<b>3</b>	i-loptao	i-loptao-he
<b>Coref</b>	tĩ-loptao	tĩ-loptao-he
<b>1+2</b>	ku-loptao	ku-loptao-he
<b>1+3</b>	emna i-loptao	

Table 4.11: Paradigm for *loptao* ‘deep inside’

Person	V-initial	Plural
<b>1</b>	j-ekatao	
<b>2</b>	ëw-ekatao	ëw-ekatao-he
<b>3</b>	ø-ekatao	ø-ekatao-he
<b>Coref</b>	t-ëkatao	t-ekatao-he
<b>1+2</b>	k-ekatao	k-ekatao-he
<b>1+3</b>	emna ø-ekatao	

Table 4.12: Paradigm for *ekatao* ‘beside’

Person	C-initial	Plural
<b>1</b>	ĩ-po	
<b>2</b>	ë-po	ë-po-he
<b>3</b>	e-po	e-po-he
<b>Coref</b>	të-po	të-po-he
<b>1+2</b>	ku-po	ku-po-he
<b>1+3</b>	emna e-po	

Table 4.13: Paradigm for *-po* ‘in, on, at’

Postpositions are inflected with personal prefixes when the postpositional object or person is not specified through a noun or proper name. When the postpositional object is overtly present, no personal markings are needed. This occurs both with animate and inanimate postpositional objects. Compare the following examples:

- (4.9) Kan pakolo-n man wewe waliktao  
 God house-POSS 3.be.PRES tree behind.LOC  
 the church is behind the tree
- (4.10) uwa mījalē tīi-kē i-waliktao  
 NEG.PRTCL again do-IMP 3-behind.LOC  
 no, again, put it behind it!
- (4.11) wewe mēihnē mēklē wēlis-ina  
 tree that.side DP.ANIM.MED woman-adj.LOC  
 the tree on the other side, next to the woman
- (4.12) helē wīhnē ē-ina tīi-kē kapau  
 DP.INAN.PROX side 2-adj.LOC do-IMP deer  
 put the deer on this side next to you!

Not all postpositions may actually take all the pronominal prefixes given in the tables above and some may take none at all; this is determined by the semantics of the postpositional stem. Pronominal prefixes, except the third person, may only be used in cases where people can actually function as the Ground; for example *j-ekatao* ‘beside me’, *ø-uhpo* ‘on top of him’ and *ē-ina* ‘next to you’. The postposition *ina* ‘next to’ appears to inflect according to the C-initial paradigm rather than the V-initial one (cf. Table 4.14). Within my data, *ē-ina* ‘next to you’ and *ku-ina* ‘next to us’ rather than the expected *\*ew-ina* and *\*k-ina*, appear frequently. The allomorphs for the 1<sup>st</sup> and 3<sup>rd</sup> person have been taken from Tavares (2006: 328), but there are no attested forms were *ina* takes is inflected for the co-referential. However, one can presume it would be *tī-ina*.

Person	C-initial	Plural
<b>1</b>	<i>ī-ina</i>	
<b>2</b>	<i>ē-ina</i>	<i>ē-ina-he</i>
<b>3</b>	<i>i-ina</i>	<i>i-ina-he</i>
<b>Coref</b>	<i>tī-ina</i>	<i>tī-ina-he (unattested forms)</i>
<b>1+2</b>	<i>ku-ina</i>	<i>ku-ina-he</i>
<b>1+3</b>	<i>emna i-ina</i>	

**Table 4.14: Paradigm for *ina* ‘next to’**

There are a couple of postpositions which may not be inflected with personal prefixes. In these cases, a person is unable to function as the Ground object which is semantically encoded within that postposition. These postpositions occur solely with a select group of nominals; for example the liquid locative -*k(u)wao* and the locative *-nao* defining location in a boundless area. In these



cases a person can not be classed as a ‘liquid’ or a ‘boundless area’, and thus personal prefixes cannot be used. However, *-k(u)wao* may occur with the third person prefix when the postpositional object is inanimate, whilst *-nao* can never occur without a nominal.

Tavares classifies *-tao* as expressing ‘permanent location’ and belonging to the group which take no personal prefixes (Tavares, 2006: 273). However she posits *-tao* and *-htao* to be two distinct postpositions whilst they are semantically and morphologically similar (this is explained in greater detail in section 4.3.2.2 below). Note that the postposition *-(h)tao* can be translated as among. Although I have no attested examples in my own data, according to Tavares, in this case it may take personal prefixes and may be translated as, for example, ‘among you all’ as in the case of *ë-htao-he* ‘among you all’.

According to Tavares (Ibid) the postposition *-jao* ‘interior locative’ may take personal prefixes as the person may function as a container. Unfortunately she gives no examples of this and I have no examples in the data collected in Apetina.

A small group of postpositions function like *-k(u)wao* above, such as *lamna* ‘in the middle of’. These postpositions may only occur with the third person prefixes and are therefore unable to take other personal prefixes. According to Tavares (2006: 272-3) the postpositions “*ahmota* ‘in the area beside,’ *k(u)wa* ‘in water,’ *aktuhpo* ‘up river; north,’ and *ameta* ‘down the river; south’” only occur in this manner. There are too few attested examples to determine this to be the case, thus further research is needed.

All other spatial postpositions may be inflected with all personal prefixes as they take both animate and inanimate postpositional objects. Additionally, all postpositions which can be inflected by personal prefixes may also take the collective suffix *-he*, except when referring to the first person singular as that can not be collectivized as such (4.13) and (4.14). Rather, the Wayana have two manners for expressing our concept of ‘we’. When ‘we’ expresses only the speaker and the listener(s), it is expressed as 1+2 and the appropriate prefixes are used (*k(u)-PP-he*). Whilst, if ‘we’ includes the speaker and a 3<sup>rd</sup> party the 1+3 plural markings are used (*emna i-/e-/ø-*).

(4.13) *i-lamnao-he*            *hapo-n*    *katip*    *t-ïï-he*  
 3-middle.LOC-PL        like-NOM    like        COREF-do-NF  
 you set them like one, like it is in the middle of them

(4.14) *ø-ekatao-he*        *hapo-n*    *inëlä*  
 3-beside.LOC-PL    like-NOM    DP.ANIM.ANA  
 one like that one beside them

#### **4.2.2.1.4 Reflexive prefixes**

Several postpositions may also take the reflexive or reciprocal pronouns when the subject of the clause is the same as the object of the postpositional phrase

(4.15) and (4.16). The forms of the reflexive markers on postpositions are given in Table 4.15 below. Like the personal pronouns, the form of the reflexive pronouns is phonologically determined according to whether the postposition is C-initial or V-initial. The V-initial postpositions are further subdivided according to form of the initial vowel. Postpositions taking reflexive prefixes may also take the collective suffix *-he*.

<b>C-initial</b>	<b>V-initial</b> <b>(e-)</b>	<b>V-initial<sup>54</sup></b> <b>(a-/o-/u-)</b>	<b>Plural</b>
ëhe-	ëh-	ët-	-he

**Table 4.15: Reflexive prefixes for postpositions**

(4.15) ëhe-pole\_lëken    mëihnë-no    male  
 refl-align\_only    that.side-NOM    also  
 just in alignment with each other on that side also

(4.16) maa,    wewe-ptile    anim-kë    ëh-ekata-k    tii-kë  
 DISC    tree-stunted    lift-IMP    REFL-beside-DIR    lift-IMP  
 so, lift the stunted trees and put them beside each other!

#### 4.2.2.1.5 Postpositions, enclitics and markers

Spatial postpositions may also be followed by the:

- negative marker *-la* (4.17) (4.19) (4.22)
- exclusion enclitic *\_lëken* (4.18) (4.20)
- frustrative enclitic *\_lep* (4.17)
- assertive enclitic *\_lë* (4.20)
- intensive enclitic *\_le* (4.19) (4.22)
- diminutive enclitic *\_psik* (4.18)
- emphatic marker *-h* (4.22)
- nominalizer *-no* (4.21)
- source postposition *-inë* (4.23)
- perlocative postposition *-ilë* (4.24)

(4.17) ëw-ekatao    hapo-n    tii-kë    ëw-ekatao-wë-la\_lep  
 2-beside.LOC    like-NOM    do-IMP    2-beside.LOC-LOC-NEG\_FRUS  
 put them like the one beside you, not completely beside you!

(4.18) mëlë    alë-kë\_le\_psiik    i-lamna-kë\_psiik\_lëken  
 DP.INAN.MED    take-IMP\_INTENS\_DIM    3-middle.of-DIR\_DIM\_ONLY  
 take this a bit, just a bit to the middle of them!

<sup>54</sup> The reflexive pronoun *ët-* has been taken from Tavares (2006: 274) as I had no examples in my own data. There have been no *ë-/i-* or *ĩ-*initial postpositions attested in any of the available data, including that of Tavares (Tavares, 2006) and Jackson (Jackson, 1972).

- (4.19) e-pole\_le-la, hūwā  
 3-align\_INTENS-NEG like.that  
 not exactly in alignment with him, so it is
- (4.20) uwa pëinëkë-imë pole\_lë\_lëken  
 NEG.PRTCL boar-AUG align\_ASSERT\_only  
 no; really, only in alignment with the pig
- (4.21) hewihnë-no-ja kamisa-ina-no-ja  
 side-NOM-GOAL loincloth-adj.LOC-NOM-GOAL  
 to the one on this side, to the one at the side of the loincloth
- (4.22) pëinëkë ë-ja hapo-n më-ham-pole-h\_le-la  
 boar 2-goal like-NOM 3PRO-ANIM.PL-align-EMPH\_INTENS-NEG  
 the pig like one to you, not exactly in alignment with those ones
- (4.23)<sup>55</sup> tuna-kwao-wë-inë ø-umëkë-më-ø-i ëhema-ilë  
 water-LIQ.LOC-LOC-SOU 1→3.1TR-come-CYC-PST-CERT path-PERL  
 I came out from the water and went along the path
- (4.24)<sup>56</sup> tuna-kwa-ilë wī-të-ja-i  
 water-LIQ.LOC-LOC-PERL 1→3.1TR-go-PRES-CERT  
 I swim in (through) the water

As discussed in section 4.2.2.1.1, the locative suffixes *-wë* and *-je* precede the negative marker *-la* (4.17) and the source marker *-inë* (4.23). However, it must be noted that this only happens when the markers *-la* and *-inë* occur directly after the spatial postposition; otherwise the spatial suffixes are not attached. Spatial postpositions may also be nominalized. In such cases the nominalization marker follows directly after the stem, and may then be followed by nominal morphology. (4.25) and (4.26)

- (4.25) hewihnë-no-ja kamisa-ina-no-ja  
 side-NOM-GOAL loincloth-adj.LOC-NOM-GOAL  
 to the one on this side, to the one at the side of the loincloth
- (4.26) wewe akon pëkë-no i-pana-tom t-ehatekma-i.  
 tree another CONTACT.LOC-NOM 3POSS-ear-3PL COREF-touch-NF  
 his ears touching the one at the other tree

The container-type postposition ending in *-ao* take *-lī* rather than *-n(o)* as a nominalizer (4.27). (cf. Tavares, 2006: 294 and Jackson, 1972: 68)

<sup>55</sup> This example came from elicitation.

<sup>56</sup> This example came from elicitation.

- (4.27) wewe i-lamna-lī-pole\_lē\_lēken alē-k ë-ja  
 tree 3-middle.LOC-NOM-align\_ASSERT\_only take-IMP 2-GOAL  
 take it just to the one exactly in alignment with the trees!

#### 4.2.2.2 Derived spatial postpositions

Some of the spatial postpositions are clearly derived from body part terms. During the ‘photo-object matching task’ (as described in section 3.3.1.5) the locative *awotao* and its directional counterpart *awotak* were frequently used (4.28). These postpositions, denoting location to the side of an animate object, are probably derived from the word for ribs: *ëwotkalan* ‘your ribcage’.

- (4.28) molo-inë kapau awotao  
 LOC.ADV.MED.SP-SOU deer rib.LOC  
 then the deer at his side

The postposition *em(in)patao* ‘facing’ (4.29) is derived from the body part *empata* ‘face, lit: place of the eye’, as is also the case in Trio (Carlin, 2004: 116). Although Tavares states that she only had examples of *empatao* ‘facing’, and its directional counterpart *em(in)patak*, with animate objects, in the data collected in Apetina, inanimate objects which are perceived as having a front side, such as buildings, also take *em(in)patao/em(in)patak* to express ‘in front of, lit: facing’. See (4.30). Although this was collected through elicitation exercises, the same answer was given by all three speakers asked. The ACT building was situated in front of the school, taking the door to be situated at the front side, as in many other cultures.

- (4.29) kapau ëw-emīnpata-k\_lēp man lome wijo-man  
 deer 2-face-DIR\_FRUS 3.be.PRES but crooked-FACS.NOM

i-pīmī  
 3POSS-neck  
 the deer it is facing to you (in vain) but its neck is a crooked one

- (4.30) ACT<sup>57</sup> pakolo-n empatao man sikolo  
 ACT house-NOM face.LOC 3.be.PRES school  
 the school is facing the ACT building

The superior locatives *uhpo* ‘on top of’ (4.31) and *ahpo* ‘on the back of’ (4.32) are also derived from body parts. The postposition *uhpo* is derived from *upu* ‘head, and *ahpo* from *apī* ‘back’, followed by the general locative *-po*.

- (4.31) hapo<sup>58</sup> man uhpo  
 hat 3.be.PRES SUP.CONTACT.LOC  
 the hat is on top (of his head)

<sup>57</sup> ACT is the abbreviation for Amazon Conservation Team, an American organization that has its own building in Apetina and that employs a small number of villagers to participate in their projects.

<sup>58</sup> The word *hapo* ‘hat’ is a loan from the French *chapeau* ‘hat’.

(4.32) molo                    man            pakolo    ahpo        kawë  
LOC.ADV.MED.SP    3.be.PRES    house    back.LOC    high  
there he is, high on top of the house

Tavares states that the postposition *lamnao* ‘middle of’ is likely to be derived from *lamī* ‘belly’ (Tavares, 2006: 348), which is highly probable although I have not yet attested the word *lamī* in my data.

She also posits that the postpositions *pehna* ‘in the area of the forehead’ and *mīta* ‘in the area of the mouth’ are derived from their respective body parts (Ibid). However, neither of these postpositions are used or known among the Wayana of Apetina.

There are also a number of derived postpositions which have been derived from nominals other than body parts, (cf. section 4.2.2); although the source noun is not clear in all cases; as previously mentioned for *ekatao* ‘beside’ in. Other postpositions that are possibly derived include *waliktāo* ‘behind’, *aktuhpoi* ‘upstream’, *ametai* ‘downstream’ and *loptao* ‘deep’. A larger lexical corpus is needed to ascertain the source nouns, although it is also possible, that the original nouns are no longer known as they now only appear in their derived form.

Below a more detailed description, of the semantic and morphological properties of each of the spatial postpositions found in Wayana, is given.

### **4.3 Locatives and directionals**

Wayana has a rich system of locative adpositions, especially compared to Indo-European language such as English whose system of prepositions is fairly basic (in, on, at). Jackson classifies the locatives into five groups distinguishing ‘in’, ‘in water’, ‘on’, ‘filled with’ and ‘contact’ (Jackson, 1972: 67). Tavares divides the Wayana locatives into three groups: ‘container’, ‘surface’ and ‘away’ postpositions, according to her morphological analysis of the suffix endings -*wë*, -*ø* and -*je*, as explained in section 4.2.2.1.14.2.2.1. Since the choice of locative is generally determined according to semantic criteria, I have chosen in the following sections to group the spatial postpositions according to semantic determinants rather than morphological ones. I state ‘generally’, as there are also certain cases where cultural aspects also determine the choice of postpositions, for which I refer the reader to section 4.3.2.3.

The basic locative distinctions of most Cariban languages, and thus also Wayana, are: general location, location in a contained space, in an open space, in water or on a flat surface (cf. Dixon and Aikhenvald, 1999: 42; Carlin (2004: 172)). Below, I have further sub-divided the locative postpositions into the following: general location, containment, specific location, superior/inferior, anterior/posterior and location according to environmental landmarks. Each

locative is discussed in turn below with a descriptive, semantic analysis and where needed extra morphological information.

### 4.3.1 General Locative: -po: general, surface

The locative *-po* ‘on, in, at’ denotes location of an object on or at a general location characterized by having a relatively flat surface and in an ‘open’ space rather than a ‘contained’ space. Example (4.33) has been taken from Boven (1995: 30) and example (4.34) from general conversation.

(4.33) t-ëne-i            e-ja-he        tēpu-po-inë  
 COREF-see-NF    3-GOAL-PL    rock-LOC-SOU  
 they saw him from up on the rock

(4.34) pau-po            man  
 island-LOC        3.be.PRES  
 he is on the island

The characteristic of the Ground being a flat surface is further exemplified as the locative *-po* is also used to express location at geographical locations (4.33) and (4.34). It occurs after place names to specify location particular country, village, city, and the like (cf. Carmargo, 2000: 6).

(4.35)<sup>59</sup> Granda    Futu-po    kampu    t-ënik-he  
 Grand    Futu-LOC    camp    COREF-sleep-NF  
 they sleep at the Grand Futu camp

(4.36)<sup>60</sup> Oland-po            man  
 Netherlands-LOC    3.be.PRES  
 he is in the Netherlands

The suffix *-po* also occurs within verbal morphology functioning as a causative in some cases and as a necessitative in others. The causative *-po* is a homophonous morpheme which functions as a causative on transitive verbs. Here, the subject causes the object to do that what is expressed by the verb (cf. Jackson, 1972: 57; Derbyshire, 1999: 44; Tavares, 2006: 256). The following example is taken from Boven (1995: 20).

(4.37) mëlë                    uhmo-po-topo-npī-po,                    t-ëtī-he                    ìmë  
 DP.INAN.MED            fall-CAUS-TMP.NOM-PST-LOC            COREF-become-NF            garden  
  
 pepta  
 large  
 on the place where she died (lit: was caused to fall), a large garden came into being

<sup>59</sup> This example was gleaned from a narrative told by Johan regarding the daily programme which is set out for tourists visiting Apetina.

<sup>60</sup> This example has been taken from natural conversation.

A second function of *-po*, in verbal morphology, is as the necessitative. Jackson posits that *-po* only occurs with “stems that denote bodily functions” (1972: 57) such as *j-ĩnik-po-ja-i* ‘I am sleepy’. This is synonymous to the corresponding suffix in Trio, which has only been attested with the verbs to sleep, to urinate and to defecate (cf. Carlin, 2004: 175):

- (4.38) *ěėnĩ-po wae*            I am sleepy  
(4.39) *suhta-po wae*            I need to urinate

Carlin categorizes the *-po* here as a grammaticalized aspect marker (Ibid). Tavares challenges Jackson’s claim by stating that other intransitive verb stems may also take *-po*. However, the examples given by Tavares do not actually fully support her argument as the *-po* appears to be functioning as another marker (cf. Tavares, 2006: 263). In the following example (4.40) taken from Tavares (Ibid) the *-po* actually functions as the causative translating as ‘I caused myself to burn’ rather than ‘I almost burned myself’:

- (4.40) *w-ěh-ewalu-po-ø*    I almost burned myself (Ibid)

Further use of the postposition *-po* in temporal constructions is discussed below in section 4.3.14 below.

### **4.3.2 Container locatives and directionals**

There are five container locatives in Wayana; namely

- *-jao*            interior locative
- *-(h)tao*        container locative
- *-nao*            boundless container locative
- *-k(u)wao*     liquid locative
- *-loptaο*        deep interior locative

As explained in section 4.2.2.1.4.2.2.1.1 these locatives may all take some of the personal prefixes except the locative *-nao*. The liquid locative *-k(u)wao* can only occur with the third person locative as the Ground it refers to is specifically liquid which is perceived as being inanimate in nature.

All of the above locatives take the directional form *-k(ě)*, the full form is used when the directional is not word final.

#### **4.3.2.1 -jao: interior**

The postposition *-jao* is a container locative and is used in combination with the largest corpus of nouns of the container locatives. It generally expresses that the object is situated in a contained or demarcated space although it is not necessary for the object to be completely surrounded by the related Ground marker (4.41). The following three examples come from general conversation.

- (4.41) ulu            man            katali-jao  
cassava    3.be.PRES    carrying.basket.INT.LOC  
the cassava is in the carrying basket

Example (4.42) shows the stative meaning of *-jao* and contrasts with the perlocative *-ilë* (4.43) which expresses movement ‘by boat’.

(4.42) kanawa-jao wĩ-të-ja-i isolĩ-pona  
 boat-INT.LOC 1→3.1TR-go-PRES-CERT rapids.DIR  
 I am going to the rapids in a boat

(4.43) kanawa-ilë wĩ-të-ja-i pau-pona  
 boat-PERL 1→3.1TR-go-PRES-CERT island.DIR  
 I am going to the island by boat

The Ground in this case is perceived as a container wherein at least part of the contained object remains visible to the eye. In cases where the object is completely submerged, the postposition *loptao* ‘deep inside’ is more frequently used. Compare the examples below where (4.44) describes the owl being in a tree, but still visible, even if visibility is partially or completely blocked by the branches and leaves of the tree. Example (4.45), however, expresses the location of the owl as being completely in the tree, in a hole in the trunk and thus completely surrounded by its container.

(4.44) kulëu man wewe-jao  
 owl 3.be.PRES tree-INT.LOC  
 the owl is in the tree (visible)

(4.45) kulëu man wewe loptao  
 owl 3.be-PRES tree DEEP.INT.LOC  
 the owl is in the tree (non-visible)

The container postposition *-jao* may also be used when the Ground is a body part. However, here the same rule applies that part of the Figure or object must be partially visible in the sense that it is not fully submerged (4.46).

