

THE PHONETICS OF PIDGIN AND CREOLE: TOWARD A STANDARD IPA TRANSCRIPTION

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1. INTRODUCTION: *Realphonetik*

The following is a presentation of the phonetics of: Cameroon, Nigerian and Jamaican Pidgin; Krio, Tok Pisin, and Trinidad. The phonetic transcription of pidgin and creole is rarely given. If it is given, the transcription is often inconsistent and the descriptions of the articulations of a number of sounds are controversial. For example, in research and language texts, a nonstandard IPA-pidgin or creole is given in place of standard IPA. An extended and precise rendering by the International Phonetic Alphabet (IPA-1996) is developed here to provide a method by means of which to clarify these difficulties (see also 1996 IPA chart at end).

Contemporary work in linguistics has stressed abstractions and universals in phonemics and phonology, as well as the experimental approach, which, while valuable, have led to the neglect of phonetic analysis and phonetic transcription. A stereotyped or phonemic transcription is typically given instead of the actual sounds heard. The phoneme is concerned only with phonological 'sound'. Tătaru (1978:91) wrote, "Although his [F. Agard's] solution is acceptable from a purely phonologic-theoretical standpoint, as it simplifies things, it is incorrect from the point of view of the concrete phonetic characteristics" [articulatory and auditory]. The result is that the practical and accurate phonetic transcription of pidgin and creole is not easily accessible to the researcher, language teacher, or learner.

Kerswill and Wright (1990:272–273) point out problems with the reliability of present methods of transcription. Symbols are said to equivocate between describing place of articulation and auditory descriptions of sound; vowel quality is confused with vowel length, and formants are erroneously thought to be descriptions of vowel sounds. Orthography is virtually never an acceptable guide to pronunciation, although Cassidy (1993) has attempted to establish a phonetic orthography for English creoles of the Caribbean. He notes that Jamaican English is basically oral and that each writer has his or her own spellings, although in some cases standard spellings may be found in the *Dictionary of Jamaican English* (Cassidy and LePage 1967).

The method used here is the case or paradigm method of analysis. The main burden of the discussion is then carried by the presentation and analysis of specific examples, rather than on a broad transcription based on ideal phonemic entities in search of universal principles. Whereas the usual article on phonetics uses as few examples as is necessary to make such theoretical points, the reverse is the case here. Only by the examination of numerous specific examples of actual pronunciation can the sound-picture of pidgin and creole emerge. This sort of transcription is called here *Realphonetik*. For the language teacher or learner there are

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no universal phonemic rules of pronunciation which will allow one to correctly pronounce pidgin and creole. The rules, even if known, would be so complex as to preclude their memorisation and employment. If, on the other hand, a dictionary with IPA transcription were provided for the pronunciation of each word, each could be pronounced correctly. Therefore, after a critique of the literature on the sounds of pidgin and creole, a sample paradigmatic lexicon is provided here. Theoretical statements are grounded on and reducible to these given examples. They also provide the basis upon which to compare diverse transcriptions from the literature, thereby generating a comparative phonetics. This reveals the differences and reliability of transcription, but also its possibilities.

On the other hand, it is also clear that phonological, phonemic, experimental, pedagogical and other approaches are also useful and must be constantly integrated with the more narrow phonetic approach in order to obtain an adequate and holistic account. But it is also evident that the experimental and phonemic approaches are only as sound as the phonetic accuracy upon which they are based. Kelly and Local (1989:1, 26) writing about phonology state, "Phonetic records of spoken language material are the only serious starting point for phonological analysis and that they should be as detailed and accurate as possible...It is not possible to have too much phonetic detail." Although the purpose of this analysis is not to show or try to resolve the relationship between phonetics and other areas such as phonology, it must be noted that such relationships were found to be controversial. There is also concern on the practical level. An educated research position might rather take the view that each approach has something to offer, but that the concrete phonetic approach should no longer fall into neglect; it appears to be rather the *sine qua non* of analysis. The search for universals has led to the neglect of work on the basic subject matter of phonetics itself. Bailey (1978:141) expresses this view in his statement, "Theoretical phonetics and phonology have made great advances in the last decade or so, but the practical field of transcriptional phonetics has not done so."

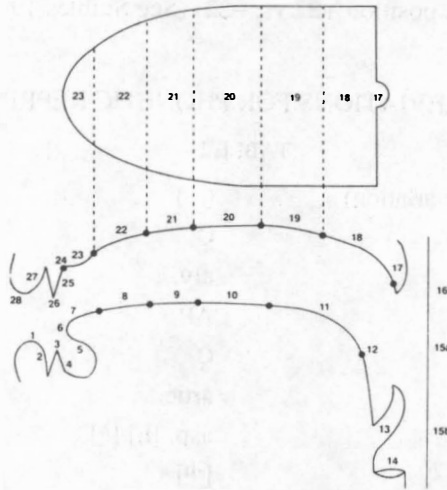
Phonemic transcription uses generic symbols such as /r/ and /ə/ which refer only to classes of sounds rather than to the specific sound spoken, that is, they do not refer to the phonetic [r] and [ə]. The phonemic slash lines // are often illegitimately replaced by phonetic brackets, e.g. [r] is given when the sound is actually [ʀ]. The following chart is more complete than necessary for pidgin and creole, but it serves to allow for phonetic comparison with other languages and to show what does not occur in pidgin and creole. Also, as will be shown in Tok Pisin, a pidgin and creole language often adopts the pronunciation of the other languages of the speaker. Thus, an expanded list of phonetic symbols is given here which may be used to represent the phonetic sounds of any language.

In regard to a standard pronunciation or orthography for Tok Pisin, there does not seem to be one, although a standard orthography booklet was published in 1956 (discussed in Wurm, Laycock and Mühläusler 1984:128, 135). There is rather tolerance for the pronunciation of each group of speakers, although some mocking or disparagement does exist (See Wurm 1985b). This may be contrasted with British 'Received Pronunciation' which problematically sets a standard for English (See Shibles 1995a).

Lynch (1990:387-397) recommends a national language institute, standard written language and dictionaries for Tok Pisin (p.396). The problems with this approach may be compared with the problems of establishing a standard English. In any case, if one is to write standard or nonstandard texts and dictionaries, it is here argued that the IPA phonetic symbolism be used, especially in dictionaries. A dictionary without IPA precludes anyone

from knowing how the language is pronounced. It is unscientific and a serious phonetic deficiency that few of the dictionaries of the world's languages use phonetics of any kind and those that do are often not standard or careful IPA phonetics. Whether or not a language is standard we require at least a standard phonetic system in which to render it, and this, in practice, we do not have.

2. STANDARD ARTICULATION DIAGRAM AND DESCRIPTIONS



T = tongue, L = lip

1. lip (L), midlabial (outer L = exolabial)
2. inner lip, endolabial
3. tip of teeth (3–26 = interdental)
4. lower, inner teeth (postdental: upper, mid, or lower)
5. underside T
6. T tip
7. T apex
8. blade, front, laminal (lamino-)
9. predorsal (middle)
10. mediodorsal (middle)
11. postdorsal, back
12. T root (radical, radico-)
13. epiglottis
14. glottis, vocal cords
15. rear pharyngeal wall
 - a. 12–15a, upper pharynx, oropharynx
 - b. 12–15b, lower pharynx, laryngopharynx, “emphatic”
 (Also, the larynx may be raised or lowered.)
16. nasopharynx, velopharyngeal closure = 17–16
17. uvula, dorsovelar
18. velar, soft palate, velarisation = 11–18
19. prevelar, postpalatal, palatovelar
20. mediopalatal

21. prepalatal, palatoalveolar
22. postalveolar, alveopalatal
23. prealveolar, alveolar ridge = teeth ridge, (front, right, or left side)
24. dentoalveolar, gumline
25. inner, upper teeth (post dental: upper, mid, lower area)
26. tip of teeth
27. upper, inner L (for inner, use *endolabial*)
28. upper, mid L (for outer, use *exolabial*)

(+ = forward, - = back, e.g. position +22 vs. -22) (See Shibles 1993b, 1994g.)

3. SYMBOLS AND ABBREVIATIONS FOR PHONETIC REPRESENTATION¹

TABLE I

additional information (or a variation)	()
advanced tongue root	Ç
alveolar	alv.
American pronunciation	AP
apical	Ç
articulation	artic.
aspiration	asp. [h] [h̥]
(un-)aspirated	[h̥]
author's artic. chart	= C+no. (e.g. [d] 7-25)
author's V chart	= V+no. (e.g. [Y] II 9.5)
becomes	>
(British) Received Pronunciation	RP
centralised Vowel (V)	(eg. ü) (V̈)
consonant	cons., C or [c]
dental	Ç
equals or tautology	=
even (not diphthong)	pure, even
final	-C, -V
glide:	
a. offglide	C ^v or c ^v V ^v or c ^v
b. onglide	v or cC ^v v or cV
c. offglide	[v̥] [c̥]
initial	C- V-
intonation:	1-5 = low-high. [^] =232, [˘] =323
	Bold 1-12 = low to high tones

(If [3] shown, other intonations are usually [2])

¹ Compare with the IPA-1989/1996 Chart for additional diacritical marks.

IPA-S	IPA transcription by W. Shibles
labialised (see rounded)	[^w W V̥]
laminal	ç
language discussed is usually in italic	
laryngealised	ç̥
lateral release (see stress symbol)	C ^l
length (for V or C):	
half long	V ^ː
long	v: or V:
half extra long	V ^{ːː}
extra long	v:: or V::
short	[V̥] (Compare C ^ː)
extra short	V̥̥
regular length	(no symbol)
linking	CV
lip(s)	L
lip protrusion	L pr.
loud-soft or soft loud (Swedish)	ç
medial	-C-, -V-
nasalised	Ṽ
omitted	(Use strikethrough) e.g. (ɬ)(-)
palatalisation	pal., [j] [i]
pause	[.] to [.....]
pharyngealised (upper, lower) (ʔ ≠ ʕ)	phg, [ʕ]
phoneme or non-IPA symbol	/ /
phonetic symbol (IPA is in larger type)	[]
prevoiced	˘C
r untrilled	r -tr
raised V, C	V̥
range (see also "variation")	
release (partial to unreleased)	V ^ː C ^ː
retracted T root	ç
rhoticity (should be replaced)	ɾ, e.g. æ > øɪ)
(less) rounded	V̥
(more) rounded (see labialised)	V̥̥
similarity	≈
simultaneity	CV
slash sign	(e.g. a/o = a or o) /
spread lips	spr. L

strength/intensity (weak to strong)	ð ò ó ó
stress (primary)	[ˈV]
stress (secondary) (see syllabic)	[V,]
syllabic (see stress)	(e.g. ŋ) [V]
(no) syllabic break	<u>V</u>
syllabic break (see pause)	(e.g. pa.sa) [.]
tongue	T
unacceptable form, or footnote	*
uncertainty, unintelligibility	?
usually	usu.
variation (see “range”)	var.
velarised or phg	(e.g. ɖ) [˘]
velarisation (C̄ preferred. ʸ ≠ ɣ)	vel, or [ʸ]
voiced	ç
voiceless	ç̣
vowel	V or [V]

4. STANDARD PHONETIC REPRESENTATION OF VOWELS

4.1 EXTENDED IPA-S VOWEL CHART

TL̄	range	round	close*		central		back		round	
			front	tongue high	tongue high	back				
y = īu	ɨ - ʉ	i ₁	y ₉		i ₁₇	ɨ ₁₈		ɯ ₁₆	u ₈	
		I _{1.5}	Y _{9.5}					ʉ _{15.5}	U _{7.5}	
ø = ēo	ɛ - ʏ	e ₂	ø ₁₀					ɤ ₁₅	o ₇	
		ɛ _{2.5}	ø _{10.5}		ə	ø		ɤ̣ _{14.5}	ọ _{6.5}	
œ = ēɔ	ɛ - ʌ	ɛ ₃	œ ₁₁		ɜ			ʌ ₁₄	ɔ ₆	
		æ _{3.5}	œ̣ _{11.5}		ɞ			ʌ̣ _{13.5}	ɔ̣ _{5.5}	
æ = āɔ	ɶ - ɶ	a ₄	æ ₁₂					ɑ ₅	ɔ ₁₃	
				I	II	III	IV	V	VI	VI I
				open		tongue low			back	

* TL̄ = Tongue is in the articulation position for i and the lips are in the position for u.

4.2 KEY WORDS FOR THE EXTENDED VOWEL CHART

The following are key words, taken from actual transcription, as a guide for each vowel symbol. One may select one’s own words suitable to one’s own language and dialect.

Languages other than English are used for front rounded vowels because the latter tend not to occur in English except in dialect, emotional or dramatic usage. The schwa ə, ɜ, ø, ɐ, ɨ, ɪ are not indicated because they are redundant and may be more precisely represented by centralising other vowels as follows. Furthermore, any additional vowel can be centralised, for example, ø, œ, ɤ, ʊ (see discussion of schwa below).

English (AP) Key Words

i	be	æ	bad	ɔ̄	ball	ʌ	but
ɪ	big	a	bar	o	bone	ʌ	up
e	bay	ɑ	baa	ɔ̄	bore	ɛ	yes
ɛ	air	ɒ	hot (RP)	u	boot		
ɛ	bet	ɔ	bob	ʊ	book		

4.3 DESCRIPTION OF EXTENDED VOWEL CHART

4.3.1 In developing the extended vowel chart, the attempt has been made to retain the symbols and the basic descriptive and relational import of the IPA chart (Shibles 1993a).

4.3.2 The Cardinal vowels 1 to 4, 8 to 5, 9 to 12, 16 to 13, are close to open. The phone [ɑ] actually belongs in the unrounded, and the phone [ɒ] in the rounded column, but to keep traditional numerical order, they are placed as shown.

