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Warao Demonstratives

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Abstract

The present paper is discussing an investigation in the field of demonstratives in the Amerindian language Warao. Data was collected during a six week fieldwork stay in the western Orinoco Delta using the 1999 fieldwork manual Language and Cognition Group at the Max Planck Institute for Psycholinguistics, Nijmegen (The Netherlands).

First analysis points to a three term speaker-anchored distance-sensitive system for Warao. However looking closer let us suspect that we are in a transitory stage between a two term and a three term system. This was made possible by considering different kinds of demonstrative use and by inclusion of further data types.

Note

The spelling of the Warao words follows the official Spanish based spelling. The letter "j" therefore corresponds roughly to "h" for English speakers.

Hyphens in Warao word and English glosses are intended to clarify their structure.

For correction of English style and discussion of the content I want to express my warmest thanks to Sam Featherton.

I introduction

1. Structure

The present paper discusses demonstratives in the Amerindian language Warao focusing on demonstrative pronouns and determiners. It is mainly based on data from a six-week field trip carried out by the author. The paper consists of five parts. In the introduction, background information as to motivation, financing, scope and method of the investigation is given as well as a short introduction to the Warao language and culture.

The second part outlines background information available in the literature and points to open questions. These are tackled in part three and four, where the procedure of data collection and the subsequent analyses are described in detail with special reference to methodology. The final part then sums up the descriptive and methodological findings.

2. Institutional background motivation and financing

My research was made possible intellectually and financially by the SFB 441 (Special Research Program 441), University of Tübingen. Subproject A2 provided the traveling expenses of the 6 week fieldwork trip to the Orinoco Delta in north eastern Venezuela. I am grateful for this support

but I should also acknowledge the grant from the German Academic Exchange Service (DAAD) who funded my previous stay in the area on which I was able to build.

Within project A2 Warao data is supposed to exemplify the theoretical concerns of the project. Data came from the first field research that had been basically ethnographic in aim and provided a large variety of data types recorded on different media. It was also necessary for linguistic data proper to be represented in our knowledge base. The area of demonstratives was chosen as it allowed for co-operation within the SFB (projects B8 and B9). There also exists a detailed field work manual, including a questionnaire for spacial deixis from the Language and Cognition Group at the Max Planck Institute for Psycholinguistics, Nijmegen (The Netherlands) that could serve as a methodological starting point.

A more general motivation for the collection of field data in the area of demonstratives is the fact that existing sources, even for widely known languages such as Spanish, seldom provide the kind of "rich" data needed for the investigation of variables determining a demonstrative system. Although published works may contain example phrases they usually lack broader contextual information for instance as to the use of gestures. Jungbluth from B9 (an other subproject of SFB 441) refers to such data as "naked".

3. Cultural and linguistic background: Warao

3.1 Short introduction to the Warao people

The language under consideration, Warao, is an Amerindian language spoken in the Orinoco Delta and adjoining areas in northeastern Venezuela and Guyana. Its speakers are the aboriginal population of the central part of the delta, who have been present for 8 500 to 9 000 years (W. Wilbert 1995: 336). Traditionally they have been fisher-gatherers in the interior of the deltaic islands. People were organized in extended family groups and did not have a larger political entity such as a chief or communal leader. Residence was matrilocal and although there was division of labor between the sexes, society as a whole had an egalitarian character. It is important to point out that Warao groups are not as homogeneous as they are often presented in the literature. Due to historical and ecological reasons there is regional variation in culture (Heinen and Garcia-Castro 2000) as well as in language.[1]

Nowadays the Warao groups have an overall population of about 30 000 which is increasing. Although the great majority of them do speak the aboriginal language, monolinguism in Spanish is on the increase, especially in areas that have been under the influence of Catholic missions for some decades. As with most Amerindian languages its future vitality is unfortunately not fully assured (Herrmann 2002).

3.2 Short introduction to the Warao language

It is not possible to prove membership in any larger language family for Warao so that it has to be considered an isolate (Weisshar 1982). From the typological point of view Warao shows some

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[1] While some authors have suggested that there are no dialects at all (Romero-Figeroa 1997) or only slight variations (Osborn 1966a: 108f.), I personally did observe differences in vocabulary, systematic vowel alternations and syntactic peculiarities. Still there is no reliable information yet concerning the number of dialects. Warao speakers themselves claim not to be able to understand speakers from certain other groups respectively.

characteristics of an "agglutinating" language. An interesting point relating to word calls is that the categories of adjective and noun are not clear-cut: a word can function as noun or adjective according to syntax and the affixes combining with it. There are furthermore "noun-verbs" (Osborn 1967) showing characteristics of both nouns and verbs. Nouns and adjectives do not have gender but can take affixes that convey plurality or functions akin to case. An example would be the suffix "-*mo*" denoting "origin of". Warao has a wide range of tense, aspect and mood markers on the verb. There is no general agreement in the literature about the basic word order, which is quite free but "verb-final". There is no copula but the notion of existence can be conveyed by the auxiliary "*ja-kitane*" (to be/ to have). With regard to the possessive construction Warao behaves in a way typical for Amazonian languages (although strictly speaking it is not really within this geographic area), marking the possessor on the possessed item: "possessor possession-marker+possessed-item": *dima a-wajibaka* (literally "father his-boat" -> father's boat).

There is no systematic definite or indefinite article in Warao but similar functions are fulfilled by the demonstrative pronoun/determiner "*tai*" (at the same time a personal pronoun) and by possession markers:

Example No 1 (consultant *Calula*)

A tale, recorded by the author thus starts this way:

Tau-tuma   manamo ja. Ta-kore a-raiba   a-rajia   tane.
womenfolk two   were. Then   her-older-sister her-younger-sister so
(" There were two women: an older and a younger sister.")   (Herrmann 2002)

5. Scope of investigation
5.2 Focus of the present investigation

Following the priorities of the questionnaire and field work manual of MPI, interest was focused on the exophoric, non-contrastive use of demonstrative pronouns and determiners in the fieldwork. However during the process of analysis the necessity for a broader vision became apparent. It led to the additional consideration of other uses, such as the contrastive and the discourse use of demonstratives.

Due to the heterogeneity of Warao culture and language there can be no claim that what is discussed here is representative of the Warao language in general. There is evidence in the literature, that in other parts of the delta different terms are in use. It is however the system found in the speech community of "*Wakajara de La Horqueta*"[2] which is situated in the western part of the Orinoco Delta.

6. Method
6.1 Definition of "demonstratives"

The terminology of demonstratives used in this paper is taken from a recent typological work (Diessel 1999). Diessels definition embraces a broad range of demonstratives including not only demonstrative pronouns and determiners but also locational adverbs and a class he calls "demonstrative

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[2] *Wakajara* the community of my previous stay, is composed of Warao speakers that due to political and ecological pressure had immigrated from different places of their traditional habitat to this part of the Delta from the 1920th on.

identifiers" (Diessel 1999: 2ff.). On this view demonstratives serve the pragmatic function of focusing hearers attention on specific objects and locations, a task often accompanied by pointing gestures. This "exophoric" or language external use is assumed to be the most basic one. The second major function of demonstratives is to organize information flow in ongoing discourse, which is labeled "endophoric"[3] or language-internal (Diessel 1999: 6).

<u>6.2 The MPI fieldwork manual</u>
Methodologically my fieldwork sessions were based on the "1999 Demonstrative Questionnaire: 'This' and 'That' in comparative perspective " from the fieldwork manual of the language and cognition group at the MPI, Nijmegen, which is designed for comparison of demonstratives cross linguistically (Wilkins 1999). It tests for "parameters"[4] that are known to influence the use of demonstratives in the worlds languages. The role of gesture is also considered important. Parameters are for example "anchoredness ("speaker-anchored" versus "addressee-anchored" versus "speaker & addressee-anchored" versus "other-anchored" terms), distance and visibility (versus non-visibility). They are tested for by the realistic enacting of 25 situations. Addressee knowledge, object accessibility and attention focus are also addressed although these parameters are apparently regarded as less basic since they are only tested by means of variations the 25 scenes.
While the manual encourages the researcher to collect additional data types by such methods as participant observation or interview, its methodological focus is on prestructured questionnaire sessions. Pronouns are the thematic focus of the questionnaire. The non-occurrence of them in answers is not rated uninteresting but still the researcher is motivated to try to elicit pronouns if somehow possible.

II Data in the literature
In this part I will take a look at the information about Warao demonstratives which is available in published sources.

<u>1. The older sources</u>
In the first extensive publications on Warao there is evidence of a three-term distance-sensitive system of demonstrative pronouns which are apparently also be used adnominally. Unfortunately the information is not consistent from a morphological point of view and too "naked" to allow the delimitation of the variables that govern the use of these demonstratives.
Figure 1 shows the information given by Vaquero, a Capuchin missionary, who reports a set of two apparently distance-sensitive demonstrative terms with singular and plural forms which he calls "*adjectivos demonstrativos*". "*tai*" and "*tatuma*" are reported to function additionally as personal pronoun (Vaquero 1965: 61-64). English translations in figure 1 and 2 are provided by me.

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[3] The separation between endophoric/exophoric goes back to Halliday and Hassan 1976. Diessel separates endophoric further into anaphoric, discourse deictic and recognitional (Diessel 1999: 6).
[4] I shall use the term "variable" for the specific parameters that I am discussing for Warao.

