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## CHAPTER 2

# The system of classifiers in Kilivila

## The role of these formatives and their functions

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This paper presents the complex system of classifiers in Kilivila, the language of the Trobriand Islanders of Papua New Guinea. After a brief introduction to the language and its speakers, the classifier system is briefly described with respect to the role of these formatives for the word formation of Kilivila numerals, adjectives, demonstratives and one form of an interrogative pronoun/adverb. Then the functions the classifier system fulfils with respect to concord, temporary classification, the unitizing of nominal expressions, nominalization, indication of plural, anaphoric reference as well as text and discourse coherence are discussed and illustrated. The paper ends with some language specific and cross-linguistic questions for further research.

**Keywords:** Kilivila, Trobriand Islands, classifier system, functions

### 1. Introduction

After a brief introduction to the Trobriand Islanders and their language Kilivila, this paper presents the complex system of classifiers in this Austronesian language. The system consists of at least 177 formatives (Lawton 1980; Senft 1996). However, for stylistic reasons we can also observe ad hoc formatives in Kilivila, where nouns (that are not repeater classifiers – see below) are used by speakers of Kilivila in a creative ‘*Sprachspiel*’ as classifiers of other nouns; thus, the Kilivila system of classifiers can be, in principle, considered as an open system. Be that as it may, the size of the Kilivila classifier inventory described so far is absolutely unique for Austronesian languages. Bronislaw Malinowski (1920) referred to these formatives with the term ‘Classificatory Particles.’ After introducing the classifiers as important morphemes for the word formation for one interrogative pronoun/adverb, two classes of adjectives as well as for demonstrative pronouns and numerals (i.e., cardinal numbers), the paper deals with the following questions:

What functions do these classifiers fulfil? What is their role for introducing referents into discourse and keeping track of them? And how do they contribute to preserving coherence in discourse? The paper ends with some questions for further research not only on the Kilivila classifier system but also with respect to comparative research on how classifier systems in other languages – including sign languages, of course – fulfil these functions or which other morphosyntactic means are used in these languages to fulfil them.

## 2. The Trobriand Islanders and their language Kilivila

The Trobriand Islanders have become well-known, even outside of anthropology, because of the anthropologist Bronislaw (Bronislaw) Kasper Malinowski (1884–1942), who did field research there between 1915 and 1918 (see Young 2004; also Senft 2009). The Islanders are affiliated to the ethnic group ‘Northern Massim’ (see Haddon 1894: 184; also Liep 2015: 185). The Trobriand Islanders are gardeners, doing slash and burn cultivation of the bush. Their most important crop is yams. They are also excellent canoe builders, carvers, and navigators, especially in connection with the ritualized ‘*Kula*’ trade, an exchange of shell valuables that covers a wide area of the Melanesian part of the Pacific (Malinowski 1922; Leach & Leach 1983; Persson 1999). The Trobriand Islanders’ society is matrilineal and follows the rule of patrilocality (virilocal residence), which means that a newly married couple lives in the village of the husband (Baldwin 1971: 246, 270; Weiner 1976, 1988).

Kilivila is the language of the Trobriand Islanders. It is one of the 40 Austronesian languages spoken in the Milne Bay Province of Papua New Guinea. These Austronesian languages can be grouped into 12 language families, and one of them is called Kilivila. The Kilivila language family encompasses the languages Budibud (or Nada, with about 200 speakers living on Budibud Island), Muyuw (or Murua, with about 4,000 speakers living on Woodlark Island) and Kilivila (or Kiriwina, and also Boyowa, with about 40,000 speakers). The Kilivila language is spoken on the islands Kiriwina, Vakuta, Kitava, Kaile’una, Kuiawa, Munuwata and Simsim. Typologically, it is classified as a Western Melanesian Oceanic language belonging to the Papuan Tip Cluster group (Capell 1976: 6, 9; Ross 1988: 25, 190; Senft 1986: 6).

Kilivila has been studied in linguistic research using different approaches. It is an agglutinative language; in this morphological language type, “a word may consist of more than one morpheme, but the boundaries between morphemes are always clear-cut” (Thompson 2003: 53).

Its word order is rather free; the most frequent word order is Subject-Verb-Object, as in (1):<sup>1</sup>

- (1) Most frequent word order  
*Weyei e-migai megwa*  
 Weyei 3-whisper magic  
 S S-V OBJ  
 “Weyei whispers magic.”

