

PHONOLOGICAL INTERFERENCE BETWEEN USARUFA AND PIDGIN ENGLISH

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0. Introduction: I am often bewildered by estimates of the number of Pidgin English speakers in Papua New Guinea. I am haunted by the question: 'What degree of fluency must be attained in order for one to be considered a speaker of Pidgin?' Among the Usarufas of the Eastern Highlands District I have witnessed within the past thirteen years an increase in the number of persons claiming knowledge of Pidgin and have become increasingly curious as to their degree of fluency. Within their home area Usarufa speakers speak either their own or one of three neighboring languages. Pidgin is reserved for strangers, some pseudo-sophisticated court cases, joking, and dogs. The Usarufas live some thirty-five miles southwest of Kainantu and have had about twenty years of marginal exposure to Pidgin but until the last decade there has been very little incentive to learn it and even less opportunity to use it. Three factors have considerably changed the picture:

- (1) Increased traffic and trade along the Okapa Road, which borders three of the four Usarufa village complexes, provides occasion for contact with an increasing number of 'strangers'.
- (2) Contract employment outside their own language area forces Usarufa youths in the 18 to 25 year age group to learn at least 'survival Pidgin'. Most of these youths return home after two years of such employment.

- (3) Schooling in mission and government schools has taught Pidgin to a small but increasing number of children and young adults.

The quality and extent of Pidgin knowledge gained by the first two of these influences has been inferior and limited, although the second is noticeably superior to the first. The third influence has hopefully given a broader scope and a greater understanding and control. In an effort to test the degree and range of competence of those Usarufas who are recognized as fluent speakers of Pidgin a translation assignment was given to a young man who was literate in Pidgin, Kate, and Usarufa and who speaks, in addition to the foregoing three languages, two neighboring but only distantly related languages: Kamano and Fore. He was about twenty-two years old when he finished the assignment and had had six to eight years of mission schooling, two years of which were beyond the primary level. Most of his schooling was through Pidgin and he had had employment experience in Popenetta, Lae, and Moresby. For these reasons he seemed well equipped to tackle the assignment: the translation of the illustrative sentences and phrases in the Pidgin-English section of Mihalic's 1957 Neo-Melanesian dictionary into Usarufa. It might be well to note that both New Guineans and Europeans had commented on the excellent control this young man had of Pidgin.

After the translation had been completed, the resulting four thousand or more sentences and phrases were examined and each error in translation noted and analyzed. Some of the errors could be attributed to a seemingly insufficient understanding of the principles of translation; a few of the errors were related to the fact that the corpus was written rather than spoken Pidgin; the vast majority of the errors were the result of the interference between Usarufa and Pidgin Phonological, Semantic, and Syntactic systems. Well over 50% of the corpus was grossly misunderstood because of disharmony between the two sets of systems. The same kinds of misinterpretations have been observed with other speakers, in other contexts, and in spoken as well as written Pidgin. While some of the problems of interference might be peculiar to Usarufa speakers, they cannot be regarded as peculiar to this particular Usarufa speaker and I suspect that a large number of these same problems plague speakers of scores of Papua New Guinea languages.

This paper will discuss only those misinterpretations which were caused by

phonological interference. While this will account for a minority of the misinterpretations, it deals with problems which are deeply ingrained and extremely resistant to correction. Even after a great deal of drill in special literacy classes designed to help overcome these kinds of phonological interference the Usarufa speaker still has difficulty with Pidgin in this area.

1. Comparison of Usarufa and Pidgin English Phonemic Inventories.

1.1 Inventory of Pidgin English Phonemes: The following phonemes have been taken from the comparative table in the preface of Mihalic's dictionary and grammar. Items in parenthesis have been deleted from the phonemic inventory in later analyses.

CONSONANTS

p	t	k
b	d	g
f	s (š)	h
v	(z)	
	(tš)	
	dž	
m	n	ŋ
	l	
	r	
w	ɣ	

VOWELS

	Front	Back
High	i (ɪ)	u (ʊ)
Mid	e (ɛ)	o (ɔ)
Low	(æ)	(ə)

Notes on Pidgin Orthography: Five vowel symbols are used representing vowel phonemes as follows:

<u>i</u>	High-Front vowels
<u>u</u>	High-Back vowels
<u>e</u>	Mid-Front vowels
<u>o</u>	Mid-Back vowels
<u>a</u>	Low vowels

Phonemes /b/, /d/, and /g/ are represented word finally as p, t, and k respectively; phonemes /f/ and /v/ are bilabials and may be actualized with or without friction; the phoneme /ŋ/ is represented by ng; and the phonemes /s/, /ṣ/, /z/, /ṭs/ and /ḍz/ are represented by s.

1.2 Inventory of Usarufa Phonemes:

CONSONANTS

	Simple			Complex		
b	t	g		ʔp	ʔt	ʔk
	r		ʔ	mm	nn	
m	n			ʔm	ʔn	
w	y			ʔw	ʔy	

VOWELS: i, e, a, u, o

Notes on Usarufa Orthography: The phonemes /b/ and /g/ are represented initially and the phonemes /ʔp/ and /ʔk/ are represented medially by p and k respectively. Glottal stop is represented by q and preglottalized phonemes are represented as digraphs: qt, qn, qm, qw, and qy.

Comments on allophones and distribution of Usarufa phonemes:

/b/ and /g/ are voiced fricatives medially and voiceless stops initially.
 /r/ is an alveolar flap [ṛ] except contiguous to /i/ and between /a/ and /a/ when it occurs as a lateral flap [ṛ̣].

Consonant phonemes do not occur in clusters or in final position. All complex phonemes and the simple phonemes /r/ and /ʔ/ occur only intervocally.

1.3 Observations on Correspondences Between Usarufa and Pidgin Phonemic Systems:

The Pidgin and Usarufa vowel systems correspond quite closely with the Pidgin high and front vowels finding allophonic correspondence¹ in Usarufa. The sounds represented by the Pidgin /ʊ /, /ɔ /, and /æ / phonemes do not occur in Usarufa but correspond to Usarufa phonemes as follows: /ʊ /: /u /; /ɔ /: /a /; and /æ /: /e /.

