

# Classifiers in Kilivila: Introducing referents and keeping track of them

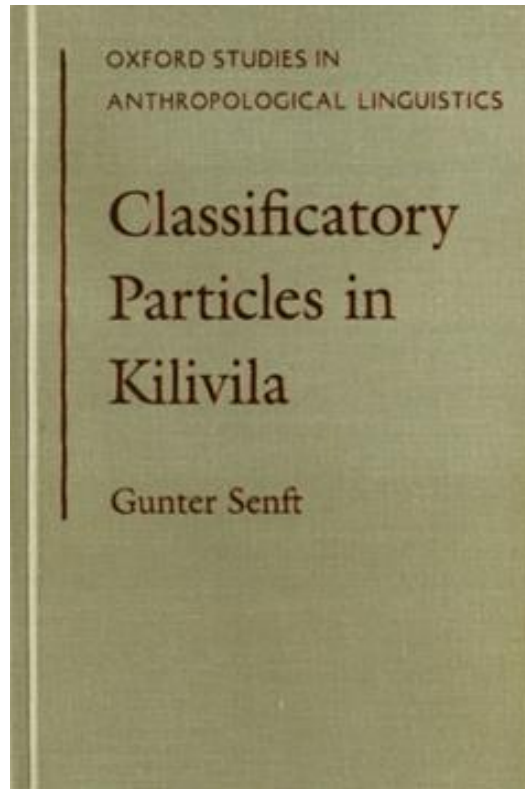


Gunter Senft  
MPI for Psycholinguistics

For Bernard

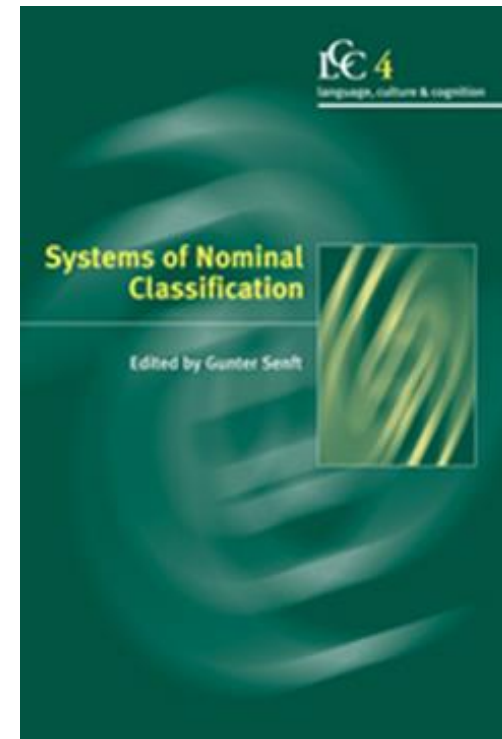
Diversity Linguistics: Retrospect and Prospect  
Closing conference of the Department of Linguistics  
at the MPI for Evolutionary Anthropology





After a brief introduction to the system of classifiers (Bronislaw Malinowski's 'classificatory particles') in Kilivila, the Austronesian language of the Trobriand Islanders of Papua New Guinea, this talk briefly outlines their main functions, especially the functions of introducing referents in discourse and keeping track of these referents, thus preserving coherence in discourse.