Warao term	Spanish translation	English translation
tamaja	*este, esta, esto*	this
tamajatuma / **tamatuma**	*estos, estas*	these
tai	*Ese, esa, eso.* *Aquél, aquella, aquello*	that/ that yonder
tatuma	*Estos, esos, aquellos. Estas,* *esas, aquellas.*	these/ those, these/those yonder

figure 1: Vaqueros system

The second figure displays information from the Warao-Spanish dictionary of Barral. A Capuchin missionary like Vaquero he integrated data from various of his fellow brethren into this extensive lexical work. The definitions below are listed as they are found under the respective Warao terms. The adverb "*ote*" is included because it will be of interest later on:

Warao term	word class	Spanish translation	English translation
tamaja	dem. pronoun, 1st pers. sing.	*Este, esta, esto*	this one

tamatuma	1. dem. pronoun,
	    1st pers. pl.
	 2. dem. adj.,
	    1st pers. pl.
		Estos, estas
		
		 Estos, estas
			these ones
			
			 these

omaja	1. dem. pron. ,
	    2nd person
	 2. dem. adj.,
	    2nd person
		Ese, esa, eso. Esos, esas
		
		 Ese, esa, eso. Esos, esas
			that one, those ones
			
			 that, those

amaja	1. dem.pron. 3rd sing. and pl. 2. adv. of location	*Aquel, aquella, aquello.* *Aquellos, aquellas* 1. *Ahí. Ese lugar .* 2. *Allí está. Vélo ahí.*	that one yonder those ones yonder there, this place there it is, see it there

tai	1. pers. pron.,
	    3rd pers. sing.
	 2. dem. pron.,
	    3rd and 2nd sing.
		el, ella, lo
		
		 Ese, esa, eso
		 Aquél, aquélla, aquéllo
			he, she, it
			
			 that one
			 that one yonder

tatuma	1. pers. pron.,
	    3rd pers. pl.
	 2. dem. pron.,
	    3rd and 2nd pl.
		Ellos, ellas
		
		 Aquellos, Aquellas
			they
			
			 those ones

ote	adv.	*allá*	(over) there

figure 2: Barral's person-oriented system

All in all the information provided by the older sources suggest that there are at most three terms "*tamaja*", "*omaja*" and "*amaja*" which correspond to three stages of increasing distance. The term "*tai*" (pl.: *ta-tuma*)[5] on the other hand seems to be set apart in that it embraces two distant meanings at once (medial and distal) at least in the Barral dictionary.

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[5]The optional suffix "-*tuma*" is often regarded as plurality marker. More precisely it is an "associative plural" (Corbett 2000: 101ff.) that expresses the idea of "the-ones- belonging-to" as in "*Maria-tuma*" (Maria and her friends/family) or *najoro-tuma* (the things belonging to food).

Since neither Barral nor his fellow Capuchin missionaries had received any linguistic training, it is not surprising that they mapped Warao data on the Spanish demonstrative system as traditionally proposed. Inspired by the person-oriented model of classical grammar, what they call first, second and third person demonstratives equals "near speaker", "near hearer" and "near a third party".

The plural forms seem inconsistent: "*amaja*" and "*omaja*" are not reported to have a plural but "*tamaja*" and "*tai*" do have plural forms. Both authors interpret *"tamaja-tuma"* and *"tama-tuma"* as variations of the same plural form corresponding to the singular "*tamaja*".
Although there are example sentences in Barral's work, these do not provide enough information to delimit the exact use of the terms.

2. More recent works

In the more recent sources the term "*omaja*" is not mentioned (I didn't find it in my data either). This may be due to dialect variation as it is found in transcribed Texts from the central Delta (La-vandero 2000, 1994, 1992, 1991). However they do contain more consistent systems since singular and plural forms are given for all terms and pronoun forms are set apart from determiner ones. The most recent work on Warao, Figeroa's reference grammar, describes a class of "demonstrative de-terminers" with three members (*ta, ama, tama*) and accords them three different degrees of distance in the English glosses, but labels only one term proximal and the other two both distal. They share with nouns the suffixation of "-*tuma*" (Figeroa 1997: 51) and have corresponding nominalized forms which take the "nominalization suffix" "-*ja*"[6]. (Figeroa 1997: 60). Note however that "*tai/ tatuma*" do not have such nominal forms and are thus listed as pronoun and determiner:

Warao term	category	distance	English translation
tama	dem. determiner	proximal	this
tama-tuma	dem. determiner	proximal	these
tama-te	deictic locative	proximal	here, in here
ta(i)	dem. determiner	distal	that
ta-tuma	dem. determiner	distal	those
ta-te	deictic locative	distal	there, in there
ama	dem. determiner	distal	that yonder
ama-tuma	dem. determiner	distal	those yonder
ama-te	deictic locative	distal	over there, in over there
tama-ja	dem. pronoun	proximal	this one
tama-ja-tuma	dem. pronoun	proximal	these
ama-ja	dem. pronoun	distal	that one yonder
ama-ja-tuma	dem. pronoun	distal	those yonder
ta(i)	dem. pronoun	distal	that
ta-tuma	dem. pronoun	distal	those

figure 3 Figeroa: 3 degrees of distance

The second recent source, Osborn, a Baptist missionary and professional linguist also names three demonstrative base terms belonging -in his view - to an overlapping class sharing some characteris-tics of nouns and others of relationals:

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[6] I shall discuss this suffix in detail in the morphology section (part IV, 2.1.2).

tama- (this)
ama- (that yonder)
ta- (that near you)
As nouns they combine with the plural suffix "-*tuma*":
tama-tuma (these)
amatuma (those yonder)
ta-tuma (those)

They also have alternants formed with "-*ja*":
tama-ja   (this)
ama-ja   (that yonder)
and "-*i*":
ta-i   (that) (Osborn 1966b: 261)

Like other nouns in Warao these demonstratives may occur attributive to a second noun as in:
peoro tamaja (this dog).
The relational like forms combine with "-*te*" and "-*ta*" accordingly (these suffixes are not further specified) (Osborn 1966b: 261):
tama-te   (here)
ama-te   (way over there)
ta-ta   (there)

Contrary to Figeroa Osborn does not mention the combination of the "-*ja*" forms with "-*tuma*". He further does not list "-*ja*" as nominalization suffix. Besides he is the only author giving, albeit indirect, evidence of a hearer-anchored characteristic by glossing the the stem *"ta-"* as "near you".

3. Open questions
All that can be said on the basis of the published sources is that there is evidence for at least three distance-sensitive demonstrative stems in Warao, some forms of which function adnominal as determiners. All forms seem to have plurals including stem *"ta-"*. This however is still set apart formally as it apparently does not combine with the nominalization suffix "-*ja*" and functions as determiner and pronoun simultaneously. Additionally it is reported as third person pronoun.
While the older sources map the Warao data onto the traditional person-oriented system the more recent works are less explicit. They do not specify the distance variable except from the indirect hint given by Osborn in his glosses which points to a distinction between hearer- versus speaker-anchored terms. In summary there is no broad and systematic treatment of demonstratives in Warao in the literature and explicit information on the language-specific variables of the demonstrative system is lacking.

III The procedure of gathering data in a fieldwork session
In the following part I describe the procedure of data collection in fieldwork in detail together with methodological reflections.

1. Enacting the questionnaire with consultants

While the MPI tool tests a set of parameters that are known to be frequently relevant cross-linguistically, there is no language where all of them apply. This leads to some redundancy in the procedure. It may be necessary to develop additional tasks to specify the language-specific value of each variable.

In order to enact the 25 different situations (plus variations) I enlisted the help of villagers from *Wakajara* I knew from my previous stay. While asking 10 consultants would have been ideal I only succeeded in doing the whole questionnaire 5 times. Sessions sometimes involved more than one consultant as neighbors or family of the informant were also present and trying to help. On the other hand not all consultants produced suitable data for each situation, so that the number of total an-swers varies from scene to scene.

I rejected the possibility of excluding the "audience" from sessions because such a procedure would have created an unnatural atmosphere. First of all traditional Warao houses do not have walls and thus most of the daily activities are strictly public, secondly most decisions in Warao society are ar-rived at by way of consensus within the extended family group. To find answers to the questions in-volved decision making: the choice between possible answers or possible interpretations of a situa-tion. So sometimes consultants felt insecure and enlisted the help of others.

Example No 2 (consultant: *Samuel*)

    We were doing scene 13 of the questionnaire.

    Samuel: *Tai baso (-) katukane jakuna? (...) katukane jakuna*?
                  "this glass (-) how could it be? (...) how could it be?"

    Stefanie: *Oko dewaraya takore baso isia dewarakitane. Baso ote jakore. Katukane dibia*?
                  "We are talking, well talking about the glass. While it is over there, how do you speak ?"

    Samuels wife: "... *kabaso ja*". *Jakuna*.
                  " '... our glass is'. It could be like this"

    Samuels daughter: "*Ote majanokoata baso ja.*"
                     "over there in at my house there is a glass."

The process went on for some time and whenever *Samuel* was unsure what to do he would wait for his wife or daughter to step in. He then usually took up those answers and repeated them for me. Under specific circumstances it might be more rewarding not to single out one consultant for a task but to try and work rather with a group of consultants. On the other hand when a consensus is reached no personal variation can be observed. Apart from the session with *Samuel* when a group formed spontaneously, I attempted to carry out the session with just one person.

2. Additional data types in the field

To make up for some methodological shortcomings of the questionnaire (which will be discussed later) I interviewed consultants directly about the use of demonstratives. One type of inquiry was to ask for "stereotype" definition of the different demonstrative terms, another type was to make a term or verbal/nonverbal behavior the topic of conversation. I call this type of data "meta-data" as it involves meta-linguistic talk. Such data arose mostly spontaneously in the course of a questionnaire session.

