

REDUPLICATION AND REPETITION IN NEW GUINEA PIDGIN

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Mi laik tokaut long wanpela pasin ol i save mekim long Tok Pisin. Dispela pasin em i pasin bilong dabolim tok, olsem marimari, makmak, na tantanim.

Orait, long sampela tok dispela pasin bilong dabolim tok em samting bilong tok tasol. Yumi save tok olsem kaukau, pitpit, na saksak. Yumi mekim nating. Em tasol. I nogat narapela as.

Tasol long sampela taim yumi pulim tok i kam long Tok Inglis yumi no mekim nating na bihainim nek bilong Tok Inglis tasol. Nogat. Yumi skelim tok gut na ol i ken save gut, olsem yumi tok sip na sipsip. Sip i gat wanpela as, na sipsip i gat narapela as.

Orait sampela taim yumi save skruim wanpela wanpela tok i go long narapela as. Na as bilong tupela tok i wankain tasol, olsem i gat mak, o i gat makmak.

Orait mi laik tokaut long sampela as bilong dispela pasin bilong dabolim tok. Wanpela as i olsem. Yumi laik strongim tok, orait yumi ken dabolim olsem, paitim na paitpaitim, tanim na tantanim, ol i krai na ol i kraikrai, sotpela na sotpela sotpela.

Orait sapos yumi laik makim i go longpela yumi ken dabolim tok olsem, brukim brukim, kaunim kaunim, sindaun sindaun, wokabaut igo igo igo igo.

Orait narapela as bilong dispela pasin bilong dabolim tok i olsem. Sapos yumi laik skelim samting i go long planti hap, yumi ken dabolim tok olsem, givim long wanpela wanpela man, na ino planti man, i wan wan tasol.

Orait yumi laik makim kain kain samting yumi ken dabolim tok olsem, siot i gat makmak, na i gat kain kain man istap.

Yumi ken askim olsem: dispela pasin bilong dabolim tok ol i bin pulim i kam long narapela tok ples o em i kamap nating. Orait, long dispela askim ol saveman i gat tripela tingting olsem:

- (1) Namba wan i olsem. Dispela pasin em pasin bilong olgeta tok ples bilong Papua Niu Gini na ol i skruim i go long Tok Pisin tu.
- (2) Namba tu i olsem. Dispela pasin em pasin bilong olgeta tok pisin, tok pisin bilong mipela na bilong ol pipel bilong narapela kantri nabaut nabaut.
- (3) Namba tri i olsem. Dispela pasin em pasin bilong tok tasol. Na i nogat wanpela tok ples ol i no save dabolim

tok olsem yumi dabolim long Tok Pisin. Nogat tru. Man bilong olgeta tok ples ol i save mekim olsem tasol.

Introduction

Iteration of linguistic units can be found in many pidgin and creole languages. Unfortunately, neither an adequate description for an individual language nor a detailed discussion of this salient feature of pidgins and creoles is available at present, although such a study could provide us with important evidence for the theories that have been proposed for the explanation of pidginisation of languages. This seems to be suggested by both Thompson (1961) and Hall (1966: 65) who both present number of instances of reduplication in various pidgins and creoles. However, the lack of data has, as in most studies on pidgins, prevented linguists from studying this phenomenon in more detail.

In the present paper I shall attempt to rectify this situation by giving a detailed description of reduplication and repetition in New Guinea Pidgin, both in synchronic terms and with reference to its source languages. In addition to the materials available in practically all published Pidgin dictionaries, the analysis is based on data collected in the field. I have found that less than 50% of the materials collected is listed in any dictionary. One of the reasons is that some of the examples clearly belong to marginal varieties of Pidgin or are ad hoc creations by their speakers. Other cases do not belong in a dictionary at all but are better described as part of the syntax of the language.

Definitions

We want to distinguish between two phenomena, namely, *reduplication* which is to be found at word level and *repetition* which is found at phrase and sentence level. Although in Pidgin the semantic implications of both reduplication and repetition can be very similar, there are some fundamental differences that justify this distinction:

- (1) At word level the same element is repeated only once; there is no triplication or quadruplication. At higher levels multiple repetition is possible.
- (2) Whereas reduplication (with the exception of lexicalised forms which will be discussed shortly) has predictable semantic implications, repetition often has just a stylistic function.
- (3) Whereas the rules underlying reduplication in Pidgin are specific to Pidgin, repetition can be said to be a stylistic feature of virtually all New Guinea languages.

In my discussion I shall use other terms which are defined as follows:

Morphemes are the smallest meaningful elements in an utterance.

Words are the minimal free forms in an utterance.

Base refers to morphemes that are words at the same time. Since Pidgin has very little inflection this is very common. Bases are regarded as being neutral as to their grammatical category: i.e., the same base can appear as noun, verb or adjective, to mention an example.

Partial Reduplication refers to cases where only part of a word is reduplicated such as in *harharim* or *vivingul*.

Reduplicatives are words in which the same formal element occurs twice; this element need not be a morpheme.

Another basic distinction that must be made is that of *lexicalised* and *rule-governed* reduplication. How this distinction affects our analysis of reduplication has been shown in detail by Uhlenbeck (1953) for Javanese. Since this distinction is absolutely basic I shall outline Uhlenbeck's argument using examples from Pidgin.