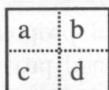
4.3.3 Gaps in the IPA chart have been filled by the addition of the diacritic [] to the standard vowels, plus a fractional Cardinal number. Example: ɛ 2.5 [ɪ] and [ɣ] have also been numbered. An example is [ɰ] for Japanese. This latter symbol is equivalent to 15.5 on the chart.

4.3.4 The position of any sound may be located on the chart in several ways :

a. By symbol and column number, e.g. i III, ɣ III.

b. By Cardinal number and column number, e.g. 1 III, or 9 III. This has the advantage of not requiring a special phonetic font.

c. If desired, each square may be further divided into four sections:



Thus, one can specify: i III c, or 6.5 V a.

4.3.5 EQUIVALENCE

Every vowel may be defined in terms of every other vowel. Example: [ɰ = ɰ]. Although an equivalent, it may be sometimes more accurate to express [œ] as ʌ 14 III. [o = ɔ̄, ʊ = ɔ̄]. To avoid redundancy, these latter two equivalents may be used only to locate sounds between two adjacent symbols. Accordingly, [ɰ] is closer to [ʊ] than [o], [ɔ̄] is closer to [o] than [ʊ]. A range of equivalencies is given to the right of the chart. Example: The [ɣ] may range from [ɪ] to [ɰ]. These equivalencies may be used for narrow transcription, for example, 14.5 may be better represented for a certain sound by [ʌ] than by [ɣ].

4.3.6 The schwa [ə] and central vowels [ɜ, ø, ɐ] are unnecessary. They can be more accurately represented by diacritics or other vowels. Example: ə = ɛ̄, ø = ø̄ or ö, ɜ = ɛ̄. It is

not the case, as is usually thought, that all unaccented vowels reduce to a single generic *wild card* schwa sound. None do, and it is preferred to keep the original quality of the reduced vowel. Example: Danish *uge* 'week' is [u:.ɑ], not [u:.ə] as it is given. French *que* [kə] is actually [k̠] or [kœ]. Swiss *aber* is [abr], not [abər]. IPA defines [ɜ] as any "additional mid-central vowel". This is unnecessary, vague and confusing. (For a full analysis of the schwa, see Shibles 1994e.)

4.3.7 Cardinal 17 [i] and Cardinal 18 [ʊ] are also unnecessary (or inelegant) as they can be rendered by centralised signs: [i̠] and [ʊ̠], respectively. The Cardinal numbers 17 and 18 can be omitted. Maddieson (1984:147) says that /i/ is perceptually close to /ɪ/. Thus, we may give [i̠ = ɪ̠], or regard i̠ as different from ɪ̠.

4.3.8 To the left of the chart is a column headed $\widehat{\text{L}}$ which means, for example, for [i̠] the tongue is in the place of articulation for [i], but the lips are in the position for [u]. These simultaneous articulations produce [y], thus [y = i̠] (See Shibles 1994f). The tongue moves forward from rounded [u:] of German *lugen*, to [y:] of *lügen*, and from [ʊ] of *Stuck* to [ʏ] of *Stück*. Symbols for front, round vowels are useful, though not absolutely necessary, because they may be replaced by rounding the unrounded counterpart of each pair. Example: [y = ɨ̠]. Conversely, [i] may be reduced to [y̠].

4.3.9 The chart may also be used for consonants in order to specify tongue position, roundness and openness. Example: [ç] is a closer [i]. Approximants, semivowels, and fricatives are already vowel-like. Not all words have vowels.

4.3.10 The acceptable range, or sound space, may be plotted on the chart. Example: /o/ = 6.5/7 VI to VII. That is, the range of the pronunciation of /o/ is in these four squares.

4.3.11 It is often stated that all vowels are voiced. This all-statement is countered by the observation that there are, for example, voiceless vowels in Spanish and Japanese.

5. CLARIFICATION AND EXPANSION OF IPA PHONETICS

"Transcription is a messy thing". Kerswill and Wright (1990:273)

Kerswill and Wright (1990), as well as others mentioned below, have noted serious problems with phonetic transcription and reliability. Therefore a number of proposals are made here in order to put phonetic transcription on a more scientific basis and provide for more narrow and reliable transcription.

5.1 THE PHONETICS VERSUS PHONEMICS CONTROVERSY: A BRIEF CRITIQUE AND REVIEW OF THE LITERATURE

5.1.1 INTRODUCTION

One test of a genuinely healthy science is its practice of aggressively criticising its own concepts and methods. One way of providing such a self-criticism is by exposing controversies which are either not recognised, silenced, denied or simply ignored. What I call here the 'Phonetics versus Phonemics Controversy' will accordingly be addressed.

An examination of the literature on the controversy is presented revealing that there are a number of serious unresolved issues in phonemics and phonology which are not being adequately faced, such as: 1) their relation to phonetics, 2) the definition of a phoneme, 3)

mentalism, 4) universalisation, abstraction and idealisation, 5) theory of meaning, 6) idealistic rules, 7) lack of adequate phonetic grounding, 8) lack of usefulness for language teaching, 9) segmental atomism and semantic exclusion, 10) theory of emotion, 11) theory of evaluative language, etc.

While on the one hand phonology and phonemes are regarded as being the central methodological paradigms and models for the analysis of speech sounds, some have objected that they have serious shortcomings. "The phoneme theory seems to us to have nothing interesting to offer. Indeed it has done a lot more harm than good" (Kelly and Local 1989:6). For example, Foley (1977:3) states, "Transformational phonetics is vitiated by philosophical errors, three of which are descriptivism, reductionism, and simplicatism...The philosophy of science...is fundamentally erroneous".

We can become captivated by a model, or commit the metaphor-to-myth fallacy. In this case, phonology appears to have replaced phonetics to such an extent that there has been little recent research done on phonetics as such: "Little has been [done] in transcriptional phonetics as has been done in phonology" (Bailey 1978:141-149). Phonemics "even disparaged phonetics" (Kelly and Local 1989:1). Only now are standard vowel charts and articulation diagrams being developed (see Shibles 1993a, 1993b, 1994g). Phonology seems to have replaced phonetics.

The position held here is that each model: phonology, phonetics, etc. is an hypothesis or root metaphor which serves to give insight. No model is absolutely true or absolutely false. *A fortiori* it is not argued here that if phonetics is well-founded then phonology is not. On the other hand, we cannot merely discount or ignore prevailing criticisms. The present account will accordingly concentrate on this largely neglected critical literature.

There are numerous theories and different definitions of the phoneme. Jones said, "I find all the attempted definitions of the phoneme to be unsatisfactory" (1967b:216). Palmer (1972:79-81) observes that the phoneme has been alternatively defined as: distinctive sound features, a psychological equivalent of speech, a mental construct (competence), a phonic image, contextually exclusive sounds. To this may be added others such as concepts from: nonsegmental, autosegmental, suprasegmental, synchronic, diachronic, prosodic, and metrical phonology.

5.1.2 MENTAL PHONOLOGY

One prevalent definition of the phoneme is given in terms of meaning. It is a minimal contrastive sound unit such that the substitution of one phoneme for another causes a change in meaning. In view of the recent work in philosophical psychology, it can no longer be held that mentalistic meanings exist, without first presenting one's arguments. "Ghostly entities such as meanings, sense or ideas provide no more than the ghost of an explanation" (Scheffler 1979:11). It is no longer acceptable to use the word *meaning* (or its synonyms: semantic, morpheme, phoneme, thought, etc.) without defining it.

Mythical *meaning* has appeared fashionably in the literature as a *speech act* (Searle 1969). A mental *act* can be just as mentalistic as meaning (see Kempson 1977). Parker (1986:86) states, "Phonology is the study of mental or psychological phenomena". Hammerly (1991:173) regards generative phonology as mentalistic, rather than as physical. Accordingly, the phoneme bracket // refers to the mental, and the phonetic bracket [] refers

to the actual pronunciation. Chomsky, with his widely-known notions of “deep structure” and inner “competence,” is also a mentalist. About this Milroy (1985:175) states, “There are considerable problems in the assumption that theoretical linguistic constructs have any kind of analogue outside of linguistic data”.

Another mentalistic relic found in contemporary linguistic literature is the word *mind* itself. Sloat, Taylor and Hoard (1978:4) state that in phoneme theory, “the mind is disposed to consider some aspects of sound more significant than others”. Ryle (1949:40) calls this the “Cartesian myth”. He wrote, “Mind is a ghost in the machine...The phrase ‘in the mind’ can and should always be dispensed with”. Chomsky’s terms “deep structure” and “inner mental processes” yield deep confusion to this issue (Gethin 1990:151ff.).

5.1.3 PHONEMES AS IDEAL ABSTRACTIONS

“The aim of phonology is...to make as general statements as possible about the nature of sound systems” (Crystal 1980:269). “In the sense of a single, unified system there is no such thing as structure in language” (Gethin 1990:89). *Phone* refers to the actual phonetic sound, but *phoneme* refers to a theoretical fiction (Crystal 1980:265, Lass 1984:23). “Phonemes do not actually exist: they are theoretical constructs”. (Standwell 1991:139). On this view, phonemes are generic, standing for classes of sounds, not for particular sounds. Jones (1973:172) believed that a phoneme is either a family of sounds or an abstract conception. In this sense, phonemes cannot be either heard or pronounced. “No one has ever uttered a phoneme or a distinctive feature” (Parker 1986:86).

Maddieson (1984:160) notes that some phonologists believe that phonology should concern itself only with purely abstract concepts. Gethin (1990:150) says, “Abstraction is totally irrelevant to what language is, how it actually works”. The main purpose of the phoneme is said to remove the study away from actual phonetic detail (Lass 1984:23). Gethin (1990) and Hammerly (1991:175) hold that the features in the Chomsky-Halle system are useless to the language learner. As a result, transformationalists, for example, are accused of overstatement, using superficial data and in this sense being unscientific (Foley 1977:1–11).

5.1.4 PHONEMIC RULES

“If logicians had their way, language would become as clear and transparent as glass, but also as brittle as glass” (Waismann 1968:23). If phonemics are fictions, however useful, the rules relating them are fictive as well. Can we establish all the phonemic rules? The supra-segmental rules are virtually absent. Ladefoged (1980:496) wrote, “Phonology... patterns are not necessarily used in any way by the speakers of the language,” and “Most of them [phonological features and rules] are completely unnecessary for adequate descriptions of speakers and listeners”. Foley (1977:1, see ix) states, “Transformational phonetics...has nothing to say about the actual nature of language, only about the writing system”. Rules and laws are often presented in such a way as to commit the All-Fallacy. This is exemplified by the following statement: Resnick (1975:7) speaks of the “vowel, which is always voiced, of course”. But vowels are sometimes voiceless, for instance, in Ik and Japanese.

5.1.5 PHONEMES ARE NOT PHONETIC

Lindblad (1980:170) shows in detail how phonemicists add or exclude sounds to suit the simplicity of the system, while ignoring the actual sounds spoken. He speaks of “system constructs, that is, analyses that increase the elegance of a description at the expense of natural phonetic...relationships” (p.204). Local (1983:449) calls phonological theories reductionistic: “This smoothing or filtering out of variability...often appears to be done for no better reason than to oblige data to fit simplistic phonological theories”. In these respects, phonology is a threat to narrow transcription.

The phonemes /ə/, and /r/ are used generically and not for actual sounds. When /ə/ is used it can be shown that it is more accurately represented by another vowel. As a class symbol, ə does not represent a sound at all. In other words, if we see the phonemes /ə/ and /r/, we will not know how to pronounce them. From the viewpoint of descriptive phonetics, phonemics and phonology are pseudo-phonetic. “It is in fact impossible to teach anyone to produce an actual phoneme, which is after all an abstraction” (Standwell 1991:140).

5.1.6 PHONETICS AS THE BASIS OF PHONOLOGY

“Without good phonetics there can be no good phonology” (Buckingham and Yule 1987:123). Relatively few languages have been transcribed phonetically, and only a few of the languages of the world are transcribed using the International Phonetic Alphabet. “How dimly understood the ‘phonetic basis’ of phonology is” (Lass 1984:121). As true today is the following statement by Bailey (1978:141–149): “Phonology suffers from...inadequate transcription data”. Transcriptions are notoriously unreliable, places of articulation are not known, diverse and inadequate symbolisms are used, and IPA phonetic dictionaries of only a few languages are available. In consequence, Lindblad (1980:203) notes: “Distinctive feature analysis presumes a phonetic description. If relevant aspects of the phonetic description are incomplete—which is the case for the Swedish /j/ sound—then the phonological distinctive feature analysis cannot be correct”.

Ladefoged (1980:485-495) objects that the features of phonology, for example, in the work of Chomsky and Halle (1968), do not give full or adequate descriptions of speech sounds. Now even the most professional works on language often give incorrect phonetics (see Shibles 1993ab, 1994abcdefgh, 1995ab).

5.1.7 ARE PHONEMES USEFUL?

“Phonology is...useless as a tool for language pedagogy” (Hammerly 1991:173). “Far from the phoneme being of any assistance to the language teacher, it is rather a red herring” (Standwell 1991:139). “One of the few branches of linguistics that I believe may have practical value is phonetics” (Gethin 1990:89).

The teaching of language requires that *each* word be pronounced correctly. What is required is a dictionary giving what is generally thought to be the correct IPA pronunciation, such as the *Oxford English Dictionary* (1989), or the *Duden Aussprachewörterbuch* (1990). Even here more narrow transcription is required. Hammerly (1991:175) states that from the perspective of language learning, phonemic rules are “absurd”.