(4.46) tamĩ man imta-jao  
 cigarette 3.be.PRES mouth.INT.LOC  
 the cigarette is in his mouth

(4.47) i-wetepu-jao, wëlii wetepu-jao  
 3POSS-stomach-CONT.LOC woman stomach-CONT.LOC  
 he is in the stomach, in the woman’s stomach  
 (Boven, 1995: 26)

Initially the example given in (4.47) appears to defy the rule that part of the object needs to be visible. However once placed in context, this is also the case. The ‘he’ refers to the forest-spirit *Wiwĩpsik* and although he is ‘in’ the woman’s



stomach his feet are still visible as he is not completely submerged within her stomach<sup>61</sup>.

The directional counterpart of *-jao* is *-jak(ë)*, with the form *-jak* being used when it is word final (cf. section 4.2.2.1.2). This postposition expresses motion into a small, contained or demarcated space (4.48) and (4.49).

(4.48) i-wehe-ja-k            hapo-n    tii-kë\_le  
 3POSS-anus-INT-DIR like-NOM do-IMP\_INTENS  
 put it like the one into his anus!

(4.49) ehmelë t-ënma-i            t-omo-ja-k  
 all            COREF-stuff-NF    3COREF-hand-INT-DIR  
 He stuffed everything in(to) his own hands  
 (Boven, 1995: 26)

Like the locative *-jao*, *-jak* may be inflected for person and the same extra morphology such as the negative marker *-la*, and the intensifier, frustrative and emphatic enclitics. In these cases the full form *-jakë* is used. There are no attested examples found within the data at my disposal.

During elicitation exercises an object held in my hand that was still partly visible, such as a stick, the postposition *-jao* was used, *jamo-jao* ‘in my hand’. However, when smaller objects were used, for example a coin which was completely surrounded by my hand (the Ground), the postposition *loptao* ‘deep inside’ was used instead; i.e. *jamo loptao* ‘deep in my hand’).

Another noun which is used in combination with the suffix *-jao*, is language (4.50). In this case one can argue that language is a demarcated area in abstract terms as it is not infinite but a ‘contained’ concept.

(4.50) tala    mi-ka-ø            helë            Wayana    omi-jao?  
 Q            2→3.1TR-say-N.PST    DP.INAN.PROX    Wayana    language-INT.LOC  
 how do you say this in Wayana?

As described in section 4.2.2.1.14.2.2.1.1 above, the postposition *-jao* may be followed by other suffixes, for example denoting notions of negation, intensification and frustration. When followed by the negation marker *-la* or the source postposition *-inë* (4.51), the suffix *-wë* is required and precedes the other markers.

(4.51) tepu-elī    t-ëne-i            kanawa-jao-wë-inë  
 rock-top    COREF-see-NF    boat-INT.LOC-LOC-SOU  
 they can see Tepu Top from inside the boat

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<sup>61</sup> The narrative *Wiwipsik* comes from a collection of oral traditions of the Wayana of the Lawa River. Karin Boven collected, translated and published a selection of their oral traditions in 1995 after conducting research in the area. The collection was originally published with Dutch translations under the name: *Over Jagers, Volken en Geesten in het Zuidelijk Bos, Wayana Nekalëtpitom*. (Boven, 1995).

### 4.3.2.2 *-(h)tao*: container

The container locative *-(h)tao* also expresses location within a demarcated space but applies to larger, more abstract notions of ‘contained space’, such as buildings and ‘environmental containers’ such as the forest and rapids (4.52) - (4.54)<sup>62</sup>. Tavares postulates that *-tao* and *-htao* are separate postpositions expressing different concepts of containment. According to Tavares *-tao* “takes an object that is typically a permanent location, usually created by humans: houses and buildings, a pathway, a baby carrier net, the edge of a river, etc” (Tavares, 2006: 270); whilst *-htao* takes “[c]omplex objects, composed of many parts or of a group of individuals” (Ibid: 272). However when further analyzing the data the distinction between the two remains unclear. Surely a forest can also be perceived as a permanent location, and how permanent were houses, etc in the past when the Wayana led a nomadic life? However it must also be mentioned that in my data words for *pakolo* ‘house’, *sikolo* ‘school’ were never used with *-htao*; and many of the nouns using *-htao* denote objects composed of several entities such as *napihtao* ‘in the sweet potato plant’ however the data is too limited to come to any definite conclusions. Carlin and Meira have conducted the same discussion regarding similar postpositions found in the Trio language (Carlin, 2004: 177). As posited by Carlin, both meanings are semantically so similar that it is highly unlikely that *-tao* and *-htao* form two distinct postpositions, especially as the pronunciation is speaker dependent (Ibid, 2004:177). This is also the case by the Wayana as both *-tao* and *-htao* were used by different speakers with the objects *itu* ‘forest’ and *isolī* ‘rapids’. More detailed research is needed to determine whether *-(h)tao* should be treated as one or two distinctive postpositions. In this paper I am treating them as a single morpheme.

(4.52) peitopit mën-ëpī-ja isolī-tao  
 children 3CERT-bathe-PRES rapids-CONT.LOC  
 the children are bathing in the rapids

(4.53) itu-htao w-a-ø-i  
 forest-CONT.LOC 1→3.1TR-be-PRES-CERT  
 I am in the forest

(4.54) kaikui j-alë-ne jalaptë-tao iw-aptau tī-ka-i  
 jaguar 3→1-take-DIST.PST tree.shelter-CONT.LOC 1-when COREF-say-NF  
 “the jaguar carried me off when I was in the hunting hut”, he said.  
 (Boven, 1995: 39)

The same discussion applies to the directional equivalent *-(h)tao*, *-(h)tak(ë)*, which takes the same type of nouns as the locative variant:

<sup>62</sup> Examples (4.52) and (4.53) have been gleaned from general conversation.

(4.55) *nĩ-tẽ-m*            *kumu-pëk*            *itu-hta-k*  
 3→3.1TR-go-PST    fruit.sp-CONTACT.LOC    forest-CONT-DIR  
 they went into the forest to get *kumu* fruits

(4.56) *Wajana*    *tĩ-tẽ-i*            *jalaptẽ-ta-k*  
 Wayana    COREF-go-NF    tree.shelter-CONT.DIR  
 A Wayana went into a hunting hut  
 (Boven, 1995: 38)

#### 4.3.2.3 *-nao*: boundless container

The postposition *-nao* is a locative expressing location in an area or space without clearly definable boundaries. In the data collected during fieldwork only 2 nouns were found which take the suffix *-na*; namely *sisi* ‘sun’ (4.57) and *kapu* ‘sky’ (4.58)<sup>63</sup>. Tavares also defines *-nao* in a similar way (Tavares, 2006: 303); the only given example in Jackson (1972: 68) is also *kapunao* ‘in the sky’. Tavares gives the postposition *hna* to express ‘in the sun’ (2006: 273). However, this postposition was unknown to the Wayana in Apetina, suggesting a dialectal form.

(4.57) *ulu*                    *t-umnaika-i*    *sisi-nao*  
 cassava.bread    COREF-dry-NF    sun-boundless.loc  
 the cassava bread dries in the sun

(4.58) *Kan man*            *kapu-nao*  
 God    3.be.PRES    sky-boundless.LOC  
 God is in the sky

The use of *-nao* in combination with the noun *kapu* ‘sky’ portrays how cultural aspects rather than semantics can determine which postposition is used with which noun. Here ‘in the sky’ refers to the invisible part of the sky, which we would possibly refer to as ‘heaven’. Previously *kapunao* ‘in the sky’ was used to refer to the celestial world to where shamans travelled during their shamanic journeys, today only God is perceived as being *kapunao* (cf. section 5.4.1).

Other entities whose location can be described as being ‘in the sky’ occur with other postpositions or adverbs. The Wayana perceive the celestial bodies (sun, moon and stars) as being attached to or as hanging underneath the lower surface of the sky. Due to the conception of the stars, moon and sun being attached to a surface, the contact locative *-pëk* is used to express, what we refer to as being, ‘in the sky’:

(4.59) *sisi man kapupëk*    *\*sisi man kapunao*    the sun is in the sky

(4.60) *silikẽ man kapupëk*    *\*silikẽ man kapunao*    the stars are in the sky

<sup>63</sup> Both examples were originally obtained through elicitation.

Other objects that we refer to as being ‘in’ the sky such as clouds, birds, airplanes are expressed as being ‘high’ in Wayana:

(4.61) *opolan man kawë* the plane is in the sky (the plane is high)

(4.62) *tolopit man kawë* the birds are in the sky (the birds are high)

The directional counterpart of *-nao* is *-nak(ë)*. The following example has been taken from the oral narratives collected by Karen Boven (1995) and expresses that the object was taken up into the celestial world, above the visible surface of the sky.

(4.63) t-ëlë-i            kapu-na-k            e-ja  
 COREF-take-NF sky-boundless-DIR 3-GOAL  
 he was taken by him into the sky  
 (Boven, 1995: 18)

#### 4.3.2.4 *k(u)wao*: liquid

A characteristic postposition for the Cariban languages is that expressing location in liquid. In Wayana this is expressed by means of the postposition *-k(u)wao* ‘in water, liquid’. It is most commonly used in combination with the noun *tuna* ‘water, river’ (4.64) and (4.65)<sup>64</sup>. In contemporary Wayana, especially among the youth, the first vowel of the locative appears to have been dropped and is now consistently pronounced as *-kwao*. Jackson (1972: 67) states that the postposition *-k(u)wao* expresses an object “*immersed in a liquid*”. Objects which are floating on the surface may be expressed with the general locative *-po* (4.66). However, once an object breaks the water’s surface, such as by boats, the liquid postposition *-k(u)wao* must be used (cf. Camargo, 2000: 6).

(4.64) *kanawa man tuna-k(u)wao*  
 boat 3.be.PRES water-LIQ.LOC  
 the boat is in the river

(4.65) *peitopit mën-ëpī-ja tuna-k(u)wao*  
 children 3CERT-bathe-PRES water-LIQ.LOC  
 the children are bathing in the water

(4.66) *tuna-po man*  
 water-LOC 3.be.PRES  
 it is on the water  
 (Camargo, 2000:6)

The postposition *-k(u)wao* is also used when objects are fully submerged but once they become obscured from view due to depth or, for example, muddy water, the postposition *loptaο* is used (4.67).

<sup>64</sup> Both examples were originally obtained through elicitation.

- (4.67)<sup>65</sup> ka man tuna loptao  
 fish 3.be.PRES water deep.INT.LOC  
 the fish are deep in the water (and thus obscured from view)

The directional expressing motion into liquid is *-k(u)wak(ë)*. Similar to the locational form younger speakers use the reduced version *-kwak(ë)* (4.68) rather than *-kuwak(ë)* (4.69).

- (4.68) wĩ-të-ja-i tuna-kwa-k  
 1→3.1TR-go-PRES-CERT water-LIQ-DIR  
 I am going into the water

- (4.69) itum-he tĩ-të-i inëlä amat-kuwa-k  
 poison-NF.SUP COREF-go-NF DP.ANIM.ANA creek-LIQ-DIR  
 he went to poison fish, in the creek  
 (Boven, 1995: 18)

#### 4.3.2.5 *-loptao*: deep interior

As already discussed above in section 4.3.2.1, the analysis of the interior locative *-jao*, the postposition *-loptao* ‘deep inside’ is applied to objects who are completely surrounded by the Ground in which they are found. Their location can be perceived as being in a deep and completely contained space whereby they become obscured from our view (4.67) and (4.70).

- (4.70) palakta-imë man tasi loptao  
 rubber-AUG 3.be.PRES bag deep.INT.LOC  
 the ball is deep in the bag (invisible)

The ‘deep interior locative’ postposition, *loptao*, may also be followed by other postpositions such as the perlocative *-ilë* ‘through’. This combination has become lexicalized and functions as the adverb *iloptailë* meaning ‘difficult’, literally translated as ‘along the deep’ (4.71) and (4.72).

- (4.71) i-lopta-ilë man Wayana omi  
 3-deep.INT.LOC-PERL 3.be.PRES Wayana language  
 Wayana is difficult

- (4.72) i-lopta-ilë man helë ï-ja  
 3-deep.INT.LOC-PERL 3.be.PRES DP.INAN.PROX 1-GOAL  
 this is difficult for me

#### 4.3.3 *Beside locatives and directionals*

There are five locatives which denote location next to, beside or adjacent to the Ground. These are:

- *ekatao* beside
- *-ina* next to, adjacent to

<sup>65</sup> This example was gleaned during elicitation.

- *awotao* ribs
- *awopo* crossing, crossways
- *ahmotao* clear space

Each locative is separately analyzed below as they do not form a single morphological group.

#### 4.3.3.1 *ekatao*: ‘beside’

The postposition *ekatao* appears is likely to be derived from a noun *eka*, the meaning of which is unclear, and the container locative *-tao*, suggesting that the area surrounding the Ground is perceived as a contained space. It expresses that objects are located in the area beside, or at the side of the Ground (4.73) and (4.74). There are also other postpositions denoting location next to an object such as *ina* ‘adjacent to’ (cf. section 4.3.3.2 below). The postposition *ekatao* appears to denote a general area ‘beside’ the Figure, rather than ‘in front of’ or ‘behind’; whilst *ina* appears to denote a more specific notion of ‘at the side of’. Tavares translates *ekatao* as the ‘area nearby’ the Ground (Tavares, 2006: 309). The exact distinction remains rather abstract as ‘nearby’ appears not to be specific enough.

(4.73) *wewe man Kan pakolo-n ekatao*  
 tree 3.be.PRES God house-POSS beside.LOC  
 the tree is beside the church

(4.74) *eluwa man kolo-me wapot ekatao*  
 man 3.be.PRES stool-FACS fire beside.LOC  
 the man is sitting beside the fire

The postposition *ekatao* can be inflected for person (4.75) including the reciprocal/reflexive (4.77), and can be followed by other postpositions, enclitics and suffixes as explained in section 4.2.2.1.14.2.2.1 above. The locative suffix marker *-wë* is added as described in the same section, when followed by the negative (4.75) or source markers.

(4.75) *ëw-ekatao hapo-n tii-kë, ëw-ekatao-wë-la\_lep*  
 2-beside.LOC like-NOM do-IMP 2-beside.LOC-LOC-NEG\_FRUS  
 set it like the one beside you, not completely beside you!

The directional counterpart of the locative *ekatao* is *ekatak(ë)* and is used to express motion towards the side of the Ground.

(4.76) *molo-inë kaikui tikoloke-m m-anim-ja-i*  
 LOC.ADV.MED.SP-SOU jaguar white-NOM 2→3-lift-PRES-CERT  
 then, you lift the white jaguar

mëihnë-no      ekata-k      e-pole  
 that.side-NOM      beside-DIR      3-align.LOC  
 to beside the one on that side, in alignment with it

Like the locative form, the directional may also take person markings, reflexives forms, enclitics and the like:

(4.77) maa wewe-ptile anim-kë ëh-ekata-k tii-kë  
 DISC tree-stunted lift-PROX.IMP REFL-beside-DIR do-IMP  
 So, lift the small stunted trees and put them beside each other!

#### **4.3.3.2 ina: ‘at the side of’**

The postposition *ina* expresses location of the Figure to be at the side of the Ground referent. According to Tavares *ina* may also be translated as ‘belonging to’; unfortunately Tavares gives no examples to express *ina* in this context (Tavares, 2006: 328). I have found no examples in my own data which would translate as ‘belonging to’ as yet.

The locative *ina* is one of only two postpositions that end in *-a*; *wala* ‘around’ being the other. Despite this morphological difference with other locatives it functions similarly in that it may take further morphology discussed in section 4.2.2.1 above. These include the negative marker *-la*, enclitics such as the intensifier and the frustrative, nominalizers, to name but a few. Additionally it may be preceded by nominals or personal pronouns (4.78) and (4.79)

(4.78) hewihnë-no-ja kamisa-ina-no-ja  
 this.side-NOM-GOAL loincloth-adj.LOC-NOM-GOAL  
 to the one on this side, to the one at the side of the loincloth

(4.79) helë wihnë ë-ina tii-kë kapau  
 DP.INAN.PROX side 2-adj.LOC do-IMP deer  
 put the deer on this side, at your side

The postposition *ina* is also used to express location ‘on the right side’. Although the Wayana do not use a relative frame of reference and rarely refer to their ‘right’ or ‘left’; since the Wayana have had more sustained contact with other cultures, its use has become more frequent. It must be noted that, *apëtunuina* ‘on the right side’ is not specifically ‘right’ in our understanding of the word. Rather it refers to your dominant hand. A Wayana who is left-handed would then refer to something/someone being on his left side as being *apëtunuina*.

#### **4.3.3.3 awotao: rib**

As previously described in section 4.2.2.2, the locative *awotao* appears to be derived from the word for *ëwothkalan* ‘ribs, ribcage’. Despite its frequent usage in Apetina, neither Jackson (1972) nor Tavares (2006) mention this particular postposition in their work.

- (4.80) Molo-inē kapau awotao  
 LOC.ADV.MED.SP-SOU deer rib.LOC  
 then the deer at his side

In my data other postpositions were attested that may be reduced forms of *awotao*. Although they were initially translated as ‘behind’, during further analysis the locative relationship they refer to, between the Figure and Ground, appears to be more precisely ‘at the ribs of’ rather than ‘behind’.

- (4.81) pēinēkē-imē wotao wewe  
 boar-AUG rib.LOC tree  
 the tree is at the ribs of the pig

- (4.82) maa pēinēkē otao kapau  
 DISC boar rib.LOC deer  
 the deer is at the ribs of the boar

The above examples (4.80) - (4.82) are the only examples attested in the data at my disposal. Due to the nature of the postposition, expressing location at the ribs, it appears only to occur with animate objects. Although there are no examples of *awotao* being inflected, I would expect it to be able the usual list of suffixes, enclitics and postpositions denoting negation, frustration, intensification, etc as is the case with *ekatao* ‘beside’ (cf. section 4.3.3.1); and additionally personal prefixes as semantically, a person could function as the Ground. This also applies for the directional counterpart (4.83), *awotak(ē)* where shows how it may be inflected for person (4.84). The full form, *awotakē*, is used when extra morphology follows, such as the collective *-he* (4.84).

- (4.83) ipun man t-īi-he mēklē awota-k enīk-pena  
 trunk 3.be.PRES COREF-do-NF DP.ANIM.MED rib-DIR Q.ANIM-HESIT  
 you have put his trunk to that one’s ribs, whatyemacallim’s (ribs)

- (4.84) wewe ø-awota-kē-he sija hūwā  
 tree 3-rib-DIR-PL hither like.that  
 the tree at their ribs this way, like that

#### 4.3.3.4 *awopo*: ‘crossways’

The postposition *awopo* is not mentioned by Tavares but occurs at intervals among the data collected in Apetina. It appears to denote the location of the Figure being ‘crossways’ or possibly ‘diagonally’ from the Ground referent (4.85).

- (4.85) mēlē-katīp ø-awopo tīi-kē  
 DP.INAN.MED-like 3-crossways.LOC do-IMP  
 put it crossways to it, like so



It functions morphologically as the general locative *-po* and may take on other postpositions and affixes (4.86). The directional counterpart is *awopona* ‘diagonally to it’.

- (4.86) Ronnie pakolo-nu-ja            ø-uputpĩ,            hapo-n  
 Ronnie house-POSS-GOAL    3POSS-head        like-NOM
- awopo\_lë\_lep  
 crossways.LOC\_ASSERT\_FRUS  
 his head towards Ronnie’s house, like one almost crossways

It behaves as a derived postposition but it is unclear where the origins of *awo* lie. It is highly likely that *awo* is related to *awotao* ‘the rib locative’ as it appears to be semantically similar. In the found examples *awopo* appears to occur with inanimate Grounds and was also used whilst describing the cross-beam used in housing construction. The postposition *awotao* occurs with animate Grounds suggesting *awotao* to be zoomorphic. More research is needed to confirm this.

#### 4.3.3.5 *ahmotao*: ‘clear space’

The postposition *ahmotao* expresses location in an empty space, or clear space, between objects or people. It patterns as other spatial locatives of the *-jao* type and may take on extra morphology such as the frustrative and perlocative (4.87).

- (4.87) ilama-k    tikoloke-m    mija    ø-ahmota-ilë\_lep  
 turn-IMP    white-NOM    thither    3-clear.space-PERL\_FRUS  
 turn the white one that way almost along the clearing

In the data available to me, the only examples of inflection were with the third person, which replaces the Ground nominal. Tavares gives the following example which is inflected for the reflexive: *ëtahmotao* ‘clear space between themselves’; but states that all “*SAP prefixed examples were rejected by speakers*” (Tavares, 2006: 313). The directional counterpart is *ahmotak(ë)*:

- (4.88) mijalë    uwa-h\_le                            sija    mëklë            ahmota-k  
 again    NEG.PRTCL-EMPH\_INTENS    hither    DP.ANIM.MED    clear.space-DIR  
 again, not this way, to that clear space

#### 4.3.4 ‘In middle of’ *lamnao*

The postposition *lamnao* ‘in the middle of’, ‘in the centre of’ or ‘between’ expresses location in the middle of a certain place or situated between two or more Ground objects (4.89).

- (4.89) pakolo    man            ëütë    lamnao  
 house    3.be.PRES    village    middle.LOC  
 the house is in the middle of the village

When the Ground is not literally named, but is still referred to, the postposition *lamnao* must be preceded by the third person pronoun (4.90). There are no attested examples of *lamnao* occurring with personal pronouns. According to Tavares (2006: 271), *lamnao* belongs to the group of spatial postpositions that may only be inflected with the third person object.

- (4.90) wewe\_psik i-lamnao katip, i-lamnao-wë-la lep  
 tree\_DIM 3-middle.LOC like 3-middle.LOC-LOC-NEG\_FRUS  
 the little tree like in the middle of it, not completely in the middle

However *lamnao* may also appear without reference to a particular Ground object where it is clear from the context what is meant (4.91). In such cases the third person pronoun is not used.

- (4.91) kaikui lamnao?  
 jaguar middle.LOC  
 is the dog in the middle?

Like the container locatives, *lamnao* may also be followed by other morphology, namely the negative marker, the source marker and enclitics expressing frustration, intensification, exclusion, etc. (cf. section 4.2.2.1 for the full list) Again, here the same rules apply governing the spatial suffix *-wë* and it is used with the negative marker *-la* (4.90) and the source marker *-inë*. *Lamnao* may also take the plural marker *-he* expressing the Ground object to consist of more than one entity. Again the spatial suffix *-wë* precedes the plural marking.