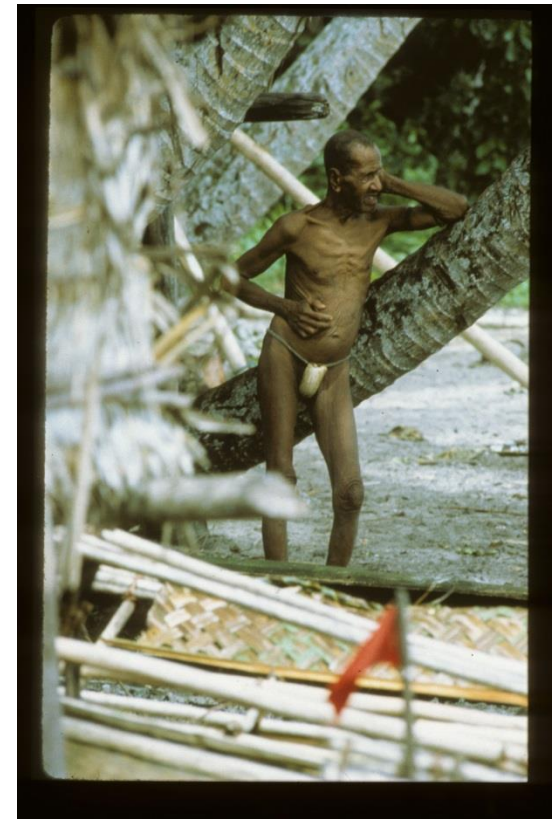
It would be interesting to use this case study as a basis for comparative research on how classifier systems in other languages - including sign languages - fulfil these functions or which other means in these languages are used to fulfil them.



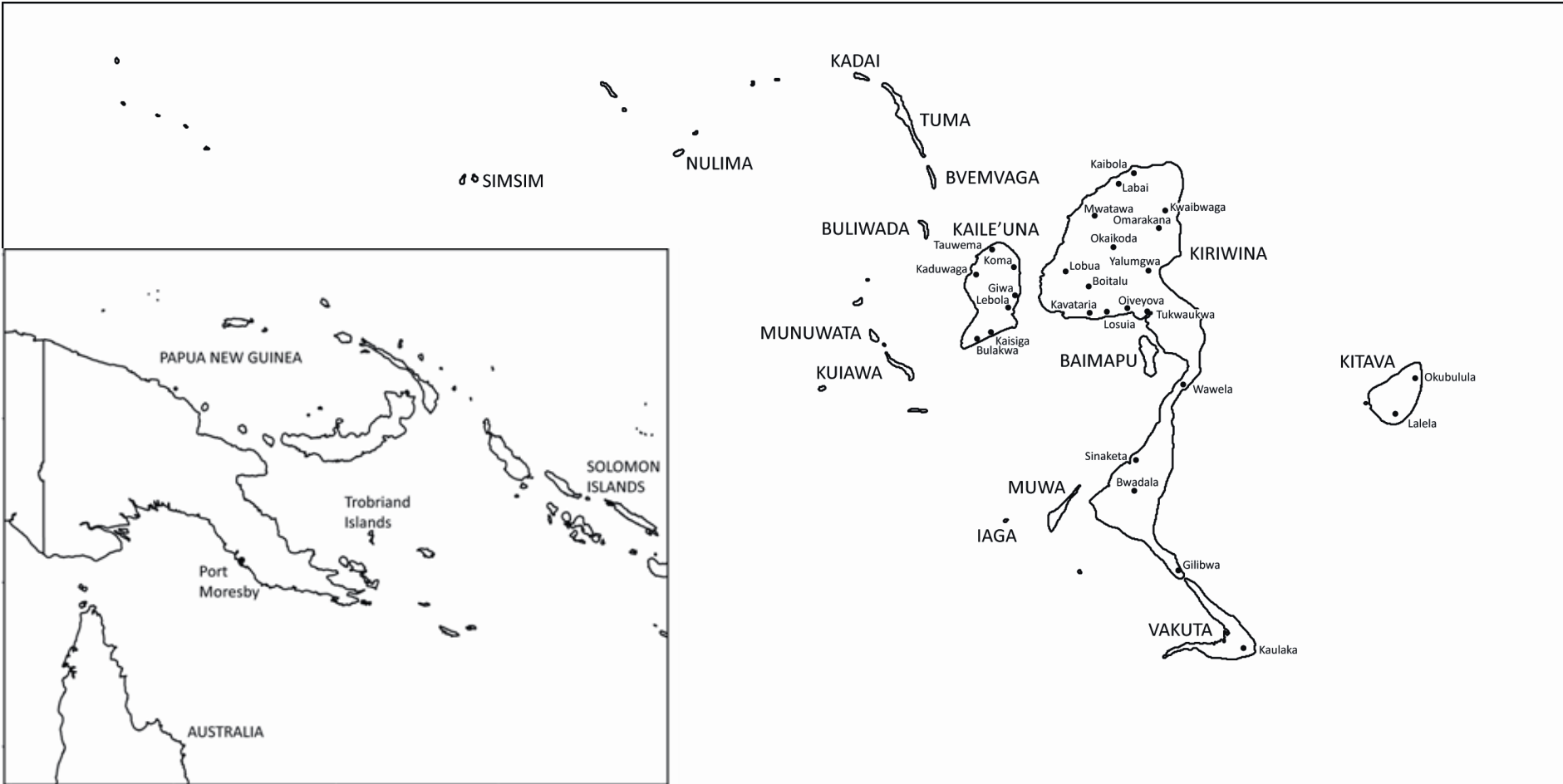
## Trobriand Islanders and their language:

