

VICTOR DIAS DE OLIVEIRA SANTOS
FALE/UFMG

LANGUAGES OF THE WORLD AND THEIR CASE MARKING
THE BRAZILIAN LANGUAGE XAVANTE: A CASE STUDY

BELO HORIZONTE
FACULDADE DE LETRAS DA UFMG
2008

VICTOR DIAS DE OLIVEIRA SANTOS
FALE/UFMG
victorlinguist@gmail.com

LANGUAGES OF THE WORLD AND THEIR CASE MARKING

THE BRAZILIAN LANGUAGE XAVANTE: A CASE STUDY

Monografia apresentada ao Colegiado de Graduação da Faculdade de Letras da Universidade Federal de Minas Gerais como requisito parcial para obtenção do título de Bacharel em Letras, com habilitação em Lingüística.

Orientador: Prof. Dr. Fábio Bonfim Duarte

BELO HORIZONTE
FACULDADE DE LETRAS DA UFMG
2008



Universidade Federal de Minas Gerais
Faculdade de Letras

Monografia intitulada “*Languages of the World and their Case marking. The Brazilian language Xavante: a case study*”, de autoria do bacharelado Victor Dias de Oliveira Santos, submetida à aprovação pela banca examinadora constituída pelos seguintes professores:

Prof. Dr. Fábio Bonfim Duarte – FALE / UFMG – Orientador

Prof. Dr. Seung Hwa Lee – FALE/UFMG

Doutorando Carlo Sandro Campos – FALE / UFMG

Prof. Dr. José Olímpio de Magalhães – FALE / UFMG – Suplente

Belo Horizonte, 04 de junho de 2008

Av. Antônio Carlos, 6627 – Belo Horizonte, MG – 31270-901 – Brasil – tel.: (31) 3499-5492

*To my mother, for being so special,
patient and caring and to all my
professors at UFMG, for having always
been so prompt to answer my wildest
questions and for making me ever so
interested in the beauty of languages.*

ACKNOWLEDGEMENTS

First of all I would like to thank my mother, who stood by my side the whole period during which I wrote this monograph and who, not rarely, reminded me of the mission that lay ahead and that putting things off is not the best way of getting things done.

I am also most grateful to all those who were my professors at UFMG, specially those who had a deeper impact on me: Prof. Fábio Bonfim, who shared with me his fascination for the strange (at least from my at the time limited Indo-European point of view) linguistic and cultural phenomena of indigenous languages and cultures around the world and who always made me believe that I have a lot of potential; Prof. Thaís Cristófaró, who showed me that there are things in life which matter more at a day's end than professional success and linguistic debates; Prof. Márcia Cançado, who showed me that a great teacher always listens to their students' opinions and is continuously learning from them; Prof. Seung-Hua Lee, who taught me that Linguistics cannot be separated from a philosophy of life; Prof. Heliana Mello, who is for me the quintessential example of a professor who was born for passing on her knowledge and wisdom in a most warm and truthful way; last but not least, Prof. José Olímpio, who helped me with his French consultancy (*merci beaucoup, prof!*) and with whom I had quite nice talks on Thursdays at lunch time.

A special word of thanks goes to my closest friends at FALE, who will always hold a very special place in my heart and to Dr. Denny Moore and Dr. Sebastian

Drude, from the Goeldi Museum, in Belém do Pará, who gave me a fantastic opportunity to spend some time with them and learn more about the fascinating process of working with indigenous languages and communities in Brazil.

In a grammar there are parts which pertain to all languages; these components form what is called the general grammar. In addition to these general (universal) parts, there are those which belong only to one particular language; and these constitute the particular grammars of each language.

Du Marsais, c.1750

ABSTRACT

This monograph aims at doing an overview of Case marking from a typological perspective and at identifying which Case systems operate in the indigenous Brazilian Language Xavante, of the Macro-Jê stock. I explore the various ways in which Case can be realized, both intra-clausally and inter-clausally. In addition, I try to determine various factors which can trigger a split in the Case systems of the languages of the world. In the part concerning Xavante, more particularly, I apply this knowledge from typological studies to propose the existence of at least seven subsystems of Case in this language, based on the linguistic data to which I have had access. The theoretical support adopted in this monograph is that of syntactic typology, as developed by Dixon (1994), Whaley (1997) and Croft (2006).

KEY WORDS: Case, ergative, indigenous languages, Xavante, split system, split-O.

RESUMO

O presente estudo tem por objetivo uma revisão bibliográfica sobre a marcação de Caso dentro de uma perspectiva tipológica e identificar os sistemas de Caso que operam na língua indígena brasileira Xavante, pertencente ao tronco lingüístico Macro-Jê. Eu exploro aqui as várias maneiras possíveis de realização de Caso, tanto intra- como inter-sentencialmente. Adicionalmente, busco determinar vários fatores que causam cisões nos sistemas de Caso das línguas do mundo. Na parte que concerne o Xavante, aplico esse conhecimento dos estudos tipológicos para propor a existência de, no mínimo, sete subsistemas de Caso nessa língua, baseado nos dados lingüísticos aos quais tive acesso. O suporte teórico adotado neste trabalho é o da tipologia sintática, tal como formulado por Dixon (1994), Whaley (1997) e Croft (2006).

PALAVRAS-CHAVE: Caso, ergativo, línguas indígenas, Xavante, sistema cindido, split-O.

ABBREVIATIONS

1/2/3PP	1 st /2 nd /3 rd person plural
1/2/3PS	1 st /2 nd /3 rd person singular
ABL	ablative
ABS	absolutive
ACC	accusative
ACT	active
AOR	aorist
AUX	auxiliary
CL	class
CM	case marker
CONJ	conjunction
CRF	coreferential
DEF	definite
EMP	emphatic
ERG	ergative
EST	stative
F/ FEM	feminine
IMPF/IPFV	imperfective
M/MASC	masculine
MED	mediator
NEG	negation mark
NFUT/ NONFUT	non-future
NOM	nominative
NS	non-singular
NZR	nominalizer
OBL	oblique
PERF /PRF	perfective
PLUR	plural
POSP	postposition
POT	potential
PRO _i	pro-drop
PROJ	projective
PRES/ PRS	present
PST	past
R	root
REAL	realis
REFL	reflexive
SING/SG	singular

TABLES

NUMBER MARKS:

Subjects and objects of verbal predicates	46
Subjects of nominal predicates	48
Subjects of nominal predicates of existential nature	49

PERSON MARKS:

Series I (Absolutive)	54
Series II (Accusative)	56
Series III (Nominative)	57
Series IV (Emphatic)	58

CONTENTS

0. INTRODUCTION	13
1. CASE FROM THE TYPOLOGICAL PERSPECTIVE	14
2. THE SIX POSSIBILITIES OF CASE SYSTEM	17
2.1.1. Nominative-Accusative	19
2.1.2. Ergative-Absolutive	22
2.1.3. Tripartite	23
2.1.4. Neutral	24
2.1.5. Accusative – focus	26
2.1.6. Split	26
2.1.6.1. the semantic nature of the verb	27
2.1.6.2. the semantic nature of the core NPs	28
2.1.6.3. tense, aspect and mood	30
2.1.6.4. the grammatical status of a clause	32
2.2. Types of marking of core syntactic relations	33
2.2.1. Particles and adpositions	34
2.2.2. Cross-referencing on the verb	35
2.2.3. Word order	37
2.3. Intra-clausal x inter-clausal case system	37
2.3.1. Accusative syntax	38
2.3.2. Ergative syntax	39
3. A CASE STUDY: XAVANTE	43
3.1. Ethnographic and linguistic information	43
3.2. Number marking	45
3.3. Person marking	54
3.4. Case subsystems found in Xavante	61
3.4.1. Case subsystems found in the number marking system	61
3.4.1.1. Neutral	61
3.4.1.2. Nominative-Accusative	62
3.4.2. Case systems found in the person marking system	65
3.4.2.1. Ergative-Absolutive	65
3.4.2.2. Tripartite	69
3.4.2.3. Nominative–Accusative 2	70
3.4.2.4. Split-S	71
3.4.2.5. Split-O	73
4. FINAL CONSIDERATIONS	75
5. BIBLIOGRAPHY	76

0. INTRODUCTION

This monograph aims at exploring the various possibilities of Case marking, from a typological perspective, found in the languages of world, with a special focus on the Brazilian language Xavante. An investigation of this sort contributes to a better understanding of the various ways in which the syntax of languages marks the core arguments of verbal predicates. Even though I will here explore various systems of Case marking, I have a special interest in looking more specifically at Ergative and Split-Ergative systems. Ergativity is a common areal feature of the languages of the Amazon basin, in contrast to areas such as Europe or Africa.

This monograph is divided in 4 sections: section 1 introduces the theoretical background within which we have worked. Section 2 discusses the types of possible systems of Case-marking, including Split-S systems and their motivations. In this chapter, examples drawn also from non-Brazilian languages will be used for exemplification. I also quickly discuss in this chapter the different ways in which languages can mark their core arguments for Case. Section 3 deals specifically with the various motivations for the emergence of the several Case systems/subsystems in the Brazilian indigenous language Xavante, from the Macro-Jê family. In the last section, section 4, I conclude the present work. Throughout this work, the following system will be adopted to indicate the source of example sentences: if a group of sentences are all taken from the same source, this will only be indicated after the last sentence in the group and if there is no indication of the source in any place, this means that the examples are my own.

1. CASE FROM THE TYPOLOGICAL PERSPECTIVE

As Dixon (Dixon 1994) notes, every single language makes a distinction between clauses that involve one verb and only one core noun phrase (intransitive clauses) and clauses that involve a verb and two or more core noun phrases (transitive clauses).

Some languages, like Latin and the Australian language Dyirbal, recognize almost every verb as either intransitive or transitive, without the possibility, in this case, of the same verb having both statuses¹. Other languages, however, like English and Portuguese are more flexible, allowing for a certain fluidity of these categories. Take the following four examples, the first two from English and the others from Portuguese:

(1) *John broke the vase. (transitive)*

(1b) *The vase broke. (intransitive)*

(2) *Pedro não consegue abrir a porta.*
Peter not can-3PS open-INF the door.
“Peter cannot open the door”

(2b) *A porta não abre.*
the door not open-3PS
“The door will not open”

As we see in English and Portuguese, many typically transitive verbs can be easily turned into an intransitive one without any formal change to the verb itself.

¹ According to Dixon, “In some languages almost every verb is strictly classified as intransitive or transitive – Latin and the Australian language Dyirbal are of this type” (Dixon:1994:6)

Despite this fluidity in some languages, it is a universal fact that every language makes a distinction between these two types of clauses, since if we have two core-NPs in an intransitive clause or only one in a transitive clause, the resulting sentences will be perceived as ungrammatical.