The Pidgin consonantal system has a much greater range of diversity than the Usarufa system both in distribution and in phonetic variety. The following list is a summary of significant consonantal correspondences between the two systems:

Pidgin	Usarufa
/p/, /b/, /f/, /v/	/b/
/p/ (medial)	/qp/
/t/, /d/, /s/, /š/, /z/, /tš/, /dž/	/t/
/l/, /r/	/r/
/k/, /g/	/g/
/k/ (medial)	/qk/
/m/, /n/, /w/, /y/	/m/, /n/, /w/, /y/ respectively
/h/, /ŋ/	no correspondence

Usarufa complex phonemes correspond to Pidgin nasal–stop sequences as follows: nasal plus voiced stop correspond to long nasals and nasal plus voiceless stop to prenasalized stops.

2. General Categories of Phonological Interference .

Three categories of phonological phenomena cause interference in the transfer of information from Pidgin English to Usarufa:

- (1) Distributional differences between phonological elements common to both languages.
- (2) Phonological elements not common to both languages or phonological processes which predispose common elements to ambiguous interpretation.

(3) Non-systemic phonological confusion.

Each of these categories of interference may in turn be divided into different kinds of misinterpretation and each kind of misinterpretation leads to different instances of error. Sections 3 and 4 will document the specific instances of error and the remainder of this section will discuss the different kinds of misinterpretation within each of the three categories of interference.

2.1 Interference Caused by Distributional Differences:

The greatest single phonological source of interference for the Usarufa speaker of Pidgin is the distributional differences of phonological elements which occur both in his own language and in Pidgin. In the face of the interference caused by these distributional differences the Usarufa speaker is forced to resolve his dilemma by guessing. Given an adequate context he stands a fair chance of guessing accurately; given an inadequate or ambiguous context he has at best only a fifty-fifty chance of making the right guess.² In actual fact the percentage of wrong guesses in the corpus examined was over seventy-five percent.

Two kinds of distributional differences contributed to the interpretational interference:

- (1) Differences in the distribution of phones.
- (2) Differences in the distribution of phoneme classes.

2.11 Interference Caused by Differences in Phones: Both Usarufa and Pidgin have voiced and voiceless obstruent phones and both have alveolar vibrant and lateral phones. However the phonemic status of these phones and their distribution within the word is vastly different in the two languages.

In Usarufa voiced and voiceless obstruents occur in complementary distribution. The voiced allophones [b] and [g] occur only intervocalically and are represented orthographically by b and g. (Note, no voiced alveolar obstruent occurs in Usarufa.) The voiceless allophones [p], [t], and [k] occur initially and are represented orthographically by the symbols p, t, and k. Initially, at least, Pidgin has a phonemic contrast between voiced and voiceless stops and although contrast medially is difficult to document, both voiced and voiceless phones do occur medially. In medial position the Usarufa speaker tends to interpret all Pidgin stops as voiceless rather than voiced even though this conflicts with the distribution of voiced and voiceless obstruents in his

own language. In contrast to the relatively consistent interpretation of the Pidgin medial stops, the interpretation of Pidgin initial stops is almost completely random. Minimal pairs in Pidgin are homophonous to the Usarufa and he has to rely solely on context for his interpretation. Unfortunately the evidence suggests that context is often unreliable. To illustrate the ambiguity of interpretation which characterizes the Usarufa's understanding of initial stops in Pidgin let us consider the Pidgin minimal pair pis 'fish' and bis 'beads'. These words occur again and again in the illustrative examples throughout the translated text. Pis was translated on some occasions as 'fish' and on other occasions as 'beads'; bis was on some occasions translated as 'beads' and on other occasions it was translated 'fish'. This ambiguity has been observed time and time again and with every Usarufa speaker of Pidgin with whom I have come into contact. (In the course of thirteen years of intimate association with the Usarufas I have probably at one time or another met most of the Pidgin speakers.)

The phonemic contrast in Pidgin between r and l presents the Usarufa speaker with an equally difficult interpretation problem but he seems to have developed a more consistent means of resolution. Two rules seem to be operative in the Usarufa's interpretation of the Pidgin r and l phonemes:

- (1) Initially and intervocally r and l tend to be interpreted in terms of the distribution of the allophones of the Usarufa r phoneme. Contiguous to i and between a and a where the [ɹ̥] allophone occurs in Usarufa the Pidgin phonemes are interpreted as l. Elsewhere, which is the distribution of the Usarufa [ɹ] allophone, both Pidgin phonemes are interpreted as r.
- (2) Following a Pidgin stop phoneme, the following complementation tends to occur in interpretation: After a voiced stop both r and l are interpreted as r; after a voiceless stop both are interpreted as l.

The tendency for the second rule to apply is so strong that when a stop has been misinterpreted, the liquid following it will be interpreted according to the above rule of complementary distribution. For example, klas 'class' was interpreted as gras 'grass' rather than glas 'glass' which would have involved only one misinterpretation.

2.2 Interference Caused by Differences in the Distribution of Phoneme Classes:

Limitations on the distribution of consonants in Usarufa created two kinds of misinterpretation.

2.21 Consonant Clusters: Usarufa has no consonant clusters so the Usarufa speaker tends to resolve Pidgin clusters by either reducing the cluster to a single consonant or by expanding it to a consonant-vowel-consonant sequence. In either case he is likely to misinterpret the Pidgin word. For example, the interpretation of stik 'stick' as sik 'sick' represents the first method of resolution; and the interpretation of lephan 'left hand' as lepahan 'leprous hand' represents the second method.

But it is not just the resolution of clusters that causes interference, for as frequently as clusters were resolved in the corpus they were created using analogous methods. That is, single consonants were expanded to clusters, and consonant-vowel-consonant sequences were reduced to clusters. The clusters created always included either stop-liquid or nasal-stop sequences.