**North-Massim:** gardeners, slash and burn cultivation; excellent carvers, canoe builders and navigators; matrilineal, but virilocal;

**Language:** Kilivila: Austronesian, West-Melanesian Oceanic  
Papuan Tip Cluster



# Trobriand Islands, Milne Bay Province, Papua New Guinea



Tauwema



Aspects of the Kilivila system of nominal classification were first described by Malinowski in 1920 in his paper “Classificatory Particles in the Language of Kiriwina”.



**CLASSIFICATORY PARTICLES IN  
THE LANGUAGE OF KIRIWINA  
By BRONISLAW MALINOWSKI,  
Ph.D. (Cracow), D.Sc. (London)**

The system of classifiers I have described in detail in 1996 consists of 88 formatives; however, so far 177 classifiers have been documented for Kilivila (Senft 1996: 171-79; Lawton 1980).

Thus, Kilivila is a classifier language with a very complex system of nominal classification that consists of quantifiers, repeaters (i.e., a nouns that serve as their own classifier) and classifiers proper. I refer to all these formatives with the general term “classifier” (CLF).

This system is an important means of word formation

- with all (but one) of the demonstrative pronouns,
- with one form of (numerical) interrogative pronouns/adverbs,
- with two classes of adjectives, and
- with numerals.

These word classes require concord with the class of the noun they refer to. This concord is secured by the CLFs that are infixes or prefixes to the respective word frame or word stem.

With the exception of the exophoric demonstrative pronoun *besa* or *beya* (“*this*”- with an obligatorily accompanying deictic gesture) all other demonstrative pronouns consist of a fixed morphological frame,

- formed by the word-initial morpheme “**ma-**”, or according to phonological rules, also “**m-**” or “**mi-**”,
- the word-final morpheme “**-na**”,
- and an infix morpheme, which is the CLF;
- to distinguish between singular and plural, there is also a plural marking morpheme **-si-**, which is infix between the CLF and the word-final morpheme “**-na**”.

Demonstrative pronouns formed in this way express the concept of “this/these here”. e.g.,

*mi-na-na*

*vivila*

DEM-CLF.female-DEM girl

this girl (here)

*mi-na-si-na*

*vivila*

DEM-CLF.female-DEM girl

these girls (here)



To express the deictic concept of "that/those there", the morpheme “-we-” is infixed either in singular forms between CLF and word-final “-na” or in plural forms between the plural-marker “-si-” and word-final “-na”.

<i>m-to-we-na</i>	<i>tau</i>	<i>m-to-si-we-na</i>	<i>tauwau</i>
DEM-CLF.male-DEM	man	DEM-CLF.male-PL-DEM	men
that man (there)		those men (there)	

To express the concept that comes close to the (archaic) English concept of "yonder", Kilivila speakers take the forms of the demonstrative pronouns expressing the concept of "that/those there" and change the final vowel of the word-final morpheme -na to an /e/ that is lengthened and gets a minor accent.