Taking this into consideration, Dixon proposes three universal syntactic-semantic primitives, recognized by any spoken language:

Universal syntactic-semantic primitives:

(S) – intransitive subject, either agent or patient

(A) – transitive subject, agent

(O) – transitive object, patient

If there is only one core-argument in a clause, it will invariably be mapped onto (S) function. However, if there are two core-arguments, one will be mapped onto (A) function and the other onto (O) function. In the case of there being more than two core-arguments (as with the verb *give*), two of them will be mapped onto (A) and (O) and the third will be marked in another way, for example, by means of adpositions. As Dixon states, there is a semantic basis for the assignment of either (A) or (O) to a certain core-argument and this has to do with the prototypical meaning of the verb. Dixon identifies what he calls ‘semantic types’ of verbs, that is, semantic classes of verbs which cross-linguistically have very similar grammatical behavior in terms of the core-arguments requested by the verb and also in terms of the theta-roles

associated with them. Here is a short list Dixon gives us on page 7 of his book

Ergativity:

<u>Semantic Types:</u>	<u>Semantic Roles:</u>
<i>Affect</i> , eg. hit, cut, burn	Agent, Manip (thing manipulated), Target
<i>Giving</i> , eg. give, lend, pay	Donor, Gift, Recipient
<i>Speaking</i> , eg. talk, tell, order	Speaker, Addressee, Message
<i>Attention</i> , eg. see, hear, watch	Perceiver, Impression

Dixon points out the regularity existent among widely different languages with regard to the treatment and assignment of (A) or (O) positions in relation to these semantic roles. It is almost always the first semantic role of each semantic type that is marked onto (A) function, that is, the Agent for *Affect*² verbs, the Donor for *Giving* verbs, the Speaker for *Speaking* verbs and the Perceiver for *Attention* verbs. The underlying logic and rule seem to be: the role which seems the most essential to the occurrence of the activity should be mapped onto (A) function. It is important to note that the D/NP mapped onto (A) need not, in these terms, be animate or even human. The other role, in the case of a two core-argument clause, will be marked onto (O) function. When it comes to verbs with only one core-argument, this will be marked onto (S) function, regardless of the meaning of the verb.

² For Dixon, *Affect* verbs denote verbs which select two core-arguments, one of them being affected by the agent.

2. THE SIX POSSIBILITIES OF CASE SYSTEMS

Each language in the world needs to make a choice as to how these three syntactic-semantic primitives will be encoded. Some languages opt to group together (A) and (S) functions and treat (O) function differently, in which case the language will have a Nominative-Accusative system. Finnish is an example of this type of language. Other languages prefer to treat (S) and (O) alike and (A) differently, in which case the language will have an Ergative-Absolutive system. Basque and Dyirbal are examples of this type of language. There are still other languages that prefer to mark each of the three primitives differently, assigning one Case to (S), another to (A) and still another to (O) (called a tripartite system). The Australian language Wangkumara makes use of this system. A fourth possibility for treating the three syntactic primitives is simply to mark them equally, that is, without any morphological differentiation between them whatsoever (called a Neutral system). It is true that a true Neutral system, one which does not have any way at all of distinguishing between subjects and objects in transitive sentences is very unlikely to develop in a human language and in fact is so far unattested. That having been said, there are many languages which do not make a morphological distinction between the three primitives, making use of other linguistic devices for dealing with them. However, in terms of having a morphologically identical marking on the D/NPs in (S), (A) or (O) positions, this system is quite common worldwide and both Portuguese and English are examples of it, as far as non-pronominal D/NPs are

concerned (with the former language making primary use of number co-reference in the verb and argument position to mark the difference between (A) and (O) and the latter, argument position). There are two other ways of treating (S), (A) and (O), these being, in my opinion, the most intriguing (with the last one being also the most complex of the six). The fifth manner in which the three primitives can be treated is through a system called 'Accusative-focus'. In this system, the sole argument of an intransitive clause is treated differently from the two arguments of a transitive clause. Just as with the Neutral system, this would mean that when faced with a transitive sentence, speakers would be unable to distinguish between its subject and its object, except with the help of context, as Whaley (1997) points out. According to the author, no languages have been attested so far which show this system throughout. Comrie (1989), however, notes that some Iranian languages make use of this system for certain classes of nouns. The last and sixth possibility is found in languages which are not always so rigid in their Case system. These languages show a mixture of the alignments above, with several factors being able to motivate (or trigger) the choice for one system or the other, depending on the language in question. This sixth possibility is called a Split-System (Dixon,1994). All these six possibilities will be analyzed shortly in the following subsections.

Regardless of the Case system, there is often one Case which is not marked, i.e., has zero realization or at least a zero allomorph, with the other Cases being always marked. In the first two types of grouping (Nominative-Accusative and Ergative-Absolutive), it is usually the Case which also encompasses the function

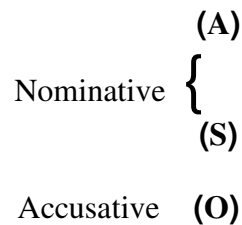
aligned with (S) function that will have zero realization or at least a zero morpheme. In a Nominative-Accusative system, therefore, it will be the Nominative Case and, in the Ergative-Absolutive system, the Absolutive Case that will show this characteristic. According to Dixon, there are a few languages in which it is the Accusative in a Nominative-Accusative system that has zero realization, but none in which it is the Ergative that has zero realization and the Absolutive non-zero marking in an Ergative-Absolutive language (this statement is only valid for marking on head nouns, which will be explored in a moment). According to the *World Atlas of Language Structures (WALS)*, out of 190 languages surveyed for the alignment of Case marking of full noun phrases, only 6 were of the Nominative-Accusative type in which it is the Nominative that is the marked Case. Interestingly, and perhaps due to the not very broad scope of the *WALS* survey, there are no Ergative-Absolutive languages listed for Brazil, which surely does not reflect the linguistic reality of the country.

2.1.1 NOMINATIVE-ACCUSATIVE

In a Nominative-Accusative system, (S) and (A) are treated equally, while (O) is treated differently, with (S) and (A) being assigned Nominative marking and (O) being assigned Accusative marking. As mentioned previously, regardless of the Case system, there will often be a Case which is not marked, that is, showing either zero realization or a zero morpheme for one of the Cases. In a language with a Nominative-Accusative system, it is most often the Nominative Case which does not

get marked. Out of 52 Nominative-Accusative languages surveyed by Bernard Comrie for WALS, 46 languages showed standard marking (Accusative gets marked but Nominative does not) and only 6 languages showed the Nominative as being marked (either in addition to the Accusative or as the only Case which is marked). We can find below a diagram of how this system works in terms of the three syntactic-semantic primitives:

Nominative-Accusative system



We can now have a look at examples of the three types of possibilities for this kind of system.

Nominative unmarked and Accusative marked (data from Evenki, an Alteic language spoken in Siberia, Russia):

(3) *nungan* *bira-duk* *ju-re-n*
 he river-ABL emerge-NFUT-3SG
 'he went out of the river'
[Nedjalkov (1997:171)]

(4) *bi* *nungan-ma* *sa:-ø-m*
 I he-DEF.ACC know-NFUT-1SG
 'I know him'
[Nedjalkov (1997:195)]

- (5) *asatkan* *ileken-me* *tet-te-n*
 girl doll-DEF.ACC dress-NFUT-3SG
 ‘the girl dressed the doll’

[Nedjalkov (1997:66)]

Nominative and Accusative marked (data from Latvian, an Indo-European language spoken in Latvia):

- (6) *Putn-s* *lidoja*
 Bird-NOM fly.PST.3
 ‘the bird was flying’

[Mathiassen (1997:181)]

- (7) *Bērn-s* *zīmē* *sun-i*
 Child-NOM draw.PRES.3 dog-ACC
 ‘the child is drawing a dog’

[Mathiassen (1997:187)]

Nominative marked and Accusative unmarked (data from Harar Oromo, a Cushitic language spoken in Ethiopia):

- (8) *sáree-n* *adū-n* *ní* *iyyi-t-i*
 dog-NOM white-NOM FOC bark-F-IPFV
 ‘the white dog is barking’

[Owens (1985:101)]

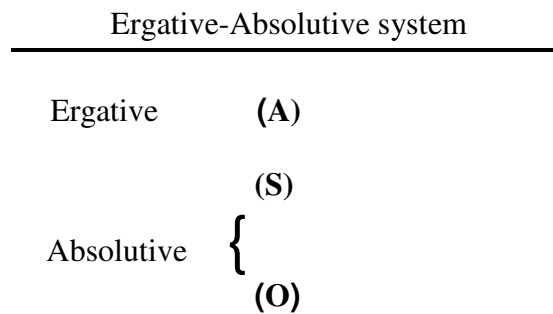
- (9) *haat-tíi* *okkóttée* *goot-t-i*
 mother-NOM POT make-F-IMPF
 ‘Mother is cooking (lit. making the pot)’

[Owens (1985:251)]

There are a few subtleties that can be found in the system, such as whether the argument being marked is a D/NP or a pronoun. However, the exposition above suffices for the moment.

2.1.2 ERGATIVE-ABSOLUTIVE

In an Ergative-Absolutive system, (S) and (O) are treated equally and (A) is treated differently, with (A) being assigned Ergative Case and (S) and (O) being assigned Absolutive Case. Below, there is a diagram of how this system works in terms of the three syntactic-semantic primitives:



Most often, it is the Ergative Case which gets marked, with the Absolutive receiving zero realization. However, there are two attested possibilities of marking:

Ergative marked and Absolutive unmarked (data from Hunzib, a Daghestanian language, spoken in the Dagestan region in Russia):

(10) *kid* *y-ut'-ur.*
 girl CL2-sleep-PST
 'the girl slept'

(11) *oždil* *kid* *hehe-r*
 boy-ERG girl hit-PST
 'the boy hit the girl'

[van den Berg, (1995:122)]

Ergative and Absolutive marked (data from *Tukang Besi*, an Austronesian language spoken in the Sulawesi region in Indonesia):

- (12) *no - tinti* *na* *ana*
 REAL.3-run ABS child
 ‘the child is running’
- (13) *no - ‘ita - ‘e* *na* *kene-no* *te* *ana*
 REAL.3-see-3 ABS friend-3 ERG child
 ‘the child saw its friend’

[Donohue (1999:51)]

2.1.3 TRIPARTITE

In a Tripartite system, each of (A), (S) and (O) are treated differently. It is usually the (S) member of the system that receives zero marking, with the other two members showing distinct marking from each other. The alignment can be better visualized below:

Tripartite system	
Ergative	(A)
Nominative	(S)
Accusative	(O)

There have been claims for only one language that categorically marks all of its noun phrases with a Tripartite system, the Australian Pama-Nyungan language Warrungu. Since I was not able to find example sentences from this language, I will include below (just for argumentation’s sake) sentences from Hindi, which does show

a Tripartite system, but only in the perfective aspect and with objects high in animacy (this is an example of a Split system, which will be discussed shortly):

(14) *laRkaa kal aay-aa*
boy yesterday come.AOR-SG.M
“the boy came yesterday”.

(15) *laRke ne laRkii ko dekh-aa*
boy.OBL ERG girl ACC see.AOR-SG.M
“the boy saw the girl”

[Anvita Abbi (p.c)]

In (14), *the boy* is in (S) function and therefore receives no morphological Case mark. In (15), however, it is assigned Ergative Case through the postposition *ne*, since it is in (A) function and *the girl* receives Accusative Case by means of the postposition *ko*. Other languages, such as Marathi (India) and Semelai (Malaysia) also make use of a Tripartite system at times.

