A Description of Differential Object Marking in the Barbacoan Languages of Ecuador and Colombia

Dingemanse, Niels

A Description of Differential Object Marking in the Barbacoan Languages of Ecuador and Colombia

Niels Dingemanse
s1793195
MA Linguistics
8 July 2022
Supervisor: Dr. Martine Bruil
Second reader: Dr. E. van Gijn

Abstract

Several languages in the world alternate between marked and unmarked objects with respect to different properties of the noun, including animacy and specificity. This phenomenon is called differential object marking. In this thesis, I describe the differential object marking system of Cha'palaa, a Barbacoan language spoken in Ecuador, and compare this with the differential object marking systems of the related Barbacoan languages. It can be concluded that in three of the four languages, including Cha'palaa, differential object marking is only governed by specificity. In one language, namely Awa Pit, differential object marking is governed by both animacy and specificity.

Key words: *differential object marking, Barbacoan, animacy, specificity*

Table of contents

List of figures and tables

FIGURES

TABLES

Acknowledgements

One of the reasons for choosing to study Linguistics about six years ago, is that I wanted to learn more about the rich diversity amongst the languages that are spoken in this world. Almost every course connected me to new languages, with their own vocabulary, grammar and peculiarities, and this always surprised me. This thesis is another example, and the final one of my studies, of a phenomenon that I had never heard of before, but again shows that there are still interesting linguistic phenomena to discover.

This thesis is the result of a long and often tough process. I have received many help of different people, without whom this thesis would never have been finished. First of all, I am grateful to Nora Julmi and Simeon Floyd for providing me with the Cha'palaa data they collected and allowing me to work with it. I am very thankful that Justin Case took the time and effort to discuss differential object marking with me and give feedback on my analysis. I would further like to thank Nienke from *TopScriptie*, who helped me when I got stuck again. She gave me very useful tips, encouraged me to continue and checked my use of the English language. I am also very grateful to my supervisor, dr. Martine Bruil. Thank you for introducing me to the Barbacoan languages and to differential object marking, but even more for your encouraging words, the useful feedback and nice conversations that we had. And thank you that you always had faith that I could finish this thesis, especially on the moments that I did not believe that! I also received many help and support from my family, especially my mother Janet and sister Annelinde. Thank you for listening to my complaints, giving me very useful tips and invaluable encouragement! Finally, I thank my fellow students, friends and other family members who helped me during different phases of the process.

Chapter 1. Introduction

In different languages of the world, the direct object of a transitive sentence[1] has to be marked with a grammatical marker, which may have the form of a prefix or suffix, a clitic, or a preposition or postposition. Other languages do not mark objects at all. Furthermore, a group of languages shows a difference in the use and/or meaning between obligatorily marked objects, optionally marked objects and objects for which marking is prohibited. The phenomenon in languages that involves distinct marking patterns of objects is called differential object marking (DOM) and occurs in languages all over the world, whereby DOM manifests itself differently in separate languages. DOM has been described in several languages, but there are still languages whose DOM system has not been described yet. In this thesis the previously unstudied DOM system of Cha'palaa, a Barbacoan language spoken in Ecuador, is described and is compared with the DOM systems of its related languages Nam Trik, Awa Pit and Tsafiki, which are spoken in different regions of Ecuador and Colombia.

In languages with DOM, there are different criteria that decide whether a given object is marked or not. These criteria are mainly inherent of or referential to the object NP. Animacy and specificity are two of the most important features and play a central role in this thesis. A distinction can be made between triggers for the alternation between marked and unmarked objects and results of this alternation. Triggers cause the alternation in object marking, whereas results follow from the alternation in object marking. In some DOM systems only a single feature plays a role, and other languages have multidimensional DOM systems. In those systems, multiple features are involved in the difference in object marking (Klein and de Swart 2011).

The objective of this thesis is to provide a description of DOM in Cha'palaa, which has not been described before, and to compare this DOM system with the systems in the related languages. This preliminary study functions as a first step towards understanding DOM in the Barbacoan languages. Further, this thesis contributes to linguistic research of DOM in general and could contribute to research of DOM in the region. The description of DOM in the Barbacoan languages in this thesis is only synchronic. Any possible diachronic parts in my analysis therefore will be minimal.
The main question of my thesis is the following:

> *How does differential object work in Cha'palaa and what are the similarities and differences between this system and the DOM system of the other Barbacoan languages Nam Trik, Awa Pit and Tsafiki?*

In order to answer this question, I will use the following sub-questions:

i) *What is differential object marking?*
ii) *What are the Barbacoan languages?*
iii) *How does DOM work in Cha'palaa?*
iv) *How does DOM work in Nam Trik, Awa Pit and Tsafiki?*
v) *To which extent can the DOM system of Cha'palaa be compared with the DOM system of the other Barbacoan languages?*

This thesis is structured as follows. In chapter 2, I describe what we know about DOM until now, based on the existing literature on the matter. Chapter 3 provides a short description of the Barbacoan language family. Both chapters provide key information needed to understand the description of the used methodology provided in chapter 4. Chapter 5 is a description and analysis of DOM in Cha'palaa. The DOM systems of the other three Barbacoan languages are described in chapter 6. In chapter 7, the DOM systems of all four Barbacoan languages are compared with each other. I end with a conclusion in chapter 8.

[1] In the remainder of this thesis, this will be referred to as 'object', unless otherwise indicated.

Chapter 2. What is differential object marking?

In recent years, a lot of people have been working on differential object marking. The expression was originally coined by Bossong (1985) in his research on this phenomenon in the Iranian languages. Since then, more and more research has been undertaken on the topic, both descriptive and theoretic.

Differential object marking (henceforth DOM) refers to the phenomenon which shows a difference in the case marking of objects in a language, depending on semantic or pragmatic features. The difference in object marking of a given object NP does not affect its grammatical function as the object of the clause (Chappell and Verstraete 2019, 2).

There are many differences between languages in the realization of DOM. First, languages with DOM can be divided into two groups: those which alternate between the presence and absence of case marking and those which alternate between two or more different case markers. The DOM systems of the Barbacoan languages belong to the first type of languages. Another language that falls under this group is Persian, which can be seen in the examples below. Definite objects are marked with the accusative case suffix *-râ* (example (1)), whereas objects that are non-referential and/or indefinite are not case marked (example (2)) (Lazard 1994, 169–70).

(1) *ketâb-râ* *xând-am*
book-ACC read.PAST-1SG
'I read the book.' (Lazard 1994, 170)

(2) *ketâb* *xând-am*
book read.PAST-1SG
'I read a book/books.' (Lazard 1994, 170)

The second type of DOM is also called *alternating case marking*. Here, the difference between objects is a matter of interpretation. An example of these languages is Finnish, where objects can be marked with either the accusative case marker or the partitive case marker. In example (3), the object *maido* 'milk' is marked with the accusative marker *-n* and is interpreted as a whole, whereas in example (4) the object is marked with the partitive marker *-a* and is interpreted as part of a whole (Chappell and Verstraete 2019, 2).

(3) *hän* *jo-i* *maido-n*
s/he.NOM drink-PAST milk-ACC
'S/he drank (all) the milk.' (Kittilä 2002, 114)

(4) *hän* *jo-i* *maito-a*
s/he.NOM drink-PAST milk-PART
'S/he drank (some) milk.' (Kittilä 2002, 114)

There are different factors that play a role in determining whether a given object is marked or unmarked. In the DOM systems of the Barbacoan languages, animacy and specificity play a major role. In the remainder of this chapter, I will amongst others deal with those factors. Section 2.1 discusses animacy, section 2.2 discusses specificity and in section 2.3, I will briefly touch upon other factors that can play a role in DOM. The chapter continues with a discussion about multidimensional DOM systems (section 2.4), after which I discuss the origins of the accusative case marker in DOM systems (section 2.5). In the final section (2.6), I will discuss the typology of DOM systems all over the world, mainly focusing on the factors that determine the difference in object marking.

2.1 Animacy

2.1.1 Definition

Animacy is a semantic property of nouns that deals with the degree of aliveness of a given entity. Usually, a distinction is made between three degrees of animacy: human, animate and inanimate. In almost all languages, animacy is an inherent feature of the NP. This means that a given noun has a fixed value for animacy which cannot be changed by morphological marking. The linguistic animacy of a given entity does however not always match with its biological value for animacy. The essential criteria for biological animacy are life and locomotion, but these are only partially important for linguistic animacy. Linguistic animacy can namely be more dependent from cultural importance, the place in the discourse, topicality and salience, with the essential criterion being influence (Frawley 1992, 89).

2.1.2 Animacy and DOM

Animacy plays an important role in languages with DOM. A well-known language with DOM based on animacy is Spanish, where human objects have to be marked with the (originally dative) particle *a*, animate objects are optionally marked and inanimate objects cannot be marked.[2] This can be seen in the examples below. The object *Pedro* in example (5) is human, and therefore has to be marked with *a*. However, the object *el libro* 'the book' in example (6) is inanimate and would therefore be ungrammatical when marked with *a*.

(5) *Juan* *visitó* **(a)* *Pedro*
Juan visited DOM Pedro
'Juan visited Pedro.' (Irimia 2020, 426)

(6) *He* *encontrado* *(*a)* *el* *libro*
have.1SG found DOM DEF.M.SG book
'I have found the book.' (Irimia 2020, 426)

As animacy is an inherent property of the noun, it functions as a trigger for differential marking: the value that a given object noun has for animacy, decides whether it receives case marking. This is in contrast with other factors that function as a result of differential marking (Klein and de Swart 2011), which will be discussed further in sections 2.2 and 2.4.

There are many languages which either mark human objects and leave non-human objects unmarked, or mark animate (including human) objects and leave inanimate objects unmarked. This is depicted in the animacy hierarchy, which is central to the analysis of Aissen (2003) as is given below:

(7) Human > Animate > Inanimate (Aissen 2003, 444)

The main point of this analysis is that when objects with a given place on the hierarchy are marked, all objects that are higher on the animacy hierarchy are also obligatorily marked (Aissen 2003, 445). For example, when a given language marks animate objects, it would also have to mark human objects. Furthermore, most typical objects are inanimate, which means human objects are a deviation from the standard pattern (Comrie 1989, 128).

Most languages in which animacy is a criteria for DOM have a two-way distinction concerning which objects receive marking and which objects are not marked. Non-human animate objects are either grouped with humans in the same category, resulting in an animate versus inanimate distinction, or are grouped with inanimates, resulting in a distinction between human and non-human. Languages which have a tripartite system, distinguishing between human, animate and inanimate, are uncommon (de Swart and de Hoop 2018, 6).

[2] This is a very general description. For now, I ignore further refinements and restrictions.

2.2 Specificity

2.2.1 Definition

Frawley (1992, 69) defines specificity as "the uniqueness of the entity". Specificity therefore deals with the extent to which an NP refers to an individual entity, or not. It is not concerned with the existence of an entity; an entity that logically cannot exist, can still be regarded as specific or non-specific. It is a semantic property which depends on the context of a given entity and is not inherent to an NP (Frawley 1992, 71–4). An NP can be ambiguous concerning its specificity. Consider for example the following sentence:

(8) I am looking for a movie with Tilda Swinton.

This sentence can be interpreted in two ways. The first interpretation of (6) corresponds to 'I am looking for a particular movie in which Tilda Swinton plays a role, but I have forgotten it's title'. In this interpretation, *a movie with Tilda Swinton* has a specific reading. It refers to an individual movie, within the group 'movies in which Tilda Swinton plays a role'. The second interpretation corresponds to 'I am looking for any movie in which Tilda Swinton plays a role'. Here, *a movie with Tilda Swinton* has a non-specific reading. It does not refer to an individual movie or a member of a pre-established group, but to the group itself.

Specificity has links with the concept of definiteness, which can also play a role in DOM systems. Specificity corresponds with definiteness in this respect that definite and specific entities are all in some degree assumed to be known by the reader or hearer, while indefinite and non-specific entities are generally assumed to be unknown (Frawley 1992, 75–6). However, there are also differences between those two concepts. Whereas specificity is a semantic property of the noun, definiteness is a syntactic and inherent property of the NP. This means there are certain grammatical markers, for example determiners and demonstrative or possessive pronouns, that can modify a noun in an NP. In this case, the NP can only be interpreted as definite and never as indefinite. Yet, the clear boundary between specificity and definiteness is not always clear, certainly not with regard to DOM, which we will see in section 2.2.2.

Another feature that has strong links with specificity is referentiality. According to Givón (1982, 84), referentiality deals with the question whether the "*specific identity* [of an entity] is important, or only its generic *type membership*" (italics in original). Entities that belong to the first group are referential, whereas those that belong to the second group are non-referential. As this definition is more or less the same as the definition of specificity, I will consider referentiality the same as specificity.

Summarizing, we could say that a given NP is specific when its referent is one particular member of a group of entities. The referent of a non-specific NP on the other hand refers to either the whole group, or to a non-particular member of such a group. Consequently, specificity deals with the inclusion of its referents. Although specificty is related to definiteness, it differs in this respect that definiteness deals with the identity of a referent. Definite NPs namely have to be identified with a particular referent in reality (Enç 1991, 9).

2.2.2 Specificity and DOM

In different languages in the world specificity plays a role in differential object marking, such as in Turkish. In this language, definite objects are always marked with the accusative case marker *-(y)i*. However, indefinite objects can be either marked or unmarked. Marked indefinite objects are always interpreted as specific, whereas indefinite objects that lack marking always have a non-specific interpretation.[3] Compare the following two sentences, where the object *piyano* 'piano' refers to a specific piano in (9) due to the presence of the accusative case marker, whereas it refers to a non-specific piano in (10), as it lacks case marking (Enç 1991, 4–5).

[3] When reading Enç (1991), I think that there are enough indications to claim that definiteness plays no role in the Turkish DOM system, leaving only specificity as a role-playing factor. But for now, I assume her analysis.

(9) *Ali* *bir* *piyano-yu* *kiralamak* *istiyor*
Ali one piano-ACC to.rent want.3SG
'Ali wants to rent a certain piano.' (Enç 1991, 4)

(10) *Ali* *bir* *piyano* *kiralamak* *istiyor*
Ali one piano to.rent want.3SG
'Ali wants to rent a (non-specific) piano.' (Enç 1991, 5)

The specificity of a given object here depends on the presence or absence of case marking. The interpretation of the object NP is a result of differential marking (Klein and de Swart 2011), unlike other factors that play a role in DOM, which cause the presence or absence of case marking. This will be further discussed in section 2.4 below.

In her analysis of DOM, Aissen (2003) uses a definiteness hierarchy to explain which objects receive case marking and which objects do not. In this hierarchy, a distinction in specificity is also made. The hierarchy is given in (11) below:

(11) Pronoun > Name > Definite > Indefinite Specific > Non-specific (Aissen 2003, 444)

The main point of this analysis is as follows. When in a given language that exhibits DOM objects with a certain value for definiteness/specificity are marked, all objects with a more definite/specific value are also marked, whereas objects with a less definite/specific value do not have to be marked, or for which marking is even prohibited (Aissen 2003, 445). This hierarchy illustrates what we have seen in section 2.2.1: there are strong links between definiteness and specificity and these are sometimes even treated in the same way, although they are different. In this thesis, I will only make a difference between specific and non-specific objects.

According to Comrie (1989, 128), most typical objects are indefinite, which means that definite objects are a deviation from the standard pattern. Although definiteness is not the same as specificity, there are enough correspondences between those two concepts to justify the claim that the most typical objects are also non-specific, which makes specific objects less common. If we combine this with the claim that the least typical objects are also human (see section 2.1.2), human objects are generally more often specific.

In their analysis, Chappell and Verstraete (2019) identify differential marking resulting in different interpretations of the object NP, which is the case with specificity as described above, as *optional case marking*. The optionality lies in the fact that the same object NP can be either marked or unmarked, respectively resulting in a specific or non-specific interpretation. However, the presence or absence of case marking does not affect the grammaticality of the NP; both marked and unmarked objects are grammatical. This is unlike differential marking driven by inherent features of the noun, such as animacy, where the grammaticality of the object NP in fact correlates with the presence or absence of case marking. Some objects are ungrammatical when these are marked and others are ungrammatical when these are unmarked. Chappell and Verstraete (2019) call this *referent-based split marking*, as there is a split based on referential properties of the object.[4]

2.3 Information structure and affectedness

Besides animacy and specificity, some people argue that there are other factors that play a role in DOM. Two of these people are Dalrymple and Nikolaeva (2011), who argue that it is better to analyse

[4] With this analysis, they reject an analysis whereby optional case marking and referent-based split marking (in addition to alternating case marking) all fall under the umbrella of differential object marking. (Chappell and Verstraete 2019, 14ff) consider these separate phenomena, due to functional and typological differences. Although I think this is a valuable approach, I do not adopt this in my thesis, as I assume that there are still enough similarities between what they call optional and referent-based split marking to discuss it all as DOM.