Examples of both methods of creation:

C → CC: kos 'course' interpreted as klos 'clothes'

plak 'flag' interpreted as plank 'plank'

CVC → CC: porat 'forehead' interpreted as pret 'afraid'

sumatin 'pupils' interpreted as samting 'something'

2.22 Resolution of Word Final Consonants: Consonants do not occur word finally in Usarufa so that final consonants in Pidgin are given the same kind of ambivalent treatment as consonant clusters. Either a vowel is added to or a consonant subtracted from the word so that the form is more Usarufa-like; or a vowel is subtracted or a consonant added, making the form less Usarufa-like. It may be that a further feature of Usarufa is operative here, namely, final syllables tend to have low contrastive value. This may tend to make the Usarufa more careless about word endings.

Examples of interpretation of final consonants:

Final Consonant Resolved:

bus 'bush' interpreted as pusi 'cat'

karim 'to carry' interpreted as kari 'car'

Final Consonant Created:

buka 'black' interpreted as buk 'knot'

lai 'to lie' interpreted as lain 'to line up'

2.3 Phonological Elements Not Common to Both Languages and Phonological Processes which Predispose Common Elements to Ambiguous Interpretation:

The following misinterpretations of phonemes either involve those sounds which do not occur in Usarufa or may be attributed to phoneme substitutions which occur frequently in Usarufa.

2.31 Bilabials: The following bilabials were misinterpreted:

f and m interpreted as p

p and w interpreted as v

m interpreted as b

p interpreted as t

Comparative studies show that all but the p:t correspondence are regular correspondences between Usarufa and related languages within the same family. Words borrowed from Pidgin into Usarufa regularly show the same sets. Stop consonants are frequently interchanged in Usarufa for various paralinguistic effects. This may account for the p: t correspondence.

2.32 Alveolars and Velars: The following misinterpretation of alveolar phonemes occurred:

n, t, and k interpreted as l

k interpreted as h and p

g interpreted as y

y interpreted as t

n and t interpreted as s

r interpreted as n

y is a morphophonemic variant of t in Usarufa so it is not surprising to find the two associated together; Usarufa has no s phoneme and the Usarufa speaker tends to over-react to a language in which an s phoneme occurs by interpreting the t phonemes of that language as s; velar stops are often substituted for bilabials in Usarufa as a stylistic variant implying intimacy or light-heartedness; the source of other misinterpretations may be visually related to the orthography.

2.33 Nasals: Nasal-stop sequences were misinterpreted as described previously. Pidgin n and ng were regularly confused undoubtedly because Usarufa has no velar nasal phone.

2.34 Vowels: Vowels were randomly misinterpreted as follows:

- o and e were interpreted as a
- o , ua, and au were interpreted as u
- i and a were interpreted as e
- u was interpreted as i, wi, and in
- e was interpreted as ai and o
- ai was interpreted as a^o
- ia was interpreted as im

2.4 Non-systemic Interferences: The remaining three kinds of interference may be regarded as phonological but are not directly associated with either the Usarufa or Pidgin phonological systems. These interferences may occur between any two languages and even within a single language.

- (1) The addition or loss of initial segments.
e.g. pogivim 'forgive' interpreted as givim 'give'
ensin 'engine' interpreted as bensin 'benzine'
- (2) Metathesis.
e.g. pinis 'finish' interpreted as pinis 'bird'
- (3) Resegmentation.
e.g. kompas 'compass' interpreted as kom pas 'fasten comb'

3. Lists of Misinterpreted Words. The following lists of misinterpreted words are grouped according to the kind of misinterpretation which occurred. The example numbers refer to Section 4 which gives the contexts of each word. In some instances the interpretation is not actually a Pidgin word or expression; these are asterisked.³

3.1 Voiced-Voiceless Obstruents:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>pusi</u> 'cat'	<u>bus</u> 'bush'	1,2,4,5
<u>bus</u> 'bush'	<u>pusi</u> 'cat'	3
<u>pis</u> 'fish'	<u>bis</u> 'beads'	6
<u>bis</u> 'beads'	<u>pis</u> 'fish'	7,8,9
<u>pasin</u> 'manner, way'	<u>banis</u> 'fence'	10
<u>bret</u> 'bread'	<u>plet</u> 'plate, dish'	11, 12

<u>baret</u> 'ditch, wrinkles'	<u>plet</u> 'plate, dish'	13-18
<u>bladi</u> 'bloody'	<u>plenti</u> 'plenty'	19
<u>gol</u> 'goal'	<u>kol</u> 'cold'	20-22
<u>kat</u> 'cut'	<u>gat</u> 'to have'	23-24
<u>sigá</u> 'cigarette'	<u>sekan</u> 'shake hands'	25
<u>klas</u> 'class'	<u>gras</u> 'grass'	26
<u>kalis</u> 'chalice'	<u>gris</u> 'grease'	27
<u>trimas</u> 'a tree'	<u>driman</u> 'dream'	30
<u>dingi</u> 'small boat'	* <u>tinki</u> 'think'	31
<u>tandok</u> 'signal'	* <u>tantok</u> 'interpreter'	28, 29
<u>bisop</u> 'bishop'	* <u>pis hap</u> 'fish pond'	89

3.2 Liquids:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>arataim</u> 'another time'	* <u>alataim</u> 'always'	32
<u>arawe</u> 'other way'	* <u>alawe</u> 'completely'	33
<u>rip</u> 'reef'	<u>lip</u> 'leaf'	34
<u>rait</u> 'write'	<u>lait</u> 'light, burn'	35-37
<u>stirim</u> 'to steer'	<u>stilim</u> 'to steal'	38, 39
<u>kros</u> 'anger'	<u>klos</u> 'clothes'	40-41
<u>kruse</u> 'cross'	<u>klos</u> 'clothes'	43
<u>pris</u> 'priest'	<u>plis</u> 'pleased'	44
<u>bras</u> 'brass'	<u>bilas</u> 'ornamentation'	9
<u>kandel</u> 'candle'	<u>kandere</u> 'kinsman'	95
<u>grasnok</u> 'feathers'	<u>glas lok</u> 'glass lock'	45
<u>baret</u> 'ditch, etc.'	<u>plet</u> 'plate'	13-18
<u>bret</u> 'bread'	<u>plet</u> 'plate'	11, 12
<u>skru</u> 'skrew, knee'	<u>skul</u> 'school'	46-49
<u>klas</u> 'class'	<u>gras</u> 'grass'	26
<u>glas</u> 'mirror'	<u>gras</u> 'weeds'	50
<u>let</u> 'belt, leather'	<u>ret</u> 'red'	51, 52
<u>Inggelis</u> 'English'	<u>gris</u> 'flattery'	53