The corresponding directional postposition is *lamnak(ë)* '(in)to the middle' (4.92). As is the case with *lamnao*, *lamnak(ë)* may also be used with personal markers. When followed by extra morphology, such as the collective (4.93) or the diminutive enclitic (4.94); the full form *-lamnakë* is used.

- (4.92) uhpaphakë\_psik i-wetepu-lu-ja\_lë\_lëken i-lamna-k  
 far\_DIM 3POSS-rib-POSS-GOAL\_ASSERT\_only 3-middle-DIR  
 a little far apart just towards his ribs, to the middle of it

- (4.93) molo-inë pëinëkë takpile-m m-anim-ja-i  
 LOC.ADV.MED.SP-SOU boar red-NOM 2→3-lift-PRES-CERT

i-lamna-kë-he katip  
 3OBJ-middle-DIR-PL like  
 then you lift the red pig to like the middle of them

- (4.94) mëlë alë-kë\_le\_psik i-lamna-kë\_psik\_lëken  
 DP.INAN.MED take-IMP\_INTENS\_DIM 3-middle-DIR\_DIM\_only  
 take it a little, only a little to the middle of it

Through elicitation the following example was collected: When used with the postposition *-po* 'on' the final vowel is dropped resulting in *lamna-po*:

- (4.95) kutëi man tafala lamna-po  
 spoon 3.be.PRES table middle-LOC  
 the spoon is on the middle of the table

Due to the method of elicitation it is uncertain if this is a valid combination of locatives. It was not attested anywhere else and neither Tavares (2006) nor Jackson (1972) has any examples of such a combination.

#### **4.3.5 ‘In alignment with’ pole**

The postposition *pole* expresses location and direction that is in alignment with, or in a straight line with the Ground object (4.96) - (4.98). Tavares posits that *pole* is only used with verbs of motion and thus translates *pole* as ‘towards’ (Tavares, 2006: 327). However, in the corpus at my disposal, it is apparent that such a translation has many discrepancies especially as *pole* also functions as a stative locative and not as a directional. The postposition *pole* takes no extra morphology to differentiate between direction and location (4.97).

- (4.96) wewe pole-h\_le  
 tree align.LOC-EMPH\_INTENS  
 exactly in alignment with the tree

- (4.97) tĩ-pata pole tĩ-tě-i  
 3COREF-village align.DIR COREF-go-NF  
 he went at right angles to his village  
 (Kulepeman, Apetina 2007)

- (4.98) wewe pole-h\_le i-wehe tĩ-kě epĩ pole  
 tree align.DIR-MPH\_INTENS 3POSS-anus do-IMP plant align.DIR

wĩ-ka-ø\_lep

1→3.ITR-say-PST\_FRUS

“put its anus exactly at right angles to the tree, at right angles to the plant” I said in vain

Additionally, *pole* may be preceded by personal prefixes (4.99) and followed by other postpositions and grammatical suffixes as expressed above in section 4.2.2.1.1. It does not appear to require any additional spatial suffixes such as *wě*, *-je* with for example the negative marker *-la* (4.100).

- (4.99) ěhe-pole, tĩ-kě takpile-m malě ěhe-pole-h\_le  
 REFL-align.LOC do-IMP red-NOM also REFL-align.LOC-EMPH\_INTENS  
 they, themselves in a straight line, put also the red one in exact  
 alignment with the other ones.

- (4.100) mẽ-ham pole-la  
 3PRO-ANIM.PL align.LOC-NEG  
 not in alignment with those ones

The postposition *pole* is also used when expressing location or direction in relation to the village which can not be denoted as up- or downstream. It refers to location and direction which is at right angles to the village: *ëutë pole* in alignment with the village (but then at right angles).

#### 4.3.6 Contact locative: -pëk(ë)

The postposition *-pëk(ë)* has two semantic functions: one being a contact locative and the other a semantic extension of this expressing 'being busy with'. As a postposition, *pëk(ë)* expresses the Figure object to be directly in contact with the Ground referent (4.101) - (4.103). It is a stative locative but distinguishes itself from the general locative *-po* in that although the Figure is touching the Ground, is not necessarily supported by it. The notion of 'contact' is fundamental within the Figure-Ground relationship expressed through *-pëk(ë)*.

(4.101) *tëpëlem man epï-pëk*  
 apple 3.be.PRES branch-CONTACT.LOC  
 the apple is on the branch (touching)

(4.102) *ëlek-pakma-top man ë-wasi-pëk*  
 wound-adhere-TMP.NOM 3.be.PRES 2POSS-leg-CONTACT.LOC  
 the plaster is on your leg

(4.103) *ina, upaphakë\_psiik lome kalipono-pëk mëje-la*  
 yes far\_DIM but person-CONTACT.LOC far-NEG  
 yes, a bit far, but practically touching the person

In cases where *-pëk(ë)* occurs word-finally the reduced form *-pëk* is used. However, once it is followed by additional morphology the full form *-pëkë* is required as in (4.104) where it occurs with the person nominalizer *-no*. Further examples of *-pëk(ë)* occurring with other morphology such as the negative marker *-la* and personal prefixes are given in (4.108) - (4.110) below.

(4.104) *wewe akon-pëkë-no i-pana-tom t-ehatekma-i.*  
 tree another-CONTACT.LOC-NOM 3POSS-ear-3PL COREF-touch-NF  
 his ears touching the one at the other tree

The directional counterpart of *-pëk(ë)* is formed with the directional marker *-na* (4.105), here the full form *pëkë* is also required.

(4.105) *heinë-no paja-pëkë-na i-wehe t-ëtï-he*  
 this.side-NOM grass-CONTACT-DIR 3POSS-anus COREF-become-NF  
 kopini-htak  
 bush-DIR  
 the one on this side, his anus becoming to touching the grass, to the bush

The postposition *-pëk* also has an extra non-spatial function, denoting ‘being busy with’ or ‘regarding’ as expressed in the following examples:

- (4.106) - palasisi\_psik-pëk?  
 white.man\_DIM-CONTACT.LOC  
 Is it about the little white man?
- uwa mëklë pëinëkë-imë-pëk  
 NEG.PRTCL DP.ANIM.MED boar-AUG-CONTACT.LOC  
 no, it’s about the pig
- (4.107) maka ei-kë tamī-pëk  
 end be-IMP cigarette-CONTACT.LOC  
 stop smoking!

In this context there are more examples of inflection. The following examples show how *-pëk(ë)* can be inflected for person and take on extra morphology such as the negative marker *-la*. The following examples are taken from songs by the Wayana Boys<sup>66</sup> and David from Kulumoli<sup>67</sup>.

- (4.108) ï-pëkë-la ei-kë  
 1-CONTACT.LOC-NEG be-IMP  
 leave me alone!
- (4.109) ise pëtuku ëw-aptao mëh-kë ï-ja ï-pëk  
 DESID beautiful 2-when come-IMP 1-GOAL 1-CONTACT.LOC  
 if you want a good looking man, come to me and be busy with me
- (4.110) ïu w-a-ø-i mëlë-kom-pëkë-la  
 1P 1→3.1TR-be-PRES-CERT DP.INAN.MED-COLL-CONTACT.LOC-NEG  
 I’m not busy with those things

### **4.3.7 Superior and inferior locatives and directionals**

This group of locatives expresses location to be above or below the Ground. The superior locatives *epoi*, *uhpo* and *ahpo* denote superior location and *opinë* and *opikai* inferior. The semantic distinctions between the superior locatives are easier to determine than the inferior locatives, whose nuances remain less transparent.

#### **4.3.7.1 epoi: superior, no contact**

The postposition *epoi* ‘above’, expresses that the location of the Figure is above the Ground marker but without any direct, physical contact. Tavares classifies *epoi* ‘above’ as one of the four ‘away’ postpositions, of which *ametai*

<sup>66</sup> The Wayana Boys are a band consisting of some Wayana and some Ndyuka from the Lawa River, who play reggae music.

<sup>67</sup> Kulumoli translates as ‘bamboo forest’ and is the Wayana name for Tutukampu, a small camp downstream from Apetina where Kapitein Same and his family live. Same still practices traditional medicine and David is one of his sons.

‘downstream’, *aktuhpo* ‘upstream’ and *m(i)kahpo* ‘behind’ also belong. This morphological classification is founded on their common usage of the spatial morpheme *-i* (*-je*). Additionally Tavares claims their semantic common denominator to be that they all express “a relationship in which one referent is located away from another” (Tavares, 2006: 322). However, this is a rather vague and unspecific explanation which covers other relationships within the Basic Locative Constructions; such as *pole* ‘in alignment with’. For this reason, I prefer to group them together semantically with other superior locatives.

(4.111) lampu-ēnī      man      tafala    epoi  
 lamp-container 3.be.PRES table    SUP.LOC  
 the lampshade is above the table

(4.112) eklot    man      ĩpĩ                  epoi  
 cloud 3.be.PRES mountain.top SUP.LOC  
 the cloud is above the mountain

As previously mentioned in section 4.2.2.1.2, there are no examples of the directional counterpart of *epoi*, in my data. Tavares has just one example showing the directional to be *epona*, whereby the locative suffix *-i* is replaced by the directional marker *-na*: *Tamoo tĩhe juputpĩĩ epona* ‘(He/She) placed his hands above my head.’ (Tavares, 2006: 287)

#### 4.3.7.2 *uhpo*: superior, contact

The postposition *uhpo* ‘on top of’ is also classified as a superior locative in which, again, the Figure is viewed above the Ground. The postposition *uhpo* ‘on top of’ distinguishes itself from *epoi* in that there is direct contact between both referents. It also expresses more specific location than *-po* ‘on’, as location is literally directly ‘on top of’ the object (that is to say on the highest point) (4.113), rather than in or on a general flat surface. The superior locative *uhpo* is anthropomorphic in nature as it appears to have been derived from the body part *upu* ‘head’ (cf. section 4.2.2.2 above); as also posited by Tavares (2006: 348).

(4.113) hapo    man      uhpo  
 hat 3.be.PRES SUP.CONTACT.LOC  
 the hat is on top (of his head)

In addition, like *pole* ‘in alignment with’ (cf. section 4.3.5), *uhpo* ‘on top of’ is also used to describe location and direction in relation to the village (4.114). Specifically this signifies location upstream from the village, though diagonally from the river and on the same riverbank as the village itself. This is further described in section 5.3.

(4.114) ěutě    uhpo                  w-a-ø-i  
 village SUP.CONTACT.LOC 1→3.1TR-be-PRES-CERT  
 I am above the village

The directional counterpart of *uhpo* is *uhpona*. The following example shows again how the Wayana use it to denote direction from the village which can be expressed as at right angles, upstream, downstream or across stream.

- (4.115) *ëutë uhpo-na wĩ-të-ja-i*  
 village SUP.CONTACT-DIR 1→3.1TR-go-PRES-CERT  
 I am going to above the village

#### 4.3.7.3 *ahpo*: ‘on the back of’

The postposition *ahpo* ‘on the back of’ is also a superior contact locative and expresses the Figure to be located on the back of the Ground marker. Like *uhpo* ‘on top of’ (section 4.3.7.2 above) it appears to be derived from a body part, in this case from *apĩ* ‘back’ (Tavares, 2006: 348). The following example comes from elicitation exercises.

- (4.116) *eluwa man pakolo ahpo*  
 man 3.be.PRES house back.LOC  
 the man is on top of the house (on the roof)

The postposition *ahpo* ‘on the back of’ may also be inflected for person. The following example has been taken from Tavares (2006: 318):

- (4.117) *j-ahpo alimi w-alë-ja-i*  
 1-back.LOC spider.monkey 1→3.1TR-take-PRES-CERT  
 I’ll take the spider monkey on my back

Although there are no attested examples in the data available to me, it is expected that that the directional counterpart of *uhpo* would pattern similarly as the other *-po* type locatives, forming *uhpona* ‘onto the back of’.

#### 4.3.7.4 *opinë*: inferior

The postposition *opinë* ‘underneath, below’ expresses that the Figure is under the Ground. No morphological distinction is made between contact and no contact between the Figure and Ground referents. Compare the following examples:

- (4.118) *makuk man tafala opinë*  
 tarantula 3.be.PRES table INF.LOC  
 the tarantula is underneath the table (contact)

- (4.119) *palakta-imë man stulu opinë*  
 rubber-AUG 3.be.PRES chair INF.LOC  
 the ball is under the chair (no contact)

In all examples *opinë* ‘underneath’ appears as a stative locative, as is also the case in the work of Tavares (Tavares, 2006: 279 and 293). The above examples come from elicitation exercises, other examples were found in oral traditions

(4.120) such as those collected and published by Karin Boven (Boven, 1995: 26).

- (4.120) t-ëne-i                apsikë-la    mïu        ëtat        opinë  
 COREF-see-NF        little-NEG    blood    hammock    INF.LOC  
 she saw a lot (not a little) of blood under the hammock

The only example available, in which *opinë* ‘underneath’ takes on extra morphology, is in Jackson’s Grammar where he gives an example of *opinë* followed by the nominalizer *-n(o)*: *opinë-n* ‘the one underneath’ (Jackson, 1972: 68). Additionally, as stated in section 4.2.2.1.2 there are no examples of a directional counterpart.

#### 4.3.7.5 *opikai*: inferior

Another inferior postposition is *opikai*. It is rather unclear how *opikai* exactly distinguishes itself from *opinë* as only secondary data are available for analysis; namely those of Tavares (2006) and Boven (1995). According to Tavares, *opikai* may take all personal affixes but not the negation marker *-la* (Tavares, 2006: 326). Tavares also states that the referent may be invisible and that there is no contact between the Figure and Ground object (Ibid). However, one needs the given examples to be placed in a larger context as sentences such as: “*kuje tilihe elimakë opikaj*” ‘he/she placed the spoon under the plate’ are contextually unclear. There is no information given regarding the exact position and measurements of the objects, which would determine whether there is contact and visible parts. The following examples were taken from the texts collected by Boven (1995):

- (4.121) t-ëhe-jo-ptë-i                                oha                opikai    t-ëtï-he  
 COREF-REFL-protection-BEN-NF    kasiri.pot    INF.LOC<sup>68</sup>    COREF-become-NF  
 inëlä  
 DP.ANIM.ANA  
 she protected herself, she hid (became) under the kasiri pot

- (4.122) opikai    t-ëtï-he                                inëlä  
 3.INF.LOC    COREF-become-NF    DP.ANIM.ANA  
 he (jaguar) came to be under him.  
 (Ibid: 38)

The above examples (4.121) and (4.122) give no great clarification regarding Tavares’s proposed characteristics of the Figure-Ground relationship. In (4.121) it remains unclear if there is direct contact between the Figure and Ground objects but it appears she is invisible. In (4.122) there is no contact between both Figures as the ‘him’ refers to a Wayana who is in a hunting hut. It is possible that the jaguar is invisible to the Wayana. Tavares further proposes

<sup>68</sup> Although I realize there must be a distinction between *opikai* and *opinë*, I have glossed them both as INF.LOC until I have established what the exact distinction is.



that *opikai* “*opikai* ‘under’ may have been the historical the [minus contact] counterpart of *opinë*” (Tavares, 2006: 292). It does, however, appear to be more commonly used with verbs of motion rather than stating stative location, although it does not follow the general morphological patterns governing directionals (cf. section 4.2.2.1.2). Further research is needed to distinguish the semantic differences between *opinë* and *opikai*.

#### 4.3.8 Anterior and posterior locatives and directionals

The following two postpositions express the location of the Figure to be either ‘behind’ *waliktao*, or ‘facing’ *em(in)patao*, the Ground. They both pattern morphologically in a similar way to the container locatives although they have restrictions regarding which objects may function as the Ground. This is explained in detail below.

##### 4.3.8.1 *em(in)patao*: ‘facing’

The derived postposition *em(in)patao* ‘facing, opposite’, the etymology of which was briefly discussed in section 4.2.2.2 above, expresses location of the Figure object as being ‘in front of’, ‘facing’ or ‘opposite’ the Ground. Although Tavares posits that *em(in)pata* can only be combined with animate objects as its referent (Tavares, 2006: 310), there are also examples of which *em(in)pata* is used with objects which have been designated intrinsic features, such as buildings - as is also the case in English, for example.

(4.123) ACT pakolo-n empatao man sikolo  
 ACT house-NOM face.LOC 3.be.PRES school  
 the school is facing the ACT building

In the data collected in Apetina two forms were attested: *empata* (4.124) and a fuller form; *eminpata* (4.125). The fuller form appears to be used by speakers of the older generation and *empata* by the younger generation.

(4.124) mĩ-lĩ-ø ka ëh-empata-h-k mĩ-lĩ-ø i-waliktao  
 2→3-make-PST Q REFL-face.LOC-EMPH-DIR 2→3-make-PST 3-behind.LOC  
 have you put them facing each other? you put them behind it

(4.125) kapau ëw-eminpata-k\_lap man lome wijo-man  
 deer 2-face-DIR\_FRUS 3.be.PRES but crooked-FACS.NOM  
 i-pĩmĩ  
 3POSS-neck  
 the deer would be facing you except that its neck is twisted

As seen in the above examples (4.124) and (4.125), *em(in)pato* may take personal prefixes, including reflexives which express objects to be facing each other (4.124); and other morphology as expressed in section 4.2.2.1, such as the frustrative enclitic (4.125). The same rules apply to the directional

counterpart *em(in)patak*. However one would expect that the full form *em(in)patakë* would be used when followed by extra morphology as in (4.125).

#### 4.3.8.2 *waliktao*: ‘behind’

The postposition *waliktao* expresses that the location of the Figure is behind the Ground. In the absence of a nominal it must be marked for person or reflexive. Additionally, as described above in section 3.2.2.1.1 above, it may take extra morphology such as the frustrative enclitic (4.127). The spatial suffix *-wë* is added before the negative marker *-la* (4.128), unless it does not directly follow *waliktao* (4.128). Tavares attests the form *walipta* rather than *waliktao* for behind. She does mention that there were cases where *waliktao* was attested (Tavares, 2006: 308), suggesting the existence of dialectical differences.

- (4.126) uwa,           mījalë   tīi-kë   i-waliktao  
 NEG.PRTCL   again   do-IMP   3-behind.LOC  
 no, again put it behind it (tree)
- (4.127) lome    heinë       i-waliktao\_lë\_lep  
 but       this.side   3-behind.LOC\_ASSERT\_FRUS  
 but not completely behind them (animals) on this side
- (4.128) sija\_lë-ja                   mëihnë-la    i-waliktao-wë-la  
 hither\_ASSERT-GOAL   that.side-NEG   3OBJ-behind.LOC-LOC-NEG  
 not to this way, not that side, not behind it

Tavares distinguishes between two posterior locatives: *walipta* ‘area behind’ and *m(i)kahpo* ‘behind’. According to Tavares the latter expresses that there is contact between the Figure and the Ground marker whilst *walipta* signifies the area behind an object, person or location (Tavares, 2006: 308 and 323). I have found no examples of the postposition *m(i)kahpo* in my own data nor in that of Jackson (1972) or Boven (1995).

During the ‘photo-object matching game’ (cf. section 3.3.1.5) a different distinction was ascertained pertaining to how the Wayana express the notion ‘behind’. The postposition *waliktao* is used with both animate and inanimate Ground objects when expressing the location of the Figure to be in the general area behind the Ground (4.129). However, when the Ground is an animal and the Figure was located directly behind it, the Wayana tend to use the animals ‘anus’ as the referent, followed by the container postposition *-jao*, rather than the posterior postposition *waliktao* (4.130) and (4.131).

- (4.129) i-waliktao       heinë       wewe  
 3-behind.LOC   this.side   tree  
 the tree behind (general) on this side

(4.130) i-wehe-ja-k hapo-n tii-kē\_le  
 3POSS-anus-INT-DIR like-NOM do-IMP\_INTENS  
 put it like one to his anus

(4.131) i-wehe-jao  
 3POSS-anus-INT.LOC  
 in his anus?

Additionally during the exercise when a larger object was behind the animal, rather than explaining the position of the tree in relation to the ‘anus’, the ‘anus’ was placed in reference to the tree. It appeared you could not say ‘the tree behind the anus’ but had to say ‘the anus to the tree’.

(4.132) wewe pole-h\_le i-wehe tii-kē  
 tree align-EMPH\_INTENS 3POSS-anus do-IMP\_INTENS  
 put its anus in alignment with the tree

(4.133) lome heinē-no paja-pēkē-na i-wehe t-ētī-he  
 tree this.side-NOM grass-CONTACT-DIR 3POSS-anus COREF-become-NF  
 but his anus coming to touching the grass on this side

During elicitation exercises a man hiding behind a chair was expressed as being behind the chair according to an intrinsic frame of reference (4.134), here *waliktao* is used to express specific location, directly behind an object because the Ground is inanimate.

(4.134) eluwa man stulu waliktao  
 man 3.be.PRES chair behind.LOC  
 the man is behind the chair

The directional counterpart of *waliktao* is the postposition *waliktak* and follows the same morphological patterns as *waliktao*.

(4.135) i-pana i-pana walikta-k ku-pana heinē  
 3POSS-ear 3POSS-ear behind-DIR 1+2 POSS -ear this.side  
  
 walikta-k katip  
 behind-DIR like  
 his ear, to behind his ear, like to behind this side of our ears

#### **4.3.9 Environmental locatives and directionals**

The environmental locatives express the Figure’s location in relation to the natural environment. Rivers play an important role in Wayana society and are not only a source of water and food, but they form important means of travelling to gardens and families in other villages. Rivers also form trade routes with groups further upstream and downstream and are increasingly important transport links for supplies from Paramaribo, Albina and the Lawa. For these

reasons they play an important role within the Wayana's perception of space. This is briefly described below and in greater detail in section 5.5.