These views are expressed in the following: "Generative phonology can have only minor coincidental effects on something as practical as the teaching of second language pronunciation" (Hammerly 1991:176). Foley (1977:11) wrote of the "irrelevance of transformational phonetics to the problems of natural languages". Gethin (1990:63) says that structural analysis has little practical value for the language learner and, in fact, "tends to bog students down".

5.1.8 HOLISTIC PHONETICS

"Virtually all past studies of intonation and attitude have been unsatisfactory" (Couper-Kuhlen 1986:180). Phonetics and phonology have for the most part used the atomistic *segmental* approach to speech sounds. Objections may be raised to this picture regarding:

a. Rigid Segmental Atomism

Some have therefore developed suprasegmental and nonsegmental phonologies.

b. Semantic Exclusion

"Prosodic categories are ill-defined in phonetics" (Rischel 1990:400). Phonemic and phonetic description typically excludes pitch, tempo, loudness, rhythm, force, tone, the quality or timber of the voice, etc. If all we know is the usual phonetics for a sentence we will not be able to know what is genuinely meant by that sentence.

c. Cognitive Implicatures

"Every spoken word or phrase conveys meanings that are not present in the words" (Bolinger 1980:11). But they are present in the words in the forms of pronunciations. Even single sounds have associations. From a tone of voice we can to a large extent determine one's way of life and belief systems. Collier (1985:125) states, "A person's tone of voice is often seen as a more accurate representation of what the person feels" than does what a person says. These non-denotative levels of meaning are conveyed by suprasegmental or voice qualities the knowledge of which is minimal. Wells (1982, vol.1:91) speaks of "voice quality...where our ignorance of the facts is considerable". In spite of its significance, the suprasegmental level has been thought to be superfluous, unnecessary and "optional" (Stockwell and Bowen 1965).

d. Evaluative Implicatures

Our descriptions of phonetic sounds are not objective, but evaluative. Sounds are spoken of as if they have objective physical existence as sounds. They do not. To describe an entity as a sound is, in part, evaluative. Similarly, *Music* ('good sound') is an evaluative term. The same is the case with other terms describing sounds: noise = discord, bad sounds; speech = sounds which are *proper* to language. This is also the case with the abstract symbols of phonology.

e. Emotive Implicatives

"Attitudinal factors are present in every utterance" (Couper-Kuhlen 1986:182). Phonology and phonetics exclude emotive meaning. Knowles (1987:206-207) observes, "Although the attitudinal approach to intonation is a long-established one, very little is actually known in this area". Stankiewicz (1964:247) notes both the failure to attend to emotional features as well as the inadequacy of theories of emotion.

The cognitive theory of emotion (Rational-Emotive Theory) remains to be applied to linguistics and phonetics. Work has been done to show that particles and interjections are not meaningless filler words, but have both full cognitive and emotive meaning (Shibles 1989abc). The theory has also been used to clarify German emotive reflexives, as well as verbal abuse (*Schimpfen*) (Shibles 1990ab, 1992). The theory has not to my knowledge been otherwise used to clarify the emotive and attitudinal features of phonetics. However, it is necessary to do so in order to achieve an understanding of the holistic suprasegmental nature of phonetics.

5.1.9 SUMMARY

The International Phonetic Alphabet provides a solid basis for phonetics. This basis may be extended to include the total cognitive, emotive and behavioral context. This goes beyond phonemes, contrastive meanings, or a short list of features. Put simply, we need a phonetics which is detailed enough so that we can determine what a person is saying in everyday conversations. It is this which therapists and speech therapists also need to know in clinical situations. "We must recognise the multiple functions of sounds in a language" (Stankiewicz 1964:247). Sounds are not mere sounds. Aspects of sounds which seem to be irrelevant are often essential to grasp the meaning. All of the sound is needed to convey the full meaning of speech. Phonetics and phonology may now include cognitive-emotive intonation in the analysis of sounds.

Griffin (1991:182) presented a supposedly more "natural" non-segmental approach to teaching pronunciation whereby the full contextual, emotive and cognitive meaning is attended to. The holistic approach is taken by Ochs and Schieffelin (1989:22) who state, "Affect permeates the entire linguistic system".

The controversy, phonemics versus phonetics, is not seen here as an either-or issue, but rather one of appreciating what each paradigm has to offer, and finding ways in which they can be mutually supportive. Although Bailey (1978:141–149) is highly critical of phonology for not transcribing phonetically, he proposes a science of "phonetology" which can better integrate phonology with phonetics. What is not acceptable, however, is for linguists to continue to ignore the critical literature or become captivated by their model to the exclusion of sound phonetic research.

In the next section, it is shown how the phonetic symbols themselves interrelate, are equivalent, and extend the possible ways in which they relate to one another. The practical use of IPA symbols may thereby be expanded. This will be followed by a paradigmatic and comparative IPA phonetic transcription lexicon of various pidgin and creole languages.

5.2 SYMBOL EQUIVALENCE IN PHONETICS

'A thing is identical with itself.' There is no finer example of a useless proposition, which yet is connected with a certain play of the imagination. It is as if in imagination we put a thing into its own shape and saw that it fitted. (Wittgenstein 1958:84)

5.2.1 TYPES OF EQUIVALENCE

A basic principle of the International Phonetic Alphabet is to use one symbol for one sound: "When two sounds occurring in a given language are employed for distinguishing one word from another, they should whenever possible be represented by two distinct letters without diacritical marks" (PIPA 1984:1). Roach (1989:70) states even more forcefully, "Only one way of representing a given sound should be allowed on the [IPA] chart". However, each symbol is, by the use of diacritical marks, equivalent to other symbols, for example, $u = \ddot{u}$, $v = f$. The following is an analysis of the meaning of equivalence in phonetic symbolism, and a demonstration of how equivalence may be used to show relationships between sounds and produce narrow transcription. (Phonetics is in brackets [].) It is observed that each sound may be defined by various combinations of these symbols to produce equivalencies and similarities. Equivalencies are shown to be: 1) stipulated, 2) tautologies or identities, 3) circularities, 4) question begging, 5) synthetic or descriptive. The descriptive and definitional equivalencies show how the relationships and the combinations of symbols may be used to produce greater phonetic accuracy and narrow transcription. In this way, IPA symbolism is extended in its use and its full heuristic power is manifested. Extensive equivalencies are given for each IPA (1996) vowel and consonant (See also Shibles 1994h).

First, the notion of *equivalence* must be clarified. Equivalence may be analysed into a number of types:

a. Stipulation

This is arbitrary, such as, *Let unstressed o = ə*. As stipulative, it is devoid of descriptive content. One symbol merely stands for another. Nothing new is known about the sound, [o]. It is like giving a cat a new name. In phonemics, as opposed to phonetics, an abstract or ideal symbol is stipulated to represent all allophones and instances of a sound in a broad transcription (See Standwell 1991:138-139).

b. Tautology or Identity

Tautologies are less than synonyms; they are empty stipulations. Thus, symbolic logicians say that tautologies say nothing about anything. No two sounds can be identical and still be two sounds. Wittgenstein (1958:84) pointed out that it is singularly uninformative to say of something that it is identical with itself. Twins are not identical, but similar. There is no absolute equality. Therefore, identity becomes similarity (\approx), ($= > \approx$) if it is to be intelligible.

c. Circularity

By *analytic* in the philosophy of science, is meant that the predicate is contained in the subject. No empirical evidence is needed for its assertion because it is true by definition. The denial of the predicate results in a contradiction, for example, *Phonetics is the study of speech sounds, Speech is sounds, Pharyngeal constriction = retracted tongue root*. Or, where C refers to a consonant, $C^y = \epsilon$, $\zeta = C$, $C^w = \zeta$.

d. Begging the Question

A form of circularity or equivalence is to assume what is to be proved. Phonemics would beg the question by using universal, broad transcription to obtain narrow transcription. To always use ϵ for a reduced vowel, or generic /r/, begs the question as to their actual phonetic values.

e. Synthetic Statement

According to the philosophy of science, these are empirical statements requiring experience and evidence for their assertion. In order to know what the Chinese [c] is like, we must listen, observe the articulation, and gather experimental evidence. The denial of the predicate, does not result in a contradiction. *ʃ* is a voiced, palatal plosive, is a synthetic statement.

f. Descriptive Equivalence

Descriptive statements are synthetic statements. What is described in phonetics are symbols or statements which are operationally defined to give as much precise descriptive information about a sound as possible.

Category-mistakes result when one type of equivalence is confused with another. The symbol \dot{i} may be stipulated or analytically defined as being equivalent to \dot{I} . But \dot{I} may be perceived to have a different sound quality than \dot{i} such that they are not equivalent. We may distinguish \dot{i} from \dot{I} in narrow transcription. Similarly, \bar{i} may be distinguished from \bar{I} . Thus, although these two symbols may be *defined* as being equivalent, they may be *described* as being different.

In actual transcription there is less subtle confusion because \bar{I} is often used interchangeably with \bar{i} , meaning that the reader would not know which pronunciation is the correct one. An examination of five dictionaries produced the following variations for *city*: siti , sitI , sI.ti , $\text{s\bar{t}i}$, $\text{s\bar{t}r/i}$. Jones (1973) gives for British *play*, plei , instead of plei , [it] for *it*, but he proceeds to use \bar{i} also for \bar{i} (Jones 1967a:xliv). Kenyon and Knott (1949:331) render *pity* as pitI , instead of pti . Ladefoged (1975:53) gives seif for *safe*, not seif , but he says *bid* can be translated as bid , instead of bid . Catford (1988:40), for the German *ich*, gives $\text{i\c{c}}$ instead of $\text{i\c{c}}$. Einarsson (1945) uses \bar{I} for \bar{i} , and \bar{i} for \bar{I} in the transcription of Icelandic. Huang (1969:2) is incorrect in holding that \bar{I} does not exist in Chinese. It appears, for instance, in *Ch'in t\c{c}*. \bar{I} is not equivalent to \dot{i} , and *a fortiori*, neither is \bar{I} equivalent to \bar{i} . We may, however, use \bar{I} for a raised \bar{i} , and \dot{i} for a lowered \bar{i} , where there is no equivalence.

5.2.2 SYMBOL EQUIVALENCE

Each vowel may in some sense be described, and so defined, in terms of every other vowel. It is in these senses that the symbols may be seen to be equivalent. These equivalencies reveal: a) the connections of sounds (or articulations) to symbols, b) the relationships between symbols, c) the relationships between the sounds (or articulations). Each symbol reduces to concrete acoustic, articulatory, or other features which are thus related to each other. By *equivalence* is not meant equality or identity (=), but that close similarity (\approx) prevails based on certain features of the sounds. Each equivalence may then be explicated for the insight it may give toward more accurate acoustic description, better understanding of the articulations involved, display of the relationships to other symbols, clarity for the language learner, etc.

Ladefoged (1975:65) states, "There is no such thing as a single correct form of transcription of English; different styles are appropriate for different purposes". In the philosophy of science definitions are not literal descriptions of reality, but, to define is to take a model or metaphor. Thus, equivalencies provide such alternative possibilities. A knowledge of the possible equivalents for a particular sound gives the phoneticist or language

learner choice as to which equivalence best represents the sound in question, as the following example illustrates.

The plosives, *p*, *t*, *k*, are labeled unvoiced aspirates, and *b*, *d*, *g* are their voiced, unaspirated counterparts. They may be stipulatively defined this way such that *p* is an unvoiced aspirate, is a tautological equivalent. Alternatively, they may be described this way on the basis of empirical evidence. The definition is not the same as a description. On the definition that *p* = aspirated and voiceless, and that *b* = unaspirated and voiced, unaspirated *p* equals p^h , [$\text{p}^h = \text{p}$]; aspirated *b* = voiced *p*, [$\text{b}^h = \text{p}$], and so forth. McKenna (1988:39) states in regard to German, "It would seem that the [*t*] of *treu* is completely unaspirated, and the [*d*] of *den* completely devoiced—the end result of both operations being, auditorily, the same". In practice, however, it may be observed that a sound can be closer to p^h than to p , because the *p* quality is retained. In this case, p^h is not descriptively equivalent to p , [$\text{p}^h \neq \text{p}$]. If other characteristics are added to the plosives such as lip pressure, lip protrusion, force, duration, etc., these plosives may lack equivalence as well. We may accordingly consider the description of plosives in various languages.

In Mandarin Chinese, *Ta* (Wade romanisation) = t^ha , but $\text{t} \neq \text{t}^h$. t may have the quality of *d* more than of *t*. In Bavarian, we may not be able to distinguish between *s* or *z*, p or p^h , for example, between *Packen* and *backen*. In Irish, *ispín* $\text{ɪʃ.p}^h\text{in}$, p and p^h may be indistinguishable. In Swiss, *denn* may be $\text{d}^h\text{e:n}$ or $\text{t}^h\text{e:n}$. It may be hard to tell the difference between d and t^h . The phonetic symbol [d] can mean not just voiceless, but partially voiced. In Icelandic, which has a special kind of syllabic aspiration, Einarsson (1945) gives $\text{e}^h\text{p}^h\text{li}$ for what may rather be rendered as $\text{e.h.p}^h\text{li}$. In *saddur*, $\text{d} \approx \text{t}^h$, in *lamb* $\text{p} \approx \text{p}^h$.

Ladefoged (1975:26, 64) wrote, "There are...disagreements among texts on phonetics on how to transcribe sounds". The exploration of equivalents reveals the different kinds of nuance a certain basic or Cardinal symbol may reflect. The distinctions are more fine than sounds which are closely related, such as that in the Swiss (Jestetten) variations of *ich*, which are ɪʃ , ɪz and ɪx . Each feature description and diacritic may be used to find functional equivalencies, just as differences of pronunciation may be exposed when the orthography of one language is used to render another, for example, rendering English by the Russian Cyrillic alphabet, or Chinese characters. Hausa *so* may be heard as: s^ho , s^ho^h , or s^ho . Swedish *te* 'tea' may be rendered as t^he or t^he^h . Chinese $\text{a}^h \approx \text{a}^h \approx \text{a}^h$. Arabic 'one' $\text{wa:h}^h\text{ɪd}$ may be rendered by d rather than by d or d^h . Dutch x is not equivalent to Arabic x . The former is often more guttural. In regard to h-sounds, Benware (1986:27) wrote, "There are as many 'h-sounds' as there are vowels". Bithell (1952:113) had earlier noted, "There is a question...whether h is a fricative, consonant or a vowel".