<i>m-to-we-nee</i>	<i>tau</i>	<i>m-to-si-we-nee</i>	<i>tauwau</i>
DEM-CLF.male-we-DEM	man	DEM-CLF.male-PL-we-DEM	men
the man yonder		these men yonder	

There are three classes of adjectives in Kilivila. One class must be used without CLFs, the other class may be used with or without CLFs, and the third class must always be used with CLFs that are prefixed to the word stem, e.g.,

<i>na-manabweta</i>	<i>vivila</i>	
CLF.female-beautiful	girl	= (a) beautiful girl(s)

The numerals, or more precisely, the cardinal numbers in Kilivila consist of the word stem and a prefixed CLF:

<i>na-lima</i>	<i>vivila</i>	
CLF.female-five	girls	= five girls

There is also one form of an interrogative pronoun/adverb that consists of the word stem “-vila” and a prefixed CLF:

<i>na-vila</i>	<i>vivila?</i>	
CLF.female-how many	girls?	= how many girls?

Classifiers with interrogative, demonstrative, adjective & numeral  
(and possible noun deletion/ellipsis):

(1)

Ke-vila                      waga    le-kota-si ?

CLF.wooden-how.many canoe 3.PST-arrive-PL

How many canoes arrived?



(2)

Ke-yu                      (waga) ma-ke-si-na

CLF.wooden-two canoe DEM\_CLF.wooden-PI-DEM

ke-manabweta                      (le-kota-si).

CLF.wooden-beautiful (3.Past-arrive-PL)

These two beautiful (canoes) (arrived).



*Kevila waga lekotasi?*

*Keyu (waga) makesina kemanabweta (lekotasi).*

The speakers of these sentences refer to canoes; they have to classify the noun ‘canoe’ with **ke**, the CLF for ‘wooden things’, in the interrogative pronoun, in the numeral, in the demonstrative pronoun, and in the adjective.

Note that the referential function of CLFs secures concord between the nouns and the word classes that use CLFs as a means of their word formation. This concord implies redundancy in the information transported by a sentence, of course, as illustrated above.

The reference of the respective word classes is unequivocal, the redundancy in the information given is obvious: Trobriand canoes are made of timber, they are ‘wooden things’.

The CLF in these examples classifies the noun inherently, specifying the semantic feature ‘wooden thing’ inherent to the classified (referent of the ) noun “canoe”.

However, the complex inventory of CLFs also allows the speakers to classify a noun "temporarily" (Berlin: 1968, 175),



i.e., to emphasize certain characteristics of the noun they refer to. This is illustrated by the following examples (see: Senft 1996: 18f.):

(3)

na-tala

*yena*

CLF.animal-one

fish

'one fish'

(4)

kevala-lima

*yena*

CLF.batch.drying-five

fish

'five batches of smoked fish'

(5)

oyla-lima

*yena*

CLF.string-five

fish

'five strings with stringed on fish'

(6)

pwasalima

pwasalima

*yena*

CLF.rotten-five

CLF.rotten-one fish

'six rotten fish'



These examples first present the CLF **na** in its connotation 'animals' and then illustrate a part of the noun-modifying group of CLFs that specify the noun with respect to its quantity, its order, its arrangement, and its condition or state.

The following example (7) illustrates that Kilivila also allows noun phrases with a multiple classification of the noun (see Senft 1996: 84):



(7)

