ILLUSTRATIONS OF THE IPA

Indonesian

Craig D. Soderberg

Boston, MA craig s email@yahoo.com

Kenneth S. Olson

Dallas, TX
Ken Olson@sil.org

Indonesian is an Austronesian language, closely related to Malay. Malay served as a lingua franca throughout the Malay Archipelago for centuries, and a variant of Malay was adopted as the official language of Indonesia when independence was declared in 1945. The variety described here is sometimes referred to as Standard Indonesian. Its autoglossonym is 'Bahasa Indonesia'.

Indonesian is the language of government and the medium of instruction in schools, and it is used in an increasingly wide sphere of social interaction, including interethnic communication, religion, and mass communication. There is an increasingly large population of speakers for whom Indonesian is their first language, particularly in the Jakarta area. An estimated 23 million people speak Indonesian as a first language and an additional 140 million speak it as a second language (Grimes 1996, Gordon 2005). For a recent discussion of its classification within Austronesian, see Adelaar (2005).

Indonesian exhibits much regional variation. When spoken as a second language, it is strongly influenced by the regional language of the speaker. This has been documented for the vowel system by van Zanten (1989), and multiple aspects of the influence of Javanese on Indonesian have been shown by Adisasmito-Smith (2004).

Studies of Indonesian phonology (in varying degrees of detail) include MacDonald (1976), Dardjowidjojo (1978), Lapoliwa (1981), Prentice (1987), Echols & Shadily (1989), Alieva, Arakin, Ogloblin & Sirk (1991), Moeliono & Grimes (1995), and Sneddon (1996). In addition, some Indonesian language learning guides discuss aspects of Indonesian phonology (Atmosumarto 1994, Barker 1992, Kwee 1993, Steinhauer 2002, and Wolff, Oetomo & Fietkiewicz 1992). Recent theoretical treatments include Cohn (1989, 1993, 2005), Kenstowicz (1995), Adisasmito-Smith & Cohn (1996), and Cohn & McCarthy (1998).

'The North Wind and the Sun' was translated from English into Indonesian by Daniel Darmawan. A Malay version of the text is found in IPA (1949: 39f.). The text and the individual words illustrating the various sounds were read by Petrus Widjaja, a male speaker of Indonesian, 66 years of age at the time of the recording. Mr. Widjaja was born in Central Java, and his speech reflects the variety of Indonesian spoken there. He lived on Java until he moved to Texas in 1998. Besides Indonesian, he also speaks Javanese, Dutch, English, and German

Consonants

	Bilabial	Labio- dental	Dental	Alveolar	Post- alveolar	Palatal	Velar	Glottal
Plosive & affricate	p b		ţ	d	t∫ dʒ		k g	(?)
Nasal	m			n		ŋ	ŋ	
Flap/trill				r				
Fricative		(f)		s (z)	(J)			h
Approximant	W					j		
Lateral approximant				1				

p	'pat∫at	pacat	'leech' 'clear away, cut through (jungle, grass, etc.)' 'enter' 'fact' 'face'
b	'babat	babat	
m	'masu?	masuk	
f	'fakta	fakta	
w	'wadʒah	wajah	
t d n r s z l	'tabir 'dat∫iŋ 'naga 'rabu 'sabu? 'zat 'labu	tabir dacing naga rabu sabuk zat labu	'curtain, partition' 'kind of portable balanced scale' 'dragon' 'Wednesday' 'belt, sash, loincloth' 'essence, substance' 'gourd, squash'
t∫	't∫akap	cakap	'clever' 'needle' 'pleasant, comfortable' 'condition' 'sure, certain, convinced'
d3	'dʒarum	jarum	
n	'ɲaman	nyaman	
∫	'∫araţ	syarat	
j	'jakin	yakin	
k	ˈkata	kata	'word' 'freshwater fish, snake-head fish' 'moth'
g	ˈgabus	gabus	
ŋ	ŋəˈŋat̯	ngengat	
?	'ma?af	maaf	'forgive, pardon' 'pest, infection'
h	'hama	hama	

The voiceless plosives /p/, /t/, and /k/ are unaspirated, and they are unreleased in syllable-final position. Syllable-final /k/ becomes [?], as in becak ['betʃa?] 'pedicab, tricycle', but this does not apply in some loan words, e.g. ['fakta] 'fact', nor does it apply in some regional variants. The voiced plosives may be somewhat breathy. The alveolar consonants /d/, /n/, and /s/ are dental in some regional variants.

The speaker normally pronounced the alveolar rhotic /r/ as a trill [r], but he sometimes produced a flap [r], especially in intervocalic position. In some regional variants, /h/ optionally deletes between non-identical vowels, e.g. ['lihat] \sim ['liat] 'to see', and word-finally, e.g. ['sudah] \sim ['sudah] 'already'. The speaker produced the /h/ in both of these words.