DOM from the viewpoint of information structure. This means they look at the information value of clauses in the discourse, namely whether a given NP contains information that is outstanding in the discourse, or not. Central to this analysis is the role that topicality plays in DOM. Marked objects are generally topical, whereas unmarked objects are non-topical (Dalrymple and Nikolaeva 2011, 13–6).

Another approach to DOM is to look at the role of affectedness, which deals with the extent to which the object is involved in the verbal event (Næss 2004, 1210). In this analysis, affected objects are case marked, whereas less affected or unaffected objects lack case marking. However, different people have claimed that the outcomes of an approach that focuses on affectedness have the same outcomes as an approach that focuses on animacy and definiteness, as objects that are highly affected generally have a high value for definiteness and animacy (Dalrymple and Nikolaeva 2011, 6–7).

Central to this thesis is the role that animacy and specificity play in the DOM systems of the Barbacoan languages. However, there are indications that there might be additional factors, especially information structure, that play a role in those DOM systems.

2.4 Multidimensional DOM

Although there are languages in which DOM is governed by only one factor, there are several languages in which more than one factor plays a role in applying case marking. Following Klein and de Swart (2011), these DOM systems are called multidimensional. Each language with a multidimensional DOM system has its own effects. The central point in these multidimensional DOM systems is the difference between factors that trigger the presence or absence of object marking and factors that are a result of this alternation. An inherent property of the NP, like animacy, cannot be changed by adding or removing grammatical information, causing it to function as a trigger for object marking in languages with DOM. This means that a given value for animacy causes the presence or absence of object marking on the NP. On the other hand, the specificity of an NP is not inherent to it; the specific or non-specific interpretation of an NP follows from factors like grammatical information or the place it has in the discourse. It can therefore also be a result of the presence or absence of case marking.

Triggers for object marking can be viewed as a split alternation. DOM systems in which a split alternation results in a difference in object marking namely show a sharp distinction between marked and unmarked objects with respect to their grammaticality, as we have seen in section 2.1.2. On the other hand, results of a difference in object marking form a fluid alternation, as we have seen with specificity in section 2.2.2. In languages where two or more factors are involved in the DOM system, it is possible to propose hierarchical relations between split and fluid alternations. In those hierarchies, split alternations are always situated higher than fluid alternations. Not every DOM system is the same concerning whether it has split or fluid alternations and how these work out. Therefore, we should keep in mind that we ideally approach every language with a DOM system individually (Klein and de Swart 2011, 4–5; de Hoop and Malchukov 2007).

The way in which triggers for and results of DOM work, can be illustrated by the outcome of DOM in Hindi (Klein and de Swart 2011). In Hindi, direct objects can be marked with *-ko*, but this does not occur in every context. Human objects are obligatorily marked with *-ko* (example (12)); unmarked human objects are ungrammatical (example (13)). So, animacy functions as a trigger for DOM in Hindi.

(12) *ilaa-ne* *bacce-ko* *uṭʰaayaa*
Ila-ERG child-ACC lift.PFV
'Ila lifted the/a child.' (Mohanan 1994, 80)

(13) **ilaa-ne* *baccaa* *uṭʰaayaa*
Ila-ERG child lift.PFV
'Ila lifted the/a child.' (Mohanan 1994, 80)

On the other hand, non-human objects are optionally marked with *-ko*. The absence or presence of the object marker *-ko* for non-human objects functions as a result: marked non-human objects are

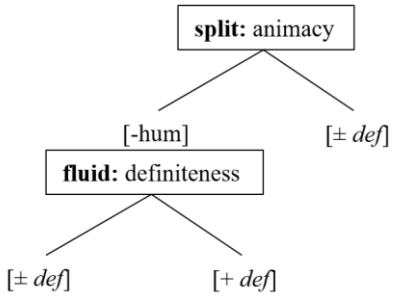
interpreted as definite (example (14)), whereas non-human objects that lack marking with *-ko* can be interpreted as either definite or indefinite (example (15)) (Klein and de Swart 2011, 6–7).

(14) *ilaa-ne* *haar-ko* *uṭʰaayaa*
Ila-ERG necklace-ACC lift.PFV
'Ila lifted the/*a necklace.' (Mohanan 1994, 80)

(15) *ilaa-ne* *haar* *uṭʰaayaa*
Ila-ERG necklace lift.PFV
'Ila lifted the/a necklace.' (Mohanan 1994, 80)

In figure 1 below a schematic representation of this description is given. The [± *def*] position on the right under animacy indicates marked human objects, which can be interpreted as either definite or indefinite. The [± *def*] position on the left under definiteness indicates unmarked non-human objects, which also can be interpreted as either definite or indefinite; the [+ *def*] position on the right under definiteness indicates marked non-human objects, which can only be interpreted as definite.

Figure 1. Schematic representation of the DOM system of Hindi (based on Klein and de Swart 2011, 7).



2.5 Origin of the accusative case suffix in DOM languages

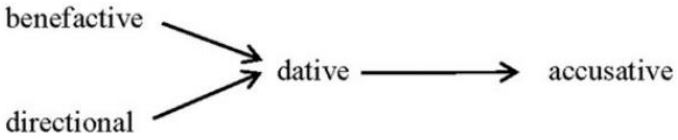
In many languages with DOM, the accusative marker has the same form as the dative marker. Consider the following sentence from P'orhépecha (a language isolate spoken in Mexico), where both the direct object *wíchu* 'dog' and the indirect object *Lúpi* 'Lupe' are marked with the case marker *-ni*.

(16) *Pédru* *íntsku-s-Ø-ti* *wíchu-ni* *Lúpi-ni*
Pedro give-PFV-PRS-3.IND dog-ACC Lupe-DAT
'Pedro gave Lupe the dog.' (Capistrán Garza 2015, 18)

In those languages, the dative case marker has extended its use to the accusative case marker. Chappell and Verstraete (2019, 27–9) draw a link between object marking and information structure; the position of the object in a sentence may have caused the object to be marked with the dative case marker as a topic marker, which would have grammaticalized into an object marker. Aissen (2003, 446–7, fn. 10) notes that the development of the dative case marker into an accusative case marker in DOM languages is far from unnatural: both direct and indirect objects are non-subject participants in a sentence, and indirect objects generally have the same characteristics as case marked objects in DOM languages, namely human/animate and definite.

The dative case marker in itself can have its origin either in the benefactive or a locative/directional suffix. For example, English *to* marks indirect objects, e.g. *I gave the flowers to my mother*, but it was originally only used as a directional preposition (*I'm travelling to Paris*) (Lehmann 2015, 117–9; Chappell and Verstraete 2019, 27). The origins of the accusative case marker are illustrated in figure 2 below.

Figure 2. The possible origins of the accusative case marker (Chappell and Verstraete 2019, 37; based on Lehmann 2015, 119).



2.6 Typology

Typological research shows that DOM is not only governed by animacy and/or definiteness[5] in languages over the world (Sinnemäki 2014). There is no proof that either animacy, definiteness or a combination of both has a universal role in DOM systems. However, there is evidence that languages prefer restricted object marking over non-restricted object marking, because the former is more stable than the latter. Restricted object marking is an umbrella term for case marking systems that alternate between marked and unmarked objects, but the factors that govern this alternation are not important. Besides semantic and pragmatic properties (which apply to DOM), the relevant factor amongst others can also be gender or word order. Alternating case marking is grouped under non-restricted case marking in this survey, as objects in those systems are always marked, albeit with a different marker (Sinnemäki 2014, 284–5).

The sample used in this study consists of 744 languages from 389 different genera. Of these languages, 521 languages do not have case marking on the object, whereas 223 languages do. Thereby 178 of this last group of languages have restricted marking, whereas 45 languages have non-restricted marking. Table 1 shows the factors that govern object marking in those 178 languages with restricted case marking on the object (Sinnemäki 2014, 292–3).

Table 1. Different factors that govern restricted case marking in Sinnemäki's (2014, 293) sample.

Animacy	52 (29%)
Definiteness	49 (28%)
Animacy and definiteness	22 (12%)
Other property	55 (31%)
Total	**178 (100%)**

Animacy and definiteness are no universal factors that govern DOM because those semantic factors are quite unstable, as opposed to morphosyntactic features (Sinnemäki 2014, 300). Further, a growing number of researchers argues that there are other factors that play a role in DOM besides or even instead of animacy and specificity. A noteworthy example is the analysis of Dalrymple and Nikolaeva (2011), which claims that DOM should be analyzed in terms of information structure, as we have seen in section 2.3 above.

[5] Sinnemäki (2014, 286) includes specificity in his definition of definiteness.

Chapter 3. The Barbacoan languages

In this chapter, I will give a short introduction of the Barbacoan languages in order to create a clear overview of the Barbacoan language family. I will discuss their genetic relations, their speakers, their location and the linguistic status of the languages in the region.

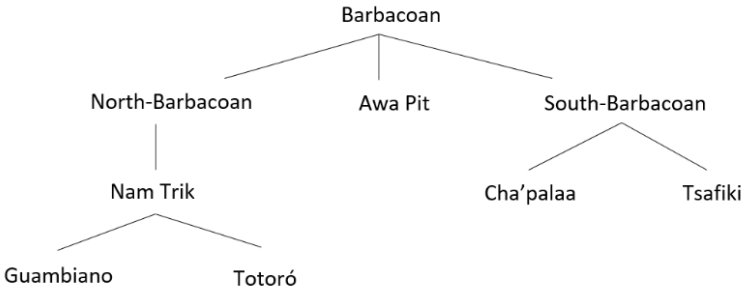
3.1 Genetic relations

The Barbacoan languages are spoken in the south-west of Colombia and the north-west of Ecuador. Nowadays, there are four living Barbacoan languages, which are Nam Trik (or Namuy Wam), Awa Pit (also known as Cuaiquer), Cha'palaa (or Cayapa) and Tsafiki (or Colorado) (Adelaar 2004, 141; Gonzales Castaño 2015). In this thesis, I will use the first names presented, that are not between brackets.

For Awa Pit, Tsafiki and Cha'palaa, there is hardly any discussion whether these consist of different varieties, in contrary to Nam Trik. Currently, most researchers regard this language as consisting of two varieties, namely Guambiano and Totoró (Costenla Umaña 1991, 72; Gonzales Castaño 2019, iv). However, not all speakers of these varieties agree with this observation and consider Guambiano and Totoró as two different languages (Gonzales Castaño 2012, 215). I will refer to this language as Nam Trik following up on Gonzales Castaño (2019, 34) and most speakers of the language (Gonzales Castaño 2015).

Some Barbacoan languages are closer related to each other. Cha'palaa and Tsafiki are grouped in the South-Barbacoan branch of the family. As mentioned earlier, Guambiano and Totoró are most likely a single language and form the North-Barbacoan branch. Curnow and Liddicoat (1998, 405) group Awa Pit with Guambiano-Totoró (Nam Trik) in the North-Barbacoan branch, although it may be more likely that Awa Pit forms a branch on its own, identical to the North-Barbacoan and South-Barbacoan branch (Norcliffe et al. 2015 in Floyd and Norcliffe 2016, 208). Figure 3 shows a tree of the Barbacoan language family based on the most recent viewpoints as discussed above.

Figure 3. Barbacoan family tree (based on Curnow and Liddicoat 1998, 405, Norcliffe et al. 2015 and Gonzales Castaño 2012, 215).



3.2 Locations and speakers

Nam Trik (pronounced as [nam tʂik]) is spoken in the south-west of Colombia. Speakers of this language live in five reserves (*resguardos*), namely Guambia, Ambaló, Totoró, Quisgó and Jambaló, where distinct varieties of Nam Trik are spoken (Gonzales Castaño 2019, 32–3). Guambiano and Totoró have their own ISO 639-3 codes (gum and ttk respectively) (Eberhard, Simons and Fenning 2022), indicating that the Ethnologue considers these as two languages. Due to the inconsistency concerning the different varieties, the sources are not clear about the number of speakers of this language. According to the *UNESCO Atlas of the World's Languages in Danger*, Guambiano has 23.242 speakers[6], although it is not clear whether this number includes speakers living in the other *resguardos* (Gonzales Castaño 2012, 198). The Totoró variety of Nam Trik has 76 speakers, which is only 1 percent of the total amount

[6] I was not able to verify this claim, stated in Gonzales Castaño (2012, 198), as it seems that the UNESCO Atlas is not available online anymore and the printed edition of this atlas does not mention any number of Guambiano speakers at all.

of inhabitants of Totoró. In this *resguardo*, Spanish has replaced Nam Trik in all spaces, with three Spanish monolingual generations (Gonzales Castaño 2019, iv). Although there is a considerable amount of speakers of Guambiano/Nam Trik, this language is considered endangered; the Totoró variety is even moribund (Crevels 2012, 195).

Awa Pit (ISO 639-3: kwi) is spoken by the Awa people in the border area between Colombia and Ecuador. It is difficult to give an exact number of its speakers, as a result of the uncertainty about the number of Awa people and the atmosphere of secrecy surrounding their culture. Crevels (2012, 195; 199) estimates there are less than 15,364 speakers of Awa Pit in the south of Colombia and 2,100 speakers in the north of Ecuador. The language has little prestige amongst the Awa people, and many of them have negative feelings towards their history of marginalization. Numerous Awa people are monolingual in Spanish nowadays, causing Awa Pit to be endangered (Curnow 1997, 18).

Tsafiki (ISO 639-3: cof) is spoken by the Tsachila people, who live in seven communities in the western lowlands of Ecuador. The Tsafiki language had 1,872 speakers in 2012. However, more and more of the Tsachila people speak Spanish nowadays, partially due to a lack of teachers who could teach Tsafiki in schools. This makes Tsafiki clearly an endangered language (Dickinson 2002, 20–4; Crevels 2012, 199).

Cha'palaa (ISO 639-3: cbi) is spoken by the Chachi people in the north-west of Ecuador by about 10,000 people of different ages (Floyd 2016, 343). Still different Chachi people are monolingual in Cha'palaa, mainly elders and very young children. The Chachi mostly speak Spanish in addition to Cha'palaa (Eberhard, Simons and Fenning 2022). The map in figure 4 shows the locations where the Barbacoan languages are spoken.

Figure 4. Locations where the Barbacoan languages (underlined) are spoken (Floyd and Norcliffe 2016, 210).

Chapter 4. Methodology

In this chapter, I will elaborate the methodology that I used in order to answer the main question of this thesis, which is stated in chapter 1 and is repeated below:

> *How does differential object work in Cha'palaa and what are the similarities and differences between this system and the DOM system of the other Barbacoan languages Nam Trik, Awa Pit and Tsafiki?*

4.1 DOM in Cha'palaa

In chapter 5, I will discuss the DOM system of Cha'palaa. This description is almost entirely based on data that have not been analyzed yet. These data have been collected and translated by Nora Julmi and Simeon Floyd and consist of ELAN (2021) files of the original text in Cha'palaa and a Spanish translation per sentence. The data are indicated in the following way: CHSF2015_XX_XXXX_Personal Name, and mainly include stories, narrations and some dialogue. There are thirteen files. Most of these have a length of about one hour, although there are some files that are shorter (the shortest is about fifteen minutes long).

I have gone through the different files and looked for overt objects, both marked and unmarked. When I found one, I took the concerned sentence, glossed it and translated it into English. For this purpose, I used different sources like a Cha'palaa dictionary (Lindskoog and Lindskoog 1964) and the works of Vittadello (1988a; 1988b), in addition to articles and book chapters that have previously been written on Cha'palaa (Dingemanse and Floyd 2014; Floyd 2014; 2015; 2016; 2018; Floyd and Norcliffe 2016), as well as the software FLEx (Butler and van Volkinburg 2007). As this process was very time consuming, I did not go through all the spoken texts. Therefore, I could not include every object that was in the recordings. Furthermore, there are some gaps in the translation and analysis of the data, mainly because I am not that experienced with the Cha'palaa language. Therefore, I did not recognize all underlying morphemes and find the translation of every Cha'palaa word. However, the parts that are relevant for the description of DOM have mainly completely been analyzed. Furthermore, in one file (CHSF2015_01_31S3_Yaanbu), the video and audio do not match the transcription. Regarding unclear parts in the transcription, I could not check the audio in this file. I used this transcription without being certain that it was completely correct, and the data from this file should therefore be checked when used in the future.

The final data set that I use consists of 110 objects. After I gathered those objects, I put them in an Excel table and indicated for each object whether it was marked or unmarked and what its value was for animacy and specificity[7], as these factors appear to be the most important in DOM, following the existing literature. The data set can be found in the appendix. Each entry includes an index number, the story or article where it came from, a line or page number, the object form in Cha'palaa and an English translation, in addition to its marking status and value for animacy and specificity.

For animacy, I looked whether the referent was human, animate or inanimate, based on general knowledge. I have not encountered in the literature any indications that the perception of animacy of the Chachi people (strongly) differs from our perceptions as westerners, so I assumed that I could apply the same values for animacy as I would do in English.