However, the general unmarked word order pattern is Verb-Object-Subject (see Senft 1986: 107–112), as in (2):

- (2) General unmarked word order  
*E-migai megwa Weyei*  
 3-whisper magic Weyei  
 S-V OBJ S  
 “He whispers magic, Weyei.”

Kilivila is a language with rather complex serial verb constructions. Speakers of Kilivila describe events as minutely as possible by differentiating a number of subevents that constitute them (see Senft 2004a, 2008). Thus, an adequate answer to the question “Where are you going?” (*Ambeya?*) may run as follows:

- (3) Serial verb construction  
*Ba-la ba-kakaya ba-ka'ita ba-sisu ba-paisewa ba-ta-tai*  
 1.FUT-go 1.FUT-bath 1.FUT-return 1.FUT-stay 1.FUT-work 1.FUT-REDUP-cut  
*waga ke-vau.*  
 canoe CLEWOODEN-new  
 “I will go I will have a bath I will return I will stay I will work I will cut (my) new canoe.”

The marking of tense / aspect / mood (TAM) is difficult to describe without access to detailed contextual information. Kilivila has a system of four series of subject- or personal-pronominal-prefixes (see Senft 1986: 36–38, Senft 1994). The first series is neutral, tenseless and aspectless and thus unmarked for TAM (*a-paisewa* = “I work”). The second series is formed with the prefix ‘b-’ and indicates an incompletive action in the Future or in the Past or a part of a hypothetical event, a form which can be classified as irrealis (*ba-paisewa* = “I will / may / can / could / would / should work”). The third series is formed with the prefix ‘l-’ and indicates a completed action; it refers to the Past and is affirmative or emphatic

1. All the examples quoted come from my comprehensive corpus of Kilivila speech data which I collected during 16 long- and short-term fieldtrips to the Trobriand Islands between 1982 and 2012. See “Kilivila” at <https://tla.mpi.nl/>.

(*la-paisewa* = “I (have) worked (indeed)”). And the fourth series is formed with the prefix ‘m-’ and expresses the concept of a habitual action; however, it can also indicate optative or irrealis and either poetic or humorous style (*ma-paisewa* = “I use to / may work”).

Kilivila also has a fourfold series of possessive pronouns, partly realized as free possessive-pronominal-pronouns, partly realized as possessive-pronominal-affixes. One of these series is produced in a specific semantic context related to food. The other three series are used to distinguish different degrees of possession. One series marks inalienable possession and the other two series mark alienable possession of inedible things (Senft 1986: 47–54, Senft 1996: 16; see especially Passer 2016: 32–34). These possessive-pronominal-forms are genitive classifiers. These classifiers are also called ‘possessive’, ‘relational’ or ‘attributive’ classifiers (see Aikhenvald 2000: 125–147; Grinevald 2000: 66; Senft 2007: 683). They are not the focus of this paper (see also Senft 1996: 16).

But Kilivila is probably most interesting for linguists because it is a classifier language (for a general typological survey on nominal classification see Royen 1929) with a system of nominal classification that consists of what other linguists have called ‘quantifiers’ or ‘mensural classifiers’, ‘repeaters’<sup>2</sup> and ‘sortal classifiers’ (Senft 1996). Such a differentiation of classifiers is in itself a form of classification which results in the claim that there are different categories of classifiers. However, I cannot observe any formal differences between the various classifiers that constitute the Kilivila system. Therefore, I refer to all these formatives within this sophisticated system with the two general terms ‘classifier’ and ‘Classificatory Particles’ (CLF); the latter term was coined for these formatives by Malinowski (1920). I will further elaborate on this point below.

### 3. Classificatory particles in Kilivila

As mentioned above, 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”. 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 (Lawton 1980; Senft 1996: 171–179).<sup>3</sup> The 88 classifiers that

2. A repeater is a noun that serves as its own classifier. As an example, in the expression *bogitatala bogi* (CLF.NIGHT-one night) “one night”, the classifier *bogi* is identical with the noun *bogi*.