The expansion of the IPA symbolism provides one method by means of which some controversies in phonetics may be resolved. Given a range of equivalencies, a transcriber may choose the most fitting alternative and then compare with the choices of others. This may also serve the purpose of establishing a range of possible pronunciations. The analysis of the symbols may then show the specific differences between them.

The following equivalent or similar forms are given for use in either normal or narrow transcription. These equivalents are based largely on actual (IPA-S) transcription of various languages (*Realphonetik*). For example, the phonetic transcription is given as [i] , which should be [j] , [e] , [i] , [ɪ] , and so forth. Where languages are transcribed with a simple Cardinal vowel, it is rather found to be the case that one or another of the simultaneities was in fact the

more correct transcription. Each alternate may be examined for its descriptive import, and the most appropriate one may be selected. The list is based on definitional equivalence as well as actual transcription. In a few cases the actual languages have been specified as illustrations. Some similarities occur only in fast speech. It is intended that researchers add their own examples as well so as to build a standard reference corpus. This may then serve as a checklist to see which alternatives would be best in a certain case. For vowels, the cardinal number is given first. The symbol (=) means: a) is defined as, b) is very similar, or c) is somewhat similar. The symbol \neq means *is not equal, or not similar to*.

The following examples show:

- a. Expanded Cardinal number equivalent.
- b. Definitional equivalents.
- c. Simultaneous-sound equivalents.
- d. Equivalents based on diacritical modification.
- e. Similarities based on diacritical modification.
- f. Similar forms characteristic of particular languages.
- g. Equivalents and similarities based upon actual transcription experience.
- h. Examples of the use of the symbol for various languages.

For additional definitions of the symbols see also Pullum and Ladusaw (1986), and Catford (1988). For an inventory list of the sounds occurring in the major languages of the world, see Maddieson (1984). (V = vowel, C = consonant, # = Cardinal number, M = Maddieson 1984.)

5.2.3 EQUIVALENTS OR SIMILARITIES

5.2.3.1 VOWELS

#	Vowel =	≈ Alternative Similarities for Narrow Transcription
1	i ɥ	j, iV ≈ jV, je ≈ je, ≈ ie ≈ i ^e , i = ī, i ^h , i, ī, i (Ik, Japanese)
1.5	ɪ ɣ	ɪ ≠ ī, ɪ = ī, œ = ɪ, ɪ = ī, i ^h (M:249), ≈ [i ^h], (CCD) gives range ɪ to ə.
2	e ø	e _Δ = e ^é (Swedish); e _j , e ^f , e (Ik)
2.5	ɛ ø _c	For languages having ɛ, see (M:249-250)
3	ɛ œ	ê _Δ ≈ œ (Swedish <i>päron</i> and AP <i>pear</i>), æ, ɛ ^r = e [?]
3.5	æ œ _c	æ ≈ ɛ (definitional), ≈ ɛ, æ ^r (Swiss), æ ≠ ae
4	a œ	Used generically for the range a to ɑ. ɑ ^f (Lancashire, Picardie French), ɑ, ɑ
5	ɑ ɹ	= ɻ (soft), ä (AP), ɑ ^h (Irish), ɹ (Glaswegian, Swiss)
5.5	ɔ ʌ	= ɹ
6	ɔ ʌ	= ɑ̄, ɑ̄, ≈ ɔ, ɔ ^f (!Xü), ɔ ^r (Chinese), ɑ ^h (Irish), ɹ (Glasgow, Swiss)
6.5	ɔ ɣ	ə = ɔ̄, AP or [ɔ̄], ɔ (Irish)

7	o	ɔ	ɔ = very round o (Icelandic, Scottish, Turkish) (Payne 1990 uses o _v), ɔ = less round o, o ≠ ɔ, ɔ̃ = ɔ̄, ɔ̂ = ɔ̄ = o' = ɔ̄? = C ^o = C ^v , ɔ̄ (M:258, Tamang), ɔ̄ (M:257, Ik)
7.5	u	ɯ	≈ ʏ/œ̃, ʊ, ʊ̃, au = aw, C ^u = C ^u (Japanese)
8	u	ɯ	ɯ (French), u ^f , ɯ, ɯ, ɯ, ou ≈ ow, Vu ≈ Vw, ʊ ≈ ɯ
9	y	ɨ, i̯	= i̯, əi̯, y ≈ ü, = ɥ = ɥ, u (pal.), ≈ ü, ʏ ≈ ɨ, (range ɨ to ɯ)
9.5	ɣ	ɨ, i̯	≈ ʊ, ʏ, (range ɨ to ɯ)
10	ø	ɛ̥, ê̆	ɨ̆ ≈ i̯, ø̆ ≈ ø̆ (AP <i>bird</i>), ø ≠ ∅ (Similar but different symbols.) (range ɛ̥ to ɣ)
10.5	ø	ɛ̥, ê̆	(range ɛ̥ to ɣ)
11	œ	ɛ̃, ễ	≈ ɛ̃, ɛ̃, œ̃ = ʊ̃, ≈ (Scottish) ɛ̃, (range ɛ̃ to ɶ)
11.5	œ̃	æ̃, æ̃	(range æ̃ to ɶ)
12	œ	ɶ, â̆	(rarely used), (range ɶ to ɶ)
13	ɔ	ɔ̃, ɔ̂	≈ ɔ̃ (Danish), ɔ̂, ɔ̂, ɔ̂, ɔ̂: (Bavarian, French, Scottish)
13.5	ɶ	ɶ̃	ɶ̃ = ɶ, ə, ɶ̃, German ɶ > ɶ or ɶ, <i>Nase nazɶ</i> ; <i>Seo</i> = ɶ̃ (Irish)
14	ɶ	ɶ̃	≈ (initial) ɶ̃, = stressed ə (Tranel 1987:38) ɶ̃, ≈ ɶ̃, = ɶ̃ = ɶ̃
14.5	ɶ̃	ɶ̃	ɶ̃ (M:257, Zoque)
15	ɶ̃	ɶ̃	≈ ɶ̃, ɶ̃, ɶ̃, vel. ɶ̃, ɶ̃, ɶ̃, ɶ̃, ɶ̃
15.5	ɶ̃	ɶ̃	Variation of u. Japanese, Chinese, Korean, Turkish, Russian, Scottish Gaelic; London dialect (Gimson 1966:129)
16	ɶ̃	ɶ̃	ĩ, ĩ, ɶ̃ (Japanese), consonantal tense u (So. Bantu), ɶ̃ (Chinese)
17	ɶ̃	ɶ̃	= ɶ̃, (ɶ̃ is a redundant symbol.) ɶ̃ West Midlands (Orton and Dieth 1971:1271)
18	ɶ̃	ɶ̃	= ɶ̃, (ɶ̃ is a redundant symbol.)

5.2.3.2 MID-CENTRAL VOWELS

(All are generically and inconsistently used, unnecessary, and controversial.)

ə	ɛ̃, ɶ̃, ɶ̃, ɶ̃ etc.	Position varies.
ə	ɶ̃, ɛ̃, ɶ̃, ɶ̃.	Some regard this as round equivalent of ə.
ɶ̃	ɛ̃, œ̃, ɶ̃, ɶ̃	Roundness unspecified.
ə	ɶ̃, ɶ̃, ɛ̃, ɶ̃	ə ≠ θ (Similar looking but different symbols.)
ɶ̃	æ̃, ɶ̃, ɶ̃, ɶ̃	Said to be unround. Position varies. Typically used for German <i>-er</i> endings. A “reduced [a]” (<i>Duden</i> 1974:11).

Rhoticity [ʀ] may be added to any symbol. Because ɛ̃ is often rounded, it is frequently equivalent to œ̃. The rhoticity symbol is generic, so does not specify the particular /r/ referred to.

It is also controversial to distinguish the mid-central vowels by stress. Shriberg and Kent (1982:48) give the following:

Stressed	Unstressed
ʌ	ə
ɜ̃	ɚ̃
ɜ	ə

IPA-1989 defines ɜ as an unspecified “additional mid central vowel”. It may therefore be used to represent any other symbol. For this reason it may be regarded as a metasymbol. Mid-central vowels, including ɜ and ɪ, are not needed because they are redundant and because they are typically used generically rather than given a specific phonetic value. Thus, they are empty, unnecessary, and so inelegant symbols. For example, ə, by both tautological definition, as well as actual transcription, reduces in every case to another vowel: ɚ = ɛ̃ɪ (unstressed), ɜ̃ = ɛ̃ɪ (unstressed). German transcription uses ɐ for -er which is more descriptively rendered as aĩx̃, for example *der* de:aĩx̃. The symbol ɜ is written as either ü or ý, whichever seems closest to the actual sound. Therefore, the Cardinal vowels 17 and 18 may be omitted for the sake of accurate description, as well as for simplicity.

5.2.3.3 CONSONANTS (Equivalents and Similarities for Alternate Transcriptions)

- b = p^{-h}, b̃ ≈ p̃, ɸ ≈ p^{-h} (Swiss and many languages), ɸ̃ ≈ ɸ, ɸ̄ = ɸ (Gaelic, Hölmer 1962:16); in fast speech b ≈ p; ɸ = b[^], ɸ̃ = b̃, ɸ̄ = ɸ̄, b^h = ɸ, ɸ^h ≈ ɸ̄ (whispered b), b^h (Welsh, Zulu)
- ɓ Implosive b (Bantu, Sindhi, Vietnamese, Xhosa), = ɸ̃^{-h}, ≈ ʔb (Fula), ɓ (velar) (Igbo)
- ɓ Voiced, trilled bilabial. Bilabial trill said to be like the imitation of horses.
- b' Ejective b. (Not on IPA chart, as such, though ['] can be used for any ejective.) ɸ̃^h
- d ɸ̄ ≈ t (Swiss), ɸ̄ = r, d[^] = ɸ̄, ɸ̄ = t^{-h}, ɸ̄ ≈ t̃ ≈ ɸ̄̇, d ≈ t̃ (Arabic), ɸ̄ ≈ t̃, ɸ̄ (Köln, Swiss), ɸ̄ = ɸ̄, d > ɸ̄ (AP *wid̄th*), ɸ̄ (Chinese), ɸ̄ (Farsi), ɸ̄ ≈ t̃. On an analogy b : ɓ :: d : ɸ̄, and ɸ̄ on the chart is a trilled r. We can create an approximant ɸ̄ (e.g. in Riesenbeck German dialect)
- ɸ Implosive d = implosive [t^{-h}]; [t̃^{-h}] (not on the chart) (Gullah, Hausa, Hindi)
- ɸ̄ t̃^{-h}, ɸ̄ (Buckinghamshire, Gaelic, Hindi, Oxford, Sanskrit, Swedish)
- dʒ (AP *judge*), d̄ʒ ≠ dʒ ≠ d̄ʒ
- ɸ̄ ≠ dʒ, ≠ d̄ʒ
- f ɸ̄^h, ɸ̄ (Russian), ɸ̄ (Bantu)
- f' = ɸ̄' Ejective f. (M:235, Kambardian)
- ɸ = ɸ̄, ɸ, ɸ (hissed, Japanese), (AP *camp̄fire*)
- ɸ' Ejective ɸ. (M:235, Yuchi), = ɸ̄'

