

GUNTER SENFT (Nijmegen)

## A Grammaticalization Hypothesis on the Origin of Kilivila Classifier Particles\*

### 1. Kilivila, Classifier Languages, and Classifiers

Kilivila (also: Kiriwina, Boyowa) is one of the 40 Austronesian languages spoken in the area of Milne Bay Province in Papua New Guinea. Typologically it is classified as belonging to the “Papuan Tip Cluster”-group (CAPELL 1976: 6 & 9; ROSS 1988: 25ff.); moreover it is classified as one of the languages with VOS-word order (SENFT 1986: 107–112). The Kilivila language family encompasses the languages Budibud (or: Nada), Muyuw (or: Murua) and Kilivila. Kilivila is spoken by about 17,500 speakers; the majority of these speakers lives on the Trobriand Islands.

BRONISLAW MALINOWSKI’S ethnographic work on these islands and on the culture of their inhabitants has made them rather well known even outside of anthropology. It was BRONISLAW MALINOWSKI who published the first study on the phenomenon with which this paper deals (see also SENFT 1985, 1989: 143–145, 1991). Ever since MALINOWSKI’S classic paper *Classificatory Particles in the Language of Kiriwina* (MALINOWSKI 1920) Kilivila has been known in linguistics to be a so-called “classifier language” (ALLAN 1977: 286ff.).

“Classifier languages” show the following three characteristics:

- they have a system of “classifiers”;
- they follow the -almost- universal principle which runs: “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 ADAMS 1989: 12 & 24);  
and
- they belong to one of the following four language types:  
numeral classifier languages,  
concordial classifier languages,  
predicative classifier languages,  
intra locative classifier languages (ALLAN 1977: 286f.).

\* This paper is based on 22 months of field research on the Trobriand Islands. I want to thank the German Research Society and the Max-Planck-Society for their support in realizing my field research. This paper owes much to the discussions I had with JOHN BOWDEN and to a talk BERND HEINE presented at our Cognitive Anthropology Research Group in Nijmegen. I want to thank the National and Provincial Governments in Papua New Guinea and the Institute of PNG Studies for their assistance with, and permission for, my research projects. I express my great gratitude to the people of the Trobriand Islands, especially to the inhabitants of Tauwema: I thank them for their hospitality, friendship, and patient cooperation.

JOHN LYONS (1977 (II): 463) mentions another 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”.

In linguistics, numeral classifier languages are considered to be the paradigmatic type of classifier languages. Kilivila, too, belongs to this paradigmatic type<sup>1</sup>.

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”. This morpheme classifies and quantifies the respective nominal referent according to semantic criteria (see: SERZISKO 1980: 1, 1982: 147; HUNDIUS, KÖLVER 1983: 166). Moreover, 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, ROMNEY 1964: 79; UNTERBECK 1990b: 90). Nevertheless, I adhere to this technical term as it is introduced in the general linguistic literature (see: ALLAN 1977: 286; BECKER 1975: 114f.; GREENBERG 1975: 19; HAAS 1942).

So far classifiers are defined 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, KÖLVER 1983: 167ff.). The term “numerative” subsumes “classifiers (proper)” as well as “quantifiers”.

Classifiers classify a noun inherently, i.e., they designate and specify semantic features inherent to the nominal denotatum and divide the set of nouns of a certain language into disjunct classes (see also CHOLODOVIC 1954: 49; UNTERBECK 1990b: 43).

Quantifiers classify a noun temporarily, i.e., they can be combined with different nouns in a rather free way and designate a specific characteristic feature of a certain noun which is not inherent to it. Thus, quantifiers are predicative (see SERZISKO 1980: 17, 68f.; 1982: 152; BERLIN 1968: 175; FRIEDRICH 1970: 397; DENNY 1986: 302ff.; with respect to nouns and quantification see also GIL 1991).

Referentially nouns in classifier languages can be characterized as nouns with generic reference (see ROYEN 1929: 775). With their referential function numeratives individualize nominal concepts; they can mark that a noun they refer to must be understood as having non-generic reference (see: SEILER 1982: 6, 8; SERZISKO 1980: 15, 86f.).

The functions numeratives or “classifiers” fulfill are succinctly summarized by ADAMS, BECKER, and CONKLIN (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”.

<sup>1</sup> This paper deals with the classificatory system of this language; thus, I will not discuss the other three types of classifier languages mentioned above. For a discussion of these types see e.g. ALLAN 1977: 286f.; CRAIG 1986: 3f.

So far we only differentiated “classifiers” and “quantifiers” (see also ADAMS 1989: 3ff., 194), or, to use LYON’S (1977 (II): 463) terms, “sortal classifiers” and “mensural classifiers” (see also UNTERBECK 1990b: 40). However, with the definition of “classifiers proper” and “quantifiers” one generally hits upon a third category, the so-called “repeaters”. HLA PE (1965: 166) defines the concepts “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, amount or number especially of ten or multiples of ten.”