For specificity on the other hand, I used a working definition based on the consulted literature. An object is specific when it refers to an entity that could be considered as part of a particular group of entities. A non-specific object on the other hand does not refer to a particular member of a group of entities, but to any member of this class, or the class as a whole. In order to decide the specificity value of a given object, the Spanish translation of the sentence in which the object occurs, served as a first indication. I subsequently examined the contextual position in which the object was placed, not only in the narrative, but also in the environment of the speaker, which I was able to do as there were video

[7] I also indicated the value for affectedness and focus, but as these features appear to be less or even not relevant for Cha'palaa, these will not be further discussed.

files available for the recordings. When the specificity of a given object was still not clear, despite those criteria, I chose the interpretation that seemed the most logical.

After I gathered this information, I put this in tables in order to get a clear overview of the factors which could be decisive in the DOM system of Cha'palaa. After it became clear to me how DOM generally works in Cha'palaa, I wrote down my analysis and illustrated this with examples from the corpus.

4.2 DOM in the other Barbacoan languages

The descriptions of DOM in the other Barbacoan languages in chapter 6 are mainly based on what has already been written on the subject in those languages. The main sources for this description are Gonzales Castaño (2019) for Nam Trik, Curnow (1997) for Awa Pit and Dickinson (2002) for Tsafiki. To a greater or lesser extent, I applied my own analysis to the DOM systems of those languages, depending on what has been written previously about those systems.

After the description of DOM in all four Barbacoan languages, I compare the phenomenon between the languages in chapter 7, focusing on both the form of object marking and the criteria for when object marking is present or absent. This methodology results in a description of the previously undescribed DOM system of Cha'palaa, and in an analysis of DOM in the Barbacoan language family.

4.3 Preliminary remarks

Before I continue with the actual description of DOM in the Barbacoan languages, the reader should keep the following remarks in mind. First, the examples that are given in this thesis, are from different languages and sources. In order to provide consistency between the different languages and sources, I have altered some of the glosses and underlying morphemes from the original source material. Second, examples consist mainly of three lines (the original sentence with morpheme boundaries, the glosses, and an English translation). Only when the underlying morphemes are differently realized due to morphophonological processes, a fourth line is added at the top of each example. Regarding the examples illustrating the DOM system, the labels A(gent), O(bject) and V(erb) are added for clarity. Third, the Nam Trik examples in Gonzales Castaño (2019) originally have a Spanish translation, so I translated those examples and glosses into English. Fourth, as different people in different time periods have worked on Cha'palaa, the orthography in the different sources is not always consistent. Therefore, I have equalized the orthography in the following way: I use <k> where older sources use <qu> or <c>, <w> for <hu> and <ll> for <li>, except for Spanish loanwords, e.g. *familia* 'family'. And at last, with 'all the Barbacoan languages' is meant all the *living* Barbacoan languages.

Chapter 5. Differential object marking in Cha'palaa

In this chapter, I will provide a description of DOM in Cha'palaa. This chapter will not only provide a description of the previously hardly studied DOM system of this language, but also serves as a base for the comparison with the DOM systems of the other Barbacoan languages in chapter 7.

In section 5.1, I will give a short grammatical sketch of Cha'palaa, with important information for the purpose of better understanding how DOM works in Cha'palaa. Section 5.2 is the core of this chapter and describes the different parameters that play a role in the DOM system of Cha'palaa, which is followed by a conclusion of the chapter in section 5.3.

5.1 Grammatical sketch

This section is a short grammatical sketch of Cha'palaa. In order to get a clear understanding of the examples and the DOM system of Cha'palaa, I will discuss morphophonological processes, the word order and the alignment system of the language.

Morphophonological processes occur regularly in Cha'palaa, especially at the end of the word. The most common are elision and assimilation. Both are present in the verb *kiñaa* 'do' in the following example. The combination of the different referent-suffix *-ñu* and the focus marker *-ya* results in the elision of the consonant /y/ and the assimilation of /u/ to the next vowel into /a/.

(17)	*wiisu'*	*shinbu*	*mika*	*ura'*	*kiñaa*
	Wilson-chi	shinbu	mike	ura'	ki-ñu-ya
	Wilson-POSS	wife	very	good	do-DR-FOC
	inuba	*tsankenu*		*tensaaka*	
	i-nu-ba	tsa-n-ke-nu		ten-saaka	
	1-ACC-also	SEM-PFV-do-INF		feel.EGO-EV.GEN	
	'As Wilson's wife made a really nice one, I also feel like making one.' (Floyd and Norcliffe 2016, 223)				

Cha'palaa is an agglutinative language, marking grammatical information with affixes on the words. There are almost only suffixes, although Cha'palaa has some prefixes, as can be seen in the verb form *dekewe* in the following example.

(18)	*mera*	*mera*	*de-ke-we*
	listen	listen	PL-do-DCL
	'They listened repeatedly.' (Floyd 2014, 78)		

The basic word order of Cha'palaa is AOV and SV and this language has a nominative-accusative alignment system (Floyd 2018, 271). The agent of a transitive clause and the subject of an intransitive clause are unmarked, and the object of a transitive clause is in certain environments marked with the accusative case suffix *-nu*.[8] Example (19) shows the word order of an AOV clause, in which the agent *Dyus* 'God' is unmarked and the object *ya' pebulu* 'his people' is marked with *-nu*.

	A	O		V
(19)	*Dyus*	*ya'*	*pebulunu*	*liveekimi*
	Dyus	ya-chi	pebulu-nu	livee-ki-mi
	God	3SG-POSS	people-ACC	save-do-SG
	'God saves his people.' (Vittadello 1988b, 296; glosses are of my own)			

[8] Besides the case suffix, *-nu* is also the form of a verbal suffix that denotes an infinitive or future tense. It does not allow further finite morphology, which makes it a kind of nominalizer (see Floyd 2016, 346–7).

The case marker *-nu* not only marks direct objects, but can also be used to mark other grammatical roles. The indirect object of a ditransitive clause is also marked with *-nu*, as can be seen in the following example, where the second person pronoun *ñu* is marked with *-nu*.[9]

(20) *i-ya* *ñu-nu* *a-kaa-tu* *ku-nu* *ju-ba*
1-FOC 2-DAT cook-CAUS-SR give-INF be-CNTR
'After cooking, I must give to you.' (Floyd 2018, 276)

The case marker *-nu* is also used as one of the ways to indicate a locative relation. This is illustrated in example (21) below, where the location *chipa* 'floor' is marked with *-nu*.

(21) *umaa* *chipanu* *matsure'*
umaa chipa-nu ma-tsu-re-tu
now floor-LOC again-lie-CAUS-SR
'Now it is left on the floor.' (CHSF2015_02_05S1_José-Pais)

5.2 DOM in Cha'palaa

In this section, I will take a look at which factors play a role in Cha'palaa DOM. I will discuss the feature animacy in section 5.2.1, and specificity in section 5.2.2.

5.2.1 Animacy

In this section, I will describe the alternation in case marking on objects according to their value for animacy. As discussed in section 2.1.2, one would expect that human and/or animate nouns are more often marked than inanimate nouns. Table 2 below shows how many human, animate and inanimate objects are marked with *-nu*. As can be seen, most human objects are marked (29 out of 32). Other animate nouns are equally distributed between marked and unmarked (10 by 10), whereas most inanimate objects are unmarked (49 out of 58). Section 5.2.1.1 deals with human objects, section 5.2.1.2 with animate objects and section 5.2.1.3 with inanimate objects.

Table 2. Marked and unmarked objects grouped by animacy value.

	Marked	Unmarked	Total
Human	**29**	**3**	**32**
Animate	**10**	**10**	**20**
Inanimate	**9**	**49**	**58**
Total	**48**	**62**	**110**

5.2.1.1 Human objects

As can be seen in table 2, most human objects are marked for accusative case. Only 3 out of 32 human objects (9,4%) are unmarked. In the following example, the human object *ya' pala* 'his parents' is marked with *-nu*. This example is taken from a story that is about a fight against the Indios Bravos.

O V
(22) *ya'* *palanu* *detu'nu* *juaa* *ti'mitya,* *tsaiñuren*
ya-chi apa-la-nu de-tu'-nu ju-ya ti-'mitya tsaiñu-ren
3-POSS father-PL-ACC PL-kill-INF be-FOC say-because so-PRECIS
'because they say that they are going to kill his parents, being like this.'
(CHSF2015_01_31S2_Guillermo)

[9] Contrary to Floyd (2014ff), I gloss *-nu* as DAT when it marks an indirect object, so that the grammatical relation is always clear in a particular sentence. Locative *-nu* is always glossed as LOC, just as Floyd does.

Besides regular nouns, human objects also include personal pronouns and personal names. In example (23), the object is the pronoun *inu* ‘me’, which contains the accusative suffix *-nu*. There are no unmarked object pronouns in the corpus.

	A		O	V		
(23)	*juntsa*	*miruku*	*i-nu*	*jawa’ka*	*jawa’ka*	*ke-we*
	that	sorcerer	1SG-ACC	wave	wave	do-NEGO

‘That sorcerer called me by waving [his hand].’ (CHSF2015_02_03S5_María-Pastora)

In example (24), *Lucrecia*, which is a personal name, functions as the object, and is marked with *-nu.* This example is the first of two instances in this story where Lucrecia is mentioned. The second time she functions as subject and is therefore not marked.

		V				O			
(24)	*manbijee*	*chutu*	*ke*	*ee*	*eedieeña*	*lucrecianu*	*manbijee*	*depu’*	*jiñu*
	man-bijee	chu-tu	ke	ee	eediee-ña	lucrecia-nu	man-bijee	de-pu-’	ji-ñu
	one-time	sit-SR	do/see?	?	?-DCL	Lucrecia-ACC	one-time	PL-put-?	go-DR

‘Once, while I was watching Lucrecia, when they were replaced.’ (CHSF2015_02_02S4_ Gervacio)

As there are only 3 unmarked human objects in the corpus, I will discuss each of them. In the next example, the object *chachi* ‘people’ is unmarked. It is a generic noun, as it does not refer to a specific person, but to people in general.

	O	V			
(25)	*chachi*	*fi*	*fi*	*kemuaa*	*detiña*
	chachi	fi	fi	ke-mu-ya	de-ti-ña
	person	eat	eat	do-AG.NMZ-FOC	PL-say-DCL

‘It eats people (repeatedly) they say.’ (Floyd 2014, 88)

The other 2 unmarked human objects both occur in the narrative of the same person, and near each other in the story. This story deals with a father who has a blind daughter. In example (26), the object *na’ma* ‘daughter’ occurs unmarked. It is the object of *miya* ‘have’, a verb which is generally lower in transitivity.

	A		O	V					
(26)	*ma*	*ruku*	*na’ma*	*miya,*	*juntsa*	*na’ma*	*kapuka*	*pu-tyu*	*panna*
	one	man	daughter	have	that	daughter	eye	have/put/be-NEG	?

‘A man had a daughter, that daughter has no eye [i.e. she’s blind].’ (CHSF2015_02_05S1_ José-Pais)

Example (27) contains a partially reduplicated object, *kailla ya’ kailla* ‘all their children’, which is not marked with *-nu*.

	O			V
(27)	*kailla*	*ya’*	*kailla*	*defaintshu’mitya*
	kai-lla	ya-chi	kai-lla	de-faint-shu-’mitya
	child-PL	3SG-POSS	child-PL	PL-eat.NMZ?-COND-because

‘Since they were eating all their children.’ (CHSF2015_02_05S1_José-Pais)

This section shows that most human objects are marked, which could indicate that human objects tend to be marked. The only instances in the corpus of unmarked objects are a generic noun, the object of a low transitive verb, and a partially reduplicated noun.

5.2.1.2 Animate objects

Animate objects occur equally marked and unmarked. In the corpus, they were equally distributed. The following example contains a marked animate object, namely *leon* 'lion'. This is a clear example of a transitive sentence: although the subject is not overtly expressed, it is clear that *leon* 'lion' functions as the object.

			O	V
(28)	*tsa-tsan-ke-mi*	*tsenñu*	*leon-nu*	*tu'-mi*
	SEM-SEM-do-SG	then	lion-ACC	kill-SG
	'Being so, he kills the lion.' (CHSF2015_02_03S4_Silverio)			

The following sentence is an example with an unmarked animate object, namely *aamana* 'big deer'. Again, the subject is not overtly expressed, but can be identified by the plural marking on the verb. The object is overtly expressed, but it does not take the accusative case suffix *-nu*.

	O	V		
(29)	*aamana*	*ka'*	*eepuke'*	*dejañaa*
	aa-mana	ka-tu	eepu-ke-tu	de-ja-ñu-ya
	AUG-deer	take/get-SR	embark/carry?-do.VCL-SR	PL-come-DR-FOC
	'They came carrying the big deer.' (CHSF2015_02_03S5_María-Pastora)			

One could think that deer and lions are differently classified in Cha'palaa, affecting their marking as objects. However, this is not the case. For example, in contrast to example (29) above, *mana* 'deer' can also occur as a marked object, which is shown in the following example.

	O	A	V
(30)	*mananu*	*sapuaa*	*puimi*
	mana-nu	sapu-ya	pui-mi
	deer-ACC	toad-FOC	beat-SG
	'The toad beats the deer.' (CHSF2015_02_02S3_Vicente)		

Other animates that occur both as marked and unmarked objects include *vaca* 'cow' and *kela* 'tiger'. Since there is no clear preference for animate objects to be marked or unmarked, this could be a clue that another factor plays a significant and maybe an even bigger role, namely specificity. This will be discussed in section 5.2.2.

5.2.1.3 Inanimate objects

The overall tendency for inanimate objects is to be unmarked for case: 49 out of the 58 inanimate objects in the corpus (85,5%) are unmarked. An example can be found below, where *lushi* 'money' is the object, lacking the accusative case suffix.

	O	V
(31)	*lushi*	*neeka-mi*
	money	take.on.credit-SG
	'I lent him money.' (CHSF2015_02_02S4_Gervacio)	

Example (32) below shows one of the 9 marked inanimate objects, namely *kuinda* 'story'.

	O		V		A	
(32)	*rukula'*	*kuindanuten*	*menestee*	*rukuaaña*	*iya*	*tsa'mitya*
	ruku-la-chi	kuinda-nu-ten	menestee	ruku-ya-ña	i-ya	tsa-'mitya
	man-PL-POSS	story-ACC-?	need	man-FOC-DCL?	1-FOC	SEM-because

'I need the history of ancient people.' (CHSF2015_01_31S3_Yaanbu)

Most marked inanimate objects occur in the same context as the object in example (32) above, namely indicating a specific entity. This points to the role that specificity plays in the DOM system of Cha'palaa, which will be the subject of the following section.

5.2.2 Specificity

Table 3 below shows the number of marked and unmarked specific and non-specific objects. The specificity of a given object was determined by looking mainly at the translation and context of the object. When referring to a particular entity, an object is considered as specific. On the other hand, when an object refers to a generic entity, it is considered as non-specific; see section 4.1 for a more elaborate discussion on this issue.

Table 3. Marked and unmarked objects grouped by specificity value.

	Marked	Unmarked	Total
Specific	**45**	**9**	**54**
Non-specific	**3**	**53**	**56**
Total	**48**	**62**	**110**

As the table shows, most specific objects in the corpus are marked, namely 45 out of 54 (83,3%). Most non-specific objects are marked: 53 out of 56 (94,6%). Specific objects will be discussed in section 5.2.2.1, and non-specific objects in section 5.2.2.2.

5.2.2.1 Specific objects

Most objects that are identified as specific, are marked with *-nu*. In example (33) the object *futu* 'photo' is marked with *-nu*. The specificity of the object follows the fact that the photo has already been mentioned earlier in the story. Out of the four mentions of *futu*, the first instance is unmarked and the following three (which all occur in the next thirty seconds) are marked with *-nu*. The first mention of *futu* in the narrative is shown in example (34) below.

	O	V	
(33)	*futunu*	*kera'*	*puite'*
	futu-nu	kera-tu	puite-tu
	photo-ACC	see-SR	pass-SR

'He sees the photo and lets it pass.' (CHSF2015_02_03S4_Silverio)

				A	O
(34)	*tseintsunmalaa*	*tsaimi*	*juntsa*	*na'machi*	*futu*
	tsa-i-ntsu-n-mala-ya	tsa-i-mi	juntsa	na'ma-chi	futu
	SEM-become-PRG-NMZ-when-FOC	SEM-become-SG	that	daughter-POSS	photo

V	
katameeka	*umaa*
kata-meeka	umaa
find-?	now

'Being so, that young woman now finds the photo.' (CHSF2015_02_03S4_Silverio)

The fact that many objects which are marked with *-nu*, are likewise specific, is also indicated by additional factors. The place that the object in example (33) above takes in the narrative, further indicates its specificity. However, there are also objects whose specificity only follows the fact that these are marked with *-nu*. This is illustrated in the example below, where the object *chachilla* 'people' is marked with *-nu*, which results in its specific interpretation.