#### 4.3.9.1 *aktuhpoi*: 'upstream'<sup>69</sup>

The postposition *aktuhpoi* denotes location 'upstream' which Tavares also translates as 'northwards' (Tavares, 2006: 276). However, this seems unlikely as the relating cardinal position for 'upstream' is dependent upon the geographical location of the village. In Apetina 'upstream', is actually 'south-westwards'. Within the Wayana community the directions denoting 'upstream' and 'downstream' are seen as very important, and they are often used as the Ground referent within the 'basic locative construction' denoting location and direction of Figure referents. The location expressed by *aktuhpoi* 'upstream' is unspecified in that it needs to be used within a broader context to know exactly where, or how far, upstream the Figure referent is situated (4.136).

- (4.136) *aktuhpoi*        *man*  
           upstream.LOC 3.be.PRES  
           he is upstream

*Aktuhpoi* may also take the postposition *-ině* (4.137) and the negative marker *-la*. In these cases the ending *-i* is replaced by the full form *-je*, as mentioned above in section 4.2.2.1.

- (4.137) *ø-uměkě-mě-ja-i*                    *aktuhpo-je-ině*                    *kanawa-ilě*  
           1→3.1TR-come-CYC-PRES-CERT upstream.LOC-DIST-SOU boat-PERL  
           I come back from upstream by boat

The directional counterpart of *aktuhpoi* 'upstream' is *aktuhpona* which is commonly used in every day language.

- (4.138) *wi-tě-ja-i*                            *aktuhpo-na*    *kanawa-ilě*  
           1→3.1TR-go-PRES-CERT upstream-DIR boat-PERL  
           I am going upstream by boat

- (4.139) *sija-ja*                    *aktuhpo-na*    *ø-emit*  
           hither-GOAL upstream-DIR 3POSS-face  
           his face going to this way, to upstream

#### 4.3.9.2 *ametai*: 'downstream'<sup>70</sup>

The downstream counterpart of *aktuhpoi* is the postposition *ametai* 'downstream', expressing location downstream from the point of reference (4.140). As is the case of 'upstream', Tavares posits that *ametai* also translates as 'southwards' (Tavares, 2006: 276), however, for the same reasons given under *aktuhpoi*, it does not correlate with the geographical location of Apetina.

<sup>69</sup> All examples in this subsection were taken from elicitation.

<sup>70</sup> All examples in this subsection were taken from elicitation.

- (4.140) ametai                      w-a-ø-i  
 downstream.LOC    1→3.1TR-be-PRES-CERT  
 I am downstream

Like *aktuhpoi* ‘upstream’, *ametai* ‘downstream’ also refers to an unspecified location in the direction of ‘downstream’. It also functions morphologically similarly as *aktuhpoi* in that the source postposition is preceded by the spatial suffix *-je* (4.141).

- (4.141) ø-umëkë-më-ja-i                      ameta-je-inë                      kanawa-ilë  
 1→3.1TR-come-CYC-PRES-CERT    upstream.LOC-DIST-SOU    boat-PERL  
 I come back from downstream by boat

The directional counterpart of *ametai* is formed with the directional marker *-k(ë)*. This differs from *aktuhpoi* where the directional is formed with the directional marker for *-po* type locatives, *-na*. In both cases the locative marker *-i* is reduced (4.142) and (4.143).

- (4.142) wĩ-të-ja-i                      atkuhpo-na    kanawa-ilë  
 1→3.1TR-go-PRES-CERT    upstream-DIR    boat-PERL  
 I am going upstream by boat

- (4.143) wĩ-të-ja-i                      ameta-k  
 1→3.1TR-go-PRES-CERT    downstream-DIR  
 I am going downstream

As is the case of *aktuhpona* ‘upstream wards’ *ametak* is used also to explain the direction of objects in and around the village (4.139). The Wayana use an absolute and intrinsic frame of reference within spatial orientation, rather than the ego-orientated relative frame. (cf. section 2.3.2 and 5.2 for further information)

#### 4.3.9.3 *etatopo*: riverbank<sup>71</sup>

The postposition *etatopo* is derived from the noun *etato* ‘riverbank’ and the general locative *-po*. It expresses location to be on the riverbank at the opposite side of the river. Tavares does not mention *etatopo* as a postposition in her grammar (Tavares, 2006). However, it is regularly used in Apetina to express across the river (4.144). When it is not used with the nominal *tuna* ‘water, river’, or a related concept such as *amat* ‘creek, it is preceded by a personal prefix (4.145).

- (4.144) tuna    etatopo    man  
 water    bank.LOC    3.be.PRES  
 he is on the opposite river bank

<sup>71</sup> All examples in this subsection were taken from elicitation.

- (4.145) ø-etatopo man  
 3-bank.LOC 3.be.PRES  
 he is on the opposite bank (of the river)

The postposition *etatopo* may also be used to explain the location of a person or object in relation to the village. The location is noted to be on the opposite side of the river in relation to the village, regardless of the direction being up- or downstream (cf. section 5.3): *ëutë etatopo* ‘away from the village, across stream’. The directional counterpart of *etatopo* is *etatopona*:

- (4.146) tuna etatopo-na wĩ-të-ja-i  
 water bank-DIR 3→1.1TR-go-PRES-CERT  
 I am going to the other side of the river

#### 4.3.9.4 *talihnao*: ‘outside’

The morpheme *talihnao* expresses location of the Figure referent as ‘outside, in the clear’. It is possible that *talih* is derived from a word meaning dawn, as is the case in Trio: *awaina* ‘dawn + *-tao* ‘container locative’ → *awainatao* ‘outside’ (Carlin, 2004: 184). As of yet I have not yet been able to verify this. Although it has the form of a derived postposition, taking the *-nao* locative expressing ‘location in a boundless area’, it appears to have become lexicalized, functioning more as a locative adverb. It does not take any objects and does not appear to occur with any additional markers, enclitics or postpositions, although it is probable that it may be marked for negation. There are also no attested cases of a directional counterpart for *talihnao*.

- (4.147) tafala man talihnao  
 table 3.be.PRES outside.LOC  
 the table is outside

- (4.148)<sup>72</sup> maka aptao talihnao t-ëhepīt-se petuku  
 finished when outside.LOC COREF-enjoy-NF beautiful  
 when they have finished, they can enjoy the beauty outside

#### 4.3.10 *At the base of: mitao*

According to Tavares *mita* expresses the location of the Figure to be hidden in the area surrounding the Ground object, the exact location is unspecified. Tavares mentions one exception to this characterization, when *mita* is used in combination with the nominal *wapot* ‘fire’ when it expresses location ‘in the vicinity of’ the fire. (Tavares, 2006: 309). The only examples in my data are through elicitation. One refers to an object at the base of the tree as being *i-mitao* ‘at the base of it’, although it was unclear if the object was completely hidden as posited by Tavares. The other example has fire as the Ground referent (4.149). More research is needed to determine the morphology and semantics of *mitao*.

<sup>72</sup> This example was taken from a narrative told by Johan.

- (4.149) molo man wapot-mitao  
 LOC.ADV.MED.SP 3.be.PRES fire-base.LOC  
 there he is, by the fire

### **4.3.11 Around: wala**

The postposition *wala* ‘around’ expresses the notion that the Ground is surrounded by the Figure, but without physical contact. Tavares asserts the same characteristics to *wala* (cf. Tavares, 2006: 327).

- (4.150) lampu wala man takahak-tom  
 lamp around.LOC 3.be.PRES spider-PL  
 the lamp is surrounded by insects

Tavares gives an example where *wala* is inflected with the reflexive pronoun: *ëhe-wala* ‘both surrounded’ (Tavares, 2006: 275). It may also be used to express movement around a certain object or geographical feature:

- (4.151) wewe wala wĩ-të-ja-i  
 lamp around.LOC 3.be.PRES  
 I walk around the tree

It must be noted that all of the above sentences come from elicitation exercises. No examples have been found in any of the narratives at my disposal. Only with the additional analysis of uses within such sources can a proper description be given.

### **4.3.12 Perlatives**

Perlatives express motion ‘along’ or ‘through’ depending on the semantics of the Ground referent. There are two attested perlatives in Wayana, namely: *-ilë* and *-lo*. In the data available to me I found only two nominals which directly took the perlative marker *-ilë*; namely *kanawa* ‘boat’ (4.152) and (4.153) and *ëhema* ‘path’ (4.154). When *-ilë* occurs with *kanawa* ‘boat’, it expresses movement ‘by boat’ (4.152) and (4.153). There are no attested examples of *-lo* appearing directly on a noun.

- (4.152) walunak hapo-n tĩ-të-i inëlä kanawa-ilë  
 evening like-NOM COREF-go-NF DP.ANIM.ANA boot-PERL  
 when it is like evening, he goes by boat  
 (Boven, 1995: 17)

- (4.153)<sup>73</sup> molo-inë wĩ-të-m mĩjalë kanawa-ilë  
 LOC.ADV.MED.SP-SOU 3→1.1TR-go-PST again boot-PERL  
 then I went again by boat

<sup>73</sup> This example was taken from a narrative told by Johan.

- (4.154) ehema-ilë akëlephakë\_psik itë-tihwë aptao  
 path-PERL far\_DIM go-after when  
 along the path when he goes a little far  
 (Boven, 1995: 29)

The perlatives *-ilë* and *-lo*, however, are most commonly used in combination with other locatives. The perlative markings *-ilë* and *-lo* ‘along, through’ appear to follow the same morphological distinctions as the directional endings *-k(ë)* and *-na*, as discussed above in section 4.2.2.1.2. The surface postpositions, and other locatives ending in *-po*, form the perlative by adding the ending *-lo* (4.155). Simultaneously, the container locatives and other locatives ending in *-ao*, take the marker *-ilë*, as in (4.156).

The ‘surface’ postpositions (i.e. those that take the locative *-po*) retain their full form, as is also the case by the directionals, creating *-polo* ‘through, along (on surface) (4.155)’. The container postpositions lose their locative ending *-o* when the perlative is added. The additional spatial suffix *-wë*, which occurs with the source marker *-inë* and the negative marker *-la* (cf. section 4.2.2.1), is not required.

- (4.155) ëutë po-lo wī-të-ja-i  
 village LOC-PERL 3→1.1TR-go-PRES-CERT  
 I walk through the village

- (4.156) tuna-kwa-ilë wī-të-ja-i  
 water-LIQ.LOC-PERL 3→1.1TR-go-PRES-CERT  
 I swim through the water/I swim in the river

The perlative *-ilë* also occurs with the ‘deep interior locative’ *loptao* to form the adverb *difficult*, which has become lexicalized (cf. section 4.3.2.5). Compare the examples below:

- (4.157) tuna-lopta-ilë ka tī-të-i  
 3-deep.INT.LOC-PERL fish COREF-go-NF  
 the fish swims deep in the river (invisible)

- (4.158) i-lopta-ilë man helë i-ja  
 3-deep.INT.LOC-PERL 3.be.PRES DP.INAN.PROX 1-GOAL  
 this is difficult for me

### 4.3.13 Source: *-inë*

The postposition *-inë* expresses the source location of the noun it refers to. It resembles the perlative markers as it is most frequently used in combination with other locatives. It is assumed it may be used directly on a nominal, although no examples were attested in the data at my disposal.



The source postposition may occur on all locatives and also on place names to express where a person has just come from, or from where he originates (4.159).

- (4.159) Oland-po-inë    ø-umëk-ne  
 Holland-LOC-SOU    3→1.1TR-come-DIST.PST  
 I come from Holland

As mentioned in several of the descriptions above, the source marker *-inë* is preceded by the spatial suffix *-wë* when it follows the container locatives and other locatives which pattern to the same morphology, such as *ekatao* ‘beside’, *lamnao* ‘in the middle’ and *-k(u)wao* ‘in liquid’, to name but a few (4.160). After the locatives ending with *-i*, the suffix marker *-je* is added (4.161). These markers denote the original full forms of the locatives in Wayana, as discussed in section 4.2.2.1.1 above. Those postpositions patterning as *-po* require no additional morphology (4.159) and (4.162). I have glossed *-poinë* as a source marker as it patterns like the directional equivalent of *-po*, *-pona*.

- (4.160) tepu-eli    t-ëne-i                    kanawa-jao-wë-inë  
 rock-top    COREF-see-NF    boat-INT.LOC-LOC-SOU  
 they can see Tepu Top from inside the boat

- (4.161) ø-umëkë-më-ja-i                    aktuhpo-je-inë                    kanawa-ilë  
 1→3.1TR-come-CYC-PRES-CERT    upstream.LOC-DIST-SOU    boat-PERL  
 I come back from upstream by boat.

- (4.162) maa    t-ëne-i                    e-ja-he    tēpu-po-inë  
 DISC    COREF-see-NF    3-GOAL-PL    rock-LOC-SOU  
 Well, they looked down from on a rock

The source marker is also used in temporal expressions and with the locative adverbs as discussed in the following sections 4.3.14.

#### **4.3.14 Expressions of time**

Space and time, like language and culture, can only be perceived as inseparable concepts which can not exist independently as all events take place in space at a certain time. As in many cultures and languages time is expressed with spatial morphology as events take place at a certain point in time.

In Wayana the general locative *-po* is used within temporal constructions, expressing location in time. This commonly occurs in temporal concepts expressed in the timeframe of days, weeks, months or years. For example ‘on Monday’ is expressed as *mondi*<sup>74</sup>-*po*. More general notions of time such as this week and the like, are also expressed with the postposition *-po*: *helë weki-po* ‘this week’; *helë nunwë-po* ‘this month’. The concept of the western calendar

<sup>74</sup> The names of the days of the week and the months of the year have been borrowed from the contact language Sranantongo.

and days of the week was initially introduced through trade contact and later by the missionaries. Today, with the arrival of the new primary school, western time and the days of the week are becoming more prominent within Wayana society.

As with the locative *-po*, the directional counterpart *-pona* and the source marker *-ině* are also used in temporal constructions expressing spatial temporality:

(4.163) peitopīt man sikolo-pěk 8 julu-po-ině 1  
 children 3.be.PRES school-CONTACT.LOC 8 hour-LOC-SOU 1

julu-pona  
 hour-DIR

the children are busy with school from 8 o'clock to 1 o'clock

The medial specific locative adverb *molo* 'there' (cf. section 4.5) also occurs frequently with the source marker *-ině* creating *molo-ině*. This lexicalized a form literally translates as 'from there' and is commonly used as a temporal construction expressing 'and then', 'after that'. *Moloině* appears frequently in narratives (4.165).

(4.164) molo-ině kapau m-anīm-ja-i  
 LOC.ADV.MED.SP-SOU deer 2→3-lift-PRES-CERT  
 then you lift the deer

(4.165) molo-ině 'kuwi' tī-ka-i kaikui  
 LOC.ADV.MED.SP-SOU 'kuwi' COREF-say-NF jaguar  
 then the jaguar screamed (said) "kuwi"  
 (Boven, 1995: 39)

#### 4.4 Third person pronouns and demonstratives

The third person pronouns in Wayana are firstly categorized according to animate and inanimate parameters creating two sets of pronouns and then according to deixis. The personal pronouns refer to animate entities and the demonstratives to inanimate entities and general deictic relations.

Demonstratives also allow us an insight into how space is categorized as described by Kemmerer (2005: 5), they:

Divide the egocentric space surrounding the speaker (or addressee) into categorically discrete zones. Crucially, demonstratives do not encode metrically precise degrees of remoteness from the deictic center, but rather have abstract meanings that are pragmatically modulated [...]allowing speakers to flexibly expand or contract the zones so as to express an unlimited range of distance contrasts.

A slight majority of languages have a binary demonstrative system, such as in English and Dutch, using the binary opposites proximal and distal (this-that and here-there). However, several languages, such as those from the Cariban language family, have a more complex system. In Wayana, both the demonstratives and third person personal pronouns are further categorized according to deictic parameters, expressing spatial location in relation to the speech participants. A four-way deictic system is recognized: proximal, medial, distal and anaphoric or referential.

	<b>animate</b>	<b>plural</b>	<b>inanimate</b>	<b>plural</b>
<b>proximal</b>	mëi/mëhë	mëham	helë/mësin/sin	hëlä-kom
<b>medial</b>	mëklë	mëkjalë	mëlä	mëlä-kom
<b>distal</b>	mëk	<i>mëkjam</i>	<i>mïn</i>	<i>mïn-kom</i>
<b>anaphoric</b>	inëlä	inamolo	inëlä	inamolo

**Table 4.16: Third person pronouns and demonstratives**

Part of Table 4.16, namely those in italics, have been taken from Tavares (2006: 184). In Derbyshire (1999: 55) however, *mïn* is classified as the animate, medial demonstrative and *mëklë* as the animate, distal. In the data collected in Apetina, it is difficult to ascertain all the nuances of the demonstrative and third person, personal pronouns. Further, more detailed research is needed before a definite conclusion can be drawn. One conclusion we may make from the above table is the existence of *he-/më-* as formatives of the demonstratives, with *he-* denoting proximate location and *më-* location away from the speaker.

The proximal pronouns denote location, close to the speaker. The proximate animate *mëi* and the inanimate, demonstrative pronoun *sïn* appear to be used to express the Figure specifically; whilst the pronouns *mëhë* and *helë* function more as presentatives (cf. Tavares, 2006: 184) or to denote general proximate location. Compare the following examples:

(4.166) mëi                    man                    kolo-me  
 DP.ANIM.PROX    3.be.PRES    stool-FACS  
 he is sitting (*said whilst pointing*)

(4.167) ëe   mëh-am                    lamnao  
 ok   DP.ANIM.PROX-PL    middle.LOC  
 ok, in between those ones

(4.168) ëtï-pa                    sïn  
 Q.INAN-Q                    DP.INAN.PROX  
 what is this?

(4.169) helë                    ekalë-top                    kupe-psik  
 DP.INAN.PROX    DP.ANIM.PROX-PL    short.LOC  
 this story is short  
 (Boven, 1995: 31)

The demonstrative *helë* occurs regularly with *wihnë* ‘side’ to express ‘this side’. *Wihnë* seems to end with the locative ending *-në* as is the case in with *opinë*. It is likely that the demonstrative formatives *he-/më-* in combination with *wihnë* form respectively *hewihne* ‘this side’ (4.170) and *mëwihnë* ‘that side’ (4.171). These forms have become reduced to respectively form the lexicalized forms *heinë* (4.172) and *meinë* (4.173) or *mëihne* (4.174).

(4.170) *hewihnë-no-ja kamisa-ina-no-ja*  
 side-NOM-GOAL loincloth-adj.LOC-NOM-GOAL  
 the one on this side to the one at the side of the loincloth

(4.171) *mëwihnë wewe tii-kë*  
 that.side tree do-IMP  
 put the tree on that side!

(4.172) *i-waliktao heinë wewe*  
 3-back.LOC this.side tree  
 the tree behind it on this side

(4.173) *kilili-k meinë ilama-k ø-uputpi sija*  
 move-PROX.IMP that.side turn-IMP 3POSS-head hither  
 move it that side, turn his head this way!

The third person pronouns may be followed by postpositions, enclitics and markers. Some of these have become lexicalized which is discussed in this section further below.

The medial pronouns denote location to be further away from the speaker. This is a relative concept, as the Figure may be very close to the speaker but slightly further than a different object in the vicinity.

(4.174) *ihï mëklë malë mëihnë-no*  
 YES DP.ANIM.MED also that.side-NOM  
 yes, him, the one on that side also

(4.175) *mëlë\_lë katip mëklë-ja tëule tii-kë*  
 DP.INAN.MED\_ASSERT like DP.ANIM.MED-GOAL eye do-IMP  
 like this, turn his eyes towards him

(4.176) *masike mëlë wewe ale pole hapo-n\_lëken*  
 therefore DP.INAN.MED tree leaf align.loc like-nom\_only  
 therefore, it just like in alignment with the trees leaves

The inanimate, medial pronoun frequently occurs with *katip* ‘like’ expressing ‘like that’.

In the narratives collected by Boven (1995), there are several examples of the medial inanimate demonstrative pronoun *mëlë* and the facsimile *-me*. These have become lexicalized forming *mëlëme*, which translates as ‘then/like that’.

- (4.177) *mëlë-me*      *tï-të-i-me*                  *inëlë*  
 DP.INAN.MED    COREF-go-NF-CYC    DP.ANIM.ANA  
 then he went again  
 (Boven, 1995: 40)

The distal pronouns express location to be far (or further than surrounding objects) from the speaker. There are few examples of these pronouns, and further research is needed to classify them correctly.

- (4.178) *maa mëk*                  *akon*      *takpile-m*      *anim-kë\_le*  
 DISC    DP.ANIM.DIST    another    red-NOM      lift-IMP\_INTENS  
 so, lift it the other red one

- (4.179) *mëk*                  *man*                  *tuna-kwao*  
 DP.ANIM.DIST    3.be.PRES    water-LIQ.LOC  
 he is in the water (*far*)

- (4.180) *ëtï-pa*      *mïn*  
 Q.INAN-Q    DP.INAN.DIST  
 what is that?

- (4.181) *masike*      *mëlë-katïp\_lëken*      *mïn*                  *ekalë-top*      *apsik\_lëken*  
 therefore    DP.INAN.MED-like\_only    DP.INAN.DIST    story-NOM    a.little\_only  
 so, that story is just like that, just a little (one)  
 (Kulepeman, Apetina 2007)

The anaphoric or referential pronouns (cf. (4.182) and (4.183)) are used to refer to an animate or an inanimate entity respectively that has previously been mentioned. The anaphoric pronouns occur frequently in narratives, generally referring to an animate entity.

- (4.182) *mïu*      *hapo-n*      *tï-panakma-i*      *e-ja-he*      *tï-ka-i*                  *inamolo*  
 blood    like-NOM    COREF-hear-NF    3-GOAL-PL    COREF-say-NF    DP.ANIM.ANA.PL  
 they said they heard something like blood  
 (Kulepeman, Apetina 2007)

- (4.183) *molo-inë*                  *tï-të-i*                  *akëlephak*      *tï-të-i*                  *inëlë*  
 DP.INAN.ANA-SOU    COREF-go-NF    far                  COREF-go-NF    DP.ANIM.ANA  
 then he went, he went far  
 (Boven, 1995: 39)

According to Tavares (2006: 183) and Derbyshire (1999: 54) *inëlë* also refers to inanimate objects, although Tavares had no examples of *inëlë* referring to an inanimate object. There are also no such examples found within my data. It

may be possible that this conclusion was drawn due to the cultural discrepancies in what is to be categorized as an animate or inanimate object. As discussed in section 1.3.3 the Wayana world consists of several cosmological layers which are inhabited by humans, animals and spirits who are all attributed the same soul and are thus animate. However, the border between animate and inanimate objects remains obscure as the Wayana also perceive certain man-made objects to be animate as they are believed to incarcerate the soul of the person who has made them.