The Pidgin words *bumbum* 'torch' (made of dry coconut fronds) and *brukbrukim* 'to break into little pieces' both have the same formal property, namely that of containing two identical parts. However, there is no morpheme *bum* in Pidgin of which *bumbum* is a reduplication. *Bumbum* is a single morpheme which cannot be further subanalysed into meaningful components. *Brukbrukim* on the other hand has been derived from *bruk-im* by a grammatical process. It is a member of a large set of items that behave alike, i.e., words which are partly reduplicated to express an intensified action. Some other members of this set are:

	Simplex		Reduplicated form	
(1)	<i>har-im</i>	'to hear, listen'	<i>har-har-im</i>	'to listen intensely'
(2)	<i>pait-im</i>	'to fight, beat'	<i>pait-pait-im</i>	'to give a good thrashing'
(3)	<i>pam-im</i>	'to pump'	<i>pam-pam-im</i>	'to pump with all one's strength'

I will expand on this set below.

Lexicalised Reduplication

There is a number of Pidgin reduplicatives which have to be considered as lexicalised items in a synchronic description. Historically, as will be shown, some of these items have had a clear grammatical function in the language from which they are derived and have only become fossilised after they have become a part of the Pidgin lexicon. These lexicalised reduplicatives can be found in mainly five semantic fields.

(i) names of plants

(4)	<i>ai ai</i>	'apple fruit'	(9)	<i>muk muk</i>	'sago' (roasted on open fire)
(5)	<i>ba i ba i</i>	'decorative palm'	(10)	<i>pit pit</i>	'type of sugarcane'
(6)	<i>gor gor</i>	'type of ginger'	(11)	<i>po po</i>	'pawpaw'
(7)	<i>kau kau</i>	'sweet potato'	(12)	<i>sak sak</i>	'sago'
(8)	<i>mar mar</i>	'Jacaranda tree'	(13)	<i>tik tik</i>	'wild sugarcane'

(ii) names of animals

(14)	<i>dem dem</i>	'snail'	(17)	<i>la la</i>	'tailorfish'
(15)	<i>gi ri gi ri</i>	'small cowrie shell'	(18)	<i>mus mus</i>	'bedbug'
(16)	<i>ko tkot</i>	'raven'	(19)	<i>na tnat</i>	'mosquito'

(iii) utensils

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|--------------------|---------------|--------------------|-------------|
| (20) <i>baubau</i> | 'native pipe' | (23) <i>laplap</i> | 'loincloth' |
| (21) <i>bombom</i> | 'torch' | (24) <i>tuptup</i> | 'lid' |
| (22) <i>paspas</i> | 'bracelet' | | |

(iv) words related to other aspects of traditional life

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|--------------------|---------------------------|--------------------|------------------------------|
| (25) <i>dukduk</i> | 'ceremonial
headdress' | (27) <i>tultul</i> | 'assistant village
chief' |
| (26) <i>mismis</i> | 'clan, clan
brother' | (28) <i>matmat</i> | 'cemetery' |

(v) some words not belonging to the above classes

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|----------------------|-----------|----------------------|----------------|
| (29) <i>kaikai</i> | 'food' | (33) <i>marimari</i> | 'pity' |
| (30) <i>kaskas</i> | 'scabies' | (34) <i>pekpek</i> | 'excrement' |
| (31) <i>liklik</i> | 'little' | (35) <i>susu</i> | 'milk, breast' |
| (32) <i>malumalu</i> | 'soft' | | |

Practically all the words listed above refer to aspects of the culture and the country as they were before the arrival of the Europeans.

Reduplication as a Means of Distinguishing Words

The small size of the inventory of phonemes in Pidgin has led to a situation in which words that have different sound shapes in the source languages often appear as homonyms in Pidgin (e.g., English 'shoulder', 'salt' and 'soul' have all three become *sol* in Pidgin). It is here that reduplication provides a mechanism by which words that would otherwise sound identical can be distinguished. In cases such as nos. 36-39 one may assume some 'unconscious language planning'.

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|-------------|---------------|----------------------|---------------|
| (36) 'fish' | <i>pis</i> | (38) 'cheque' | <i>sek</i> |
| 'to piss' | <i>pispis</i> | 'to shake' | <i>seksek</i> |
| (37) 'ship' | <i>sip</i> | (39) 'key' | <i>ki</i> |
| 'sheep' | <i>sipsip</i> | 'sit' | <i>kiki</i> |
| | | (Kuanua for 'chair') | |

In other cases (40-41) reduplication serves to indicate a special meaning of the unreduplicated word:

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|--------------|-----------------------|-------------|------------------------|
| (40) 'belly' | <i>bel</i> | (41) 'mark' | <i>mak</i> |
| | <i>belbel</i> 'tripe' | | <i>makmak</i> 'motley' |

In still other cases (42-46) pairs of simple and reduplicated words have contrastive meanings simply because they come from different source languages and a lexicalised reduplicated word has been taken from one source language. In all the examples the reduplicated form can be traced back to a Melanesian language.