3.3 Consonant Clusters:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>stik</u> 'stick'	<u>sik</u> 'sick'	54
<u>stingk</u> 'to smell'	<u>stik</u> 'stick'	55, 56
<u>tarangu</u> 'unfortunate'	<u>taragau</u> 'hawk'	57-59
<u>kundu</u> 'drum'	<u>kanu</u> 'canoe'	60
<u>kostim</u> 'cost'	<u>kolim</u> 'call'	61, 64
<u>bumbum</u> 'torch'	<u>bung</u> 'gather'	62
<u>hipim</u> 'heap'	<u>helpim</u> 'help'	63
<u>kos</u> 'course'	* <u>klos</u> 'to close'	64
<u>plak</u> 'flag'	<u>plank</u> 'plank, board'	66
<u>tang</u> 'tongue'	<u>tank</u> 'drum, tank'	67
<u>dingi</u> 'small boat'	* <u>tinki</u> 'think'	31
<u>wataim</u> 'when'	<u>wantaim</u> 'together'	68
<u>waitsan</u> 'sand'	<u>wantaim</u> 'together'	69
<u>bladi</u> 'bloody'	<u>plenti</u> 'plenty, lots'	19
<u>bigin</u> 'begin'	<u>bringim</u> 'bring'	70-72
<u>daun</u> 'down'	<u>graun</u> 'ground'	73
<u>dai</u> 'to die'	<u>drai</u> 'dry'	41
<u>katres</u> 'cartridge'	<u>kandere</u> 'kinsman'	74-76
<u>lephan</u> 'left hand'	* <u>lepahan</u> 'leprous hand'	77
<u>bras</u> 'brass'	<u>bilas</u> 'ornamentation'	9
<u>sumatin</u> 'pupils'	<u>samting</u> 'something'	35, 78
<u>poret</u> 'forehead'	<u>pret</u> 'afraid'	79
<u>kalis</u> 'chalice'	<u>gris</u> 'grease'	27
<u>polisim</u> 'polish'	<u>plis</u> 'police'	80
<u>baret</u> 'ditch, etc.'	<u>plet</u> 'plate, dish'	13-18

3.4 Final Consonants:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>karim</u> 'give birth'	* <u>kari</u> 'car'	81
<u>ain</u> 'iron'	<u>ai</u> 'eye'	82
<u>natink</u> 'probably'	<u>nait</u> 'night'	83-84
<u>pusi</u> 'cat'	<u>bus</u> 'bush'	1, 2, 4, 5

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>sito</u> 'dice'	<u>sit</u> 'excrement'	86
<u>buka</u> 'black'	<u>buk</u> 'knot'	2
<u>pasis</u> 'passage'	<u>pas</u> 'letter'	87
<u>malen</u> 'to draw'	<u>mal</u> 'G-string'	88
<u>polisim</u> 'polish'	<u>plis</u> 'police'	80
<u>bumbum</u> 'torch'	<u>bung</u> 'gather'	62
<u>nildaun</u> 'kneel'	<u>nil</u> 'nail'	90
<u>mandato</u> 'commandment'	<u>man</u> 'man'	91-94
<u>kandel</u> 'candle'	<u>kandere</u> 'kinsman'	95
<u>bigin</u> 'begin'	<u>bringim</u> 'bring'	70-72
<u>hepi</u> 'happy'	<u>helpim</u> 'help'	96,97
<u>het</u> 'head'	<u>helpim</u> 'help'	98
<u>gip</u> 'poison'	<u>givim</u> 'give'	99
<u>bus</u> 'bush'	<u>pusi</u> 'cat'	3
<u>angka</u> 'anchor'	<u>*ankati</u> 'handcuff'	100
<u>ful</u> 'fool'	<u>pulap</u> 'full'	19
<u>lai</u> 'lie'	<u>lain</u> 'line up'	101
<u>lik</u> 'leak'	<u>liklik</u> 'little'	102-104
<u>haus</u> 'house'	<u>haumas</u> 'howmuch'	105
<u>moni</u> 'money'	<u>moning</u> 'morning'	106
<u>sig</u> 'cigarette'	<u>sekan</u> 'shake hands'	25
<u>kruse</u> 'cross'	<u>klos</u> 'clothes'	43
<u>draiwara</u> 'low tide'	<u>draiva</u> 'driver'	114

3.5 Confusion of Phonemes:

3.5.1 Consonants:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>lim</u> 'coconut sheath'	<u>lip</u> 'leaf'	112
<u>masket</u> 'gun'	<u>basket</u> 'basket'	113
<u>draiwara</u> 'low tide'	<u>draiva</u> 'driver'	114
<u>tuhap</u> 'half'	<u>tuh</u> 'perspiration'	115, 116
<u>gip</u> 'poison'	<u>givim</u> 'to give'	99

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>ful</u> 'fool'	<u>pulap</u> 'full'	19
<u>angka</u> 'anchor'	* <u>ankati</u> 'handcuff'	100
<u>bigin</u> 'begin'	<u>bringim</u> 'bring'	70-72
<u>wing</u> 'wing'	<u>win</u> 'wind, cold'	117
<u>bung</u> 'gather'	<u>bun</u> 'bone'	118
<u>ron</u> 'run'	<u>rong</u> 'wrong'	120-121
<u>raunim</u> 'encircle'	<u>rausim</u> 'get rid of'	122
<u>grasnok</u> 'feathers'	<u>glas lok</u> 'glass lock'	45
<u>nok</u> 'sago midrib'	<u>lok</u> 'lock'	123
<u>banara</u> 'bow'	<u>banana</u> 'banana'	124-127
<u>yambo</u> 'guava'	<u>tambu</u> 'taboo'	128
<u>hotim</u> 'heat'	<u>holim</u> 'hold'	129
<u>tiktik</u> 'reeds'	<u>liklik</u> 'little'	130
<u>rait</u> 'write'	<u>rais</u> 'rice'	131, 132
<u>plet</u> 'plate'	<u>ples</u> 'place'	133-136
<u>tuptup</u> 'lid'	<u>supsup</u> 'spear'	137
<u>trimas</u> 'a tree'	<u>driman</u> 'a dream'	30
<u>plet semen</u> 'porcelain plate'	* <u>ples sem man</u> 'shameful person'	138