3. Ralph Lawton (1928–2021) was a Methodist missionary based in the village Oyabia on Kiriwina Island from 1962 until 1973. He translated the Bible (Lawton 1997). Given that the Trobriand Islanders’ indigenous eschatology is codified in the ‘*biga tommwaya*’ or ‘*biga baloma*’

I have described can be assigned to the following 24 semantic domains (Senft 1996: 289, 315–321): general classifiers; persons; body parts; animals; trees and wooden things; places; quantities with generally animate referents; quantities with generally inanimate referents; fire and ovens; names; time; road or journey; qualities; shape; utensils; dress and adornments; doors, entrances and windows; ritual items; parts of a food house, a canoe or a creel; measures; yams; texts.

Note again that the classifiers that constitute the domains that refer to quantities do not show any formal differences from the other classifiers; therefore – as mentioned above – I do not differentiate between sortal and mensural classifiers. To argue that measure words are not obligatory whereas numeral classifiers are, misses the point for Kilivila: most of the word classes that require classifiers for their word formation have to have such a classifier – and the fact that some of these classifiers provide information about quantity is in itself just another form of classification and categorization (Senft 2000: 22–23). This results in the claim that there are different categories of classifiers. However, with respect to this claim I maintain with Greville Corbett (1991: 147) “the requirement that to demonstrate the existence of a category, evidence of distinction in form is necessary”. When considering this requirement, I do not observe any distinctions between the classifiers that constitute the Kilivila system – and I suspect that it will be somewhat problematic to find this “evidence of distinction in form” in other so-called numeral classifier languages, too. Nevertheless, we should still consider the possibility of grouping classifiers according to semantic criteria (as indicated above, I have done this myself); however, if we do this, we need to be aware that this grouping is based on the researchers’ understanding of the semantics of these formatives in the respective languages. Therefore, I would like to argue that as long as these groupings are not grounded in the grammar and marked as being formally distinct in the respective language, we cannot claim the status of different categories for semantically based groupings of classifiers. Therefore, I define classifiers – the classifying morphemes or formatives – in classifier languages as morphemes that classify nouns according to semantic criteria. A subclassification into categories like ‘quantifiers’ versus ‘classifiers’ or ‘sortal’ versus ‘mensural’ classifiers can only be considered if there are distinctions in form that clearly indicate that the speakers of the respective language themselves differentiate between these categories. But back to the more general features of the Kilivila classifier system.

This system is an important means of word formation with all (but one) of the demonstrative pronouns, with one form of (numerical) interrogative pronouns/

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variety of Kilivila – “the language of the ancestors” or “the language of the spirits of the dead” (see Senft 2011), his consultants seem to have produced in their working sessions with him many by now archaic classifiers, which are no longer known by present day speakers of Kilivila.

adverbs, with two classes of adjectives, and with numerals (i.e., cardinal numbers). These word classes require concord with the class of the noun they refer to. This concord is secured by the classifiers that are infixes into, or prefixed to, the respective word frame or word stem. These processes of word formation and the syntactic aspects of constituents with classifiers have already been described elsewhere (Senft 1985: 374–379, Senft 1986, 1991, 1996); Senft (1986: 103) also provides a detailed description of the noun phrase in Kilivila. For the purposes pursued here, I just want to mention that the patterns ‘Possessor – Possessed’ and ‘Numeral – Noun – Demonstrative Pronoun – Adjective’ represent the general word order in complex noun phrases. Numerals almost always precede the noun; putting the demonstrative pronoun or the adjective in front of the noun implies emphasis (but note that these word order patterns are also very flexible). In what follows I will briefly sketch the processes of word formation that involve classifiers.

With the exception of the exophoric demonstrative pronoun *besa* or *beya* (“this/that” – 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-*, and the word-final morpheme *-na*, and an infix morpheme, which is the classifier. The production of this classifier is obligatory; to distinguish between singular and plural, there is also a plural marking morpheme *-si-*, which is infixes between the classifier and the word-final morpheme *-na*. Demonstrative pronouns formed in this way express the concept of “this/these here”:

#### (4)–(6) Deictic use of classifiers

- (4) *mi-na-na*                      *vivila*  
 DEM-CLF.FEMALE-DEM girl  
 “this girl (here)”  
*mi-na-si-na*                      *vivila*  
 DEM-CLF.FEMALE-PL-DEM girl  
 “these girls (here)”

To express the deictic concept of “that/those there”, the morpheme *-we-* is infixes either in singular forms between the classifier and word-final *-na* or in plural forms between the plural-marker *-si-* and word-final *-na*:

