CLASSIFICATORY PARTICLES IN KILIVILA

GUNTER SENFT

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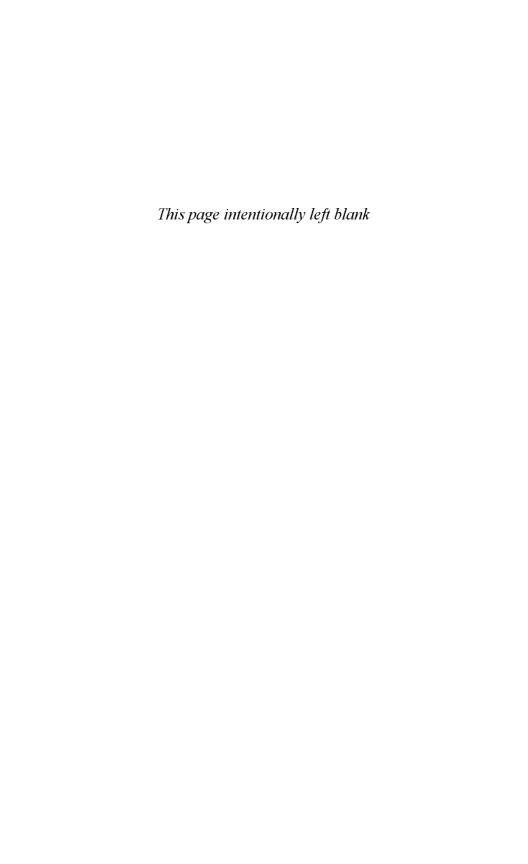
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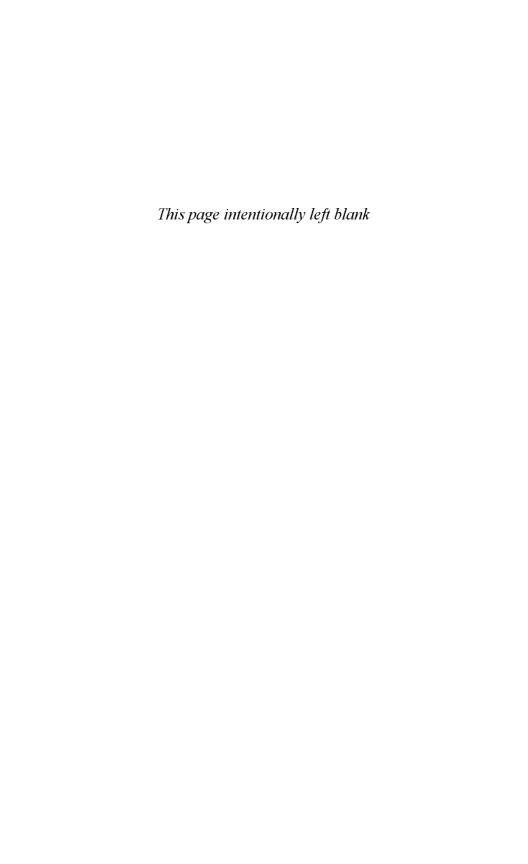
... Cassirer 1923 behandelt im ersten Teil seiner *Philosophie der symbolischen Formen* die menschliche Sprache, wobei auch die "Grundrichtungen der sprachlichen Klassenbildung" besprochen werden... Das Wort "Philosophie" möchte vielleicht Namen, wie die eines MAUTHNER und HOOGVLIET und andere mehr in Erinnerung rufen, hier aber ganz zu unrecht. Dieses Buch ist reich an Gedanken und Einsichten, äußerst suggestiv und lehrreich.

Es sei nicht die Aufgabe der Sprachphilosophie "die verschiedenen Formen der Begriffs- und Klassenbildung, die in den Einzelsprachen wirksam sind, zu beschreiben, und sie in ihren letzten geistigen Motiven zu verstehen... Die Wege, die die Sprache hier einschlägt, sind so vielfältig verschlungen und so dunkel, daß es nur durch die genaueste Versenkung und durch die feinste Einfühlung in das Detail der Einzelsprachen gelingen kann, sie allmählich zu erhellen. Denn gerade die Art der Klassenbildung macht ein wesentliches Moment jener "inneren Form" aus, durch welche sich die Sprachen spezifisch voneinander unterscheiden".

Man sieht, daß sich CASSIRER visionärer Flüge in das Reich der erphantasierbaren Möglichkeiten enthält und dauernde Fühlungnahme fordert mit der reichen Mannigfaltigkeit der sprachlichen Tatsachen. Aber wenn auch die verschiedenen Klassifikationssysteme in verschiedenen Varianten wechselten, so könnten doch in dieser großen Mannigfaltigkeit "gewisse allgemeine Gesichtspunkte" entdeckt werden. Zweifellos sei es möglich, diese Gesichtspunkte so anzuordnen, "daß man dabei jenen ständigen Fortgang vom "Konkreten" zum "Abstrakten", der die Richtung der Sprachentwicklung überhaupt bestimmt, als leitendes Prinzip benutzt". Aber, so fügt CASSIRER... hier richtig hinzu, man dürfe nicht vergessen, "daß es sich hier nicht um eine zeitliche, sondern um eine methodische Schichtung handelt, und daß demnach in einer gegebenen historischen Gestalt der Sprache die Schichten, die wir hier gedanklich zu sondern versuchen, neben- und miteinander bestehen und sich in der mannigfachsten Weise übereinander lagern können".

Gerlach Royen (1929:254-255)

... wer auf der Studierstube ein System zimmert, ohne es der Welt anzupassen, der lebt entweder seinem System all Augenblick schnurstracks zuwider, oder er lebt gar nicht.



Preface

We shall deal in this article with a single phenomenon, namely, the *classificatory formatives* in the language of Kiriwina, Trobriand Islands, an archipelago lying due north of the eastern end of New Guinea.

Bronislaw Malinowski (1922:37)

Classification is certainly a basic fact of life. That classification abilities are necessary for the survival of every organism is an important insight of biology. Human beings classify consciously and unconsciously—and subconsciously, of course—in all situations. When we confront a scientific problem, we try to solve it by first classifying the various parts of the problem. Thus it is not surprising that the history not only of philosophy but of all branches of science is also the history of how these sciences have classified their research subject. Classification always implies selection because, as Koestler (1978:201) stated,

(our) minds would cease to function if we had to attend to each of the millions of stimuli which—in William James's classic phrase—constantly bombard our receptor organs in a ''blooming, buzzing confusion.'' Thus the nervous system and the brain itself function as a multilevelled hierarchy of filtering and classifying devices, which eliminate a large proportion of the input as irrelevant ''noise,'' and assemble the relevant information into coherent patterns before it is represented to consciousness.

If we want to communicate about this perceived, classified, and filtered input, we have to classify once more: We have to transform this input into classes and categories provided by the systems that organize our communicative verbal and nonverbal faculties. With our systems of language and gesture, we again classify and filter on various levels while communicating. On one of these levels, we decide, for example, on the grammatical structure we want to use to refer to what we want to communicate about; on another level, we also have to classify the referents of our communication. Linguistics is the science that tries to describe, illuminate, and explain the processes of classification that are relevant for communication—and this goal is the reason that many

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linguists find their discipline so fascinating. Indeed, human beings have developed a number of different linguistic techniques to apprehend the world, providing an enormous database for the analysis of this problem. This book deals with a classification technique used by the speakers of an Austronesian language, Kilivila.