Moreover, “repeaters” are defined by BURLING (1965: 249) as “echo classifiers”, FISCHER (1972: 69) calls them “identical classifiers”, and KÖLVER (1982: 178, 183; 1979: 34) characterizes them as “semantischer dummy”; finally, GORAL (1978: 33) defines “repeaters” as “autoclassifiers ... filling a syntactic slot...” (see also ADAMS, CONKLIN 1974: 3f.; BENTON 1968: 116; SMITH 1979: 88). In connection with this phenomenon, LEHMANN (1979: 169) hints at the possibility to study this problem from a different point of view; he notes: “... a classifier can also function as an independent noun...”. ALLAN (1977) takes up the problem “repeater” with all necessary caution and offers some hypothetical answers to the question why this category develops. ALLAN (1977: 295) gives the following three “explanations ... for their existence: (i) The information may be worth duplicating because of its significance ... this strikes me as a possible explanation for the ... Kiriwina ... examples, because the objects denoted are prized possessions in the ... speech communities. (ii) Perhaps the noun and its classifier were originally borrowed from some other language and have maintained their relationship separately from native classes; or, alternatively, the class may once have been larger, but in the course of time all the other nouns have dropped out of use or been reclassified.”<sup>2</sup>

It is the aim of this paper to offer another hypothesis on the function of these “repeaters” and on the origin of classifiers. However, before I do this, I want to note here, that BRONISLAW MALINOWSKI (1920) does not differentiate between classifiers (proper), quantifiers, and repeaters, but refers to these formatives as “Classificatory Particles”. I will use this general term (from here onwards abbreviated as: “CP”) MALINOWSKI coined for these formatives to pay tribute to the master of Trobriand ethnography<sup>3</sup>.

Kilivila has a system of “Classificatory Particles” that encompasses at least 177 formatives (LAWTON 1980; SENFT 1983). For the last 8 years this fascinating system of classifi-

<sup>2</sup> See also JONES (1970: 2): “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 (in print a) and ADAMS (1989: 1).

<sup>3</sup> ROYEN (1929: iii, 37, 68, 185, 192, 305, 364, 889) emphasizes again and again that an interdisciplinary approach is not only necessary but also inevitable for any research and analysis of nominal classifier systems. See also BERLIN et al. 1973: 214. For the sake of completeness I want to mention that BERLIN (1968) also speaks of “action classifiers” in Tzeltal, that HARWEG (1987) 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) speaks of “the general or cannibalising classifier”, that HIRANBURANA (1979: 39f.) mentions the terms “reduplicative classifier” and “imitative classifier”, and that FISCHER (1972: 69, 77) speaks of “isolierte Klassifikatoren” (i.e.: one classifier classifies only one noun) and that he mentions “metric classifiers” (i.e.: classifiers for numerical and time/temporal units), too. See also SEILER 1986.

cation has been one of my main concerns in learning, studying, describing and analyzing Kilivila (Senft 1985; 1987; 1989; 1990; 1991).

The system of noun classification is an important means of word formation with all but one demonstrative pronouns, with one form of (numerical) interrogative pronouns/adverbs, with two classes of adjectives and with numerals. These word classes require concord with the class of the noun they refer to. This concord is secured by the CPs that are infixes or prefixed to the respective word frame or word stem. I have described these processes of word formation and syntactic aspects of constituents with CPs in detail elsewhere (SENFT 1985: 374–379; 1986). I refer the reader who wants some more detailed information about these processes of word formation to my previously published work on this topic (Senft 1985; 1986; 1991); for the purposes pursued here it suffices to finish this brief paragraph with the presentation of two sentences with all the four word classes involved in the system of noun classification (see: SENFT 1989; 1991). In the examples the CP (-)ke(-) is underlined:

*Kevila waga lekotasi?*

ke-vila waga le-kota -si?

wooden-how many canoe 3 Ps. Past-arrive-Plural

'How many canoes arrived?'

*Keyu waga makesina kemanabweta (lekotasi).*

ke-yu waga ma-ke -si -na ke-manabweta ( le-kota -si ).

wooden-two canoe this-wooden-Plural-this wooden-beautiful (3 Ps. Past-arrive-Plural).

'These two beautiful canoes (arrived).'

Here the speakers of these sentences refer to "canoes"; they have to 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.

To give a few examples of Kilivila noun phrases with repeaters as CPs (repeaters are underlined):

<i>mabogina bogi</i>	'this night'
<i>dobamanabweta doba</i>	'beautiful grass-skirt'
<i>makedana keda</i>	'this road'
<i>kovalima kova</i>	'five fireplaces'
<i>likuveaka liku</i>	'big yamshouse'
<i>megwabogwa megwa</i>	'old magic'
<i>pwaninatata pwanina</i>	'one hole'

etc.

Just recently I finished the description and analysis of a sub-system of 88 CPs (see Appendix) with respect to its functions, its acquisition, its realization in actual speech production, its change, and its semantics (see also SENFT 1991). These 88 CPs represent the classifier system of the speech community of Tauwema village on Kaile'una Island, my place of residence during 15 months of field research in 1982/83 and during 4 further months of field research in 1989. These classifiers are listed in the Appendix below.