3.52 Vowels:

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>bol</u> 'testicle'	<u>bal</u> 'ball'	139
<u>hot</u> 'zealous'	<u>hat</u> 'hard'	140
<u>kot</u> 'court'	<u>kat</u> 'card'	141
<u>lep</u> 'left'	<u>lap</u> 'laugh'	142
<u>hait</u> 'hide'	<u>hot</u> 'hot, warm'	143
<u>Tomas</u> 'Thomas'	<u>tumas</u> 'plenty'	144
<u>yambo</u> 'guava'	<u>tambu</u> 'taboo'	128
<u>sua</u> 'sore'	<u>su</u> 'shoe'	146
<u>yau</u> 'ear'	<u>yu</u> 'you'	147
<u>makim</u> 'mark'	<u>mekim</u> 'make'	148
<u>bladi</u> 'bloody'	<u>plenti</u> 'plenty'	19

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>sig</u> 'cigarette'	<u>sekan</u> 'shake hands'	25
<u>meru</u> 'paring knife'	<u>meri</u> 'woman'	149
<u>sut</u> 'shoot'	<u>swit</u> 'sweet'	127
<u>santu</u> 'sacred'	<u>samting</u> 'something'	150
<u>bisop</u> 'bishop'	* <u>pis hap</u> 'fish pond'	89
<u>wel</u> 'oil'	<u>wail</u> 'wild'	151
<u>wet</u> 'wet'	<u>wait</u> 'white'	152
<u>sel</u> 'sail'	<u>sol</u> 'salt'	153
<u>Lusia</u> 'Lucy'	<u>lusim</u> 'forget'	145
<u>kruse</u> 'cross'	<u>klos</u> 'cloths'	43

3.6 Non-systemic Changes

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>pinis</u> 'finish'	<u>pinis</u> 'bird'	154
<u>pasin</u> 'manner, way'	<u>banis</u> 'fence'	10
<u>skru</u> 'knee'	<u>skul</u> 'school'	46-49
<u>natink</u> 'perhaps'	<u>naït</u> 'night'	83-85
<u>kompas</u> 'compass'	* <u>kom pas</u> 'fasten comb'	155
<u>misa</u> 'mass'	* <u>mi sa</u> 'I saw'	44, 156
<u>skrudraiva</u> 'screwdriver'	<u>skul draiva</u> 'school driver'	48
<u>gumi</u> 'rubber'	<u>yu mi</u> 'us'	157, 158
<u>yu ministran</u> 'are you an altar boy'	* <u>yu mi nus ran</u> 'our noses are running'	159
<u>plet semen</u> 'porcelain plate'	* <u>ples sem man</u> 'shameful man'	138
<u>pukpuk man</u> 'male crocodile'	<u>pukpukman</u> 'person with tinea'	160
<u>grasnok</u> 'feathers'	<u>glas lok</u> 'glass lock'	45
<u>bisop</u> 'bishop'	* <u>pis hap</u> 'fish pond'	89
<u>sumatin i-</u> 'pupils they'	<u>samting mi</u> 'something I'	78
<u>Inglis</u> 'English'	<u>gris</u> 'flattery'	53
<u>nogut</u> 'bad'	<u>gut</u> 'good'	107
<u>pogivim</u> 'forgive'	<u>givim</u> 'to give'	108
<u>hapim</u> 'to halve'	<u>apim</u> 'lift up'	109, 110

<u>Pidgin</u>	<u>Interpreted as</u>	<u>Example</u>
<u>ensin</u> 'engine'	<u>bensin</u> 'benzine'	111
<u>sapim</u> 'carve'	<u>apim</u> 'lift up'	60

4. Appendix of Contexts Within Which Interference Occurred. In the following examples the Pidgin sentence with its English translation as it occurs in Mihalic will be given first. This will be followed by the Usarufa interpretation and its English translation. Illustrated words are underlined.

1. pusi i-stap ananit long tebol. 'The cat is under the table.'
karaa-qtatááqá yaaregón-ámênapaqa wáiyé. 'The bushes are under the table.'
2. dispela pusi i buka tru. 'This cat is jet black.'
maa-tááyúqñóbáqá aumá ôri uráiyé. 'There are lots of knots in this forest.'
3. buskanaka 'a wild uncivilized native'
púti-kanagaaqa 'a cat-native' (empty of meaning)
4. pusi man 'male cat'
karaapáq-naqa 'one who lives in the wilds'
5. pusi meri 'female cat'
karaanóbáq-innimma 'a female who lives in the wilds'
6. pis waitsan 'bass'
wayá-pátétúmá 'white beads'
7. ropim bis 'to string beads'
noyááqa ánná-kuqtwo! 'Tie up the fish!'
noyááqa atáá uwo! 'Bundle the fish!'
8. smol bis 'small beads'
pááqya-noyaaqa 'little fish'
9. bis bras 'any brassy coloured or dark beads'
noyáákoni awaameqa 'the fish's ornamentation'
10. gutpela pasin i-mas win. 'Good conduct must excel.'
íráqô-kuruma wemá kótaiye. 'He passed by the good fence.'