In August 1982, I entered for the first time the district that was to be the future site of my linguistic fieldwork—the Trobriand Islands in Milne Bay Province of Papua New Guinea. I did so with, I suppose, almost the same feelings of intense interest and suspense that Malinowski felt (Malinowski 1922:51). However, I had the enormous advantage of having read Malinowski's masterpieces on the Trobriand Islanders' culture. Nevertheless, there is a difference between having read about a completely foreign world and actually confronting it. The aim of my research project was to describe and explain aspects of ritual communication. To achieve this aim, it was necessary to acquire a certain competence in the language, of course. Since there was no existing grammar of the Trobrianders' language, writing a grammar was one of the prerequisites (G. Senft 1986:3-5). Among the few linguistically reliable sources on Kilivila was Malinowski's fascinating article "Classificatory Particles in the Language of Kiriwina," published in 1920. Working on this system of classifiers became one of my preoccupations as soon as I was able to master the language. After fifteen months of field research, I returned to Germany with a great deal of data on classifiers, knowing that I would concern myself for a long time with the analysis of these data and with an attempt to understand this system and its importance for the language as well as for the culture. This concern is documented in a number of publications (G. Senft 1983, 1985a, 1985b:133-134, 1986:68-72, 1987a, 1989, 1991c, 1993).

In this book, I present the results of almost ten years' work on the system of classificatory particles in Kilivila. However, I am not at all sure whether this means that I am really "through" with my Trobriand friends' classifier system.

The work is offered as a contribution to the research on classifiers and classifier languages.

It is an empirical work, based on data gathered during a period of fifteen months of field research in 1982 and 1983 and four months of field research in 1989. It is extremely data-oriented and emphasizes the use of classifiers in social contexts. The aim of this work is to describe (1) the functions of the system of Kilivila classifiers; (2) the acquisition of the classifier system; (3) the inventory of Kilivila classificatory particles (produced in actual speech); (4) the processes of language change that affect the system; and (5) the semantics of the Kilivila classifier system.

The introductory chapter—based on a broad survey of the relevant literature—gives a general definition of the concepts "classifier languages" and "classifiers" and presents the aims and methods pursued in traditional studies on the classifier systems of classifier languages in general and on the Kilivila language in particular. Chapter 2 presents a description of the

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grammatical and discourse functions of the system of classificatory particles (CPs) in the Kilivila language.

The third chapter is the central chapter of this book. After a description of the aims and methods used in data collection, the CP data gathered in a specially developed elicitation test, as well as CP data documented in my overall corpus of Kilivila speech, are presented in detail. First, the CP production data are presented and preliminarily interpreted separately for each of the five age groups into which I divided my consultants. This data presentation is meant to give the reader a first impression and a general account of CP production in each of the five age groups. Second, the data gathered in the CP elicitation test are presented in two ways: (1) the CP types and the respective tokens produced by all consultants during the elicitation test are given, including a description of which consultant produced how many tokens of the respective CP type; and (2) the CP types produced by all consultants in the elicitation test are given, allocating the tokens of the CP type produced to the CP type or types actually expected. Finally, the CP types and tokens documented in my overall corpus of Kilivila speech data are presented.

This kind of data presentation serves as an empirical, checkable basis for the analyses necessary to reach the aims of this study. I am aware that this large-scale presentation requires space; however, it allows the critical reader to check (and countercheck) all the analyses and all the inferences made using these data. Moreover, it is hoped that this large-scale data presentation makes it easier for the reader to understand the train of thought that starts with the empirical datum elicited (on the basis of theoretical reflection and ideas presented in the relevant literature) and leads to the description, interpretation, and evaluation of this empirical datum, resulting in theoretical conclusions.

Following the data presentation, the results of the CP research are given. First, the question of how the CP system is acquired by Trobriand children is considered. Here, all but one of the many side issues of this complex question are answered. The subquestion of why the individual CPs are acquired in the order found is the last question addressed in this chapter, because the answer requires the information provided by the answers to the other two main questions raised in the study. The question of how the individual CP types are produced in actual speech is considered next. The third and last question answered in chapter 3 is that of the semantic domains constituted by the CP system. The headings of the sections and subsections in chapter 3 should make it easy for readers to find the answers to aspects of this study that may be of special interest to them.

Chapter 4 presents the results of a restudy I did in the Trobriand Islands in 1989, in which I reconsidered the results of my analyses of the Kilivila CP system based on data gathered in 1982 and 1983.

Chapter 5 is an excursus; it discusses—with all necessary caution—possible interdependencies between language, culture, and cognition based on an analysis of the CP system.

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Chapter 6 summarizes the results of the study and presents a "network" model for the description of classifier systems.

Appendix A lists the individual consultants used in gathering CP data in 1982 and 1983; appendix B lists which consultant produced which CP in what text category in my overall corpus of Kilivila speech data; appendix C lists the consultants I worked with during my restudy in 1989; and appendix D presents some hypotheses on the origin of classifiers.

I would like to mention here two concepts that are central in understanding the research and the arguments that I present.

First, I speak of the "system" of CPs in Kilivila and of "systems of classification" in general. I do this not only because I follow the general usage in the literature, but especially because I am convinced that my analyses of the CPs in Kilivila justify the use of the term "system." One of the aims of this research is to describe a set of elements—that is the set of CPs in Kilivila—and the set of relations existing among these elements (Klaus 1968:634). I try to describe the internal order among linguistic elements and to present the functional relation that can be found on various levels of description and in relation to social and other subsystems (Bussmann 1983: 489).

Second, I speak of "referents" and of the "act of referring." A referent is an object or a fact in the extralinguistic reality to which noun phrases as verbal signs "refer." By "act of referring," I understand on the one hand the verbal reference to language-internal and language-external contexts and on the other hand the relation between the verbal expression (name, word, etc.) and the object in the extralinguistic reality to which the expression refers (Bussmann 1983:428).

I would like to end this preface with a warning to my readers: much of this book contains rather dry linguistic descriptions. However, I hope that the results presented help readers forget some of these long hauls and that they may get at least an impression of the fascination I experience in dealing with the complex linguistic phenomenon of classifier systems in general and in particular the system of classificatory particles in Kilivila.

June 1995 Nijmegen, The Netherlands

G.S.

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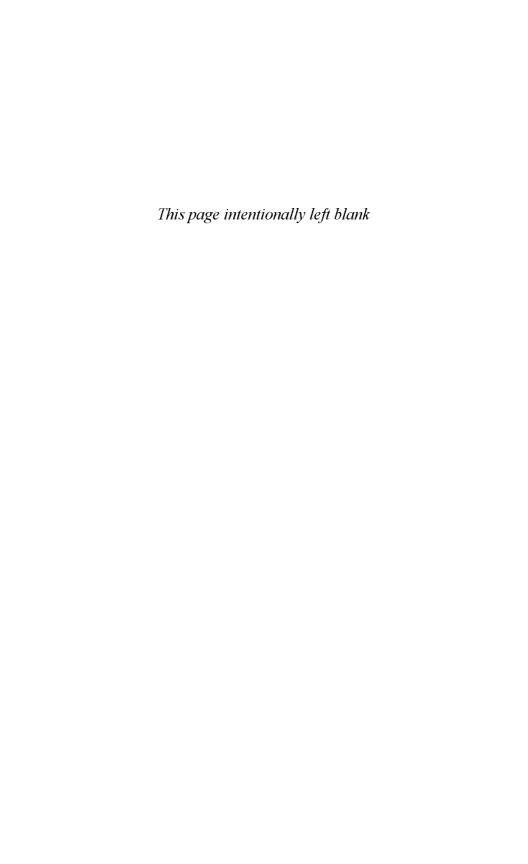
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Although I typed the manuscript myself, finishing touches have been made by Edith Sjoerdsma and Gertie de Groen. All the problems I had with the various computers I used were competently solved by Gertie de Groen, Caroline Rek, Herbert Baumann, and Karl Grammer. Many thanks to all of them.