Thus in Example No 3 I asked *Calula* whether pointing was obligatory with the demonstrative adverb "*ote*":

Example No 3 (consultant: *Calula*):

> I ask whether the adverb "*ote*" has to be accompanied by gestures always. The answer is affirmative:
>
> "*'ote' kajara isiko .   'Ote Pepeineta' dibukore, jara omi nokonaja*"
>
> 'over there' our-arm with.   Over there Pepeina-at say-while, arm without understand-not
>
> " 'over there' is accompanied by arm movement. If you say '*ote Pepeineta*' without arm movement it is not understood."

Aswell as doing the questionnaire the manual encourages the researcher to also keep track of natural demonstrative usage. This method of not actively eliciting something from a consultant but observing activities as they are taking part in everyday activity is one of the anthropological core methods, namely "participant observation".

Later it will become apparent how these different types of data: elicited, meta-discussion and observational combined with still other data types (corpus data) allowed an increasingly clear perception of Warao demonstratives.

3. Recording the data

As situations sometimes became rather confusing (especially with several interacting consultants) it was essential to tape sessions for later analysis. Sessions were recorded on a MD-player together with verbal comments such as whether consultants where touching the object, pointing at it, or holding it up. I separated the different parts of the recordings according to the scenes in the field but transcribed them at home. Transcribing with a consultant would have been preferable but for practical reasons was not achieved.

The questionnaire tests "this" and "that" in non-contrastive use but additional tests for contrastive use are included in the manual. The answers of these latter sessions were only written down and not taped. They took place at the end of my stay when I was increasingly confident about what variables I was looking for exactly.

When I observed demonstratives used in a naturalistic context I recorded this in a little notebook and expanded upon it in my field trip diary.

Especially in the beginning videotaping of the scenes would have been desirable to capture nonverbal behavior. As many different factors took my attention while I was at the same time improvising questions I was not able to keep track of such things as gestures most of the time. Such non-audible information had to be added as comments during the recording process and were rather disturbing for the procedure.

4. Methodological issues

4.1 cultural factors

It is crucial in judging the reliability of a given answer to know the consultants, their culture, and the relationship between them and the researcher.

The fact that I had stayed in the same village and had done research there for one year provided sound knowledge about my to be consultants and thus facilitated my task greatly. We were all used to interacting with each other. Both members of the family group I stayed with and villagers in

general were fairly used to my "strange" research questions. While not all of them had the qualities of a good linguistic consultant, all of them accepted my interest and tried to cooperate.

So why is knowledge of the culture important? One reason is that I was sometimes forced to supply possible answers such as: "is it also possible to say X?". These were a last resort when consultants failed to grasp what was required of them. The answers given to such questioning are treated as "meta-data" and when included in a table appear thus in brackets. Such data is problematic in Warao culture where objecting overtly to a non-Indian is regarded as impolite and not generally done. Within the Delta Warao people live in contact with *Criollos*[7]. Compared to them Warao people appear shy and discreet.

The following scene from a story transcribed by Lavandero[8] illustrates the typical Warao behavior in a situation when we would expect him to object overtly to a proposition.

Example No 4:

    (The narrator is in a far away place where a *Criollo* proposes to him to marry his daughter)

    That is how that Criollo, the old José put the matter to me.

    [I was thinking:] "I won't come back."

    I thought it twice: "Well I'll have to cheat on him."

    [I said] "I'll come back, I'll come back at the new moon."

    But I said to myself: "No kidding, it's very far from home." (Lavandero: 1992: 79)

So although I believe there was mutual trust between me and my consultants and I in fact did get negative answers to my proposals, the possibility that a consultant regarded it as impolite to object or wanted to please me by saying what he suspects I wanted to hear can not be discarded completely.

Another difficulty was to plan sessions with consultants. Villagers daily occupations: gathering, fishing, hunting, gardening or occasionally payed day labour require them to be flexible. Their daily schedule is thus adapted according to the necessities of the moment. Things are done because they are felt to be urgent (like fishing to provide the days meal) or because it is the appropriate time for it (like planting to secure the next harvest or gathering crab or fruit). Other activities (like producing crafts for sale to tourists or helping the anthropologist) are fitted in around these core activities.

So in order to enlist the help and time of my consultants I employed two strategies. First of all I was flexible in the choice of consultants and second I tried to convey to them the necessity and urgency I was feeling for getting my work done. Some researchers have found payment useful to motivate consultants but when I offered payment people gave evasive answers. They preferred to help me informally as we had already established family-like relations to one another.[9]

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[7] For historical reasons the Venezuelan society merged from different ethnical and cultural groups: indigenous people (Indians), African slaves and European invaders. The term *Criollo* is an autodenomination of the Venezuelans.

[8] Lavandero is one of the Capuchins that contribute to the Barral dictionary and did an enormous amount of transcribing and publishing Warao narratives. Unfortunately he never systematized his linguistic insights. They are scattered in comments in the Warao text collections.

[9] Calling people by their name or nick name is only done by peers and otherwise considered impolite. The normal form of address are kinship terms. In order to participate in this system I was given a fictive kinship relation to an older woman upon my arrival from which all other terms of address for villagers derived. Obligations and rights to give and receive goods were part of this system. By

4.2 Difficulties inherent in the questionnaire

Some aspects of the questionnaire were problematic in research practice. Although creating and enacting the situations was generally unproblematic, some of the variations listed involved extensive verbal explanation on my part. The necessity of verbally created situations is shown in the following excerpt from scene 15.

Example No 5a (source: Wilkins 1999: 7):

"Spkr and addr are sitting next to each other at one end of a large clear space. The area is about the size of a football field. There is another person at the other end of the space facing away from spkr/addr and the referent [the object] is in front of him. The referent is not visible to spkr/addr, but the spkr knows about object and its location. (...)"

Example No 5b (consultant *Cheo*):

- Stefanie: "Now, *Fredy* could be over there or when he was over there really far at the house of Maria's mother. Like there. He sat down on the sidewalk with the bottle, but we cannot see the bottle. He is sitting like this, like this, like this. He sat down over there. And we do not see the bottle. But you came from there, you saw the bottle. How would you then refer to it, when I still cannot see it, then what would you say?"

- Cheo: After having called your name: "Stefanie, whose bottle is it, he sat down with?"
("*Estefani, tai sina apipina isiko kemu dujunae jakotai?"*)

The verbal explanations lead to an enactment that is more "abstract" than a truly spontaneous reaction would be. It is a piece of discourse that precedes the action. Utterances may be influenced by parameters of discourse.

Additionally some of the variables were difficult to pin down because of the methodology of the questionnaire. As we were using the same object in several situations in a row such parameters as "attention on object" and "object mentioned" were problematic. These difficulties will be addressed during the discussion of the fieldwork data. They illustrate the limit to what is testable by a questionnaire and call for the inclusion of other types of data at a specific point of the analyses.

IV The process of analyzing the Warao demonstratives

In the following part the process of delimiting the variables affecting Warao demonstrative use is described in detail.

We first list the demonstrative terms and structures as they were observed in the questionnaire data. Then the demonstrative classes in Warao are defined on the basis of their morphology and syntactic behavior in accordance with typological expectations. In a third step each parameter is discussed in turn in order to give precise definition for the Warao specific variables delimiting choice and use of demonstrative pronouns/determiners. Demonstrative adverbs are only included in the morphological overview but are not discussed in any detail.

As the process of analysis goes on it will be observable how different types of data combine in order to allow for a broader comprehension of the Warao demonstrative system.

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the end of my stay a family-like emotional closeness had developed on both sides.

1. Analysis of the questionnaire data

First I will analyze the answers that were given in the course of the enactment of the questionnaire in order to identify the variables that characterize each term. Figure 4a and 4b list the demonstrative terms as they appeared in the respective settings.

In the table we adopt the following conventions:
(): meta information
(-) : it is not possible to employ this term (meta information)
total of answers: counts only the answers that contained demonstrative pronouns

10 scenes with no shared vision space

5 scene were pointing is impossible

total of answers	7	1	2	1	1	8	1	3	5	3	/	7	6
scene	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
tamaja	5 (1)	1	1			5	1	1	(1) 3	(1) 1			
amaja												(1) 2	2
otamaja/ ote amaja												1 (1)	2
tai	(1)		1	1	1	3		1 (1)	(-)	1		2	2

figure 4a: occurring terms per scene, part 1

total of answers	1	2	/	1	1	1	1	1	1	1	4	
scene	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
tamaja	(-)					1	1		1			
amaja	(1)							1			(2) 1	
otamaja	(1)			1	1					1	1	
tai		1										

figure 4b: occurring terms per scene, part 2

1.1 Terms observed in the questionnaire

As pointed out in part II the term *"omaja"* did not occur at all in my data. I did find the terms "*tamaja*" (provisional gloss: proximal), "*amaja*" (non-proximal) and "*tai*" (non-proximal). Additionally I found the term "*otamaja*" (sometimes pronounced in two words: "*ote amaja*") that obviously consists of "*amaja*" plus the adverbial demonstrative "*ote*" and can be glossed as "this/that-one-further-away". From the answers given to the questionnaire it is not possible to distinguish the use of "*otamaja*" and "*amaja*". All that can be claimed is that it also denotes non- proximity as it occurs in the same kind of settings.

As we only tested reference to one object at a time it is natural that the plural forms did not occur in my data. What is surprising however is the fact that the forms listed as demonstrative determiners by Figeroa "*?tama?*" and "*?ama?*" did not appear either (compare section 2.1.2).