## 2. Some speculations on the origin of classifiers

Linguists dealing with the phenomenon of classifiers can hardly refrain themselves from speculating on the origin of these formatives. I will not discuss the hypotheses already proposed here; ADAMS (1989: 193f.) gives an excellent general account on the most

interesting speculations put forward so far (see also ASMAH 1972; DE LEON 1988: 128, 134ff., 141f., 168ff.; SEILER 1983; UNTERBECK 1990a: 8, 1990b: 86, 90). On the basis of my research on Kilivila I indulge in the following speculations upon the origin of the Kilivila classifiers:

I assume that probably most if not all Kilivila CPs are traceable to nouns. This is a rather obvious speculation, if we remember that quite a number of CPs are “repeaters”. As already defined above, a “repeater” is a form that can function as a CP as well as a noun within its own right, or, to say it the other way round, a “repeater” is the noun that functions as its own classifier. Repeaters are found in many classifier languages (see e.g. ASMAH (1972: 88ff.); BARZ, DILLER (1985: 168, 174), and the idea that CPs have evolved from nominals is far from original<sup>4</sup>. Nevertheless, let me develop this speculation briefly.

If we look at the list of the Kilivila CP types in the appendix below and if we compare the CPs there with the lexical entries given in SENFT (1986: 185–430), we note the following:

The CPs or CP variants *beku* ‘stone blade’, *bogi* ‘night’, *boda* ‘group, team, crowd’, *bwalita* ‘sea’, *doba* ‘grass-skirt’, *duli* ‘cluster, bundle’, *dumia* ‘swamp’, *gula* ‘heap, group’, *yegila* ‘name’, *keda* ‘road, track’, *kasa* ‘row, line’, *kova* ‘fire’, *kwena* ‘clay-pot’, *koya* ‘mountain, hill’, *megwa* ‘magic’, *nigwa* ‘hole, nest’, *peta* ‘basket’, *po’ula* ‘plantation, grove’, *siva* ‘time, number of times’, *tetu* ‘yams’, *tuta* ‘time, occasion’, *vaya* ‘door, window, river, creek’, *vakala* ‘belt of spondylus shell discs’, *vosi* ‘song’, and *yam* ‘day’ are repeaters. These 25 repeaters represent 28 % of the 88 CPs that represent the classifier system of the speech community I studied in detail.

The CP *gudi* is a shortened form of the noun *gwadi* ‘child’; the CP variant *iga* is a shortened form of the noun *yegila* ‘name’ (note that I also documented the CP variant *yegila!*); the CP *ke* is a shortened form of the noun *kai* ‘wood, tree’ (note that in highly formal situations the CP variant *kai* is produced); the CP *kumla* is a shortened form of the noun *kumkumla* ‘earth oven’; the CP variants *kwoila*, *kwela*, *kway*, *kwaila*, *kwai kwa* are modified forms of the noun *kwena* ‘clay-pot’ (note that we also documented the CP variant *kwena!*); the CP *na* in its connotation ‘person of female sex’ is most probably a shortened and modified form of the noun *vivila* ‘girl, woman’ (in the “biga galanani”-variety of Kilivila the noun is realized as *vivina*); the CP variants *pwantina*, *pona*, *ponina*, *ponu*, *polu*, *pwana* are shortened or modified forms of the noun *pwana* ‘hole’; the CP *te/to* is a shortened form of the noun *tau* ‘man’ (note that in highly formal situations the CP variant *tau* is produced); and the CP *vilo* is a modified form of the noun *valu* ‘place, area, village’. These 9 cases incorporate 7 more CP types that can be traced back to nouns; these 7 CP types represent another 8 % of the 88 CPs described in detail here.

The CP *kabulo/kabulu* in its connotations ‘protuberances’ and ‘cape, point’ can be traced back to the nouns *kabulula* ‘point, ledge’, *kabunu* ‘point’, and *kabulu*-PP IV (= possessive pronoun suffix, indicating intimate degree of possession) ‘nose’; the CP

<sup>4</sup> See also CARPENTER (1986: 18) and Lee (1987: 404). It goes without saying that classifiers may also originate in other word classes. See e.g. WALTER SEILER (1986: 17) who argues for Imonda, a Nonaustronesian language of the Trans-New Guinea Phylum, “...that erstwhile full verbs were semantically depleted and reanalysed as classifiers”. See also SEILER 1983. For the influence of classifier systems upon classifier systems, for the topic of how CP systems are changed by processes of borrowing from other languages see ADAMS (in print b).

*kauya* can be traced back to the noun *kauya* 'woven basket' – however, the CP has a more specific meaning than the (original) noun; the CP *kudu* in its connotation 'tooth' can be traced back to the noun *kudu*-PP IV; the CP *liku* can be traced back to the noun *liku* 'big food-house' – however, the CP has a more specific meaning than the (original) noun; and the CP *yuma*, *yam* in its connotation 'hand' can be traced back to the noun *yama*-PP IV. These 5 CPs represent another 6% of the 88 CPs described in detail here.

To summarize this argument: 37 of the 88 CPs described in detail in this monograph can be traced back to nouns without any difficulties at all. Thus, the speculation presented here seems to be highly plausible for 42% of the described CPs!

Discussing this aspect of my research with MALCOLM ROSS, he proposed to reconstruct the proto forms for the Kilivila CPs to find some more evidence for the proposed hypothesis (ROSS 1989, personal communication); this is a very interesting proposal, indeed, and such a research should be done some time.