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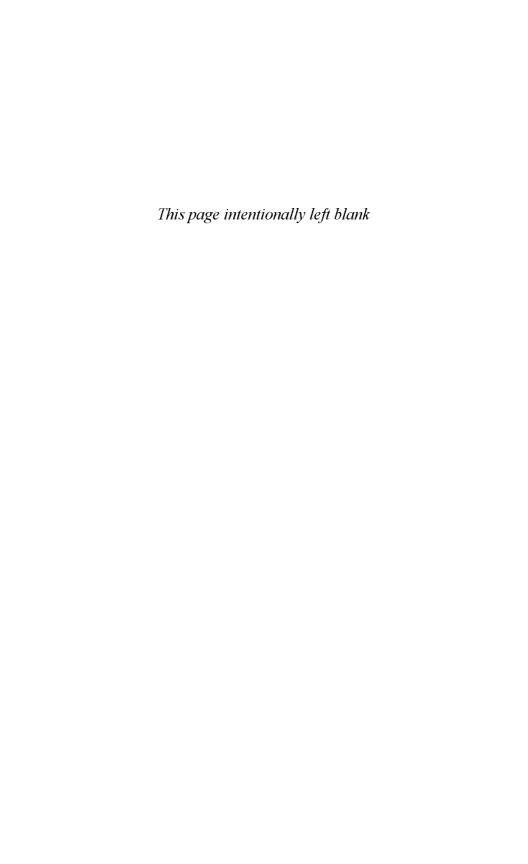
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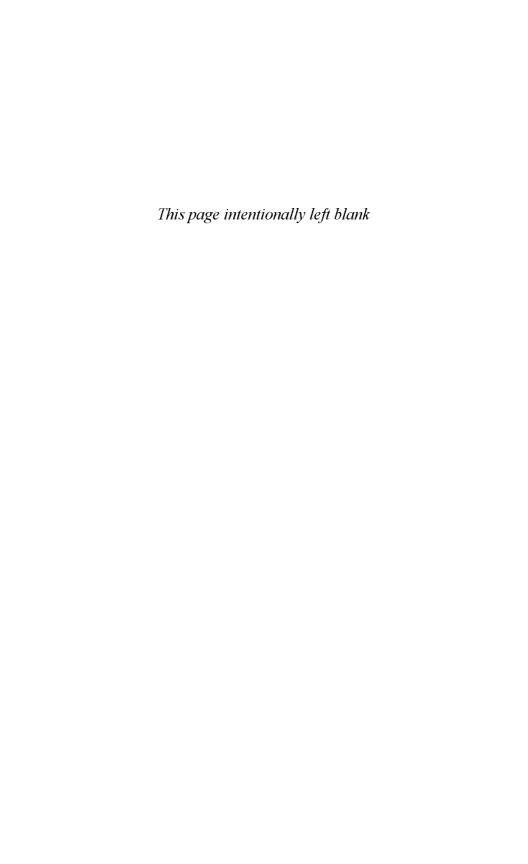
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Classificatory Particles in Kilivila



Chapter

1

Introduction

Kilivila (also known as Kiriwina and Boyowa) is one of the 40 Austronesian languages spoken in the area of Milne Bay Province in Papua New Guinea. It belongs to the "Papuan Tip Cluster" (Capell 1976:6, 9; Ross 1988:25–27), and typologically is classified as having verb-object-subject (VOS) word order (G. Senft 1986:107–112). The Kilivila language family comprises Budibud (also known as Nada), Muyuw (also known as Murua), and Kilivila. Kilivila has about 25,000 speakers, most of whom live on the Trobriand Islands.

Bronislaw Malinowski's ethnographic work on the Trobriand Islands has made this area rather well known, even outside the field of anthropology. In fact, Malinowski first reported the phenomenon that is the subject of this book. As a result of his classic article, "Classificatory Particles in the Language of Kiriwina" (Malinowski 1920), Kilivila is known to linguists as a so-called classifier language (Allan 1977:286–288).

The present chapter first defines the concepts "classifier" and "classifier language". It then gives an overview of the structure and function of classifier systems and the methods and aims of traditional classifier studies, including those on classifier languages in general and those on Kilivila in particular.

1.1 WHAT ARE CLASSIFIER LANGUAGES?

John Lyons (1977b:463) notes an important feature of classifier languages:

Languages which grammaticalize the distinction between entity-denoting nouns and mass-denoting nouns tend to draw a sharp syntactic distinction between phrases like "three men" on the one hand, and "three glasses of whisky," on the other. Classifier languages do not: they treat enumerable entities and enumerable quanta in much the same way.

Classifier languages also show the following three characteristics (Allan 1977:286–8):

- 1. They have a system of classifiers.
- 2. They follow the almost universal principle that "A classifier concatenates with a quantifier, locative, demonstrative or predicate to form a nexus that cannot be interrupted by the noun which it classifies" (Allan 1977:288; but see also Adams 1989:12, 24).
- 3. They belong to one of the following four classifier language types: numeral, concordial, predicative, or intralocative.

Classifier languages are distributed around the world and are found in such different language families as Malayo-Polynesian, Mon-Khmer, Austro-Asiatic, Sino-Tibetan, Altaic, Dravidian, and Indo-Aryan (see, among others, Adams and Conklin 1973:9; Foley 1968:77–91; Greenberg 1975:18).² Numeral classifier languages are considered the paradigmatic type, and Kilivila belongs to this class.³

Languages with numeral classifiers differ from other languages primarily with respect to the following characteristic feature: in counting inanimate as well as animate referents, the numerals obligatorily concatenate with a certain morpheme, which is the so-called classifier.⁴ This morpheme classifies and quantifies the respective nominal referent according to semantic criteria (see Serzisko 1980:1, 1982a:147; Hundius and Kölver 1983:166).⁵ Moreover,

¹ For further examples where one noun takes over similar classifying functions with respect to a second noun in the noun phrase, see Adams and Conklin (1973); Allan (1977:292–293, 301); Burling (1965:260); Clark (1976:449–450); Denny (1976:129); Greenberg (1975:22); Hla Pe (1965:167), Hoa (1957:125–126); Katz (1982); Kölver (1982c:162); Lee (1988:225, 242); Löbel (1986); Harweg (1987a); Jackendoff (1968); Parsons (1970); Plank (1984); Verhaar (1986, 1987:503, 1988:21–23); Zubin and Köpcke (1986); and Jacob (1965); for a formal logical discussion of count terms, mass terms, and quantification, see Lonning (1987); for the difference between noun classes and classifiers, see Dixon (1982: Part D:157–159); Silverstein (1986); Chin (1989, 27–29); but see also Gomez-Imbert's (1982) thesis on nominal classification in Tatuyo, a language that has features characteristic of classifier systems as well as features characteristic of noun class systems; for an interesting discussion of levels of semantic structuring in Bantu noun classification, see Spitulnik (1988).

²Moreover, we find classifiers in American Sign Language (ASL); Egyptian hieroglyphics and Mesopotamian cuneiform use graphemic classifiers (see, e.g., Klima and Bellugi 1979: 13–15, 191–192; Kantor 1980; Newport and Supalla 1980; Kegl and Schley 1986; Supalla 1986; Rude 1986).

³This book deals with the classificatory system of Kilivila; thus, I will not discuss the other three types of classifier languages mentioned. For a discussion of these types, see Allan (1977:286–287) and Craig (1986:3–4).

⁴As the example of Kilivila shows, this morpheme may also be a so-called zero morpheme (G. Senft 1986:75; see also Mufwene 1980c:246). Moreover, due to processes of language change, it may well be that in some languages and some contexts the classifier is no longer obligatory, but becomes optional (see Chin 1989:4-6), Stolz (1991) presents data for classical Nahuatl, where the classifier is optional (see also Adams 1989).