#### 4.5 Locative adverbs

The locative adverbs, like the third person pronouns, are also categorized according to the deictic parameters: proximal, medial and distal. A further distinction is then made depending on the definability of the inferred location.

	proximal	medial	distal
<b>specific location</b>	tan(ë)	molo	mon(o)
<b>general location</b>	talë	hëj(e) (stative)	mëje (stative)

Table 4.17: Locative adverbs

The proximate adverbs expressing ‘here’ are *tan(ë)* and *talë*. The locative *tan(ë)* denotes specific location at the speaker, whilst *talë* refers to location in the general vicinity of the speaker. The boundaries of the locative adverbs remain ambiguous and can not be measured in metric terms as *talë* ‘here’ can express location around the speaker, but also more abstractly in the same village or general area. Hence:

- (4.184) tan wai I am right here  
 (4.185) talë wai I am here (general), I stayed here  
 (4.186) talë wai ëütë I am here in the village  
 (4.187) \*tan wai ëütë \*I am here in the village  
 (4.188) mëhkë tanëna Come right here!

As *tan(ë)* expresses specific location at the speaker and the concept *ëütë* expresses the village in general, it is grammatically incorrect to use them together to express being ‘here in the village’ as it would be a contradiction in terms (4.187). Additionally, Tavares asserts that the directional *-na* may not be used on the locative adverb *tan(ë)* (2006: 364). However, the Wayana in Apetina do use it in this formation, saying that it may occur on both forms of the proximal adverbs. In Apetina they frequently use *tanëna* ‘to here’ (specific) in combination with the imperative of the verb to come (4.188). There are no attested examples of *tan(ë)* occurring with the source marker *-inë* although there were some examples where it occurred with *talë* (4.189).

- (4.189) Talë-inë wĩ-tëi-më-ja-i ëütë-na  
 LOC.ADV.PROX 1→3.1TR-go-CYC-PRES-CERT village-DIR  
 from here I am going back to the village

The medial adverbial locatives are *molo* defining a specific location and *hëi/hëje* expressing general location, at a medial distance from the speaker. Again the exact metric boundaries are indefinable and ‘there’ may define a location close to the speaker or a location kilometers further away. During the elicitation exercises with the ‘topological relations picture series’, one speaker constantly used *molo* to define ‘there it is ...’ (4.190).

(4.190) *molo*                      *man*                      *ahmīt-po*  
 LOC.ADV.MED.SP    3.be.PRES    shelf-DIR  
 it is there, on the shelf

(4.191) *Granda Futu-po kampu t-ënik-he*                      *molo*  
 Granda Futu-LOC camp                      COREF-sleep-NF                      LOC.ADV.MED.SP  
 they will sleep there at Granda Futu camp

(4.192) *maka molo-na\_lëken*  
 end                      LOC.ADV.MED.SP-LOC\_only  
 finished, to there only  
 (Boven, 1995: 40)

The non-specific medial locative is *hëi/hëje*. According to the speakers of Apetina, it may not be used with verbs of motion and may not take on the directional or source markers. When asking the location of objects (eg. gardens, geographical locations) outside the village or at the far end, the medial non-specific *hëi/hëje* was used. This was always accompanied by a gesture in the direction of the object.

In narratives *hëi/hëje* may also be used to express a general location away from the speaker. In the following example ‘there’ refers to the general ‘human-world’, whilst the narrator perceives it from the ‘spirit-world (cf. section 5.5).

(4.193) *tihule*                      *t-upi-jë-më-i*                      *hëje*                      *i-wekī-lī-ja*  
 long.time                      COREF-look-?-CYC-NF                      LOC.ADV.MED                      3POSS-family-POSS-GOAL  
 for a long time his family looked for him there (in the human-world)

Whilst *molo* may occur with verbs of motion and markers denoting direction and source (4.194), *hëi/hëje* only occurs in a stative form (4.195), according to the speakers of Apetina.

(4.194)                      *molona wītējai*                      I am going to there  
 (4.195)                      *\*hëina wītējai*                      I am going to somewhere over there

The deictic adverbs locating distal location are *mon(o)* and *mëje*. Like the medial adverb *hëje*, *mëje* is a stative form and may not be used with verbs of motion, directionals or source markings, the locative *mon(o)* may occur in this manner:

(4.196)                      *monona wītējai*                      I am going to way over there  
 (4.197)                      *\*mëje wītējai*                      I am going to somewhere way over there

When *mon(o)* is used, the speaker must know exactly which location he is talking about, it must be a place that he has previously been to or has heard of its exact location, whilst with *mėje* this is not the case. Therefore when referring to the Netherlands, *mėje* is used:

(4.198) ahamatse man mėje it is cold there (in the Netherlands)

A final observation is that the non-specific locative adverbs *hėje* and *mėje* follow the same pattern as the third person pronouns and the demonstratives in that they are constructed with the formatives *he-* and *mě-*, denoting location close and far respectively (cf. section 4.4). Due to the ambiguous nature of the locative adverbs further, detailed research is needed to determine the exact characteristics and boundaries between each category.

#### 4.5.1 Motion adverbs

There are two adverbs referring to motion which are found regularly within the data collected during the ‘photo-object matching’ game. These are: *sija* ‘hither, movement towards’ (4.199) - (4.202) and *mija* ‘thither, movement away’ (4.203). Within the data collected they occur frequently with the assertive enclitic *\_lě* (4.199), the diminutive *-psik* (4.200), the negative marker *-la* (4.202) and the goal marker *-ja* (4.199) and (4.201).

(4.199) lome-hek sija\_lě-ja ĭ-ja mija-ja i-watkĭ  
 but-only hither\_ASSET-GOAL 1-GOAL thither-GOAL 3POSS-tail  
 but he is this way towards me, his tail that way

(4.200) uwa sija-psik sija-psik enep-kě enep-kě  
 NEG.PRTCL hither-DIM hither-DIM bring-IMP bring-IMP  
 no, a little this way, bring it a little this way, bring it!

(4.201) sija-ja ø-emĭt sija-ja ø-emĭt ene-k!  
 hither-GOAL 3POSS-face hither-GOAL 3POSS-face see-IMP  
 his face this way, his face this way, look!

(4.202) ina sija-la-ja ø-uputpĭ  
 yes hither-NEG-GOAL 3POSS-head  
 yes, his head not this way

(4.203) mija hapo-n alě-k  
 thither like-NOM take-IMP  
 take it like one this way

#### 4.6 Final remarks

In this chapter the morphological and semantic characteristics of the spatial locatives and their directional counterparts have been defined and described in detail resulting in an extensive overview of the spatial postpositions in Wayana. This was followed by a description of the third person and demonstrative deictic



pronouns and finally by an overview of the locative adverbs, which are divided according to deixis and specificity of the location. Although this analysis may not be as complete as a full grammar due to the restrictions laid down on a study and paper of this size, enough information has been given to place each spatial concept within its semantic context, and to understand how it patterns morphologically. The result is a concise overview of how spatiality, in particular topology, is grammatically expressed in Wayana.

In the above linguistic analysis I have already placed many components within a cultural context showing how language and culture are inseparable entities. In the following chapter I shall develop on this theme and outline how the Wayana perceive several aspects of spatiality and their surrounding landscape, and how this is reflected in the spatial language described above.



# 5 The Perception of Space and Landscape by the Wayana

It is hard to see Amazonia as a landscape, in the sense this term has for people from temperate climes. The land does not recede away from a point of observation to the distant horizon, for everywhere vegetation occludes the view. (Gow, 1995: 43)



## 5.1 Introduction

Grammar is thick with cultural meaning. Encoded in the semantics of grammar we find cultural values and ideas, we find clues about the social structures which people maintain (Enfield, 2002: 3).

In Chapter 4 I gave a partial<sup>75</sup> overview of the grammar surrounding the expression of spatiality in Wayana which subsequently forms the base of this chapter. In the following sections I discuss how the findings, as posited in Chapter 4, help us to reach an understanding in how certain aspects of space, such as frames of reference, spatial orientation and landscape, are experienced and perceived by the Wayana of Apetina.

## 5.2 Frames of Reference

As discussed in sections 2.3.1 and 2.3.2, all humans have an underlying coordinate system which is used to perceive and express the location of objects, both animate and inanimate, in space. Until the late 20<sup>th</sup> century, it was universally assumed that all languages expressed spatial location phenomenologically, which relates space in terms of the ego. Recent studies<sup>76</sup>, however, have shown that other frames of references also exist within human spatial orientation; namely the intrinsic and absolute frames (cf. section 2.3.2). Although cognition is not the focus of this paper it is impossible to discuss spatiality without any reference to it.

In Apetina I conducted the ‘animals in a row task (cf. Levinson, 2003: 158-159; section 3.3.2.1 and Figure 5.1) which resulted in a 100% absolute response, showing that the Wayana use fixed coordinates and direction, rather than the ego, to determine the location and direction of objects in space. The use of the absolute frame of reference was also evident during the ‘photo-object matching task’ (cf. section 3.3.1.5) where the ‘instructor’ also made use of fixed coordinates determined by the surrounding environment, to explain how the objects were to be positioned in relation to each other (cf. (5.1) and (5.2)).

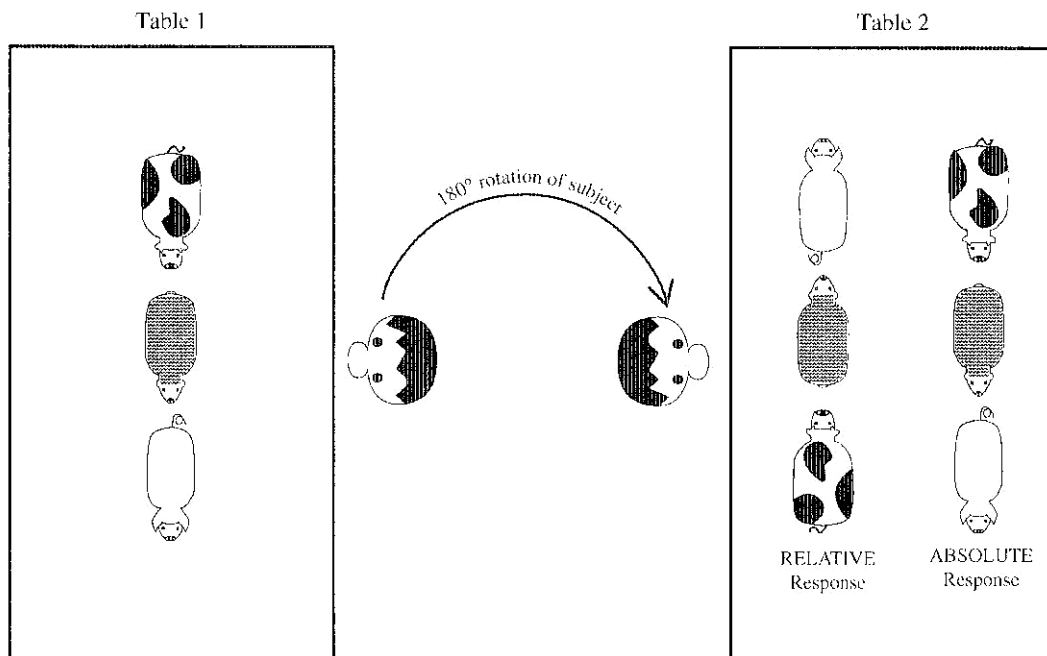
(5.1) sija-ja            aktuhpo-na        ø-emit  
hither-GOAL    upstream-DIR    3POSS-face  
his face going this way, towards upstream

(5.2) heinē            tuna-ina  
this.side        water-ADJ.LOC  
on this side, on the side of the river

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<sup>75</sup> I say partial, as the aim of this thesis was not to give a full grammatical overview of the language but on the grammatical characteristics of the spatial postpositions, locative adverbs and the demonstrative and third person personal pronouns. For this reason, and due to the restrictions on a study of this size, other aspects of Wayana have not been discussed, including phonology and verbal morphology.

<sup>76</sup> These studies include those carried out by the Max Planck Institute of Psycholinguistics in Nijmegen, the Netherlands (Cf. Levinson, 2003 and Levinson and Wilkins Eds., 2006).



**Figure 5.1: Recall Memory Task - Animals-in-a-Row**

Source: Levinson. 2003. *Space in Language and Cognition: Explorations in Cognitive Diversity*.

This differs from the native speakers of Indo-European languages whose phenomenological, relative frame of reference results in the coordinates 'left' and 'right' to be most frequently used. In Wayana the absolute system is based on the upstream-downstream axis, portraying the importance of the river in Wayana culture (cf. sections 1.3.2 and 5.3). During these tasks gestures were also used, and as is common among speakers of languages with a predominately absolute underlying coordinate system, the speaker pointed through himself whilst referring to a location situated behind him. Speakers, whose spatiality is determined by a relative underlying coordinate system, tend to firstly turn their trunk in the direction of the object in order to be able to point in that direction (cf. Levinson, 2003: 260).

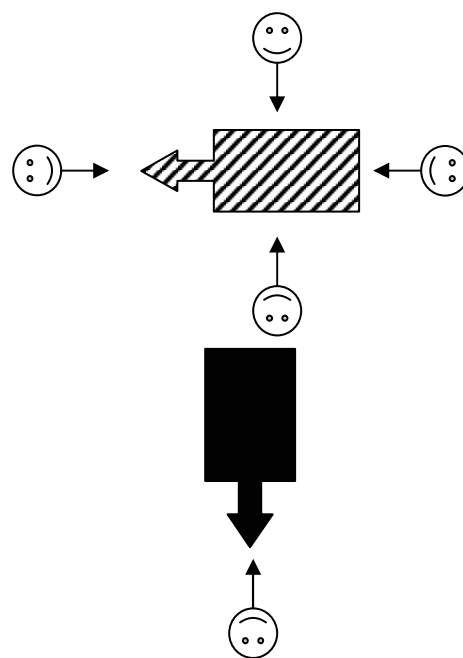
During general conversation the absolute frame of reference was also apparent, especially when asking about the location of certain places and objects situated outside the village. On one occasion I asked Marius<sup>77</sup> where the village of Tëpu was. Whilst he explained the location of Tëpu in relation to Apetina, he drew an imaginary map on the bench on which he was sitting, accurately 'drawing' the course of the Tapanahoni River and it's creeks whilst pinpointing the position of the *isoli* 'rapids' and camps and villages found en route. According to my own frame of reference and perception, he appeared to draw the map upside-down which took me a while to find my own bearings. However, for Marius the

<sup>77</sup> Marius Marenke is Trio and lives with his family in Apetina. He works both for ACT and the government in the office of *Basja* 'Deputy Captain'. Although Apetina is a Wayana village, many formal positions are filled by the Trio rather than the Wayana which shows the different characteristics of the two groups.

opposite was true as he had drawn the map from the perspective of his own frame of reference, dependent upon fixed coordinates. Hereby, the location and direction of the villages and rivers were drawn in relation to their actual, fixed, geographic bearings and not according to a relative map to which speakers of Indo-European languages are accustomed.

With regards to the location of objects found in the village, the Wayana tend to express their location in relation to buildings, generally people's houses. By doing so the intrinsic frame of reference, rather than the absolute, upstream-downstream axis is used, as is also frequently the case in Indo-European languages (cf. section 2.3.2). The use of the intrinsic frame of reference was obvious during the 'photo-object matching task' (cf. section 3.3.1.5) and during the following exercise described below.

Figure 5.2 shows the position of the church (striped) and the school in relation to each other in Apetina. The arrow points to the front of the building, i.e. the side with the door. At each position, marked in the diagram by the 'man' I asked several Wayana on different occasions where the school was situated. Each time, I was given the same answer by each participant, namely: *kan pakolon ekatao*, 'beside the church'. When a front and back side are imposed onto objects, in this case buildings, the position of the speaker plays no role in expressing the location of the object as intrinsically speaking, the school will always be beside the church. If the speaker used a relative frame of reference the answer would vary according to the point of questioning and location would be expressed in relation to the ego using left and right coordinates. Additionally, the absolute frame of reference was also not employed, as the location of the school would have otherwise been given in relation to the upstream-downstream axis of the river.



**Figure 5.2: Map of school and church**

As was mentioned in section 2.3.2, several cultures may use up to three frames of reference in their perception of spatiality, as is the case by the Wayana. Not only are the demonstratives, the third person personal pronouns and the locative adverbs based on a deictic system, taking the ego as the centre (cf. section 4.4) but the relative system is also used to explain the location of objects as the following example shows. During the trial run of the 'photo-object matching task' the two participants also used the relative frame of reference (5.3) to explain where the objects were to be positioned:

(5.3) Johan: apētunu-ina tīi-kē  
right-ADJ.LOC do-IMP  
set it on the right side!

Anema: apētunu-ina  
right-ADJ.LOC  
on the right side?

The two participants who did the trial run were of a younger generation than those who finally conducted the task and they have either stayed temporarily in Paramaribo or have a much contact with tourists arriving in the village due to their role as tourist guide. Additionally there had always been a strong missionary presence in Apetina since the last half of the 20<sup>th</sup> century. The use of the relative frame of reference, and in particular the use of the ‘right-left’ axis, is more than likely a result of acculturation due to the increasing levels of contact with the western world. It would be expected that the younger generation are more adaptive in the borrowing of other concepts. Adaptation has always been an important characteristic of the Wayana and is possibly the reason of their very survival. As discussed by Boven (2006: 291):

Yet the present-day Wayana will continue to seek contacts with others, as well as innovation and change. They are convinced that the intermingling with other peoples and the joining of national, regional and international (interest) groups will enable them - as in the past - to forge alliances and to acquire skills and knowledge with which they can safeguard their future; as individuals and preferably still as a unique ethnic group, under the name Wayana.

In conclusion, all three frames of reference are attested in Wayana, as is also the case by the Trio (cf. Meira, 2006: 350). Due to the results of the ‘animals in a row task’ and the explanation given to location of places and objects, particularly outside the village, it appears that the main underlying frame of reference is the absolute one. However with reference to the location of objects which are proximate and particularly those found in the village the intrinsic frame of reference appears to be preferred. It does seem, however, that closeness to the river affects the frame of reference applied only in a minor way and even in the village if speakers are located in the close vicinity to the river, location and direction is more frequently described in terms of ‘upstream’ or ‘downstream’. Further and more detailed research is required to verify this.

### 5.3 Finding one’s way

Met een bewonderenswaardig oriënteringsvermogen lopen de Indianen door het bos (Geijskes, 1956: 231).

Indeed, the Wayana travel through the forest with an exceptional feeling for orientation and direction, one unfathomable to outsiders who perceive the forest as no more than a mass of trees which look the same in all directions. As discussed below in section 5.4, the Wayana have a great eye for detail which



assists them whilst in the forest whether it is known or unknown to them. The Wayana learn from an early age to navigate themselves in the forests and on the rivers and a child of 4 can navigate a dug out canoe alone, with great dexterity. As posited in section 5.2 the Wayana use an absolute frame of reference to express location of objects, particularly those outside the village, this underlying coordinate system also helps them in the forest. They almost never lose awareness of the river and use that as their basic landmark whilst in the forest; that is not to say that the Wayana never get lost.



**Figure 5.3: Tapanahoni River, Apetina**

Rivers are of great importance to the Wayana and are used for navigation, transportation, sanitation and as a source for food and water. Today Wayana villages are always found along rivers, preferably near to waterfalls or rapids due to increased bathing and fishing opportunities. However, whilst in the forest it is not only the river which is used to navigate. In general hunting areas located around the village and further up or downstream, hunting paths have been made which the Wayana know by heart. When hunting in other areas unknown to themselves, in order to find their way back to the river and their canoe, they mark the path in such a way they only have to simply follow the markings made enroute. These markings are generally broken branches and twigs or marks cut into trees with a machete. Each Wayana recognizes his own markings so not to become confused by those made previously by others. This again portrays what a great attention for detail the Wayana have and how it is important to their spatial orientation (cf. section 5.4.1).

The Wayana also have a great knowledge of surrounding sights, places and even countries<sup>78</sup>, often without having visited them themselves. This knowledge is passed down generation to generation and when distant places and sights are named, they are accompanied by gestures in that exact direction. Distant places which are unknown to the Wayana tend to be expressed with the locative adverb *měje* denoting location to be unspecific and distal. Other places which they have visited themselves are known and described as being *mon* ‘there but known’ (cf. section 4.5.1.) It is this shared knowledge that assists the Wayana in giving directions to places unknown to others.

According to Rivière (1969, 189) Wayana encompasses ‘a range of postpositions and adverbs that indicate location but otherwise the language is relatively poor in directional terms’. He reaches this conclusion as the Wayana do not use the directional terms ‘left’ and ‘right’ or the cardinal directions as is common in the western world. At the time of his writing, the scientific world was still convinced of the phenomenological bias within spatial orientation whereby the possibility of space being perceived through other frames of reference was still unheard of (cf. section 2.3.1). Rivière does mention the use of the directionals ‘upstream’ and ‘downstream’ but states that direction was solely dependent upon ‘reference to named sites, knowledge of which depends on experience and familiarity [which] puts the outsider at a very grave disadvantage’ (Ibid). This portrays the etic viewpoints of the 1960s.