1.2 Types of constructions observed in the questionnaire

As Warao word order is quite free a demonstrative pronoun can be placed at the beginning or end of a phrase. Thus the question "whose bottle is this?" can either be put: "*tamaja sinama apipina*?" (this-one-here whose bottle?) or "*sinama apipina tamaja*?" (whose bottle this-one-here?)

Terms used as demonstrative determiners usually are found in front of the noun they specify as in: "*tamaja pipina yakera*" (this-here bottle is good) but may also appear after it.

1.2.1 "*tamaja*" "*amaja*", "*otamaja*"

a) pronominal use

In the first instance these items may function as a pronoun:

tamaja mi! (look at this-here!)/ *tamaja sinama apipina*? (this-here whom his-bottle? "Whose bottle is this one here?")

b) demonstrative determiner use

In the second type of construction the demonstrative pronoun is used adnominally and thus functions as a demonstrative determiner:

tamaja mai ajera (this-here my-tooth hurting "This here tooth is hurting")

amaja dau, *kasabaina jakotai* (this-further tree, far away which "That tree which is far away")

c) demonstrative identifier use

There is still in a third type of construction, in which this set takes on the function of a grammatical category classified by Diessel as "demonstrative identifiers"[10]. It is not clear if we need to assume a distinct class of such indentifiers in the case of Warao:

tamaja, baso![11] (this-here [is] a glass)

It can only be observed that the morphological form is the same in this case as in a) and b) but I did not investigate whether the syntactical properties of this "*tamaja*" are different from the other uses of "*tamaja*".

1.2.2 "*tai*"

"*tai*" appears only in two different types of constructions:

a) pronominal use

"*Tai mi*!" (that, look! "Look at that!")

b) determiner use

tai tira dibu-n-ae: (that woman said:)

In this example "*tai*" is used adnominally. I only had one example in my data where "*tai*" was functioning as a determiner. These type of sentences are more common in narration as will be shown in our discussion of endophoric use of demonstratives below.

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[10] Demonstrative identifiers usually translate in English by "this/that is". See next section.

[11] The comma indicates a small pause between the two words making the difference towards the phrase: "*tamaja baso ...*" (this glass here [is] ...")

c) identifier use
"*tai*" does not function as a demonstrative identifier. Instead sentences like: "*tai ma-rabo*" (that-one [is] my knife) must be understood to mean "this knife of mine".

As this section was able to show "*tamaja*" "*amaja*" and "*otamaja*" (and their plural forms[12]) form one set in terms of construction as they all can appear in three different construction types opposed to "*tai*" which constitute a second set which is restricted to two constructions.

1.2.3 Other demonstratives
Additionally to these two sets ("*tamaja*" "*amaja*" and "*otamaja*" as opposed to "*tai*") relative clauses and demonstrative adverbs were used especially in scenes where the object was not visible. Examples of the use of demonstrative adverbs are:
tamate ma-pipina (here [is] my bottle)
Ote ma-ribona isika ja! ([over there my back behind is "it is there, behind my back!")

2. Clarification of terminology: typological background
In the literature there is naturally no consistent terminology for the different demonstrative terms and their functions but we shall follow the definitions put forward by Diessel. According to him most languages have different series of demonstratives which correspond to specific syntactic functions. On this basis he distinguishes four different categories: demonstrative pronouns, demonstrative determiners, demonstrative adverbs and demonstrative identifiers. This last category according to Diessel is almost unknown in the typological literature where it is usually subsumed under demonstrative pronouns. He sees it justified as many languages use special demonstrative forms in copular and nonverbal clauses. Demonstrative identifiers according to him function to identify a referent in a speech situation and are usually glossed as "this/it is X" in English. [13] (Diessel 1999: 4f.)
Generally speaking not all languages distinguish categorically between all four possible classes. For example some languages have no distinct demonstrative determiners but use a demonstrative pronoun in adnominal position instead. The adverbial demonstratives on the other hand usually differ from others in their morphological form. Most often they are a combination of a demonstrative root and locative marker. Pronominal demonstratives are often formed from a demonstrative root and a nominalizing suffix, a third person pronoun or a classifier. Adnominal and identificational demonstratives on the other hand have either the same stem as pronominal demonstratives or consist of a deictic root alone (Diessel 1999: 157).
In order to define a set of demonstratives as a category it has to have phonological or morphosyntactic properties setting it apart from other sets (Diessel 1999: 3f.; 159).

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[12] The singular forms will hence be understood to represent the whole set.
[13] Demonstrative identifyers will not play a prominent role in this paper. Diessel gives an example from French: **C***' est Pascal*. (It/this is Pascal) (Diessel 1999: 5).

2.1 Morphology analysis of Warao demonstratives as evidence for demonstrative classes
2.1.1 Morphology of demonstrative adverbs
As generally predicted by Diessel demonstrative adverbs are a combination of a demonstrative stem and a locative marker. More specifically in Warao demonstrative roots combine with the suffix "*-te*" ("in/on") labeled "locative" by Figueroa (Figueroa: 45) or a suffix "*-ata*" (directional[14]). Those combinations can further combine with several suffixes as for example with "*-ika*"/"*-uka*", two variants of a diminutive:

tama-te (here)
tama-t-ika/ *-uka* (right here)

ama-te (over there)
ama-t-ika/ *-uka* (right over there)

t-ata (there)
t-at(a)-ika/uka (right there)

*ta-te (*there Figeroa 1997: 72)
*ta-t-ika (*right there)
tai-t-ika/uka (right at that place)

o-te (over there/away from speaker) (right next to speakers back, few meters away to landscape scale)

Comments:
Osborn analyses the term "*tata*" (there) as a combination of the stem "*ta-*" and the suffix "*-ta*" (Osborn 1966b: 261) he does not include the suffix "*-ata*" in his inventory of locatives (Osborn 1966b: 254).
The adverb "*taitika*" that I observed in my data is not mentioned in the literature. There is a form *ta-te* only cited by Figeroa and not found anywhere else. Both these forms differ from Osborn's findings as they shows the stem "*ta-*" in combination with the suffix "*-te*" (followed by the diminutive: *ta-i-t(e)-ika*. *t* in one instance).
Anyway there is a difference in the behavior of the stems "*tama-*" and "*ama-*" which only combine with the locative "*-te*" as opposed to *"ta-*" which combines (additionally) with the directional "*-ata*".
There is no corresponding adverb (**otamtate*) for the demonstrative term "*otama-ja*" observed in my data. This might be evidence on a morphological level that this term - presumably a contraction composed of the demonstrative root "*ama-*" and the adverb "*ote*" - is not yet fully integrated into the system. I would have to find out more about it in another field trip.

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[14] The suffix "*-ata/-eta*" functions as a directional for instance with place names:
kasaba naru-ae? (where did [he] go?) *Waranoko-ata naru-ae* ([he] went to Waranoko).

What can be stated with regard to demonstrative adverbs is that they form a distinctive class in Warao. In line with the predictions made in the typological literature they are formed from a deictic root and a locative marker.

2.1.2 Morphology of demonstrative determiners and pronouns

It is not easy to decide beforehand whether certain demonstratives should be classified as demonstrative pronouns or as demonstrative determiners, as the same forms can be used syntactically in both functions.

Now looking at the morphology as analyzed in the literature there is the set "*tama-*" , "*ama-*"[15] on the one hand and "*ta-*" on the other. Both are identified as belonging to a class of demonstrative determiners by Figeroa. The only example he gives is the plural form "*ta-tuma*" in adnominal position (Figeroa 1997: 51) it is thus not clear whether he considers expressions like ?"*nibora tama*"/"*tama nibora*"? (this man here) possible. I personally did not hear such a sentence nor does one appear in my data and Osborn refers to the stems as bound forms (Osborn 1966b: 261).

Thus there seems to be no free "*ama" or "*tama" in use.

"*ta-tuma*" on the other hand is heard very often. First of all it also functions as third person plural pronoun and second it is a phrase expressing surprise, used by older man[16]: "*tatuma*!" (my god!/Now that!)

Plural forms such as *tama-tuma* (those proximal) and *ama-tuma* (those distal) that are listed in the literature were not observed due to the design of the questionnaire.

The singular forms testified in my field data (with the exception of *omaja* (that-one), that I only found in the Barral text collection) are:

tamaja (this-one -within reach of speaker), *amaja* (this-one -a few meters away/geographical scale) *otamaja* / *ote amaja* (this -one-a few meters away/geographical scale), *omaja* (that-one (in the Barral data)), *tai* (that one). All of these but "*ta-*" may combine with the suffix "*-ja*", "*ta-*" combines with "*-i*". (The forms ending with "*-ja*" are shown to combine with the suffix for associative plural "*-tuma*" in the literature.)

- The suffix "*-ja*"

The status of the suffix "*-ja*" plays a key role in identifying the word class of the demonstratives. Osborn claims that the demonstrative stems share properties of nouns because they combine with the suffixes "*-ja*" (Osborn 1966b: 261). However he does not categorize this as a nominalizing suffix. Figeroa on the other hand does label "*-ja*" a nominalizing suffix but provides no argument for this (Figeroa 1997: 60). One might nevertheless want to claim that the suffix "*-ja*" is in fact a nominalizer. However the morphology of "*-ja*" is complex:

There is a morpheme "*-ja*" which can be suffixed to the durative form of a verb for instance "*naro-ya-ja*" (eat-durative-ja) and roughly means to be in the middle of doing something, thus in our case: "to be in the middle of eating". Some authors gloss it as perfective aspect and do not identify it as nominalizer (Osborn 1967:47, Figueroa 1997: 96f.).