- β ≈ v, = ϕ , β (Bavarian, Frankfurt), (AP *obvious*), \widehat{wv} (Grandgent 1892:10), b' , ≈ w (Anglo-Irish)
- g $\mathring{g}^h = \mathring{k}^h$ (Swiss), ≈ ηg , ≈ $\eta^{\mathring{g}h}$ (Chinese), $g' \approx [g] \approx [y]$, = $\underset{\cdot}{j}$, $\underset{\cdot}{g}$ (Swedish), g' (in double consonants $g'g$), $\underset{\cdot}{g}$ (Russian)
- g' \mathring{k}^h . Ejective g. (M:217, !Xū)
- ǧ Implosive q, \mathring{k}^h
- q = q
- ǧ Implosive q^h . This latter symbol does not appear on the 1996 IPA chart.
- h $ph \approx p^h$, h^h (strong asp.), $h = [h]$, (aspiration, and consonant lengthener), $d.h \approx \mathring{d}h$ (Hindi), $h = \mathring{h}$ (If unvoiced, as in Japanese, vowels become h, creating a different h for each vowel.), \mathring{h} (Japanese), h (Turkish), \mathring{h} (Burmese).
- h = $\underset{\cdot}{h}$, $eh \approx e\underset{\cdot}{j}\check{e}$ (Farsi), $h =$ a more fricative h (Arabic), ≈ χ
- h $\underset{\cdot}{h}$
- fi \mathring{h} , (AP *ahead*), $fi \neq h$
- ? This can represent any vowel quality. In RP dial. ? ≈ $\check{\lambda}$, \check{i} , \check{a} , \check{o} , ≈ (initial plosive), ≈ $\check{\lambda}$, $\check{\lambda}$. Sound varies with following vowel: $\underset{\cdot}{V}$, $\underset{\cdot}{V}'$ (Burmese), $\underset{\cdot}{V}^h$, $\underset{\cdot}{V}' \approx \underset{\cdot}{?}$, $\underset{\cdot}{C}' \approx \underset{\cdot}{?}$ (Chinese), $\underset{\cdot}{?b}$ (Fula), $\underset{\cdot}{?} \approx \underset{\cdot}{V}$ (velar), (see Danish *stød*), ≈ syllabic break [.] (compare Hausa)
- ǻ [$\underset{\cdot}{\text{v}}$] = (pharyngealised), = $\mathring{h}^{\text{v}} = \mathring{q}^{\text{v}}$, = $\underset{\cdot}{q}$, = $\underset{\cdot}{h}$; ≈ a, $\underset{\cdot}{q}$; $\underset{\cdot}{?}$, $\underset{\cdot}{?}^{\text{v}}$ (M:215), (Controversial: see Laufer and Condaux 1981: 50 ff.)
- ǿ Epiglottal plosive.
- ǿ Voiced epiglottal fricative, \mathring{h} , \mathring{h} (Doke 1926, Zulu)
- c $\underset{\cdot}{k}$, $\underset{\cdot}{j}$, = $\underset{\cdot}{\mathring{c}}$, $\underset{\cdot}{\mathring{j}}$, $\underset{\cdot}{\mathring{c}}$, ≈ tc (PIPA 1984: 41), ≈ $\underset{\cdot}{t}$
- c' Ejective ≈ $\underset{\cdot}{\mathring{c}}$, = $\underset{\cdot}{\mathring{j}}$
- f An ambiguous symbol on the 1996 chart as it looks like implosive f or j or $\underset{\cdot}{j}$. Again, it would be better to just use the symbol [$\underset{\cdot}{\text{f}}$] plus the implosive sign, e.g. [$\underset{\cdot}{\text{f}}$ '] respectively.
- ǧ c, plosive $\underset{\cdot}{j}$, ≈ $\underset{\cdot}{d}j$ in sound quality, ≈ $\underset{\cdot}{d}c$ (affric.), $\underset{\cdot}{g}$, ≈ $\underset{\cdot}{j}$ (tense) (Columbian Spanish), $\underset{\cdot}{d}$ (in AP *educate*)
- ǧf ≠ $\underset{\cdot}{d}f \neq \underset{\cdot}{d}\underset{\cdot}{f}$
- k k^h , $k^h = \mathring{g}^h$, $\underset{\cdot}{k} \approx \underset{\cdot}{q}$, $\underset{\cdot}{k}^h \approx \mathring{g}$, $k^h \approx \check{k}$, $k \approx k^h$, $k^h = k'$, = $\underset{\cdot}{c}$, = q (+ front vowel), \check{k} (Japanese), k^x (Cockney), $\mathring{k}\chi$ (Dutch, Swiss)
- k' Ejective k, ≈ K^h , $k^w = \underset{\cdot}{k} = \mathring{k}w$
- ǧ Implosive k (Hausa) = $\underset{\cdot}{g}$
- l $\underset{\cdot}{l} \neq l$, $l \approx r$ (Icelandic); $Vl \approx Vo \approx Vw$ (e.g. British dialect *all* [ow]); final $r \approx l$; $al \approx au$, aw (Swiss); $\underset{\cdot}{l}$ (AP *clean*, French, Icelandic), approximant $\underset{\cdot}{l} \approx \underset{\cdot}{o}$ (Indonesian), $\underset{\cdot}{l}$ (Thai), $\underset{\cdot}{l}$ (AP *health*, Spanish); $l \approx \underset{\cdot}{j}$, $\underset{\cdot}{r}$, $\underset{\cdot}{r}$
- l̥ \mathring{r} , (English Midlands *girls*, Marathi, Norwegian, Swedish)

- L** = ʎ (velar), (the phonetics of Irish Gaelic also uses the symbol **L** in a special way), lateral approximant
ʎ ≈ ʎ̥, ʎ̥ (Russian), ≈ ʎ (Italian, Spanish), ʎ̥ (Ladefoged 1968: 29, Burmese)
ʎ̥ = ʎ̥, ʎ̥, (ʎ̥ is ambiguous because [-] is described on the IPA chart as velar or pharyngeal); ≈ ʎ, ʎ; ʎ̥ > ʎ, (= vel. or pharyngeal, e.g. in German Rhine dialect *Kamisol*), ʎ̥ non-alveolar pharyngeal (Dutch)
ʎ̥ ʎ̥ ≈ ʎ̥, ≈ ʎ̥, (Irish, Suto, Xhosa, Welsh, Zulu), ʎ̥ (Icelandic), ʎ̥: (M:234, Greenland), ≈ ʎ̥ (Welsh)
ʎ̥ = ʎ̥, ʎ̥, (Irish, Xhosa, Zulu)
m range m to n (CCD:1987), m̥ (Bengali), m̥ (Cantonese, Swahili), m̥ (Turkish), m̥ (Bantu)
m̥ = m̥ (Duckworth et al. 1990:276), m̥ (Bantu), (AP *nympt*)
n n̥ ≈ n̥ (Burmese), n̥ ≈ n̥, n̥ = n+ (Payne 1990), (see [~]), n̥ (Japanese), n̥ (Bantu), n̥ (Icelandic), n̥ (pharyngeal, Dutch), n̥ (Swahili, Tswana)
N n̥ > ̃ (Japanese), = n̥, nasal release (e.g. p^N), N is an IPA uvular nasal, e.g. in Bantu, or in English slang “brok(e)n” [bɹo.k^N].
ŋ retroflex n, n̥, n̥ (r/ varies), (Marathi, Eastern Norway, Punjabi, Scottish)
ɲ n̥ (Xhosa), ≈ n̥, ≈ n̥ (Russian), n̥ (Burmese), (French, Italian, Polish, Spanish)
ɲ̥ n̥ (Icelandic), n̥ (Japanese), n̥, (Bavarian, Cantonese, Southern Sotho, Thai), n̥, n̥, n̥ (pal. and velar in Irish), range n̥ to n̥, n̥n̥ (German dialect, Kiel)
p ≈ p̥, p̥ ≈ p̥ (Ladefoged 1975: 44), = p̥, p̥ = p̥ (whispered), p̥ = p̥, p̥ = p̥, p̥ = p̥
p̥ Ejective p̥, = p̥
ɓ Implosive p̥, = p̥, (Igbo)
q q̥ ≈ k̥, q̥ ≈ k̥ (+back vowel), q̥ ≈ k̥, = q̥, q̥ (phg., Arabic), q̥ (Portuguese)
q̥ Ejective q̥, = q̥ (see M:217)
q̥ Implosive q̥, q̥
r ≈ trilled d, r̥ ≠ r̥, r̥^{tr} ≈ l (Spanish), r̥ (Puerto Rico), ≈ r̥, ≈ r̥, r̥^{tr} = ü:, r̥ ≈ a vowel (e.g. a:, ø:), r̥ (forceful) > r̥ (Swedish), r̥ and r̥ (Russian), r̥ > χ (Swiss), r̥^{tr} (Icelandic), strong trill: Arabic, Scottish, r̥ (velar r, Irish)
r̥ ≠ r̥, d (both have one tap) (Irish), (tap) r̥, d̥, r̥^h, r̥/r̥ and r̥ (Japanese), r̥ (RP), r̥ ≈ d̥
ɹ (voiced alveolar lateral flap), d̥, (Japanese, Tswana)
ɹ̥ (Czech., Grassington dialect of English; Hausa, Hindi, Japanese, Oslo, Swahili, Swedish), ≠ ɹ̥, ɹ̥
ɹ̥ ɹ̥ ≠ ɹ̥, ɹ̥ ≈ ɹ̥ ≈ ɹ̥, h̥ ≈ h̥, ɹ̥ = ɹ̥, ɹ̥, ɹ̥, ḁ (Danish), ɹ̥/ɹ̥ = ḁ, ḁ, ɹ̥ (Irish), ɹ̥ (AP), ɹ̥ (Japanese), ɹ̥ (Ibo, Korean, Zulu), ɹ̥ (Scottish)

- ɤ** (French, German, *-er* > ɤ), $\widehat{\text{ɤ}}$, $\widehat{\text{ɛ}}$ ≈ ʏ, ʉ, ɑ, œ, ø; ʏ > ɤ (Arabic), = ɤ, = ɤ = $\widehat{\text{ɤ}}$, = ɤ ≈ ɪ', = $\widehat{\text{ɤ}}$, ≈ ʏ, (Arabic, Swabian), $\widehat{\text{ɤ}}$ and ɤ (Alsace), ɤ > ɪ' (Swabian), ɤ' (German Rhine dialect), ɤ (Danish), (Northumbrian *burr* = ɤ ≈ w)
- ɶ** (Bengali, Bristol dialect of English, Dutch, Swedish), ≈ ɪ (Chinese, Finnish), ɶ' (Chinese), ɶ
- ɹ** ≈ ɤ, ɹ = ɤ, ≈ ʏ, ɹ (Léon 1983: 9), (Cologne [ɹ])
- [V-]** Generic rhotic quality added to any vowel. Advisable instead to substitute a specific /r/.
- r^{-tr}** (the symbol [-^{tr}] is added here to IPA), (Irish), r to r^{-tr} (Malay)
- s** s = z, ≈ s^z (Cologne), s ≈ z (German dialects), s̺ (Arran Garlic), s (vel.: Arabic, Irish), s (whistled: Efik, Shona), s̺ (Amharic, M:229), s̺ (Cambodian, Japanese), s^s (Russian), s^{-s} and s (Swiss)
- s'** Ejective s (M:235). Appears on the 1996 IPA chart.
- ʃ** = ʃ, ʃ (Fr.), (grooved vs. slit), ʃ^s (Duden 1974:13), s̺ (Gullah, Turner 1973:246)
- ʂ** = r̺s̺, = ʂ, = r̺ʃ, ≈ /r/, s̺ ≈ s̺u, ʂ (whistled, Swedish), ≈ ʃ (Swedish), ʂ (a hiss, Spanish, Dalbó 1969:92)
- ɬ** (Controversial). Defined as ʃ plus x; for example: ɬx (Swedish, Zulu). fi ≠ ɬ.
- ç** (German, Norwegian), = ç, sj, i ≈ ç, ɧ, (AP *hue*), j (strongly whispered), ç (Swedish), ç
- ɟ** ç, ɟ ≠ ʃ
- ç** (Chinese, Dutch, Köln), ç, ç, ɟ, ≈ ɟ (Japanese), ç̺, ɟ (pal., Polish), s̺ (Duden 1974:11), s̺ç (Ladefoged and Wu 1984:271)
- t** t = t^{-h} (Swiss), t' = d', ɟ = ɟ, t^{-h} ≈ ɟ, t^{-h} = r, ɟ = t (Payne 1990), t^{-h} = t', t ≈ ɟ', approximant t = ɟ, ɟ (Arabic), ɟ (Irish, Liverpool), t^s (Cockney, Liverpool), ɟ (Irish)
- tʃ** ɟ̺ ≈ c, ≈ ç, ≈ ɟ, ≈ t^s, tʃ (palatal, Irish), ɟ̺ ≠ tʃ (Controversial)
- t'** Ejective t
- t̪** Implosive t, = ɟ̪, (Igbo), ≈ a click
- ɽ** (Buckinghamshire, Hindi, Norwegian) ≈ r̺t, ≈ ɽt, ≈ /r/t, ɽ^{-h} = ɟ̪, = r^{-tr}t, ɽ̺, (AP *ty*)
- ɽ'** Ejective ɽ
- θ** = ʈ, groove and slit articulations, θ ≠ ø ≠ ʈ ≠ ø
- ð** ≈ ɟ, ≈ ɪ (Danish), ≈ ʈ, ʈ, ɟ, ɟ̺
- v** ʋ = ʋ (Bavarian, Icelandic), ʋ = f, f̺, f̺^{-h}, v̺, ʋ, ʋ
- ʋ** [Bavarian, Dutch (see Mees and Collins 1982:6), Finnish, Hindi, Irish, Zulu], ≈ β, v̺, v̺, ʋ, endolabial ʋ (Kahananui and Anthony 1974: xvii, see Catford 1977:144–145)
- ɰ** h̺w̺, ɰ, h̺w̺, h̺w̺, x̺w̺, h̺ɰ, h̺ɰ^w, ɰw̺

- w w' ≈ ũ, wV̄, uV̄, Vw ≈ Vu, uo (AP *water* uoɪ) (e.g. au ≈ aw), uə, uo, u, ow ≈ ou, w ≠ ʋ, ʋ (Japanese), ʋ (RP, Icelandic), w̃ (Breton, M:246), velar versus palatal w, onglide or offglide, ʋ, [w] = (labialised), [w] = [], w > β (Bavarian, Irish), oə, uɨ ≈ wi, u.ɛ = uwe
- ɥ (French, Spanish) (voiced labial-palatal approximant), ≈ w, *consonantal ü* (*Duden* 1974:11), ʏ, wi
- x ɣ, xua ≈ hwa, ɕ > x (German), ɕ., ɣ̃., ɕh
- ɣ uvular and velar in Arabic, ɣ (German dialect), ɣ, consonant ɣ ≠ vowel ɣ; ≈ ɣ', ɣ̃, [ɣ] = (velarised), ɣ (with friction), ɣ̃, ɣ̄
- ɥ ɣ (non-fricative), ɥ ≈ u, (Burma)
- χ = ɣ̃, ɣ̄, kχ̃ (Swiss), ɣ̃, strong χ (Dutch), χ: (!Xū)
- j [j] (palatalisation), ≈ j̃, ʔi, j̃V̄, j̃V, Vj̃ ≈ Ṽj̃, ejɛ ≈ ee, ija ≈ i:ə (Hausa), ĩo, j ≈ i
- z ž ≈ ʒ, ʒ ≈ s^{-h} (Bavarian), ʒ = ʒ̃ (Swiss), ʒ (Payne 1990), z^v ≈ ʒ̃u (Chinese), ʒ (Arabic), ʒ (Alsace German), z whistled (Bantu), ʒ (whistled, Doke 1954:33)
- ʒ = ʒ̃, = j̃, (strong) ɕ (Swedish), ʒ̃ (Fr.), ʒ̃ (Bavarian)
- ʒ̃ [Buckinghamshire, Castilian Spanish (Dalbor 1969)] = ʒ̃, ʒ̃, f̃s (Mandarin)
- ʒ̃ (Ewe, Frankfurt German, Fula, Japanese, Norwegian, Polish), ɕ, ʒ̃ (Canepari 1983)

6. THE PHONETICS OF PIDGIN AND CREOLE

I gat koltcha [ai.gat.kol.tʃa] 'I got culture' (Jamaican dialect)

The following is a phonetic description of the basic sounds of each language rendered by IPA symbolism as described earlier. It does not, however, include a description of intonation or the full holistic aspects of phonetics description. Krio orthography uses a number of phonetic symbols, for example: 'boycott' bɔykɔt, 'branch' branch[^], 'gaget' gajɛt (see Fyle and Jones 1980), but they are not always phonetic. The schwa and schwa-like symbols are not used by IPA-S for reasons given earlier. The following may be compared in this regard to show that, as elsewhere in phonetics, the schwa cannot be trusted to render the actual sound.