2.1.4 NEUTRAL

In a Neutral system, (S), (A) and (O) are marked in the same way. This system is very common in the languages of the world, showing no distinct morphological marking on the D/NPs in any of the three positions, as can be seen in the diagram:

Neutral system

(A)

(S)

(O)

Out of the 190 languages surveyed by Comrie for WALS, the majority of them (98) show this system. However, there is always in these languages a way of recovering, as it were, who is the subject and who is the object in a transitive sentence. The resources employed by English and Portuguese have already been mentioned. I will include here two examples from the Niger-Congo language Ewe:

- (16) *fiá vá*
king come
'the king came'

[Westermann (1965:48)]

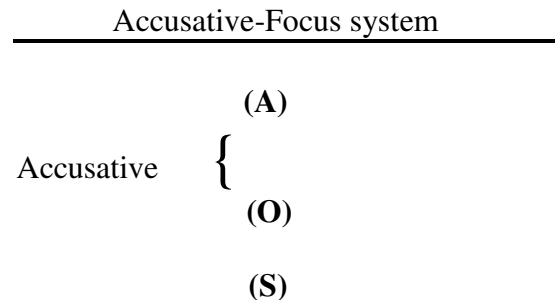
- (17) *eye fiafitɔ ɖafi nyɔnuvi la*
and thief steal girl the
'and the thief stole the girl'

[Westermann (1965:233)]

As we can easily note from the examples above, none of the arguments *fiá* (S), *fiafitɔ* (A) and *nyɔnuvi* (O) receive any distinctive morphological marking. However, we should note that the word order of Ewe is Subject-Verb-Object, making it possible for speakers to recover these functions from a transitive utterance. A real Neutral system, one in which there would be no linguistic way of distinguishing between subjects and objects in transitive sentences is in fact unattested.

2.1.5 ACCUSATIVE-FOCUS

In this kind of system, the sole argument of an intransitive verb gets marked differently from the two core arguments of a transitive verb. The alignment in this system is the following:



Just as with the Neutral system, this system would mean that speakers would have no way, other than context, of telling the subject of a transitive clause from its object. However, even if we take context into account, there are endless instances/contexts in which both interpretations would make sense. It does not come as a surprise, therefore, that no full Accusative-focus languages have been attested. Comrie (1989), however, notes that some Iranian languages make use of this system for certain classes of nouns.

2.1.6. SPLIT

Some languages, like the ones we looked at above (with the exception of Hindi) display a very fixed and consistent encoding of the core D/NPs in a sentence, choosing either an Ergative-Absolutive pattern or a Nominative-Accusative one. The

important point here is that they stick to that system, that is, that system can be seen throughout the language.

On the other hand, some languages “opt” to have more than one system in its repertoire (such as Hindi above). The motivations for there being a Split-system are basically four, which are explored below.

2.1.6.1. THE SEMANTIC NATURE OF THE VERB:

It is a known fact that core arguments with the theta-role of agent are usually found in either (A) or (S) position in active clauses and that core arguments with the theta-role of patient are usually projected onto either (S) or (O) position (also in active clauses). We can see from the statement above that when it comes to intransitive clauses, (S) can be either the agent or the patient of the sentence, with no marked tendency for either. Thus, some languages opt to make this fact explicit in its grammar, showing a so-called *Split-intransitive* system, in which (S) is marked in the same way as (A) (as in a Nominative-Accusative system) when the intransitive verb assigns the theta-role of agent to its sole argument but in the same way as (O) (as in an Ergative-Absolutive system) when the verb assigns the theta-role of patient to its sole argument. The former type of intransitive verb is also referred to as *unergative* and the latter as *unaccusative*. We can see below in the Basque examples how this system works:

- (18) *ni etorr-i naiz*
I fall-PRF AUX.PRS.1SG
'I fell'

- (19) *ni-k salta-tu dut*
 I-ERG jump-PRF AUX.PRS.1SG>3SG
 ‘I jumped’
- (20) *ni-k zu ikus-I zaitut*
 I-ERG you see-PRF AUX.PRS.1SG>2SG
 ‘I saw you’

[Hualde and Urbina (2003)]

As we can see from the examples above, in (18), (S) gets marked in the same way as (O) does in (20) (that is, it is not marked morphologically), since the verb in (18) assigns the theta-role of *patient* to its sole argument, whereas the verb in (19) assigns the theta-role of *agent* to its sole argument, which results in (S) in (19) being marked in the same way as (A) in (20), i.e., with the Ergative Case, represented here by the suffix *-k*.

2.1.6.2. THE SEMANTIC NATURE OF THE CORE NPS

Another factor which can trigger a split in the Case system of some languages is the semantic nature, or referents, of the core NPs. As Dixon points out (Dixon 1994), not all D/NPs have the exact same chance of being found in either (A) or (O) position in a transitive clause. If we take inanimate common nouns, such as *rock*, *table* and *cookie*, for example, we will see that they are much more likely to appear in (O) function than in (A) function. At the same time, 1st person pronouns are more likely to be found, statistically speaking, in (A) function than in (O) function, since we see ourselves much more often as the main actor or actress in a discourse than as a supporting actor onto whom things are done. Most discourse is therefore quite

egocentric in this sense. Dixon offers in his book *Ergativity* what he calls *The nominal Hierarchy*. The nominal Hierarchy is represented below, with the first items being increasingly more likely to be found in (A) position and the last ones increasingly more likely to be found in (O) position:

←-----*more likely to be in (A) than in (O) function*-----

1p pronouns>2p pron.> demonstratives and 3p pron.>proper nouns> human common nouns> animate common nouns>inanimate common nouns.

Some languages choose to treat all arguments in (A) position in the same way, regardless of their semantic nature. The same is valid for arguments in (O) position. Other languages, however, show a different morphological marking on certain arguments when they are not in their most likely or prototypical function. The Australian language Dyirbal, for instance, has Accusative *-na* versus the unmarked Nominative - \emptyset for first and second person pronouns, but Ergative *-ngu* opposed to the unmarked Absolutive - \emptyset for the rightmost three nominals in the Hierarchy above.

A few examples can be seen below:

(21) *n'urra* *ŋana-na* *bura-n*
 you all + NOM we all-ACC see-NONFUT
 'You all (A) saw us (O)'

(22) *ŋana* *n'urra-na* *bura-n*
 we all + NOM you all-ACC see-NONFUT
 'We (A) saw you all (O)'

[Dixon (1994:14)]

- (23) *yabu* *ɣuma-ɣgu* *bura-n*
 mother+ABS father-ERG see-NONFUT
 ‘father(A) saw mother(O)’

[Dixon (1994:10)]

If we compare (21) and (22), we will see that the same referent (*n^hurra*) appears in one case with its prototypical Nominative case marking, given that it is in its most likely position of occurrence, but in another case it shows Accusative marking, indicating that it is occupying a position which is not its most likely one. The same can be seen with the word *ɣuma* in (23), which shows Ergative Case, indicating that it is not occupying its most typical function in the sentence, given that it is a nominal belonging to the right side of the hierarchy.

2.1.6.3. THE TENSE, ASPECT OR MOOD OF THE CLAUSE (TAM)

Another factor which triggers a split in the Case system of some languages is the tense, aspect or mood of the clause in question. A certain language may present only one of these three triggering factors in its repertoire or more. When we look at Brazilian indigenous languages, we find amazingly complex and varied patterns. Therefore, I will limit the exemplification in this section to the first factor (tense). Let us have a look at the four sentences below, taken from Georgian, a language from the Kartvelian family and spoken in Georgia:

- (24) *Student-i* *midis* (present)
 student – CM goes
 ‘The student goes’

(25) *Student-i* *ceril-s* *cers* (present)
 student – CM letter –CM writes
 ‘The student writes the letter’

(26) *Student-i* *mivida* (perfect)
 Student – CM went
 ‘The student went’

(27) *Student-ma* *ceril-i* *dacera* (perfect)
 Student – CM letter – CM wrote
 ‘The student wrote the letter’

[Whaley (1997:162,163)]

By looking at examples (24) to (27), we come to the conclusion that there are two case systems in operation in Georgian, one for the present tense and another for the perfect tense. In sentences (24) and (25), we have the Nominative-Accusative Case system being used to signal the core arguments of the sentences. The word *student* gets marked with Nominative in both sentences due to the fact that it occupies the (S) and (A) position respectively, in contrast to the word *ceril*, which gets marked with the Accusative case, given that it occupies the (O) position in the sentence. On the other hand, we see the word *student* in (27) being assigned a different Case (Ergative) from the Case assigned to the word *student* in (26) and the word *ceril* in (27), both of which receive Absolutive Case marking, given that they occupy the (S) and (O) positions respectively. The pattern becomes clear: in the present tense, we have the Nominative-Accusative system and in the perfect tense, we find the Ergative-Absolutive system.

2.1.6.4. THE GRAMMATICAL STATUS OF A CLAUSE: WHETHER IT IS MAIN OR SUBORDINATE

The fourth and last way in which languages present a split in their Case system is related to the status of a clause, more precisely whether it is main or subordinate. In the language Shokleng, from the Jê family of Brazil, for example, main clauses can be either Ergative or Accusative (the option for one or another being linked to the aspectual feature of the sentence). Subordinate clauses, however, are always Ergative in the way they mark their core arguments, as the example below illustrates:

(28) *ti t̃ ti penũ wã*
 he ERG he shoot EST
 ‘he shot him’

(29) *tã wũ ti penũ mũ*
 he NOM he shoot ACT
 ‘he shot him’

[Urban (1985:166)]

(30)

<i>yɣuɣ</i>	<i>ðãl</i>	<i>ẽ</i>	<i>t̃</i>	<i>win</i>	(subordinate clause)
falcon	feather	CRF	(he)ERG	store-away	
<i>t̃</i>	<i>tã</i>	<i>wãɣmẽ</i>	<i>kɔðãɣ</i>	<i>mũ</i>	(main clause)
POSP	he	REFL+DIST	put on	ACT	
‘he put on the falcon feather he had stored away’					

[Urban (1985:179)]

As we can see from sentences (28) and (29), main clauses can be either Ergative-Absolutive (in the former) or Nominative-Accusative (in the latter). In sentence (30) however, the system of the main clause is Nominative-Accusative (*tã* only happens in Nominative-Accusative clauses), but the system of the subordinate clause is Ergative-Absolutive, which can be perceived from the presence of the ergative particle *tã*.

2.2 – TYPES OF MARKING OF CORE SYNTACTIC RELATIONS

We now turn our attention to the ways in which languages can mark core syntactic relations. The majority of the sentences collected so far make use of only one way of marking the core arguments, namely *morphological marking or Case inflections on D/NPs*. Other ways of marking the core syntactic relations are through:

- (i) particles and adpositions;
- (ii) cross-referencing on the verb
- (iii) word order.

I briefly explore these three possibilities below, since this knowledge will be essential for the analysis of Xavante that will be presented in Section 3. It is also important to note that when we think of the different types of marking and also of the Case systems discussed above, the number of possibilities of Case manifestation in

languages becomes quite large. Let us look then at the contexts in which particles and adpositions are used to indicate the Case of the nuclear/core arguments of transitive and intransitive verbs.

2.2.1. PARTICLES AND ADPOSITIONS

Particles and adpositions (prepositions and postpositions) can be used to mark the core syntactic relations. In the following example, taken from the language Tonga, of the Niger-Congo family, we can see how the D/NPs are marked by particles (in Dixon's view) or prepositions (in Comrie's view):

(31) *Na'e tāmate'i 'e Tēvita 'a Kōlaiate.*
 PAST kill ERG David ABS Goliath
 'David killed Goliath'.

(32) *Na'e lea 'a Tolu.*
 PAST speak ABS Tolu
 'Tolu spoke'.

[Churchward (1953: 67-68)]

As we can see from examples (31) and (32), the particles 'e and 'a signal the Ergative and Absolutive Cases respectively. Just as is the situation with Case inflection, the D/NPs can be moved freely around the sentence, since on doing so they will carry with them the indicators (the particles) of their syntactic status in the sentence.