11. pipia bilong bret 'bread crumbs'
yaa-táápépi aratáma kéíye. 'There are scraps in the wooden dish.'
12. bret i-swelap. 'The bread rises.'
páre'tima kéburitiye. 'He is blowing the plate.'
13. baret i-gat tait. 'The stream is flooded.'
táápeqa akoqnáá wáíye. 'The plate is strong.'
14. baret bilong mekim wara i-ronowe 'a drainage ditch'
táápeqa nommá awirakaina nékaqa kóiniye. 'The plate holds the water and
will go aside.'
15. i-gat baret 'to be grooved, corrugated'
táápeqa wáíye. 'He has a plate; there is a plate.'
16. kapa i-gat baret. 'The roof has corrugations.'
oáma táápeqa wáíye. 'The roof has a plate.'
17. pes bilong lapun i-gat baret. 'The old man's face is wrinkled.'
anónuqmagon-oípiima táápeqa wáíye. 'There is a plate on the old man's face.'
18. dispela baret i-gat plenti pis. 'There are many fish in this stream.'
mi-táápépimá taibaq-noyaaqa wáíye. 'There are lots of fish in this plate.'
19. bladi ful 'a bloody fool'
netuqyáá óqikaiye. 'A lot are full.'
20. givim gol long 'make a goal'
yaugiqá amiyo! 'Give him coldness!'
21. golman 'goal keeper'
yaugiq-náqá 'a cold man'
22. karim gol 'to lose a game'
yaugiqá mayaa! 'Take the cold!'
23. dokta kat 'surgeon'
tótaama wáíye. 'There is a doctor.'
24. haus kat 'surgery theatre'
naammá wáíye. 'There is a house.'

25. wokim siga 'to roll a cigarette or cigar'
ayáamma amiyo 'Give him your hand!'
26. yu stap long wanem klas nau? 'What grade are you in?'
emá nóin-aapepaakaqa maano? 'Which grass are you at?'
27. ka:is bilong comunio 'a ciborium, communion cup'
káritima, arááq-aaware 'grease, it is communion food'
28. mekim tandok 'to give the signal'
aamá waerao! 'Translate it!'
29. tandok bek 'two o'clock, when afternoon work is generally resumed'
anónnama waéma timámiyo! 'Translate the answer and tell him!'
30. longpela trimas 'a tall thin person'
ayaaqtááq-kaimma 'a long dream'
31. díngi i-nogat pin bilong en 'The dinghy has no oarlocks.'
kemá tuyánammá kéitaune, wení waimá íma wáiyé. 'I think that he doesn't
have a needle.'
32. yu kam arataim. 'Come some other time.'
aati-aatimá iyo! 'Come all the time!'
33. yu no tanim olsem, tanim arawe. 'Don't turn it like that. Turn it the other way.'
íma wáiqma miráuma ikatikama uwo! 'Don't turn it like that, tighten it!'
34. ol rip i-kamap antap. 'The reef has risen to the surface.'
ánama yanaamá wáiyé. 'The leaves are overhead.'
35. lainim ol sumatin long rait. 'Teach the pupils to write.'
yiráátiyo! máqtêma irautakáqá oro! 'Show them! Everyone go to the light!'
36. rait long pepa 'to write on paper'
wanaaráqá kegaiye. 'On the paper it is burning.'
37. em i-lainim rait. em i-lain long rait. 'He is learning to write.'
autamá wemá kárayaiye. 'The flame is burning him.'
38. stirim kanu 'to steer a canoe'
únópi -kááremá moyámmá kémayaiye. 'He is stealing the boat.'

39. stirim tingktink 'to inspire someone'
áyánámmá moyámmá kéyabiye. 'He is stealing his ideas.'
40. kik kros 'a grudge game in soccer'
 ikamí-kórótímá 'hitting, kicking clothes'
41. mekim dai kros bilong ol 'to settle their quarrel'
korótima kokoqá oro! 'You all dry the clothes!'
42. tok kros 'a quarrel'
aa-kórótímá 'clothes for speaking'
43. rot kruse 'the way of the cross'
korótigoni aammá 'the clothes' path, i.e. a hole or tear'
44. pris i-misa nau. 'The priest is celebrating the mass now.'
timuqá marakaupo! ábêma kéyao. 'I am pleased, they are playing.'
45. grasnok 'the feathers of a fully grown bird'
memotákoni ārōkima 'the mirror's lock'
46. dispela skru i-no gat mama bilong en. 'This bolt has no nut.'
 maa-túgárúmá anōama íma máiye. 'This school has no mother.'
47. naip skru 'pocket knife'
tugarunáúkē-támmá 'a knife from school'
48. skrudraiva 'a screwdriver'
tugaru-tarai-wama 'a school driver'
49. taitim skru 'to tighten a bolt or screw'
tugaru-tarai-wama yabitima akoqnáá uwo! 'Pull the school driver hard!'
50. lait bilong glas 'the flash from a mirror'
námagoni tágama-yaqtaaqa 'the weed's shining-thing'
51. bal let 'leather ball'
naaé-fúbóqá 'red ball'
52. kapa bilong let 'belt buckle'
naaégóní káápaama 'the metal of the red (one)'
53. tok ingglis 'English'
 aamá, karítima 'flattery'

54. mi kisim stik long papa. 'I got a whipping from my father.'
kemá ketibónopake karimá mataune. 'I got sick from my father's presence.'
55. sua i-stingk. 'The wound is festering'
nááokoni yátâma 'the sore's sliver'
56. rausim stingk long sua 'to clean a wound'
nááopike yátâma yaqtubuwo! 'Pull the sliver out of the sore!'
57. ol i-taranggu tru. 'They are really miserable.'
yemá áráimma akikimá mááe. 'It's true, they are hawks.'
58. mipela taranggu pikinini bilong Eva. 'We poor banished children of Eve.'
ketáámá akikíé, Ébáni iyápópoanataa máune. 'We are hawks, because we
are Eve's children.'
59. taranggu, olgera ol i-dai pinis. 'Unfortunately they all died.'
yemá akikima máqtepaqa pukurááe. 'All the hawks died.'
60. sapim kundu 'to carve a tomtom'
únopi-káárémá ikuyuwu! 'Bring up the boat!'
61. em i-kostim haumas moni? 'How much does it cost?'
wemá nóra umá óqtane kétiyo? 'How much money did he say?'
62. bumbum 'a torch made of dried coconut leaves'
kuikuyo! 'Come together!'
63. Got i-hipim pe bilong mipela . 'God rewards us well.'
Áánûqtuma ketáái meyámmá tíwâqnaa kéitaae. 'They know that God helps with
our wages.'
64. em i-kostim plenti moni 'It costs much money.'
wemá mónetabama anón-awíqa kéyaiye. 'He has a big name about money.'
65. makim kos 'to set a course'
auyarakao! 'Close it!'
66. háisapi plak 'raise the flag'
páráama muté yauyuwo! 'Lift up the board!'
67. soim tang 'to put out one's tongue'
nommá yanái-taraamuma aráatiyo. 'Show him the water drum!'