TABLE 2

Trinidad with schwa	IPA-S no schwa
əv	ʌv
ə	æ
əɛ̃	e:
kɜ:li	kul.j

ɪ	jʌ
əm	ɛ:m
ə:	ea
a:ə	æ
hə	hæ
əno	ɛn.ɔ
ɪ	jʌ

wɛkm	wɔkm
kɛa	kea
wɜk	wok
faiə	fai.a
wantə	wanda
fə	fʌ

Jamaican is characterised by offglides such as [o^a, eⁱ]. Krio /r/ is [ɹ̥, ɹ, ʀ, ɾ].

6.1 TOK PISIN

The phonemes, not the phonetics, of Nigerian Pidgin are given here by Barbag-Stoll (1983). For a comparison of Nigerian Pidgin and Tok Pisin, see Faraclas (1990). The meanings of the words of Tok Pisin (literally, 'speak pidgin') indicate their phonetic borrowings. A brief sample list is given below. (Ger. = from German):

TABLE 3

Tok Pisin	English	kokoros	cockroach
Aprika	Africa	kraide	chalk (Ger.)
asawe	that's the way	lukluk	appearance
bikples (lit. 'big place')	mainland	natnat	mosquito
bilong yu	your	no gut (no good)	bad (Ger. gut)
dok	dog	nogat (no got)	have not
ensin	engine	opis	office
esik	vinegar (Ger.)	pait	fight
go kambaut	wander about	paul	fowl
go lukim	visit	pren	friend
gutbai	goodbye	sisel	chisel
gumi	rubber (Ger.)	suga	sugar
gutaim (good time)	peace	skulim	teach
haus kuk	kitchen (Ger.)	tisa	teacher
kek	cake	toktok	talk
kikbal	football	wokabaut	travel
kilim	hit with a weapon		

Mühlhäusler notes the following:

Data concerning the phonological properties of early stabilised Tok Pisin are fairly scarce and the prevailing convention of using English orthography does little to help the analyst. There is general agreement, however, that at the phonetic level, a great deal of variation was found and, by and large, accepted. (Mühlhäusler 1985:91)

Laycock (1985:298–301) states that the pronunciation of Tok Pisin is influenced by the sounds of other languages which are spoken, and states that there is no single phonology (p.305, see also Mühlhäusler 1990). For example, in Sepik and Madang Provinces and some dialects of Kuanua, /bdg/ are pronounced as [mb, nd, ng], respectively; g > ɲg, ng > ɲ, b > mb, d > nd; [l] is said to be sometimes palatalised as [lʲ], or is an upward flap, that is, often [l = r] (p.301). Also /s/ may be replaced by /t/ in the case of older speakers. /n/ is also said to occur, but it is described as a syllabic nasal (Wurm, Laycock and Mühlhäusler 1984:127), whereas [N] should mean just nasal release (See the uvular nasal release of Bantu). Laycock (1985:299) uses orthography rather than phonetics to show differences as follows:

TABLE 4

Tok Pisin	Buin and South Bougainville	English
abus	aapusi	animal
baibel	paipera	bible
bebi	peepi	baby
nogut	nokusi	bad
oda	oora	order
paradiso	pararito	paradise
redi	rere	ready
saiden	taiteni	sergeant
trabel	taraaporo	trouble

Laycock (1985:302) gives the following vowel inventory for Tok Pisin:

TABLE 5

IPA	Tok P.	English	IPA	Tok P.	English
a	pat	fat	a:	hat	hard
e	wet	wait	ɛ	let	belt
i	nil	nail	ɪ	pik	pig
o	kol	cold	ɒ	dok	dog
ɔ	kot	court	ɜ	wok	work
u	susu	breast	ʊ	puspus	copulate

The IPA-S inventory given below shows that in actual speech there are other vowels as well. For an analysis of intonation, see Wurm (1985a:309–334).

6.2 IPA-S TRANSCRIPTION LEXICON

Some of the most commonly used databases of the world's languages (Maddieson (1984), Stanford (1979), and Comrie, ed. (1987)) contain little or no information about pidgin and creole languages.

The following is given by the author as a sample paradigmatic lexicon of actual phonetic sounds of pidgin and creole. It is not intended that the transcriptions presented here be regarded as the standard, but rather show how the IPA may be used to render an accurate and useful phonetic transcription. As mentioned earlier, the symbols are intended to refer primarily to sound rather than to the physical articulations made. This is called here *Realphonetik* to stress the fact that it is based on actual pronunciation heard, rather than on theoretical phonemes, stereotypic graphemes, or ideal standards of how the language should sound.

IPA-S KEY WORDS are given for the IPA-S 1995 Jamaican informant, which may be compared with the transcriptions of these same words for other dialects of English and other languages described by the author (Shibles 1994bcd, 1995ab).

TABLE 6

PIDGIN AND CREOLE

Jamaican Dialect	IPA-S Kühnel 1991		
'appen (happen)	ʔap ^h .m	breyk (break)	bɹʊk
'daktah (doctor)	dak.ta	briék (brakes)	bɹe:ɪk
'im (he)	ʔɪm	bruk (broke)	bɹʊk
'im (him)	ɪm	buk (book)	bʊk
aalrait (all right)	a.l.ɹait	chail (child)	sail, tʃail
afta (after)	a/æf.ta	chaklit (cocoa)	tʃa:k.lit
ah-go (will, become)	a.go	chiep (cheap)	tʃi:p
ai-whatah (tears)	ai.wai.ta	Chjusdi (Tuesday)	tʃu:z.de
andah (under)	a:n.da	daag (dog)	da:g/ɣ
antiks (peculiarities)	a:n.tiks	dalla (dollar)	dal.lø
arinsh (orange)	ai.ɹɪnʃ	dan (than)	dən
(See irinsh)		dat (that)	dat ^h
auer (hour)	o:ɑ:	datti (dirty)	dɔ.ti
aut (out)	o:t ^h	def-ier (stubborn)	def.i:ɑ
auta-orda (rude)	o.taɹ.da	deh (there)	de
baddi (buddy)	ba.di	dehd (dead)	dɛ:d
bahl (bawl)	bal	dey (day)	de:ɹ, ʔde:ɑ
bait (bite)	bait	di (the)	di
bangarang (quarrel)	baŋg.a.ɹaŋ	dis-jah (this)	dɪs.jɑ
bass (boss)	bʌs, bɔ/ɔs	doan (not, don't)	dɔ:, do:n
bass (bus)	bʌs	don (ended)	dɔ:n
batam (bottom)	bat.am	dón (don't)	dɔn
baut (about)	bo:t, boʔat	dong (down)	dɔŋ
bay	bi:æ	driem (dream)	duim
beil (boil)	bwail	égen (again)	a.gɛ̃
bettah	bɛt.ta	eil (oil)	ail
biébi (baby)	bi̯a.bi, bi.a.bi	faada (father)	fa:da
biék (bake)	bi:ɛk	faas (fast)	fɑ:s
big	big	faiáh (fire)	fai.jɑ
big man	big.mən	fait (fight)	fait
bigga (bigger)	bi.ga	fallo (follow)	fʌ.lɑ
bikaaz (because)	bi.ka:z	fambli	fam.bi.li
bokkl (bottle)	bak.kl	farihn (abroad)	faɹ.i:n
börn (burn)	bɔ/ɔn	fashn	fasn
bot (but)	bɔt	feyszi (fresh)	fias.ti
bradda (brother)	bɹɑ.da	fi (for)	fɪ
brait (bright)	bɹait	fi (ought to)	fɪ̃
breyds (braids)	bɹeðs	fi-mi (mine)	fɪ.mi
		figet (forget)	fɪ.get

fischaman (fisherman)	fi.ʃa.man	jier (year)	ʒe:ɪ
fohr (four)	foa	juh (you)	ʒã, ʒa
fos (first)	føʃ	juud (youth)	ʒu:t
fram (from)	fɾam	kaas' (cost)	ka:s
fren' (friend)	fɾɛn:	kallalu (vegetables)	kal.a.lɔ
fuul-fuul (dumb)	ful.ful	kam (come)	kɔ:m
gaan (gone)	ga:n	kassawa	kas.sa.va
gaan-why (go away)	gɔ:n.we	kau (cow)	ko
gas	gʒas	kendl (candle)	kʒan.dl
gitop (get up)	gɪ.tɔp	ketsch (catch)	kɛtʃ
gjal (girl)	dʒal	kíaan (can)	kã:
groh (grow)	gɾo, gɾoa	kiék (cake)	kiek
gud (good)	gud	kjan (can)	kjã:, kjan
gwoan (continue)	gwa:n	kjar (auto)	kjaɪ
h'eskep (escape)	ɛs.kjep	kjarri (carry)	kja.ɪ
h'ignorant	ɪg.na.ɪant	klevah	klɛ.va
h'onest	ɔn.ɛs	klos (close)	kloʔs
haard (hard)	a:(ɾ)d, a:d	kobitsch (stingy)	kɔ.bitʃ
haard-ier (obstinate)	a.ɪ.i:ɛɪ	kold	kɔal
haffi (have to)	af.fi	koltcha (culture)	kol.tʃa
hai (hello)	hai	körri (curry)	kɔɾ.ɪ
hao (as, how)	o:	kot (cut)	kɔt
happi	hæp.pi	kriiss (lively)	kɾɪs
haus	aus, os	kuck (cook)	kuk
hav	av	kuda (could)	ku.da
hevi (heavy)	ɛv.i	kuu (show)	ku
hi-gout (he-goat)	i:ɡuat	kwaata (1/4)	kwa:ta
hongri (hungry)	ɔŋɡɾɪ	kwick	kwik
honk	aŋk	laas (last)	lɔs
hörb (herb)	øɾb	lai (a lie)	lai
hörli (early)	ø:li	laiárd (liar)	lai.aɾd
hott (hot)	at, a:t	lakka (like)	lak.ka
houm (home)	oʊm	lan', land	lan
i-rinsh (orange)	ai.ɪnʃ	laud (loud)	lɔd
(see arinsh)		lef' (miss)	lef
iiet (eat)	ʒi:t	letta (letter)	let.ta
jah (here)	ʒa	lick (beat)	lik
jam (yam)	ʒam	licki-licki (coward)	lɪ.ki
jard (yard)	ʒa:d	liédi (lady)	le.ɪdi
jeh maan (ok)	ʒe.man:	liét (late)	li(:).ɛt
jesaid (yesterday)	ʒɛs.ɪ.de	liézi (lazy)	li.a.zi
		likkl (little)	lɔkl

likkle (little)	likl	pörl (pill)	pø:l
liriks (lyrics)	li:iks	prablim	pɾa.blem
lov	lɔv, lʌv	prison	pɾi:zn
maaming	ma.i.nɪn/ŋ	pritti	pɾi.ti
maita (might)	mai.ta	put	put
makka (thorns)	mak.ka	rais (rice)	ɾais
Mandi (Monday)	mo/ʊn.de	rait (write)	ɾait(-h)
mash op	mɔʃ.ɔpʻ	red-ai (lit. red eye?; greedy)	ɾed.ai
mesha (measure)	me.dʒa	repair	ɾa.pɾi
mi (me)	mi	reyn (rain)	ɾean
Miéri (Mary)	mi.a.ri	riddim (rhythm)	ɾid.dim
miiet (meet)	mit ^h	riied (read)	ɾaiɖ
milk	mi:lɪk	robbisch	ɾʌ.biʃ
minit (minute)	min.ut	rón, ron (run)	ɾoan, ɾʌ/ɔn
móni (money)	mɔ.ni	saal' (salt)	sa:l.t
mor (more)	mɔɾ	sah (sir)	sa ^h
motsch (much)	mɔ/ʌtʃ	samfai (sly)	sam.fai
muosli (mostly)	moas.li	Satcherdi (Saturday)	sæ.tɾi.de
muzik	mju.zik	seh (that)	sě
nah (not)	na:, nɔ	sekl (settle)	sɛkl
nan (no)	nʌn	sen' (send)	se:n
nattn (nothing)	nʌ/ɔ.tn	shap (shop)	ʃap(-h)
nattn (nothing)	nɔ.tn	shauer (shower)	ʃo.a
nau (now)	nou	shi (she)	ʃi [?]
njam (eat)	njam	shi-gout (she-goat)	ʃia.guat
njuh (new)	nju	shiém (be ashamed)	ʃie(m)
noa (know)	no	shoh (show)	ʃo
nobadda	no.ba.di	shuda (should)	ʃu.da
non (not)	no/un	sick	sɪk
nörs (nurse)	nøʃ	sinting (something)	sɪn.tɪŋ
nuun (noon)	nu:n	skuul	sku:l
ongl (only)	ɔŋ.gl	slackniss	slɔk.nɪs
paas (pass)	pa:s	smaal	sma:l
pain (pineapple)	pein, pai:n	smaart	sma:ɾt
passport	pa:s.po ^{at}	smaddi (somebody)	sma.di
pickni (child)	pɪk.ni	smouk (smoke)	smo ^{ak}
piepl (people)	pi:pl	so-so (only)	so ^a .so
pig	pi	som (some)	sɔm
pitetah (potato)	pi.te.ta	somtaim (sometimes)	sʌ ^{om} .taim
pliés (place)	plejs	Sondi (Sunday)	sʌn.de
polies-uman (police, fem.)	po.lis.u.man	sörf (serve)	sɪ/øv