⁵What Seiler and his research team call *Das sprachliche Erfassen von Gegenständen* (and living beings, I would add) by means of numeral classification is, by the way, just one of nine different techniques this linguist defines as *Sprachhandlungsprogramme* describing the dimension "apprehension" within the framework of the so-called Kölner Universalienprojekt (see Seiler 1982).

in numeral classifier languages, we find classifier morphemes in anaphoric (see, e.g., Downing 1986) and deictic expressions. Therefore, the term "numeral classification" is somewhat inaccurate (see also Asmah 1972:90; Berlin and Romney 1964:79; Unterbeck 1990b:90). Nevertheless, I will adhere to this technical term as it is used in the general linguistic literature (see, e.g., Allan 1977:286; Becker 1975:114–115; Greenberg 1975:19; Haas 1942).

Greenberg (1978:78) has answered the question of why such classifying systems apply only to nouns:

... it is the noun par excellence which gives rise to classificational systems of syntactic relevance. It is not so much that the noun designates persisting entities as against actions or temporary states of persisting entities. It is that nouns are continuing discourse subjects and are therefore in constant need of referential devices of identification. As soon as we wish to talk about an action as such, we nominalize it; classification is a help in narrowing the range of possible identification.

In sentence analysis, the syntactic description of the phenomenon of classification in numeral classifier languages is restricted to the noun phrase level (see Kölver 1983:55).⁷ The order in which the three constituents—classifier, numeral, and noun—appear varies across languages; however, according to the principle formulated by Allan (1977:288), in general the noun does not interrupt the nexus formed by the numeral and the classifier (see also Adams and Conklin 1973:1; Adams 1989:12, 24).

The morphological/syntactic role of classifiers is generally neglected in the literature in favor of their semantic functions. However, Goral's statement that "in [classifier] systems, syntax and semantics are inextricably intertwined" (Goral 1978:5; see also Friedrich 1970:381) holds for all classifier languages and confirms the definitions proposed for the concept classifier.

1.2 WHAT ARE CLASSIFIERS?

We have defined classifiers as morphemes that classify and quantify nouns according to semantic criteria. Because of the twofold function of classifiers, Serzisko (1980:7)—following Hla Pe (1965:166) and Bloomfield (1933:237)—proposes the generic term "Numerativ" to denote the "obligatorische Konstituente in Quantifizierungskontexten" (see also Hundius and Kölver

⁶See also Mufwene 1980a:1025 and Broadfield 1946:25.

⁷On the other hand, Schafer (1948:413) states the following about classical Chinese: "Classifiers are also used with numbers accompanying verbs"

⁸ For general definitions of classifiers, noun classifiers, and nominal classifiers, see Allan 1977:285; Becker 1975:114–115; Benton 1968:137; Berlin 1968:20; Burling 1965:249; Denny 1979:97; Hoa 1957:124; see also the contributions in Craig (1986). Mufwene (1980a:1025) characterizes classifiers as "delimitative markers"; see also Mufwene 1984:200, 202.

1983:167–169). The term numerative subsumes classifiers proper and quantifiers.

Classifiers classify a noun inherently, that is, they designate and specify semantic features inherent to the nominal denotatum and divide the set of nouns of a language into disjunct classes (see Cholodovic 1954:49; Unterbeck 1990b:43).

Quantifiers classify a noun temporarily, that is, they can be combined with different nouns rather freely and designate a specific feature of a noun that is not inherent to that noun. Thus, quantifiers are predicative (see Serzisko 1980:17, 68–69, 1982a:152; Berlin 1968:175; Friedrich 1970:397; Denny 1986:302–307).

Contrary to one of Greenberg's (1975:25) language-universal postulates, not all but only the majority of nouns in numeral classifier languages lack a marking with respect to the category 'number'; in these languages, number is usually marked with nouns denoting persons (see, e.g., Barz and Diller 1985:170; Goral 1978:15; Miram 1983:36–37; Rausch 1912; Serzisko 1980:13, 48, 70; G. Senft 1986:45–46; Stolz 1991:18). Numeratives can take over the syntactic function of marking number for the nouns to which they refer.

Referentially, nouns in classifier languages can be characterized as having generic reference (see Royen 1929:775). With their referential function, numeratives individualize nominal concepts; they can mark a noun as obligatorily nongeneric in reference (see H. Seiler 1982:6, 8; Serzisko 1980:15, 86–87; also Carpenter 1992:147).

The functions that numeratives or classifiers fulfill are succinctly summarized by Adams et al. (1975:2):

Besides their function in numeral noun phrases, classifiers in various languages function as nominal substitutes, nominalizers of words in other form classes, markers of definiteness, relativizers, markers of possession, and as vocatives; serve to disambiguate sentences; establish coherence in discourse and regularly mark registers and styles within a language.

These functions will be discussed in detail in chapter 2.

So far we have differentiated classifiers and quantifiers (see also Adams 1989:3–5, 194) or, to use Lyon's (1977b:463) terms, "sortal classifiers" and "mensural classifiers" (see also Unterbeck 1990b:40). However, along with the definition of classifiers proper and quantifiers one generally finds a third category, the so-called repeaters. A repeater is a noun that serves as its own classifier, that is, the noun is repeated in the classifier slot. Hla Pe (1965:166) defines the terms classifier (proper), repeater, and quantifier as follows:

A classifier is a word for an attribute of a specific object, some of which may have more than one; a repeater is the specific object itself or part of it, used as numerative; whilst a quantifier concerns itself with the estimating of things by some sort of measure—size, extension, weight or number *especially* of ten or multiples of ten.

Repeaters are defined by Burling (1965:249) as "echo classifiers", Fischer (1972:69) calls them "identical classifiers", and Kölver (1982c:178, 183, 1979:34) characterizes them as "semantischer dummy"; finally, Goral (1978:33) defines repeaters as "autoclassifiers ... filling a syntactic slot ..." (see also Adams and Conklin 1974:3-4, 7; Benton 1968:116; Smith 1979:88; Carpenter 1992:132). In connection with this phenomenon, Lehmann (1979:169) hints at the possibility of studying this problem from a different point of view; he notes: "... a classifier can also function as an independent noun ...". Whether this repeater category of numeratives, which probably has to be assigned to the category classifier, carries the principle of classification to the point of absurdity, as Kölver (1982c:178) claims, must be doubted after a closer inspection of the numeratives within the individual languages. Allan (1977:295) discusses the problem of repeaters with all necessary caution and offers some hypothetical answers to the question of why this category develops in languages.9 I shall not discuss this problem in detail here, 10 but I want to emphasize that as far as I know there is no language described so far where all nouns can be used as repeaters to classify themselves. Thus, in all languages that have them, repeaters represent a relatively closed category; they form—in principle—a finite set of formatives.

Moreover, most if not all classifier languages have, in the words of Lyons (1977b:461), at least one "semantically neutral classifier, which may be employed ... with reference to all sorts of entities In many languages the semantically neutral classifier is restricted to non-personal, or even inanimate, entities" (see also Asmah 1972:95). This general classifier (see Serzisko 1980:24) has to be assigned to the category of classifiers, too (see also Schafer 1948:410–411).

Finally, I want to note here that Malinowski (1920) does not differentiate between classifiers proper, quantifiers, and repeaters, but refers to these formatives as "classificatory particles". I will use Malinowski's general term (abbreviated as CP) for these formatives to pay tribute to the master of Trobriand ethnography.¹¹

⁹Jones (1970:2) states "It is interesting to speculate on the possibility that such usage arises from an inadequate supply of classifiers once their use becomes firmly established". See also Adams (1991) and Adams (1989:1).

¹⁰Goral (1978:8) and Denny (1976:130) emphasize the strong affinity between nouns and numeratives (see also Schafer 1948:410–411). However, keeping in mind Dixon's (1968:114) admonition that we know very little about the development of such systems, I do not want to indulge in speculation on this topic here; but see appendix D of this volume and Dixon (1986); Mithun (1986); Delancey (1986); Demuth et al. (1986); Royen (1929:58, 63, 78, 141, 254, 266–268, 543, 705, 780); G. Senft (1993).