*ma-gula-na*

DEM-CLF.heap-DEM

*kwe-lima*

CLF.thing-five

*kwe-vasi*

CLF.thing-four

*kwena*

clay.pot

*kwe-veaka*

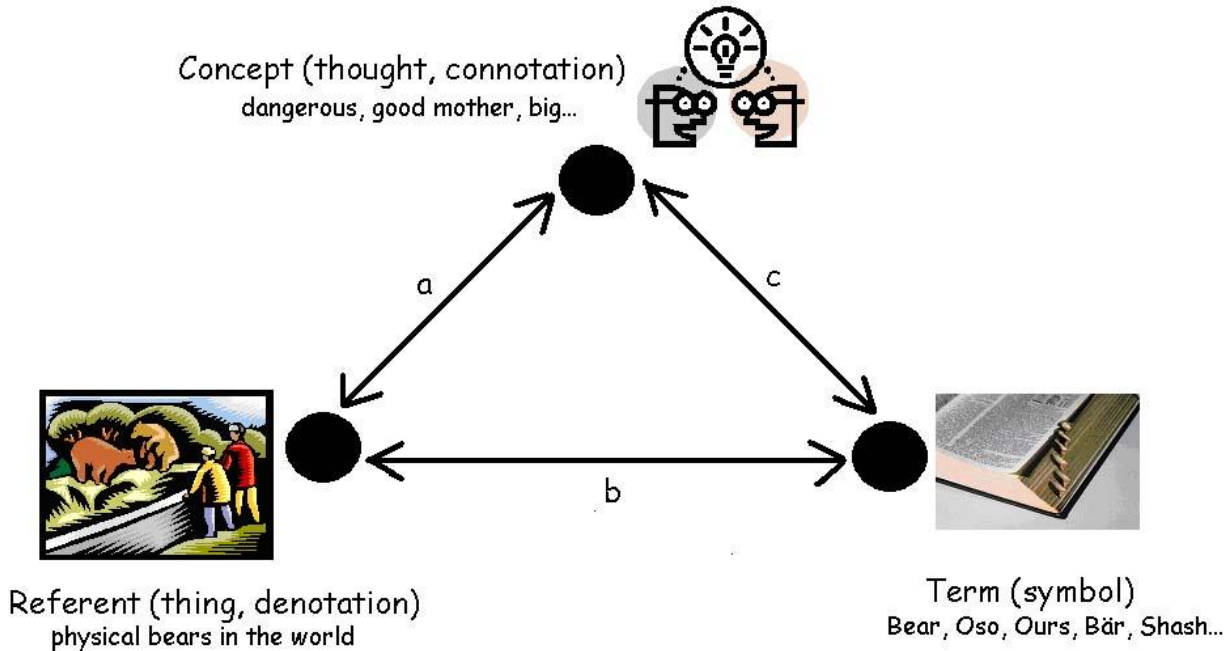
CLF.thing-big

this heap of nine big clay pots...





In all these examples the classifiers also have a unitizing function – and with this function they introduce referents.



The examples (3)-(8) clearly illustrate that “the classifier form and the lexical noun jointly contribute to reference: the lexical noun indicates the referent’s identity ... and the classifier form indicates its individuation status... Change either and you change the meaning of the whole” (Lucy 2000: 330).

Besides their important role in Kilivila word formation processes and their functions to mark concord between nouns classified and the word classes containing the CLF, to classify and specify their nominal referents both inherently and temporarily in many different ways and with much semantic power, CLFs also serve the following important functions:

- CLFs can nominalize all numerals, some adjectives, and all demonstrative pronouns (with the exception of *besa*):

(9)

*Bi-bodi*

te-*tala*

na-*tala*

gudi-*tala*

3.FUT-benefit

CLF.male-one

CLF.female-one

CLF.child-one

It will benefit each man, woman, and child.

- Being collective terms CLFs can fulfill the function of marking plural in nouns they refer to.

(10)

*Ma-po'ula-na*

*nuya*

bwa-*veaka*

DEM-CLF.plantation-DEM

coconut

CLF.tree-big

This plantation of big coconut trees.

- Some CLFs can fulfill verb-like functions within noun phrases of sentences (see examples (4), (5), (7) and (8) which is repeated here as (8')):

(8')

<i>kai</i>	<i>ma-<u>bubo</u>-si-na</i>	<i><u>kwela</u>-tolu</i>
wood	DEM-CLF.cut.across-PL-DEM	CLF.pot.like-three
`these three pot-like sawn-off sections of timber`		

- Moreover, CLFs also have anaphoric referential potential

– and this function is in the focus of the brief project proposals with which I will end this talk.