simplex

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|-----------------|---------|---------------|---------------|
| (42) <i>ai</i> | 'eye' | <i>aiai</i> | 'apple fruit' |
| (43) <i>bum</i> | 'boom' | <i>bumbum</i> | 'torch' |
| (44) <i>kas</i> | 'cards' | <i>kaskas</i> | 'scabies' |

(45)	sak	'shark'	saksak	'sago'
(46)	su	'shoe'	susu	'breast'

Diachronic Analysis of Lexicalized Reduplication

Most of the items listed above and some more which will be mentioned shortly are derived from Melanesian languages, and more specifically from Kuanua. Before I discuss this group I want to mention the exceptions. The words *kaikai* 'food, to eat' and *laplap* 'loincloth' are loans from Polynesian and have either been introduced by Samoan missionaries in the early days of German colonisation or else were already part of older Pidgins e.g., (Beach-la-Mar) spoken by sailors and whalers in the South Pacific. *Laplap* seems to be a form that became common in New Guinea Pidgin only recently. Older dictionaries list it as *lavalava* or *lavalap*.

Since reduplication is not common in English, few reduplicatives are derived from this language. Some have become reduplicatives in New Guinea Pidgin by certain phonological processes. *Rere* is derived from 'ready', *baibai* from 'bye and by' and the source for *liklik* is sometimes given as 'little bit' although its derivation from Kuanua *ikilik* is more likely. A very common variant of *tude* 'today' is *tete*.

A number of words derived from English fall into the category of discriminatory reduplication: *belbel*, *makmak*, *seksek*, *pispis* and *dakdak*, a word that is common in Solomon Island and New Hebridean Pidgin (*dakdak* 'duck' as against *dak* 'dark').

A special register of English, baby language, may be the source for these forms (cf. Ferguson 1956; Hockett 1958:359). The baby-talk register of English is also the most likely source for *mama* 'mother' and *papa* 'father', possibly with a reinforcement from German.

As for the words from Melanesian languages, it seems that a large number of them (especially the names for animals and plants) were already lexicalised reduplications. Unfortunately I do not have sufficient source materials to verify this for each individual item. *Kiki* 'chair' is an example of a word that belonged to a productive pattern in Kuanua. *Ki* was the verb 'to sit' and *kiki* the derived noun 'chair, seat'. This reduplicated noun came to fulfill the function of a verb in Pidgin. This form was possibly chosen in order to distinguish it from *ki* which already had the meaning 'key'. The process by which *kiki* (now an almost obsolete work in Pidgin) was derived from *ki*, that of nominalising by repeating the verb stem, is, however, completely unknown in Pidgin grammar.

There are a few instances of partly reduplicated words in Kuanua which became fossilised in Pidgin: *vivingul* 'to play the flute', *varvardoan* 'benediction', *varvaliu* 'procession' and *limlimbur* 'to stroll'. Most of these words have fallen into disuse in Pidgin, except in the Rabaul area where they can still be heard. The Pidgin word *raring* 'to pray' (used in the Rabaul area and on Manus Is.) comes from *ararig* which is a partial reduplication of *arig*.

One can conclude that no words that belonged to a productive reduplicative pattern in Kuanua belong to a productive pattern in Pidgin. If one merely looks at the inventory the influence of Kuanua on Pidgin seems to be negligible. However, it remains to be seen how much of the Kuanua system has been preserved in Pidgin. This will be discussed later.

Criteria for Classification

When classifying reduplications and repetitions we face several alternatives: one can show what happens to each individual pre-established word class; one can relate them to various size levels of grammar; or one can take the functions that are expressed by repeating elements of any size level as a point of departure. My own opinion is that the last approach is the most satisfactory one. The justification is that the same semantic implications can be found for various word classes and size levels. There are certain difficulties with establishing word classes, it being not clear for many Pidgin words to which part of speech they belong. I have tried to make my description in terms of traditional classes such as noun and verb to facilitate a comparison of my analysis with other analyses available for pidgins and creoles. It should be remembered, however, that a word like *lapun* 'old' (said of people) can appear in several grammatical functions, corresponding to the English categories of adjective, intransitive verb and noun (nos. 47-49).

- (47) *dispela man i lapun* 'this man is old' (adjective)
 (48) *em i laik lapun nau* 'he is getting old' (intransitive verb)
 (49) *dispela lapun i kros* 'this old man is angry' (substantive)

Moreover, although this is predictable by rules rather than being a lexical property of the word, nevertheless, for the above reason I will refer to bases in grammatical functions that are normally associated with nominals as nouns, to bases in predicate function as intransitive verbs, and so on. So I would describe the examples in nos. 50-51 as reduplications of an adjective and a noun respectively.

- (50) *em i lapun lapun nau* 'he is very old now'
 (51) *ol lapun lapun nabaut* 'all the various old men around'

I shall also try to distinguish between reduplications that result in a compound word with a single main stress and reduplications that result in a phrase. However, this distinction is difficult to make in some cases.

The Main Functions of Reduplication

Intensifying Function

By repeating part or whole of a base, a compound or a phrase, a new form is created which expresses that the action, state or property described by the non-reduplicated form is present to a higher degree. Very often this function is difficult to delineate from the function of duration since it often happens that an action or state that lasts longer is also more intense. This function is extremely common in Pidgin, especially in colloquial and picturesque speech, and is in certain cases just a stylistic alternative to non-reduplicated forms. It also seems to be popular with less fluent speakers of the language, probably because reduplication is a process that enables the speaker to gain time in speaking. This is particularly true for the repetition of longer phrases and whole sentences.