	A		O	V			
(35)	*pillujmu*	*tenmala*	*chachillanu*	*katyu*	*suuke'*	*kanu*	*kemu*
	pillujmu	tenmala	chachi-lla-nu	ka-tyu	suuke-tu	ka-nu	ke-nu
	Pillujmu	then	person-PL-ACC	take/get-NEG	chase-SR	take/get-INF	do-INF

'The Pillujmu then does not grab the people, he chases them no more.'
(CHSF2015_02_02S4_Gervacio)

Some objects however also lack marking with *-nu*, yet these still have to be interpreted as specific, due to the context in which these appear. In the corpus this is correct for 9 of the 54 specific objects (16,7%). This is for instance the case in the following example, in which the object *manbajali* 'blanket' is unmarked, although it refers to a specific blanket. This can be seen in the video recording of this story, in which the speaker talks about a specific blanket in her environment.

		A		V		O	
(36)	*mmm*	*mami*	*engu*	*juike'*	*netyuu*	*manbajali*	*depajtetyu*
	mmm	mami	engu	juike'	ne-tyu-ya	manbajali	de-pajte-tyu
	INTJ	baby?	here	pull	?-NEG-FOC	blanket	PL-go.down-NEG

'Baby don't go pulling the blanket, don't make it fall.' (CHFS2015_02_03S3_Daira)

Concluding this section, most of the specific objects in Cha'palaa are marked. This is not only clear when we look at the context of the objects, but it also works the other way around: the presence of case marking results in a specific interpretation. However, some objects are unmarked, but these still have a non-specific interpretation.

5.2.2.2 Non-specific objects

Most non-specific objects lack case marking. In the following example, the object *tu piyama* 'clay pot' is not marked *-nu*, as it refers to a generic, non-specific entity.

	A	O		V		
(37)	*shinbu-la*	*tu*	*piyama*	*ke-mudeeshaka*	*tu*	*piyama-bain*
	woman-PL	clay/earth	pot	do-?	clay/earth	pot-also

'The old women made clay pots.' (CHSF2015_01_31S3_Yaanbu)

Some objects are non-specific, because these refer to any entity of a given group, as is indicated by the definition of specificity in section 2.2.1. The following example illustrates this: the unmarked object *chaandutu* 'toucan' does not refer to a particular toucan.

				O	
(38)	*jela,*	*jele*	*jitu*	*chaandutu*	*main*
	jela	jele	ji-tu	chaandutu	main
	?	mountain	go-SR	toucan	one
	V				
	kake'	*maayu*	*ti'*	*jijiimi*	
	ka-ke-tu	maa-yu	ti-tu	jijii-mi	
	take/get-do-SR	come.back-EGO	say-SR	go.repeatedly-SG	

'Tell him that when you went to the mountain he came grabbing a toucan.' (CHSF2015_02_02S4_Gervacio)

Just like objects can be interpreted as specific when these are marked with *-nu*, the fact that a given object is non-specific, can also be derived from its unmarked status. The lack of marking on the object *ya* 'house' in the following example results in the interpretation that the subject is looking for a non-specific house, not a specific one.

	O	V	
(39)	*ya*	*mi'kii-nu*	*ji-la*
	house	search-INF	go-PL

'They are going to look for a house.' (CHSF2015_02_03S4_Silverio)

Nevertheless, 3 out of 56 tokens in the corpus (5,4%) are marked, yet these have to be interpreted as non-specific, following the context. These three instances are discussed below. In example (40) the object is *pishu* 'corn', which is marked but refers to corn in general. The fact that the sentence has a restricted translation, might be an indication that there is another factor at play, for instance focus (Martine Bruil p.c.).

		O	V?		A	
(40)	*tsenbalan*	*pishun*	*fadeju*	*jungu*	*tutsa'*	*rukula*
	tsan-malan	pishu-nu	fadeju	junga	tutsa-chi	ruku-la
	SEM-when	corn-ACC	?	there	Tutsa-POSS	man-PL

'And the people of Tutsa only ate corn.' (CHSF2015_01_31S3_Yaanbu)

In the other two examples, which are given in (41) and (42) below, it is even the question whether it concerns actual objects or not. The reason that I included these two examples in the data set, is because these are both marked with the accusative suffix *-nu*. As these could not be interpreted as indirect objects or locations – which are the other two grammatical roles that can be marked with *-nu* – I assumed they have some characteristics as objects. In the following example, *cawallu* 'horse' is marked with the accusative suffix *-nu*, but this does not refer to a specific horse. This sentence is about a tiger that looks like a horse.

	O	V
(41)	*cawallunu*	*machuntsaibalan*
	cawallu-nu	ma-chu-n-tsa-i-malan
	horse-ACC	again-live/sit-NMZ-SEM-become.VCL-when

'It feels as if it were a horse.' (CHSF2015_01_31S3_Yaanbu)

In the following example, *miruku* 'sorcerer' is marked with the accusative suffix. It is still unclear to me what the exact grammatical role of this NP is. However, it is still marked with *-nu*, whilst it has a non-specific interpretation.

		O	V			
(42)	*naa*	*miruku-nu-bain*	*janbi*	*kui-tyu-de-ju*	*entsaa*	*atyutyu*
	neither	sorcerer-ACC-also	heal	?-NEG-PL-be.VCL	this	small

'Sorcerers are not allowed to heal either.' (CHSF2015_01_31S3_Yaanbu)

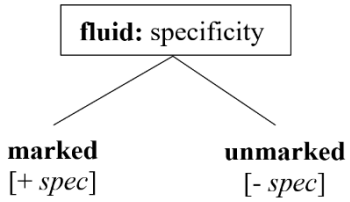
5.3 Conclusion

In section 5.2, I have described the distribution of marked and unmarked objects according to their value for animacy on the one hand, and specificity on the other hand. Most human objects are marked,

most inanimate objects are unmarked, while marked and unmarked animate objects are equally distributed. On the other hand, most specific objects (as is interpreted from the context in which they appear) are marked and most non-specific objects are unmarked. However, for most languages in which specificity is a determining factor in DOM, it is not the case that the specificity value of a given object causes the presence or absence of object marking. The presence of object marking conversely results in a specific interpretation and the absence of marking in a non-specific interpretation, as we have seen in section 2.2.2.

Animacy is an inherent feature of the noun. Therefore, if animacy is a decisive factor for DOM in Cha'palaa, it would be more likely that there would be no exceptions to it. However, there is no explanation in which animacy governs DOM without exceptions, as both human, animate and inanimate objects can occur with or without object marking. However, the feature of specificity is much less clear, as this is a matter of interpretation. There are very strong tendencies in Cha'palaa, in this way that marked objects are very often interpreted as specific and unmarked object almost always as non-specific. The exceptions to this statement may also come from the fact that I interpreted them incorrectly. Therefore, all these observations lead to my conclusion that DOM in Cha'palaa is most likely only determined by specificity. Marked objects in Cha'palaa are in principle interpreted as specific, and unmarked objects as non-specific. This analysis of the Cha'palaa DOM system is schematized in figure 5, which is based on the schemes that Klein and de Swart (2011) present in their approach to DOM.[10] The fluid nature of DOM governed by specificity lies in the fact that any object NP in Cha'palaa can be marked or unmarked, resulting in a different interpretation as specific or non-specific. The [+ *spec*] position represents marked objects which are interpreted as specific in Cha'palaa, whereas the [- *spec*] position indicates unmarked objects, which are interpreted as non-specific.

Figure 5. Schematic representation of the DOM system of Cha'palaa.



The fact that human objects tend to be marked with *-nu* and inanimate objects have a tendency to lack case marking, which has already been noted by Floyd (2018, 272–3), is an epiphenomenon of the fact that human objects are more often specific, whereas inanimate objects are more often non-specific. This is also illustrated in table 4 below, in which specific and non-specific objects are subdivided by animacy value. Most marked, specific objects are human (28 out of 45, or 62,2%), whereas most unmarked, non-specific objects are inanimate (44 out of 53, or 83,0%).

Table 4. Marked and unmarked objects divided by specificity value and subdivided by animacy value.

	Marked	Unmarked	Total
Specific	**45**	**9**	**54**
Human	28	1	29
Animate	9	3	12
Inanimate	8	5	13
Non-specific	**3**	**53**	**56**
Human	1	2	3
Animate	1	7	8
Inanimate	1	44	45
Grand total	**48**	**62**	**110**

[10] I have slightly altered Klein and de Swart's (2011) concept of the scheme by adding the words 'marked' and 'unmarked'. This also applies to the schemes in chapters 6 and 7.

Another argument in favour of the claim that specificity is the only determining factor in DOM in Cha'palaa, lies in the animate objects. We have seen that there is an equal distribution between marked and unmarked animate objects. Therefore, these have no preference to be either marked or unmarked. If animacy would govern DOM in Cha'palaa, this would be uncommon. As we have seen in section 2.1.2, languages in which DOM is governed by animacy generally make a two-way distinction in terms of which objects are marked and which are unmarked, resulting in either a human versus non-human distinction or an animate versus inanimate distinction. This would not apply to Cha'palaa, since this would imply a three-way distinction, which is rare amongst languages of the world. It could still be possible, but in my opinion, this is additional evidence that animacy does not play a role in the DOM system of Cha'palaa.

Although I propose that DOM in Cha'palaa is governed by specificity, some counterexamples of this claim can be mentioned. The three marked objects that (seem to) have a non-specific interpretation, which are discussed in section 5.2.2.2, might indicate that there are in some contexts additional factors that decide that a given object receives case marking. I have interpreted some objects as specific despite their unmarked status. This is mainly a result of the fact that the concerned entity appeared a short time earlier in the narrative. The second (or third) time the object was mentioned, I presumed the speaker was talking about a specific entity, which was mentioned earlier. There were also instances in which other contextual factors made clear the speaker was talking about a specific entity. However, this could also indicate that information structure plays a role in those examples. This would have to be investigated further.

Summarizing this section, there is enough evidence to claim that DOM is governed by specificity in Cha'palaa. However, not all objects can be explained in this way. This might indicate that in addition to specificity, other factors influence the presence or absence of case marking on the object in Cha'palaa.

Chapter 6. Differential object marking in Nam Trik, Awa Pit and Tsafiki

Chapter 5 dealt with the DOM system of Cha'palaa. In this chapter, I will describe the DOM systems of the other three Barbacoan languages. Nam Trik is discussed in section 6.1, Awa Pit in section 6.2 and Tsafiki in section 6.3.

6.1 Nam Trik

This section describes DOM in Nam Trik. First, I will give a short grammatical sketch with elements that are important in the understanding of the DOM system of Nam Trik (section 6.1.1). Then, I will discuss which factors determine DOM in Nam Trik (section 6.1.2), followed by a conclusion about how DOM works in the language (section 6.1.3).

6.1.1 Grammatical sketch

In this section, I deal with morphophonological processes, the alignment system of Nam Trik and one instance in which the first person genitive pronoun functions more or less as a definite article.

The most important morphophonological processes that occur in Nam Trik are elision, assimilation and epenthesis. These mostly occur at morpheme boundaries, when two morphemes are attached to each other (Gonzales Castaño 2019, 100–1). Elision and assimilation both occur between combinations of two vowels, two consonants, or a vowel and a consonant. Example (43) below illustrates all three processes. Elision occurs in the genitive pronouns, where *na-wai* '1-GEN' surfaces via /aai/ as *nei~nai* 'my'[11], and the indirect object *usri-wan* 'mother-DAT' surfaces as *usran*, as the combination /i-wa/ results in /a/ (Gonzales Castaño 2019, 109–10). Assimilation occurs at the boundary between *pen-ɨntrain* 'buy' and *chor* 'go', where the palatal approximant /j/ of *y* 'go' assimilates to the alveolar nasal /n/ of the non-egophoric marker *-in*, resulting in the post-alveolar affricate [ʧ] (Gonzales Castaño 2019, 123). And finally, because the final *-n* in *pen* 'buy' is followed by another consonant in the prospective marker *-ntr-*, an epenthetic *-ɨ-* has to be inserted (Gonzales Castaño 2019, 134).

(43)	*nei*	*mɨskaimpe*	*nai*	*usran*	*contan*	*carro*
	na-wai	mɨskaim-pe	na-wai	usri-wan	cont-an	carro
	1-GEN	dad-TOP	1-GEN	mom-DAT	contar-NEGO	car
	pen-ɨntrain		*chor*		*chitan*	
	pen-ɨ-ntr-ap-in		y-or		ch-i-t-an	
	buy-EPEN-PROS-NEGO		go.SG-EGO.SG		say-EPEN-EGO.EXP-NEGO	

'My dad told my mom that we are going to buy a car.' (Gonzales Castaño 2019, 466)

Nam Trik has a nominative-accusative alignment system.[12] Grammatical information is marked with suffixes on the words, which means that Nam Trik is an agglutinative language. The most common and most attested word order is AOV and SV, although there occur also some other word orders; only the order VOA is not attested. Both the subject of an intransitive clause and the subject of a transitive clause (the agent) are unmarked. The object of a transitive clause is marked with the marker *-wan*, which will be discussed in more detail in section 6.1.2 (Gonzales Castaño 2019, 430–1; 435). In example (44) below, the agent *nɨ* 'he' is in sentence initial position and lacks any case marking. It is followed by the object *saco* 'jacket', which is underlying marked with *-wan*. The verb is in final position.

[11] It seems that both forms of the first person genitive pronoun *nai* and *nei* are in free variation, with *nai* occurring the most.

[12] With the exception of a restricted class of experiencer verbs (Gonzales Castaño 2019, 430), which will not further be discussed.

	A		O	V
(44)	*nɨ*	*kucha*	*sacon*	*wesron*
	nɨ	kucha	saco-wan	wesro-an
	3	also	jacket-ACC	take.off-NEGO

'He also put off his jacket.' (Gonzales Castaño 2019, 432)

Both subjects and agents can be marked with the topic marker *-pe*, although this marker not only occurs on subjects/agents. It can also occur on objects amongst others. However, the topic marker *-pe* and the accusative marker *-wan* are in complementary distribution. It is used by the speaker to clarify the concerned element of the clause (Gonzales Castaño 2019, 445–6). In the following example, the agent, object and location are all marked with the topic marker *-pe*.

(45)	*nampe*	*yawimpe*	*pueblope*	*penɨmelɨ*	*ker*
	na-m-pe	yawim-pe	pueblo-pe	pen-ɨ-mɨ-elɨ	kɨ-er
	1-PL-TOP	meat-TOP	town-TOP	buy-EPEN-NEG-NMZ$_1$.PL	COP-EGO.PL

'We don't buy meat in town.' (Gonzales Castaño 2019, 456)

Contrary to the other Barbacoan languages, Nam Trik has a way to express definiteness. Besides being used in possessive constructions, the first person genitive pronouns *nai* 'my' and *namoi* 'our' can also be used as definite markers. First, the regular use of the genitive pronoun is illustrated below in *namoi ya* 'our house'.

(46)	*namoi*	*yawan*	*martrap*	*yu*
	na-m-wai	ya-wan	mar-tr-ap	yu
	1-PL-GEN	house-ACC	make-PROS-NFIN	here

'To make our house here.' (Gonzales Castaño 2019, 164)

But in example (47) below, *namoi pusruk* refers to the thoughts that are happening in the head of the character in the story, and not that of the utterance of the speaker (Gonzales Castaño 2019, 166).

(47)	*isuintra*	*kɨn*	*namoi*	*pusrukyu*
	isu-i-ntr-ap	kɨ-an	namoi	pusruk-yu-pe
	think-EPEN-PROS-NFIN	COP-NEGO	DEF	head-INE-TOP

'She [surely] was thinking in the head [of her/*of us].' (Gonzales Castaño 2019, 167).

This construction does not occur very often; Gonzales Castaño (2019, 166) found 73 examples in her corpus. It could be that this phenomenon more often occurs in stories than in everyday speech; the examples that are mentioned in Gonzales Castaño (2019) only come from stories.

6.1.2 DOM in Nam Trik

6.1.2.1 Description

In this section, I will describe the DOM system of Nam Trik. In this description, I will use Gonzales Castaño (2019), who based her description of Nam Trik on data from the variety of the Totoró village (Gonzales Castaño 2019, 60–70).

The case marker *-wan*, which we already encountered in section 6.1.1, can be used to mark different semantic roles, which are assigned to both direct and indirect objects. *-wan* originally only marked indirect objects, functioning as a dative case marker. This is illustrated in the following example, where the indirect object *usri* 'mom' is marked with *-wan*.

	V	IO
(48)	*motsɨnor*	*usriwante*
	mots-ɨ-na-or	usri-wan-te
	tomar-EPEN-CAUS-EGO	mom-DAT-REST

'I already gave the mother to drink [the remedy].' (Gonzales Castaño 219, 352)

Nowadays, *-wan* can also be used to mark direct objects, which can be seen in example (49) below. Both objects *tur* 'head' and *mantrɨ* 'heart' are marked with *-wan*.