- (5) *m-to-we-na*                      *tau*  
 DEM-CLF.MALE-there-DEM man  
 “that man (there)”  
*m-to-si-we-na*                      *tauwau*  
 DEM-CLF.MALE-PL-there-DEM men  
 “those men (there)”





- (9) Adjectives with classifiers  
*na-manabweta*      *vivila*  
 CLF.FEMALE-beautiful girl  
 “(a) beautiful girl(s)”

The numerals, or more precisely, the cardinal numbers in Kilivila constitute a mixed quinary-decimal system (Senft 1986: 76–84). Five numerical units are counted, then the system proceeds by counting 5 + 1, 5 + 2, 5 + 3, 5 + 4, 10, 10 + 1, ..., 10 + 5, 10 + 5 + 1, ..., 20, etc. With their traditional counting system, the Trobrianders can count up to 10,000. The cardinal numbers consist of the word stem and a prefixed classifier. The classifier is obligatory. However, if the cardinal stem is produced without a classifier – or, if you like with a zero classifier ‘Ø’, then this zero classifier indicates that the Trobrianders are counting basketfuls of yams:

- (10) Numerals with classifiers and the role of the zero classifier  
*na-lima*      *vivila*  
 CLF.FEMALE-five girl(s)  
 “five girls”  
*Ø-lima*      *tetu*  
 basketfuls.of.yams-five yams  
 “five baskets full of yams”

There are only four ordinal numbers:

- (11) Ordinal numbers  
*ekugwa* “first” *esakeli* “second”  
*moluvala* “third” *kasusu* “fourth”

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

- (12) Interrogative pronoun/adverb with classifiers  
*Na-vila*      *vivila?*  
 CLF.FEMALE-how.many girls  
 “How many girls?”  
*Kwe-vila*      *dakuna?*  
 CLF.GENERAL-how.many stones  
 “How many stones?”

#### 4. Referential function: Concord

Readers who want detailed information about these processes of word formation can consult previously published work on this topic (especially Senft 1986, 1991, 1996). For the purposes at hand, it suffices to finish this brief descriptive general account with the presentation of two sentences with all the four word classes involved in the system of noun classification. In the examples the classifier *ke* “wooden” is underlined:

##### (13) & (14) Sentences with all four word classes which are formed with classifiers

- (13) *Ke*-*vila*                      *waga le-kota-si?*  
 CLF.WOODEN-how.many canoe 3.PST-arrive-PL  
 “How many canoes arrived?”

- (14) *Ke*-*yu*                      *waga ma-ke-si-na*                      *ke-manabweta*  
 CLF.WOODEN-two canoe DEM-CLF.WOODEN-PL-DEM CLF.WOODEN-beautiful  
 (*le-kota-si*).  
 (3.PST-arrive-PL)  
 “These two beautiful canoes (arrived).”

The speakers refer to canoes and classify the noun “canoe” with *ke*, the classifier for “wooden things”. This classification is found with the interrogative pronoun, with the numeral, with the demonstrative pronoun, and with the adjective. Note that the referential function of classifiers secures concord between the nouns and the word classes that use classifiers as a means of their word formation. This concord implies redundancy in the information transmitted 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” (I will come back to this aspect of redundant information below). The classifier in these examples classifies the noun inherently, specifying the semantic feature “wooden thing” inherent to the classified noun “canoe”.

#### 5. Temporary classification and the unitizing function of classifiers

The complex inventory of classifiers 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: 18–19):

**(15)–(19) Temporary classification of one and the same referent**

- (15) *na-tala*                      *yena*  
 CLF.ANIMAL-one fish  
 “one fish”
- (16) *kevala-lima*                      *yena*  
 CLF.BATCH.DRYING-five fish  
 “five batches of smoked fish”
- (17) *oyla-lima*                      *yena*  
 CLF.STRING-five fish  
 “five strings with stringed-on fish”
- (18) *ma-kupo-na*                      *yena*  
 DEM-CLF.TWO.STRING-DEM fish  
 “these two strings of fish”
- (19) *ma-pwasa-si-na*                      *yena*  
 DEM-CLF.ROTTEN-PL-DEM fish  
 “these rotten fish”