With their **anaphoric referential function** CLFs can constitute noun phrases that are comparable to elliptic utterances: once a noun has been introduced, the following noun phrases referring to this noun may consist of numerals, adjectives, and/or demonstrative pronouns only (the noun itself is then no longer realized, or, to phrase it differently, the noun is then "deleted" in the respective noun phrases) if the noun these noun phrases refer to is not reclassified.

Example (9) (here repeated as (9')) already illustrated this observation:

(9')

*Bi-bodi*

te-tala

na-tala

gudi-tala

3.FUT-benefit

CLF.male-one

CLF.female-one

CLF.child-one

It will benefit each man, woman, and child.

This sentence presents the two sex-specifying CLFs to/te and na - (na now in its meaning 'persons of female sex') - and the age-subclassifying CLF gudi.

Thus, noun phrases may be constituted by numerals without the respective nouns these numerals refer to. This principle of noun phrase construction can be explained by positing that the respective nouns are omitted/deleted and that the other word classes (in the example given: the numerals) that constitute the noun phrases acquire nominal status.

It was already Malinowski (1920, 59f.) who hinted at such an interpretation of Kilivila sentences as in sentence (9) above.

He also compared these sentences with elliptic utterances in English.

Sentences that are constructed like our example (9) are indeed quite frequently produced in Trobriand discourse. Trobriand Islanders introduce a certain nominal denotatum explicitly. If they want to refer to this noun in the course of their discourse by the means of numerals, demonstrative pronouns, and adjectives, they usually do no longer realize this noun - they omit it.

This is only possible because the CLFs represent the omitted nouns in a quasi-fragmentary way and the anaphoric reference of CLFs secures semantic concord beyond sentence boundaries.

Now we can explain why we sometimes find redundant information within the noun phrase (as in the examples (1) and (2) above): the information redundancy given by the CLFs within a Kilivila noun phrase enables the omission of the noun without any loss of information - even beyond sentence boundaries!

Thus CLFs fulfill the important function of securing coherence in discourse.

As a general rule, a noun can be elided/deleted as long as it is not reclassified, e.g. for stylistic reasons, by another CLF. If this occurs, the noun must be overtly realized again as a constituent of the noun phrase to secure unequivocal and unambiguous reference.

In my sample of transcribed Kilivila speech data I have one (rather extreme) example where a speaker (Tomalala) introduces a nominal referent to which he refers back 16 (!) sentences (or: 78 words, 113 morphemes) later with the apt CLF; nevertheless, the reference is unequivocal (see Senft 1996: 21).

The following examples 11-13 illustrate these functions of CLFs:



(11)

<i>a-tatai</i>	<i>tataba</i>	<i>tauwau</i>	<i>Tabalu</i>	
1.-carve	tataba-board	men	Tabalu-subclan	
<i>m-to-si-na</i>		<i>ma-ke-na</i>	<i>si</i>	<i>koni</i>
DEM-CLF.male-PL-DEM		DEM-CLF.wooden-DEM	their	sign.of.honor

I carve a tataba-board. These men belonging to the Tabalu-subclan - this is their sign of honor.

Here the speaker refers to a certain board with carved patterns that marks houses, food houses, and canoes as the personal property of men belonging to the Tabalu-subclan. The reference of the two demonstrative pronouns produced is unequivocal, because in this context the CLF *to* can only refer to the (referent of the) noun *tauwau* and the CLF *ke* can only refer to the *tataba*-board.

(12)

*tauwau pela*

men for

*e-me-si*

3.-come-PL

*bi-lebu-si*

3.Fut.-take-PL

*e-kokwa'u-si*

3.-weave-PL

*kebila*

stretcher

*ma-buda-na-ga*

DEM-CLF.group-DEM-EMPH

*e-kugwa-si*

3.-first-PL

*e-me-si*

3.-come-PL

The men have come to take him with them. They have woven a stretcher, the men belonging to this group who were the first to arrive.

Here the speaker uses the CLF buda with the demonstrative pronoun in the second sentence to refer unequivocally to the (referent of the) noun tauwau produced in the first sentence (see Senft 1996:21f.).