	A	O			V	V	O
(49)	*na*	*nei*	*turwan*	*pechopala*	*tratra*	*mɨrar*	*mantrɨwan*
	na	na-wai	tur-wan	pecho-pala	tratr-a	mɨr-ar	mantrɨ-wan
	1	1-GEN	head-ACC[13]	chest-above	put-SR	sense-EGO	heart-ACC

'When I put my head on his chest I felt his heart.' (Floyd and Norcliffe 2016, 220)

Indirect objects are always marked with *-wan*, whereas direct objects alternate between being marked and being unmarked. Historically speaking, this is a general indicator of the fact that *-wan* is originally a dative case suffix, and the use as an accusative case suffix is a later development (Denis Creissels p.c. in Gonzales Castaño 2019, 460–1).

In Nam Trik, only specificity plays a role in the DOM system. Objects that are marked have a specific interpretation, whereas unmarked objects have a non-specific interpretation. The following two examples illustrate the difference between a marked and unmarked object. The object of example (50) *trɨ* 'firewood' is marked with *-wan*, resulting in a specific interpretation. The object of example (51) on the other hand, *sralɨ* 'woman', lacks this marking and has therefore a non-specific interpretation.

	O		V
(50)	*trɨwan*	*cuchillotɨka*	*paran*
	trɨ-wan	cuchillo-tɨka	par-an
	firewood-ACC	knife-INS	cut-NEGO

'The firewood is cut with a knife.' (Gonzales Castaño 2019, 464)

	O	V	
(51)	*sralɨ*	*lantra*	*imor*
	sralɨ	la-ntr-ap	y-mɨ-or
	woman	search.for-PROS-NFIN	go.SG-NEG-EGO.SG

'I am not going to look for a woman.' (Gonzales Castaño 2019, 462)

There seem to be no indications that animacy plays any role in the Nam Trik DOM system. Both human, animate and inanimate objects can receive and lack marking with *-wan* (Gonzales Castaño 2019, 462). In example (52) below the inanimate object *trɨ* 'firewood' lacks case marking, resulting in a non-specific interpretation, whereas in example (50) above, *trɨ* occurs with case marking.

		O	V	
(52)	*kaumai*	*trɨ*	*lantrap*	*yor*
	kau-mai	trɨ	lan-tr-ap	ya-or
	mountain-ALL	firewood	search-PROS-NFIN	go.SG-EGO

'I'm going to the mountain to look for firewood.' (Gonzales Castaño 2019, 463)

[13] Gonzales Castaño (2019) always glosses *-wan* as dative, indicating the dative origin of this case marker. However, I will gloss *-wan* with DAT when it is attached to an indirect object and with ACC when it is used in combination with a direct object.

6.1.2.2 Low transitive verbs

The DOM system of Nam Trik is very straightforward, with almost no exceptions. There is however one construction in which objects are never marked, even if they have a specific interpretation. This depends on the type of verb, namely a verb of possession with a low level of transitivity.[14] This concerns the verb *po* 'have', in combination with the nominalizer *-ik* (singular) or *-eɬi* (plural) and the copula *kɨp* as auxiliary. In this construction, the object is never marked, as can be seen in the following example, where the object *pɨn notsak* 'three sisters' is not marked for accusative case, because it is part of the aforementioned construction.

	O				V	
(53)	*pɨn*	*notsakpe*	*pari*	*maitik*	*poik*	*kor*
	pɨn	notsak-pe	pari	maitik	po-ik	kɨ-or
	three	sister-TOP	very	beautiful	have-NMZ_1.SG	COP-EGO

'I have three beautiful sisters.' (Gonzales Castaño 2019, 471)

6.1.2.3 Ditransitive constructions

As we have seen in example (48) above, the origin of *-wan* lies in the dative case, with its use now being extended to the accusative. An indicator of this is that there occur objects that lack marking with *-wan*, resulting in a non-specific interpretation, whereas indirect objects are always marked with *-wan*, even when they have a non-specific interpretation. This can be seen in example (54) below, where the indirect object *misak* 'people' is marked with *-wan*, but it has a non-specific interpretation.[15]

	IO	V			
(54)	*misakwan*	*contam*	*poik*	*kɨn*	*asha*
	misak-wan	conta-am	po-ik	kɨ-an	asha
	people-DAT	tell-PRIO	have-NMZ_1.SG	COP-NEGO	so
	mapeɬi		*ker*	*cha*	
	ma-ap-eɬi		kɨ-er	ch-ap	
	eat-NFIN-NMZ_1.PL		COP-EGO.PL	say-NFIN	

'I have to tell people that we do know how to eat.' (Gonzales Castaño 2019, 473)

6.1.3 Conclusion

Although I follow Gonzales Castaño (2019, 459–72) in her claim that DOM in Nam Trik is governed by specificity, my approach is different than hers. According to Gonzales Castaño (2019, 431–2), first and second person objects are always marked with *-wan*, whereas for third person objects, it depends on the specificity of the object; specific objects are always marked with *-wan*, whereas non-specific objects always lack case marking. This approach implies that the marking of a given object follows its specificity value. However, as we have seen in section 2.2.2, specificity in DOM generally works the other way around. Not the specificity value of a given object results in it being marked or unmarked, but the presence or absence of marking results in its interpretation as specific or non-specific, respectively. This also applies to DOM in Nam Trik: objects that are marked with *-wan* always have a specific interpretation, whereas objects that lack the case marker, are interpreted as non-specific. This would also explain why first and second person objects are always marked with *-wan*: they are in general always part of the conversation, so they would always refer to a specific person, for which the

[14] This is not uncommon in languages of the world that exhibit DOM (Gonzales Castaño 2019, 470).

[15] Although it could also be the case that the recipient of a speech verb is systematically marked with the accusative, as this also occurs in Quechua, which is spoken in the same region (Martine Bruil p.c.).

marking with *-wan* is needed.[16] Example (55) below illustrates the marking of a first person object, by means of the first person plural object pronoun *namon* 'us'.

	A	O	V		
(55)	*ñi*	*namon*	*lar-ɨ-ntrap*	*atrik*	*wan*
	ñi	na-m-wan	lar-ɨ-ntr-ap	atr-ik	wa-an
	2	1-PL-ACC	see-EPEN-PROS-NFIN	come-NMZ$_1$.SG	sit.SG-NEGO.SG

'You can come see us.' (Gonzales Castaño 2019, 461)

As we have seen in section 6.1.1 above, in certain instances, the first person genitive pronouns are used to express definiteness in Nam Trik. Objects that are preceded by a first person genitive pronoun used as definite marker are always marked with *-wan*, resulting in a specific interpretation. This is illustrated in the following example, where the object *nai walɨm* 'the ax' is marked with *-wan*.

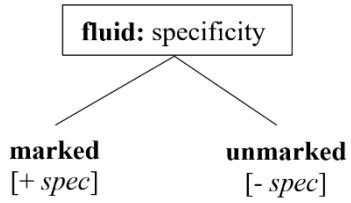
	O					V
(56)	*nai*	*walɨmwan*	*uyu*	*kiltakyu*	*uyu*	*wesrowa*
	nai	walɨm-wan	uyu	kiltak-yu	uyu	wesro-wa-ap
	DEF	ax-ACC	LOC	shoulder-INE	INE	take.out-sitting-NFIN

'(The boss) pulls out the (*my) ax that he had (slung) on his shoulder.' (Gonzales Castaño 2019, 469)

In this particular construction, one could wonder whether the definite particle *nai/namoi* is in fact a trigger for case marking. On the other hand, it is also possible that the specific interpretation of *nai walɨm* still follows the fact that it is marked with *-wan*, but that marking with *-wan* is unavoidable in this construction, as the specific interpretation has to follow the fact that the object is definite.

In conclusion, we could say that Nam Trik has a DOM system in which only one factor is relevant, namely specificity. The specificity value of a given object follows the presence or absence of case marking; object marking is applied or avoided by the speaker according to their need to express a specific or non-specific object. This is summarized in figure 6 below, where [+ *spec*] indicates the objects that are marked with *-wan*, resulting in a specific interpretation. The [- *spec*] position stands for the unmarked objects in Nam Trik, which are interpreted as non-specific.

Figure 6. Schematic representation of the DOM system of Nam Trik.



6.2 Awa Pit

In this section, I will describe DOM in Awa Pit. First, I will give a short grammatical sketch with elements that are important in the understanding of the DOM system of Awa Pit (section 6.2.1). In section 6.2.2, I will discuss the determinative factors of DOM in Awa Pit, which is followed by a conclusion about how DOM works in this language (section 6.2.3).

[16] Or, it could be a result of the fact that first and second person objects can be placed higher on the definiteness/specificity scale as discussed in section 2.2.2.

6.2.1 Grammatical sketch

The grammatical elements that will be featured in this section are the word order and alignment system of Awa Pit, and the origin and use of the morpheme that marks objects.

Awa Pit has an AOV and SV word order, which is quite fixed. Unless being separated with a pause, no elements can occur after the verb (Curnow 1997, 50). It is an agglutinative language which marks grammatical information with suffixes and clitics. Example (57) below illustrates the word order of a transitive sentence.

	A	O		V
(57)	*Laureano*	*paynya*	*kuzhu*	*pyaŋta-ma-t*
	Laureano	his	pig	kill-COMP-PFPART

'Laureano had killed his pig.' (Curnow 1997, 296)

Awa Pit has a nominative-accusative alignment system. Both the subject of an intransitive clause and the agent of a transitive clause are unmarked. The object of a transitive clause can be marked in certain contexts, although this depends on different factors. Singular object pronouns consist of the subject pronoun marked with an accusative suffix. With the plural object pronouns, an accusative clitic is attached to the last element of the object NP that contains a personal pronoun (e.g. *au kutnya=mɨza* we three=(1/2PL.)ACC 'us three'). The object pronouns can be found in table 5. Object pronouns are always marked, contrary to object nouns, which are only marked in specific contexts (Curnow 1997, 63–5; 85–6).

Table 5. Object pronouns in Awa Pit (Curnow 1997, 86).

1st person singular	*na-wa*
2nd person singular	*nu-wa*
3rd person singular	*us-a*
1st person plural	*au …=mɨza*
2nd person plural	*u …=mɨza*
3rd person plural	*uspa …=tuza*

Nouns in object position can be marked with the clitic *=ta*, as can be seen in the following example. Here, the object *Santos* is marked with *=ta*.

(58)	*na=na*	*Santos=ta*	*izh-ta-w,*	*mii=wa*	*shaa-zi*
	1SG(.NOM)=TOP	Santos=ACC	see-PAST-LOCUT.SUBJ	path=in(approx)	walk-NLOCUT

'I saw Santos, he was walking along the path.' (Curnow 1997, 138)

Curnow (1997, 64–5) identifies this marker as a clitic postposition rather than case inflection, although the postpositions give the same grammatical information as case markers. The fact that *=ta* is a clitic, can be seen in the following example, where the accusative marker is attached to the entire noun phrase *awa iita* 'the dead man', instead of the noun only.

(59)	*na=na*	*awa*	*ii-ta=ta*
	1SG(.NOM)=TOP	person	die-PFPART=ACC

'I saw the dead man.' (Curnow 1997, 121)

The accusative marker *=ta* is probably related to the locative marker *=ta*. This locative marker is used to denote a specific location like a container or a town, contrary to other locative markers (Curnow 1997, 135–6). The use of locative *=ta* is illustrated in the following example, where the location *Nulpe Medio* is indicated with the locative postposition.

(60) *Nulpe* *Medio=ta* *tu-y,* *profesor=na*
Nulpe Medio=in be.in.place-NLOCUT teacher=TOP
'The teacher is in Nulpe Medio.' (Curnow 1997, 135)

6.2.2 DOM in Awa Pit

6.2.2.1 Description

In this section, I will describe the DOM system of Awa Pit. This description is based on what Curnow (1997) already has written on the subject. Both animacy and specificity[17] are relevant in the DOM system of Awa Pit. I will first discuss animacy and then turn to specificity.

Human objects can be marked or unmarked, whereas non-human objects are never marked. The examples (61) and (62) below show non-human objects; the object *kuzhu* 'pig' in example (61) is animate, whereas the object *pala* 'plantains' in example (62) is inanimate. Both are unmarked.

A O V
(61) *Demetrio* *kuzhu* *pay-t* *kway-zi*
Demetrio pig buy-SV DROP-NLOCUT
'Demetrio bought a pig.' (Curnow 1997, 65)

A O V
(62) *nu=na* *pala* *ku-mtu-y*
2SG(.NOM)=TOP plantain eat-IMPF-NLOCUT
'You are eating plantains.' (Curnow 1997, 65)

The following two sentences contain human objects. In example (63), the object *Demetrio* is marked with *=ta*, whereas in example (64), the object *ashaŋpa* 'woman' is unmarked.

A O V
(63) *na=na* *Demetrio=ta* *pyan-tu*
1SG(.NOM)=TOP Demetrio=ACC hit-IMPFPART
'I hit Demetrio.' (Curnow 1997, 65)

O V
(64) *ashaŋpa* *ŧita-mtu-s*
woman search-IMPF-LOCUT
'I am looking for a woman [to marry].' (Curnow 1997, 72)

The difference between marked and unmarked human objects lies in the interpretation of their value for specificity. Marked human objects have a specific interpretation, whereas unmarked human objects have a non-specific interpretation. This can be seen if we compare example (64) above with the following example. The object *ashaŋpa* 'woman' in example (64) has a non-specific interpretation, because it lacks the clitic *=ta*. In example (65) on the other hand, the object *ashaŋpa* 'woman' is marked with *=ta* and therefore has a specific interpretation (being the one who killed Santos).

V O
(65) *Santos=ta* *pyaŋta-ta=mika=ta* *pyan-ta-w,* *ashaŋpa=ta*
Santos=ACC kill-PFPART=NMZ.SG=ACC hit-PAST-LOCUT.SUBJ woman=ACC
'I hit the one who killed Santos, the woman.' (Curnow 1997, 288)

[17] Curnow (1997) uses the term *referentiality* here.

Non-human objects, which are thus never marked, can be interpreted as either specific or non-specific. In example (66), the inanimate object *an kɨh* 'this leaf' is unmarked, yet it has a specific interpretation. The inanimate, unmarked object *pitikku* 'sloth' in example (67) has a non-specific interpretation.

	O		V		
(66)	*an*	*kɨh*	*ku-ka=na*	*shi=ma*	*ki-nɨ-zi*
	this	leaf	eat-WHEN=TOP	what=INT	do-FUT-NLOCUT

'If [one] eats this leaf, what will happen?' (Curnow 1997, 273)

	A	O	V
(67)	*ishu=na*	*pitikku*	*ku-m*
	tiger=TOP	sloth	eat-ADJZR

'Tigers eat sloths.' (Curnow 1997, 72)

6.2.2.2 Low transitive verbs

Although human objects with a specific interpretation can always be marked with *=ta*, there are certain verbs whereby the object can be marked with a locative postposition instead of the accusative clitic (although marking with *=ka* is still possible in this type of constructions). This occurs with verbs that are low in transitivity (Curnow 1997, 72–3). Consider the following examples, which both have a low level of transitivity (in Curnow's (1997, 73) words: "there is no transfer of action"). In example (68), the object is marked with the accusative clitic *=ta*, whereas in example (69), the object is marked with the locative postposition *=wa* (which is an allomorph of *=pa*).

	O		V
(68)	*Santos=ta=na*	*mɨza*	*pyan-a-ma-t*
	Santos=ACC=TOP	almost	hit-PL.SUBJ-COMP-PFPART

'They almost beat up Santos.' (Curnow 1997, 73)

	O		V
(69)	*Demetrio=wa=na*	*mɨza*	*pyan-ma-t*
	Demetrio=in(approx)=TOP	almost	hit-COMP-PFPART

'[They] almost beat up Demetrio.' (Curnow 1997, 73)

6.2.2.3 Ditransitive constructions

In certain contexts, it is possible to mark non-human objects with *=ta*, namely in ditransitive constructions. Consider for example the following sentence, where the non-human (indirect) object *kizha* 'dog' is marked with *=ta*.

	A	IO	DO	V
(70)	*na=na*	*kwizha=ta=na*	*comida*	*kwin-ta-w*
	1SG(.NOM)-TOP	dog=ACC=TOP	food	give-PAST-LOCUT.SUBJ

'I gave food to the dog.' (Curnow 1997, 73)

And in example (71), the specific human object *pashu* '(my) daughter' lacks the clitic *=ta*.

	A	IO	DO	V
(71)	*na=na*	*Santos=ta*	*pashu*	*mɨla-ta-w*
	1SG(.NOM)=TOP	Santos=ACC	daughter	give-PAST-LOCUT.SUBJ

'I gave my daughter to Santos.' (Curnow 1997, 74)

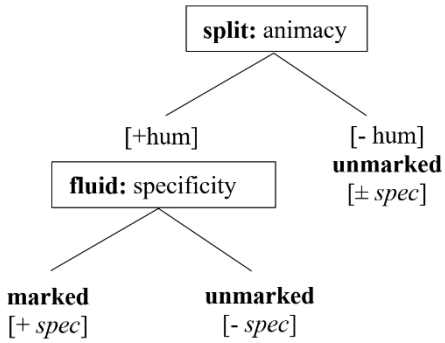
According to Curnow (1997, 73–4), this has to do with the fact that the recipient of a ditransitive clause, which is the indirect object, usually is a human. The gift in this construction on the other hand, which is the direct object, is usually not a human. This leads to the indirect object always being marked with *=ta*, humanizing any non-human entity, and the direct object always lacking *=ta*, dehumanizing any human entity, also in ditransitive constructions that do not follow the general pattern.