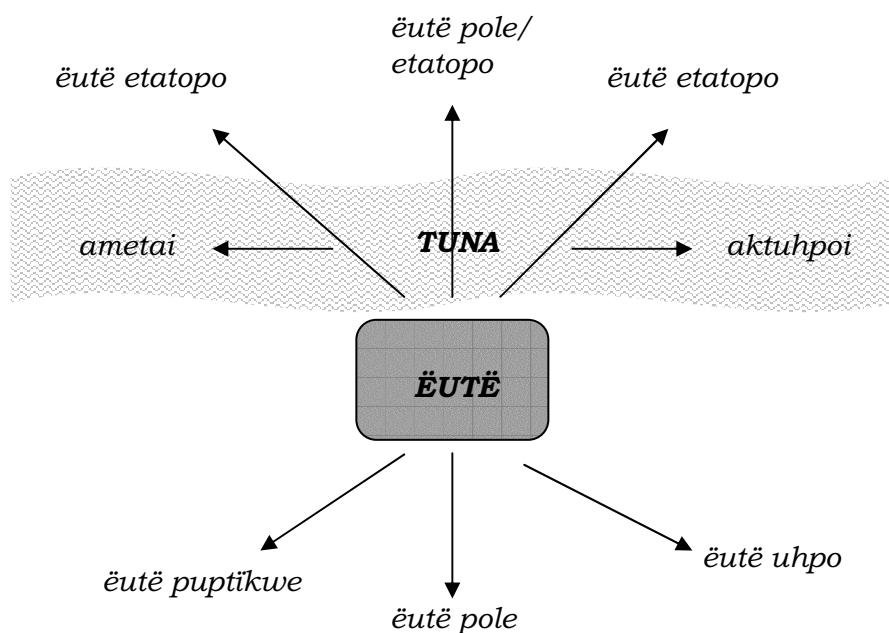
Rather, the Wayana use both an absolute and intrinsic frame of reference for spatial orientation and direction. As discussed in section 5.2 the absolute frame is generally used to explain direction and location outside the village and the intrinsic frame for inside the village. The Wayana also use the following postpositions to describe location and direction, taking the village as point of reference:

<b>LOCATIVE</b>	<b>TRANSLATION</b>	<b>DIRECTIONAL</b>
ametai	upstream	ametak
aktuhpoi	downstream	aktuhpona
etatopo	across the river on the other riverbank	etatopona
pole	at right angles to the village in alignment with	pole
uhpo	above the village	uhpona
puptikwe	below the village	puptikwe

**Table 5.1: Locatives and directionals used to describe spatial orientation from the village**

<sup>78</sup> The countries referred to here are Brazil, French Guiana, Guyana.

These locatives and directionals are shown in Figure 5.4.



**Figure 5.4: Directions from the village**

Therefore, whilst the Wayana may lack terms for ‘left’ and ‘right’ they do have a complex system to express location and direction. Instead, the Wayana use terminology and concepts which fit into their frames of reference. Another factor is also important within this system, that of knowledge. To express location and direction outside the village the Wayana use an absolute frame of reference in combination with the shared knowledge of landmarks and places customarily learnt through oral traditions and experience. Those lacking this knowledge are at a loss within their environment, as the Wayana also would be in one of our large cities.

## **5.4 Categorization**

Classifying refers to the cognitive and cultural mechanisms by which this (classification) is achieved; and classifications are the linguistic, mental and other cultural representations which result (Barnard and Spencer Eds. 2002: 103)

According to psychological studies, all human beings categorize the world around them through grouping related concepts together, which assists us to understand our environment and enables us to act upon it. Although classification is often related to biological taxonomies it also extends over other concepts (and also over various word classes) allowing us a deeper insight and understanding of, in this case, Amerindian philosophies. Boas claimed that language categories are analogous to cultural classifications and categories (Foley, 1997). Within this field a distinction between relativist and universal ideas is apparent and the universal ideas of Berlin, that the categorization of

society is fixed by “*innate universal dispositions*”, (Ibid; 1997) has been greatly questioned and challenged by relativist thinkers. It is now widely accepted that classification in fact varies according to cultural interests. This is also true for Cariban languages which contain grammatical and lexical elements which gives us an insight into how they “*categorize, classify and label the world around them*” (Carlin, 2002).

### 5.4.1 Postpositions and Spatiality

The human practice of classifying the world into distinct objects and relations is a cognitive accomplishment: the means by which human beings create order and identity in an environment, making it socio-cultural (Rapport and Overing, 2000: 32).

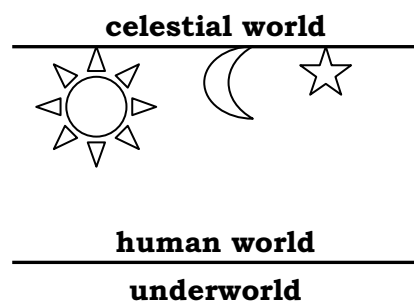
The categorization and classification of the surrounding world is displayed in several ways, including through the rich use of postpositions describing spatiality in Wayana. As discussed in section 4.2.2 the Wayana distinguish between various types of general spatial fact, namely: general location on a flat surface, location in a contained space, in an open space and in water (cf. Dixon and Aikhenvald, 1999: 42; Carlin, 2004: 172). For ease of reference I am reproducing in Table 5.2 the earlier Table 4.1 of section 4.2.2. These types of location are then further categorized according to the specificity of the Ground rather than specificity of the Figure.

<b>LOCATIVE</b>	<b>GLOSS</b>	<b>TRANSLATION</b>	<b>DIRECTIONAL</b>
-po	LOC	general location on/in/at	pona
-jao	INT.LOC	contained in small demarcated area	-jak(ë)
-(h)tao	CONT.LOC	contained in large demarcated area	-(h)tak(ë)
-nao	LOC	contained in large, boundless area	-nak(ë)
-k(u)wao	LIQ.LOC	contained in liquid	-k(u)wak(ë)
loptao	deep.INT.LOC	contained deep inside, non-visible	loptak(ë)
ekatao	beside.LOC	beside	ekatak(ë)
ina	adj.LOC	at the side of, adjacent to	ina
awotao	rib.LOC	at the ribs	awotak(ë)
awopo	crossways.LOC	crossways	awopona
ahmotao	clear.space.LOC	clear space	ahmotak(ë)
lamnao	middle.LOC	in the middle of	lamnak(ë)
pole	align.LOC	in alignment with	pole
-pëk(ë)	CONTACT.LOC	unsupported contact	pëkëna
epoi	SUP.LOC	above: no contact	
uhpo	SUP.CONTACT.LOC	above: contact	uhpona
ahpo	back.LOC	on back of	ahpona

opine	INF.LOC	beneath	
opikai	INF.LOC	beneath	
em(in)patio	face.LOC	in front of/facing	em(in)patak(ë)
waliktao	behind.LOC	behind	waliktak(ë)
aktuhpoi	upstream.LOC	upstream	aktuhpona
ametai	downstream.LOC	downstream	ametak(ë)
etatopo	bank.LOC	on riverbank	etatopona
talihnao	outside.LOC	outside	talihnak(ë)
mitao	base.LOC	at base of	
wala	around.LOC	around	
-ilë	PERL	along, through	-
-lo	surface.PERL	along, over	-
-inë	SOU	source	-

**Table 5.2: Spatial postpositions in Wayana**

In section 4.3.2.3 I already explained how the postposition *-nao* ‘boundless location’ and the contact locative *-pëk* in conjunction with the noun *kapu* ‘sky’ portray how cultural aspects may also determine the classification of postpositions and nouns. This allows us an insight into the philosophy and cosmology of the Wayana portraying how their world consists of several cosmological layers. For the Wayana, *kapunao* ‘in the sky’ refers only to objects which are ‘in’ the upper celestial world and thus unknown and invisible to the Wayana. The visibility of the celestial bodies shows they therefore exist in the ‘human world’ rather than the celestial one and are perceived to be *kapupëk* ‘attached to the underside of the upper celestial world’ rather than *kapunao* ‘in the celestial world’ (cf. Figure 5.5). The postposition *-nao* also shows us how the Wayana adapt to cultural change as *kapunao* is now used to refer to God rather than the shaman. Previously only the shaman was able to journey into the upper celestial world in order to mediate with the spirits, today it is the Christian God who resides there. In essence the celestial world still exists and the celestial bodies are still perceived in the same way, whilst the shaman has been replaced by the Christian god. This process of taking old concepts and positing them on new ones is common practice. As posited by Humphrey (1995: 140):



**Figure 5.5: Position of the celestial bodies**

It would be an act of historical unwillingness not to recognize that they came up with new views which are in many ways the same as those from an earlier time or different place and using the same vocabulary.

One question arose whilst describing the grammar of the rich postpositional system, used in the expression of the location of objects in space: why do the

*Chapter 5: The perception of Space and Landscape by the Wayana*

Wayana describe spatial relations in such detail? The answer may lie in their surrounding landscape which encompasses a dense, compact geographic space, lacking extended views and distant horizons. The 'smallness' of the Amazonian landscape has been noted by many:

During my months among the Trio, my world had shrunk to the size of their world... A Trio in his traditional environment may never have a horizon of more than two hundred yards, the diameter of the village clearing. His life is spent in a well, with the sky a bright hole above the forest walls so that the size of the firmament is restricted by the tree tops. (Rivière, 1969: vii)

In the forest sight penetrates only a short distance into the mass of trees. Along the big rivers, you can see further, but even here there is no distant blue horizon. The sky starts abruptly from behind the screen of forest. Sight is hemmed in (Peter Gow, 1995: 43).



**Figure 5.6: Aerial photo of Apetina**

These same ideas and perceptions resemble my own thoughts during my stay in Apetina. Despite the denseness and compactness of the Wayanas' physical world, one cannot conclude that the world of the Wayana is actually 'smaller' than ours. Indeed the perception of worlds is subjective to the perceiver and so whilst we often perceive the landscape of the Wayana to be physically small and as a sea of green in which we are barely able to differentiate between primary and secondary forest; the Wayana perceive a world which is not only:

## *The Expression and Perception of Space in Wayana*

Divided by invisible lines into named land tracts and settlement sites; it is seen as structured by history. There is thus the landscape we see and a second landscape which is produced through local practice. (Hirsch, 1995: 2)

To the Wayana the same forest is a source of food, material and medicine but also a place where spirits may reside, a reminder of the multiple worlds of the Wayana cosmology. (cf. section 1.3.3) With sight being shortened one automatically looks in greater detail to that which is visible. The Wayana instantly see if a branch or rock is out of place, and just by observing the particular movement of twigs and leaves in the undergrowth or tree crowns they are able to ascertain immediately whether the movement is caused by the elements or by potential game. This ability to observe the forest in great detail and their intensive knowledge of it assists them in their spatial orientation whilst being there (cf. section 5.3). As described by (Langacker, 2002: 139):

We are, after all, spatial creatures who must occupy and navigate a spatial world. We are also creatures whose primary sense [is] vision.

As noted by Levinson and Meira (1994: 514), the lack of an “*in-container focus*” in the Aboriginal languages of contemporary Australia, shows how they “*had little traditional use for containers, using for the most part only flattish trays or coolabahs*” (Ibid). For the Wayana the “*in-container focus*” shows the importance of containers in their worldview. Prior to the arrival of Europeans in the Amazon Delta the Wayana were a nomadic folk as described in section 1.3.2. Due to such a livelihood containers were necessary to carry the few belongings the Wayana had, such as arrow heads, food and the like. Still today the Wayana have a remarkable ability of making containers out of all sorts of natural materials (cf. Figure 5.). Additionally, the landscape of the Wayana may also be perceived as a container due to the forest like walls. As mentioned in section 1.3.2, the Wayana were previously forest dwellers living in the containment of the dense Amazon forest before they became the river dwellers they are today (cf. Boven, 2006: 65).



**Figure 5.7: Katali ‘carrying baskets’**

Whether the physical compactness and density of the Wayanas’ landscape determines the detailed manner in which the Wayana perceive their landscape

and thus the manner in which they express it linguistically remains unclear. What is apparent is that both factors effect the perception and expression of it. As stated by Hirsch<sup>79</sup> (1995: 20):

A dense forest environment imposes a reorganization of sensibility different in kind from that which develops in more open environment. Language takes on a salience additional to that which it possesses in more visual cultures.

## 5.5 Landscape

Landscape is never passive. People engage with it, rework it, appropriate and contest it. It is part of the way in which identities are created and disputed, whether as individual, group or nation-state. Operating at the juncture of history and politics, social relations and cultural perceptions, landscape is a concept of high tension. It is also an area of study that forces the abandonment of conventional disciplinary boundaries and creates potential for innovative cross-fertilization. (Barnard and Spencer, 2002: 324)

The term 'landscape' originally defined a particular painting technique used by artists in the 16<sup>th</sup> century; this same term was later applied to picturesque rural settings which evoked memories of such 'landscape' paintings (cf. Hirsch, 1995: 2). Although western cultures continue to define general landscape as a picturesque setting, the term has also evolved, connecting landscape to human agency within anthropological discourse:

A landscape has no meaningful shape and significance until it is accorded place and identity in the social and cognitive worlds of human experience. (Helms, 1998: 20)

However, it is only in recent decades that this anthropological notion of landscape has come to be perceived as a dynamic, cultural process '*between foreground actuality and background potentiality*' (Halbmayer, 2004: 136; cf. Hirsch, 1995: 2-5). The 'foreground actuality' represents everyday experience which coexists with the idea of a 'background potentiality'; an ideal, potential life, '*the way we might be*' (Ibid: 3). Hirsch (1995: 4) divides these two senses of being according to the following schemata:

foreground	↔	background
place	↔	space
inside	↔	outside
image	↔	representation

These notions continuously interrelate with each other creating a dynamic, cultural process wherein human agency turns 'space' into a 'place', creating a dynamic landscape which no longer fits into the static definition applied by western Europeans and in the scientific discourses of disciplines such as geography (cf. Hirsch, 1995: 5; Granero, 1995: 100; Barnard and Spencer Eds. 2002: 324).

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<sup>79</sup> Hirsch was summarizing here the ideas of Alfred Gell in his chapter: The Language of the Forest which was published in 'The Anthropology of Landscape' (Hirsch and O' Hanlon Eds. 1995).



In anthropology, landscape is often intersected by concentric, spatial zones radiating outwards from the known, ‘safe’ village towards the unknown and potential danger. These concentric zones often become distorted by the presence of rivers which elongate the centre ‘safe’ place as they are generally perceived as:

A safe and “socialized” space where every river bend and local place is named, and therefore known, with the forest beyond, a dangerous, mysterious and undifferentiated wilderness of spirits and monsters (Helms, 1988: 23; cf. Chaumeil, 2004: 123).

This slight overgeneralization is not always the case inside the landscape of the Wayana, where specific parts of the river are also perceived as ‘dangerous’ places, where spirits live and where oral traditions tell of past incidents which have led to the death of villagers. As expected, the most distinctive contrast of landscape in Amazonia is that between forest and village, the latter of which is perceived as being proximate, visible, known and thereby a safe place (cf. Rivière, 1969: vii; Rivière, 1995: 43; Helms, 1988: 21).

As discussed above in section 1.3.3, the Wayana live in a highly transformational world whereby different worlds and cosmological layers coexist simultaneously and wherein humans, spirits and animals reside. The habitation of spirits in forests and other cosmological layers creates the idea that these areas represent space which is distal, invisible, unknown and therefore uncontrollable (except through ritual), evoking a sense of uncertainty. In this sense forests and other cosmological layers outside the one where humans reside form a parallel. As posited by Helms (1988: 30):

Contact with the geographically distant unknown may be considered comparable to contact with distant spiritual levels and unknowns.

These distinctions between proximate and distal place are made within the demonstrative and third person pronouns and locative adverbs, (cf. Table 5.3) as discussed in sections 4.4 and 5.5.

	<b>proximal</b>	<b>medial</b>	<b>distal</b>
<b>specific location</b>	tan(ë)	molo	mon(o)
<b>general location</b>	tale	hëj(e) (stative)	mëje (stative)

**Table 5.3: Locative adverbs**

Within these word classes, landscape is divided according to the deictic parameters proximal, medial and distal<sup>80</sup>, whilst a further distinction is made between specific and non-specific location. This last distinction is especially important with the medial and distal locatives as they distinguish between locations which are ‘away’ but still in a ‘known’ place versus locations in a distant, unknown general space enshrouded by uncertainty and potential danger. As was discussed in section 4.5 when the specific counterpart for the

<sup>80</sup> The demonstrative pronoun makes a further distinction, that of the 3<sup>rd</sup> person anaphoric expressing a person (animate) or object (inanimate) that has previously been mentioned in discourse (cf. section 4.4).

distal locative, *mon* is used, the speaker must know exactly where the place is, it must be known personally to him.

The unspecific locative adverbs occur frequently in oral traditions expressing the unspecific, unknown location which may be situated in another cosmological layer than the narrator or actor (5.4). When this is not the case the adverbs denoting specific location, *molo* is more frequently used (5.5), the adverb *mon* is rarely, if at all, used.

- (5.4) t-ëlë-i                      kapu-nak                      e-ja                      mëje                      kulum  
 COREF-take-NF                      sky-boundless.DIR                      3-GOAL                      LOC.ADV.DIST                      vulture
- peinom                      t-ë-he                      e-ja  
 children                      COREF-eat.meat-NF                      3-GOAL  
 he [the head] took it into the sky, there, he ate the children of the  
 vulture  
 (Boven, 1995: 18)

- (5.5) t-ëne-imë-i                      molo                      Wïwïpsik                      okomë-jao  
 COREF-see-CYC-NF                      LOC.ADV.MED.SP                      Wïwïpsik                      wasp-CONT.LOC  
 they saw Wïwïpsik there in the wasps' nest  
 (Boven, 1995: 26)

Due to the existence of other worlds and cosmological layers which are:

Animated and inhabited by physical and spiritual agents which consist not only of what can be seen but also of what common people cannot see but know that is there (Granero, 1995: 102).

Therefore, the notion of 'landscape' needs to be broadened to encompass the worldviews of Amazonia thus including the '*multiple worlds or a multiverse of an unspecified number of agential and interacting spaces*' (Overing, 1995: 73, cf. Overing, 1990). The landscape of the Wayana, perceived as a cultural process, is therefore embedded with cultural meanings created by the Wayana over time. Both modern and historical oral traditions are played out in the Wayanas' landscape which is constantly changing depending upon the actors living within it. Within this dynamic process the identity of the Wayana and the meanings attributed to their landscape are constantly being redefined. As also posited by Boven (2006: 35):

Het hele gebied dat de Wayana als hun traditionele leefgebied beschouwen [... is] een bezielde gebied, vol van betekenissen; een *cultural landscape*.

The Wayana gain knowledge about their landscape through information passed down from generation to generation and through their own experiences gained from travelling through their own environment. Today with the encroachment of the modern world in the form of tourists, Christianity, education, trade and upward mobility it would be expected that their ideas and perceptions

pertaining to their own landscape and cosmology would have changed (cf. Granero, 1995: 116). However, although one can already detect changes in this, it is not yet entirely the case. Whilst some notions are changing, others remain constant even though they appear to have slipped from the foreground into the background. When asking the Wayana of Apetina about spirits and ‘dangerous’ places in the forests, answers were given as ‘those were the early Wayana’. However as my stay in the village lengthened and mutual trust increased, I learnt more about how transformation, spirits and the multiplicity of worlds still play a large role within the Wayana culture and perception of landscape. Today there remain particular areas which the Wayana prefer to avoid. In the area surrounding a certain creek found upstream of Apetina, the Wayana believe that if they shoot game there, death will befall them. One of the peaks found in the same area is also generally avoided as they are afraid their presence there will anger the spirits residing there which could potentially lead to illness, misfortune or death. However, today due to the dynamics of culture, their perception of their landscape is slightly altering to encompass the changes they encounter over time and it is expected that this process will continue as contact with the western world increases.

The Wayana are now considering the development of tourism in the aforementioned area which may lead to a potential solution to an existing problem regarding clashing worldviews. Tourists travelling to the interior of Suriname still expect to have the opportunity to observe wild animals found in their unspoiled, natural habitat. Due to hunting and the agglomeration of villages, little game is to be found around the villages of the interior and when it is, the Wayana will proceed to shoot it, often to the horror of the tourists. To the Wayana wild animals represent a source of food, whilst tourists perceive the same animals as ‘cute’ or as an ‘endangered species’ which needs protecting. Within this framework tourists perceive the hunting of wild animals by the Wayana as cruel and unnecessary, portraying how far removed western cultures are from their own food industry. For the Wayana, hunting is a necessity. It is this clash of worldviews which results in incomprehension and tension on both sides. The creek found upstream from Apetina offers a solution to this problem. As the Wayana do not hunt there due to fear of the spirits residing there, the wild animals found in the area are not yet shy of humans. Due to this the tourists have the opportunity to observe wildlife without being confronted by the Wayanas’ hunting culture.

## **5.6 Wayana in national space**

Today the Wayana are spread across the countries of Suriname, French Guiana and Brazil, a national landscape thrust upon them by the governing nation states of the past centuries. These national borders had previously little or no significance to the Wayana (de Goeje, 1941; Findlay, 1971; Carlin, 2002) or other indigenous peoples who wandered freely across them. Rather, the Wayana perceived themselves as one group with one language who lived in one landscape: ‘Wayana-country’. Whilst on one level this perception of landscape remains, as does their relative political autonomy, on another level their

awareness of national and international politics is currently increasing due to the encroaching western world, in which they are becoming more involved.

This is especially true of the Wayana who live along the Lawa River, which forms the border between Suriname and French Guiana. The social and political situation in French Guiana is very different to that of Suriname, mainly because the government of French Guiana stimulates and supports important issues as education, development and cultural identity among indigenous peoples. These differences in governmental policies are causing an onward migration from Suriname (and to a lesser extent Brazil) towards French Guiana. With a greater chance of receiving social security payments in French Guiana the Wayana continue to migrate eastwards in search of these benefits. Recently however, the government of French Guiana is trying to curb this inward migration.