We can distinguish a number of types of intensifying reduplication. Some verbs undergo *partial reduplication*. Most of these reduplicated verbs are transitive, i.e., they end in the transitivity marker *-im*. The general shape of the reduplicatives is base+base+*im*. Semantically

this group expresses an action affecting an object or person to a higher degree than would be expressed by base+*im* alone.

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|------|-----------------------|---|
| (50) | <i>bruk-bruk-im</i> | 'to break into little bits' |
| (51) | <i>hap-hap-im</i> | 'to cut s.th. into many equal parts' |
| (52) | <i>kalap-kalap-im</i> | 'to jump up and down on s.th.' |
| (53) | <i>kar-kar-im</i> | 'to always carry around with one' |
| (54) | <i>har-har-im</i> | 'to listen intensely' |
| (55) | <i>pam-pam-im</i> | 'to pump with all one's strength, make violent love to' |
| (56) | <i>pait-pait-im</i> | 'to give a good thrashing' |
| (57) | <i>tan-tan-im</i> | 'to turn round violently, incessantly' |
| (58) | <i>skru-skru-im</i> | 'to increase considerably' |
| (59) | <i>sut-sut-im</i> | 'to shoot several times, violently' |

The only intransitive verb that falls into this category is *kalkalap* 'to dance, to jump up and down'. This form is an exception in another sense too. It is related to *kalap* 'to jump, spring' which in turn is derived from English 'gallop'. In Pidgin, the English simplex has been reinterpreted as a complex form *kal-ap*, the *ap* being felt to be identical with *ap* in such words as *bagar-ap* (from 'bugger up'). This has also happened with *siker-ap* derived from English 'scrape'. What happened in the case of *kalap* is that the first part, which Pidgin speakers feel to be a morph, is repeated to form the reduplicative.

For some dialects of Pidgin intensity can be expressed for words with more than one syllable or for compound words by repeating the transitivity marker *-im*.

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|------|-----------------------|-----------------------------|
| (60) | <i>bagarap-im</i> | 'to ruin' |
| (61) | <i>bagar-im-ap-im</i> | 'to ruin completely' |
| (61) | <i>liptap-im</i> | 'to raise s.th.' |
| | <i>lipt-im-ap-im</i> | 'to raise s.th. forcefully' |
| (62) | <i>sikerap-im</i> | 'to scratch' |
| | <i>siker-im-ap-im</i> | 'to scratch intensely' |

In most dialects intensification with these words has to be expressed by means of an adverbial construction:

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|------|------------------------------------|---------------------------|
| (63) | <i>em i bagarapim em nogut tru</i> | 'he ruined it completely' |
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Most other intransitive verbs are reduplicated in full to express intensity of action or state.

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|------|--------------------------------------|---------------------------------------|
| (64) | <i>ol i luslus nau</i> | 'they are really lost' |
| (65) | <i>yu mas birua birua tru</i> | 'you must really fight' |
| (66) | <i>bodi i tait tait</i> | 'to walk stiffly' (said of dead body) |
| (67) | <i>ol meri i paul paul long taun</i> | 'the women lead a bad life in town' |
| (68) | <i>ol i kam bungbung</i> | 'they all gathered eagerly' |
| (69) | <i>mi gogo pinis</i> | 'I finished walking fast' |
| (70) | <i>ol i kraikrai long mani</i> | 'they are all crying loud for money' |

Reduplication is very common with adjectives. It is one of the methods to express that some property is present to a high degree. Since Pidgin has no construction corresponding to the comparative in European languages, reduplication is used to express comparative and superlative in many contexts. It is found in both attributive and predicative

positions.

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|------|--|---|
| (71) | <i>blakpela blakpela klaut</i> | 'a very dark sky' |
| (72) | <i>gutpela gutpela meri</i> | 'a very good woman' |
| (73) | <i>switpela switpela kaikai</i> | 'very tasty food' |
| (74) | <i>draipela draipela pik</i> | 'a very big pig' |
| (75) | <i>trupela trupela tok</i> | 'a very true story' |
| (76) | <i>sotpela sotpela siket</i> | 'a very short skirt' |
| (77) | <i>pasin i nogut nogut tru</i> | 'this is really bad behaviour' |
| (78) | <i>kokonas i kamap sotpela sotpela</i> | 'just a tiny coconut tree had grown' |
| (79) | <i>dispela dis i brukbruk</i> | 'this plate is broken to little pieces' |

Reduplication is also found with adverbs.

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|------|--|---|
| (80) | <i>pater i krosim em nating nating</i> | 'the Father is cross with him for no reason whatsoever' |
| (81) | <i>ol i givim nabaut olsem olsem</i> | 'they distributed it just like this' |
| (82) | <i>nau nau Inglis i stap nau</i> | 'now, the English are here' |
| (83) | <i>ol pipel bilong Hailans i save pait klostu klostu</i> | 'the Highlanders usually fight from very close' |
| (84) | <i>ol Niu Gini i save dring kwik kwik</i> | 'the New Guineans usually drink very quickly' |
| (85) | <i>em i paitim em nogut nogut tru</i> | 'he is hitting him really badly' |
| (86) | <i>em i pundaun blutblut nabaut</i> | 'he fell down covered all over with blood' |
| (87) | <i>ol i wok giaman giaman tasol</i> | 'they worked very sloppily' |
| (88) | <i>ol i wok hat hat</i> | 'they worked very hard' |

Repetition of phrases and sentences is sometimes used to express intensity. It is much more frequently used to express duration. Nevertheless I have found a few examples of the former.