¹¹Royen (1929:iii, 37, 68, 185, 192, 305, 364, 889) emphasizes repeatedly that an interdisciplinary approach is not only necessary but also inevitable for an analysis of nominal classifier systems. See also Berlin et al. (1973:214). I want to mention for the sake of completeness that Berlin

Figure 1 summarizes this system—or classification—of CPs or numeratives and the technical terms found in the literature to refer to them.

General Terms for all Classifiers

Numeratives Classificatory particles (CPs) Classifiers Nominal classifiers Noun classifiers Zähleinheitswörter

Terms for the Category Classifier

Klassifikator Classifier proper

True classifier Inherent state classifier Sortal classifier

Repeater Reduplicative classifier Imitative classifier Echo classifier Identical classifier

Semantically neutral/ Cannibalizing classifier Genereller Klassifikator

Isolierter Klassifikator

Inherent classification Inhärente Klassifikation

Terms for the Category Quantifier

Quantifikator Quantifier

Temporal state classifier Mensural classifier

Action classifier

Semelfactive classifier

Metric classifier

Temporary classification Temporare Klassifikation

Figure 1. Classification of Classifiers.

Introduction 9

1.3 STRUCTURE AND FUNCTION OF CLASSIFIER SYSTEMS

In classifier languages, nouns are classified and categorized according to characteristics of their referents. This classification is based on semantic principles and results in the ordering of objects, living beings, concepts, actions, and events. In other words, it leads to a categorization of all the nominal denotata, of all nominal "conceptual labels" (Hundius and Kölver 1983:182; see also Denny 1986) coded in the language. We can refer to the units of this classification as "semantic systems" (Denny 1979:97) or as "semantic domains" (Berlin 1968:34; Tyler 1969:8). Thus, CPs can be regarded as indices or as "Exponenten von nach inhaltlichen Merkmalen geschiedenen Nominalklassen" (Kölver 1979:1); they represent the semantic (sub) structures of a (classifier) language (see Friedrich 1970:379).

The critical questions to be answered are, What are the semantic criteria and principles this kind of classification is based on? and, Are the classifications in different languages culturally determined?

Before I attempt to answer these questions, I want to emphasize that the classificatory systems of the various numeral classifier languages are usually not comparable to folk taxonomies, but must, more often than not, be regarded as paradigms (see Becker 1975:111; Berlin 1968; Berlin et al 1973; Burling 1965; Conklin 1962:124; Ellen 1979:7–9; Foucault 1966:108, 110; Frake 1969:34; Haas 1942; Barz and Diller 1985:176; Hundius and Kölver 1983:204; Miram 1983; Saul 1965; G. Senft 1987b; Tyler 1969:7–9). In taxonomies, the respective nominal referents are classified on the basis of the objectively perceptible and verifiable features. In paradigms, the single nominal referents are categorized in contrastive relation to other nominal referents. Mixed forms of taxonomic and paradigmatic classification do exist, but they are exceptional; moreover, such mixed forms of classification depend on the inventory of CPs these languages display. The inventory of CPs in classifier languages ranges from 2 to 528 (or even 730) (see Adams and Conklin 1973:9; Berlin 1968; Miram 1983:103).

Descriptions of the criteria that structure classifying systems generally give the following features: \pm human; human and social status; human and kinship; \pm animate; sex; shape/dimension; size; consistency; function; arrangement; habitat; number/amount/mass/group; measure; weight; time; action; \pm visible (see Adams 1989; Adams and Conklin 1973; Allan 1977; Becker 1975; Benton 1968; Burling 1965; Denny 1979; Friedrich 1970; Haas

(continued from page 7)

(1968) also describes "action classifiers" in Tzeltal; that Harweg (1987b) uses the term Zähleinheitswörter as a synonym for Numerativ; that Hoa (1957:128) introduces the term "semelfactive classifier" for a "type of classifier which indicates single action", referring to certain numeratives in Vietnamese; that Adams (1989):177, 182) describes "the general or cannibalising classifier"; that Hiranburana (1979:39–40) uses the terms "reduplicative classifier" and "imitative classifier"; that Fischer (1972:69, 77) speaks of "isolierte Klassifikatoren" (i.e., one classifier classifies only one noun) and mentions "metric classifiers" (i.e., classifiers for numerical and temporal units); and that Craig (1992:285–286) mentions "genitive classifiers" that are also called "relational" or "possessive classifiers". See also Seiler (1986).

1942; Hiranburana 1979; Hoa 1957; Kaden 1964; Miram 1983; Royen 1929:82–83, 125–137, 142, 256, 396–397). 12

Classificatory systems are usually described by feature lists that give the features in a relatively free order; however, there have been a few attempts to order the features hierarchically (see, e.g., Goral 1978:38; cf. Craig 1986:5-6). Becker (1975) describes the Burmese system of CPs hierarchically in the form of concentric circles; Miram (1983) proposes functional diagrams—Flussdiagramme—to describe the system of Yucatecan Maya (I will discuss this approach in more detail in section 1.4.1). What must be emphasized here is the fact that most, if not all, of these features represent semantic categories that are fundamental in all languages. For example, Friedrich (1970:404) characterizes the feature "shape" as the "ultimate semantic primitive" (see also Allan 1977:302). Moreover, it should also be noted that—at first sight, at least—these features seem to be universal (Lyons 1977b:466). However, a closer look at the CPs that constitute the semantic domains in individual languages on the basis of these features reveals that these general, probably universal, categories are defined in culture-specific ways (Berlin 1968:35). It is also evident that the boundaries between the individual semantic domains are rather fluid (Rosch 1978:36, 1977:4, 15, 18, 21). Thus, Craig (1986:1), on the basis of prototype theory, claims rightly that "... categories ... should be described as having fuzzy edges and graded membership ..." (see also Posner 1986; Givón 1986).13

Therefore, the description of semantic domains within any numeral classifier language requires a sound analysis of how these domains are constituted, that is, which features are relevant for the definition of the semantic domain (see Lenneberg 1953:468; Rosch 1978:28). This ethnosemantic descriptive and analytical research is rather complex and presupposes the linguist's thorough knowledge of the language described. This may explain why, at least in my opinion, typological, comparative studies on classifier languages, which necessarily use a general approach, neglect this microlevel of ethnosemantic analysis. ¹⁴ In these studies, relating the general results of the description of semantic domains to a specific language is possible only in a rather indirect, intermediate way. Moreover, it may well be that the complexity of ethnosemantic analysis is the reason that most descriptions of classificatory systems thrust the equally important morphological/syntactic role of CPs into the background.

Now, what about the actual use of the CPs that constitute such complex

¹²Apparently no classifier language makes use of a color classifier (see Adams 1989:5; Allan 1977:297; Asmah 1972:94; Berlin and Romney 1964:80; Carroll and Casagrande 1958:27–29, 31; Lee 1987:397; but see also Royen 1929:151).

¹³With respect to prototypes, see Rosch (1988); see also Mufwene (1980b:30, 31, 33, 36; 1980c;1983) who describes prototypes as "underlying principles of cognitive classification" and discusses possible ambiguities because of their "metaphorical extension(s)". For a critical discussion, see MacLaury (1991); see also Fischer (1972:68), who pleads for a historical foundation for the structure of so-called *semantische Felder*.