68. wataim baimbai yu kam? 'When will you come?'
egáráqá maabáq-iyo! 'You two come together!'
69. pis waitсан 'bass'
 noyáákararaq 'with fish'
70. bigín bilong wok 'to start work'
 mayáí-yáqtááqá mamé iyo! 'Bring the things for work!'
71. bigín bilong singsing 'the beginning of a hymn, song, or dance'
 imá yáí-yaqtaaqá mamé iyo! 'bring the things for singing!'
72. paít i-bigín. 'The war began.'
 aáíqá í-yáqtááqá mamé iyo! 'Bring the things for fighting!'
73. haus i-daun 'The house is low.'
mara-náámmá 'a dirt house'
74. gris bilong katres 'the powder, explosive of shell'
ketinóganekoni áinomma 'my kinsman's fat'
75. bol bilong katres 'buckshot'
ketinógaani áwáákama 'my cousin's groin'
76. skin bilong katres 'the jacket of a bullet or shell'
tinógaani áinomma 'my cousin's fat'
77. long lephan 'to the left, on the left side'
karu-áyáámá 'leprous hand'
78. ol sumatin i-longlong tumas. 'The pupils are very ignorant.'
yemá máqtepaqa aiboq-naaboq-kéune. 'I'm stupid about them.'
79. yu go poret. 'You go forward. Go ahead!'
 emá komá ikatiq-owo! 'You go and be shy or bashful!'
80. polisim su 'to polish shoes'
i-wááyúkátí áítauq-anaamma 'the policeman's shoes'
81. haus karim 'the birth hut, the maternity ward'
kááregoni naammá 'garage'
82. ain bilong tomjok 'axehead'
kukóní aúramma 'the axe's eye' (no meaning)

83. em i-stap we? Natink. 'Where is he? Who knows?'
wemá náakaraq nokáámma máíyo? 'Where is he at night?'
84. natink em i-tok olsem, nogat? 'He probably said it this way, didn't he?'
nokáámma weé tiráíye. imiye. 'Last night he said, 'No!'
85. natink em i-orait. 'I suppose it's all right.'
nokáámma wemá íráqône uráíye. 'He got better in the night.'
86. pilai sito 'to shoot dice, to play dice'
márûpi káitoma káitoma kéíye. 'It's dusty outside.'
87. nambatu pasis 'the less used harbour, an emergency harbour'
anáeka-paatima 'a later letter'
88. em i save malen nais tumas. 'He knows how to draw well.'
wemá wáqtôma íráqôma aónaraiye. 'He saw a nice skirt.'
89. em i-baut long bisop. 'He bowed to the bishop.'
wemá noyáá-waayuma kóyáutuma íráíye. 'He circled the fish pond.'
90. bank bilong nildaun 'a kneeler, a pre-dieu'
nírigoni yawaamá 'a nail case'
91. brukim mandato 'to break a commandment'
waayúkama akátíyo! 'Break the people in two!'
92. holim mandato 'to keep the commandments'
waagómá yammá máqtokaiye 'The man is holding the taro.'
93. kaunim olgeta mandato bilong God. 'Enumerate the ten commandments.'
yorautuwo! máqte-qtaqtaqa waayúkama Áánûqtuni awigayao!
'Count it! Mix everything and God's people.'
94. kolim ten mandato 'to recite the ten commandments'
áwîqa tiyáákama waayúkama yaaro! 'Let the people name ten.'
95. lek bilong kandel 'candlestick'
ketinógaani aitaqqa 'my cousin's foot'
96. hepi krismas 'Merry Christmas'
karitimaatimá yíwâqnaa oro! 'You all help them at Christmas.'

97. hepi nu yia 'Happy New Year'
aúge-karitimaatima yíwâqnaa oro! 'You all help them in the new year!'
98. het bilong man 'human skull'
waayúkama yíwâqnaa oro! 'Help the people!'
99. kaikai gip 'to take poison'
aáwaqa amiyo! 'Give him food!'
100. tromoim anka; legoim anka 'to drop anchor'
ayaánepake i yaabótuwaa. 'Throw it from your hands!'
101. lai long gutnem bilong arapela man 'to slander'
móraraqa araamá iráqôn-awíqa yaao! 'Line up one at a time and call your
good name.'
102. sodarim lik long sospen. 'Solder the leak in the pan.'
pááqya-tinima taróq-umá arutaa. 'Fix the little pan.'
103. kanu i-lik. 'The canoe leaks.'
únópi-kááréma pááqyane. 'The boat is little.'
104. kerasin i-lik. 'The kerosene is leaking out.'
pááqya-karaatinima 'a little kerosene'
105. haus moni 'a bank'
nóra-umá mōnerabiyo? 'How much money?'
106. moni giaman 'bad money, counterfeit money'
kaqáári-abayaanapine. 'It's a false morning. That was an insincere greeting.'
107. kolim nogut nem bilong God 'to curse, take God's name in vain'
arúfama yaqtoraa, Áánúqtuni áwíqa. 'Hold tight God's name!'
108. pogivim pinis 'forgave'
tímitukaiye. 'He finished giving it to me.'
109. hapim wok 'to do only half a job'
mayáimma múte mayaa! 'Lift up the work!'
110. hapim kaikai 'to fast'
aáwaqa múte mayaa! 'Lift the food high!'