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|------|--------------------------------------|-------------------------|
| (89) | <i>em i gutpela man, gutpela man</i> | 'he is a very good man' |
| (90) | <i>ol i kam, ol i kam</i> | 'they came, they came' |

This type of repetition is paired with an increase in the speed of the utterance. At the same time adjective and verb in the above examples get an emphatic stress.

Duration

Related to the concept of intensity and sometimes implied in some of the above examples is the concept of duration. Again, we find the whole gamut from grammatical reduplication to certain performance phenomena.

Most of the forms listed earlier as examples of the partial reduplication of verbs can appear in the form *base+im + base+im* to express duration of an action. Phonologically the difference is that the partly reduplicated bases have one main stress only, whereas fully reduplicated forms ending in *-im* have two main stresses.

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|------|----------------------|-----------------------------------|
| (91) | <i>brukim brukim</i> | 'to break continuously' |
| (92) | <i>karim karim</i> | 'to carry on and on' |
| (93) | <i>pamim pamim</i> | 'to pump for a long time' |
| (94) | <i>skruim skruim</i> | 'to increase s. th. continuously' |

- (95) *tanim tanim* 'to turn and turn'
 (96) *kaunim kaunim* 'to count on and on'

Reduplication for intransitive verbs is not different. As for the transitive verbs very long duration can be indicated in the text by *multiple repetition*. This is a feature particularly found in narrative style.

- (97) *em i pait pait pait* 'he fights and fights and fights'
 (98) *em i pait i pait i pait* 'he fights and fights'
 (99) *ol i kam bek sindaun sindaun i go* 'they came back and stayed for a long time'
 (100) *ol i senis senis stori* 'they keep changing their story'
 (101) *sampela taim yu tingting tingting i go i go* 'sometimes you keep thinking'
 (102) *nau i tok i tok* 'now he talks and talks'

Whereas in most cases the repetition of the predicate marker *i* is optional, in the last example it seems to be obligatory to distinguish *i tok i tok* from *i toktok*.

Reduplication to express duration is often accompanied by a *durative marker i go*. One could speak of *i go* as a reduplication trigger.

- (103) *ol i sindaun sindaun i go* 'they sat for a long time'

Reduplication to express duration is not found with nouns; we do not get constructions such as

- (104) * *em i kiap kiap* 'he is a long-served administration officer'

Adjectives, too are not found in this category, probably because adjectives express a state that persists for a fairly long time anyhow.

In the case of adverbs, reduplication is found with time adverbs as might be expected. Semantically both duration and iteration are implied in most cases.

- (105) *em i stap longtaim longtaim* 'he stayed for a long time'
 (106) *ol kiap bilong bihain bihain* 'all the administration officers that came thereafter'
 (107) *olde olde* 'one day after the other, every day'

Repetition to express duration can be found mainly in narrative style. Duration is expressed either by repeating certain verbs (*go*, *kam*, *stap*) after the predicate or by repeating phrases and sentences several times.

- (108) *ol i sindaun i stap i stap* 'they sat down for a long time'
 (109) *em i paitim i go go go go go* 'he kept on beating him'
 (110) *mipela wokabaut i go i go i go i go* 'we kept walking for a long time'
 (111) *ol i pait i go i go* 'they kept fighting'
 (112) *mipela i go go go kamap* 'after a long journey we arrived'

I go can be considered to be a dummy element that is used after verbs to indicate duration as an alternative for repeating the verb itself.

- (113) *ol i kam kam kam kamap nau* 'after a long journey they arrived'

- (114) *em i kam i kam i kam kamap* 'he arrived after a long journey'

I kam implies movement in the direction of the speaker and is most frequently found in collocation with *kamap* 'to arrive'. We described *i go* as a dummy element replacing single words. *Mekim* on the other hand is a dummy element that replaces parts of sentences or whole sentences.

- (115) *Ol i sutim ol long musket, ol i sutim tu ol long masket, mekim, mekim mekim, mekim nau. Urunati i no winim Wallis.* 'They were shooting at one another with guns; they did it for a considerable time. Nevertheless Wallis was not taken by Urunati.'

The repetition of phrases and sentences is an alternative to the *mekim* construction.

- (116) *em ol kanaka sutim ol, sutim ol* 'the natives kept shooting at them for a long time'
- (117) *em sindaun hia, sindaun hia i stap* 'he was living here for a long time'
- (118) *ol doktaboi holimpas i stap, holimpas i stap* 'the medical orderlies held it for a long time'
- (119) *ol i kaikai nabaut, ol i kaikai nabaut olsem* 'they were feasting like this for a long time'

Distributive function

The most common word class acquiring the distributive function is that of numerals. Very frequently a repetition of a numeral is combined with a noun. However, note *i no planti man, i wanwan tasol* 'just a few scattered men'.