2.2.2. CROSS-REFERENCING ON THE VERB

When Case marking is realized through cross-referencing on the verb, what we see is main verbs and/or auxiliary verbs showing inflections which provide information as to the number and/or person and/or gender of the core syntactic arguments. Out of the 4 ways of marking syntactic relations, this is the most complex and varied. We will not explore every possibility here, limiting ourselves to a few examples from languages that make use of cross-referencing. Let us have a look at the Brazilian Portuguese examples below:

(33) *O* *garoto* *viu* *as* *jóias.*
the-MASC-SING boy saw-3PS the-FEM-PL jewels
'The boy saw the jewels'

(34) *João e eu corremos.*
John and I ran-1PP
'John and I ran'

We can see from the examples above that verbs in Brazilian Portuguese only cross-reference arguments in (A) and (S) functions ('*o garoto*' and '*João e eu*', respectively). Arguments in (O) function do not get cross-referenced on the verb. The primary means of marking the nominative Case in Brazilian Portuguese is through cross-referencing in the verb. Nonetheless, speakers also rely on the AVO/SV order (see below) in order to identify either the nominative Case of transitive/intransitive subjects or the accusative Case of objects. Therefore, when there are two arguments, one in (A) position and another in (O) position, which have the same number, gender

and person, the respective order of the core arguments is fundamental for speakers to identify the syntactic function and the Case of the arguments.

Whereas Portuguese, like most European languages, shows an Accusative Case system, Avar, a northeast Caucasian language, shows an Ergative pattern of cross-referencing, however, with only (S) and (O) arguments being cross-referenced on the verb, as the following examples show:

- | | | | |
|------|---|--------------------------|--|
| (35) | <i>Vas</i>
boy+ABS
'the boy runs' | <i>v-</i>
SG+MASC+ABS | <i>ekerula.</i>
run |
| (36) | <i>Jas</i>
Girl+ABS
'the girl runs' | <i>j-</i>
SG+FEM+ABS | <i>ekerula.</i>
run |
| (37) | <i>Vas-as:</i>
Boy+ERG
'the boy praises the girl' | <i>jas</i>
girl+ABS | <i>j-</i>
SG+FEM+ABS

<i>ec:ula</i>
praise |

[Andeson (1976:4)]

What we note from the three sentences above is that Avar shows an Ergative pattern of cross-referencing on the verb. In sentences (35) and (36) it is the sole argument (S) which gets cross-referenced on the verb. In (37), however, it is (O), and not (A), that triggers the verbal cross-referencing, as can be perceived from the fact that the prefix used is feminine. There are various other possibilities which, due to a matter of space, we will not explore here. The ones above suffice to give us an idea of how this kind of marking occurs.

2.2.3. WORD ORDER

There is a general tendency for languages with inflectional marking on the head nouns of core syntactic constituents to have a much freer word order, even though it is argued that there is always a preferred or default order. Languages which show cross-referencing on the verb as their primary means of marking syntactic functions also tend to have a certain freedom of movement of the core arguments. English is a language which relies almost completely on word order, since apart from pronouns, no head nouns are marked for Case and due to the fact that only third person singular in either (S) or (A) position gets cross-referenced on the verbal stem. In the other cases, identification of syntactic function or core arguments is mostly dependent on the AVO/SV word order. As we are familiar with, both (A) and (S) occur before the verb in English, which gives us strong evidence of its accusativity.

2.3 – INTRA-CLAUSAL X INTER-CLAUSAL CASE SYSTEM

Before we move on to explore how Case marking occurs in the Xavante language, we should make a very important distinction. Case systems can operate in two independent ways, i.e., either in an intra-clausal or in an inter-clausal manner. The latter possibility occurs particularly in the case of coordination, subordination and relativization. All the examples analyzed so far concern Case systems as viewed from an intra-clausal point of view. In the next subsections, I will look into Accusative syntax and Ergative syntax.

2.3.1. ACCUSATIVE SYNTAX

If inter-clausal rules in a language treat (S) and (A) equally and (O) differently from these two, this language can be said to have Accusative syntax and therefore an (S)/(A) pivot. The Portuguese examples below illustrate such a system:

(38a) *Carlos saiu e Carlos(A) comprou cigarros*
 Carlos left.3PS and Carlos bought cigarettes.
 ‘Carlos left and Carlos bought cigarettes’

becomes

(38b) *Carlos_i saiu e pro_i comprou cigarros*
 Carlos left.3PS and bought cigarettes
 ‘Carlos left and bought cigarettes’

or

(38c) *Carlos_i comprou cigarros e pro_i saiu.*
 Carlos bought cigarettes and left.3PS
 ‘Carlos bought cigarettes and left’

(39a) *A policia(A) viu o ladrão(O) e o ladrão correu.*
 the police saw.3PS the thief and the thief ran.3PS
 ‘The police saw the thief and the thief ran’

can’t become

(39b) **A policia viu o ladrão_i e pro_i correu*
 the police saw.3PS the thief and ran.3PS
 *‘The police saw the thief and ran’

From these examples we can say that Portuguese is an instance of a language that treats (S) and (A) as a pivot. Note that the second occurrence of the same D/NP

can be freely omitted when both occurrences are in (S) function, both in (A) function or one in (S) function and the other in (A) function. If the second occurrence of the D/NP is in (O) function, it cannot be omitted, as sentences (39a) and (39b) show.

Sentence (39b) could only be grammatical if the trace left by (S) is co-referential with *the police* (A). Thus, from the examples listed above, we can see that Portuguese operates with an Accusative syntax. In languages that exhibit Accusative syntax, one way of making an underlying (O) co-referential with either (S) or (A) and therefore possible to be omitted is to make use of a passive construction, in which the underlying (O) will have the surface appearance of (S), becoming therefore part of the pivot. This is what happens in the following construction.

(39c) *O ladrão_i foi visto pel-a polícia e pro_i fugiu.*
 The thief was seen by-the police and ran.3SG
 ‘The thief was seen by the police and ran’

English also has Accusative syntax, as can be easily perceived from the translated sentences. In the next sub-section, I will deal with languages which show Ergative syntax.

2.3.2. ERGATIVE SYNTAX

If inter-clausal rules in a language treat (S) and (O) equally and (A) differently from these, this language can be said to have an Ergative syntax and therefore an (S)/(O) pivot. For co-referential arguments to be omitted, they must be both in (S) function, both in (O) function or one in (S) and the other in (O) function. This is the syntactic system found in Dyirbal, a language from Australia:

- (40a) *ɲuma* *banaga – n^ɣu* *yabu-ɲgu* *bura-n*
 father +ABS return + NONFUT mother +ERG see-NONFUT
 father (S) returned and mother (A) saw him (O)
- (40b) *ɲuma* *yabu – ɲgu* *bura-n* *banaga-n^ɣu*
 father +ABS mother +ERG see – NONFUT return-NONFUT
 mother(A) saw father (O) and he (S) returned

[Dixon (1994:12)]

In sentence (40a), the only possible interpretation is that the mother (A) saw the father (O) since for the second NP to be omitted, it must be a member of the pivot, in this case (S)/(O). Since the NP of the first sentence is in (S) function, the only NP that can be omitted is either another (S) or an (O). If the father was interpreted as the one who saw the mother, it would be in (A) function, violating, therefore, the pivot.

Just as an NP in (O) function can gain the status of the (S) function through a passive construction in a Nominative-Accusative language, with the result that it is now part of the (A)/(S) pivot), so can a DP in (A) function gain the status of (S) function through a construction called anti-passive in an Ergative-Absolutive language, becoming now a member of the (S)/(O) pivot. Mathews (1997:20) defines it in the following way:

“in the basic construction, a patient is Absolutive and an agent is Ergative. In the corresponding anti-passive, it is the agent that is Absolutive, the verb is in a form that is also called anti-passive and the patient, if indicated, is marked otherwise”.

We could say that the anti-passive construction in Ergative languages is a mirror image of the passive construction in Accusative ones. In the Dyirbal anti-passive, underlying (A) becomes (S) in the anti-passive, underlying (O) goes into the dative Case and the verb bears an anti-passive derivation suffix - *ŋa-* between root and inflection. We find below two single-clause sentences from Dyirbal:

- (41a) *ŋuma* *banaga – n^Yu*
 father +ABS return + NONFUT
 father (S) returned
- (41b) *yabu* *ŋuma-ŋgu* *bura-n*
 mother+ABS father-ERG see-NONFUT
 father(A) saw mother(O)

[Dixon (1994:10)]

For these two sentences to be coordinated with the NP *father* being co-referential, we must apply an anti-passive construction to (41b), so that (A) becomes (S), becoming therefore part of the (S)/(O) pivot of the language. The corresponding anti-passive for sentence (41b) is:

- (41c) *ŋuma* *bural-ŋa- n^Yu* *yabu-gu*
 father+ABS see-ANTIPASS-NONFUT mother-DAT

[Dixon (1994:13)]

Now that father is in (S) function in the anti-passive, we can coordinate this sentence with (41a), in which case the NP *father* can be omitted in the second clause, since it is now apt to be co-referential with the NP *father* in the first clause:

- (41d) *ŋuma* *banaga – n^Yu* *bural-ŋa- n^Yu* *yabu-gu*
 father +ABS return + NONFUT see-ANTIPASS-NONFUT mother-DAT
 father(S) returned and he(S) saw mother

[Dixon (1994:13)]

- (41e) *ɲuma* *bural-ɲa- n^Yu* Or *yabu-gu* *banaga – n^Yu*
 father +abs see-ANTIPASS-NONFUT mother-DAT return + NONFUT
 father(S) saw mother and he(S) returned
- [Dixon (1994:13)]

Note that in Dyirbal there is no overt coordinating particle as we find in familiar European languages, with the word *and* joining two separate clauses.

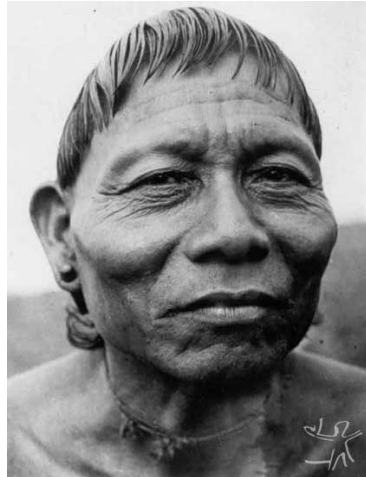
The fact that a language has a fully or partially Ergative system intra-clausally does not mean that it will have an Ergative syntax (that is, be Ergative inter-clausally as well). In fact, Dyirbal is unusual in this respect, given that all of its major syntactic operations treat (S) and (O) equally.

Before bringing this second section to an end, it is vital to note that when we look at the languages of the world, more often than not things are not as clear-cut and simple as the examples used so far might suggest. The possibilities discussed up to this point can be combined in an overwhelming number of ways, many of which are theoretically possible but which have so far not been attested. However, as far as a grasping of these concepts is concerned, the exposition above suffices for the moment. I will now focus on the Brazilian language Xavante and how Case subsystems manifest themselves in it.

3. A CASE STUDY: XAVANTE

The purpose of this section is to look into the Macro-Jê language Xavante and more specifically the Case subsystems found in it. My hypothesis is that Xavante, like many Ergative languages, shows several subsystems of Case, there being at least two subsystems in regard to its number marking and at least five in regard to its person marking system. Before presenting and analyzing the linguistic data, I have included below some basic ethnographic and linguistic information about Xavante.