¹⁴Here the eminent exception is Royen (1929)!

systems?¹⁵ As mentioned previously, the inventory of CPs in classifier languages varies from 2 to 730 lexemes. In languages with many CPs, it must be emphasized that some CPs can refer to any nominal denotatum. That is, even with inherent classification, CPs can be used to specify special aspects of relatively general nominal concepts. In other words, complex systems of CPs allow the possibility of referring to a noun within its semantic domain either by the general, characteristic, "unmarked" CP or by a more specific CP.¹⁶ The choice of the appropriate CP occurs on the semantic level. It can be independent of the intended speech act, and thus attains stylistic denotation, meaning, and significance (see Becker 1975:113; Burling 1965:259; Goral 1978:26). Individual speakers use these options in their choice of CPs. 17 They may even be innovative by using a certain CP in a metaphoric way. Some linguists (e.g., Becker (1975:113), in his work on Burmese CPs) even claim that the actual "use of classifiers ... is in part an art" (see also Rosch 1977:42). This implies that analyses of CP systems must take into account the function of CPs as sociolinguistic variables (Labov 1972:237; see also Hla Pe 1965:170). Thus, we can conclude that all CPs do have meaning (Allan 1977:290; see also Adams 1989:7-8, 192; Adams et al. 1975:14, 17; Berlin and Romney 1964:79, 82; Mufwene 1984: 201, 203-204, 214; Schafer 1948:412). The problem of how to describe this meaning leads us to basic linguistic methodological considerations.

1.4 METHODS AND AIMS OF TRADITIONAL CLASSIFIER STUDIES— A BRIEF SURVEY

This section discusses studies on classifier languages in general, as well as studies on Kilivila in particular.

1.4.1 Studies on Classifier Languages

The literature cited so far includes typologically oriented comparative studies, on the one hand, and empirical descriptive studies of individual languages, on the other. A discussion of the methods that typological comparative studies use is unnecessary here. Rather, methodological techniques used in

¹⁵With the exception of Downing (1986) and Erbaugh (1986) this question is not answered in any of the literature cited here.

¹⁶Benton (1968:111) states, "The 'characteristic' or unmarked meaning of a form is generally that which is most likely to be encountered in a particular context and may not have any direct connection with a specific set of inherent features", and (Benton 1968:137), "Within a domain, a change in classifier generally signals a change of meaning. That is, certain semantic features of the noun ... are highlighted by a particular classifier" See also Adams (1986:241–243) and Lehmann (1979:171), who mentions "... the semigrammatical (e.g., sarcastic or insulting) deliberate choice of a 'wrong' classifier" See also Allan (1977).

¹⁷With respect to the topic "frequency of usage", see for example, Rosch (1977:38). See also Mufwene (1980a) who notes the discrepancy between CP inventory and actual CP usage.

empirical descriptive studies of individual languages will be described, based on Berlin's (1968) and Miram's (1983) monographs; other studies will then be discussed in light of the questions raised by these monographs.

In his work on the system of CPs in the Mayan language Tzeltal, Berlin presented two literate, Spanish-speaking, native Tzeltal speakers with 4,410 "phonemically possible forms". Using these forms, he elicited from the two consultants 528 numeral classifiers, which were counterchecked with the help of three more consultants in "informal and nonsystematic checks of reliability" (Berlin 1968:13, 19–20; see also Berlin and Romney 1964:80–81). The elicited CPs are described according to their features. Using the same consultants and a questionnaire, Berlin ordered the CPs hierarchically and according to the semantic domains they constituted. Thus, the Tzeltal CPs were described on the basis of the judgments of only two—or, if we include the three counterchecking Tzeltal speakers, five—consultants.

In her study on the CPs in Yucatecan Maya, Miram (1983) also worked with a literate and bilingual consultant, Edilberto Ucan Ek; he became her assistant and also did transcriptions for her. Miram's data are based on observations of ordinary language spoken in a natural context, as well as on interviews with consultants. During these interviews, she (or her assistant) checked lists of possible or already described CPs and elicited further, "new" CPs. It is unclear, however, which kind of data she is referring to in her study. Miram elicited 730 CPs; on the basis of clearly defined criteria, she reduced these CPs to 225 forms that were semantically analyzed. Her assistant grouped 194 of these CPs into 47 semantic domains. What is decisively new in her approach is her use of functional diagrams based on these data. The diagrams are intended to simulate a native speaker's decision processes in choosing a certain CP. This form of data presentation allows a description of the semantic domains as "open" systems that may be linked with each other in various ways (see Ellen 1979:17).

The value of Miram's novel approach is unfortunately partially diminished by the somewhat unclear description of her consultants' contributions and by the important role her assistant played in the processes of data collection and data processing. Linguists experienced in field research will probably agree that Miram's assistant falls into the category of the so-called marginal native (Freilich 1970). This is true of Berlin's consultants, too. In general, all data gathered with the help of such consultants must be looked upon with a certain amount of skepticism.

Although I am critical of the databases used in both of these studies because they resulted mainly from work with only a few consultants, it should be pointed out that Berlin and Miram at least reveal the methods of their data collection. Although there are a few exceptions (e.g., Carpenter 1991), many other investigators either do not mention the methods used in data collection or claim that theirs is a comparative study, which need not use empirical data gathered by the author. Some studies are based on data presented in already published papers and on judgments of native speakers and (foreign) trained linguists. Kölver's excellent study on Central Thai is an example (Kölver 1979; see also Unterbeck 1990b:3–4, 61). Nevertheless,

in general descriptive studies of the CP systems of individual classifier languages have a number of significant methodological shortcomings.

The research interests of published CP studies can be summarized as follows:

- 1. Descriptions of the syntactic role of CPs.
- 2. Descriptions of the semantics of CPs.
- 3. Descriptions of CPs with respect to their constitutive function for semantic domains, as well as lists of these semantic domains.
- 4. Comparisons of semantic domains constituted by CPs in different classifier languages, with respect to the question of language universals.

To my knowledge, only nine empirically founded studies deal with the question of first-language acquisition of CP systems (Carpenter 1986, 1991; Chin 1989; Erbaugh 1986; Gandour et al. 1984; Luke and Harrison 1986; Matsumoto 1985; Sanches 1977); Clark (1976) unfortunately indulges in sheer speculation. However, the studies of Allan (1977:295), Burling (1965:261), Goral (1978:4), Haas (1942:201–202), and Tversky (1986:72–73) provide some hints toward possible answers to the question of how the CP system is acquired by native speakers.

With respect to data showing CPs in actual speech, the currently available CP studies—with the exception of Becker 1986, Downing 1986, and Erbaugh 1986—only present isolated sentences as examples to support the syntactic and/or semantic description of the CP systems. Context influence (Rosch 1978:42; Strawson 1950:334; cf. Levinson 1983:172–177) on the speaker's choice of a certain CP is a problem sometimes mentioned but not illustrated by relevant data. Symptomatic of the state of the art with respect to this question is Berlin's (1968:23) statement (which he does not indicate is a hypothesis) that "The actual occurrence of numeral classifiers in recorded texts is relatively low" He then concludes that the occurrence of CPs in various contexts can be ignored in analyzing the CP systems of individual languages, and supports this conclusion with the statement that "... only systematic elicitation for classifiers per se ... can hope to claim partial exhaustiveness" (see also Craig 1986:8). Thus, Berlin supports Burling's (1965:264) guiding methodological principle for the analysis of CP systems:

Seeing the problems which arise in the attempts to bring order into the set of classifiers, one may feel that the best available "analysis" so far is simply the list of classifiers with their definition.

¹⁸For the acquisition of Niger-Congo noun class and agreement systems, see Demuth et al. (1986:463–465). Noun classes and agreement in Sesotho acquisition are discussed in Demuth (1988) and Demuth (1992). For a discussion of how and when number and countability distinctions are acquired in English, see Mufwene (1984:207–208). This criticism and some of the other statements presented here do not hold for studies on the ASL classifiers; see, for example, Kantor (1980). For a criticism of Clark (1976) see Goral (1978:4), also Chin (1989:156–158).