_____

[15] There is a time adverb "*ama*" (now, today, then).

[16] Younger men often use Spanish expressions instead.

Vaquero lists the "-*ja*" suffix under adjective suffixes and glosses it as showing that the quality is enacted ("(...) *que la cualidad se esta realizando.")* (Vaquero: 116), thus "*yakera-ja*" (good-ja): that it is white. Lavandero mentions the "-*ja"* suffix in various notes and points out that this form has a subordinating property[17].

I therefore propose to consider the suffix "-*ja*" a kind of nominalizer, its general gloss being "the existence of X" which means "there is an action X taking place or there is a quality X being realized". On this basis the morphology of the demonstratives seen in pronoun use corresponds to the predictions made by Diessel. They are composed out of a demonstrative root and a nominalizing suffix. This applies to "ta-" as well though in this case the nominalizing suffixes are: "-i" (in the singular) and "-tuma" (in the plural). As mentioned before "*tai"* and *"tatuma*" are additionally used as third person pronoun. I shall assume that "*tai/ tatuma*" exist both as personal pronoun and demonstrative pronouns.

As I did not observe the forms *ama-tuma* and *tama-tuma* I do not know whether they are used pronominally and/or as determiners. Anyway they too have a suffix ("-*tuma*") labeled distinctive for nouns and do thus not interfere with our argument.

In summary the list of pronouns observed in the field and in Lavandero with their preliminary glosses is thus:

tama-tuma (those proximal)

tama-ja (this-one proximal)

tama-ja-tuma (those ones proximal)

*ama-tuma (*those distal)

ama-ja-tuma (those ones proximal)

ama-ja (this-one distal)

oma-ja (that-one)

o-t(e)-ama-ja (this -one-further away)

Some points remain unclear. As all the forms ending with "-*ja*" combine with "-*tuma*" we would expect the form "?*oma-ja-tuma?"* (those) which however is not mentioned in Barral and was not seen in the Lavandero data that I analyzed so far. Additionally I do not know whether there is a form ?*o-t(e)-ama-ja-tuma? (*this -ones-further away) corresponding to the term *"otama-ja"* that was only observed in my data.

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[17]*"Si a las formas de presente (...) se agrega el suffijo -ja las convertimos en formas subordinadas activas de tiempo pasado , con un matriz significativo parecido o igual al copreterito de A. Bello. (...)"* "When attached to the form of the present, the suffix *-ja* converts it into a subordinate active form of the past, with a meaning similar to or equal to the *copreterito* of A. Bello. (...)*"* (Lavandero 1991: 154)

2.2 Inventory of morphemes for demonstratives and denomination of categories

After a preliminary analysis the following list of morphemes may be assumed:

stems	suffixes
tama- (proximal)	*-te* (locational)
ama- (distal)	*-ata* (directional)
oma- (distal)	*-ja* (nominalizer)
ta- (?distal?)	*-tuma* (nominalizer plural)
	-i (nominalizer, singular)

figure 5a

One might however wonder if it is not possible to extract a further generalization from the data. Among the adverbs there seems to be a root "*t-*" prefixed to the suffix "*-ata*" in "*tata*". Could this be also the case with "*tama-*" thus analyzeable as "*t-ama-*"?

Neither Osborn nor Figeroa propose to separate a prefix "*t-*", and it is not clear how such a prefix could be glossed. But the systematicity is tempting: *tama-* could be a combination of the two demonstrative stems "*t(a)-*" and "*-ama-*" (the a having disappeared in contraction) and "*t-ata*" had to be analyzed as "*t(a)-ata*" or "*ta-(a)ta*" (which is in accordance with Osborns analysis: "*ta-ta*")

According to Osborn "verbthemes" can be a compound of two verb roots in Warao just as a noun may be composed out of two nouns (Osborn 1967: 56, Osborn 1966b: 254). This might apply to demonstratives.

Another possible element for our inventory of demonstrative stems is "*o-*" from *"oma-"* as found in the Barral and Lavandero data. It could have the underlying form o+ama+ja the first vocal of the stem "*ama*" having assimilated and be the first element in the demonstrative adverb "*o-te*".

A modified inventory of stems would thus read:

stems	stem themes	suffixes
ama- (distal)		*-te* (locational)
ta- (?distal?)	*tama-* (proximal)	*-ata* (directional)
o-(distal)	*oma-* (distal)	*-ja* (nominalizer)
		-tuma (nominalizer plural)
		-i (nominalizer, singular)

figure 5b

However as the stem themes do not combine the semantic value of the two assumingly underlying stems this analysis must still be considered a hypothesis.

2.3 Summary

It is possible to argue for two classes of demonstratives for Warao. First a class of demonstrative adverbs and second a class of demonstrative pronouns all of which can be used adnominally. Functionally they are thus "pronoun/determiners" (the term "pronoun" will from now on be understood to include both of these functions). Morphologically speaking the pronouns can further be subdivided in a set of stems that combine with the suffix "*-ja*" on the one hand and the stem "*ta-*" on the other that combines with other suffixes.

As the pronoun forms that combine with the nominalizing suffix "*-ja*" are also used as identifiers there is no separate class of demonstrative identifiers in Warao.

3. Pinning down the variables of Warao demonstrative pronouns

Having thus defined the demonstrative categories in Warao the following section will discuss the factors that showed themselves to be crucial in delimiting the use of the demonstrative pronouns (as they were the focus of the questionnaire, demonstrative adverbs were not systematically tested for). I will discuss the different parameters in turn and try to proceed to an exact definition of their role in Warao. We shall start from the easily definable ones and move to the more problematic ones. The following questionnaire parameters showed themselves to be of importance: distance, visibility and the use of gesture. Less easy to pin down but nevertheless of some importance seem to be the factors attention on object/attention not on object and object mentioned/ object not mentioned. Other parameters for which the questionnaire was testing such as, "social space" or whether an object is moving or not do not apparently play a role in the Warao demonstrative system.

3.1 Gesture: "obligatory finger pointing/touching"

During the first sessions it became immediately apparent that "*tamaja*" was always accompanied by a finger pointing or touching gesture. It was less clear whether pointing regularly accompanied the other terms, partly because they occurred less frequently, but also because of the very demanding nature of the role of the interviewer. I therefore included "meta data" to clarify this point:
Scene 5 in the questionnaire tests for a situation in which the speaker should refer to an object without gesture. This endeavour led to "meta" discussions about the usage of gesture as in the following Example.

Example No 6 (Consultant: *Cheo*):

> "*Amojo eku jakore amojo daisa oanaetiaja. Dija' omokomoni "tai mi, tai mi*!"
> ("when we have something in our hands or have gripped something else. And we cannot let it go, we say: "that look, that look!")

In this example and in direct answers to scene 5 only "*tai*" was used out of the two sets of demonstrative pronouns. My consultants pointed out to me that finger pointing/touching was indeed obligatory with "*tamaja*", "*amaja*" and "*otamaja*" (just as with the demonstrative adverb "*ote*") but not with *"tai".* According to my observational data there is however a possible pointing gesture other than finger pointing.

Example No7:

> *Calula* laid completely wrapped up in his hammock and was not able to use his arms. As he had to use the adverb "*ote*" he accompanied it with a pointing gesture of the head.

But for scene 5 "*tai*" was the only possible demonstrative candidate. So the *tai* set is set apart from the other terms as it does not require a pointing gesture. Although people do use mouth pointing in other situations they cannot use this gesture with "*tamaja*", "*amaja*" or "*otamaja*".

3.2 Visibility: "shared visual space"

One other variable which turned out to be important was visibility. Within the questionnaire several scenes (6, 10, 11, 15, 25) have the referent hidden or half hidden from the speaker, hearer or both. In scene 11 and 25 no demonstratives were used in the answers, whereas in the remaining scenes (6, 10, 15) "*tai*" was chosen. "*tamaja*", "*amaja*" and "*otamaja*" together with their accompanying

finger pointing gesture are apparently not possible in such situations.[18]

Other constructions which did occur in the answers were relative clauses and possessive constructions.

I would suggest that the relevant factor may be best captured by the term "shared visual space". This variable too seems to differentiate between "*tai*" and the other three terms: While they require shared visual space "*tai*" does not.

3.3 Distance: "distance from speaker"

It was clear from the start that distance played a role in Warao demonstrative system. In this section I will analyze this variable for each term in turn:

- "*tamaja*"

In all the scenes where "*tamaja*" was used (1, 2, 3, 5, 7, 8, 9, 10, 19, 20, 22) the referent was either within the speaker's reach (1, 2, 3, 5, 7, 8) or easily brought within it, for instance by taking one step or by the inclination of the body (9, 19, 20, 22).[19]

- "*amaja*"

The distance of referent to the speaker in the scenes where "*amaja*" was used (12, 13, 14, 21, 24) ranged from 5 paces away (12), a few meters away (21), half the size of a football field away (14), size of a football field away (13) to several kilometers away (large geographic scale) (24).

- "*otamaja*" ("*ote amaja*")

The same held true for "*otamaja*" scenes (12, 13, 14, 17, 18, 23, 24) as well. Distance ranges from 5 paces away (12), a few meters away (23), half the size of a football field away (14, 17), size of a football field away (13, 18) to large geographic scale (24).

- "*tai*"

With regard to "*tai*" distance seemed not to play any perceivable role as the term was used in scenes with every possible scale (1, 3, 4, 5, 6, 8, 10, 13, 13, 15) except the geographic one (24, 25). We are nevertheless confident, that "*tai*" is possible in such situations on the basis of data from narrative texts as discussed in section 5.3.1.