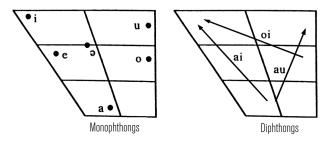
The consonants in parentheses on the consonant chart are found only in loan words and may exhibit variation in their pronunciation. For example, f is optionally realized as [p] as in [fikir] \sim [pikir] 'think'. (The speaker produced the latter.) The symbol $\langle v \rangle$ found in

loan words is voiceless in the speaker's pronunciation, e.g. variasi [fari'asi] 'variation'. The marginal phoneme /x/ (written $\langle kh \rangle$) is now generally being replaced by /k/, but [x] may still be heard in the speech of older speakers. For example, in the recorded text, the speaker produced [x] in the word akhirnya [a'xirpa] 'final, last'.

The voiced plosives /b/, /d/, and /g/ do not occur word-finally in the native vocabulary. When they occur in borrowed forms, they are realized as voiceless plosives [p], $[t_{ij}]$, and [k], e.g. *murid* ['murit] 'student'.

The glottal stop [?] occurs in four environments. First, it occurs as an allophone of /k/ syllable-finally, as mentioned above. Second, it occurs between vowels in some words of Arabic origin, e.g. *maaf* ['ma?af] 'forgive, pardon'. Third, it occurs between a prefix ending in a vowel and a stem beginning with a vowel, irrespective of the vowel quality, e.g. *seorang* [sə'?oraŋ] 'a person', *keenam* [kə?ə'nam] 'sixth'. Fourth, it occurs between a stem ending in /a/ and a stem or suffix beginning with /a/, e.g. *keadaan* [kə?a'da?an] 'existence, situation'.

Vowels



i	'biar	biar	'to allow'
e	'bet∫a?	becak	'pedicab, tricycle'
Э	bə'nar	benar	'correct, right'
a	'baba <u>t</u>	babat	'tripe of ruminants and pigs'
u	'buah	buah	'fruit'
O	'bobot	bobot	'heavy'
aj	'pantaj	pantai	'beach'
aw	'pisaw	pisau	'knife'
oj	səˈpoj-səˈpoj	sepoi-sepoi	'breezy'

The vowels /i, e, o, u/ generally lower to $[i, \varepsilon, o, v]$ in a final closed syllable. In addition, they lower to $[i, \varepsilon, o, v]$ in a penultimate syllable that precedes a final closed syllable when the vowels of the two syllables agree in height. These patterns are subject to regional variation. See van Zanten (1989) and Adisasmito-Smith (2004) for further discussion.

Both /e/ and /ə/ are written $\langle e \rangle$, though /e/ can be written as $\langle \acute{e} \rangle$ to disambiguate the pronunciation. The diphthongs occur only root-finally.

Stress

Stress in Indonesian is predictable. Unaffixed words in isolation have primary stress on the penultimate syllable, but if the vowel in the penultimate syllable is a schwa /ə/, the stress usually occurs on the ultimate syllable (depending on the dialect).

'pintu 'sampaj 'tola? 'masu?	pintu sampai tolak masuk	'door' 'arrive' 'refuse' 'enter'
bə'lum	belum	'not yet'
pəˈrut̪	perut	'stomach
əˈmas	emas	'gold'
bəˈras	beras	'rice'

Transcription of recorded passage

saŋ'aŋin u'tara dan saŋ mata'hari sə'daŋ bərdə'bat tən'taŋ si'apa dian'tara mə'reka jaŋ 'paliŋ 'hebat || kə'tika məlin'taslah sə'oraŋ pə'lantʃoŋ | jaŋ tər'buŋkus 'deŋan 'dʒubah ha'ŋatɲa || mə'reka sə'tudʒu | 'dʒika saŋ'aŋin u'tara | bər'hasil | məm'buat si pə'lantʃoŋ tərsə'but məm'buka dʒu'bahŋa | 'maka 'dialah jaŋ mən'dʒadi tər'hebat dian'tara mə'reka || dan | saŋ 'aŋin u'tara pun | bər'tiup sə'kuat 'muŋkin || 'namun | sə'makin 'kuat ia bər'tiup | sə'makin 'erat | pu'lalah | si pə'lantʃoŋ məmə'lu? dʒu'bahŋa || sə'hiŋga 'pada a'xirna | saŋ 'aŋin u'tara 'itu | mənə'rahlah || sə'karaŋ | ti'balah gi'liran saŋ mata'hari | 'untu? | bər'sinar 'deŋan ha'ŋatŋa || dan 'sa?at 'itu pun si pə'lantʃoŋ məm'buka dʒu'bahŋa | sə'hiŋga | məm'buat saŋ 'aŋin u'tara 'harus mə'ŋakui || 'bahwa | saŋ mataha'rilah | jaŋ lə'bih 'hebat | dari 'pada saŋ 'aŋin u'tara 'itu sən'diri.

Orthographic version

Sang Angin Utara dan Sang Matahari sedang berdebat tentang siapa diantara mereka yang paling hebat, ketika melintaslah seorang pelancong yang terbungkus dengan jubah hangatnya. Mereka setuju jika Sang Angin Utara berhasil membuat si pelancong tersebut membuka jubahnya, maka dialah yang menjadi terhebat diantara mereka. Dan Sang Angin Utara pun bertiup sekuat mungkin, namun semakin kuat ia bertiup semakin erat pulalah si pelancong memeluk jubahnya, sehingga pada akhirnya Sang Angin Utara itu menyerahlah. Sekarang tibalah giliran Sang Matahari untuk bersinar dengan hangatnya, dan saat itupun si pelancong membuka jubahnya sehingga membuat Sang Angin Utara harus mengakui bahwa Sang Mataharilah yang lebih hebat dari pada Sang Angin Utara itu sendiri.