For the lexicology of a classifier language, this is an important conclusion, of course; however, for a CP analysis that tries to penetrate into the microlevels of the CP system, the static listing of CPs is certainly not entirely satisfactory.¹⁹

Finally, there is virtually no information about processes of language change in progress affecting CP systems.²⁰

1.4.2 Studies on Kilivila

The previous section surveyed rather briefly publications on numeral classifier languages other than Kilivila, the Austronesian language whose CP system is the focus of the analyses presented here.²¹

Milner (1963:66) poses the following question:

Is an Oceanic linguist to concentrate on one language at a time to treat it with the same searching analysis that is now taken for granted in the study of, say, Latin or French, at the risk of too great a degree of specialisation, or is he to be content with general surveys and comparative work founded generally on second-hand and superficial knowledge of his material?

Faced with these alternatives, (see also Vachek 1976:225–226), I decided on the first course, the analysis of the CP system of one language, namely, Kilivila.

Kilivila CPs are first mentioned by Fellows (1901) and Ray (1907). Baldwin (no date), who worked as a missionary on Kiriwina Island, lists 75 classifiers in his unpublished fragment of Kilivila grammar, translates them into English, and describes aspects of their morphological role and function. Malinowski (1920) describes 42 CPs with respect to their morphological, syntactic, and semantic functions. Capell (1969:61) lists 44 CPs in his description of noun class division in Kiriwina.²² Capell (1971:273–274) and Lithgow (1976:461, 465–467, 480, 488–490) also refer briefly to the Kilivila CP system.

Ralph Lawton's unpublished Master's thesis "The Kiriwinan Classifiers" (Lawton 1980) is the most comprehensive description of Kilivila CPs so far, and thus warrants a brief review. After a description of the morphological

¹⁹That it is possible to describe the semantic domains constituted by the CPs as dynamic, open systems is convincingly demonstrated by Miram's (1983) monograph.

²⁰ As far as I know, only Asmah (1972;96); Becker (1975:120); Demuth et al. (1986); Dixon (1986:110–111); Erbaugh (1986); Jacob (1965); and Kölver (1982a:107, 115, 120) discuss possible processes of language change affecting CP systems.

²¹The CP system of Kilivila is mentioned briefly in the following publications: Allan (1977:285, 288, 290, 295–296, 299, 300, 303–305); Chin (1989:24–25); Friedrich (1970:401–403); Greenberg (1975:18–19; 1978:78).

²² However, the CP *ukdu* that Capell mentions is not (or no longer?) known to Kilivila native speakers; one explanation for this may be that this CP does not agree with Kilivila syllable patterns (see G. Senft 1986:20–22).

role the CPs fulfill and a discussion of the special relationship between CPs and nouns, Lawton presents a semantic description of 147 CPs. He divides these into two groups: Group 1 comprises 34 CPs, which "specify whole items in terms of their features or properties" (Lawton 1980:80). Group 2 comprises 113 CPs, "which classify items in terms of some modification they have undergone. Modification of items is conveniently divisible into three categories labelled activity, partition and arrangement" (Lawton 1980:81).

Lawton then subdivides the CPs of group 1 into the following three classes:

- 1. Basic property specifiers which are subclassified according to the features \pm animate, \pm human, dimension, and residue.
- 2. Subclassifying CPs within the semantic domains constituted by the basic property specifiers.
- 3. Residue.

The individual CPs are listed and described, and a phrase or sentence is given as a reference for the use of the respective CP.

In his semantic description of the CPs of group 2, Lawton subclassifies the partitive classifiers according to the features "topographical, parts within wholes, pieces, multiple reference", and the arrangement classifiers according to the features "inherent/non-inherent arrangement"; the feature non-inherent arrangement is itself further subcategorized according to the features "distributional", "configurational", and "quantitative". The individual CPs of group 2 are presented in the same way as the CPs of group 1.

Lawton then discusses the CPs in connection with adjectives, verbal expressions, associations, and metaphors; the appendix presents a list of the 147 CPs according to Lawton's classification principles and in alphabetical order.

Some of Lawton's expositions are problematic, but the whole topic is complex. Thus, I shall not criticize Lawton (1980) in detail here. However, I want to note that almost all the points of criticism mentioned in the discussion of the studies of classifier languages in general hold for Lawton's thesis as well.

Chapter

2

Classificatory Particles in Kilivila: Grammatical and Discourse Functions

In this chapter, we will look at the grammatical and discourse functions¹ of the Kilivila system of CPs, including the morphological relevance of CPs with respect to Kilivila inflectional morphology and the functions that are assigned to CPs in Kilivila.

2.1 MORPHOLOGICAL RELEVANCE

The Kilivila system of CPs contains at least 177 formatives. (Section 3.3.1 lists these CPs in detail.) I assume that with all the subtle and very specific differentiations possible, there are probably more than 200 CPs in Kilivila. Moreover, if we keep in mind all the pragmatic functions CPs can serve, the Kilivila CP system can even be regarded as basically open; here it has to be noted, however, that at least so far no loanword has been incorporated completely or in part into the inventory of Kilivila CPs (see G. Senft 1991a, 1992a).

The system of noun classification in Kilivila is an important means of word formation with (1) all but one of the demonstrative pronouns, (2) one

¹Kilivila has a fourfold series of possessive pronouns, partly realized as free pronominal forms, partly realized as pronominal affixes. One of these series is produced in a specific semantic context, referring to food only; the other three series are used to distinguish different degrees of possession: one series marks inalienable possession and two series mark nonedible alienable possession (G. Senft 1986:47–54). These possessive pronominal forms classify the Kilivila noun, too, of course (see also Royen 1929:186; Wurm 1981). However, I do not deal with this kind of nominal classification in this book, but rather present research on the specific system of formatives that consists of quantifiers, repeaters, and noun classifiers proper, which all are referred to with the general term—classificatory particles—that Malinowski coined for them. Finally, I am sure that Kilivila has verbal derivational classificatory prefixes similar to those described by Ezard (1978) for languages of the Massim cluster; however, as stated elsewhere (G. Senft 1986:28), I have omitted all consideration of derivational morphology in my description of Kilivila.

form of (numerical) interrogative pronouns/adverbs, (3) two classes of adjectives, and (4) numerals. These word classes require concord with the class of the noun to which they refer. This concord is secured by the CPs, which are infixed or prefixed to the respective word frame or word stem. I have described these processes of word formation and the syntactic aspects of constituents with CPs in detail elsewhere (G. Senft 1985a:374–379, 1986); however, I will give a rather general account of the processes of word formation here.

With the exception of the purely exophoric demonstrative pronoun besa or beya 'this' (with a deictic gesture), all other demonstrative pronouns consist of a fixed morphological frame, formed by the word-initial morpheme ma-(or, according to phonological rules, m- or mi-), the word-final morpheme -na; and an infixed morpheme, which is the CP. To distinguish between singular and plural, there is also a plural marking morpheme -si-, which is infixed between the CP and the word-final morpheme -na. Demonstrative pronouns formed in this way express the concept of 'this/these'. To express the deictic concept of 'that/those', the morpheme -we- is infixed in singular forms between the CP and word-final -na and in plural forms between the plural marker -si- and word-final -na. To express the kind of deictic concept that comes close to the English demonstrative 'yonder', the Kilivila speaker takes the forms of the demonstrative pronouns expressing the concept of 'that/those' and changes the final vowel /a/ of the word-final morpheme -na to an /e/ that is lengthened and has a minor accent.

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

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

There is also one form of an interrogative adjective or adverb that consists of the word stem *-vila* and a prefixed CP (for CPs with an interrogative quantifier see de León 1988:65–66).

I conclude this brief account of the processes of word formation in Kilivila with the presentation of two sentences containing all four word classes involved in the system of noun classification (see G. Senft 1989):

(1) Kevila waga lekotasi?

ke-vila waga le-kota-si? wooden-how many canoe 3Ps.Past-arrive-Plural² 'How many canoes arrived?'