We may conclude that "distance of referent from speaker" is an important variable in Warao demonstrative usage. It governs the choice within the "-*amaja*" set. *"tai"* on the other hand is apparently not affected by the distance variable at all, which one more factor setting it apart from the remaining three terms. Because of this evidence the "*tamaja*", "*amaja*" and *otamaja* group will be called the "distance-sensitive set" from now on.

Now within this set, there is a clearly definable borderline between "*tamaja*" on the one hand and "*amaja*"/ "*otamaja*" on the other, but no such easily definable conceptual line between "*amaja*" and "*otamaja*". The questionnaire data only allows us to define it as "non-proximal" as opposed to the

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[18] In order to account for the times that those demonstratives did occur it has to be said that the object was not completely invisible and that due to this the situation may have been interpreted differently by various consultants. On various occasions consultants tried to bring the object into shared vision space by grabbing it and holding it up or suggested to walk over and have a look at the object in order to talk about it.

[19] Even in scene 10 where the object is badly visible to the speaker on the other side of the adressee's body "*tamaja*" was accepted on suggestion.

proximal "*tamaja*". In order to probe the border between the non-proximal terms I had to include different data types and look at additional uses of demonstratives as will be laid out in section 4.

3.4 Attention on object: "attention not on object"

A variable that was less well observable in the questionnaire data was "attention on object". The question here is whether the attention focus of the participants on the referent has any effect on demonstrative choice. A methodological problem was however that enacting the different scenes was usually done in one session and therefore entailed repeated questioning for the same object in different situations in rapid succession. The object was thus permanently within attention focus.

In Example No 5b the consultant *Cheo* was not able to use a demonstrative term of the distance-sensitive set as the object was not visible to us. He first called my name to attract my attention and only after having done so used the demonstrative "*tai*". ("*Estefani, tai sina apipina isiko kemu dujunae jakotai?")* The question is if he could not have used "*tai*" right away?

An observed situation might be helpful in resolving this question: Here speaker assumes that addressee has his/her attention on something but then realizes that this is not the case :

Example No 8a (consultant *Lora*):

    Lora is trying to show a louse to me she just found in one of her grand-children hair.

    "*tai mi, tamaja*"

    that look, this-one-here

    look at that, at this one here!

She first uses *"tai mi",* thinking I was looking at it. When she realized that I was not, she follows this with a term from the distance-sensitive set ("*tamaja*"). The same holds true for the next example.

Example No 8b (consultant *Lora*):

    She is asking somebody about the owner of a glass and addressee was not attentive:

    "*sina abaso ja, tamaja*?"

    who his-glass is, this-one-here?

    Whose glass is it, this here?

On the basis of this observational data it is possible to conclude that in order to draw attention to an object the speaker employs terms from the distance-sensitive set. Whereas when attention is already on the object "*tai*" may be used.

3.5 Object mentioned

Our last and in the data least obvious parameter is "object mentioned". This variable too suffered under the problem artificial discourse context of questionnaire enactment. In order to ensure that my consultant assumed a situation where the object hadn't been talked about yet, I had to create the situation verbally:

Example No 9 (consultant *Cheo*):

    We were enacting the variation "does it make a difference if object had been mentioned before?" of scene 6 (referent just beside Spkr, on side away from addressee):

    - Stefanie: (...) we are going to talk about the bottle. You (-) that one is my bottle. And so you want to buy the same. In *Tucupita.* Then how would you ask me?

    - Cheo: Am I going to show it to you?

> Just the same [as in the other scenes] pointing it out to me. First we talk (-) we did not talk about it, first. And then it is that you are going to talk.
>
> -Cheo: I will say: "What a great bottle!" Where have you bought it", I will talk like that.
>
> ("*Pipina yakera jae*! *Kasabamu iji nisanae*?")

There was obviously a problem with the strong emphasize on "not-mentioned" that I had created since the consultant used a marked expressions in order to call attention to the object, which denotes great surprise but is not a demonstrative. It was thus not possible to reach a definite conclusion on the relevance of this variable from my field data alone.

4. Open questions

In section 3 the answers given to the questionnaire were analyzed and where necessary complemented by interview and observational data. Although this allowed the identification of almost all the variables relevant in the Warao demonstrative system we were left with two open questions. First, the border between the two non-proximal terms ("*amaja*" and "*otamaja*") within the distance-sensitive set is not yet defined and second, we were not able to answer the question whether the variable "object mentioned" plays a role in the choice of demonstratives. This might be due to the fact that "object mentioned" has to be regarded as a variable that delimits the use of demonstratives in discourse (in the endophoric realm following Diessel) rather than in "concrete" spacial deixis. In the following section we shall include additional kinds of uses (e.g. contrastive use) and other data types (e.g. endophoric discourse use as observable in narrative texts) in order to produce further progress.

5 Tackling the open questions

5.1 The boundary between "*amaja*" and "*otamaja*"

The variable "distance from speaker" was readily detectable as the primary factor governing the choice of "*tamaja*", "*amaja*" and "*otamaja*" as opposed to "*tai*". Within the distance-sensitive set the first can be glossed as "within reach of speaker/easily brought within". All that could be said with regard to the two remaining terms was that they were non-proximal. We have yet to discover if there is any distinctive factor setting them apart from each other. In order to do so it was necessary to examine demonstrative use in contrastive contexts.

5.1.1 Additional data: looking at contrastive use

Contrastive use was tested with the questionnaire method on the bases of 5 further scenes proposed in the manual for this purpose (here referred to as B1-B5). While scenes B1 to B3 are table scale (objects were on lab of consultant) scenes B4 and B5 are on a somewhat larger distance scale ("room scale": objects were within two meters distance). In scenes B1, B2 and B3 several paper cards with hidden drawings were placed on a book which rested on the consultant's lap. He was then asked to guess the picture on the other side. In scene B4 and B5 two plates were placed on the floor in front of the consultant who was sitting on a chair and could reach the closer object by bending towards it but would have had to get up and walk a step towards the further one.
The results are shown in figure 6 were we only list the demonstrative terms while the names of the objects and all other responses are represented by "X". Words other than the demonstratives were either names of the objects drawn on the cards without an attributed demonstrative or names of the

presumed owners of the objects (*a-jorioko* (his/her plate)), *ma-jorioko* (my plate)). I also included data that rose during the questionnaire sessions when consultants came up spontaneously with a contrastive setting in order to explain the difference between the terms to me. They are marked with a "Q" in brackets.

Specification of scenes:
B 1: 2 paper cards in a vertical row
B 2: 3 paper cards in a vertical row
B 3: 2 paper cards in a horizontal row (equidistant from speaker)
B 4: two plates in a horizontal row (equidistant from speaker)
B 5: two plates in a vertical row

consult-ant	B1	B2	B3	B4	B5
Wilmer	tamaja X/ tamaja X tamaja X/ tamaja X tamaja X/ tamaja X tamaja X/ tamaja X	tamaja X/ tamaja X/ tamaja X tamaja X/ X/ X[20]	tamaja X/ tamaja X tamaja X/ tamaja X	tai X/ tai X tamaja X/ tamaja X tamaja X/ tamaja X	tamaja X/ tamaja X
Cheo	tamaja X/ tamaja X tamaja X/ tamaja X tamaja X/ tamaja X	tamaja X/ tamaja X/ tamaja X tamaja X/ tamaja X/ tamaja X	/	/	tamaja X/ amaja X tamaja X/ amaja X (Q) tamaja X/ otamaja X tamaja X/ otamaja X (Q) tamaja X/ otamaja X (Q)
José	/	/	/	tamaja X/ tamaja X tamaja X / tai X	tai X/ X
Julian	/	/	/	tamaja X/ tamaja X	tamaja X/ amaja X[21] tamaja X/ amaja X tamaja X/ amaja X
Calula	/	/	/		tamaja X/ amaja X(Q)

figure 6

Observation: There was no preference as to the order in which the cards or plates were addressed. By looking at contrastive use two statements can be made: First the boundary between "*tamaja*" and "*amaja*"/"*otamaja*" is confirmed and so is the gloss for "*tamaja*" ("within reach of speaker or easily brought within reach of speaker"). Second the boundary between the two non-proximal expressions "*amaja*" and "*otamaja*" is still not definable[22].

a) boundary between proximal and non-proximal
The plate in scene 5 that is further away from speaker can obviously be considered to be right on the border between "proximal" and "non-proximal". If it had been standing alone without a contrasting second object "*tamaja*" surely would have been possible for the object further away from speaker. A comparison with the questionnaire confirms this. Compare scene No 9, where the object is not within direct reach but easily brought within reach of speaker: "*tamaja*" was actually chosen

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[20] Asked whether "*amaja*" was possible in this scene, consultant negates.
[21] Asked whether the further away object could be adressed by "*tamaja*", consultant negates.
[22] I did not at the time try a setting with two objects on a vertical row with the first being out of reach of speaker. Maybe this would have triggered "*amaja*" and "*otamaja*" as contrasting pair.

by all consultants. The fact that "*amaja*" and "*otamaja*" are also used for such a distance can be attributed precisely to the contrastive use that so to speak "expands the boarder into proximity" for these two non-proximal terms.