However, I have some further evidence to support and to develop my speculative hypothesis: In my description and analysis of the processes of language change that affect the Kilivila system of CPs I made the following observations:

I observed that the CP *kweya/kwaya/keya* 'limb, yard' supersedes the CP *yam/yuma/yama* 'hand, yard' and that the CP *ka'i* 'tooth' supersedes the CP *kudu* 'tooth'; the repeater *peta* 'basket' is superseded by its shortened variant *ta* and the repeater *yegila* 'name' is superseded by its shortened variant *iga*; the CPs *bogi* 'night', *koya* 'mountain, hill', *po'ula* 'plantation, grove', *siva* 'time', *yam* 'day', and to a certain extent the CP *boda* 'group, team, crowd', too, are superseded by the general CP *kwe* 'thing'; the CP *liku* 'compartment of a big foodhouse' and to a certain extent the CP *duli* 'cluster, bundle', too, are superseded by the general CPs *ke* and *kwe*; the CP *kabulo* 'protuberances, sectors, point' is superseded by the CP *ke*; the position of the CP *gula* 'heap, group' is afflicted by the CPs *tam* 'sprouting yams' and *kwe* 'general CP'; and the CPs *beku* 'stone blade', *bwalita* 'sea', *doba* 'grass-skirt', *dumia* 'swamp', *megwa* 'magic', *nigwa* 'hole, nest', *tetu* 'yams', *tuta* 'time', *vaya* 'door, window, river, creek', *vakala* 'belt of spondylus shell discs', *vosi* 'song' and *kauya* 'fish trap, creel' play a marginal role only within the system of Kilivila CPs.

Given these additional observations for 26 of the 37 CPs that could be traced back to noun forms without difficulties I will now summarize my speculative line of thought:

I assume that most if not all Kilivila CPs originate in nouns (for a too general formulation of this idea see LEE 1988: 212, 225, 235). Originally, the CP system was constituted by, and consisted of, repeaters only. In the course of the time these repeaters were changed and modified, most often by processes of phonological reduction. Finally, the CPs that can be traced back to nouns rather easily are superseded by the general CPs or by those CPs who underwent so many changes themselves that their nominal origin is difficult, or – because of processes of language change – almost impossible, to trace.

### 3. Grammaticalization, Repeaters, and the Origin of CPs

At the moment, it seems, we can observe the revival of the classic concept of "grammaticalization" in linguistics (see e.g. HEINE et al. 1991; TRAUOGOTT, HEINE 1991). The basic idea for this concept came from the British scientist HORNE TOOK, to whom WILHELM VON HUMBOLDT refers in his discussion of – what we now would call – "grammati-

calization” processes of words referring to “real objects” into prepositions (HUMBOLDT 1822 (= 1963): 51f.). The term “grammaticalization” was first coined by MEILLET (1912), but – as JOHN BOWDEN (1991: 13ff.) rightly emphasizes – it is with KURYLOWICZ (1965) that modern interest in the subject began. MEILLET (1912) already claimed that grammatical forms could be traced back either to processes of analogy (e.g. irregular verbs become regular) or to the development of lexical morphemes into grammatical morphemes. In 1965 KURYLOWICZ defined the concept of “grammaticalisation” as follows: “[Grammaticalization] ... consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status” (KURYLOWICZ 1965: 52).

In his discussion of the “grammaticalisation of locatives in Oceanic languages” BOWDEN (1991: 19) mentions quite generally that nouns “tend to be adopted for different functions: they can be used as, e.g., case markers or classifiers”. This observation corresponds with what I have been discussing so far in connection with the Kilivila CPs. Therefore, I can reformulate my hypothesis on the origin of the CPs in Kilivila on the basis of the concept of “grammaticalization”:

I assume that most if not all Kilivila CPs originate in nouns. Originally, the CP system was constituted by, and consisted of, repeaters only. In the course of the time these repeaters were changed and modified, most often by processes of phonological reduction. These changes, however, are most probably mere consequences of a grammaticalization process that affect the lexical form “noun” and changes it into the grammatical form “classifier” – thus, in Kilivila nouns decategorialized into CPs. In this decategorialization process many repeaters were also changed and modified, especially by processes of phonological reduction. Only with a few CPs this grammaticalization process also resulted in a semantic bleaching, i.e., in a desemanticisation of the former, now decategorialized, nouns. Among the CPs that are desemanticized we find the repeater *kwena* (the noun refers to “clay pot” only, the CP refers to pot-like entities in general) and all the repeaters that are now in the process of being superseded by the two general CPs *kwe* and *ke* with which speakers can refer to all inanimate referents. In general we can note that CPs which can be traced back rather easily to the nouns from which they originate are very much likely to be superseded by the general CPs or by those CPs the grammaticalization process of which is much more advanced so that their nominal origin is difficult, or almost impossible, to trace.

I would like to summarize this line of thought as the grammaticalization hypothesis on the origin of Kilivila “Classificatory Particles”.