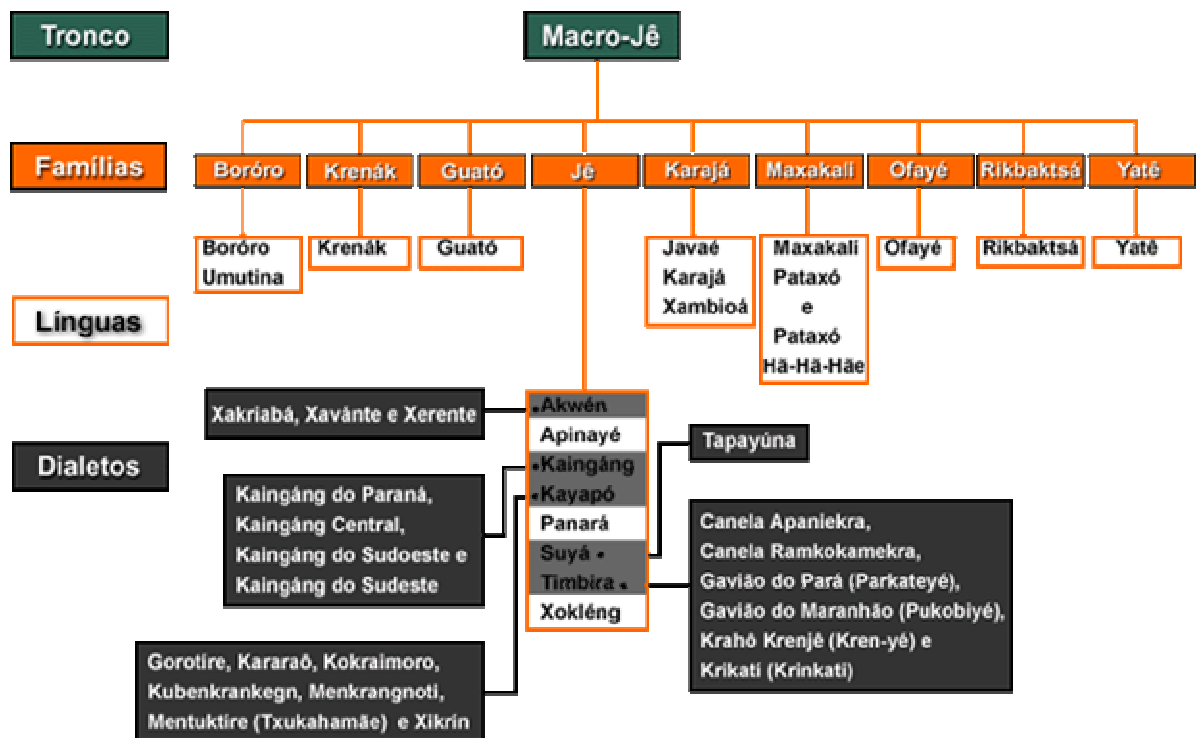
3.1. ETHNOGRAPHIC AND LINGUISTIC INFORMATION



Photographer: Vladimir Kojak
Museu Paranaense, 1988

Xavante is a Brazilian indigenous language which belongs to the Jê family of the Macro-Jê stock. The Xavante people refer to themselves as *A'uwe*, which means *people* literally and live on protected lands on the eastern part of the Brazilian state of Mato Grosso, in the mid-east region of the country. Unlike many indigenous tribes in Brazil, the Xavantes have managed to keep their mother tongue strong and pass it

down to new generations. Social developments like the building of schools inside their homeland have had some substantial effect in this regard. Differently from most kids, women and elders, most Xavante men speak and understand Portuguese well and use it when interacting with non-indigenous people. According to anthropologist Laura Graham, the region that the Xavantes currently inhabit has since the 1960s been undergoing several environmental impacts (hard to be reversed) because of its incorporation by intensive agricultural and cattle-raising activities, a process which has intensified since the 1980s due to the increasing implementation of the production of exportation grains, such as soy. According to information provided by ISA (Instituto Socio-Ambiental) from a 2007 census, their current population is estimated at about 13,000 people. This number varies slightly depending on the source.



After this quick overview of the Xavante people and language, we will now focus on the language data per se.

3.2 NUMBER MARKING

Before delving into the various Case systems found in the Xavante language, it is necessary to briefly explore how the category of number manifests itself in this language. This category is quite pervasive in Xavante and holds a status much more important to its grammatical system than in languages such as English, Portuguese, French, German and other European languages. It also exerts a strong influence over the several Split systems proposed here. Santos (2008) and Mcleod and Mitchell (1977) describe several Xavante particles which express number and which are, according to these authors, dependent on the following factors:

- (i) whether their referent is 1st, 2nd or 3rd person;
- (ii) whether the referent of the number particle is occupying the syntactic function of subject, object, possessor or complement of postposition;
- (iii) whether the predicate is nominal or verbal.

As we will see further on, whether the referent is singular, dual or plural is also a defining factor regarding which number particle will be activated. All the data used in this section have been taken from Santos's Master thesis (2008) and Mcleod and Mitchell's paper (1977). The examples taken from Rodrigues, Soares and Cabral have been taken from Santos's monograph. I have taken the liberty to translate into English all the Portuguese sentences provided by Santos (2008), (Rodrigues, Cabral

and Soares, 2005) and Mcleod and Mitchell (1977). **All the authors just mentioned choose to use the word *dual* in their gloss to define the second component of a number particle which is clearly plural, but compound (cf. *1p* and *2p* in the chart below). This can be misleading to the reader, but I have chosen to keep it in the original form.** I present below the paradigm of the number particles according to their distribution.

Subjects and objects of verbal predicates:

Subjects and objects of verbal predicates	
1s	∅
2s	∅
3s	∅
1d	dĩ
2d	?wa ~ ?wa?wa
3d	dzahu:rɛ
1p	dza?ra dĩ
2p	dza?ra ?wa?wa
3p	dza?ra

Table 1

- (42) ?wa ∅ ?ĩ: - wawa ∅
 1 POT 1 - cry SING
 ‘I am crying’
- (43) ∅ te ?aj – wawa ∅
 2 POT 2 - cry SING
 ‘You are crying’
- (44) ∅ te ti: - wawa ∅
 3 POT 3 - cry SING
 ‘He is crying’

- (45) *ʔwa* *ø* *ʔwa: - wawa - j* ***dĩ***
 1 POT 1 - cry - NZR **DUAL**
 ‘We are both crying’
- (46) *ø* *te* *ʔaj - wawa - j* ***ʔwa:ʔwa***
 2 POT 2 - cry - NZR **DUAL**
 ‘You are both crying’
 [Mcleod and Mitchell (1977:138)]
- (47) *ø* *te* *ti - ʔaʔa* ***dzahu:re***
 3 POT 3 - cough **DUAL**
 ‘They are both coughing’
 [Mcleod and Mitchell (1977:139)]
- (48) *ʔwa* *ø* *ʔwa: - wawa - j* ***dzaʔra:*** ***dĩ***
 1 POT 1 - cry - NZR **PLURAL** **DUAL**
 ‘We are all crying’
- (49) *ø* *te* *ʔaj - wawa - j* ***dzaʔra:*** ***ʔwa:ʔwa***
 2 POT 2 - cry - NZR **PLURAL** **DUAL**
 ‘You are all crying’
- (50) *ø* *te* *ti: - wawa - j* ***dzaʔra***
 3 POT 3 - cry - NZR **PLURAL**
 ‘They are all crying’
 [Mcleod and Mitchell (1977:138)]

Subjects of nominal predicates:

Subjects of nominal predicates	
1s	∅
2s	∅
3s	∅
1d	∅
2d	ʔwaʔwa
3d	dzahu:re
1p	dzaʔra
2p	dzaʔra ʔwaʔwa
3p	dzaʔra

Table 2

The only difference between the number particles for verbal predicates and nominal predicates is that for the latter, there is absence of the particle *dī* in first person dual and plural.

(51) *ʔa hā ʔa - ts - i - odo ∅*
 2 EMP 2 - R - MED - bent **SING**
 ‘You are bent’

(52) *ʔwa dōrī ʔiwa - dz - ĩ - odo ∅*
 1 NS 1 - R - MED - bent **SING**
 ‘We are (both) bent’

(53) *ʔō dōrī ʔi - rare dzahure*
 3 NS 3 - small **DUAL**
 ‘They are (both) small’

(54) *ʔwa dōrī ʔiwa - dz - ĩ - oto dzaʔra*
 1 NS 1 - R - MED - bent **PLURAL**
 ‘We are (all) bent’

- (55) *ʔõ dõrĩ ʔi – ts – i – oto dzaʔra*
 3 NS 3 – R – MED – bent **PLURAL**
 ‘They are (all) bent’

[Rodrigues, Cabral and Soares (2006)]

Nominal predicates of an existential nature:

Subjects of nominal predicates of existential nature	
1s	∅
2s	∅
3s	∅
1d	∅
2d	ʔaba
3d	dzahu:re
1p	dzaʔra
2p	dzaʔra ʔaba
3p	dzaʔra

Table 3

The number particles for this group are almost the same as those for the previous nominal predicates, with the exception of the second person dual and plural, with the former becoming *ʔaba* in this group, instead of staying *ʔwaʔwa* and the latter becoming *dzaʔra ʔaba*, instead of staying *dzaʔra ʔwaʔwa*.

- (56) *ʔa – bã rowe ʔaba di*
 2 – POSP happiness **DUAL EST**
 ‘You are (both) happy’

- (57) *ʔõ dõrĩ ta – bã rowẽ dzahurɛ di*
 3 NS 3 – POSP happiness **DUAL** EST
 ‘They are (both) happy’
- (58) *ʔwa dõrĩ ʔwa - wẽ ø di*
 1 NS 1 – beauty **sing** EST
 ‘We are (both) beautiful’
- (59) *ʔwa – bã rowẽ dzaʔra di*
 1 – POSP happiness **PLURAL** EST
 ‘We are (all) happy’

[Rodrigues, Cabral and Soares (2006)]

All the example sentences given so far for Xavante which contain a verb are intransitive. In intransitive sentences, the number mark refers, obviously, to the sole argument of the sentence, i.e., (S). It is important to note, however, that in transitive predicates, number marks can refer to either just the subject (A), just the object (O) or to both (A) and (O). Based on the data provided in Santos (2008), I will postulate the following descriptive generalization:

- (60) *Arguments do not get marked for number when they are singular. In transitive predicates, non-singular (A) will get marked for number and non-singular (O) will only get marked if it is definite.*

Here are a few examples taken from her dissertation:

- (61) *ʔwa ø ʔa – tsa – ri dĩ*
 1 POT 2 – bite – NZR **DUAL**
 ‘We both bit you’

[Rodrigues, Cabral and Soares (2005)]

(62) *ʔwa dōrĩ ʔwaʔwa hã bĩtsi peʔa ø te ʔĩ - ʔrẽ - dẽ ʔwa*
 2 SN DUAL EMP one fish 2 POT 3 – eat – NZR DUAL
 ‘You (both) eat one fish’

(63) *ʔwa dōrĩ hã bãparadẽ peʔa ʔwa ø ø - ʔrẽ - dẽ: dĩ*
 1 NS EMP two fish 1 POT 3 – eat – NZR DUAL
 ‘We (both) ate two fish’

[Santos (2006)]

(64) *ʔwa ø ʔa – tsa ø*
 1 POT 2 – bite SING
 ‘I bite you’

[Rodrigues, Cabral and Soares (2005)]

(65) *ʔō hã bĩtsi peʔa ø te ti - ʔrẽ ø*
 3 EMP one fish 3 POT 3 – eat SING
 ‘He eats one fish’

[Santos (2006)]

(66) *ʔwa ø ʔa – tsa – ri ʔwaʔwa*
 1 POT 2 – bite – NZR DUAL
 ‘I bite you both’

[Rodrigues, Cabral and Soares (2005)]