The Examples (15–19) first present the classifier *na* in its connotation “animals” and then illustrate a part of the noun modifying group of classifiers that specify the noun with respect to its quantity, its order, its arrangement, and its condition or state. I want to note here that Example (18) illustrates that classifiers can also fulfil the function of numeralization. The Examples (20–22) illustrate how classifiers can be used to refer to specific parts of referents – in this case “tobacco”:

**(20)–(22) Classifiers referring to specific parts of one and the same referent**

- (20) *utu-tala*                      *tobaki*  
 CLF.SCRAP-one tobacco  
 “a / one scrap of tobacco”
- (21) *gum-tala*                      *tobaki*  
 CLF.BIT-one tobacco  
 “a /one bit of tobacco”
- (22) *gibu-tala*                      *tobaki*  
 CLF.CUT.ACROSS-one tobacco  
 “a / one cut-across piece of tobacco”

The following Examples (23) and (24) illustrate that Kilivila also allows noun phrases with a double classification of the noun:

- (23) Double classification of a referent

*ma-gula-na kwe-lima kwe-tala kwena*  
 DEM-CLF.HEAP-DEM CLF.THING-five CLF.THING-one clay.pot  
 “this heap of six clay pots”

Here the speaker combines the information given with the numerals that are formed with the general classifier *kwe* which is the unmarked classifier for clay pots, with a configurational information provided by the classifier *gula* (“heap”) in the demonstrative pronoun. If a speaker wants to refer back to this number of clay pots in this spatial configuration s/he can produce either of the two classifiers without producing the noun *kwena* again. If the speaker wants to reclassify this referent, s/he has to use yet another classifier and s/he has to produce the noun again with the new classifier as in (24):

- (24) Reclassification requires the production of the referent again

*ponina-lima ponina-tala kwena*  
 CLF.HOLE-five CLF.HOLE-one clay.pot  
 “five broken clay pots”

Especially Examples (25) and (26) illustrate the semantic power of the Kilivila classifiers:

### (25) & (26) The semantic power of classifiers

- (25) *kai ma-bubo-si-na kwela-tolu*  
 wood DEM-CLF.CUT.ACROSS-PL-DEM CLF.POT.LIKE-three  
 “these three pot-like sawn-off sections of timber”

Here the speaker classifies a section of timber with two different classifiers, a shape classifier (*kwela*) and a quality classifier (*bubo*). This combination of classifiers results in a very detailed description of the piece of timber s/he refers to – and thus makes it easy for an interlocutor to identify the referent.

- (26) *M-to-na tau pila-kesa mata-la yaga-la Mogege.*  
 DEM-CLF.MAN-DEM man CLF.PART-left.over eye-his name-his Mogege  
 “This one-eyed man is called Mogege.”

In this sentence the classifier *to* refers to the man and the classifier *pila* to his eyes. The utterance provides a clear – though sad – characterization of a specific man in the village.

In all these examples the classifiers also have a unitizing function – and with this function they introduce referents. Referentially, nouns in classifier languages can be characterized as having generic reference (see Royen 1929: 775). With their referential function, classifiers individualize and unitize nominal concepts; they

can mark the noun as obligatorily nongeneric in reference (see Senft 1996: 6). The examples provided above 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).<sup>4</sup>

## 6. Nominalization, indicating plural, and verb-like expressive functions

Besides their important role in Kilivila word formation processes and their functions to mark concord between nouns classified and the word classes containing the classifier as well as to classify and specify their nominal referents inherently and temporarily in many different ways and with much semantic power, classifiers also serve the important function of nominalizing numerals (i.e., cardinal numbers), some adjectives, and all demonstrative pronouns (with the exception of *besa/beya*). This is illustrated in sentence (27):

- (27) Nominalizing function of classifiers  
*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.”

Example (27') illustrates what sentence (27) would look like without the nominalization of the three word classes; however, this construction with the explicit mentioning of the nouns would stylistically not be as elegant as the construction illustrated with Example (27):

- (27') Stylistically inelegant variant of (27) without nominalization  
*Bi-bodi      te-tala      tau na-tala      vivila gudi-tala*  
 3.FUT-benefit CLF.MALE-one man CLF.FEMALE-one woman CLF.CHILD-one  
*gwadi*  
 child  
 “It will benefit each man, woman, and child.”

Being collective terms, classifiers can also fulfil the function of semantically indicating plural in nouns they refer to. The classifier in Example (28), *po'ula*, for example, refers to “a plantation” or “plantations”; the semantics of “plantation” – which is a collective term – clarify that a plantation consists of more than one tree.