spiiech (speech)	spis	wosch (wash)	waʃ
stey (stay)	ste:.ɪ	wrong	ɪaŋ
su-su (chatter)	sũ.sũ	wuda (would)	wu/u.da
suun (sun)	sun	Jamaican Creole	IPA-S Görlach 1986
swiïet-maud (flatter)	swit.mɔɔ	'tretch (stretch)	tɹetʃ
szieh (see)	si(:)	aaf (off)	ɔf
sziesón	siz.m	all	ɔl
taak (talk)	ta:k ^h	ave (have)	æv
taak-taak (too much talk)	taka.taka	away	a.wĩ
tai'r (tire)	tai.ja	baak (bark)	bɔ:k
tain (time)	tain	bad	bad
tanks (thanks)	taŋks	bot (but)	bɔ/ɔt
taun (town)	to:n	brown	bɹaʊn
ti (tea)	tĩ	bus (burst)	bʌs
tidey (today)	tĩ.de	bwail (boil)	bwail
tiéla (tailor)	ti.ɛ.la	bway (boys)	bwaɪ
tiicha (teacher)	ti.tʃa	chimbly (chimney)	tʃɪm.bli
tiïet (teeth)	tɪt	coat	ko ^ə t
ting (thing)	tɪŋ	coke-nat (coconut)	kok.nat
trabbl	tɹʌbl	com (come)	kɔm
trie (tree)	tɹi:	craas (cross)	kɹæs
tu (to)	t ^h u	dem	dem
tumarroh (tomorrow)	tu.ma.ɪo tu.ma:ɪ.ɪǎ	diffrant	dɪf ^r .fɹænt
turis (tourist)	tu.ɹɪs	dis (this)	dɪs
twang (accent)	twɔŋ	do	do
uman (woman)	u.man	domb (dumb)	dɔmb
unu (you) pl.	uno	fĩ (for)	fĩ
vex	vɛks	fies (face)	fe's
waak (walk)	wɔ:k	fiesty	festi
waan go (want to go)	wa:ŋ.go	flatta (flutter)	flæ.tʌ
wann (want)	wɔ:	friggissee (fricassee)	fɹɪŋ.ɹi:
wha/á (what)	wɛ, wa:ʔ	fry	fɹi
whatah (water)	wɔ(:).ta(:)	gi (give)	gɹi
whé (where)	wɛ̃/e, ɛe	gon (gun)	gɔŋ
which	ɹɪtʃ	grong (ground)	gɹɔŋ
wi (we)	wi	guol (gold)	goʊl
wi' (will)	wi	gwine (going)	gwain
wid (with)	wɪd	hegg (egg)	hɛg
woan (a)	wɔ̃a:n, wɔn, woan, wɔ̃ɹn	ignarance	ɹg.na.ɹæns
		insis (insist)	ɪn.sɪs
		jine (join)	dʒaɪn
		know	kno:

kot (cut)	kɔt	was (waste)	wɛ:s
kuol (cold)	ku ^o l	water	wɔtə
kyan (can)	kjā:, kjan	ways	wɛ'z
laas (last)	lɑ:s	weh (way)	wɛ
lickle (little)	likl	wha (what)	mə
lissen	lis.n	wid (wild)	wɪd
mek (make)	mek	woss (worse)	wɔs, wʌs
mine (mind)	mi:n	ya (here)	ja
neva (never)	neva	yaad (yard)	ja:d
nex	nɛks	yout (youth)	jut
niekid (naked)	nɪkɪd	Jamaica Dialect 1995	IPA-S Informant
niem (name)	ne'm	Age 20 Key Words	k = ejective k'
nomba (number)	nɔmbə	apple(s)	ap ^h .l
notten (nothing)	nʌ.ɪn	April	e.pɹɪl
now	nɔw	banana(s)	bə.nə.nə
op (up)	ɔp	bean(s)	bi:n
ouse (house)	aus	beefsteak	bif.steak
pan (upon)	pan	beer	bi:ɹ
pickcha	pɪktʃə	black	blak ^h
pickney	pɪkni	blue	blu
piepa (paper)	pi ^e pa	bread	bɹɛd
plom	plɔm	breakfast	bɹɛk.fas
puor (poor)	pu ^o ɹ	brown	bɹaun
ribba (river)	ɹɪbə	butter	bʌt ^h .tə
saafa (suffer)	sa:.fə	cabbage	kæ.bɪdʒ
secan (second)	sɛ.kæ/an	cake	keɪk
shake	ʃɛɪk	candy	kændi
shob (shove)	ʃɔb	car	kɑɹ
siddong (sit down)	sɪd ^h .dɔŋ	cheese	tʃi:z
sief (safe)	seɪf	cherry(ies)	tʃɛɹɪz
sipple (slippery)	sɪpl	chicken	tʃɪkən
som	sʌm	chocolate	tʃɔk.lɪt
strent (strength)	stɹɛnt	cocktail(s)	kɔk.teɪl
tap (top)	təp	coffee	kɔf.fi
teacha (teacher)	tɪtʃə	cream	kɹi:m
tek (take)	tɛk	cup	kɔp
temparated (angry)	tɛm.pa.ɹɛtəd	egg(s)	ɛgz
ting (thing)	tɪŋ	eight	e:ɪt
tree (three)	tɹi:	English	ɪŋɡ.lɪʃ
tuos (toast)	to:s	evening	iv.nɪn
waam	wə:m	father	fɑ:də
wan (one)	wʌn	February	fɛb.ɹu.ɛɹi

fish	fɪʃ	rice	ɹaɪs
five	faɪv	salt	sɔlt
fork	fɔ:k	Saturday	sæt.(ɪ).de
four	fɔ:ɹ	second	sɛ.kən
Friday	fɹa.de	seven	sɛvn
good	ɡʊd	shrimp(s)	ʃɹɪmp
goodbye	ɡʊd.bai	six	sɪks
grape(s)	ɡɹɛps	spoon	spu:n
gray, grey	ɡɹe: ^a	spring	spɹɪŋ
green	ɡɹi:n	sugar	ʃʊ.ɡɑ:
herring	ɛ.ɹɪn	summer	sʌm.mə
hour	ɑ.wɑ	Sunday	sʌn.de
January	dʒæn.u.ɛ.ɹɪ	tea	tɪ
knife	naɪf	thank you	tæŋk.ju
lamb	lɑ:m	thirteen	tɪ.ti:n
lemon(s)	lɛ.mʌn	three	tɪ:
lettuce	lɛ.tɪs	Thursday	tɹz.de
lobster	lɒb.stɑ	today	tu.dɛ
lunch	lʌtʃ	tomorrow	tu.mɑ.ɹo
meat	mi:t	Tuesday	tuz.de
milk	mɪlk	two	tu
'minute	mɪn.ɪt	vegetable(s)	vɛdʒɪ.tʌbl
Monday	mɔn.de	vinegar	vɪn.ɛɡɑ
month	mɔn.t ^h	water	wɔ:.tɑ
morning	mɔ:ɹ.nɪn	Wednesday	wenz.de
mother	mʌ.da	week	wi:k
night	naɪt	where	wɪ.ɹ
no	nɔ ^a	white	waɪt
one	wʌ:n	winter	wɪn.tɑ
orange(s)	ɔ:ɹ.æ.n.dʒɪz	yellow	jel.lo
oyster(s)	ɔɪs.tɛz	yes	jes
peach(es)	pɪtʃ	yesterday	jes.tɪ.de
pear(s)	pɛɹ	Krio orthography	IPA-S Görlach 1986
pepper	pɛ.pɹɪ	apful	æpfʊl
plate	plɛɹt	bisin	bɪsɪn
please	plɪs	bɔt	bɔt ^h
plum(s)	plʌmz	chɔch	tʃɔtʃ
pork	pɔ:k	dɛbul	dɛbl
potato(es)	pɑ.te.taz	dem	dem
purple	pɹ.pl	den	den
rain	ɹe:n	dɛnsɛf	dɛnsɛf
red	ɹɛd	dis	dɪs

dizaya	di.za.ja	tri	tʂi
dən	dɔ̃	trik	tʃɪk
dəŋ	dəŋ	Cameroon Pidgin	IPA-S Görlach 1986
drim	dʁim	banana	bæ.na.na
ed	ed	but 'boat'	bʊt
fɛda	fɛ.da:	chia	tʃe.a
fə	fɔ̃	dis	dɪs
fəm	fɔ̃m	dəŋ	dəŋ
fəs	fɔ̃s	fashən	fæ.ʃən
get	getʰ	fə	fə
insay	ɪn.sai	fəa	fə ^a
jɛs	dʒɛs	gən	ɡən
kin (can)	kɪn	kəni	kə ^a ni
kəmɔt	kɔ̃mɔt	laik	laik
kray	kʁai	lam	læm
laf	læf	lɛn	lɛ:n
langa	læŋɡə	muf	muf
lebə	lebo	nɔmba	nɔm.bo
luk (look)	lʊk	rait	raɪt
mənɪn	mənɪn	san	sæn
ɔjɛnt	ɔ.dʒɛnt	səm	səm
pikin (children)	pikɪn	tali	tæ.li
pɔsɪn	pɔsɪn	tich	tɪʃ
prawd	pʁɔd	ting	tɪŋ
prifɛs (preface)	pʁɪfɪs	tɪnk	tɪŋk
prɔpa	pʁɔpə	tot	tot
raskɛl	ʁ/ɾæ.s.kɛl	wuna	wʌnə
raytɪn	ʃai.tɪn	Tok Pisin Schaefer	IPA-S (German
rid (read)	ʃɪd	1992	source, note v/w)
rɪzɔlt	ʃi:zɔlt	ai (eye)	ai
rul	ʃɪl	aɪskɪm (ice cream)	ais.krem
saful	sæful	aɪtɪŋk (perhaps, lit. I think)	ai.tɪŋk
sɛf	sɛf	ánien (onion)	han.jɛn
sɔfa	sɔfa	apɪnún (good afternoon)	æpi.nu:n
sɔspekt	sɔspektʰ	arasait	ara.sait
swit	swit	ásade (yesterday)	as.a.de
tay	tʰai	aúa (hour)	a.wa
tek	te ^h k	Augus (Aug.)	au.gus
tɪn (times)	tɪ:n, tɪ	báim	bai:
tɪnk	θɪŋk, tʰɪŋk	bálus (plane)	ba.lus
to	tso		
tɔd	tʰɔd		

banána	ba.næ.na	hánggre (hungry)	haŋ.gre
báta (butter)	ba.ta	hánwas (watch)	han.vas
behaín (later)	bi.hain	hap (half)	hæp ^h
bélo (bell)	bɛ.lo	hárim (listen)	ha:.rim
bik (big)	bik	hátwok (hard work)	hat.wɔk
biknait (midnight)	bik.nait	hausat (why)	haus.at
bíkpela	bik.p ^h ela	héve (heavy)	hɛ:.vi
biksan (noon) (lit. big sun)	biks.a:n	hía (here)	hi.a(:)
bílas (clothes)	bi.las	husát (who)	hu.sat
bilóng (belong)	bi.lɔŋ(g)	ia (ear)	i:.a
bin (bean)	bin	iet (yet)	jet
bin (been)	bi:n	ináf (enough)	in.af
bipó (before)	bi:.fɔ:	insait	in.sai
bráta (brother)	bra:.da	ísi (easy)	i:.zi
bruk (broken)	bruk	Januáre	dʒan.wa.ri
buk (book)	buk	Julaí (July)	dʒu.lai
daun (down)	daun	Jun (June)	dʒun
día (costly)	di:.a	kaáim (carry)	ka.rim
Disémba	di.sem.ba	kábis (cabbage)	ka.bidʒ, kæ:.bidʒ
díwai (tree)	di.vai	kágo (cargo)	ka.go
dok (dog)	dɔk	kaikai (to eat)	kai.kai
dókta (doctor)	dɔk.ta	kakáo	ka.kau
dráiva (driver)	drai.va	kákaruk (hen)	ka.ka.ruk
dring (drink)	driŋ	kam (come)	kam
em (he)	e/em	kamáp (rise)	kam.ap
énsin (engine)	en.zin	kápsaitim (capsize)	kap ^h .sait.im
Epril (April)	ei.pɹil	kasáng (peanut)	ka.saŋ
et (#8)	e/et	kástam (custom)	kas.tam
faiv (#5)	faif	kaukau (sweet potato)	kau.kau
Februére	feb.ru.eri	kek (cake)	kejɔk
fíim (feel)	fil.im	kílim (kill)	ki.lim
foa (#4)	fɔ.a	klok (clock)	klɔk
Fónde (Thu.)	fɔn.de	klóstu (near)	klɔ/os.tu
Fraíde (Fri.)	frai.de	kókonas	ko.ko.nas
gen (again)	gen	kon (wheat)	ko:n
gívim (give)	gɪv.im	kópi (coffee)	ko.p ^h i
go	go, go ^ʔ	kot (court)	ko ^{at}
gude (good day)	gud.de:	kot ren (raincoat)	kɔt.r:ɛn
gut (good)	gu:t ^h	krai (cry)	krai
hamás (how much)	ha.mas	kraim (bark)	krai.m
handet (100)	han.det	kukim (cook)	kuk.im
		kukúmba	ko.kum.ba