- (120) *givim wan dola long wanpela wanpela man* 'give a dollar to each individual man'
- (121) *wanpela wanpela ailan i gat nem bilong em yet* 'each island has its name'
- (122) *ol Ostrelia i no save maritim tu tu meri* 'the Australians do not marry two wives each'
- (123) *ol i kamap wanpela wanpela* 'they came one by one'

There are a number of words referring to localities which can be reduplicated to indicate distribution. These words are from the following classes: adverbs (no. 124), nouns (no. 125-127), adjectives (no. 128) and verb (no. 129).

- (124) *ol membas nabaut nabaut long olgeta ples* 'the members (of the House) in all parts of the country'

Note that *nabaut* as a postposition can be regarded as a sort of reduplication trigger. It occurs frequently after reduplicated nouns.

- (125) *ol pipel i stap long ples ples nabaut* 'the people that are scattered in various places'
- (126) *ol kanaka kanaka nabaut long bus* 'all the natives that live in various places in the bush'
- (127) *mbabu i pundaun long saitsait bilong haus* 'the bamboo fell down on all sides of the house'
- (128) *sampela samting i stap* 'pieces of s.th. were scattered all over the place'

One may also consider the examples 128-129 as exhibiting the intensive function.

- (129) *em i pundaun blutblut nabaut* 'he fell down completely covered with blood'

Only one verb showing partial reduplication with distributive meaning was found.

- (130) *em i putputim nabaut* 'he put them in various places'

Repetition with distributive meaning is found both with expressions containing numerals and with others:

- (131) *olgeta pipel i takis long ten dola ten dola* 'the people pay \$10 tax each'
- (132) *ol wokboi i kontrak long wan yia wan yia* 'the workers sign a contract for one year at a time'
- (133) *katres i kisim namel, hap sait i stap, hap sait i stap* 'the bullet hit it in the middle; an equal part was left on both sides'
- (134) *ol i kaikai nabaut, ol i kaikai nabaut olsem* 'they had food in various places'
- (135) *wanem ples, wanem ples ol i go singsing* 'to whatever place they go dance'
- (136) *em i go slip wanpela hap, i go slip wanpela hap, i go slip wanpela hap, i go slip wanpela hap, kamap long ples* 'after having spent several nights in various places he arrived at home'

Although the following example is not a case of pure repetition, it illustrates the principle of how distribution is expressed in Pidgin. People who could not converse very fluently in Pidgin, being asked how they would communicate replied:

- (137) *hap kranki i go, hap kranki i kam* 'both sides use broken language'

Diversity

- (138) *siot i gat kala kala* 'the shirt has all sorts of colours'
- (139) *siot i gat makmak* 'the shirt has all sorts of colours'

More commonly this construction is expressed by using *kainkain* 'all kinds of' together with the property desired.

- (140) *siot i gat kainkain kala* 'the shirt has all sorts of colours'
- (141) *i gat kainkain man i stap* 'there were all sorts of people'

Various Other Functions of Reduplication

It would seem that there are only very few examples for some of the above categories. This may be in part due to the fact that the materials presented come for the most part from a corpus of spoken and written Pidgin. Since the importance of reduplication and repetition only occurred to me after a long period of field work and partial

analysis of the data, elicitation from informants was not used. Some of the examples, however, were given to me by other scholars or taken from the available literature. I am convinced the number of cases that fit into the above categories will be increased considerably once the elicitation method is used. It may also happen that some of the various other functions of reduplication and repetition here discussed as marginal cases are really much more important.

Plurality

It is almost certain that reduplication to express the notion of plurality is due to substratum influence and is not normal for Pidgin. In fact the speakers who provided examples 142-143 were very poor speakers of Pidgin.

- (142) *dispela tumbuna tumbuna, em* 'those ancestors, those two
tupela tumbuna ancestors'
 (143) *pater i kam bek moa, kam bek* 'the Father returned twice'
moa, tu taim

Reciprocity

The first written statement that reciprocity can be expressed by reduplication is found in Brenninkmeyer (1924). He reports that reduplication of pronouns is an optional means of indicating reciprocity. Reciprocity in the standard forms of Pidgin occurs with pronouns and with numerals.

- (144) *tupela i paitim wanpela wanpela* 'the two are fighting with one
 another'

Reduplication of verbs, too, can express the idea of reciprocity.

- (145) *ol i helpim helpim* 'they help one another'

More commonly repetition of clauses is used.

- (146) *tupela i pait; narapela i paitim* 'the two are fighting with
narapela, narapela i paitim one another'
narapela

The Sources of Reduplication in Pidgin

I have tried to show that reduplication can be found in many parts of Pidgin grammar. The picture I have given is idealised in as much as Pidgin is not a single language but varies with the geographical and social background of its speakers. Reduplication is not equally distributed among all sociolects and dialects. In addition it is also a stylistic feature. Most reduplication was found in Bush Pidgin, the broken Pidgin spoken in areas that have come into contact with Europeans only recently or that spoken by very old people in other Pidgin speaking areas. Repetition is extremely widespread in Bush Pidgin, and at least some of the reduplication can be explained in terms of hesitation and other performance phenomena. We also get reduplication as a result of misinterpreting standard Pidgin forms, e.g., *hamas hamas* instead of *hamamas* 'to be glad' or *tori tori* instead of *teritori* 'territory'.