4. Note that Kilivila is different from Chinese: In Chinese different noun phrases that can be glossed as either “three CLF.LONG fish” or as “three CLF.ANIMAL fish” both mean “three fish”. This is not the case in Kilivila – as I have tried to illustrate with the examples provided so far.

Note that the classifier for “coconut (tree)” – *bwa* – in Example (28) does not provide any information with respect to the number of the referent.

- (28) Classifiers indicating plural in referents  
*ma-po'ula-na*                      *nuya*    *bwa-veaka*  
 DEM-CLF.PLANTATION-DEM coconut CLF.TREE-big  
 “this plantation of big coconut trees”

Some classifiers can fulfil verb-like functions within noun phrases of sentences (see Examples (16), (17), (22), and (25) which is repeated here as (25')):

- (25') Verb-like function of classifiers  
*kai*    *ma-bubo-si-na*                      *kwela-tolu*  
 WOOD DEM-CLF.CUT.ACROSS-PL-DEM CLF.POT.LIKE-three  
 “these three pot-like sawn-off sections of timber”

Here the classifier *bubo* (“cut across”) clearly has a verb-like function: the classifier describes the action of cutting.

We can sum up that classifiers can nominalize all numerals (i.e., cardinal numbers), some adjectives and all demonstratives (with the exception of *besa/beyo*), they can fulfil the function of (semantically) indicating plural, and they can also fulfil verb-like functions. Moreover, classifiers also have anaphoric referential potential. This function will be discussed in the next section of this paper.

## 7. The anaphoric referential function of classifiers in Kilivila: Redundancy, ellipsis, and discourse coherence

With their referential function classifiers 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 (i.e., cardinal numbers), adjectives, and/or demonstrative pronouns only (the noun itself is then no longer realized, or, to phrase it differently, the noun is then ‘deleted’ or ‘elided’ in the respective noun phrases, if the noun these noun phrases refer to is not reclassified. Example (27) – here repeated as (27'') – illustrates this observation: This sentence presents the two sex-specifying classifiers *to/te* and *na* – (*na* now in its meaning “persons of female sex”) – and the age-subclassifying classifier *gudi*:

- (27'') Redundancy of information allows ellipsis  
*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.”

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 and that the other word classes (in the example given: the numerals) that constitute the noun phrases acquire nominal status (see Senft 1996: 19).

It was already Malinowski (1920: 59–60) who hinted at such an interpretation of Kilivila sentences as in Example (27") above. He compared these sentences with elliptic utterances in English. Sentences that are constructed like our Example (27") 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 no longer produce this noun – they omit it.

This is only possible because the classifiers represent the omitted nouns in a quasi-fragmentary way and the anaphoric reference of classifiers secures semantic concord beyond sentence boundaries. Now we can explain why we often find redundant information within the noun phrase (as in the Examples (13) and (14) above): the information redundancy given by the classifiers within a Kilivila noun phrase enables the omission of the noun without any referential ambiguity – even beyond sentence boundaries.

Thus, classifiers fulfil the important function of securing coherence in discourse. As a general rule, a noun can be elided as long as it is not reclassified, e.g., for stylistic reasons, by another classifier (as pointed out in Examples (23) and (24) above). 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, Consultant No.: V 16) introduces a nominal referent to which he refers back 16 (!) sentences (or: 78 words, 113 morphemes) later with the apt classifier; nevertheless, the anaphoric reference is unequivocal (see Senft 1996: 21).

The following examples, (29)–(31), illustrate these anaphoric functions of classifiers in more detail (see also Senft 2004b):

### (29)–(31) Anaphoric reference function of classifiers and discourse coherence

- (29) *A-tatai tataba.      Tauwau tabalu      m-to-si-na*  
 1-carve tataba-board men      Tabalu-subclan DEM-CLF.MALE-PL-DEM  
*ma-ke-na                      si      koni.*  
 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 of the Trobrianders. The anaphoric reference of the two demonstrative pronouns is unequivocal, because in this context the classifier *to* can only refer to (the referent of) the noun *tauwau* and the classifier *ke* can only refer to (the referent of) the noun *tataba*.<sup>5</sup>

- (30) *Tauwau pela e-me-si bi-lebu-si. E-kokwa'u-si kebila*  
 men for 3-come-PL 3.FUT-take-PL 3-weave-PL stretcher  
*ma-buda-na-ga e-kugwa-si e-me-si.*  
 this-CLF.GROUP-this-EMPH 3-first-PL 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 classifier *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: 21–22).