According to the gloss provided by Santos, we would have the following pattern for the sentences above: from sentences (61) to (63), only (A) gets marked for number and in sentences (64) and (65) only one of the arguments gets marked, even though it is not clear which one does. In (66), only (O) gets marked. There are many more sentences in her monograph, separated according to whether subject and object are singular, dual or plural. However, the sentences above suffice for the purposes of the moment. Applying the generalization in (60), we can simply say that in (61) only

(A) gets marked, given that it is non-singular and (O) is singular, therefore not being marked for number. With regard to (62) and (63) we explain the absence of number marking for the object in the former due to the fact that it is singular and in the latter due to the fact that it is indefinite. For sentences (64) and (65) we argue that neither (A) nor (O) gets marked for number, given that both are singular. This analysis contrasts with the gloss provided by the authors, who seem to postulate either a \emptyset morpheme which is marking just one of the arguments or both of them concomitantly. As for our last example, sentence (66), only (O) gets marked, since it is dual and definitive and given the fact that (A) is singular. There is however an exception to the generalization in (66), which can be formulated as follows:

- (67) *Whenever (O) is 2nd person dual and (A) is 1st person plural at the same time, (O) does not get marked for number. It also does not get marked for number when it is 1st person dual, regardless of (A).*

Sentence (66) is a case in point. The object (O), which is 2nd person dual, only gets marked in this case because (A) is 1st person singular. We have included below examples in which a 2nd person dual (O) does not get marked or in which it only gets marked because (A) is 1st person singular or dual and also examples showing that 1st person dual (O) does not get marked for number:

- (68) ʔwa \emptyset $\text{ʔaj - h\text{ə}dzu}$ ***dzaʔra*** ***dĩ***
 1 POT 2 – bite **PLURAL** **DUAL**
 ‘We all bit you both’

(69) *ʔwa* *∅* *ʔa – tsa – ri* *ʔaba* *dĩ*
 1 POT 2 – bite – NZR DUAL DUAL
 ‘We both bit you both’

(70) *ʔa* *doĩ* *ʔwaʔwa* *bã* *te* *ʔiwa – tsa – ri* *ʔwaʔwa*
 2 NS DUAL PERF POT 1 – bite – NZR DUAL
 ‘Both of you bit both of us’

[Rodrigues, Cabral and Soares (2005)]

(71) *∅* *bã* *to* *ʔwa – pawapto*
 3 PERF real 1 – help
 ‘He helped both of us’

[McLeod and Mitchell (1977:126)]

In (68), therefore, (O) does not get marked for number because it is 2nd person dual and because (A) is 1st person plural. As mentioned previously, the gloss the authors provide is somewhat misleading, because of the word *dual*. However, as can be seen from the number table for verbal predicates, the number mark *dzaʔra* *dĩ* refers to 1st person plural. In sentence (69), however, (O) does get marked, since despite being 2nd person dual, (A) is 1st person dual. Both in (70) and (71), we can see that (O) does not get marked for number, given the fact that it is 1st person dual.

In the next sub-section, I examine the person marking system of Xavante and I also present a discussion of the several Case subsystems found therein and also in the number marking system.

3.3 PERSON MARKING

Santos (2008) suggests the existence of four series or person marks in Xavante: They are:

- (i) series I (Absolute);
- (ii) series II (Accusative);
- (iii) series III (Nominative)
- (iv) series IV (Emphatic).

In addition to the above series, I will argue for a fifth series, namely an Ergative one. The five series are shown below.

Series I - Absolute series of verbal prefixes: they mark both the intransitive subject and the object of transitive verbs.

Series I (Absolute)	
1s	∅- ∞ ʔi:-
1d/1p	∅- ∞ ʔwa-
2	ʔa- ∞ ʔaj-
3	∅- ∞ ti-

Table 4

INTRANSITIVE VERBS

(72) ʔwa ∅ ∅ - bō ∅
 1 POT 1 - go SING
 'I go'

[Santos (2006)]

- (73) *ʔwa* *∅* *ʔi* - *wawa* *∅*
 1 POT **1** - cry SING
 ‘I cry’ [Mcleod and Mitchell (1977:138)]
- (74) *ʔwa* *∅* *∅* - *ʔatsabrō* *dĩ*
 1 POT **1** - run DUAL
 ‘We both run’ [Santos (2006)]
- (75) *ʔwa* *∅* *ʔwa* - *ʔaʔa* *dĩ*
 1 POT **1** - cough DUAL
 ‘We both cough’ [Mcleod and Mitchell (1977:139)]
- (76) *ʔwa* *∅* *ʔwa* - *dzōtō* *dzaʔra* *dĩ*
 1 POT **1** - sleep PLURAL DUAL
 ‘We are all sleeping’
- (77) *∅* *te* *ʔa* - *tsō* *∅*
 2 POT **2** - sleep SING
 ‘You sleep’ [Santos (2006)]
- (78) *∅* *bã* *to* *ʔaj* - *putsi* *ʔwa*
 2 PERF REAL **2** - leave DUAL
 ‘You both left’ [Mcleod and Mitchell (1977:218)]
- (79) *∅* *te* *ʔa* - *tsōtō* *dzaʔra:* *ʔwa:ʔwa*
 2 POT **2** - sleep PLURAL DUAL
 ‘You all sleep’
- (80) *∅* *te* *∅* - *bō* *∅*
 3 POT **3** - go SING
 ‘He goes’
- (81) *∅* *te* *tī* - *wawa* *dzaʔra*
 3 POT **3** - cry PLURAL
 ‘They all cry’ [Mcleod and Mitchell (1977:138)]

TRANSITIVE VERBS

- (82) \emptyset $b\tilde{a}$ to $\mathfrak{?i}:$ - *pawapto* \emptyset
 3 PERF REAL **1** – help SING
 ‘He helped me’
 [Mcleod and Mitchell (1977:126)]
- (83) $\mathfrak{?wa}$ \emptyset to $\mathfrak{?a}$ - *tsabu - j* $\mathfrak{?wa}:\mathfrak{?wa}$
 1 PERF REAL **2** – see - NZR DUAL
 ‘I saw you both’
 [Mcleod and Mitchell (1977:129)]
- (84) \emptyset $b\tilde{a}$ to \emptyset - *pawapto* \emptyset
 3 PERF REAL **3** – help SING
 ‘He helped (him)’
 [Mcleod and Mitchell (1977:125)]

Series II - Accusative series of verbal prefixes: used with transitive verbs to mark 1st person dual or plural object and also 3rd person singular, dual or plural object when the subject is 2nd person singular, dual or plural. The only exception is when (O) is 3rd person indefinite and (A) is 2nd person plural concomitantly.

Series II (Accusative)	
1d/1p	$\mathfrak{?iwa}$ -
3	$\mathfrak{?i}$ -

Table 5

- (85) \emptyset $b\tilde{a}$ te $\mathfrak{?iwa}$ -*tsa*
 2 PERF POT **1** – bite
 ‘You bit both of us’
 [Rodrigues, Cabral and Soares (2005)]

- (86) \emptyset *bã* *to* *ʔwa -pawapto -p* *dzaʔra*
 2 PERF REAL **1** – help – NZR PLURAL
 ‘You helped us all’

[Mcleod and Mitchell (1977:127)]

- (87) \emptyset *bã* *te* *ʔ -tsa -ri* *dzaʔra* *ʔwaʔwa*
 2 PERF POT **3** – bite – NZR PLURAL DUAL
 ‘You all bit him’

[Rodrigues, Cabral and Soares (2005)]

Series III - Nominative series of personal pronouns: they refer to the subject of both transitive and intransitive verbs.

Series III (Nominative)	
1	ʔwa
2	∅-
3	∅-

Table 6

- (88) *ʔwa* \emptyset *ʔi: - wawa* \emptyset
1 POT 1 – cry SING
 ‘I cry’

[Mcleod and Mitchell (1977:138)]

- (89) \emptyset *te* *ʔa -tsõ*
2 POT 2 – sleep
 ‘You sleep’

[Santos (2006)]

- (90) \emptyset *bã* *te* *ʔ - tsa - ri* *ʔwaʔwa*
2 PERF POT **3** – bite – NZR DUAL
 ‘You two bit him’

[Rodrigues, Cabral and Soares (2005)]

- (91) \emptyset *te* \emptyset - *bō*
 3 POT 3 - go
 ‘He goes

[Santos (2006)]

Series IV - Emphatic series of personal pronouns: these pronouns combine with the emphatic particle *hā* to form emphatic pronominal expressions. There is no distinction between dual and plural, but dual can be marked when the speaker wants to emphasize it. Such pronouns are used with both intransitive and transitive subjects.

Series IV (Emphatic)	
1	ʔwa
2	ʔa
3	ʔō

Table 7

Emphatic pronominal constructions' table	
1	ʔwa hā
2	ʔa hā
3	ʔō hā
1d/1p	ʔwa dōrĩ hā
2d/2p	ʔa dōrĩ ʔwaʔwa hā
3d/3p	ʔō dōrĩ hā

Table 8

- (92) *ʔa hā* \emptyset *te* *dza* *ʔaj - wara*
 2 EMP 2 POT PROJ 2 - run
 ‘You will run’

- (93) *ʔō hā* \emptyset *te* *dza* \emptyset - *wara*
 3 EMP 3 POT PROJ 3 - run
 ‘He will run’

- (94) *ʔwa dōrĩ hā* *ʔwa* \emptyset *dza* \emptyset - *ʔatsabrō* *dĩ*
 1 NS EMP 1 POT PROJ 1 - run DUAL
 ‘We will both run’

(95) *ʔa dõrĩ ʔwaʔwa hã ø te dza (ʔa) - ʔatsabrõ*
2 ns dual emp 2 pot proj 2 - run
ʔwaʔwa
 dual
 ‘Both of you will run’

(96) *ʔõ dõrĩ hã ø te dza ø - ʔatsabrõ dzahure*
3 NS EMP 3 POT PROJ 3 – run DUAL
 ‘Both of them will run’

(97) *ʔa hã bã te ʔĩ - bẽ ʔajʔute*
2 EMP PERF POT 3 – push child
 ‘You pushed the boy’

(98) *ʔõ hã ø bã ti - bẽ ʔajʔute*
3 EMP 3 PERF 3 – push child
 ‘He pushed the boy’

[Rodrigues, Cabral and Soares (2005)]

Series V - Ergative series: perhaps the name *series* is misleading here, since what we actually see is the postposition/particle [-te ∞ -te te ∞ - ø] marking the noun-head subject of a transitive verb in relative and subordinate clauses, in addition to negated independent clauses.

RELATIVE CLAUSES

(99) *ʔwa te ʔĩ - bãdzã - rĩ dzaʔra tsiʔõdõ hã*
1 ERG 3 – make – NZR PLURAL basket EMP
 ‘It was made by us, the basket’

(100) \emptyset *te* *te* *ʔĩ - bādzã - rĩ* *dzahure* *tsiʔōdō* *hã*
3 **ERG** 3 – make – NZR DUAL basket EMP
‘It was made by both of them, the basket’

(101) \emptyset \emptyset *ʔĩ - bādzã - rĩ* *dzaʔra* *tsiʔōdō* *hã*
2 **ERG** 3 – make – NZR PLURAL basket EMP
‘It was made by all of you, the basket’
[Mcleod and Mitchell (1977:160)]

CONDITIONAL AND TEMPORAL CLAUSES

(102) \emptyset *te* $\emptyset - poʔo$ *ʔwaʔəhã,* *ʔwa* *are* *ʔĩ: - tsiwatsuʔu*
1 **ERG** 3 – break CONJ 1 COMP 1 – confess
‘If I had broken it, I would have confessed’
[Mcleod and Mitchell (1977:172)]

(103) *ʔaj-brēmẽ* *waptuj* *waphã,* \emptyset *te* *wajhuʔu* *ʔō* *di*
2 – talk fast CONJ **1** **ERG** understand NEG EST
‘When you talk fast, I don’t understand’
[Mcleod and Mitchell (1977:182)]

NEGATED INDEPENDENT CLAUSES

(104) \emptyset *te* $\emptyset - pa:wapto - p$ *ʔō* *di*
1 **ERG** 3 – help – NZR NEG EST
‘I am not helping him’

(105) *ʔwa* *te* $\emptyset - pa:wapto - p$ *dzaʔra* *ʔō* *di*
1 **ERG** 3 - help – NZR PLURAL NEG EST
‘All of us are not helping him’
[Mcleod and Mitchell (1977:128)]

With this, we draw our exposition of the data to an end and will now discuss the several Case subsystems found both in the number and person marking systems of Xavante.