Today the interior of Suriname is still generally neglected by the Surinamese Government and they have failed to create any concrete policies regarding the rights of indigenous peoples. This neglect helps to explain the continuous popularity of Desi Bouterse in Suriname, despite his past actions during the War of the Interior, as he appears to be more in touch with the needs of the different indigenous and Maroon groups. *“That there are several Amerindian groups with different histories, lives, and needs is ignored by one and all”* (Carlin and Boven, 2002). The issue concerning indigenous land rights remains a heated topic within Suriname, but without the Surinamese Government formally recognizing the various indigenous groups and their differences in culture, lifestyle and language a solution to the problem appears to be remote. The Wayana in Apetina are becoming increasingly aware of the need to be able to understand and participate in national politics (Carlin and Boven, 2002), especially concerning the issues of land rights. Whilst the Wayana, and other Amazonian peoples, do not perceive land as something which can be possessed (cf. Boven, 2006: 26), today they are being forced to adjust this perception as the urgency for land rights becomes apparent. Despite this growing awareness on one level, they still continue to refer to Paramaribo as Suriname, implying that they still feel removed from the nation in which they live. They are and remain above all Wayana, rather than Surinamese.

## **5.7 Concluding remarks**

In this chapter several aspects of spatial orientation and landscape as perceived by the Wayana have been discussed. First, the underlying spatial mapping system of the Wayana was ascertained through the analysis of the results of the ‘recall-memory’ and the ‘photo-object matching’ tasks. Corresponding with the results of recent cross-linguistic and cognitive research (cf. section 2.3.1) showing that spatial orientation of humans is not universally phenomenological; it was ascertained that the Wayana rely on an absolute coordinate system dominated by the upstream-downstream axis. Developing on this, further analysis of the ‘photo-object matching’ task, other exercises conducted in the field (cf. section 5.2) and the linguistic data discussed in

Chapter 4, showed that this system correlated with the predominant frames of reference used by the Wayana in spatial orientation. For direction and location outside the village the Wayana rely predominantly on the absolute frame, and the intrinsic frame for orientation inside the village.

In section 5.4.1 the rich system of spatial postpositions allowed us a glimpse in how the Wayana categorize space in which the specificity of the Ground is important in determining which postposition is to be used. As shown with *kapupëk* and *kapunao*, this is often culturally determined. Additionally, I explored how the denseness and compactness of the Wayana world is almost certainly an important factor in explaining why spatiality is expressed in such detail.

Finally the concept of landscape was examined showing the importance of the distinction between forest and village, both culturally and linguistically. Landscape is a dynamic process shaped by human agency and here I have demonstrated how our western perceptions need to be adjusted before we can even attempt to understand that of another world, culturally or linguistically. The landscape of the Wayana is no different and whilst much remains constant many aspects change, resulting in a new Wayana landscape to which they continue to give meaning.



# 6 Concluding Remarks

This is not the end. It is not even the beginning of the end. But it is perhaps the end of the beginning. (Sir Winston Churchill)





This thesis has attempted to provide a detailed descriptive analysis of how spatiality is expressed in Wayana, a Cariban language spoken by little more than a thousand speakers in Suriname, French Guiana and Brazil. From this linguistic analysis a small glimpse is given into the perception of space within the philosophy of the Wayana of Apetina, portraying the intrinsic relationship between culture and language.

The concepts and notions of ‘space’, ‘place’ and ‘landscape’ are so immense that unfortunately due to the nature and size of this paper such notions have only been grazed upon, leaving many possibilities for future research. Other concepts, such as ‘timescapes’ and ‘mythscape’ (cf. Overing, 1995: 71-89), ‘public’ and ‘private’ space are also intertwined in the Wayana landscape and have a place in their perception of space. Even the notions and concepts discussed within this thesis are still not exhaustively researched or debated, as was repeatedly mentioned throughout the analysis.

One area in particular needs a more detailed research and analysis, that of the locative adverbs. The table drawn in section 4.5 was taken from my own analysis and that as posited by Tavares (2006: 363). It is reproduced here for easy reference:

	<b>proximal</b>	<b>medial</b>	<b>distal</b>
<b>specific location</b>	tan(ě)	molo	mon(o)
<b>general location</b>	tale	hěj(e) (stative)	měje (stative)

**Table 6.1: Locative adverbs**

It would make an interesting study to decipher where the actual borders lie within the deictic parameters. There was some contradiction among the speakers of Apetina as to when which adverb was to be used. In some cases the distal specific locative *mon* was described to denote loction in the village and one speaker even suggested it may only be used to denote location in Apetina. The majority however also used it to express location of places known to them from personal experience whilst in other instances gardens were described to be *hěje*. There are many nuances in the perception of ‘here’ and ‘there’, many of which may remain understandable, only to the native speakers themselves.

Although this study gave a detailed account of the grammar surrounding spatiality in Wayana, the focus lay predominantly on the expression of topological relations. The choice to do this lay in the existence of the rich system of spatial postpositions found in Wayana which is characteristic of many Cariban languages. However, as discussed in section 2.4, many other word classes denote spatiality and in this particular thesis the grammar and analysis of the verbal morphology has not been discussed. In particular verbs of motion belong to the grammar of spatiality but as this is also such an extensive topic to describe, it was impossible to do it any justice in a study of this calibre.

Although Dr. Eithne Carlin is currently working on a full grammar of the Wayana language of Suriname as part of the NWO funded programme 'Giving them back their languages' (cf. [www.nwo.nl/projecten](http://www.nwo.nl/projecten)), the possibility for further ethno-linguistic or anthropological studies on Wayana is more or less endless. Despite the extremely detailed account of the Wayana of the Lawa River by Karin Boven (2006), such a detailed account of the Wayana living along the Tapanahoni is still lacking. As stated by Boven (2006: 240) the Wayana of the Tapanahoni live a different life to those on the Lawa. The Lawa forms the border between Suriname and French Guiana, whereby the Wayana of the Lawa live in a "*frontier society*" (Ibid) surrounded by conflicts on a regional, national and international level. Even a more detailed, anthropological analysis of spatiality could complement this ethno-linguistic analysis further.

Other interesting topics of discussion, outside the domain of linguistics, would be the contemporary problematic question concerning land rights. This is particularly interesting as there have been the rumours of possible plans to build a road from Paramaribo southwards towards Palumeu, facilitating a possible IIRSA (Initiative for the Integration of Regional Infrastructure in South America) project which aims to divert the Tapanahoni River in order to create a hydro-electro power plant which would create enough electricity for large parts of Suriname and the surrounding countries ([www.iirsa.org](http://www.iirsa.org)). The opening up of the interior would have uncountable affects on the culture and language of the Wayana and the surrounding groups whereby the urgency and the importance of land rights issues becomes even more apparent.

Hundreds of options lie open for future study, both in and outside the world of the Wayana. Spatiality could also be discussed and compared within other languages of the Cariban language family. Additionally there remain several languages in Suriname which await any form of linguistic study. The study of indigenous languages not only increases international and national awareness of such peoples but it also increases the self esteem of the very speakers, as they begin to realize the value of their own language after years of linguistic oppression. On a scientific level, linguistic studies allow us to understand the vastness and potentiality of human language and cognition. But language encompasses more. The understanding of language correlates with the understanding of:

Whole cultures and knowledge systems, including philosophical systems, oral literacy and music traditions, environmental knowledge systems, medical knowledge, and important cultural practices and artistic skills (Hinton and Hale, 2001: 5)

Therefore it is of great importance to understand the language of a people in order to even try to attempt to understand the culture, philosophies or perceptions of the speakers. Hopefully this paper has achieved this to the extent possible with a study of this size.

# Appendices



## **REFERENCES**

- Barker, Clive. 1999. *Weaveworld*. Harper Press, London.
- Barnard, Alan & Spencer, Jonathan (Eds.) 2002. *Encyclopedia of Social and Cultural Anthropology*. Routledge, New York.
- Boven, Karin. 2006. *Overleven in een grensgebied: Veranderingsprocessen bij de Wayana in Suriname en Frans-Guyana*. IBS Rozenberg Publishers, Amsterdam.
- Boven, Karin. 1998. *Ethno-history of the Wayana: A Reconstruction*. Paramaribo.
- Boven, Karin. 1995. *Over Jagers, Volken en Geesten in het Zuidelijk Bos, Wayana Nekalëtpïtom*. Paramaribo.
- Boven, Karin & Trio of Tëpu & Kwamalasangutu, 2001. *Samuwaka Herdacht; Een Geschiedenis van het Trio Volk*. Amazon Conservation Team & Centre for the Support of Native lands, Paramaribo.
- Camargo, E. 2005. Lieu et Langue: Paramètres d'identification et d'attribution de Soi et de l'Autre en Wayana (Caribe) in: *Lexical Categories and Root Classes in Amerindian Languages*. Vapnarsky & Lois (Eds.). Peter Lang, Frankfurt.
- Carmargo, 2000. Une Interaction entre Localisation et Aspect: Un Exemple de -pëk{ë} et -ja/e en Wayana in: *Amerindia*. No. 25.
- Carlin, Eithne B. 2004. *A Grammar of Trio, a Cariban Language of Suriname*. Duisburg Papers on Research in Language and Culture, Vol 55. Frankfurt etc.: Peter Lang.
- Carlin, Eithne B. 2002. Patterns of Language, Patterns of Thought: the Cariban Languages in: *Atlas of the Languages of Suriname*. Carlin, Eithne B. and Jacques Arends, (Eds.). KITLV Press, Leiden.
- Carlin, Eithne B. and Jacques Arends, (Eds.). 2002. The Native Population: Identities and Migrations in: *Atlas of the Languages of Suriname*. KITLV Press, Leiden.
- Carlin, Eithne B. with Boven, Karin. 2002. The Native Population: Identities and Migrations in: *Atlas of the Languages of Suriname*. Carlin, Eithne B. and Jacques Arends, (Eds.). KITLV Press, Leiden.
- Chapuis, Jean and Rivière, Hervé. 2003. *Wayana Eitoponpë. Une Histoire Orale des Indiens Wayana*. Ibis Rouge Éditions, Guyane.

## References

- Chaumeil, Jean-Pierre 2004. Perception and Appropriation of Space Without Frontiers: An Indigenous Perspective from the Amazon *Trapezio* in: *Kultur, Raum, Landschaft: zur Bedeutung des raumes in Zeiten der Globalität*. Halbmayer, Ernst and Mader, Elke (Eds.). Brandes & Aspel, Frankfurt am Main.
- Derbyshire, Desmond. 1999. Carib in: *The Amazonian Languages*. Dixon, R. and Aikhenvald, Alexandra (Eds.). Cambridge University Press, Cambridge.
- Descola, Philippe. 1996. Constructing Natures: Symbolic Ecology and Social Practice in *Nature and Society: Anthropological Perspectives*. P. Descola & G. Palsson (Eds.). Routledge, London.
- Dixon, R. and Aikhenvald, Alexandra (Eds.). 1999. *The Amazonian Languages*. Cambridge University Press, Cambridge.
- Enfield, N.J. [Eds.] 2002. *Ethnosyntax*. Clarendon Press, Oxford.
- Everett, Daniel. 2005. Culture Constraints on Grammar and Cognition in Pirahã: Another Look at Design Features of Human Language in: *Current Anthropology*. Vol. 46, No. 4. (p621-644).
- Findlay, D.G.A. 1971. *Trio en Wayana Indianen in Suriname*. Paramaribo.
- Foley, William A. 1997. *Anthropological Linguistics: an Introduction*. Blackwell Publishers, Oxford.
- de Goeje, C.H. 1941. De Oayana-Indianen in: *Bijdragen tot de Taal-, Land- en Volkenkunde*, dl. 100's. Martinus Nijhoff, Gravenhage.
- Gow, Peter. 1995. Land, People and Paper in Western Amazonia in: *The Anthropology of Landscape: Perspectives on Place and Space*. Hirsch and O' Hanlon (Eds.). Clarendon Press, Oxford.
- Grimes, J.E. (ed.). 1972. *Languages of the Guianas*. (SIL Publications in Linguistics and Related Fields). Norman: Summer Institute of Linguistics, University of Oklahoma.
- Halbmayer, Ernst. 2004. Timescapes and the Meanings of Landscape: Examples of the Yukpa of Northwestern Venezuela in: *Kultur, Raum, Landschaft: zur Bedeutung des raumes in Zeiten der Globalität*. Halbmayer, Ernst and Mader, Elke (Eds.). Brandes & Aspel, Frankfurt am Main.
- Halbmayer, Ernst and Mader, Elke (Eds.). *Kultur, Raum, Landschaft: zur Bedeutung des raumes in Zeiten der Globalität*. Brandes & Aspel, Frankfurt am Main.

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- Hegeman, Susan. 1998. Native American "Texts" and the Problem of Authenticity in: *American Quarterly*. Vol 41, No.2 (p265-283).
- Helms, 1988. Ulysees' Sail: An Ethnographic Odyssey of Power, Knowledge, and Geographical Distance. Princeton University Press, Princeton.
- Hinton, Leanne and Hale, Ken [Eds.]. 2001. *The Green Book of Language Revitalization in Practice*. Academic Press, London.
- Hirsch, Eric. 1995. Landscape: Between Place and Space in: *The Anthropology of Landscape: Perspectives on Place and Space*. Hirsch and O' Hanlon (Eds.). Clarendon Press, Oxford.
- Hirsch, Eric and O' Hanlon, Michael (Eds.). 1995. *The Anthropology of Landscape: Perspectives on Place and Space*. Clarendon Press, Oxford.
- Humphrey, Caroline. 1995 Chiefly and Shamanist Landscapes in Mongolia in: *The Anthropology of Landscape: Perspectives on Place and Space*. Hirsch and O' Hanlon (Eds.). Clarendon Press, Oxford.
- Hurault, J. 1968. *Les Indiens Wayana de la Guyane Française; Structure sociale et coutume familiale*. ORSTOM, Paris.
- Jackson, Walter. 1972. A Wayana Grammar A Wayana Grammar. In: *Languages of the Guianas*, J.E. Grimes (ed.), 47-77. Norman: Summer Institute of Linguistics, University of Oklahoma.
- Kemmerer, 2005. *The Semantics of Space: Integrating Linguistic Typology and Cognitive Neuroscience*. Purdue University, Indiana.
- Langacker, R.W. 2002. A Study in Unified Diversity: English and Mixtec Locatives in: *Ethnosyntax*. Enfield, N.J. [Eds.] Clarendon Press, Oxford.
- Levinson, Stephen. 2003. *Space in Language and Cognition: Explorations in Cognitive Diversity*. Cambridge University Press, Cambridge.
- Levinson, Stephen and Wilkins, David (Eds.). 2006. *Grammars of Space: Explorations in Cognitive Diversity*. Cambridge University Press, Cambridge.
- Levinson, Stephen & Meira, Sergio. 2003. 'Natural Concepts' In The Spatial Topological Domain (Adpositional meaning in cross-linguistic perspective: an exercise in semantic typology) in: *Language*, Vol 79, No. 3 (pp. 485-516).
- Meira, Sergio. 2006. Approaching Space in Tiriyo Grammar in: *Grammars of Space: Explorations in Cognitive Diversity*. Levinson, Stephen and Wilkins, David (Eds.). Cambridge University Press, Cambridge.

## References

Melville, Pauline. 1997. *The Ventriloquist's Tale*. Bloomsbury Publishing, London.

Mörner, M. and Rosendahl, M. (Eds.). *Threatened Peoples and Environments in the Americas*. Institute of Latin America Studies, University of Stockholm, Stockholm.

Overing, Joanna. 1995. The Grotesque Landscape of Mythic "Before Time", the Folly of Sociality in "Today Time": an Egalitarian Aesthetics of Human Existence in: *Kultur, Raum, Landschaft: zur Bedeutung des raumes in Zeiten der Globalität*. Halbmayer, Ernst and Mader, Elke (Eds.). Brandes & Aspel, Frankfurt am Main.

Overing, Joanna. 1990. The Shaman as a Maker of Worlds: Nelson Goodman in the Amazon in: *Man, New Series. Vol 25, No.4 (p602-619)*.

Rapport, Nigel and Overing, Joanna (Eds.). 2000. *Social and Cultural Anthropology: The Key Concepts*. Routledge, London.

Rivière, Peter. 1995. Ambiguous Environments in: *Threatened Peoples and Environments in the Americas*. Mörner, M. and Rosendahl, M. (Eds.). Institute of Latin America Studies, University of Stockholm, Stockholm.

Rivière, Peter. 1994. WYSINWYG in Amazonia in: *Journal of the Anthropological Society of Oxford, Vol.XXV, No.3 (p255-262)*.

Rivière, Peter. 1988. Words, Places and Directions Among the Trio Indians in: *Journal of the Anthropological Society of Oxford. Vol XIX, No. 2 (p188-190)*.

Rivière, Peter. 1969. *Marriage Among the Trio: A principle of social organization*. Clarendon Press, Oxford.

Santos-Granero, Fernando. 1995. Arawakan Sacred Landscapes. Emplaced Myths, Place Rituals, and the Production of Locality in Western Amazonia in: *Kultur, Raum, Landschaft: zur Bedeutung des raumes in Zeiten der Globalität*. Halbmayer, Ernst and Mader, Elke (Eds.). Brandes & Aspel, Frankfurt am Main.

Senft, Gunter. 1992. *Everything we Always Thought we Knew about Space - but Did not Bother to Question*. Max Planck Institute for Psycholinguistics, Nijmegen.

Staub, Michael E. 1991. Collecting the Past: Writing Native American Speech in: *American Quarterly. Vol 43, No.3 (p25-456)*

Tavares, Petronila da Silva. 2006. *A Grammar of Wayana*. Rice University, Houston.



Vapnarsky & Lois (Eds.). 2005. *Lexical Categories and Root Classes in Amerindian Languages*. Peter Lang, Frankfurt.

Viveiros de Castro, Eduardo. 1998. Cosmological Deixis and Amerindian Perspectivism in: *The Journal of the Royal Anthropological Institute*, Vol 4, Nr 3 (p469-488).

---

Websites:

[www.ethnologue.com](http://www.ethnologue.com). October 2007.

[www.forests.org](http://www.forests.org). October 2007.

[www.iirsa.org](http://www.iirsa.org). November 2007.

[www.linguistics.buffalo.edu/people](http://www.linguistics.buffalo.edu/people). October 2007.

[www.nwo.nl/projecten](http://www.nwo.nl/projecten). October 2007.

[www.scientificmethod.com](http://www.scientificmethod.com). November 2007.

[www.suriname.wedd.de](http://www.suriname.wedd.de). October 2007.

[www.wilstar.com/theories](http://www.wilstar.com/theories) November 2007.



## PHOTO-OBJECT MATCHING TASK

Apetina (22nd February 2007)

### Foto 1



A: I-waliktao heinë wewe.  
3-back.LOC this.side tree  
The tree is behind, on this side.

Helë wihnë wewe i-pana enatulu-ja.  
DP.INAN.PROX side tree 3POSS-ear pointing-GOAL  
On this side of the tree his ears are pointing towards him.

Maa, i-lamnao pëinëkë.  
DISC 3-middle.LOC boar  
The boar is in the middle.

Maa pëinëkë otao kapau.  
DISC boar rib.LOC deer  
The deer is at the ribs of the boar.

Mëlë katip.  
DP.INAN.MED like  
So is it.

Inëlë?  
DP.ANIM.ANA  
Him?

Maa mijalë tafala enato-me heinë,  
DISC again table end-FACS this.side  
So, again, on this side of the table edge,

wewe tî-hatukma-i.  
tree COREF-set.down-NF  
set the tree down.

Molo-inë i-lamnao pëinëkë-imë takpile-m.  
LOC.ADV.MED.SP-SOU 3-middle.LOC boar-AUG red-NOM  
Then in the middle is the red boar.

Molo-inë kapau awotao.  
LOC.ADV.MED.SP-SOU deer rib.LOC  
Then the deer at his rib.

Mijalë wī-ke-imë-ja-i,  
again 3→1.ITR-say-CYC-PRES-CERT  
Again, I'll say it again,

ene-k nail  
see-IMP EMPH  
look carefully!

Ipun man t-ī-he mēklē awota-k enīk-pena.  
trunk 3.be.PRES COREF-do-NF DP.ANIM.MED rib-DIR Q.ANIM-HESIT  
Put the tree trunk to the rib of what-do-you-call-him.

Pëinēkē sija lome i-wetepu-lu-ja tī-kē ø-uputpī.  
boar hither but 3POSS-rib-POSS-GOAL do-IMP 3POSS-head  
The boar is facing this way but put his head towards his ribs.

K: Awopo-na?  
crossways-DIR  
Crossways?

A: Uhpaphakē\_psi*k* i-wetepu-lu-ja\_lē\_lēken i-lamna-k.  
far\_DIM 3POSS-rib-POSS-GOAL\_ASSERT\_only 3-middle-DIR  
A little far apart just towards his ribs in the middle.

Mololo\_lēlep awota-k.  
LOC.ADV.MED.SP\_ASSERT\_FRUS rib-DIR  
Just exactly like that, to behind him.

Īu w-ene-ja-i ipok?  
1 1→3.1TR-see-PRES-CERT good  
I'll look, ok?

Maa kamisa-tpē-ja, kamisa-tpē-ja wewe tī-kīlīma-imē-i.  
DISC loincloth-PST-GOAL loincloth-PST-GOAL tree COREF-move-CYC-NF  
Towards the former loincloth move the tree again.

K: Kamisa-tpē-ja?  
loincloth-PST-GOAL  
Towards the former loincloth?

A: I-lamnao takpile-m\_lē mēihnē-na tī-lī-mē-i kapau.  
3-middle.LOC red-NOM\_ASSERT that.side-DIR COREF-do-CYC-NF deer  
The red one in the middle, you put the deer to the that side again.

K: Awota-k?  
rib-DIR  
To the ribs?

I-lamnao t-ëh-etpët-se katip.  
3-middle.LOC COREF-REFL-look-NF like  
The middle, as if he is looking at him.

A: Maa, mijalë wī-ke-i.  
DISC again 3→1.1TR-say-CERT  
So, I do/say it again.

Maa, hapë-me-h\_le ehe-pole  
DISC straight-FACS-EMPH\_INTENS REFL-align  
So, the really straight one in alignment

wewe pole-h\_le tīi-kë\_le takpile-m!  
tree align-EMPH\_INTENS do-IMP\_INTENS red-NOM  
set the red one exactly in alignment with the tree!