Although Curnow (1997) analyzes this as a deviation from the semantic norm, it is also possible that this has something to do with dative marking. There is no mention in Curnow's (1997) grammar about any dative case marker or postposition, but it might be the case that *=ta* can also be used as a dative marker in certain contexts. We have seen in example (70) and (71) that the indirect object is always marked with *=ta*, even when it is not human. Furthermore, it is not uncommon in other languages that the accusative marker and the dative marker have the same form. These two facts could indicate that *=ta* also can be used as a dative postposition in Awa Pit. In this case, the lack of accusative marking with specific human objects could in fact still be explained from the fact that the direct object in a ditransitive clause is usually not a human entity, and therefore never marked with accusative *=ta*, or that two elements that are both marked with *=ta* cannot occur in the same clause.

6.2.3 Conclusion

Awa Pit is an excellent example of a multidimensional DOM system in the terms of Klein and de Swart (2011). Figure 7 below shows a schematic representation of the DOM system of Awa Pit, in line with their model. Animacy functions as a split alternation: non-human objects are obligatorily unmarked; any marked non-human object would be ungrammatical in Awa Pit. Those objects can both be interpreted as specific or non-specific, which is indicated by [± *spec*] in the figure below. Human objects are optionally marked, whereby specificity functions as a fluid alternation. Marked human objects are interpreted as specific (which is indicated by [+ *spec*]), whereas unmarked human objects have a non-specific interpretation ([- *spec*]).

Figure 7. Schematic representation of the DOM system of Awa Pit.



6.3 Tsafiki

This section deals with the DOM system of Tsafiki. In the first section (6.3.1), I will give a short grammatical sketch with relevant elements for the understanding of DOM in this language. In section 6.3.2, I will discuss the factors that determine DOM in Tsafiki. This is followed by a conclusion about how DOM works in this language, in section 6.3.3.

6.3.1 Grammatical sketch

In this section, I will deal with the word order and alignment system of Tsafiki. The most common word order in Tsafiki is AOV and SV, although other word orders are also attested, for example OVA, OAV, VAO and VS (Dickinson 2002, 41–5). Example (72) is a sentence with the basic word order AOV.

			A			O
(72)	*junni*	*ya*	*pone*	*uni=ri*	*ya*	*sona=ka*
	then	3P2	shaman	old.M=FOC	3P2	woman=ACC
	V					
	joso-le-nu-ti-e					
	release-cause.SUF.GNV-EV-RP-DCL					
	'They say the old shaman released the woman.' (Dickinson 2002, 42)					

Tsafiki is an agglutinative language, with grammatical information mostly being marked with suffixes and enclitics; there are some prefixes or proclitics, for example the semblative *tsan=*.

Tsafiki has a nominative-accusative alignment system.[18] The subject of an intransitive clause and the agent of a transitive clause are unmarked for case. The object of a transitive clause is in certain contexts marked with the accusative case clitic *=ka*. In the following example, the relative clause *apa polenamin* 'his father who was passing by' is marked with *=ka*. This example further illustrates the fact that *=ka* is a clitic and not a suffix, as it is attached to the whole relative clause and not to the noun *apa* 'father'.

	A	O			V
(73)	*ya=ri*	*apa*	*pole-na-min=ka*	*koto=chi*	*tuli-po-chi-na-yo-e=ke*
	3P2=FOC	father	go.across-PRG-SIT=ACC	slope=LOC	push-put:GNV-INCEPT-PRG-CNJ-DCL=QT
	'He pushed his father who was passing by down the slope.' (Dickinson 2002, 269)				

The clitic *=ka* is not only used to mark direct objects, but is also one of the ways to express a location. In example (74), *manto*, the Tsafiki name for Santo Domingo, is marked with *=ka* in order to indicate an allative location.[19]

(74)	*ya*	*la*	*man-to=ka*	*ji-e*	*ti-e*
	3P2	1M	other-earth=LOC	go-DCL	say-DCL
	'He said that I went to Santo Domingo.' (Dickinson 2002, 93)				

The indirect object of a ditransitive clause is marked with the clitic *=chi*, as can be seen with the indirect object *yachi* 'him' in example (75) below.

(75)	*ya=chi*	*mala*	*kuwa-na*
	3P2=DAT	chicha	give-PRG
	'Could you give him the chicha?' (Dickinson 2002, 85)		

Although it is possible to identify the most common word order and the alignment system of Tsafiki, there are many clauses where the core arguments are omitted. In Dickinson's (2002) sample of 668 clauses, 44 per cent (294 clauses) did not contain any expression of a core argument, and in only 4 per cent (30 clauses), both the agent and subject of a bivalent clause were present (Dickinson 2002, 225).

6.3.2 DOM in Tsafiki

6.3.2.1 Description

This section deals with a description of DOM in Tsafiki. Although there are not that many clauses in Tsafiki that have an overt object, it is still possible to conclude that DOM exists in Tsafiki. This was

[18] According to Dickinson (2002, 219–26), case marking in Tsafiki is semantic rather than grammatical, having to do with the starting and ending point of an action. However, as this theoretical point goes too far to discuss this here, I will not deal with it further.

[19] In combination with a motion verb, locative *=ka* has an allative sense, as a result of the semantics of the given verb. In other contexts, it marks a stative location (Dickinson 2002, 56–7).

already observed by Dickinson (2002, 228), who stated that objects are almost always marked when they are human, animate objects are less often marked and inanimate marked objects are even more uncommon. Although this observation is not false, there is more to say about the DOM system of Tsafiki. It is actually the case that specificity plays the biggest, and maybe the only, role in this system. The tendencies that Dickinson (2002) noted, are a result of the fact that specificity is the determinative factor.

Objects that are marked with *=ka* have a specific interpretation, whereas objects that lack marking with *=ka* are interpreted as non-specific. In the following example, the object *nama* 'daughter' is marked with *=ka*, resulting in a specific interpretation.

			A		O	V
(76)	*aman*	*ya*	*apari*	*ayanbe*	*namaka*	*otilatimanti'*
	aman	ya	apa=ri	ayan=be	nama=ka	o-ti-la-ti-man-ti-e
	now	3P2	father=FOC	mother=COM	daughter=ACC	call-say:GNV-PL-say:VCL-SIT-RP-DCL
	'Now they say the father and mother called (their) daughter.' (Dickinson 2002, 285)					

The following example contrasts this, as the object *tsachila* 'everybody' is not marked with *=ka*. This results in a non-specific interpretation.

	O			V	
(77)	*tsachila*	*tikatiya*	*ya*	*fimin*	*jotieti'*
	tsachi=la	tikatiya	ya	fi-min	jo-ti-e-ti-e
	people=PL	whatever	3P2	eat-IMPFPART	be:AUX-RP-DCL-RP-DCL
	'They say he said he [the tiger] eats everybody.'[20] (Dickinson 2002, 364)				

Both objects in the examples above are human, which illustrates that human objects can occur both marked and unmarked. The same holds for animate objects and inanimate objects. The animate object *jodo naka* 'small armadillo' in example (78) is marked with the accusative case clitic *=ka*. Therefore, it refers to a specific armadillo.

	A	O			V		
(78)	*Fan*	*jodo*	*na-ka=ka*	*me=le*	*ka-to*	*soko*	*kari-e*
	Juan	armadillo	small-NCL=ACC	tail=LOC	get-SR	writhe	cause:GNV-DCL
	'Grabbing the little armadillo by the tail Juan made him squirm.' (Dickinson 2002, 267)						

On the other hand, the animate object *mololo* 'firefly' in example (79) lacks the clitic *=ka*, and is a non-specific object.

	O	V		
(79)	*mololo*	*fi-na-yo-e*	*ti-nin*	*ti-nu-ti-e*
	firefly	eat-PRG-CNJ-DCL	say-CNTR	say:GNV-EV-RP-DCL
	'They say he said that he was just eating fireflies.' (Dickinson 2002, 92)			

The inanimate object *lake kala tolo* 'gold money bag' in example (80) is marked with *=ka*, resulting in a specific object, whereas the clitic is absent on the inanimate, non-specific object *ano* 'food' in example (81).

[20] When the imperfective participle *-min* occurs in combination with the auxiliary *jo* 'be', this indicates habitual aspect (Dickinson 2002, 364). A more accurate translation would therefore be 'They say he said he [the tiger] eats people repeatedly [implicating that after a while, the tiger ate everybody]'.

	A	O			V	
(80)	*ya*	*lake*	*kala*	*tolo=ka*	*ka-to*	*man=ja-la-i-man-ti-e*
	3P2	yellow	money	bag=ACC	get-SR	again-come-PL-become:VCL-SIT-RP-DCL

'They say they grabbed the gold money bag/bag of gold money and came back.' (Dickinson 2002, 70)

		A	O	V	
(81)	*jun*	*ayanni*	*ano*	*kabi*	*jinamanyotieti'*
	jun	ayan=ri	ano	ka-bi	ji-na-man-yo-ti-e-ti-e
	3D1	mother=FOC	food	get-LOC	go-PRG-SIT-CNJ-RP-DCL-RP-DCL

'They say the mother said she was going to get food.' (Dickinson 2002, 108)

The examples in this section have shown that marked objects have a specific interpretation and unmarked objects a non-specific interpretation, irrespective of their value for animacy. The fact that human objects are generally always case marked, animate objects less often and inanimate objects even less, as Dickinson (2002, 228) observed, is in my opinion a result of the fact that human and animate objects are more often specific than inanimate objects. It is just a logical consequence of the fact that specificity determines DOM in Tsafiki, that there occur less unmarked human objects and marked inanimate objects.

It is worth noting that there are still some counter-examples to this claim, as we can see for instance in example (82) below. The inanimate object *lanto* 'clay' has a non-specific interpretation in the translation, yet it is marked with accusative *=ka*. An explanation for this case might be that the sentence is part of a whole story and that there has already been talked about clay earlier in the narrative, which makes that *lanto* in example (82) still refers to specific clay. Another explanation could be that it is very uncommon that people eat clay, which results in the marking of this surprising situation (Martine Bruil p.c.). However, I do not have access to the original material, so I was not able to check this.

		A			
(82)	*aman*	*yalari*	*wari*	*ano*	*mocha*
	aman	ya=la=ri	wari	ano	mo=chi
	now	3P2=PL=FOC	well	food	hunger=INS
	O	V			
	lantoka	*filakito*		*chularatieti'*	
	lanto=ka	fi-la-ki-to		chu-la-ra-ti-e-ti-e	
	clay=ACC	eat-PL-do:GNV-SR		sit-PL-be.in.position:GNV-RP-DCL-RP-DCL	

'Now they lived eating clay because of hunger.' (Dickinson 2002, 309)

6.3.2.2 Topicalized objects

In regular transitive sentences, DOM is determined by specificity. However, other constructions exist that have a different type of DOM, namely topicalized objects. In this type of constructions, the object is in sentence initial position and is always marked with *=ka* (Dickinson 2002, 229). An example can be found below, where the object *pini* 'snake' is very important in the narrative. It is therefore fronted and marked with the accusative case clitic.

		O		A	V
(83)	*wari*	*pini=ka=ri*	*wari*	*ayan=la=ri*	*fi-la-ki-n-ki-n*
	well	snake=ACC=FOC[21]	well	mother=PL=FOC	eat-PL-do:VCL-ST-do:VCL-ST

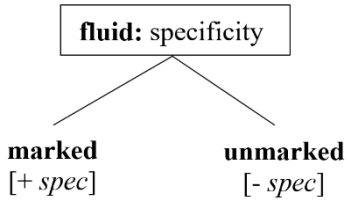
'Well this snake, the parents must have just eaten it.' (Dickinson 2002, 229)

It is most likely that object marking is required in this case in order to avoid ambiguity concerning the identification of the subject and object. As we have seen in section 6.3.1, the most common word order in Tsafiki is AOV. If *pini* 'snake' would be unmarked in example (83), it would be interpreted in this way that the snake ate the parents. So, in order to interpret this sentence correctly, objects that are in sentence-initial position always have to be marked.

6.3.3 Conclusion

Tsafiki has a DOM system in which only one factor plays a decisive role, namely specificity. This factor occurs as a fluid alternation: the same object could be both marked and unmarked. The presence or absence of case marking results in a different interpretation for its specificity value. This is illustrated in figure 8 below, where [+ *spec*] indicates marked objects that are interpreted as specific, and [- *spec*] indicates unmarked objects that are interpreted as non-specific.

Figure 8. Schematic representation of the DOM system of Tsafiki.



An epiphenomenon of this type of DOM is that human and animate objects occur more often marked than inanimate objects, as human and animate objects are more often specific than inanimate objects. This could lead to the understandable but false observation that animacy also plays a role in this type of DOM systems.

[21] The question whether *=ri* is a focus or topic particle still had to be answered at the time of Dickinson's dissertation, which is the source for this example. I refer to Dickinson (2002, 59–60)'s discussion for more information, as this falls beyond the scope of my thesis.

Chapter 7. A comparison of differential object marking in the Barbacoan languages

Chapter 5 was dedicated to a description of the DOM system of Cha'palaa. Chapter 6 dealt with the DOM systems of the other Barbacoan languages Nam Trik, Awa Pit and Tsafiki. In this chapter, I will compare the DOM systems of those four languages with each other. In section 7.1, I will discuss the suffix/clitic that is used to mark objects in the different Barbacoan languages. In section 7.2, I compare the factors that play a role in the different DOM systems with each other. In section 7.3, I discuss some deviant patterns concerning DOM in the different languages.

7.1 The case marker

Although all the Barbacoan languages have a nominative-accusative case system, the actual case marker that is used to mark direct objects is different in form and use in each language. As we have seen in section 2.5, many languages that exhibit DOM have an accusative case marker of which the origin lies somewhere else, mostly the dative case and/or the benefactive case or one of the locative cases. The Barbacoan languages are no exception for that matter.

The form of the accusative case marker is different in all four Barbacoan languages. Nam Trik and Cha'palaa have a suffix, *-wan* and *-nu* respectively. In the other two languages, the case marker is a clitic; in Awa Pit it is *=ta* and Tsafiki has *=ka*.

In three of the four languages, the grammatical marker that marks direct objects is also used to mark indirect objects, namely Nam Trik, Awa Pit and Cha'palaa. Tsafiki is the only Barbacoan language that has a distinct dative case marker, which is *=chi*. In Nam Trik and Cha'palaa, it is most likely that the original use of the concerned suffix is that of a dative case marker. This claim is supported by the fact that as a dative case marker, the suffix is attached to all indirect objects, regardless of semantic properties of the noun. As an accusative case marker on the other hand, it is only attached to direct objects in particular contexts, namely in order to give the object a specific interpretation. Additional evidence comes from DOM languages all over the world, in which the originally dative case suffix has extended its use to that of a marker for accusative case (Chappell and Verstraete 2019, 27–9). Therefore, that the accusative case suffixes of Nam Trik and Cha'palaa most likely have their origin in the dative case marker. Awa Pit has a slightly different story; as we have seen in section 6.2.2.3, there are clues that the clitic *=ta*, which marks direct objects in certain contexts, can also be used to mark indirect objects, although this does not happen with every indirect object.

The accusative case marker is also used as one of the ways to express locative relations in three Barbacoan languages, namely Awa Pit, Tsafiki and Cha'palaa. Nam Trik has four other locative case markers, which are *-yu*, *-sri*, *-kutri* and *-mai* (Gonzales Castaño 2019, 189). In each of those languages, the use of the concerned suffix/clitic as a marker for locations does not depend on semantic factors of the noun like animacy and specificity. When the case marker is used to mark direct objects, it does however depend on those semantic factors. This is evidence for the claim that the use of the suffix/clitic as a marker for accusative case is a later development from its use as a marker for locations. This is supported by other languages of the world with DOM, where the accusative case marker also has its origin in (one of) the locative case marker(s). In Cha'palaa (and maybe to a lesser extent Awa Pit), the dative and locative marker are the same, and this marker has extended its use to the accusative marker. Here, the development went presumably from locative via dative to accusative case, which is common amongst languages of the world (see section 2.5 and Lehmann 2015, 117).

One further interesting remark about the locative/accusative marker *=ta* in Awa Pit is that its form and use correspond with the accusative-locative marker *-ta* of Quechua[22], which is spoken in the same region as Awa Pit. So, the origin of the Awa Pit clitic *=ta* may lie in Quechua, or the other way around

[22] The exact use is somewhat different: although both markers can be used as an allative, *=ta* in Awa Pit can also indicate stative locations (Adelaar 2004, 145; Curnow 1997, 135).

(Adelaar 2004, 145). To be more sure about the origins of the accusative case marker in all the Barbacoan languages, more historical research is needed.