(13)

<i>O</i>	<i>da-valu-si</i>	<i>e-sisu-si</i>	<i>tommota</i>
LOC	our(INCL)-village-PL	3.-live-PL	people

<i>to-paisewa.</i>	<i>Vivila</i>	<i>na-salau,</i>	<i>tauwau</i>
CLF.human.beings-work	woman	CLF.female-busy	men

<i>to-bugubagula.</i>	<i>Tommota</i>	<i>gala</i>	<i>to-dubakasala</i>
CLF.male-work.in.the.garden	people	not	CLF.human.beings-rude

<i>kena</i>	<i>kumwedona</i>	<i>e-nukwali-si</i>	<i>bubune-si</i>	<i>bwena.</i>
but	all	3.-know-PL	manners-their	good

In our village live people taking pleasure in their work. The women are busy, the men are good gardeners. The people are not rude, but all have good manners.

This example illustrates that, in general, reclassification of a noun does not allow it to be omitted. To emphasize the different characterization of men and women on the one hand, and all villagers on the other, the nouns can hardly be omitted. If the speaker did not use the noun *tommota* (people) in the last sentence, then this sentence would refer to ‘persons of male sex’ only.

## Questions for further research



With respect to the organization of discourse and conversation the referent introducing function and the discourse deictic, anaphoric reference function of these classifying formatives are of special interest – not only from a language specific point of view, but also from a cross-linguistic and more comparatively oriented point of view.

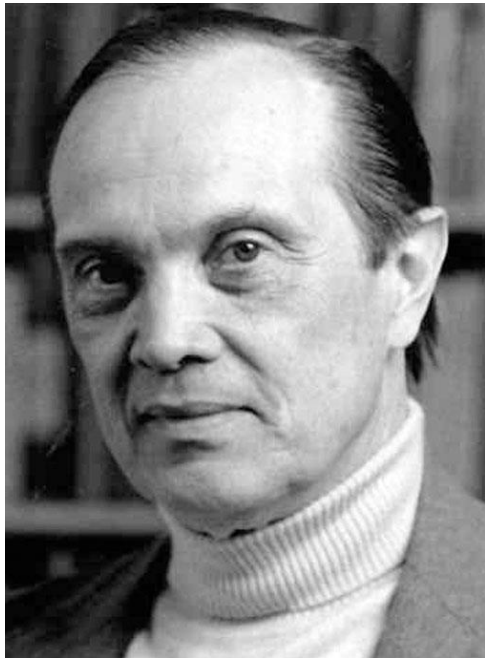
I think it would be extremely interesting to pursue research questions like the following ones:

## 1.) Language specific research questions:

- Do all three word classes that use CLFs in their word formation fulfil anaphoric reference functions – or is it mainly the demonstratives that are used for endophoric deictic reference?
- If we observe cases of multiple classification (as in examples (7) and (8) above), which classifier is used for anaphoric reference to secure text coherence?
- How far does anaphoric reference go in discourse?