K: Wewe pole-h\_le.  
tree align-EMPH\_INTENS  
Exactly in alignment with the tree.

A: Ĕhe-pole\_lëken mëihnë-no malë.  
REFL-align\_only that.side-NOM also  
Just in a straight line, the one on that side also.

Wewe-ja katip tēule tīi-kë kapau  
tree-GOAL like eye do-IMP deer  
Put the deer's eyes towards the tree

lome kapau lome wijo-man man i-pīmi,  
but deer but crooked-FACS.NOM 3.be.PRES 3POSS-neck  
but the deer, but it's neck is crooked,

lome hek wewe-ja tēule katip ipun i-sapëkak wewe-ja  
but only tree-GOAL eye like trunk 3POSS-body tree-GOAL  
but only his eyes like towards the tree, his body towards the tree trunk

Apsik ipok.  
DIM good  
Not quite right.

Maa upaphakë-na\_psiik wewe tīi-kë ëhe-katip.  
DISC far-DIR\_DIM tree do-IMP REFL-like  
So, set the tree a little further, the same distance apart.

Upaphakë\_psiik sija iw-ei-top  
far\_DIM hither 3-be-TMP.NOM  
It's being a little further this way,

upaphakë\_psiik sija iw-ei-top, hūwā.  
far\_DIM hither 3-be-TMP.NOM like.that  
it's being a little further this way, like that.

## Foto 2



A: Maa wewe\_psiik m-anim-ja-i meinē-na tii-kē!  
DISC tree\_DIM 2→3-lift-PRES-CERT that.side-DIR do-IMP  
So, you pick up the little tree and set it on the other side!

Molo-inē heinē kē-patah-ken man mēklē-ina  
LOC.ADV.MED.SP-SOU this.side REFL-face-? 3.be.PRES DP.ANIM.MED-adj.LOC  
Then on this side facing each other (opposite)

m-i-ja-i pēinēkē-imē takpile-m.  
3→2-do-PRES-CERT boar-AUG red-NOM  
you set the red pig.

K: Sija-ja?  
hither-GOAL  
Facing this way?

A: Heinē tuna-ina.  
this.side water-adj.LOC  
On this side, the side of the water.

K: Sija?  
hither  
Facing this way?

A: Hapē-m sija\_lē-ja sīn tafala-ja ēti-pena?  
straight-NOM hither\_ASSERT-GOAL DP.INAN.PROX table-GOAL Q.INAN-HESIT  
The straight one facing this way, here this table, what-do-you-call-it?

Kupi-me iw-ei-topo-ja tii-kē!  
fish.sp-FACS 3-be-TMP.NOM-GOAL do-IMP  
Set it along the length!

ø-uputpī sija Jula pakalon-u-ja.  
3poss-head hither Jula house-POSS-GOAL  
it's head facing hither towards Jula's house.

K: Mēi-ka-pa kapau akon?  
Q-CYC deer another  
And this one, the other deer?

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- A: Molo-inë                      kaikui    m-anim-ja-i                      sija  
 LOC.ADV.MED.SP-SOU jaguar    2→3-lift-PRES-CERT    hither  
 Then lift the jaguar this way
- nesti pakolo-nu-ja              ø-uputpī              m-īi-ja-i.  
 Nesti house-POSS-GOAL 3POSS-head 2→3-do-PRES-CERT  
 put it's head towards Nesti's house.
- K: Ehe-mīnpata-k?  
 REFL-face-DIR  
 Are thy facing each other?
- A: Toholohe\_psik      ěh-ekata-wē-la.  
 apart\_DIM                      REFL-beside-LOC-NEG  
 A little apart, not right beside each other.
- Maa, mijalē, wewe\_psik    mēinē      man              ipok    tī-hatukma-i.  
 DISC again tree\_DIM      that.side 3.be.PRES good COREF-set.down-NF  
 So, again, the little tree on that side, you set it good.
- Lome mēlē                      ekata-k      hapo-n      tīi-kē      pēinēkē!  
 but DP.INAN.MED beside-DIR like-NOM do-IMP boar  
 But you set the boar like next to it!
- K: Pēinēkē?  
 boar  
 The boar?
- A: Īna, upaphak    mēihnē\_lē.  
 yes far                      that.side\_ASSERT  
 Yes, far on that side.
- Ĕhe-woto    ětup-ja    upaphak      toholohe\_psik      lome      ěh-ekatao  
 REFL-rib    -GOAL far                      space\_DIM              but      REFL-beside.LOC
- mēihnē-la.  
 that.side-NEG  
 Their ribs beside each other with a little space between them but beside each other  
 not on that side.
- K: Ĕhe-pole-h\_le  
 REFL-align-EMPH\_INTENS  
 In alignment with,
- ěhe-pole-h\_le                      mīi-lī-ø                      sija      ø-uputpī      ěh-emta-k  
 REFL-align-EMPH\_INTENS 2→3-make-I.PST    hither 3POSS-head REFL-?-DIR
- ø-uputpī.  
 3POSS-head  
 you put them in alignment with each other their heads this way, their heads ...

K: Sija ø-uputpī sija ø-uputpī.  
hither 3POSS-head hither  
His head this way, his head this way.

A: Tikoloke-m ø-uputpī mīja-ja.  
white-NOM 3POSS-head  
The white ones head that way.

K: Īna.  
Yes.

A: Takpile-m ø-uputpī sija-ja, hūwā?  
red-NOM 3POSS-head hither-GOAL like.that  
The red ones head this way, is it so?

Wewe\_psi*k* i-lamnao katip, i-lamnao-wē-la\_lep.  
tree\_DIM 3-middle.LOC like 3-middle.LOC-LOC-NEG\_FRUS  
Like the little tree in the middle, not completely in the middle.

I-lamnao-he hapo-n katip t-īi-he!  
3-middle.LOC-PL like- NOM like  
Set them like it is in the middle!

lome heinē i-waliktao\_lē\_lep  
but this.side 3-back.LOC\_ASSERT\_FRUS  
but not exactly behind them on this side

I-wotkī ekatao hapo-n.  
3POSS-tail beside.LOC like-NOM  
Beside like that one's tail.

K: Ipok?  
Good?

A: Uwa-hnē malē-la, uwa-hnē\_psi*k* man.  
NEG.PRTCL-PERSIST also-NEG NEG.PRTCL-PERSIST\_DIM 3.be.PRES  
No, not yet, it is still not quite right.

I-wotkī ekatao hapo-n.  
3POSS-tail beside.LOC like-NOM  
Beside like that one's tail.

Maa mijalē tīwēlēn-jao.  
DISC again ?-INT.LOC  
So, again using other words.

Maa, ēhe-woto.  
DISC REFL-rib  
So, beside each others ribs.

Ēhe-pole, tīi-kē takpile-m malē ēhe-pole-h\_lep!  
REFL-align do-IMP red-NOM also REFL-align-EMPH\_INTENS  
In a straight line? Put the red one also in alignment with the others!



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Mëlë\_lë                      katïp    ëtup-ja    sija    ø-uputpï    sija    ø-uputpï.  
DP.INAN.MED\_ASSERT    like    ?-GOAL    hither    3POSS-head    hither    3POSS-head  
Exactly like that, his head this way his head this way.

A: Malë    wewe    upaphak    apsik\_lëken.  
also    tree    far                      a.little\_only  
Also the tree just a little further.

Ekatao-wë-he              hapo-n    inëlä,              lome    i-lamnao    katïp.  
beside.LOC-LOC-PL    like-NOM    DP.ANIM.ANA    but    3-middle.LOC    like  
That one like beside them, but like in the middle.

tihole\_psiK    mü-lï-ø                      i-lamnao.  
space\_DIM    2→3-make-I.PST    3-middle.LOC  
You made a little space in the middle.

K: Ipok?  
Is it good?

A: ëeja-la\_psiK.  
OK-NEG\_DIM  
Not quite good.

Mëinë              takpile-m    tïï-kë!  
that.side    red-NOM              do-IMP  
Put the red one on the other side!

K: Mëinë?  
that.side  
That side?

A: İna.  
Yes.

K: Helë                      wihnë-mëi.  
DP.INAN.PROX    side-CYC  
Back on this side.

A: İna.  
Yes.

Mëlë\_lë                      katïp,  
DP.INAN.MED\_ASSERT    like  
Just like that,

mitëimaken    helë                      katïp    m-ïï-ja-i,  
DP.INAN.PROX    like                      2→3-do-PRES-CERT  
like you did the first time you set it, you set it so,

sija    ø-uputpï              sija\_lë-ja                      takpile-m.  
hither    3POSS-head    hither\_ASSERT-GOAL    red-NOM  
his head this way, the red really facing this way.

ø-uputpī m-ii-ja-i tīkoloke-m ø-uputpī hūwā.  
 3POSS-head 2→3-do-PRES-CERT white-NOM 3POSS-head like.that  
 You put his head, the white one's head, just like that.

Mijalē, uwa-hnē man toholohe\_psik apsik\_lēken.  
 again NEG.PRTCL-PERSIST 3.be.pres space\_DIM a.little\_only  
 Again, it's wrong, just a little apart.

Toholohe\_psik.  
 space\_DIM  
 A little apart.

Mēk-ja\_lē mi-kīlīmai-mē-ja-i upaphakē\_psik\_lēken  
 DP.ANIM.DIST-GOAL\_ASSERT 2→3-move-CYC-PRES-CERT far\_DIM\_only  
 You move those ones again, just a little far

Upaphakē\_psik\_lēken mēihnē-la.  
 far\_DIM\_only that.side-NEG  
 Just a little far, not on that side.

Apsik ipok, ina.  
 a.little good yes  
 A little right, yes

Maa mēi helē-wihnē-na\_psik alē-kē\_le kaikui.  
 DISC DP.ANIM.PROX DP.INAN.PROX-side-DIR\_DIM take-IMP\_INTENS dog  
 So, this, take the dog and set it on this side a bit.

Apsik\_lēken.  
 a.little\_only  
 Just a little.

Mēihnē-la ēhe-pole\_lēken sija\_lē enep-kē ē-ja  
 that.side-NEG REFL-align\_only hither\_ASSERT bring-IMP 2-GOAL  
 Not on that side, just in alignment with each other, bring it this way to you

ē-ja apsik\_lēken.  
 2-GOAL a.little\_only  
 just a little towards you.

Īna, ipok man.  
 yes good 3.be.pres  
 Yes, it is good.

---

### Foto 3

A: Maa, wewe-ptile anīm-kē ēh-ekata-k tīi-kē!  
 DISC tree-stunted lift-IMP REFL-beside-DIR do-IMP  
 So, lift the stunted trees, put them beside each other!



Awopo-lo-la                    ehewena    sija        apëlët-kë    kupi-me        iw-ei-topo.  
 crossways.PERL-NEG    hither    place-IMP    fish.sp-FACS    3-be-TMP.NOM  
 Place them this way ... not crossways, their being longways.

Ët-ale                    pïkïna        apsik\_lëken.  
 REFL-leaf                    ?                    a.little\_only  
 Their leaves just touching each other a little.

Molo-inë                    kapau\_psik    m-anïm-ja-i                    i-lamnak  
 LOC.ADV.MED.SP-SOU    deer\_DIM        2→3-lift-PRES-CERT    3-middle-DIR  
 Then, you lift the little deer to the middle

mëlë                    ëhe-pïkïna    ale        ëtïtop        pole-h\_le  
 DP.INAN.MED    REFL-?                    leaf    TMP.NOM    align-EMPH\_INTENS

upaphakë\_psik\_lëken.  
 far\_DIM\_only  
 in alignment with the leaves toching eachother, just a little bit far.

Helë                    wïhnë    ë-ina        tïi-kë    kapau!  
 DP.INAN.PROX    side    2-adj.LOC    do-IMP    deer  
 Put the deer on this side, your side!

K: Sija\_lë-ja                    mëihnë-la        i-waliktao-wë-la?  
 hither\_ASSERT-GOAL    that.side-NEG    3-back.LOC-LOC-NEG  
 Towards this way, not that side, not behind it?

A: Ë-ihna,        ë-ina.        Ë-ina        müi-lï-ø.  
 2-adj.LOC    2-adj.LOC    2-adj.LOC    2→3-make-I.PST  
 Your side, your side. You put it on your side.

K: Tïja-ja    ø-uputpï        kupi-me        iw-ei-topo-ja?  
 -GOAL    3POSS-head    fish.sp-FACS    3-be-TMP.NOM-GOAL  
 His head longways, towards its being?

A: Ìna    sija-la-ja                    ø-uputpï.  
 yes    hither-NEG-GOAL    3POSS-head  
 Yes, it's head not towards this way.

Tatilē-la    ěw-ene-ja\_lep    ø-uputpī  
 NEG        3→2-see-GOAL\_FRUS    3POSS-head  
 It doesn't matter, his head as though he's looking at you

lome-hek    sija\_lē-ja        ĭ-ja        mija-ja        i-watkī.  
 but-only    hither-NEG-GOAL    1-GOAL    thither-GOAL    3POSS-tail  
 except he is this way towards me, his tail towards that way.

A: Uwa-hnē\_psik.  
 NEG.PRTCL-PERSIST\_DIM  
 Not quite.

Maa    ět-ale-pikīna    tīī-kē    wewe!  
 DISC    REFL-leaf-?    do-IMP    tree  
 So, put the tree, their branches touching each other!

Mēklē        ikīlīma-kē\_le\_psik    apsik    upaphakē-na-psik    kilīkilī!  
 DP.ANIM.MED    move-IMP\_INTENS\_DIM    a.little    far-DIR\_DIM        tik,tik,tik  
 Move it slightly a bit, tik tik tik to a little far!

Īna,    ipok.  
 yes    good  
 Yes, good.

---

**Foto 4**



A: Maa,    molo-inē        wewe        m-anīm-ja-i,  
 DISC    LOC.ADV.MED.SP    tree        2→3-lift-PRES-CERT  
 So, then you lift the tree,

wewe    akon        m-anīm-ja-i,        ěhe-pole    m-īī-ja-i.  
 tree    another    2→3-lift-PRES-CERT    REFL-align    2→3-do-PRES-CERT  
 you lift the other tree and you put them in alignment with each other.

Upaphakē\_psik.  
 far\_DIM  
 A little far (apart).

Eh-ekata-wē-la        hapo-n        upaphakē\_psik    toma.  
 REFL-beside-LOC-NEG    like-NOM    far\_DIM  
 Not like one exactly beside each other, a little apart.

K: Awohamna\_psik.  
neatly\_DIM  
A little neatly.

Molo-inë kapau m-anime-ja-i  
LOC.ADV.MED.SP-SOU deer 2→3-lift-PRES-CERT  
Then you lift the deer

helë wihne-no wewe-pole.  
DP.INAN.PROX side-NOM tree-align  
and put it on this side in alignment with the tree.

K: Tëna-ja sija?  
Q.LOC-GOAL hither  
Facing which way, this way?

A: Ĕ-ja ø-emit.  
2-GOAL 3POSS-face  
It's face towards you.

K: ø-emit?  
3POSS-face  
It's face?

A: Īna, i-wehe mii-lī-ø wewe epī-ja-h\_le i-wehe  
yes 3POSS-anus 2→3-make-I.PST tree plant-GOAL-EMPH\_INTENS 3POSS-anus  
i-watkī.  
3POSS-tail  
Yes, you put it's anus, his anus right to the tree trunk, his tail.

Ehkatao hapo-n nai tii-kē!  
beside.LOC like-NOM EMPH do-IMP  
Set it beside it like that!

Molo-inë kaikui tikoloke-m m-anim-ja-i  
LOC.ADV.MED.SP-SOU jaguar white-NOM 2→3-lift-PRES-CERT  
Then you lift the white dog

mēihnē-no ekata-k, epole.  
that.side-NOM beside-DIR align  
to beside the one on that side, in alignment.

Wijo-m apsik ě-ja.  
crooked-NOM a.little 2-GOAL  
The crooked one a little towards you.

Wijo-m mēihnē-la apsik\_lēken hapo-n.  
crooked-NOM that.side-NEG a.little\_only like-NOM  
The crooked one not on that side, just a little like.

Molo-inë                      pëinëkë    takpile-m    m-anim-ja-i                      i-lamna-kë-he  
LOC.ADV.MED.SP-SOU    boar            red-NOM            2→3-lift-PRES-CERT    3-middle-DIR-PL

katip,

like

Then lift the red pig to like the middle of them,

lome    helë-wihnë-na                      ë-ja-h\_le                      hapo-n  
but    DP.INAN.PROX-side-DIR    2-GOAL-EMPH\_INTENS    like-NOM  
but to this side like by you

upaphakë\_psiK    më-ham-pëk.  
far\_DIM                      3PRO-ANIM.PL-CONTACT.LOC  
a bit far from those ones.

K: Ī-ja?

1-GOAL

To me?

A: Ęw-ekatao    hapo-n    tii-kë!    ëw-ekatao-wë-la\_lep,  
2-beside.LOC    like-NOM    do-IMP    2-beside.LOC-LOC-NEG\_FRUS  
Set it like beside you! not completely beside you,

helë                      wihnë\_psiK    hapo-n    i-lamnao                      takpile-m.  
DP.INAN.PROX    side\_DIM                      like-NOM    3-middle.LOC    red-NOM  
like one a little on this side, the red one in the middle.

K: Kaikui    lamnao?

jaguar    middle.LOC

The dog in the middle?

A: Ęe,    më-ham-lamnao.

ok    3PRO-ANIM.PL-middle.LOC

Ok, in the middle of them.

K: Kaikui    lamnao?

jaguar    middle.LOC

The dog in the middle?

A: Më-ham-lamnao

3PRO-ANIM.PL-middle.LOC

In the middle of them

wewe    i-lamnali-pole\_lë\_lëken                      alë-k!  
tree    3-middle.LOC-align\_ASSERT\_ONLY    take-IMP  
take it just in the middle in alignment with the trees!

ë-ja                      hapo-n    upaphak    më-ham-pole-la.  
2-GOAL    like-NOM    far                      3PRO-ANIM.PL-align-NEG  
like far to you, not in alignment with those ones.

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Upaphakë\_psik heije ë-ja hapo-n.  
far\_DIM LOC.ADV.MED 2-GOAL like-NOM  
A little far, to there, like one towards you.

K: ĩja hapo-n?  
1-GOAL like-NOM  
Like to me?

A: Pëinëkë takpile-m ë-ja hapo-n më-ham-pole-h\_le-la  
boar red-NOM 2-GOAL like-NOM 3PRO-ANIM.PL-align-EMPH\_INTENS-NEG  
The red pig like to you not in alignment with those ones

upaphakë\_psik toma.  
far\_DIM  
put it a little far.

K: Ipok?  
good?

A: Uwa-hnë\_psik mijalë, hūwā\_lëken.  
NEG.PRTCL-PERSIST\_DIM again like.that\_only  
Not quite, again, only like that.

Maa,  
DISC  
so,

mëi ikilima-kë\_le kapau sija\_lë-ja tii-kë ë-ina!  
DP.ANIM.PROX move-IMP\_INTENS deer hither\_ASSERT-GOAL do-IMP 2-adj.LOC  
move it, set the deer towards this way, adjacent to you!

Mëklë wewe po...false start  
DP.ANIM.MED tree

wewe pole-h\_le i-wehe tii-kë epī pole wī-ka\_lep  
tree align-EMPH\_INTENS 3POSS-anus do-IMP plant align 1→3.ITR-say\_FRUS  
Put it's anus in alignment of the tree! in alignment with the plant I said in vain,

alë-kë\_le mëje-ja mëlë ekata-k!  
TAKE-IMP\_INTENS LOC.ADV.DIST-GOAL DP.INAN.MED beside-DIR  
take it to there to beside it!

Īhī, molo-na akon!  
yes LOC.ADV.MED.SP-DIR another  
Yes, then the other to there!

helë wihnë-na\_psik tii-kë\_le apsik\_lëken!  
DP.INAN.PROX side-DIR\_DIM do-IMP\_INTENS a.little\_only  
put it a little to this side, just a little!

K: Apsik\_lëken?  
a.little\_only  
Just a little?

A: Maa, mēklē mēihnē-no-hnē epī-pole  
DISC DP.ANIM.MED that.side-NOM-PERSIST plant-align

mēlē\_lē-katip.

DP.INAN.MED\_ASSERT-like

So, still the one on that side in alignment with the plant, so is it.

Maa, mēk akon takpile-m anīm-kē\_le!  
DISC DP.ANIM.DIST another red-NOM lift-IMP\_INTENS  
So, lift it the other red one!

ē-ja hapo-n, ē-ja hapo-n tanē-na hapo-n,  
2-GOAL like-NOM 2-GOAL like-NOM LOC.ADV.PROX.SP-DIR like-NOM  
like to you, like to you, like to here,

mēlē-ken mī-tēi-mē-i\_lep mijalē.  
DP.INAN.MED-ADD 2→3.1TR-go-CYC-CERT\_FRUS again  
you left it in the wrong place again.

Apsik sija\_lē enep-kē\_le\_psik!  
a.little hither\_ASSERT bring-IMP.PROX\_INTENS\_DIM  
Bring it a little this way!

Enep-kē enep-kē sija!  
bring-IMP bring-IMP hither  
Bring it, bring it this way!

K: Īna.  
yes.

A: Hūwā hapo-n.  
like.that like-NOM  
Just like that.

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Until recently it was assumed that all cultures perceive and express ‘space’ from the ego. However, this belief in a universal phenomenological bias is currently being challenged by many linguists from several disciplines, who believe that space can also be perceived intrinsically or absolutely. This ethno-linguistic analysis of the Cariban language, Wayana (still spoken in the dense rainforests of Suriname, French Guiana and Brazil), not only strengthens these claims but, more importantly, gives a detailed account of how spatiality is expressed in Wayana. Particular attention is given to their rich postpositional system surrounding topological relations, to their demonstrative pronouns and to their locative adverbs. Additionally, following the idea that language and culture are intrinsically interwoven, this linguistic analysis gives us a glimpse into the worldview of the Wayana, enabling us to achieve a greater understanding of how the Wayana perceive and categorize ‘space’ and the ‘landscape’ in which they live.



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