Ps person

PP-IV fourth series of possessive pronouns

(see note 1 to this chapter)

glottal stop

²I tried to use as few abbreviations as possible for glosses and in the Kilivila orthography (see Senft 1986). Here is the list of abbreviations used for these purposes:

(2) Keyu waga makesina kemanabweta (lekotasi).

ke-yu waga ma-ke-si-na
wooden-two canoe this-wooden-Plural-this

ke-manabweta (le-kota-si).
wooden-beautiful (3Ps.Past-arrive-Plural).

'These two beautiful canoes (arrived).'

The speakers of these sentences in referring to canoes must indicate the noun class of 'canoe' with the CP for 'wooden things'—ke—in the interrogative pronoun, in the numeral, in the demonstrative pronoun, and in the adjective.

Concerning the morphological relevance of the CPs in Kilivila, I have already mentioned one function of these formatives, namely, to secure concord between the noun and the four word classes involved. The next section describes the functions of CPs in Kilivila in more detail.

2.2 FUNCTIONS OF CPS IN KILIVILA

I have already mentioned some functions CPs fulfill in classifier languages in general. I will now describe the functions of CPs in Kilivila. I will illustrate these functions by isolated phrases or sentences (see G. Senft 1989); however, I refer anyone interested in the actual realization of CPs in Kilivila speech production to the already published parts of my Kilivila text corpus (Eibl-Eibesfeldt et al. 1987; B. Senft and G. Senft 1986; G. Senft 1985c-f, 1986, 1987c,d, 1991b,d, 1992b).

2.2.1 Referential Function—Concord

As mentioned previously, CPs perform the referential function of securing concord between the nouns and the word classes that use CPs in their word formation. This concord, of course, creates redundancy in the information conveyed by a sentence, as was illustrated in examples (1) and (2). The reference of the various word classes is unequivocal, and the redundancy is obvious: Trobriand canoes are made of timber; they are "wooden things" (this aspect of redundant information will be discussed in section 2.2.3).

The complex inventory of CPs allows speakers to classify a noun "temporarily" (Berlin 1968:175), that is, to emphasize certain characteristics of the referent of the noun. This is illustrated by the following examples (from G. Senft 1985a:380–387):

(3) natala yena
na-tala yena
animal-one fish
'one fish'

(4) kevalalima yena

kevala-lima yena batch drying-five fish 'five batches of smoked fish'

(5) oylalima yena

oyla-lima yena string-five fish

'five strings with stringed-on fish'

(6) makupona yena

ma-kupo-na yena this-two string-this fish 'these two strings of fish'

(7) mapwasasina yena

ma-pwasa-si-na yena this-rotten-Plural-this fish 'these rotten fish'

These examples first represent the CP na meaning 'animals' and then illustrate a set of the noun-modifying group of CPs that specify the noun with respect to quantity, order, arrangement, and condition or state.

Example 8 presents the two gender-specifying CPs to/te and na (now meaning 'persons of female gender') and the age-subclassifying CP gudi.

(8) Bibodi tetala natala guditala

bi-bodi te-tala na-tala gudi-tala 3Ps.Fut.-benefit male-one female-one child-one 'It will benefit each man, woman, and child.'

The noun phrase in example (9) (see Lawton 1980:49) illustrates the semantic power of CPs.

(9) kai mabubosina kwelatolu

kai ma-bubo-si-na kwela-tolu wood this-cut across-Plural-this potlike-three 'these three potlike sawed-off sections of timber'

Example (10) shows that CPs can also be used metaphorically. Here, a speaker refers to a 'dinghy' as a 'child-canoe':

(10) Kugisi magudina waga kekekita okopo'ula waga dimdim!

ku-gisi ma-gudi-na waga ke-kekita 2Ps.-look this-child-this canoe wooden-small

okopo'ula waga dimdim behind canoe white man

'Look at this small dinghy behind the motorboat!'

All these examples illustrate the referential function of CPs and their semantic power. A closer look at some of these examples shows other (grammatical) functions that CPs perform, as described in the next section.

2.2.2 Nominalization, Plural Marking, Numeralization, and Verblike Expressive Functions

In example (8), the numerals tetala, natala, guditala are translated as nominal expressions. This is legitimate, especially if we assume that the nouns of the three noun phrases (tetala tau 'one man', natala vivila 'one woman', and guditala gwadi 'one child') were omitted. This analysis—which is possible because of redundancy conveyed by CPs—assigns proper nominal status to the numerals. We also find this kind of nominalization with demonstrative pronouns and adjectives (see G. Senft 1985a:384).

The noun phrases in (11) and (12), as well as those in (4)–(6), illustrate the plural-marking function of CPs.

(11) makena nuya bwaveaka

ma-ke-na nuya bwa-veaka this-wooden-this coconut tree-big 'this big coconut tree'

(12) mapo'ulana nuya bwaveaka

ma-po'ula-na nuya bwa-veaka this-plantation-this coconut tree-big 'this plantation of big coconut trees'

Besides plural marking, we also find some CPs that quantify numeralization, a function independent of that of numerals proper. The noun phrase in example (6), given previously, illustrates this function.

In examples (4), (5), (7), and (9), it is clear that some CPs take over the function of verblike expressions within a noun phrase. This is especially true for CPs that specify or refer to certain activities (see G. Senft 1985a:385).

So far we have dealt with CPs only on a sentence or phrase level. In the next section we look at CPs as they are used in actual discourse.

2.2.3 Redundancy, Ellipsis, and Discourse Coherence

Example (8) shows that noun phrases can be composed of numerals without the respective nouns to which they refer. I explained this type of noun phrase construction by proposing that the noun is omitted and that the other word class (in this case, the numeral) acquires nominal status.

Malinowski (1920:59–60) hinted at such an interpretation and compared this type of sentence with elliptical utterances in English. Sentences that are constructed like example (8) are, indeed, quite frequently produced in Trobriand discourse. Trobriand Islanders introduce a certain nominal

denotatum explicitly. If they then want to further refer to this noun in discourse, using numerals, demonstrative pronouns, and adjectives, they usually omit the noun. This is only possible because the CPs represent the omitted nouns in a quasi-fragmentary way and the anaphoric reference of CPs secures semantic concord beyond sentence boundaries. Now we can explain why we sometimes find redundant information within the noun phrase: the information redundancy given by the CPs within a Kilivila noun phrase enables the omission of the noun without any loss of information, even beyond sentence boundaries.

Thus, CPs perform 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 CP. If this occurs, the noun must be overtly realized again as a constituent of the noun phrase to ensure unequivocal and unambiguous reference. In my sample of transcribed Kilivila speech data, I have one (rather extreme) example where a speaker (Tomalala, Consultant No. V16) introduces a nominal referent to which he then refers 16 sentences (78 words, 113 morphemes) later with the appropriate CP; nevertheless, the reference is unequivocal.

Examples (13)–(15) illustrate these functions of CPs.

(13) Atatai tataba. Tauwau Tabalu mtosina makena si koni. a-tatai tataha tabalu tauwau 1Ps -carve tataba-board Tabalu-subclan men ma-ke-na koni m-to-si-na sithis-male-Plural-this this-wooden-this 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 is unequivocal because in this context the CP to can only refer to the noun tauwau, and the CP ke can only refer to the noun tataba.

(14) Tauwau pela emesi bilebusi. Ekokwa'usi kebila mabudanaga ekugwasi emesi.

tauwau pela e-me-si bi-lebu-si

men for 3Ps.-come-Plural 3Ps.Fut.-take-Plural

e-kokwa'u-si kebila ma-buda-na-ga

3Ps.-weave-Plural stretcher this-group-this-Emphasis

e-kugwa-si e-me-si

3Ps.-first-Plural 3Ps.-come-Plural

'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.'