## References

- ADAMS, KAREN L. (1989): *Systems of Numeral Classification in the Mon-Khmer, Nicobarese and Aslian Subfamilies of Austroasiatic*. Pacific Linguistics, Series B, No. 101, Canberra: Australian National University.
- (in print a): *Borrowed Numeral Classification in Austroasiatic*, in: Proceedings of the Conference on Southeast Asia as a Linguistic Area, University of Chicago, April 16, 1986, Chicago Linguistic Society: University of Chicago.
  - (in print b): *The Influence of Non-Austroasiatic Languages on Numeral Classification in Austroasiatic*, in: Journal of the American Oriental Society.
  - , CONKLIN, NANCY F. (1974): *On the Numeral Classifier in Thai*, Paper presented at the 7th International Conference on Sino-Tibetan Language and Linguistic Studies, Atlanta, Georgia, 19. 10. 1974, 23 pp.

- , BECKER, ALTON L., CONKLIN, NANCY F. (1975): *Savoring the Differences among Classifier Systems*, Paper presented at the 8th International Conference on Sino-Tibetan Languages and Linguistics, Berkeley, October 1975, 19 pp.
- ALLAN, KEITH (1977): *Classifiers*, in: *Language* 53, 285–311.
- ASMAH, HAJI OMAR (1972): *Numeral classifiers in Malay and Iban*, in: *Anthropological Linguistics*, 14/3, 87–96.
- BARZ, R. K., DILLER, A. V. N. (1985): *Classifiers and Standardisation: Some South and South-East Asian Comparisons*, in: BRADLEY, D., ed., (1985), 155–184.
- BECKER, ALTON L. (1975): *A Linguistic Image of Nature: The Burmese Numerative Classifier System*, in: *Linguistics*, 165, 109–121.
- BENTON, RICHARD A. (1968): *Numeral and attributive classifiers in Trukese*, in: *Oceanic Linguistics*, 7, 104–146.
- BERLIN, BRENT (1968): *Tzeltal Numeral Classifiers: A Study in Ethnographic Semantics*, The Hague: Mouton.
- , ROMNEY, A. KIMBALL (1964): *Descriptive Semantics of Tzeltal Numeral Classifiers*, in: *American Anthropologist*, 66, No. 3 Part 2, 79–98.
- , BREEDLOVE, DENNIS E., RAVEN, PETER H. (1973): *General Principles of Classification and Nomenclature in Folk Biology*, in: *American Anthropologist*, 75, 214–242.
- BLOOMFIELD, LEONARD (1933 (= 1976)): *Language*. London: Allen & Unwin.
- BOWDEN, JOHN (1991): *Behind the preposition. Grammaticalisation of locatives in Oceanic languages*, MA-thesis: University of Auckland.
- BRADLEY, DAVID, ed., (1985): *Papers in South-East Asian Linguistics*. No. 9: *Language policy, language planning and sociolinguistics in South-East Asia*. Pacific Linguistics, Series A, No. 67, Canberra: Australian National University.
- BURLING, ROBBINS (1965): *How To Choose a Burmese Numeral Classifier*, in: SPIRO, M. E., ed., (1965), 243–264.
- CAPELL, ARTHUR (1976): *General Picture of Austronesian Languages, New Guinea Area*, in: WURM, S. A., ed., (1976), 5–52.
- CARPENTER, KATHIE (1986): *Productivity and Pragmatics of Thai Classifiers*, in: *Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistic Society*, Berkeley: University of California, Berkeley, 14–25.
- CHOLODOVIĆ, A. A. (1954): *Očerk grammatiki korejskogo jazyka*, Moskva, quoted according to UNTERBECK (1990b).
- CRAIG, COLETTE, ed., (1986): *Noun Classes and Categorization*, Amsterdam: John Benjamins.
- (1970): *Jacalteco noun classifiers: A study in grammaticalization*, in: *Lingua* 70, 241–84.
- DENNY, J. PETER (1986): *The Semantic Role of Noun Classifiers*, in: CRAIG, C., ed., (1986), 297–308.
- DOWNING, PAMELA (1986): *The Anaphoric Use of Classifiers in Japanese*, in: CRAIG, C., ed., (1986), 345–375.
- FISCHER, GERO (1972): *Die syntaktischen und semantischen Eigenschaften der Numeralklassifikatoren im Thai*, in: *Archiv Orientalni*, 40, 65–78.
- FLITNER, ANDREAS, GIEL, KLAUS, eds. (1963): *Wilhelm von Humboldt. Werke in fünf Bänden*. Vol. III: *Schriften zur Sprachphilosophie*, Stuttgart: J. G. Cotta'sche Buchhandlung.
- FRIEDRICH, PAUL (1970): *Shape in Grammar*, in: *Language*, 46, 379–407.
- GIL, DAVID (1991): *Nouns, verbs, and quantification*, Eurotyp Working Papers Series X, No. 1., May 1991, Haifa, Berlin: Mimeo, 62 pp.
- GORAL, DONALD A. (1978): *Numerical Classifier Systems: A Southeast Asian Cross-Linguistic Analysis*, in: *Linguistics in the Tibeto-Burman Area*, 4, 1–72.
- GREENBERG, JOSEPH H. (1972): *Numeral Classifiers and Substantival Number: Problems in the Genesis of a Linguistic Type*, in: *Working Papers in Language Universals*, 9, 1–39 (= GREENBERG: 1975).
- (1975): *Numeral Classifiers and Substantival Number: Problems in the Genesis of a Linguistic Type*, in: HEILMANN, L., ed., (1975), 17–37 (= GREENBERG: 1972).
- HAAS, MARY R. (1942): *The Use of Numeral Classifiers in Thai*, in: *Language*, 18, 201–205.
- HARWEG, ROLAND (1987): *Zählheitwörter und Weltbild*, in: *Archiv Orientalni*, 55, 253–270.
- HAWKINS, JOHN, ed., (1988): *Explaining Language Universals*, Oxford: Basil Blackwell.
- HEILMANN, LUIGI, ed., (1975): *Proceedings of the 11th International Congress of Linguists*, Bologna 1972, Vol. 1. Bologna: Mulino.