Summarizing, the markers that are used in each Barbacoan language to mark direct objects, can also be used for other grammatical relations, namely indirect objects and locations. This is shown in table 6 below. As we have seen in section 2.5, it is not uncommon for languages in the world to have markers for indirect objects and/or locations that have been developed into markers for direct objects. The accusative markers that have been described above, have probably also followed this development. This claim is supported by the fact that the use of these markers for indirect objects and locations does not depend on semantic factors of the noun like animacy and specificity, whereas this is important for their use as direct object markers.

Table 6. The accusative case marker in the Barbacoan languages.

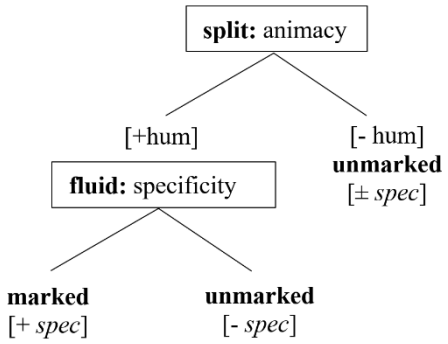
Language	Accusative marker	Clitic or suffix?	Also used as dative marker?	Also used as locative marker?
Nam Trik	*-wan*	suffix	yes	no
Awa Pit	*=ta*	clitic	maybe	yes
Tsafiki	*=ka*	clitic	no	yes
Cha'palaa	*-nu*	suffix	yes	yes

7.2 The criteria for DOM

Each Barbacoan language has its own DOM system, and there are several similarities and differences between them. This will be the central point of this section.

The biggest difference is between Awa Pit on the one hand and Nam Trik, Tsafiki and Cha'palaa on the other. Awa Pit has a multidimensional DOM system, in which both animacy and specificity play a role. Animacy functions as a trigger in this system. For Awa Pit, this means that objects that are non-human cannot receive case marking; they would be ungrammatical when being marked. Human objects on the other hand can receive case marking. So, the value of a given object NP for the semantic property of animacy is a trigger for the presence or absence of case marking. Regarding human objects, which are optionally marked, there is another factor involved in the alternation in case marking, namely specificity. The interpretation of a marked or unmarked human object as specific or non-specific is a result of the presence or absence of the case marker. Human objects that are marked with *=ta* are interpreted as specific, whereas human objects that lack this marker are interpreted as non-specific. This is summarized in figure 7 of chapter 6, which is repeated below. Note that non-human objects, which are obligatorily unmarked, can be interpreted as either specific or non-specific, depending on the context.

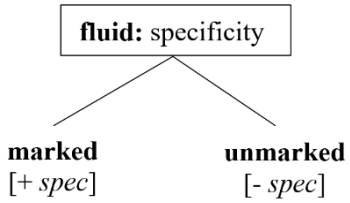
Figure 7 (repeated). Schematic representation of the DOM system of Awa Pit.



Contrary to Awa Pit, Nam Trik, Tsafiki and Cha'palaa have most likely a one-dimensional DOM system, in which only specificity plays a role. There are some language specific differences between the DOM

systems of those three languages, but in general, those systems correspond to each other. Objects in Nam Trik, Tsafiki and Cha'palaa can both be marked or unmarked, with no consequences for their grammaticality. Marked objects are interpreted as specific, whereas unmarked objects are interpreted as non-specific. The schematic representation of DOM in Nam Trik, Tsafiki and Cha'palaa is the same, and is shown in figure 9 below, which is repeated from figures 5, 6 and 8 from chapters 5 and 6.

Figure 9. Schematic representation of the DOM system of Nam Trik, Tsafiki and Cha'palaa.



7.3 Deviant patterns

Certain constructions in the Barbacoan languages deviate from the standard DOM pattern in the concerned language. In this section, I discuss some examples of these deviations, namely low transitive verbs (section 7.3.1) and clauses in which information structure might play a role (section 7.3.2).

7.3.1 Low transitive verbs

In Nam Trik and Awa Pit, the object of a verb with a lower level of transitivity behaves differently concerning DOM than regular objects. In Nam Trik, the object of the verb *po* 'have' in combination with a nominalizer and copula, is never marked, even when it has a specific interpretation (Gonzales Castaño 2019, 470–1). This is illustrated in example (84) below, where the object *nimpasrmera pa* 'two daughters' is not marked.

		O		V	
(84)	*sre*	*nimpasrmera*	*pa*	*poik*	*kor*
	sre	nimpasr-mera	pa	po-ik	kɨ-or
	see	daughter-PL	two	have-NMZ$_1$.SG	COP-EGO

'See, I have two daughters!' (Gonzales Castaño 2019, 470)

In Awa Pit, the (human) object of a low transitive verb can be either marked in the regular way with *=ta*, or with the locative postpositions *=pa* or *=mal*. There seems to be no difference in meaning between objects marked with *=ta* on the one hand and *=pa* or *=mal* on the other (Curnow 1997, 72–3). Example (85) illustrates this; the object *Libardo* is marked with *=mal* instead of *=ta*.

				O
(85)	*na=na*	*pueblo=mal*	*shaa-ta-w*	*Libardo=mal*
	1SG(.NOM)=TOP	town=LOC	walk-PAST-LOCUT:SUBJ	Libardo=LOC
		V		
	mɨza	*pyan-ma-t*		
	almost	hit-COMP=PFPART		

'When I was in town, [they] almost beat up Libardo.' (Curnow 1997, 73)

This might also occur in Cha'palaa. In example (26) of chapter 5, which is repeated below, the object *na'ma* lacks case marking, although it could be interpreted as a specific object. However, it is the object of the verb *miya* 'have', which can be interpreted as a low transitive verb, just like the verb *po* 'have' in Nam Trik. There were no other objects of the verb *miya* in the corpus, but it is definitively worth to look at in the future.

	A		O	V					
(86)	*ma*	*ruku*	*na'ma*	*miya,*	*juntsa*	*na'ma*	*kapuka*	*pu-tyu*	*panna*
	one	man	daughter	have	that	daughter	eye	have/put/be-NEG	?

'A man had a daughter, that daughter has no eye [i.e. she's blind].' (CHSF2015_02_05S1_José-Pais)

So, there are several attestations in multiple Barbacoan languages of objects that behave differently concerning object marking, which is because they are the object of a low transitive verb.

7.3.2 Information structure

There are some examples where the alternation of object marking might be explained from the viewpoint of information structure instead of animacy or specificity. In Tsafiki, topicalized objects, which are moved to sentence initial position, are always marked even when they have a non-specific interpretation (see also section 6.3.2.2). This is the case in the following example, where the non-specific object *sona* 'woman' is marked with *=ka* in order to be identified as an object. So, in this construction, the topicality of an object decides whether it receives case marking or not.

	O	V		A	
(87)	*sona=ka*	*jele*	*ti-man-ti-e*	*lu-ba-n*	*oko=la=ri*
	soman=ACC	fear	say.GNV-SIT-RP-DCL	red-QUAL-ST	spirit=PL=FOC

'They say they are afraid of women, the red demons.' (Dickinson 2002, 44)

In the following example in Cha'palaa, which is repeated from chapter 5, information structure could also be an explanation for the fact that the non-specific object *pishu* 'corn' is marked with *-nu*, as it has some restrictive meaning.

		O	V?			
(88)	*tsenbalan*	*pishun*	*fadeju*	*jungu*	*tutsa'*	*rukula*
	tsan-malan	pishu-nu	fadeju	junga	tutsa-chi	ruku-la
	SEM-when	corn-ACC	?	there	Tutsa-POSS	man-PL

'And the people of Tutsa only ate corn.' (CHSF2015_01_31S3_Yaanbu)

Additionally, there are examples in Cha'palaa where the object is not marked, but still has to be interpreted as specific. Consider for example the following sentence, where the object *cocina* 'stove' is unmarked. However, it would be very strange that in this imperative sentence, the speaker would ask the hearer to turn a non-specific stove off. There might be additional factors that play a role in this sentence, maybe information structure.

	O	V
(89)	*cocina*	*de-man-pere-e*
	stove	PL-again-turn.off-IMP

'Turn the stove off.' (Floyd 2015, 473)

The examples in section 7.3.2 show that specificity alone cannot account for all the occurrences of DOM in Cha'palaa and Tsafiki, and that it seems likely that we should look to the role that other features play in the DOM system of those languages.

Chapter 8. Conclusion

In this thesis, I have described the DOM system of Cha'palaa, a Barbacoan language spoken in Ecuador, and compared it with the DOM systems of the other three Barbacoan languages Nam Trik, Awa Pit and Tsafiki. It turns out that object marking in Cha'palaa is only governed by specificity. Objects can occur both marked and unmarked without affecting their grammaticality. The alternation in object marking results in the interpretation of the specificity value of a given object. Marked objects are interpreted as specific, whereas unmarked objects are interpreted as non-specific. Although this explanation gives a satisfactory description of the DOM system of Cha'palaa, there are some exceptions where unmarked objects are interpreted as specific or marked objects as non-specific. These examples lead to the question whether there are additional factors that play an role in DOM in Cha'palaa, for example information structure or affectedness.

In comparing the DOM system of Cha'palaa with that of the other Barbacoan languages, there are similarities and differences to identify. In all four Barbacoan languages, there are certain contexts in which marked objects are interpreted as specific and unmarked objects as non-specific. However, in Awa Pit this only holds for human objects, whereas in the other three languages, this holds for all objects. Consequently, specificity plays a role in the DOM system of each Barbacoan language, whereas animacy only plays a role in the DOM system of Awa Pit. Awa Pit is therefore the only Barbacoan language with a multidimensional DOM system in the terms of Klein and de Swart (2011). In Nam Trik, Tsafiki and Cha'palaa, specificity is the only factor that governs the alternation of object marking.

In Cha'palaa and Tsafiki, it is an epiphenomenon of DOM governed by specificity that human and animate objects are more often than not case marked and inanimate objects generally lack case marking. However, as I have shown in chapter 5 for Cha'palaa and section 6.3 for Tsafiki, the DOM systems of those languages can be sufficiently explained by only looking at specificity. Animacy plays therefore no decisive role in the DOM systems of Cha'palaa and Tsafiki. However, the discussed DOM systems show that we should not only look at animacy and/or specificity as a decisive factor in DOM. In this respect, it corresponds to the results of Sinnemäki (2014), discussed in section 2.6, that animacy and specificity are no universal factors in DOM.

A minor subject that I looked at is the grammatical marker for direct objects in the Barbacoan languages. Although each Barbacoan language uses a suffix or clitic to mark direct objects in certain contexts, this marker has a different form in each language, even in the two most closely related languages Tsafiki and Cha'palaa. This lack of cognacy between the accusative case markers fits well with Norcliffe's (2018, 306) observation that "[t]he cross-Barbacoan picture so far is therefore one of (broadly) shared functional contrasts expressed by distinct formal means", when she talked about the egophoric verbal system of the Barbacoan languages. And according to Curnow and Liddicoat (1998, 387), this suggests that the case markers have a recent origin. Furthermore, in different Barbacoan languages, it is possible to trace back the dative and/or locative origin of the accusative case marker.

In this thesis, I have mainly looked at the role that animacy and specificity play in the DOM systems of Cha'palaa, Nam Trik, Awa Pit and Tsafiki. Whereas it is clear that they play an important role, although different in each individual language, there are indications that there are other or additional factors that play a role in the DOM systems of the Barbacoan languages. This is something that should be explored in more depth in the future. Another interesting point for further research would be to investigate in how far the DOM system of Cha'palaa shows similarities and differences with the DOM systems of unrelated neighboring languages. For now, this thesis has given another description of a DOM system of a language of which the DOM system had not been studied extensively before, and compared it with its related languages.

Index	Story	Line/page	Object form	Translation	Marking	Animacy	Specificity
1	CHSF2015_02_03S5_María-Pastora	P1	piyama-nu	(the) pot	Marked	Inanimate	Specific
2	CHSF2015_02_03S5_María-Pastora	M60	wakara	cow	Unmarked	Animate	Non-specific
3	CHSF2015_02_03S5_María-Pastora	M66	wakara	(the) cow	Unmarked	Animate	Specific
4	CHSF2015_02_03S5_María-Pastora	M84	vaca-nu	(the) cow	Marked	Animate	Specific
5	CHSF2015_02_03S5_María-Pastora	M99	animaa-nu	(the) animal	Marked	Animate	Specific
6	CHSF2015_02_03S5_María-Pastora	M102	kamula-nu	(the) buyers	Marked	Human	Specific
7	CHSF2015_02_03S5_María-Pastora	M104	kamula-nu	(the) buyers	Marked	Human	Specific
8	CHSF2015_02_03S5_María-Pastora	M106	aakule	big canoe	Unmarked	Inanimate	Non-specific
9	CHSF2015_02_03S5_María-Pastora	M106	vaca	cow	Unmarked	Animate	Non-specific
10	CHSF2015_02_03S5_María-Pastora	M107	kule	canoe	Unmarked	Inanimate	Non-specific
11	CHSF2015_02_03S5_María-Pastora	M107	aakule main	one big canoe	Unmarked	Inanimate	Non-specific
12	CHSF2015_02_03S5_María-Pastora	M177	lala-nu	us	Marked	Human	Specific
13	CHSF2015_02_03S5_María-Pastora	M230	kakabu	cocoa	Unmarked	Inanimate	Non-specific
14	CHSF2015_02_03S5_María-Pastora	M231	parma	palm	Unmarked	Inanimate	Non-specific
15	CHSF2015_02_03S5_María-Pastora	M273	pedasu-nu	piece	Marked	Inanimate	Specific
16	CHSF2015_02_03S5_María-Pastora	M468	alla	prey	Unmarked	Inanimate	Non-specific
17	CHSF2015_02_03S5_María-Pastora	M472	nejuru	footprint	Unmarked	Inanimate	Non-specific
18	CHSF2015_02_03S5_María-Pastora	M496	illapan	shotgun	Unmarked	Inanimate	Non-specific
19	CHSF2015_02_03S5_María-Pastora	M520	aamana	big deer	Unmarked	Animate	Specific
20	CHSF2015_02_03S5_María-Pastora	M543	alla	meat	Unmarked	Inanimate	Non-specific
21	CHSF2015_02_03S5_María-Pastora	M575	mashte	machete	Unmarked	Inanimate	Non-specific
22	CHSF2015_02_03S5_María-Pastora	M576	mashte	machete	Unmarked	Inanimate	Non-specific
23	CHSF2015_02_03S5_María-Pastora	M581	in cuerpu-nu	my body	Marked	Animate	Specific
24	CHSF2015_02_03S5_María-Pastora	M595	rayugrafiya-nu	x-ray	Marked	Inanimate	Specific
25	CHSF2015_02_03S5_María-Pastora	M606	kaaya (ma)	(a) little house	Unmarked	Inanimate	Non-specific
26	CHSF2015_02_03S5_María-Pastora	M639	kule-nu	(the) canoe	Marked	Inanimate	Specific
27	CHSF2015_02_03S5_María-Pastora	M688	armeja	clam	Unmarked	Inanimate	Non-specific
28	CHSF2015_02_03S5_María-Pastora	M704	tyaipi alla ma liwera	a pound of salted fish	Unmarked	Inanimate	Non-specific
29	CHSF2015_02_03S5_María-Pastora	M708	benenu	poison	Unmarked	Inanimate	Non-specific
30	CHSF2015_02_03S5_María-Pastora	M725	i-nu	me	Marked	Human	Specific
31	CHSF2015_02_03S5_María-Pastora	M819	ku'chi-nu	(the) pig	Marked	Animate	Specific
32	CHSF2015_01_31S3_Yaanbu	Y7	aakela	(the) big tiger	Unmarked	Animate	Specific
33	CHSF2015_01_31S3_Yaanbu	Y7	kelaatala	tigers?	Unmarked	Animate	Non-specific
34	CHSF2015_01_31S3_Yaanbu	Y8	kela-nu	the tiger	Marked	Animate	Specific
35	CHSF2015_01_31S3_Yaanbu	Y11	cawallu-nu	horse	Marked	Animate	Non-specific