- (31) *O da-valu-si e-sisu-si tommota to-paisewa. Vivila*  
 in 1.INCL-village-PL 3-live-PL people CLF.HUMAN.BEINGS-work woman  
*na-salau tauwau to-bugubagula. Tommota gala*  
 CLF.FEMALE-busy men CLF.MALE-work.in.the.garden people not  
*to-dubakasala, kena kumwedona e-nukwali-si bubune-si bwena.*  
 CLF.HUMAN.BEINGS-rude 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 once more 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 hand, the nouns can rarely be omitted. The speaker uses the classifier to refer to “human beings” and to “persons of male sex”. The classifier *na* is used to refer to “persons of female sex”. If the noun *tommota* was not realized in the last sentence again, then this sentence would refer to “persons of male sex” only (see Senft 1996: 22).

To sum up, with their anaphoric reference, classifiers secure discourse cohesion and unequivocal reference to earlier mentioned nominal referents. The anaphoric function of classifiers also allows the ellipsis of the nouns that go with their respective classifiers in certain contexts; however, if a noun is reclassified

5. For a discussion of the fundamental problem whether a classifier refers to the noun or to its extralinguistic referent see Senft (2000: 36–37).



with another classifier, it cannot be omitted after its reclassification by this new classifier, it must be repeated to secure and guarantee unequivocal reference.

## 8. Summary

The grammatical and discourse functions classifiers perform in Kilivila can be summarized as follows (see Senft 1985, Senft 1991: 138, 1996: 22–23):

- They play an important role in the word formation of all numerals that are cardinal numbers, all demonstrative pronouns (with the exception of the exophoric form and general demonstrative *besa/beya*), some adjectives and one interrogative adverb or numerical interrogative pronoun.
- They mark concord between nouns classified and the word classes containing the classifier.
- They classify and specify their nominal referents inherently as well as temporarily in many different ways and with much semantic power.
- They can nominalize all numerals, some adjectives and all demonstratives (with the exception of *besa/beya*).
- Being collective terms, they can indicate plural for the nouns to which they refer.
- Some classifiers can perform verb-like functions within noun phrases in a sentence.
- With their anaphoric referential function, they can constitute noun phrases that are comparable to elliptical utterances: once a noun has been introduced, if it is not reclassified, the following references to this nominal denotatum may consist of numerals, adjectives, and/or demonstrative pronouns only, that is, the noun itself is then no longer realized; it is ellipsed or deleted in the noun phrases.
- With their anaphoric referential potential, classifiers can perform the function of preserving coherence in discourse.

## 9. Questions for further research

With respect to the organization of discourse and conversation, the referent introducing function and the discourse deictic, anaphoric reference function, 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 questions like

the following in future research; they can be differentiated into language specific research questions – in this case for Kilivila – and cross-linguistic research questions. I first list the language specific questions:

- First of all, it would be interesting to know whether all the three word classes of Kilivila that use classifiers in their word formation fulfil anaphoric reference functions – or whether it is mainly the demonstratives that are used for (endophoric) deictic reference. In addition, it would be interesting to find answers for the following questions:
- If we observe cases of double classification (as in Examples (23), (25) and (26) above), which classifier is usually used for anaphoric reference to secure text coherence?
- At what distance can anaphoric reference be achieved solely by means of a classifier 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 Miller's "magical number seven, plus or minus two" maxim (Miller 1956) also hold for Kilivila native speakers?
- What other means do speakers of Kilivila use to secure text coherence?

As to the cross-linguistic research questions, it would be interesting to answer the following ones (see also Contini-Morava & Kilarski (2013) and Feist (2019)):

- 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 (see, for example, Zwitserlood (2003); Azar & Özyürek (2015); Perniss (2007); Perniss & Özyürek (2015))?
- Can we observe different 'classifiers' in different sign languages of the world (see, for example, Zeshan (2003); Zeshan & De Vos (2012))?

- 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. 2003) – especially with respect to describing and analyzing their functions in sign languages and for signers?

Thus, there is much to do ...

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