- HEINE, BERND, CLAUDI, ULRIKE, HÜNNEMEYER, FRIEDERIKE (1991): *Grammaticalization: a conceptual framework*, Chicago: University of Chicago Press.
- HIRANBURANA, SAMANG (1979): *A Classification of Thai Classifiers*, in: Nguyen Dang Liem, ed., (1979), 39–54.
- HLA PE (1965): *A Re-Examination of Burmese 'Classifiers'*, in: *Lingua*, 15, 163–185.
- HOA, NGUYEN DINH (1957): *Classifiers in Vietnamese*, in: *Word*, 13, 124–152.
- HUMBOLDT, WILHELM VON (1822 (=1963)): *Ueber das Entstehen der grammatischen Formen, und ihren Einfluß auf die Ideenentwicklung*, in: FLITNER, A., GIEL, K., eds. (1963), 31–63.
- HUNDIUS, HARALD, KOLVER, ULRIKE (1983): *Syntax and Semantics of Numeral Classifiers in Thai*, in: *Studies in Language*, 7, 165–214.
- JONES, ROBERT B. (1970): *Classifier Constructions in Southeast Asia*, in: *Journal of the American Oriental Society*, 90, 1–12.
- KOCH, WALTER A., ed., (1989): *Das Ganze und seine Teile – The Whole and its Parts* (BPX 19), Bochum: Brockmeyer.
- KÖLVER, ULRIKE (1979): *Syntaktische Untersuchung von Numeralklassifikatoren im Zentralthai*, Köln: akup Nr. 34, ed. H. SEILER.
- (1982): *Klassifikatoronstruktion in Thai, Vietnamesisch und Chinesisch – Ein Beitrag zur Dimension der Apprehension*, in: SEILER, H., LEHMANN, C., eds., (1982), 160–185.
- KURYLOWICZ, JERZY (1965): *The evolution of grammatical categories*, in: *Diogenes*, 51, 55–71.
- LAWTON, RALPH (1980): *The Kiriwina Classifiers*, M. A-thesis, School of General Studies, Australian National University, Canberra.
- LEE, MICHAEL (1987): *The Cognitive Basis of Classifier Systems*, in: *Berkeley Linguistic Society Proceedings of the 13th Annual Meeting, February 14–16, 1987*, BLS 13, Berkeley: Berkeley Linguistic Society, 395–407.
- (1988): *Language, Perception and the World*, in: HAWKINS, J., ed., (1988), 211–246.
- LEHMANN, F. K. (1979): *Aspects of a formal theory of classifiers*, in: *Studies in Language*, 3, 153–180.
- DE LEÓN, MARIA DE LOURDES (1988): *Noun and Numeral Classifiers in Mixtec and Tzotzil: A Referential View*, Unpublished Ph.-D.-thesis, Linguistics Division of the Graduate School, University of Sussex.
- LYONS, JOHN (1977): *Semantics II*, Cambridge: Cambridge University Press (= 1983<sup>3</sup>).
- MALINOWSKI, BRONISLAW (1920): *Classificatory Particles in the Language of Kiriwina*, in: *Bulletin of the School of Oriental Studies, London Institution*, Vol. I, part IV, 33–78.
- MEILLET, ANTOINE (1912 (= 1948)): *L'évolution des formes grammaticales*, in: ANTOINE MEILLET (1948), *Linguistique Historique et Linguistique Générale*, 2 vols., Paris: Klincksieck, 130–148.
- NGUYEN DANG LIEM, ed., (1979): *South-East Asian Linguistic Studies*, Vol. 4. *Pacific Linguistics, Series C*, No. 49, Canberra: Australian National University.
- ROSS, MALCOLM D. (1988): *Proto Oceanic and the Austronesian Languages of Western Melanesia*, *Pacific Linguistics, Series C*, No. 98, Canberra: Australian National University.
- ROYEN, GERLACH (1929): *Die nominalen Klassifikations-Systeme in den Sprachen der Erde. Historisch-kritische Studie, mit besonderer Berücksichtigung des Indogermanischen*, *Anthropos Linguistische Bibliothek Band IV*, Wien/Mödling: Anthropos.
- SEILER, HANSJAKOB (1982): *Das sprachliche Erfassen von Gegenständen (Apprehension)*, in: SEILER, H., LEHMANN, C., eds., (1982), 3–11.
- , LEHMANN, CHRISTIAN, eds., (1982): *Apprehension: das sprachliche Erfassen von Gegenständen. Teil I: Bereich und Ordnung der Phänomene*, Tübingen: Narr.
- SEILER, WALTER (1983): *The Acquisition of a Noun Classification System by a Language*, in: *Language and Linguistics in Melanesia*, 14, 76–97.
- (1986): *From Verb Serialisation to Noun Classification*, in: *Papers in New Guinea Linguistics*, No. 24, *Pacific Linguistics, Series A*, No. 70, Canberra: Australian National University, 11–19.
- SENFT, GUNTER (1983): *The System of Classificatory Particles in Kilivila Reconsidered – First Results on its Inventory, its Acquisition, and its Usage*, Paper presented at the Annual Meeting of the Linguistic Society of Papua New Guinea, Port Moresby, University of PNG, July 4–6, 1983 (see SENFT: 1987), 22 pp.
- (1985): *Klassifikationspartikel im Kilivila – Glossen zu ihrer morphologischen Rolle, ihrem Inventar und ihrer Funktion in Satz- und Diskurs*, in: *Linguistische Berichte*, 99, 373–393.