36	CHSF2015_01_31S3_Yaanbu	Y12	juntsa tsuta	that spear	Unmarked	Inanimate	Specific
37	CHSF2015_01_31S3_Yaanbu	Y129	ya' kuñau-nu	his brother-in-law	Marked	Human	Specific
38	CHSF2015_01_31S3_Yaanbu	Y244	supula-nu-bain	the women-also	Marked	Human	Specific
39	CHSF2015_01_31S3_Yaanbu	Y251	supu-nu pure-nu	the poor woman	Marked	Human	Specific
40	CHSF2015_01_31S3_Yaanbu	Y271	i-nu	me	Marked	Human	Specific
41	CHSF2015_01_31S3_Yaanbu	Y271	kuinda	story	Unmarked	Inanimate	Non-specific
42	CHSF2015_01_31S3_Yaanbu	Y276	kulabain	cola-also	Unmarked	Inanimate	Non-specific
43	CHSF2015_01_31S3_Yaanbu	Y276	panbain	bread-also	Unmarked	Inanimate	Non-specific
44	CHSF2015_01_31S3_Yaanbu	Y421	miruku-nu-bain	sorcerer-also	Marked	Human	Non-specific
45	CHSF2015_01_31S3_Yaanbu	Y433	rukula' kuinda-nu-ten	history of (ancient) people	Marked	Inanimate	Specific
46	CHSF2015_01_31S3_Yaanbu	Y477	pishu-n	corn	Marked	Inanimate	Non-specific
47	CHSF2015_01_31S3_Yaanbu	Y468	tu piyama	clay pot	Unmarked	Inanimate	Non-specific
48	CHSF2015_01_31S3_Yaanbu	Y468	tu piyamabain	clay pot-also	Unmarked	Inanimate	Non-specific
49	CHSF2015_01_31S3_Yaanbu	Y491	piyama	pot	Unmarked	Inanimate	Non-specific
50	CHSF2015_01_31S3_Yaanbu	Y561	asa	blood	Unmarked	Inanimate	Non-specific
51	CHSF2015_01_31S2_Guillermo	G643	ya' pala-nu	his parents	Marked	Human	Specific
52	CHSF2015_01_31S2_Guillermo	G351	ya' na'ma-nu	his daughter	Marked	Human	Specific
53	CHSF2015_02_02S2_Rebeca	A21	chachilla-nu	the people	Marked	Human	Specific
54	CHSF2015_02_02S2_Rebeca	A22	mashte	machete	Unmarked	Inanimate	Non-specific
55	CHSF2015_02_02S2_Rebeca	A22	mashtebain	machete-also	Unmarked	Inanimate	Non-specific
56	CHSF2015_02_02S2_Rebeca	A22	kuchiyubain	knife-also	Unmarked	Inanimate	Non-specific
57	CHSF2015_02_02S3_Vicente	V8	mana-nu	the deer	Marked	Animate	Specific
58	CHSF2015_02_02S4_Gervacio	Am5	Lucrecia-nu	Lucrecia	Marked	Human	Specific
59	CHSF2015_02_02S4_Gervacio	Al26	lushi	money	Unmarked	Inanimate	Non-specific
60	CHSF2015_02_02S4_Gervacio	Al31	chaandutu	toucan	Unmarked	Animate	Non-specific
61	CHSF2015_02_02S4_Gervacio	G25	pallu awili	two shads	Unmarked	Animate	Non-specific
62	CHSF2015_02_02S4_Gervacio	G89	chachilla-nu	people	Marked	Human	Specific
63	CHSF2015_02_02S4_Gervacio	G92	chachilla-nu	(the) people	Marked	Human	Specific
64	CHSF2015_02_02S4_Gervacio	E13	shupa-nu	bat	Marked	Animate	Specific
65	CHSF2015_02_03S1_Rodrigo	R421	enbu-nu	the thigh	Marked	Inanimate	Specific
66	CHSF2015_02_03S2_Luis Alberto	LA218	supu-nu	the woman	Marked	Human	Specific
67	CHSF2015_02_03S2_Luis Alberto	LA227	pi	water	Unmarked	Inanimate	Non-specific
68	CHSF2015_02_03S3_Daira	D13	in kawawala-nu	my children	Marked	Human	Specific
69	CHSF2015_02_03S3_Daira	D26	ujmu-ba	ghost-CNTR	Unmarked	Animate	Non-specific
70	CHSF2015_02_03S3_Daira	M122	manbajali	blanket	Unmarked	Inanimate	Specific
71	CHSF2015_02_03S4_Silverio	A47	panda	banana	Unmarked	Inanimate	Non-specific

72	CHSF2015_02_03S4_Silverio	A56	nintsala	coal	Unmarked	Inanimate	Non-specific
73	CHSF2015_02_03S4_Silverio	A120	ta'pa	board	Unmarked	Inanimate	Non-specific
74	CHSF2015_02_03S4_Silverio	A208	futu-nu	the photo	Marked	Inanimate	Specific
75	CHSF2015_02_03S4_Silverio	C19	ya	house	Unmarked	Inanimate	Non-specific
76	CHSF2015_02_03S4_Silverio	C51	leon-nu	the lion	Marked	Animate	Specific
77	CHSF2015_02_03S6_Crecensio	A2	in mumu	my name	Unmarked	Inanimate	Specific
78	CHSF2015_02_03S6_Crecensio	A14	nejuru	footprint	Unmarked	Inanimate	Non-specific
79	CHSF2015_02_05S1_José-Pais	A2	kuinda	story	Unmarked	Inanimate	Non-specific
80	CHSF2015_02_05S1_José-Pais	A20	ruku-nu	man	Marked	Human	Specific
81	CHSF2015_02_05S1_José-Pais	A27	kailla-nu	children	Marked	Human	Specific
82	CHSF2015_02_05S1_José-Pais	A32	na'ma	daughter	Unmarked	Human	Non-specific
83	CHSF2015_02_05S1_José-Pais	A32	kapuka	eye	Unmarked	Inanimate	Non-specific
84	CHSF2015_02_05S1_José-Pais	A35	kailla ya' kailla	all their children	Unmarked	Human	Specific
85	CHSF2015_02_05S1_José-Pais	A36	kapuka punaa (underlying pu-nu-ya)	blind [woman]-FOC	Marked	Human	Specific
86	CHSF2015_02_05S1_José-Pais	A37	kapuka putyu-nu	blind [woman]	Marked	Human	Specific
87	CHSF2015_02_05S1_José-Pais	A62	kapuka	eye	Unmarked	Inanimate	Specific
88	CHSF2015_02_05S1_José-Pais	A62	na'ma-nu	daughter	Marked	Human	Specific
89	CHSF2015_02_05S1_José-Pais	A87	alla	meat	Unmarked	Inanimate	Non-specific
90	CHSF2015_02_05S1_José-Pais	A134	aapebulu	city	Unmarked	Inanimate	Non-specific
91	CHSF2015_02_05S1_José-Pais	A284	wallapa	hen	Unmarked	Animate	Non-specific
92	CHSF2015_02_05S2_Patricia	P217	pibain	water-also	Unmarked	Inanimate	Non-specific
93	CHSF2015_02_05S2_Patricia	P217	pandabain	food-also	Unmarked	Inanimate	Non-specific
94	Vittadello 1988	296	dius-nu	god	Marked	Animate	Specific
95	Vittadello 1989	296	ya' pebulu-nu	his people	Marked	Human	Specific
96	Floyd 2015	485	Albertun	Alberto	Marked	Human	Specific
97	Floyd 2018	272	ñu-nu	you	Marked	Human	Specific
98	Floyd 2014	86	supula-nu-bain	the women-also	Marked	Human	Specific
99	Floyd 2014	86	kailla-nu-bain	the children-also	Marked	Human	Specific
100	Floyd 2014	95	uñilla-nu-bain	the chiefs-also	Marked	Human	Specific
101	Floyd 2015	481	Rocio' kawawa-nu	Rocio's baby	Marked	Human	Specific
102	Floyd 2014	88	chachi	people	Unmarked	Human	Non-specific
103	Dingemanse & Floyd 2014	465	ajpele-nu	belt	Marked	Inanimate	Specific
104	Floyd 2016	353	lushi	money	Unmarked	Inanimate	Non-specific
105	Floyd 2016	359	tablon	board	Unmarked	Inanimate	Non-specific
106	Floyd 2018	273	alla	fish	Unmarked	Inanimate	Non-specific
107	Floyd 2014	84	alla	fish	Unmarked	Inanimate	Non-specific
108	Floyd & Norcliffe 2016	215	kakabu	cocoa	Unmarked	Inanimate	Non-specific
109	Floyd 2015	473	cocina	stove	Unmarked	Inanimate	Specific
110	Floyd 2015	483	coco ma puka	one [sphere-class] coconut	Unmarked	Inanimate	Non-specific

Abbreviations

*(x) = without x, the construction is ungrammatical
(*x) = with x, the construction is ungrammatical
1 = first person
2 = second person
3 = third person
3D1 = third person distal one
3P2 = third person proximate two
A = subject of a transitive clause
ACC = accusative
ADJZR = adjectivizer
AG.NMZ = agentive nominalizer
ALL = allative
AUG = augmentative
AUX = auxiliary
CAUS = causative
CNJ = conjunct
CNTR = counter-assertive
COM = comitative
COMP = completive
COND = conditional
COP = copula
DAT = dative
DCL = declarative
DEF = definite
DO = direct object
DOM = differential object marking
DR = different referent
DROP = perfective serial verb *kway-*
EGO = egophoric
EPEN = epenthetic
ERG = ergative
EV = evidential, inferred from physical evidence
EV.GEN = general knowledge evidential
EXP = experiencer
FOC = focus
FUT = future
GEN = genitive
GNV = generic verb
IMP = imperative
IMPF = imperfective
IMPFPART = imperfective participle
INCEPT = inceptive?
IND = indicative
INE = inessive
INF = infinitive
INS = instrumental
INT = interrogative
INTJ = interjection
IO = indirect object
LOC = locative
LOCUT = locutor
M = masculine
NCL = noun classifier
NEG = negation
NEGO = non-egophoric
NFIN = non-finite verb
NLOCUT = non-locutor
NMZ = nominalizer
NOM = nominative
NP = noun phrase
O = object of a transitive clause
PART = partitive
PAST = past tense
PFPART = perfective participle
PFV = perfective
PL = plural
POS = positional
POSS = possessive
PRECIS = precision
PRG = progressive
PRIO = priority
PROS = prospective
PRS = present
QT = quotative
QUAL = quality
REST = restrictive
RP = reportative
S = subject of an intransitive clause
SEM = semblative
SG = singular
SIT = situational
SR = same referent
ST = stative
SUBJ = subject
SUF = suffix
SV = serial verb marker
TOP = topic
VCL = verb class marker
WHEN = simultaneity marker

References

Adelaar, Willem. 2004. “Barbacoan languages.” In *The Languages of the Andes*, edited by Willem F. H. Adelaar, and Pieter C. Muysken, 141–51. Cambridge: Cambridge University Press.

Aissen, Judith. 2003. “Differential object marking: iconicity vs. economy.” *Natural Language & Linguistic Theory* 21: 435–83.

Bossong, Georg. 1985. *Differentielle Objektmarkierung in den neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.

Butler, Lynnika, and Heather van Volkinburg. 2007. “Review of Fieldworks Language Explorer (FLEx).” *Language Documentation and Conservation* 1, 100–6.

Capistrán Garza, Alejandra. 2015. *Multiple object constructions in P’orhépecha. Argument realization and valence-affecting morphology*. Leiden/Boston: Brill.

Chappell, Hilary, and Jean-Christophe Verstraete. 2019. “Optional and alternating case marking: Typology and diachrony.” *Language and linguistics compass* 13 (3): 42 pages.

Comrie, Bernard. 1989. *Language Universals and Linguistic Typology. Syntax and Morphology.* Second edition. Oxford UK and Cambridge USA: Blackwell.

Constenla Umaña, Adolfo. 1991. *Las lenguas del área intermedia: introducción a su studio areal.* San José: Editorial de la Universidad de Costa Rica.

Crevels, Mily. 2012. “Language endangerment in South America: The clock is ticking.” In *The Indigenous Languages of South America: A Comprehensive Guide*, edited by Lyle Campbell and Verónica Grondona, 167–233. Berlin: De Gruyter Mouton.

Curnow, Timothy Jowan. 1997. “A grammar of Awa Pit (Cuaiquer): An indigenous language of south-western Colombia.” PhD diss., The Australian National University.

Curnow, Timothy Jowan, and Anthony J. Liddicoat. 1998. “The Barbacoan languages of Colombia and Ecuador.” *Anthropological Linguistics* 40 (3): 384–408.

Dalrymple, Mary, and Irina Nikolaeva. 2011. *Objects and Information Structure*. Cambridge: Cambridge University Press.

Dickinson, Connie. 2002. “Complex Predicates in Tsafiki.” PhD diss., University of Oregon.

Dingemanse, Mark, and Simeon Floyd. 2014. “Conversation across cultures.” In *The Cambridge handbook of linguistic anthropology*, edited by N.J. Enfield, Paul Kockelman, and Jack Sidnell 447–480. Cambridge: Cambridge University Press.

Eberhard, David M., Gary F. Simons, and Charles D. Fenning, eds. 2022. *Ethnologue: Languages of the World*. Twenty-fifth edition. Dallas, Texas: SIL International. Accessed on June 15, 2022. http://www.ethnologue.com.

ELAN (Version 6.2) [Computer software]. 2021. Nijmegen: Max Planck Institute for Psycholinguistics. Retrieved from https://archive.mpi.nl/tla/elan.

Enç, Mürvet. 1991. “The Semantics of Specificity.” *Linguistic Inquiry* 22 (1): 1–25.

Floyd, Simeon. 2014. “Four types of reduplication in the Cha’palaa language of Ecuador.” In *Reduplication in South American Indian Languages*, edited by Gale Goodwin Gómez and Hein van der Voort, 77–113. Leiden: Brill.

Floyd, Simeon. 2015. “Other-initiated repair in Cha’palaa.” *Open Linguistics* 1: 467–489.

Floyd, Simeon. 2016. “Insubordination in interaction. The Cha’palaa counter-assertive.” In *Insubordination,* edited by Nicholas Evans and Honoré Watanabe, 341–365. Amsterdam/ Philadelphia: John Benjamins Publishing Company.

Floyd, Simeon. 2018. “Egophoricity and argument structure in Cha’palaa.” In *Egophoricity*, edited by Simeon Floyd, Elisabeth Norcliffe, and Lila San Roque, 269–304. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Floyd, Simeon, and Elisabeth Norcliffe. 2016. “Switch reference systems in the Barbacoan languages and their neighbors.” In *Switch Reference 2.0*, edited by Rik van Gijn, and Jeremy Hammond, 208–229. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Frawley, William. 1992. *Linguistic Semantics*. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.

Givón, Talmy. 1982. “Logic vs. Pragmatics, with human language as the referee: Toward an empirically viable epistemology.” *Journal of Pragmatics* 6 (2): 81–133.
Gonzales Castaño, Geny. 2012. “¿Quién necesita una lengua? Política y planificación lingüística en el departamento del Cauca.” *Tábula Rasa Revista de Humanidades* 17: 195–217.
Gonzales Castaño, Geny. 2015. “Documentation and Description of Nam Trik, an endangered language of the Colombian Andes.” *Endangered Languages Archive*. Accessed on June 14, 2022. https://www.elararchive.org/dk0382/.
Gonzales Castaño, Geny. 2019. “Una gramática de la lengua namtrik de Totoró.” PhD diss., Université de Lyon.
de Hoop, Helen, and Andrej Malchukov. 2007. “On fluid differential case marking: A bidirectional OT approach.” *Lingua* 117 (9): 1636–56.
Irimia, Monica Alexandrina. 2020. “Variation in differential object marking: On some differences between Spanish and Romanian.” *Open Linguistics* 6 (1): 424–62.
Kittilä, Seppo. 2002. “Remarks on the basic transitive sentence.” *Language Sciences* 24: 107–30.
Klein, Udo, and Peter de Swart. 2011. “Case and referential properties.” *Lingua* 121 (1): 3–19.
Lazard, Gilbert. 1994. “Le *râ* persan et le *ba* chinois.” *Cahiers de linguistique – Asie orientale* 23: 169–76.
Lehmann, Christian. 2015. *Thoughts on grammaticalization*. 3rd edition. Berlin: Language Science Press.
Lindskoog, John N., and Carrie A. Lindskoog. 1964. *Vocabulario Cayapa*. Quito: Instituto Lingüístico de Verano.
Mohanan, Tara. 1994. *Argument Structure in Hindi*. Stanford, California: CSLI Publications.
Næss, Åshild. 2004. “What markedness marks: the markedness problem with direct objects.” *Lingua* 114 (9): 1186–212.
Norcliffe, Elisabeth. 2018. “Egophoricity and evidentiality in Guambiano (Nam Trik)” In *Egophoricity*, edited by Simeon Floyd, Elisabeth Norcliffe, and Lila San Roque, 305–46. Amsterdam/Philadelphia: John Benjamins Publishing Company.
Norcliffe, Elisabeth, Simeon Floyd and Harald Hammarström. 2015. *The reconstruction and classification of the Barbacoan family of languages*. Talk presented at Societas Linguistica Europaea [SLE 2015], Leiden, The Netherlands.
Sinnemäki, Kaius. 2014. “A typological perspective on Differential Object Marking.” *Linguistics* 52 (2): 281–313.
de Swart, Peter, and Helen de Hoop. 2018. “Shifting animacy.” *Theoretical Linguistics* 44 (1-2): 1–23.
Vittadello, P. Alberto. 1988a. *Cha’palaachi. El Idioma Cayapa. Tomo 1.* Guayaquil: Pontificia Universidad Católica del Ecuador/Sede de Esmeraldas & Museos del Banco Central de Ecuador.
Vittadello, P. Alberto. 1988b. *Cha’palaachi. El Idioma Cayapa. Tomo 2.* Guayaquil: Pontificia Universidad Católica del Ecuador/Sede de Esmeraldas & Museos del Banco Central de Ecuador.