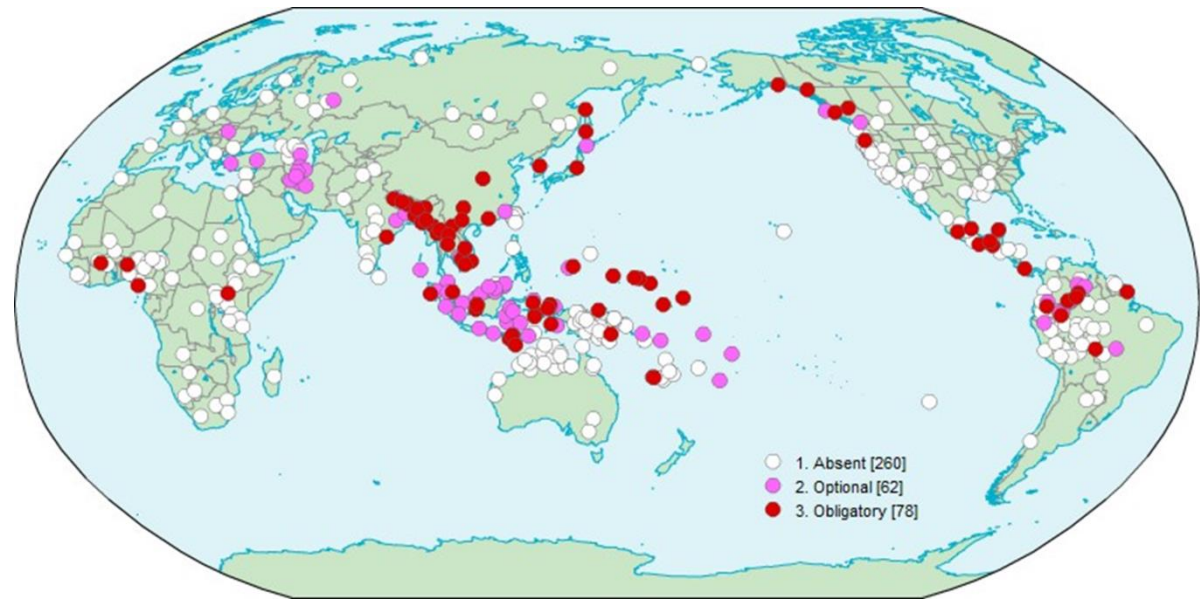
- How many referents can be introduced until the language processing capacities of Kilivila native speakers require the realization of complete noun phrases again so that speakers and hearers can be sure that the references they make in their discourse or conversation are still unequivocally understood?

Or, to formulate it differently, does George Miller’s “magical number seven, plus or minus two” (Miller 1956) also hold for Kilivila native speakers?



- What other means do speakers of Kilivila use to secure text coherencs?

## 2.) Cross-linguistic research questions



- How are classifiers used in various classifier languages to secure text coherence?
- What other means do these languages use to secure text coherence?
- If we compare the function of anaphoric reference cross-linguistically, do we find common – or maybe even universal – strategies or do we observe more language specific ways of how classifiers fulfil this function?
- Do we observe differences with respect to the structural and/or the semantic power with which classifiers fulfil their anaphoric reference functions in various languages?



- Do sign languages use their classifiers in a different way than spoken languages – especially with respect to their function of securing coherence in discourse?
- Can we observe different ‘classifiers’ in different sign languages of the world?
- What do we gain if we reclassify the concept of “classifiers” in sign languages as “property markers” – as proposed by the Berkeley Sign Language Project (Slobin et al.: 2000) – especially with respect to describing and analysing their functions in sign language and for signers?



## References:

- Berlin, Brent. 1968. *Tzeltal numeral classifiers. A study in ethnographic semantics*. The Hague: Mouton.
- Lawton, Ralph. 1980. *The Kiriwinan Classifiers*. MA-thesis. Canberra: Australian National University.
- Lucy, John. 2000. Systems of nominal classification: a concluding discussion. In: Gunter Senft, ed. *Systems of Nominal Classification*. 326-341. Cambridge: Cambridge University Press.
- Malinowski, Bronislaw. 1920. Classificatory particles in the language of Kiriwina. *Bulletin of the School of Oriental Studies*, London Institution, vol 1. Part IV, 33-78.
- Miller, George A. 1956. The magical number seven, plus minus two: some limits on our capacity for processing information. *Psychological Review* 63: 81-97.
- Senft, Gunter. 1996. *Classificatory Particles in Kilivila*. New York: Oxford University Press.
- Slobin, Dan I., Nini Hoiting, Marlon Kuntze, Reyna Lindert, Amy Weinberg, Jennie Pyers, Muichelle Anthony, Yael Biederman, and Helen Thumann. 2000. *A cognitive/functional perspective on the acquisition of "classifiers"*. Paper presented at the conference on "Classifier Constructions in Sign Languages", April 14-16, 2000, La Jolla.