b) boundary between the two non-proximal terms
"*amaja*" and "*otamaja*" are ideally glossed as "well out of the reach of speaker" and therefore are only possible in scene B5 (where the boundary of this gloss is expanded because of the contrastive setting). The distance of the referent to speaker is apparently too small in the other scenes. Here not even the contrastive setting is enough to elicit them.
We might compare this with scene 12 were the object is a few steps away, which is the nearest distances to elicit "*amaja*" and *"otamaja"* in non-contrastive settings.
As contrastive use of two objects on a room-sized scale (B5) did not yet bring the desired results I enacted scene B5 with 3 objects. All were placed increasingly far away from a speaker on a vertical axis. It was only then (in terms of contrastive use of three objects) that a border between "*amaja*" and "*otamaja*" became observable. My one consultant answers were in order of growing distance: "*tamaja*" "*amaja*" and "*otamaja*".
To conclude, while "*tamaja*" can be glossed in terms of "absolute distance" in non-contrastive as well as in contrastive use, "*amaja*" and "*otamaja*" can be glossed distinctively only in contrastive use. The semantic content of the two non-proximal terms however remains less well defined: "*otamaja*" can be glossed as non-proximal, and distal in contrastive use . While "*amaja*" would be glossed as non-proximal, and medial in contrastive use.
Interestingly my consultants employed similar approaches when asked to give an ideal definition of the three terms. The answers are shown in figure 7.

consultant	"*tamaja*"	"*amaja*"	"*ote amaja*"/ "*otamaja*"
Wilmer	- "*este*" (Sp.: this) - "*tamaja karata*" (this book here) (obj. on speakers knees)	"*amaja karpa*" (the plastic over there) (obj. ~ 3 paces away)	"*ote amaja motor*" (the motor over there) (obj. ~ 300 meters away)
José	"*aquí*" (Sp.: here) "*tamatika witu*" (exactly here)	"*allá*" (Sp.: there)	
Julian	"*kawere witu*"[23] (really near us)	"*utira sabuka jaine*"[24] (a little away from me)	points at an obj. 200 meters away
Cheo		"*awere*", "*taitika*" (near), (right there)	
Calula	not possible for things which are further away like on the other river shore (*kejenuka*) (Q)		

[23] Formulated as distance from speakers.
[24] Formulated as distancea from speaker (self)!

figure 7

Note that while consultants gave Warao glosses or Spanish translations for the two first terms, "*ota-mja*" was only explained by way of examples.

5.1.2 Hypothesis: a system undergoing development?

So do we really have a two-term distance-sensitive system (proximal versus non-proximal) develop-ing into a three-term distance-sensitive system? Or will the third term "*otamaja*" that seems to con-sist of the second term "*ama*" and the adverb "*ote*" [25] (over there) stay an auxiliary construction that will not be integrated further in the system? If it were fully integrated we would expect the term "*amaja*" to become a medial term also in non-contrastive use and the new term to function as distal demonstrative.

5.2 Variables governing the use of "*tai*"

Let us first sum up what we found out about the use of "*tai*" so far. First of all "*tai*" is the only de-monstrative pronoun which simultaneously functions as a personal pronoun. It is not chosen in or-der to explicitly call forward attention of addressee. It is not distance-sensitive, has no obligatory gesture and does not require the referent to be in shared vision space.

However we have not yet established whether the variable "object mentioned" plays any role in de-limiting the use of this set.

5.2.1 Inclusion of an additional use: looking at discourse (endophoric) use[26]

I became aware of the necessity to include discourse use of demonstratives when I repeatedly heard the use of first "*tamaja*" and then "*tai*" in a sequence portrayed in the next example.

Example No 10:

> *Jury* (a young girl) is sent by her grandmother to fetch one of her grandfather's trousers that she wants to sew for her husband. The girl walks over to another part of the house compound. And holding up a pair of trousers she asks:
>
> "*tamaja* ?" (this-one-here?)
>
> and her grandmother answers:
>
> "*tai* !" ([yes] that-one!)

There was never any variation in the use of these two terms in such a situation. *Jury* first uses the appropriate distance sensitive pronoun "*tamaja*" to call attention on the object. Then attention being on the object/the object being mentioned her grandmother uses "*tai*". This sequence stands out in-sofar as there is no term for "yes" in Warao and usually the phrase is echoed in order to give an af-firmative answer so one would have expected her grandmother to echo "*tamaja*" or use "*amaja*".

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[25] The adverb "*ote*" itself has a rather unspecific distance range as "some distance away from speaker". Reaching from behind the speaker's back to over a a few meters away to hundreds of ki-lometers away. *"ote"* can further be intensified by making the final vowel longer and putting stress on it while raising the voice to high pitch: *"otéee"*. One has always to point with *"ote"* and *"otéee"* or make a movement with the arm in the according direction.

[26] Although Diessel (1999) discusses two additional instances of the endophoric use as opposed to endophoric namely "anaphoric" and "recognitional" I will limit myself to the consideration of dis-course use here.

Here it is not clear whether it is the variable "object mentioned" or "attention on object" that triggers the use of "*tai*". In order to find out more we examine discourse use in narrative texts. Narrative texts need to keep track of mentioned information on the one hand and introduce new information on the other. In line with our observations so far we would suspect that "*tamaja*" is the ideal candidate for discourse new / unmentioned information while "*tai*" would then be used to refer to things that were already mentioned thus paralleling its function in exophoric use where it denotes that the object is already in the attention span of the addressee.

5.3 Inclusion of an additional data type and method: looking at narrative texts by corpus research and text analysis

Now in order to check on the use of "*tai*" and "*tamaja*" in discourse I carried out a corpus search. The corpus consisted of narratives, more specifically of myths that were written down and published by J. Wilbert (1964, 1969) (6384 words, 41925 characters). I scanned the material in and normalized the spelling conventions but did not annotate it in any way. In order to be able to judge genre peculiarities I cross-checked the results with texts from two other genres: 10 stories of every day life as they were recorded and transcribed by the Capuchin missionary Lavandero (1992) (available only in text form), and an public relations text commissioned by an oil company active in the region (834 words/ 5826 characters). The author is Heinen, who elaborated it with Warao consultants from different parts of the Delta in order to inform the Warao inhabitants of the area about the activity of the oil company.

5.3.1 Corpus search for "*tai*" and "*tamaja*"/"*amaja*"/"*otamaja*"/"*omaja*" [27]

The results of the search turned out as follows: "*tai*" occurred 23 times in the "Wilbert corpus" and 44 times in the Heinen text, while "*tamaja*" was found 9 times in the "Wilbert corpus" and only once in the Heinen text. There was no occurrence of "*amaja*", "*otamaja*" or "*omaja*" whatsoever in these two text sets. (The Lavandero texts could not be electronically searched).
It is striking that the word "*tai*" has a significantly higher occurrence than "*tamaja*" in all of the texts and astonishing that the Heinen text contains more occurrences of "*tai*" than the whole "Wilbert corpus". This has to be blamed on genre characteristics. The Heinen text concerns exclusively one topic: "the oil". The sole occurrence of "*tamaja*" in this text takes place in the second sentence: Example No 11:[28]

> *tamaja kri'tiana*[29] *ta-tuma a-ribu "petróleo", oko warao ka-ribu isia "ore"*
>
> <u>this-one</u> *Criollo* they their-word "oil",   we Warao our-word with "*ore*"
>
> "<u>this is</u> the word of the *Criollos:* 'petrol', we Indians, in our language call it '*ore*' "

Here the topic, "oil", is presented for the first time, attention is drawn to it as the focus of the following text.

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[27]Although I personally did not find the term "*omaja*" in my data I assume it to be a member of the distances-sensitive set on the bases of its morphology.
[28]The English translation by Heinen was: The word oil is a non-Indian term. We the Warao call it "*ore*" in our language.
[29] From Spanish: *cristiano* (christian)

The rest of the phrases exclusively use "*tai*" as pronoun or demonstrative determiner as in the following example.

Example No 12:[30]

> <u>*tai*</u> *ore nisaya.   <u>tai</u> ekumo ore atoi nonakitane kasorina tane.*
>
> that oil extract. that from   fuel   make-to   diesel   so
>
> "They extract the oil and make fuel out of it"

In the light of the paucity of information in the above two sources I also read through 10 Lavandero texts (approximately 70 pages) looking for examples of demonstrative terms other than "*tamaja*". (The occurrences of "*tai*" and "*tamaja*" confirmed the data from the Wilbert texts, but we did not further analyze this frequency data.) Here in Lavandero alone I found 3 occurrences of "*omaja*" (the distal term in the Barral model).[31]

Example No 13 (Lavandero 1992: 29):

> (...) *, omaja Masijakanoko a-tai-si eku*
>
> this-one-non-proximal *Masijakanoko* possession-marker-that-goal-marker in.
>
> "that happened, in a side arm of the Masijakanoko river"

The term *"omaja"* behaves in this example just as "*tamaja*" did in example No 11, it appears early in a text setting the frame of the narration.

Another typical occurrence of "*tamaja*" is the very last sentence at the very end of a story were it is often found in a fixed expression.

Example No X (Lavandero 1992: 25):

> *tamaja isia a-kua.   Mate tamaja, deje kuai*
>
> this-one-here with his-head. Still this-one-here story high[32]
>
> "This is the end of the story. It is a yet recent story."

Here attention is called to the point at which the story ends. The whole story is summed up by the demonstrative term "*tamaja*" and qualified as not mythological.

Whenever I found demonstratives of the distance-sensitive set in other positions than the beginning or end they were always part of direct speech as in the next example.

Example No 14 (Lavandero 1992: 38):

> - (...) "*Iji tamaja dauna naminanaja (...) tamaja bu era.   Taisikuare* (...) "(38)
>
>   you this-here land   know-not   *(...)* this-one-here there-is-a-lot. That-for   (...)
>
> "you don't know this land here   (...) there is are a lot of mangroves. That for   (...)"