- (1986): *Kilivila, The Language of the Trobriand Islanders*, Mouton Grammar Library 3, Berlin: Mouton de Gruyter.
- (1987): *The System of Classificatory Particles in Kilivila Reconsidered – First Results on its Inventory, its Acquisition, and its Usage*, in: *Language and Linguistics in Melanesia*, 16 (1987 (for 1985)), 100–125.
- (1989): *Apropos "The Whole and its Parts": Classificatory Particles in Kilivila Language*, in: KOCH, W. A., ed., (1989), 142–176.
- (1991): *Network Models to Describe the Kilivila Classifier System*, in: *Oceanic Linguistics*, 30, 131–155.
- SERZISKO, FRITZ (1980): *Sprachen mit Zahlklassifikatoren-Analyse und Vergleich*, Köln: akup Nr. 37, ed. H. SEILER.
- (1982): *Temporäre Klassifikation. Ihre Variationsbreite in Sprachen mit Zahlklassifikatoren*, in: SEILER, H., LEHMANN, C., eds., (1982), 147–159.
- SMITH, KENNETH D. (1979): *Sedang Grammar*, *Pacific Linguistics*, Series B, No. 50, Canberra: Australian National University.
- SPIRO, MELFORD E., ed., (1965): *Context and Meaning in Cultural Anthropology*, New York: Free Press.
- TRAGOTT, ELIZABETH C., HEINE, BERND, eds. (1991): *Approaches to grammaticalization*, 2 vols., Amsterdam: John Benjamins.
- UNTERBECK, BARBARA (1990a): *Thesen zur Dissertation A: KOLLEKTION, NUMERALKLASSIFIKATION und TRANSNUMERUS – Überlegungen zur APPREHENSION im Koreanischen und zu einer typologischen Charakteristik von Substantiven* (Zentralinstitut für Sprachwissenschaft, Akademie der Wissenschaften der DDR, Berlin: Mimeo).
- (1990b): *KOLLEKTION, NUMERALKLASSIFIKATION und TRANSNUMERUS – Überlegungen zur APPREHENSION im KOREANISCHEN und zu einer typologischen Charakteristik von Substantiven* (Dissertation, Zentralinstitut für Sprachwissenschaft, Akademie der Wissenschaften der DDR: Berlin).
- WURM, STEPHEN A., ed., (1976): *New Guinea Area Languages and Language Study*, Vol. 2: *Australian Languages*, *Pacific Linguistics Series C*, No. 39, Canberra: Australian National University.

## Appendix: Kilivila CP types

Abbreviations: # = this connotation of the CP type was not elicited.  
 + = this (these) connotation(s) of the CP type are the result of my lexicographic research.

CP type	<u>gloss(es) and comments</u>
1. <i>beku</i>	stone blade
2. <i>bililo</i>	trip: (#)
3. <i>bogi</i>	night
4. <i>bubu, bobu, hobo</i>	cut across, cut transversely, (block) cut off
5. <i>bubwa</i>	cut across, (part(s)) cut off
6. <i>buda, boda, budu</i>	group, team, crows
7. <i>bukwa, buko</i>	a) fruit cluster; b) cowries tied into a specific cluster (+)
8. <i>bwa</i>	trees, wooden things
9. <i>bwalita</i>	sea
10. <i>deli</i>	company, group on the move
11. <i>doba</i>	skirt made of banana-leaves, "grass"-skirt
12. <i>duli</i>	cluster, bundle
13. <i>dumia</i>	swamp, swamp-like: (#)
14. <i>duya, duyo, kaduya, kaduyo</i>	door, entrance