laik	laik	Niugíni (New Guinea)	n(u).gi.ni
lain (family)	lain	noken (can't)	no.ken
lait (light)	lait	Novémba	no.vem.ba
laplap (towel)	læp.læp	Októba	ɔk.to.ba
liklik (small)	lik.lik	ol (old)	o/ɔ/ɔl
longtaim	lɔŋ.tam	olgéta (total)	ol.ge.da
lóngwe (far)	lɔ(:)ŋ.we	olsem (same)	o:l.sem
lúkim (see)	luk.im	opis (office)	ɔ.pis
lúkim yu (goodbye)	luk.im.ju	orait (all right)	o.rait
lúsim (leave)	lu.sim	páinim (find)	p ^h ai.nim
máma	ma.ma	pait (fight)	pait
man	mæ/an	pámpken (pumpkin)	pam.kin
Mánde (Mon.)	man.de	pápa	p ^h a.p ^h a
mángki (youth)	maŋ.ki	Pápua	pap.wa
mángo	maŋ.go	pas (letter)	p ^h as
máni (money)	ma:.ni	pástaim (begin)	pas.taim
márasin (medicine)	mara.sin	páto (duck)	p ^h a.to
márit (marriage)	mar.it	peim (pay)	p ^h a.im
Mas (March)	mas	pen (pain)	pen
masalaí (spirit)	ma.sa.lai	pik (pig)	p ^h ɪk
másta kot (Mr lawyer)	mas.ta.kɔt	pikiníni (child)	pi.ki.ni.ni
maúnten (mt.)	maun.ten	piksa (picture)	pik.sa
maúsgras (beard)	maus.græs	pínis (finish)	fi.nis, fi:.nis
Me (May)	me:	pis (fish)	p ^h ɪs
mékim (do)	me.kim	Písín (pidgin)	pi:.dʒin, pitʃ.ɪn
mélen	mɛl.en	plank (shield)	plank
meri (woman)	me:.ri	plánti (much)	plan.ti
mi (I)	mi	ples (place)	bles
minit (minute)	min.ɪt	plis (please)	plis
mísis (Mrs.)	mis.ɪz	pópo (papaya)	po.po
móa (more)	mo.a	Port Moresby	p ^h ɔrt mɔr.es.bi
móning (morning)	mɔ/ɔ.nɪŋ	potéto	p ^h o.te.to
móta (motor)	mo.ta	pren (friend)	pren
mumu (oven)	mu.mu	présen (gift)	prsen
mun (month)	mun	pukpuk (crocodile)	p ^h ʊk.p ^h ʊk
na (and)	na	pulpul (grass skirt)	pul.pul
nain (#9)	nain	pundaun (to land)	p ^h ʊn.daun
nais (rice)	nais	rais (rice)	rais
nait (night)	nait	rait (write)	rait
namba (#)	nam.ba	raus (Ger.)	raus
nat (nut)	nɪt	ren (rain)	ren
ngos (louse)	ŋgɔs	ríva (river)	ri/ɪ.va

rot (road)	rot	switmúli (orange)	swit.mu.li
rum (room)	rum	táia (tire)	ta.ja
sámpela (some, many)	sam.pala, sæm.p ^h ela	taim (time)	taim
samtaim	sam.taim	tambu (tabu)	tæm.bu
sámting náting (nothing, not)	sam.tɪŋ. na.tɪŋ	tapióka	tap.jo.ka
Sánde (Sun.)	san.de	táro (taro)	ta.ro
sapós (if)	sa.p ^h os	tasol (only)	ta.sɔ:ɔl:
Sárede (Sat.)	sar.de	taúnam (net)	tau.nam
sáve (know)	sa.ve, sæ.va, sa:.ve	tausen (1000)	tau.zen
sékhan (lit. shake hands; peace)	sek.han	tébol (table)	te.bɔ:l
sel (tent) (Ger. <i>Zelt</i>)	se:l	télipon (telephone)	tel.i.fon
Setémba	se.tem.ba	ten (#10)	ten
seven (#7)	sev.en	tenkyu	tenj.kju
sikis (#6)	si.kis	tis (teeth)	tis
sindáun (sit down)	sin.daun	tísa (teacher)	ti.tʃa, ti.tsa
singsing (songfest)	siŋ.siŋ	tok (say)	tɔk
sis (cheese)	sis	tomáto	to.ma.to
sísa (sister)	si.sa	trak (truck)	trak
siút (shot)	ʃut	tri (#3)	tri
siútim (shoot)	ʃu.tɪm	Trínde (Wed.)	trin.de
skin	skm	tru (very)	tru
skúlrum	skul.rum	tu (#2)	tu
slek (flat)	slek	tudák (dark)	tu.dak
slip (sleep)	slɪ:p	tudé (today)	tu.de(:)
smólpela (small)	smol.p ^h e.la	tumás (very) (too much)	t ^h u.mas
snek (snake)	snek	tumbúna (ancestors)	tum.buna
sóim (show)	ʃo.im	tumóra (tomorrow)	tu.mɔr.a
sol (salt)	sol	Túnde (Tue.)	tun.de
sóri (sorry)	sɔ.ri	túpela (two)	tu.p ^h e.la
sótpela (short)	ʃɔt.p ^h ela	túris (tourist)	tu.rɪs
spia (spear)	spi:.a:	wan (#1)	wǎn
stap (stop)	stap ^h	wánem (what)	wan.em
stilman (thief)	stil.man	wánpela (one)	v/wan.p ^h ela
stóri	stɔ.ri	wántok (fellow native speaker)	wan.tɔk
strong	strɔŋ	wára (water)	va.ra
súa (sore)	su.a	waswas (wash)	vas.vas
súga (sugar)	su.ga	wataím (when)	mat.taim
supsup (spear)	sɔp.sɔp	we (where)	we(:)
susu (milk)	su.su	westap (where)	wɛ/est.(h)ap
		wet (wait)	wet

wik (week)	wik	skul (school)	skul
wín (air, wind)	wín	slek (slack)	słik
wíndo	vin.do	tokim (tell)	tòkím
wok (work)	vək	trausis	trauzis
wókabaut (walk)	wo.ka.baut	tret	tret
wókboi (work boy)	vək.bɔi	wan (one)	wǎn
wónem (what, which)	vo.nem	wari (worry)	wari
yam	jam	Nigerian Pidgin	Phonemes by
yámbo (guava)	jam.bo	(English)	Barbag-Stoll 1983
yánpela (young)	jaŋ.p ^h e.la	agree	gri
yes	jes	answer	hansa
yíar (year)	i.jar	apple	apɔ
yu (you)	ju	ask	aks
yumi (we)	ju.mi	beard	biabia
yúpela (you)	ju.p ^h e.la	book	buku
Tok Pisin	IPA-S Görlach 1986	bottle	bɔtɔ
ausait	au [?] .sait ^h	build	bil
bek (back)	bək	cup	kobu
bladiful (bloody fool)	bladiful	devil	debu
brara	brata	every	efri
bret	bret	flag	filag
bris (bridge)	bris	half	afu
gohet (go ahead)	gohet	harbour	habo
graun (ground)	graun	himself	imsef
i (he)	i	ink	hink
kabis (cabbage)	kabis	milk	milik
klos	kłɔs	mix	misk
kos (course)	kɔs	mouth	mɔt
kranki (odd)	kraŋki	operation	oprefɔn
lap (laugh)	lap	picture	pitfo
meri (woman)	meri	pleasure	plefo
moa	moa	pump	pompu
namba (number)	namba	question	kwefɔn
nogat (no got)	no.gat	receipt	risiti
rabis (rubbish)	rabis	sit down	sidɔn
rida	rida	soldier	sɔdza
ritim	ridim	stand	tanda
rong (wrong)	rɔŋ	story	tori
samting (something)	sæm.tiŋ	table	tabu
sanap (stand up)	san.ap	tender	tonda
save (know)	save	them	dem
sket (skirt)	skɛt	thunder	tonda

tire	taia	we	mifelə
tree	tiri	Trinidad and Tobago	IPA-S from Winer 1993
trousers	trɔsis		
umbrella	hombrela	about	a.bu
village	filidʒ	after	af.tɪ
wasp	waps	back	bak
water	wara	bad	bad
weed	wiwi	boy	boi
witch	wintʃ	boyhood	boi.ʊ:ɔ
young	njongi	cage	keɪdʒ
Melanesian Pidgin	Phonemes by Hall 1943	came	gem
		cast	kast
afterward	bɪhɑjŋ	cherry	tʃeri
all	ɔlə	coming	kɔm.ɪn
already	fɪnɪʃ	down	daʊ, doʊ
all right	ɔraɪt	fella	fɛla
backwoods	bʊʃ	gate	ge:t
before	bɪfɔr	had	had, æd
continually	ɔltajm	hit	hɪʔ
dark	tudark	home	om
get	kɪtʃɪm	how	həʊ
get up	kɪrəp	hush	hoʊʃ
good	gʊdfelə	I	i
he	em	including	ɪnklʊ.dɪn
hear	i-hɪrɪm	just	dʒʌs
I	mi	know	nəʊ
keep going	go go go	lot	lɒt ^h
longtime	lɔŋtaɪm	nothing	na.tɪn
now	naw	out	oʊt ^h
number	nəmbər	pass	pas
of	bɪlɔŋ	put	pʌt ^h
one	wən	road	ɹoad
police-boy	plɪsbɔɪ	run	rɒn
post (letter)	stɛʃən	short	ʃɔt ^h
send	i-selɪm	so	sau
soon	bɑɪmbɑɪ	sticking	stɪk.ɪn
speak	i-tɔkɪm	stone	stʊn
teach	lɑɪnɪm	street	st ^h .ɪt ^h
together	ɔltəgədər	that	dæt ^h , ðæt
trouble	trəbəl	the	di
two	tufelə	things	tɪŋ
us	mifelə	three	tɪ:

throw	tɹo	wine	wainj
to	tɛ	work	wɔ̃k
together	tu.ged.a	working	wɔ̃/ɔ̃kɪn
we had	jæd	you	jʌ, jɔ̃
when	wɛn		

7. SUMMARY

In summary, the International Phonetic Alphabet was extensively described and shown to provide a solid basis for phonetic transcription. The controversy of phonemics versus phonetics showed that it is no longer acceptable for linguists to continue to ignore the critical literature or become captivated by their model to the exclusion of sound phonetic research.

It was shown, then, how the phonetic symbols themselves interrelate, are equivalent, and extend the possible ways in which they relate to one another. The practical use of IPA symbols was thereby expanded. This was followed by a paradigmatic and comparative IPA phonetic transcription lexicon for various pidgin and creole languages.

THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993, corrected 1996)

CONSONANTS (PULMONIC)

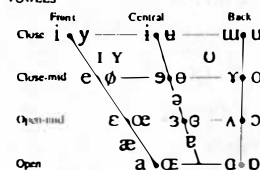
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		ɴ̥
Trill	ʙ			r					ʀ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ʘ Bilabial	ɓ Bilabial	ɛ Examples
Ʉ Dental	ɗ Dental/alveolar	ɓ Bilabial
ʘ Postalveolar	ɗ Palatal	ɗ Dental/alveolar
ɗ Palatoalveolar	ɟ Velar	ɟ Velar
ɟ Alveolar lateral	ɠ Uvular	ɠ Alveolar fricative

VOWELS



OTHER SYMBOLS

ʌ Voiceless labial-velar fricative	ɕ ʑ Alveolo-palatal fricatives
ʋ Voiced labial-velar approximant	ɻ Alveolar lateral flap
ɰ Voiced labial-palatal approximant	ɣ Simultaneous / and X
ħ Voiceless epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary
ʕ Voiced epiglottal fricative	
ʔ Epiglottal plosive	kp ts

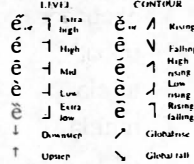
SUPRASEGMENTALS

- ˈ Primary stress
- ˌ Secondary stress
- ː Long
- ˑ Half-long
- ˑ̇ Extra-short
- ˑ̈ Minor (foot) group
- ˑ̈ˑ Major (intonation) group
- ˑ̈ˑ̈ Syllabic break
- ˑ̈ˑ̈ˑ Linking (absence of a break)

DIACRITICS

Diacritics may be placed above a symbol with a descender, e.g. ɪ̥			
Voiceless	̥	Breathy voiced	̤
Voiced	̤	Creaky voiced	̰
Aspirated	̚	Linguabial	̙
More rounded	̙	Labialized	̙̟
Less rounded	̙̟	Palatalized	̙̟̟
Advanced	̟	Velarized	̙̟̟̟
Retracted	̙̟̟̟	Pharyngealized	̙̟̟̟̟
Contrahed	̙̟̟̟̟	Velarized or pharyngealized	̙̟̟̟̟̟
Mid-centralized	̙̟̟̟̟̟	Raised	̙̟̟̟̟̟̟
Syllabic	̙̟̟̟̟̟̟	Lowered	̙̟̟̟̟̟̟̟
Non-syllabic	̙̟̟̟̟̟̟̟̟	Advanced Tongue Root	̙̟̟̟̟̟̟̟̟̟
Rhoticity	̙̟̟̟̟̟̟̟̟̟̟	Retracted Tongue Root	̙̟̟̟̟̟̟̟̟̟̟̟

TONES AND WORD ACCENTS



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