---

[30] The English translation by Heinen was: The oil is extracted and gasoline is made from it.

[31] Recall that I observed no "*omaja*" . This may be due to dialect variation between the western and central areas, but this would not account for the fact that the term is absent from the "Wilbert corpus".

[32] "its head" means "its end" and "a high story" means a "recent story". This has to do with Warao World view. The tree as a symbol of life: its roots are the ancient and the crown with its new branches and leaves the recent.

If "*tamaja*" is so rare then how are new topics introduced or identified otherwise? Other evidence suggests that "*tamaja*" is not the standard way of doing this. It is rather used to draw attention to the identity of a participant thus showing its "identificational" function:

Example No 15:

"*Tai, tamaja jakutai* a wai "juba".

it, this-one which its name "snake"

"He who was in fact a snake."

We have to take into account that at this stage of the story the character had appeared in the story (therefore the sentence starts with "*tai*" functioning as pronoun) but not yet been identified (or mentioned as snake), so it is explicitly identified by the phrase: "*tamaja jakutai"* (this one, which).

The same task is often achieved by a relative clause without "*tamaja*" as shown in the following example.

Example No 16:

-Ma natoro sanuka, dau a wamana eku jakutai tai seke tomonojo.

my grandchild,   tree its-crack   in   which it actually wasp

"my grandchild! The one who is in the the crack of the tree actually is a wasp"

5.4 Conclusion

By looking at texts of three genres it was thus possible to detect a discourse use of our demonstratives. "*tai*", which was seldom used in spacial deixis is the demonstrative predominantly used in narrative texts. Terms of the distance-sensitive set on the other hand appear very seldom. When they do occur they are placed at the beginning or end of a story and may thus be said to occur "outside" the narration proper. In this case they set the frame of the narration.[33] An additional use of the distance-sensitive terms is the identificational function that was discussed briefly in part 1.2.2.

Our hypothesis that "*tai*" may function as way of keeping track of referents in discourse was not confirmed, but a new variable "inside/outside narration" was claimed to govern the choice of demonstratives in discourse: Whereas "*tamaja*" (and probably also other terms of this set) is used to point to global characteristics of the story (setting its frame) or to identify an element within the story, inside the narration process it is exclusively "*tai*" which is used to keep track of elements within the body of the narration.

Note also that "*tai*" forms part of expressions that function as sentence connectives, like for example "*tai-si-kuare*"[34] (that-goal-marker-after "because of that"), where it refers to a previous proposition.

V Summing up

The last part sums up observations concerning Warao demonstratives in the first section and then revises the different data types and fields of demonstrative use in order to evaluate their contribution to the analysis process.

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[33] In the light of these observations the term "*tamaja*" in example No 11 is tracing the limits of the following text. It is telling us that this text will be about oil (as opposed to mythical or everyday events).

[34] Compare example No 14.

1. Demonstrative pronouns in Warao

On the bases of their morphology and syntactic behavior two distinct classes of demonstratives were be claimed for Warao, demonstrative pronouns (functioning additionally as determiners) and demonstrative adverbs. Both classes correspond to predictions made in the typological literature. There was a further subdivision within the demonstrative pronouns as terms formed from the "*ta-*" stem have no identificational use.

1.1 Variables according to demonstrative terms

The following parameters from the questionnaire where found to be relevant for spacial deixis:[35] "Distance of object to speaker", "object visible", "accompanying pointing gesture" and "attention on object". The language-specific variables governing the use of demonstrative pronoun/ determiners in Warao were : "distance of object from speaker", "object within shared vision space", "attention not on object", "finger pointing/touching obligatory" and additionally there was the variable "inside/outside" discourse found to be relevant in discourse use.

The distribution of the values of these variables is shown in figure 8. It confirmed the division of demonstrative pronouns into two sets that has already been claimed on morphosyntactic grounds. The distance-sensitive terms *tamaja, amaja, otamaja* contrast with the *"tai"* set with regard to all relevant variables[36].

	distinctive property of
	discourse parameter
?	no data available

variable demonstrative	shared vision space	gesture obligatory	distance from speaker	calls attention on obj.	outside narration	inside narration
tai						
tamaja						
amaja						?	?
otamaja						?	?
omaja	?	?				

figure 8: two sets contrasting in terms of variables

After all nor the person-oriented system of classical grammar - on which older sources mapped the Warao data- nor hints to a hearer versus speaker anchored system -that were found in more recent works- were affirmed by my findings.

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[35] As adverbs are formed with the same stems than demonstrative pronouns the results may also serve as a first hint to their usage.

[36] As these carry a notion of distance it is possible to refer to an object and its location at once. This fact may have been the reason why Barral attributes the category of adverb to at least one term of this set ("*amaja*").

1.2 Range of the distance-sensitive terms

It had been somewhat problematic to delimit the range of the different members of the distance-sensitive set. Figure 9 shows how the different data combine and contrast in this task.

(As I did not gather any data on the plural forms they are not included here. The term *omaja* is represented with the information from the literature and narrative texts.)

Pattern	Meaning
▤	true for non-contrastive use
▥	true for contrastive use
▦	true for both uses
?	no data available
▮ (green)	ideal definition (meta data)

distance notion	within reach of speaker	easily brought within reach of speaker	well out of reach of speaker	further away than "*amaja*"
tamaja	true for both uses	true for non-contrastive use		
amaja		ideal definition (green)	well out of reach (both uses)	
otamaja		true for contrastive use		ideal definition (green)
omaja		?	?	

figure 9: delimitation of the terms of the distance sensitive set

2. Methodological reflections: data types, methods and contexts

In order to investigate parts of the Warao demonstrative system different data types and different areas of use were examined. We took as our starting point a fieldwork manual of the Language and Cognition Group at the Max Planck Institute, Nijmegen (Wilkins 1999) which was designed for cross-linguistic comparison. At first we followed their method in limiting ourselves to the use of demonstrative pronouns and determiners in spacial non-contrastive deixis. The questionnaire had nevertheless to be complemented by additional data types and their corresponding methods: observational data gathered using participant observation, data from open interviews and data from narrative texts assembled into a corpus.

In order to gain an in-depth understanding of the demonstrative system we found it necessary additionally to examine demonstratives in contrastive and discourse use. In the next section we discuss the strength and limitations of the different data types and evaluate each method's contribution to the investigative process.

2.1 Observational data

Observational data was gathered with the core method of cultural anthropology: participant observation. This method typically refrains from heavily structuring the activities of the researched people. While some observations may impose themselves on the researcher others might just not be observable because there is no appropriate context for them or because the presence of the researcher makes their occurrence more unlikely. Such data therefore is less appropriate for comparative purposes. On the other hand this open method enables the discovery of parameters that have not been suspected beforehand. As was shown in this report, the observation of demonstratives in spontaneous use directed my interest to an additional field of their use, the discourse use, and enabled the definition of a variable "inside/outside discourse".

Further observational data can be helpful in providing insight into the cultural background of the consultants and their relationship to the researcher. Such factors must be taken into account when interpreting consultants' responses. We discussed above how culture specific factors influenced the enactment of the questionnaire.

2.2 Questionnaire data
Coming from a psycholinguistic background the questionnaire controls the context variables to a high degree to allow for cross-linguistic comparison. The strengths of these controlled settings correspond to the weaknesses of participant observation and visa versa.

There are also problems inherent to the elicitation of data with a questionnaire. As we saw, it is difficult to produce a context where the referent is not the object of attention or has not previously been mentioned. In such cases observational data is a valuable additional source of information. Nevertheless the clear limitation of the questionnaire to the field of spacial non-contrastive deixis was of great advantage at the beginning of the investigation process. Were one initially to test for all possible parameters in all possible uses, it would be difficult to obtain unconfounded data.

While the distinction between spatial and discourse deixis is a useful starting point, the two concepts are intermingled in practice. Especially as the enactment of a questionnaire is a communicative act in itself and involves intratextual (endophoric) deixis.

2.3 Interview data
Interview data falls somewhere in between the two extreme types outlined above. There is a continuum from open interview, through half structured interview to standardized questionnaire. Interview data is different from the questionnaire and observational data as it allows a meta-linguistic discussion with consultants (it was therefore called "meta data" and specially labeled throughout the research process).

On its own meta-linguistic data is an ambiguous or problematic source of information. It represents the - mostly spontaneous - linguistic theory of consultants who may have specific parameters in mind without explicitly stating them. Consultants might also derive their theories from the structure of the researcher's questions. At any rate norms of ideal use of a term or its abstract definition always contrast with its actual use. This can be observed in other cultural fields as well where ideology and behavior diverge. Figure 9 reveals how meta-data contrasts and combines with questionnaire data to give a full picture of demonstrative use.

2.4 Corpus data and text analysis
In weighing up the evidence for the variable "object mentioned" we examined the discourse use of demonstrative pronouns in a corpus of published narrative texts. With the knowledge already gained from spacial deixis we were able to hypothesize how "*tai*" and and the distance-sensitive set would contrast in discourse deixis. This data source enabled us to exclude this variable but let us to analyze "inside/outside narration" as a relevant parameter.

2.6 Conclusion
While my own perspective, that of cultural anthropology and ethnolinguistics, favors less structured methods such as participant observation or open interviews I chose a psycholinguistic questionnaire

as starting point for a research on demonstratives in Warao. This controlled method was very effective in providing potential parameters which were then narrowed down to language-specific variables by the inclusion of additional data and methods. Although the non-contrastive use of demonstratives in spacial deixis was a starting point, only the inclusion of the contrastive and discourse uses made a detailed understanding of the relevant Warao variables possible.

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