15. *gĩli* row  
 16. *gĩwi* cut  
 17. *guba* bundles of taro  
 18. *gudi* a) child;  
 b) immature human (#)  
 19. *gula, guli, gulo, gũno* heap, group  
 20. *gũm* bit, small piece  
 21. *ĩga, yegĩla* name  
 22. *kabisi* compartment of a foodhouse, section/division in a foodhouse  
 23. *kabulo, kabulu* a) protuberances  
 b) village sectors: areas of authority (#)  
 c) cape, point, peninsula (+)  
 d) half of something (+)  
 24. *kada, keda* a) road, track  
 b) way in which something is done (+)  
 25. *kai* stone blade  
 26. *ka'i* tooth  
 27. *kala* day  
 28. *kali* paddle strike (#)  
 29. *kapwa, kapo* a) bundles (wrapped up), parcel  
 b) nest of birds (+)  
 30. *kasa* row, line  
 31. *kauya* fish trap, creel (#)  
 32. *kavi* tool  
 33. *ke* a) wooden things  
 b) rigid, long objects  
 c) unmarked form for inanimates (general classifier)  
 d) fire  
 34. *kĩla* clusters/hands of bananas  
 35. *koya* fire, fireplace  
 36. *kubĩla, kwabĩla* large land plot  
 37. *kudu* a) band of fibres (especially the band of fibres at the waist-band of a "grass"-skirt  
 b) tooth  
 c) bundles of lashing creeper (#)  
 38. *kũmla* earth oven  
 39. *kwe* a) thing, anything indefinite or unknown, unmarked form for inanimates (general classifier)  
 b) shells and clams  
 40. *kweya, kwaya, keya* a) limb, severed limb  
 b) yard (+)  
 41. *kwoĩla, kwela, kway, kwaila, kweĩkwa, kwena* clay pot, pot-like  
 42. *kwoya, koya* mountain, hill  
 43. *liku* a) compartments of a foodhouse, compartments of a canoe  
 b) area of authority (+)  
 44. *lĩla* bough, branch, leaf  
 45. *lĩlo, lola, lĩlo'u* a) walk, journey  
 b) number of times going somewhere (+)  
 c) number of times doing something (+)  
 46. *lipu* compartment of a creel, tier (#)  
 47. *lũba* bundle (of rolls), parcels (of taro pudding)  
 48. *luva* a) wooden dishes ("kaboma"-type), full of one's share of food during a food-distribution ceremony/ritual  
 b) tried bundle  
 49. *megwa* magic, magical formula  
 50. *meĩla, mavĩla* a) part of a song, part of a magical formula

51. *mmwa, mmo* b) part of a (bible) chapter (+)  
c) part of a day (+)  
conical bubbler (of taro)
52. *na* a) persons of female sex  
b) animals  
c) stars, planets, moon (#)  
d) carvings in human likeness (#)  
e) corpses (+)  
f) spirits, dwarfs (+)
53. *nigwa, nigo* a) hole  
b) nest (+)
54. *nina* a) parts of a song  
b) idea, thought (+)
55. *nutu, notu* kneaded things, dot, drop
56. *nunu* corner(s) of a garden
57. *oyla* a) string  
b) fish on strings
58. *peta, ta* a) basket  
b) contents of a basket (but not basketfuls of yams!) (+)
59. *pila, pa* part, piece
60. *po'ula* a) plantation, grove  
b) heap, group (+)
61. *pwanina, pona, ponina, ponu, polu, pwana* punctured, something with a hole in it, hole
62. *sa* nut-bunch
63. *sam* ginger (in play accompanying verses) (#)
64. *si* small bit
65. *sipu* sheaf  
(LAWTON (1980) gives also the glosses: tangle, tangled line, rope, net, string)
66. *sisi* a) bough  
b) cut off part of a tree (#)  
c) division of a magical formula (+)
67. *siva* a) time  
b) number of times doing something (+)
68. *siwa* sea portions, ownership division with reference to fishing rights
69. *suya, suye* batch of fish on strings
70. *tam* sprouting, sprouting yams
71. *tetu* yams
72. *tolte* a) persons of male sex  
b) human beings
73. *tuta, tuto* time, occasion
74. *utu* scrap, parts (cut off), small particles, fragments
75. *uva* a) span, measure (the span of two extended arms – from tip to tip)  
b) items measured in spans (+)
76. *va, vaya, vayo, vala* a) door, window  
b) river, creek, sea passage (+)
77. *vakala* belt of spondylus shell discs
78. *vili* untwisted
79. *vilo* place, area, village
80. *vosi, wosi* song, parts of a song
81. *wela* batch of fish, string of fish
82. *ya* flexible things, thin things
83. *yam* a) day  
b) number of days (+)

84. *yuma, yam, yuma**yama*85. *yeni*86. *yulai, yule*87. *yuva, yuwo*88. *o*

a) hand

b) length, measure (the span of two extended arms – from the fingertips of one hand to the wrist of the other hand (#))

c) yard (+)

a handful of something (#)

bundle of four things

shoal

a basketful of yams (this “zero-classifier” is only used when basketfuls of yams are counted)

I have to mention here that during my restudy on the Trobriands in 1989 my informants mentioned three additional CPs, namely

*num*

magic, magical formula

*tili*

bits of lime clinging at a lime spatula

*sebulu*

“grass”-skirt for little girls

However, these CPs seem to be either very rarely used or almost obsolete. They are only mentioned here for the sake of completeness.

Gunter Senft, Cognitive Anthropology Research Group,  
Max Planck Institute for Psycholinguistics, Nijmegen