3.4 CASE SUBSYSTEMS FOUND IN XAVANTE, IN TERMS OF (S), (A) AND (O) ALIGNMENTS

As stated in the beginning of this section, Xavante shows a very heterogeneous system when we examine its Case marking. I will explore in this section the subsystems I have been able to identify, first in terms of number marking and then with regard to person marking.

3.4.1 CASE SUBSYSTEMS FOUND IN THE NUMBER MARKING SYSTEM

Based on the data provided previously, there is evidence for the existence of, at least, two subsystems of Case in the number marking system of Xavante. In the next subsections, I provide the reader with a detailed exposition of each of these patterns.

3.4.1.1. THE NEUTRAL SUBSYSTEM

In verbal clauses, the marking of (A), (S) and (O) is identical, and therefore neutral, in two ways: (i) whenever these arguments are singular, with the result that they do not get marked for number and (ii) whenever (O) is definite and all three arguments are non-singular (the only exception being when (O) is 2nd person dual and (A) is 1st person plural at the same time or when (O) is 1st person dual). In the former, what we see is that none of the three core arguments gets marked, which is the prototypical form of Neutral marking. However, contrary to the pattern described in typological studies, according to which Neutral systems consist in these three arguments receiving no morphological Case mark whatsoever and being therefore

equal (Neutral), what seems to be happening in the latter case is that all three core arguments receive exactly the same number marking. This becomes clear from examples (46), (62) and (66), repeated below as (106), (107) and (108), which use the same number mark $\text{ʔwa} \infty \text{ʔwaʔwa}$ (they are allomorphs) to mark (S), (A) and (O) respectively.

(106) \emptyset *te* *ʔaj – wawa – j* ***ʔwa:ʔwa***
 2 POT 2 - cry - NZR **DUAL**
 ‘You are both crying’

[Mcleod and Mitchell (1977:138)]

(107) *ʔwa* *dõrĩ* *ʔwaʔwa* *hã* *bĩtsi* *peʔa* \emptyset *te* *ʔĩ – ʔrẽ – dẽ* ***ʔwa***
 2 SN DUAL EMP one fish 2 POT 3 – eat – NZR **DUAL**
 ‘You (both) eat one fish’

[Santos (2006)]

(108) *ʔwa* \emptyset *ʔa – tsa – ri* ***ʔwaʔwa***
 1 POT 2 – bite – NZR **DUAL**
 ‘I bite you both’

[Rodrigues, Cabral and Soares (2005)]

3.4.1.2. NOMINATIVE-ACCUSATIVE SUBSYSTEM

This is the Case system found when:

- (i) (O) is non-singular and indefinite
- (ii) (O) is 1st person dual
- (iii) (O) is 2nd person dual and (A) is 1st person plural at the same time.

For the first instance of Nominative-Accusative alignment, sentences (47), (100) and (63), repeated here as (109), (110) and (111) respectively, serve as evidence:

(109) \emptyset *te* *ti - \text{ʔaʔa}* ***dzahu:re***
 3 POT 3 - cough DUAL
 ‘They are both coughing’

[Mcleod and Mitchell (1977:139)]

(110) \emptyset *te* *te* *\text{ʔi} - b\ddot{a}dz\ddot{a} - ri* ***dzahure*** *tsi\text{ʔ}\ddot{o}\ddot{d}\ddot{o}* *h\ddot{a}*
 3 ERG 3 – make – NZR DUAL basket EMP
 ‘It was made by both of them, the basket’

[Mcleod and Mitchell (1977:160)]

(111) *\text{ʔ}wa* *d\ddot{o}ri* *h\ddot{a}* *b\ddot{a}parad\ddot{e}* *pe\text{ʔ}a* *\text{ʔ}wa* \emptyset $\emptyset - \text{ʔ}r\ddot{e} - d\ddot{e}:$ ***d\ddot{i}***
 1 NS EMP two fish 1 POT 3 – eat – NZR DUAL
 ‘We (both) ate two fish’

[Santos (2006)]

In (109) and (110), 3rd person dual (S) and (A), respectively, receive number marking but in (111) 3rd person dual (O) does not get marked for number, given that it is non-singular and indefinite. In this system however, it is (A) and (S) which get marked (marked Nominative), instead of the more common pattern in which only (O) gets marked and the other two arguments do not. However, the alignment is Nominative – Accusative in both situations.

For the second instance, we can look at sentences (94), (63) and (71), repeated here as (112), (113) and (114):

- (112) *ʔwa dōrĩ hã ʔwa ø dza ø - ʔatsabrõ dĩ*
 1 NS EMP 1 POT PROJ 1 – run DUAL
 ‘We will both run’
 [Rodrigues, Cabral and Soares (2005)]
- (113) *ʔwa dōrĩ hã bãparadě peʔa ʔwa ø ø - ʔrẽ - dẽ: dĩ*
 1 NS EMP two fish 1 POT 3 – eat – NZR DUAL
 ‘We (both) ate two fish’
 [Santos (2006)]
- (114) *ø bã to ʔwa – pawapto*
 3 PERF real 1 – help
 ‘He helped both of us’
 [Mcleod and Mitchell (1977:126)]

We can see that in sentences (112) and (113), both (S) and (A), respectively, get marked for number. In sentence (114), however, (O) does not.

For the third instance of the Nominative-Accusative Subsystem, we can look at sentences (46), (70) and (68), repeated below as (115), (116) and (117).

- (115) *ø te ʔaj – wawa – j ʔwa:ʔwa*
 2 POT 2 - cry - NZR DUAL
 ‘You are both crying’
 [Mcleod and Mitchell (1977:138)]
- (116) *ʔa dorĩ ʔwaʔwa bã te ʔĩwa – tsa – ri ʔwaʔwa*
 2 NS DUAL PERF POT 1 – bite – NZR DUAL
 ‘Both of you bit both of us’
- (117) *ʔwa ø ʔaj - hødzu dzaʔra dĩ*
 1 POT 2 – bite PLURAL DUAL
 ‘We all bit you both’
 [Rodrigues, Cabral and Soares (2005)]

In sentences (115) and (116), both (S) and (A) 2nd person dual get marked with $\lambda wa:\lambda wa \infty \lambda wa\lambda wa$, whereas in (117), 2nd person dual (O) does not get marked, since (A) is 1st person plural.

3.4.2 CASE SYSTEMS FOUND IN THE PERSON MARKING SYSTEM

The person marking system of Xavante is an even richer source of subsystems of Case than its number making one. Some of them have already been pointed out in the tables provided in section 3.3, in which we dealt with the series of person marks. In the following subsection I explore each of the subsystems found in regard to person marking.

3.4.2.1. ERGATIVE-ABSOLUTIVE SUBSYSTEM

There are three different realizations of the Ergative-Absolutive subsystem in Xavante:

Ergative-Absolutive 1:

The marking of core syntactic relationship occurs here by means of cross-referencing on the verb stem. The Absolutive series of verbal prefixes (Series I) are employed to cross-reference only (S) and (O). (A) is not cross-referenced on the verb stem at all. This provides us with the (S) = (O) ≠ (A) alignment, as can be seen from the following examples:

- (118) \emptyset *te* *ʔaj* – *wawa* – *j* *ʔwa:ʔwa*
 2 POT 2 - cry - NZR DUAL
 ‘You are both crying’

[Mcleod and Mitchell (1977:138)]

- (119) *ʔwa* \emptyset *ʔa* – *tsa* – *ri* *ʔwaʔwa*
 1 POT 2 – bite – NZR DUAL
 ‘I bite you both’

[Rodrigues, Cabral and Soares (2005)]

- (120) *ʔa* *dōrĩ* *ʔwaʔwa* *hã* *bĩtsi* *peʔa* \emptyset *te* *ʔĩ* – *ʔrẽ* – *dẽ* *ʔwa*
 2 SN DUAL EMP one fish 2 POT 3 – eat – NZR DUAL
 ‘You (both) eat one fish’

[Santos (2006)]

In sentences (118) and (119), it is (S) and (O) which are being cross-referenced on the verb, respectively. By looking at sentence (120), we can see that (A) does not get cross-referenced at all.

Ergative-Absolutive 2:

Whenever (O) is 3rd person indefinite and (A) is 2nd person plural, what we see is that the prefix occurring on the verb to mark (O) is not the expected Accusative prefix of Series II proposed by Santos (2008). What I have found in this very specific context, is that (O) will get marked with the Absolutive prefix from Series I. The data below make it easier to visualize the phenomenon:

(121) *ʔa dõrĩ ʔwaʔwa hã bĩtsi peʔa ø te ʔaj – tsiwi*
 2 NS PLURAL EMP one fish 2 POT 2 - many
ø - ʔrẽ - dẽ ʔwaʔwa
3 – eat – NZR PLURAL
 ‘You (plural) eat one fish’

(122) *ʔa dõrĩ ʔwaʔwa hã peʔa bãparadẽ ø te*
 2 NS PLURAL EMP fish two 2 POT
ʔa – tsiwi ø - ʔrẽ - dẽ ʔwaʔwa
 2 – many **3** – eat – NZR PLURAL
 ‘You (plural) ate two fish’

(123) *ʔa dõrĩ ʔwaʔwa hã tsiʔupdatõ peʔa ø te*
 2 NS PLURAL EMP three fish 2 POT
ʔa – tsiwi ø - ʔrẽ - dẽ ʔwaʔwa
 2 – many **3** – eat – NZR PLURAL
 ‘You (plural) eat three fish’

(124) *ø bã te ʔĩ - tsa – ri dzaʔra ʔwaʔwa*
 2 PERF POT **3** – bite - NZR plural DUAL
 ‘You (plural) bit him’ (Rodrigues, Cabral and Soares, 2005)

(125) *ʔa hã tsiʔupdatõ peʔa ø te ʔĩ - ʔrẽ ø*
 2 ENF three fish 2 POT **3** – eat SING
 ‘You (singular) eat three fish’

[Santos (2006)]

We can see clearly from the examples above that in sentences (121), (122) and (123), what we have is the 3rd person Absolutive mark *ø* cross-referencing (O) on the verb. This happens, as mentioned above, because (O) is 3rd person indefinite and (A) is 2nd person plural. In sentences (124) and (125), however, we find the expected Accusative mark predicted by Santos’s Series II, given that in (124) 3rd person (O) is definite and in (125) (A) is not 2nd person plural, but 2nd person singular, even though

(O) is 3rd person indefinite. I would also like to note that the occurrence of the number suffix *-tsiwi* cancels out the number particle *dzaʔra*.