Reinterpretation of non-reduplicated forms as reduplicated forms has also played a subordinate part in the development of Pidgin, cf., the part *didi* in the Pidgin compound (it is considered to be a compound and member of the set *stilman, rabisman*, etc.) *didiman* 'agricultural officer'

which is derived from the name of the German head of the botanical garden in Rabaul, Dr Bredeman. I have already mentioned the examples *liklik* from Kuanua *iklik*, *rere* from 'ready' and *tete* from 'today'.

Reduplication and repetition is extremely common in what I have described as standard Rural Pidgin elsewhere ('Sociolects in New Guinea Pidgin' in this volume). This has been discussed by Reed (1943: 283), although Reed only recognises reduplication of words for emphasis and repetition of phrases in a running account for linkage. However, all the types described above as The Main Functions of Reduplication are common in this variety of Pidgin.

The amount of reduplication found in anglicised Urban Pidgin (*tok skul*) is less than in the two other varieties spoken by Papua New Guineans. This is due to the fact that English idiom is followed in many cases. I found distribution expressed as follows:

- (147) *yupela kam long ten dola* 'you contribute ten dollars
 ten dola is each'

and also

- (148) *ol i givim faiv dola is* 'they give five dollars each'

Tok Masta, the Pidgin spoken by Europeans in their dealings with their domestic servants appears to contain very little reduplication. This is without doubt due to the fact that the insights of Europeans into the structure of Pidgin is generally low and that English does not contain many reduplicated patterns.

There are at least three possible answers to the question of where the reduplications in Pidgin originate. Firstly, the patterns found in the native language which has influenced other parts of pidgin grammar and lexicon most, namely Kuanua, were taken over into Pidgin. This answer reflects the *substratum theory*. Secondly, reduplication is a universal feature of all pidgins and creoles and can be traced back to Portuguese Pidgin. This answer reflects the *relexification theory*. Thirdly, reduplication is a universal of languages which is bound to appear wherever a pidgin language originates. This answer reflects the *universals of pidgin theory*.

Unfortunately we still do not have sufficient data to come to a conclusive decision. However, it seems to me that no key-cause or single factor theory will provide a sufficiently satisfactory explanation, and that the various types of reduplication found in Pidgin can be traced back to a number of different sources. The following discussion is necessarily fairly tentative, but I hope it will serve as a basis for the discussion of reduplications in pidgins and that it will soon be complemented with data and analyses from other pidgins.

In support of the *substratum theory*, Kuanua has a number of reduplicative patterns. I have no personal experience with this language and I rely on the data provided by Bley (1912). Some of the types of reduplication found there are:

- (a) *Transitive verbs become intransitive by a process of partial reduplication*. This type cannot be found in Pidgin. The only verb that originally came from this group and is now lexicalised and non-reduplicative is *raring* 'to pray'.
- (b) *Intransitive verbs that are partly reduplicated remain intransitive and come to mean an extended action (duration)*. This is

not a productive pattern in Pidgin either. The only example found is *kalkalap* 'to jump up and down' vs. *kalap* 'to jump' which corresponds exactly to Kuanua *pipil* vs. *pil*.

- (c) *Partial reduplication of verbs indicates an infinitive or present participle form.* This is not known in Pidgin, which has no forms for verbs other than the base form. Pidgin *vartovo* 'to teach' is used for all persons and all grammatical functions whereas Kuanua distinguishes between *vartovo* and *varvatovo*. In some cases the reduplicated form has become the standard Pidgin form, for instance in *varvardoan* 'benedictions' and *varvaliu* 'processions', both are used as nouns and verbs. This is, however, a matter for the lexicon.
- (d) *Total reduplication of verbs can express a repeated, habitual or constant action.* We have seen that this function of reduplication is common in Pidgin too (nos. 91-119).
- (e) *Total reduplication also occurs to express the intensity of the action.* This is also common in Pidgin (especially nos. 64-70). However, for many transitive verbs, Pidgin has partial rather than full reduplication.
- (f) *Reduplication is used to nominalise verbs.* This is unknown in Pidgin. It is one of the main properties of Pidgin that a large number of lexical items can appear in both nominal and verbal function without change of form.

Unfortunately, I do not have more data on reduplication in Kuanua. The most conservative conclusion one can make is that not all productive patterns that are found in Kuanua have become part of Pidgin grammar.

The *relexification theory* proposes that most if not all Pidgins are relexifications of 16th century Pidgin Portuguese which in its turn may be a relexification of a still older *lingua franca*, Sabir, spoken in the Mediterranean area. Relexification would mean that the grammar of Portuguese Pidgin remained virtually unchanged and that only the lexical inventory has been replaced in languages such as New Guinea Pidgin.

I have no source materials on reduplication in Pidgin Portuguese. However, Whinnom's analysis of Spanish contact vernaculars in the Philippines provides us with some information of what reduplication may have been like in Pidgin Portuguese. He describes the following types:

- (a) *Reduplication of adjectives and adverbs.* There is no grammatical category in the three main contact vernaculars that corresponds to comparison in Indo-European languages. There is only a series of devices used to convey that the adjective or adverb is intensified. Whinnom distinguishes between two types of reduplication, one with a connective (a feature which he ascribes to Tagalog influence) and one without connective.