Acknowledgements

We wish to thank Donald Barr, Fraser Bennett, Michael Boutin, Michael Cahill, Charles Grimes, Paul Kroeger, and two anonymous reviewers for helpful comments and suggestions. All errors are our responsibility.

References

Adelaar, Alexander. 2005. The Austronesian languages of Asia and Madagascar: A historical perspective. In Alexander Adelaar & Nikolaus P. Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (Routledge Language Family Series), 1–42. London: Routledge.

Adisasmito-Smith, Niken. 2004. *Phonetic and phonological influences of Javanese on Indonesian*. Ph.D. dissertation, Cornell University.

- Adisasmito-Smith, Niken & Abigail C. Cohn. 1996. Phonetic correlates of primary and secondary stress in Indonesian: A preliminary study. *Working Papers of the Cornell Phonetics Laboratory* 11, 1–15.
- Alieva, N. F., V. D. Arakin, A. K. Ogloblin & Yu H. Sirk. 1991. *Bahasa Indonesia: Descripsi dan Teori*. Yogyakarta: Penerbit Kanisius.
- Atmosumarto, Sutanto. 1994. *Colloquial Indonesian: A complete language course*. New York: Routledge. Barker, John. 1992. *Practical Indonesian: A communication* guide, 7th edn. Singapore: Periplus.
- Cohn, Abigail C. 1989. Stress in Indonesian and bracketing paradoxes. Natural Language & Linguistic Theory 7, 167–216.
- Cohn, Abigail C. 1993. The initial dactyl effect in Indonesian. Linguistic Inquiry 24, 372–381.
- Cohn, Abigail C. 2005. Truncation in Indonesian: Evidence for violable minimal words and AnchorRight. In Keir Moulton & Matthew Wolf (eds.), North East Linguistic Society (NELS) 34.1, 175–189. Amherst, MA: GLSA.
- Cohn, Abigail C. & John J. McCarthy. 1998. Alignment and parallelism in Indonesian phonology. Working Papers of the Cornell Phonetics Laboratory 12, 53–137.
- Dardjowidjojo, Soenjono. 1978. Sentence patterns of Indonesian. Honolulu, HI: The University Press of Hawaii.
- Echols, John M. & Hassan Shadily. 1989. *An Indonesian-English dictionary*, 3rd edn. Ithaca, NY: Cornell University Press.
- Gordon, Raymond G. (ed.). 2005. *Ethnologue: Languages of the world*, 15th edn. Dallas, TX: SIL International.
- Grimes, Charles E. 1996. Indonesian the official language of a multilingual nation. In Stephen A. Wurm, Peter Mühlhäusler & Darrell T. Tryon (eds.), *Atlas of languages of intercultural communication in the Pacific, Asia, and the Americas* (Trends in Linguistics. Documentation 13), 719–727. Berlin: Mouton de Gruyter.
- IPA (International Phonetic Association). 1949. The principles of the International Phonetic Association, being a description of the International Phonetic Alphabet and the manner of using it, illustrated by texts in 51 languages. London: International Phonetic Association.
- Kenstowicz, Michael. 1995. Cyclic vs. noncyclic constraint evaluation. *Phonology* 12, 397–436.
- Kwee, John B. 1993. Indonesian (Teach Yourself Books). Chicago, IL: NTC Publishing Group.
- Lapoliwa, Hans. 1981. *A generative approach to the phonology of Bahasa Indonesia* (Pacific Linguistics Series D No. 34). Canberra: The Australian National University.
- MacDonald, R. Ross. 1976. *Indonesian reference grammar*. Washington, DC: Georgetown University Press
- Moeliono, Anton M. & Charles E. Grimes. 1995. Indonesian (Malay). In Darrell T. Tryon (ed.), *Comparative Austronesian dictionary: An introduction to Austronesian studies*, Part 1, Fascicle 1 (Trends in Linguistics. Documentation 10), 443–457. Berlin: Mouton de Gruyter.
- Prentice, D. J. 1987. Malay (Indonesian and Malaysian). In Bernard Comrie (ed.), *The world's major languages*, 913–935. London & Sydney: Croom Helm.
- Sneddon, James Neil. 1996. *Indonesian: A comprehensive grammar*. London & New York: Routledge. Steinhauer, Hein. 2002. *Leerboek Indonesisch*. Leiden: KITLV.
- van Zanten, Ellen. 1989. *The Indonesian vowels: Acoustic and perceptual explorations*. Ph.D. dissertation, Leiden University.
- Wolff, John U., Dede Oetomo & Daniel Fietkiewicz. 1992. *Beginning Indonesian through self-instruction, Book 2*. Ithaca, NY: Cornell University, Southeast Asia Program.