111. ensin boy 'a boy who tends an engine, a mechanic'
wemá penitíní-iyapoe. 'He's a benzine boy.'
112. lim bilong kanu 'a coconut flower sheath used for bailing'
únópi-kááregóní ánama 'the boat's leaf'
113. mambu bilong masket 'the barrel of a gun'
kamáágukoni anamá 'the basket's bamboo'
114. draiwara 'low tide, ebb tide'
káárema awetái-naqa 'a driver'
115. tuhap 'two parts'
imutimmá 'perspiration'
116. katim tuhap; brukim tuhap 'to cut in two; to cut in half'
imutimmá kánaao!. 'Perspire!'
117. wing bilong balus 'the wing of a dove; an airplane wing'
waarútingoni yauqiqa 'the coldness of the plane'
118. ol kanaka i bung bilong painim pis . 'The natives are gathering to go fishing.'
kanaagáqqa noyáákoni ayááqtáma abáá kéoe. 'The natives are looking for fish
bones.'
119. _____
120. em i-ron nabaut long haus. 'He ran around the house.'
wemá naaúpaqa taíq-uráíye. 'He spoiled the house.'
121. kanu i-ron stret long Wewak. 'The canoe is sailing straight to Wewak.'
Wiwáákiqa únópi-káarēmá taíq-uráíye. 'The boat is broken down in Wewak.'
122. raunim het long bilas 'to encircle one's head with a headdress'
aqnókake konaari-yáqtáqá maqtuwaao!. 'Get rid of the decorations from your
head.'
123. nok bilong haus 'the ridge of the house'
naakóní arókima 'the lock of the house'
124. rop bilong banara 'bow string'
ekóní ánnama 'the banana's vine'

125. slekim banara 'loosen the bowstring'
eqá karekóqa uwo! 'Make the bananas loose!'
126. supsup bilong banara 'an arrow'
ekóní aítauma 'banana fuzz'
127. sut long banara 'to shoot with bow and arrow'
átê-eqa 'delicious bananas'
128. pikinini bilong yambo 'the guava'
aammá áuqmakaiye. 'It is forbidden.'
129. hotim pateri 'to charge the battery'
páátarema yaqtoraa! 'Hold the battery!'
130. yu pausim tiktik. 'Make a bundle of reeds.'
emá pááqyane uwo! 'Do a little!'
131. masin bilong rait 'typewriter'
áráetigoni maatinimá 'a rice machine'
132. rait kranki 'to write incorrectly, to write wrong'
áráetima taíq-kéiye. 'The rice is bad.'
133. plet bilong kap 'a saucer'
káápugoni márûqa 'the cup's place'
134. plet bilong sup 'a soup plate'
túpugoni márûqa 'the soup's place'
135. plet bilong boi 'any bowl used as standard issue to workers'
iyápóti márûqa 'the boys' place'
136. plet kanaka 'a carved wooden plate or platter'
kanagáá-waayukati márûqa 'the native people's place'
137. putim tuptup 'to cover with a lid'
waatamá maraao! 'Place the spear!'
138. plet semen 'a porcelain plate or dish'
netuqyáá-agaye-naqa 'a person with lots of shame'

139. brukin bol; katim bol; rausim bol 'to castrate'
túbôqqa yubáqtuwaaó! 'Throw the ball!'
túbôqqa káráqtuwaaó! 'Cut the ball!'
túbôqqa máqtuwaaó! 'Get rid of the ball!'
140. em i-hot long mekim skul. 'He is zealous about teaching.'
wemá tugaru-náámma taíq-uráíye. 'He is hard on the school.'
141. baiim kot 'to bribe the court'
kááti-aima meyaniq-uwo! 'Pay the card talk!'
142. em i-lep. 'That is left over.'
wemá wíráama kéíye. 'He is laughing.'
143. ples hait 'a hidden place, a secret spot or location'
koko-máruqá 'a warm place'
144. Tomas-O! 'O, Thomas!'
netuqyaané. 'There is plenty.'
145. Lusia-O! 'O, Lucy!'
ibéqyuwaaó! 'Forget it!'
146. ai bilong sua 'the head of a sore or abscess'
aitauq-anaakoni aúramma 'the eye of the shoe'
147. yau pas 'to be deaf'
emá aúyakaane. 'You are closed, forbidden.'
148. makim gudpela pasin 'to imitate good example'
íráqo-qtaqtaaaq taroq-uwo! 'Make something good!'
149. naip meru 'a small kitchen knife, a paring knife'
aragóni yáámma 'the woman's knife'
150. santu olgera 'all holy'
máqte-qtaqtaare, máqtemma 'everything, all'
151. wel santu 'holy oil'
abááq-aama 'wild talk'
152. klos bilong mí i-wet olgera. 'My dress is all wet.'
keti unáákáqtôgoma wayámma káuraiye. 'My clothes have become white.'

153. daunim sel 'to lower a sail'
tórema nawikaao! 'Swallow the salt!'
154. _____
155. _____
156. klos misa 'a vestment'
korótima káonaune 'I see the clothes.'
157. maus bilong gumi 'the stem of an inner tube'
ketáái tóyauqa 'our mouths'
158. marasin bilong pasim gumi 'rubber cement'
ketáámá ábō-kái-maratinima 'the medicine for when we're tired'
159. yu ministran? 'Are you an altar boy?'
ketáámá tiqá káyabaiye 'Our noses are running.'
160. pukpuk man 'a male crocodile'
aakarááq-naqa 'an ugly, disfigured person'

FOOTNOTES

1. By correspondence we mean that sound transfer which the Usarufa speaker automatically makes in correlating the sounds of Pidgin to those of his own language. This correlation is reflected in transliterations, borrowings, and pronunciations of Pidgin words.
2. Where there are more than two choices of interpretation the percentage of course must be adjusted downward.
3. Many of the asterisked terms are obviously derived from English rather than from Pidgin. However these terms are used commonly by Usarufa speakers of Pidgin who know no English. A further note on the list of misinterpreted words listed here: many of the words misinterpreted are relatively uncommon Pidgin terms and some are quite unknown to Highlanders. These are counted as misinterpreted rather than unknown because the informant thought he knew the words and so translated what he understood them to mean. Words which he did not know he simply transliterated.