In his article on creoles, Thompson (1961) lists examples from Sranan Tongo, and Jamaican in which reduplication has the same grammatical function as in the contact vernaculars described by Whinnom. We have seen that reduplication expressing intensity is very common in New Guinea Pidgin, too. There are, however, various other methods of expressing comparison in Pidgin. Reduplication is probably not the most common one and is dependent on certain stylistic prerequisites.

- (b) *Reduplication with nouns.* The function of reduplication with nouns is to make the noun indefinite, or in other instances diminutive. Both functions are not known in New Guinea Pidgin. In his article on creoles, Thompson (1961) lists another function of nominal reduplication, namely that of pluralisation. This feature, too, apart from one dubious instance which we have listed above, is not known in Pidgin.
- (c) *There is simple reduplication of the verb* (it is not quite clear with what semantic implications) *and reduplication larger grammatical groups with verbs as centres* which give continuous and repetitive force to the verb. This can also be found in certain styles of Pidgin.

If Whinnom's analysis is complete, there are a number of functions in Pidgin which cannot be related to the grammar of these contact vernaculars, for example, distributive function, diversity and reciprocity. The word classes involved in reduplication seem to be greater in number in Pidgin, too. We need much more detailed data on Pidgin Portuguese and derived languages before we can come to any conclusions.

The list of examples presented by Thompson in his article on the relationship between Creole dialects is certainly insufficient. Thompson himself does, however, recognize that "iteration is common in many languages and the part it plays in the formation of pidgins, could alone explain, its vigorous presence in the Creoles" (1961: 111).

The third explanation of the reduplicative patterns found in Pidgin is in terms of *linguistic universals*, possibly triggered off by certain stimuli that are present during pidginisation. The examples listed in Key (1965) show that all the types common in Pidgin can be found in other unrelated languages, too. The factors creating favourable conditions for reduplications to appear in Pidgin can be tentatively listed as follows:

- (a) It is a process that involves very little effort on the part of the language learner.
- (b) Speakers of the target language, the language that is broken down during the process of pidginisation, often address the learners in some special baby-talk or foreigner register of the language. These special registers are often characterised by a comparatively large amount of reduplication.
- (c) There are certain performance phenomena that influence the grammar of the language that is broken down, e.g., the slow speed and frequent hesitations which characterise early stages of pidgins favour reduplicatives. It is certainly relevant in that the amount of reduplication increases with decreasing proficiency among speakers of New Guinea Pidgin.
- (d) The small inventory of phonemes may account for a number of reduplicated forms with a discriminatory function. However, the lack of data forces us to abandon any further investigation into the sources of reduplication in pidgins here.

Applications for Language Planning in New Guinea Pidgin

I have defended a position elsewhere (Mühlhäusler forthcoming) that

the language planner should, in extending the lexicon of a language, take into consideration the existing patterns provided by the lexicon itself, rather than creating either new words with new rules, or adopting words from other languages. Some of the patterns of reduplication in Pidgin are extremely productive and could certainly be used to extend the Pidgin vocabulary.

The discriminatory function of reduplication has been widely neglected in the discussion of grammar. Pidgin is still very dependent on English for new words. Its restricted phonology and dialect variation have led to a larger number of homophones, a number which is still increasing, especially in the urban varieties of Pidgin. I have shown that in an earlier stage of development disambiguation was attained by reduplicating one of the homophones. I see no reason why this should not be done in present day Pidgin. I propose for example that the ambiguities of nos. 149-151 column (a) be resolved by reduplication as in column (b).

(149)	<i>tret</i>	'trade, thread'	<i>tret</i> - 'trade'	<i>trettret</i> 'thread'
(150)	<i>het</i>	'hat, head'	<i>het</i> - 'head'	<i>hethet</i> 'hat'
(151)	<i>kol</i>	'coal, call'	<i>kol</i> - 'coal'	<i>kolkol</i> 'call'

It remains to be seen how speakers would accept this solution. An obvious advantage over other suggestions (e.g., to introduce vowel lengthening as a distinctive feature) is that the same simple phonological inventory can be kept. This is of great importance for a language that is spoken by speakers from so many language backgrounds.

Another illustration of how reduplication can be used to extend the vocabulary is found in the partial reduplication of transitive verbs. Following the pattern described for nos. 50-63 (*tantanim*, *sutsutim* etc.) one could generate the following:

	simple		reduplicated	
(152)	<i>brum-im</i>	'to broom'	<i>brum-brum-im</i>	'to broom thoroughly'
(153)	<i>katim</i>	'to cut'	<i>kat-kat-im</i>	'to cut into little pieces'
(154)	<i>kol-im</i>	'to call'	<i>kol-kol-im</i>	'to call loud and repeatedly'
(155)	<i>kros-im</i>	'be angry'	<i>kros-kros-im</i>	'to be furious with'
(156)	<i>so-im</i>	'to saw'	<i>so-so-im</i>	'to saw violently'

I shall leave my discussion here. I hope to have succeeded in demonstrating the importance of reduplication for the grammar of Pidgin and in contributing something of value to the description of this language.

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