Ergative-Abslutive 3:

Differently from Ergative–Abslutive 1 and 2 above, the marking of the three core arguments here does not occur by means of cross-referencing on the verb, but by use of a particle/adposition after the head of the D/NP. In this Ergative-Abslutive 3, it is (A) that gets marked, with (S) and (O) receiving no mark. This is the prototypical Ergative-Abslutive system. However, this Case subsystem is only activated in relative and subordinate transitive clauses, in addition to negated independent transitive clauses. Let us take a look at the three sentences below.

(126) *ʔwa te ʔi - bādzā - rĩ dzaʔra tsiʔōdō hā*
1 ERG 3 – make – NZR PLURAL basket EMP
 ‘It was made by us, the basket’
 [Mcleod and Mitchell (1977:160)]

(127) *ʔwa te ø - pa:wapto – p dzaʔra ʔō di*
1 ERG 3 - help – NZR PLURAL NEG EST
 ‘All of us are not helping him’
 [Mcleod and Mitchell (1977:128)]

(128) *ʔwa ø ʔwa - dzōtō dzaʔra dĩ*
1 POT 1 - sleep PLURAL DUAL
 ‘We are all sleeping’
 [Santos (2006)]

From sentences (126) and (127), a relative and a negated independent clause, respectively, we can see that (A) gets marked with the Ergative particle *te*, whereas (O) shows no particle at all. In sentence (128), we can see that (S) also does not receive such particle.

3.4.2.2. TRIPARTITE SUBSYSTEM

Taking into consideration the typological view developed by Dixon (1994), I propose that Series II, despite being an Accusative series, reflects in fact a Tripartite subsystem. To be able to define which Case system is in operation, one must first examine how the three core arguments are encoded in the system and look into the way in which they are similar or different in terms of Case marking. Let us have a look at the sentences below:

(129) *ʔwa* *ø* *ʔwa - ʔaʔa* *dĩ*
 1 POT 1 - cough DUAL
 ‘We both cough’ [McLeod and Mitchell (1977:139)]

(130) *ʔwa* *ø* *ʔa - tsa - ri* *dĩ*
 1 POT 2 - bite - NZR DUAL
 ‘We both bit you’

(131) *ø* *bã* *te* *ʔwa - tsa*
 2 PERF POT 1 - bite
 ‘You bit both of us’ [Rodrigues, Cabral and Soares (2005)]

The Case system found in this series could only be called Accusative if, and only if, (A) and (S) were treated in the same way. However, (A) and (S) do not show

the same behavior or marking, since only (S) gets cross-referenced in the verb, as can be seen in sentence (129), in contrast with sentence (130). What actually happens with this series is that (O) will have a different prefix from (S) in Series I, as we can see if we compare sentences (129) and (131). Thus, (O) will receive the verbal prefixes from Series II, (S) will receive the verbal prefixes from Series I and (A) will not get cross-reference on the verb stem at all. Therefore, what we have here is a Tripartite subsystem, in which (S) ≠ (A) ≠ (O).

3.4.2.3. NOMINATIVE – ACCUSATIVE 2

Series III and IV consist in a series of pronouns which only occur with subjects, that is, (S) and (A). Since (O) does not receive these marks, we can say this characterizes a Nominative-Accusative Case subsystem in both series. The examples below can help us to better visualize this:

(132) *ʔwa* *ø* *ʔiː - wawa* *ø*
1 POT 1 – cry SING
 ‘I cry’

[Mcleod and Mitchell (1977:138)]

(133) *ø* *bã* *te* *ʔiwa - tsa*
2 PERF POT 1 – bite
 ‘You bit both of us’

(134) *ʔwa* *ø* *ʔa - tsa - ri* *dĩ*
1 POT 2 – bite – NZR DUAL
 ‘We both bit you’

(135) *ʔõ hã ø te dza ø - wara*
3 EMP 3 POT PROJ 3 - run
 ‘He will run’

(136) *ʔõ hã ø bã ti - bẽ ʔajʔute*
3 EMP 3 PERF 3 - push child
 ‘He pushed the boy’

[Rodrigues, Cabral and Soares (2005)]

By looking at the examples above, we notice that in sentences (132) and (134), it is 1st person (S) and (A) respectively which receive the Nominative personal pronouns from Series III, in this case the pronoun *ʔwa*. In sentence (133), on the other hand, 1st person (O) does not receive this mark. In sentences (135) and (136) what we see is 3rd person in (S) and (A) position being marked with the emphatic personal pronoun *ʔõ hã* from Series IV. No examples have been found in the data in which 3rd person in (O) function is marked with the emphatic pronoun.

3.4.2.4. SPLIT – S

This subsystem is found in the subjects of nominal predicates. Whenever (S) is 1st person dual/plural or 3rd person singular/dual/plural, the cross-referencing prefixes found are those from series II (Accusative). However, if (S) is either 2nd person or 1st person singular, what we find are the Absolutive cross-referencing prefixes from Series I, as we can see in the sentences below:

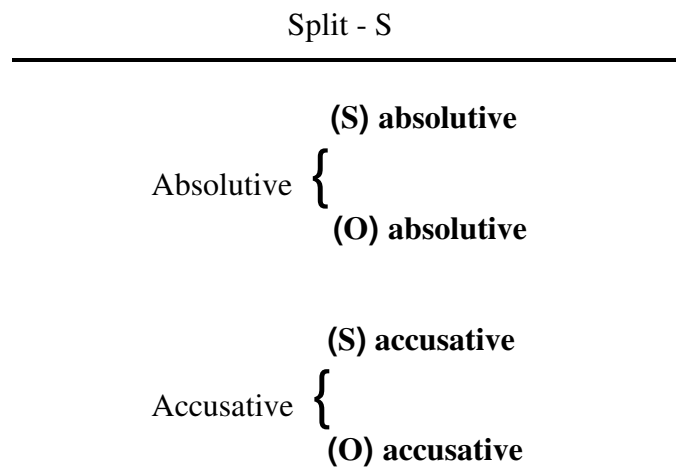
(137) *ʔwa hã ʔĩ - dz - ã - odo ø*
1 ENF 1 - R - MED - bent SING
 ‘I am bent’

- (138) *ʔa hã ʔa - ts - i - odo* \emptyset
 2 ENF **2** - R - MED - bent SING
 ‘You are bent’
- (139) *ʔõ hã ʔi - ts - i - odo* \emptyset
 3 ENF **3** - R - MED - bent SING
 ‘He is bent’
- (140) *ʔwa dõrĩ ʔiwa - dz - ã - odo* \emptyset
 1 NS **1** - R - MED - bent DUAL
 ‘Both of us are bent’
- (141) *ʔa dõrĩ ʔwaʔwa ʔa - ts - i - oto ʔwaʔwa*
 2 NS DUAL **2** - R - MED - bent DUAL
 ‘You are both bent’
- (142) *ʔõ dõrĩ ʔi - ts - i - oto dzahure*
 3 NS **3** - R - MED - bent DUAL
 ‘They are both bent’
- (143) *ʔwa dõrĩ ʔiwa - dz - ã - oto dzaʔra*
 1 NS **1** - R - MED - bent PLURAL
 ‘We are all bent’
- (144) *ʔõ dõrĩ ʔi - ts - i - oto dzaʔra*
 3 NS **3** - R - MED - bent PLURAL
 ‘They are all bent’
- (145) *ʔa dõrĩ ʔwaʔwa ʔaj - rare dzaʔra ʔwaʔwa*
 2 NS DUAL **2** - small PLURAL DUAL
 ‘You are all small’

[Rodrigues, Cabral and Soares (2006)]

In sentences (137), (138), (141) and (145) we see the occurrence of the Absolutive prefixes co-referencing (S) on the verb. However, for sentences (139),

(140), (142), (143) and (144), it is the prefixes from the Accusative series that occur. This split gives us not (Sa) and (So), the pattern generally described in typological studies, but actually one (So) when it is the Accusative prefix that occurs and yet another (So), when we see the occurrence of the Absolutive prefix. This Split-S system can be better visualized through the diagram below:



3.4.2.5. SPLIT-O

By looking at the Tripartite and Ergative-Absolutive subsystem 2 discussed previously, we can see the last subsystem I have identified. To explain the phenomenon, I propose a Split-O system. The features of number, person and definitude are crucial to an understanding of this subsystem, given that they act as triggers for the split. Another instance of a Split-O is when we are dealing with relative clauses. Quite interestingly, in relative transitive clauses (O) does not get co-referenced with the expected Absolutive Series I prefixes when accompanied by a 1st

or 3rd person (A). The prefixes cross-referencing (O) in this case are the Accusative prefixes from Series II, which normally would only be expected if (A) was 2nd person. We can find below three sentences which illustrate this:

(146) *ʔwa te ʔ - bādzā - rĩ dzaʔra tsiʔōdō hā*
 1 ERG 3 – make – NZR PLURAL basket EMP
 ‘It was made by us, the basket’

(147) *∅ te te ʔ - bādzā - rĩ dzahurē tsiʔōdō hā*
 3 ERG 3 – make – NZR DUAL basket EMP
 ‘It was made by both of them, the basket’

(148) *∅ ∅ ʔ - bādzā - rĩ dzaʔra tsiʔōdō hā*
 2 ERG 3 – make – NZR PLURAL basket EMP
 ‘It was made by all of you, the basket’

[Mcleod and Mitchell (1977:160)]

Sentence (148) shows an Accusative prefix cross-referencing 3rd person (O), which is expected to occur, given that (A) is 2nd person plural and (O) is 3rd person definite. Although for sentences (146) and (147) the expected prefix is the Absolutive one from Series I, given that neither subject is 2nd person, what we note, however, is that the prefix cross-referencing 3rd person (O) on the verb is the Accusative one. This can be regarded as yet another instance of what I have called a Split-O. In this specific case, the triggering factor might be related to the fact that the sentences are relative.

With this, I conclude my analysis of Case subsystems in the Xavante language.

4. FINAL CONSIDERATIONS

I have tried to explore in this monograph the various systems and manners of marking the core syntactic arguments of sentences in the languages of the world. I have provided examples from languages from quite diverse linguistic backgrounds and explored, in more detail, the Macro-Jê language Xavante. I have attempted to show just how greatly important the categories of number, person, definiteness and syntactic position are to the number and case/person marking systems of this language and managed to find at least seven subsystems of Case marking in Xavante, which is in accordance with the fact that Ergative – Absolutive languages constitute a much more diverse and heterogeneous phenomenon than Nominative – Accusative languages, which tend to be more homogeneous. I hope that this work has fulfilled its task, helping therefore to raise awareness of the richness of languages and also throwing some new light on how Case systems operate in Xavante. I am fully aware that the corpus used is limited and I hope that future research on Xavante may provide new answers to questions left unanswered or unasked.

5. BIBLIOGRAPHY

CROFT, William. *Typology and Universals*. Cambridge: Cambridge University Press, 2006.

CRYSTAL, David. *Dictionary of Linguistics and Phonetics*. Oxford: Blackwell Publishing, 2003.

DIXON, R.M.W. *Ergativity*. Cambridge: Cambridge University Press, 1994.

DIXON, R.M.W and AIKHENVALD, Alexandra. *The Amazonian Languages*. Cambridge: Cambridge University Press, 1999.

MATHEWS, P.H. *Oxford Concise Dictionary of Linguistics*. Second edition. Oxford: Oxford University Press, 1997

WHALEY, Lindsay J. *Introduction to Typology: The Unity and Diversity of Language*. Thousand Oaks: Sage, 1997.

SANTOS, Juliana Pereira Dos. *Marcas Pessoais, Concordância de Número e Alinhamento em Xavante*. Master's dissertation. Brasília: Universidade de Brasília, 2008.

