



Language Specific Peculiarities Document for JAVANESE as Spoken in INDONESIA

Javanese is an Austronesian language (Malayo-Polynesian) spoken primarily in the central and eastern parts of Java, an island of Indonesia. It is spoken by approximately 84 million people. Bahasa Indonesia is the official language of Indonesia, and while Javanese does not have official language status, it is the most widely spoken regional language in Indonesia (Nothofer, 2006).

Javanese is also spoken by approximately 500,000 people in Suriname, New Caledonia, Malaysia and other countries (Lewis et al., 2014), but these were not collected for the current project.

1. Special handling of dialects

There are three main dialects of Javanese corresponding to geographical areas within Java (Andarini et al., 2007). The standard dialect is based on Central Javanese as spoken in Surakarta and Yogyakarta. It is representative of the Javanese taught in schools and spoken in the palaces. There are phonetic and lexical differences between the three dialects. But in general, there is a high degree of mutual intelligibility. The phonetic differences are largely made up of different vowel pronunciations (Ras, 1985).

Region	Districts or Cities
Central Javanese	Pekalongan, Kedu, Bagelen, Semarang, Eastern North-Coast, Blora, Surakarta, Yogyakarta, Madiun
Western Javanese	North Banten, Cirebon, Tegal, Banyumas
Eastern Javanese	Surabaya, Malang, Jombang, Banyuwangi

Speakers of all 3 dialects are included in this speech database.

In addition to the dialects, Javanese has three speech levels used depending on the social relationship between the conversation partners (Poedjosoedarmo, 1968; Quinn, 2011):

- *ngoko* – non-polite or informal speech level, used between people who have a high degree of familiarity, e.g., close family and friends. It can also be used by a person who wants to talk down to someone of a lower social status, e.g., a grandparent talking to a child.
- *madya* – semi-polite or semi-formal speech level, used between people where the status is unknown, e.g., strangers or distant acquaintances.



- *krama* – polite or formal speech level, used when addressing someone to indicate respect, e.g., child to grandparent, employee to employer.

The fluency with which Javanese speakers use and understand the three speech levels varies depending on a range of factors, including socio-economic and socio-cultural factors, such as location and age (Poedjosoedarmo, 1968). Some Javanese speakers, in fact some dialects such as Tengger, only use one speech level. Accordingly younger people may understand both *ngoko* and *krama* but can only speak *ngoko*. These speakers typically use Bahasa Indonesia when speaking to older relatives where *krama* would otherwise be used, to avoid causing offence. Quinn (2011) suggests that *ngoko* vocabulary is used more frequently and dominates Javanese-language publications, while *krama* is usually seen as “ultra-refined and esoteric” (p. 365).

The *ngoko* speech level is prevalent in the conversational data recordings. The *madya* and *krama* speech levels form a smaller proportion estimated at around 10% of this data. The scripts include items from both *ngoko* and *krama* speech levels where appropriate.

2. Deviation from native-speaker principle

There is no special deviation from the native-speaker principle for this project. Only native speakers of Javanese were collected.

3. Special handling of spelling

None.

4. Description of character set used for orthographic transcription

The Latin script is used for the orthographic transcription of Javanese. The Unicode range for Javanese is U+0041-U+007A. Javanese can be written in the Latin script, or in the traditional Javanese script Hanacaraka (or Aksara Jawa); however, this latter script is used mainly by scholars or for decoration, and the Latin script is now the most commonly used writing system (Clynes et al., 1995). There is a third script, Pegon, which is a form of Arabic adapted to accommodate Javanese speech sounds; however, the use of this script is now restricted to religious manuscripts (Hisyam, 2006).

5. Description of Romanization scheme

Not applicable.

6. Description of method for word boundary detection

Word boundaries in the orthography are determined by whitespace. Hyphens are used in Javanese, especially in reduplications. Acronyms are usually borrowed from Indonesian and are often pronounced in an Indonesian way.



7. Table containing all phonemes in the stipulated notation

The phonemic transcription of the words in this database uses X-SAMPA symbols, which can be found at <http://www.phon.ucl.ac.uk/home/sampa/x-sampa.htm>. The total number of native phonemes is 27. There are 19 consonants, 2 semi-vowels (/w/ and /j/), 6 vowels (6 monophthongs and 0 diphthongs) and 0 tones (Nothofer, 2006). There are also 4 salient vowel allophones. There are 3 foreign consonants.

JAVANESE PHONE CHART

TYPICAL JAVANESE CORRESPONDENCE	UNICODE	IPA	SAMPA	COMMENTS
CONSONANTS				
p	0070	p	p	
b	0062	b̥	b	
t	0074	t	t	
d	0064	d̥	d	
th	0074 0068	t	t`	
dh	0064 0068	d̥	d`	
k	006b	k	k	
g	0067	g̊	g	
k	006b	ʔ	ʔ	
m	006D	m	m	
n	006E	n	n	
ny	006E 0079	ɲ	J	
ng	006E 0067	ŋ	N	
s	0073	s	s	
h	0068	h	h	
c	0063	tʃ	tS	
j	006a	dʒ	dZ	
l	006c	l	l	

TYPICAL JAVANESE CORRESPONDENCE	UNICODE	IPA	SAMPA	COMMENTS
w	0077	w	w	
r	0072	r	r	
y	0079	j	j	
FOREIGN CONSONANTS				
f	0066	f	f	
z	007a	z	z	
sy	0073 0079	ʃ	S	
VOWELS				
i	0069	i	i	
u	0075	u	u	
e	0065	e	e	
e	0065	ə	@	
o	006f	o	o	
a	0061	a	a	
VOWEL ALLOPHONES				
e	0065	ɛ	E	
o	006f	ɔ	O	
i	0069	ɪ	I	
u	0075	ʊ	U	

OTHER SYMBOLS	
.	Syllable break
#	Word boundary

Notes:

Strictly speaking, there are no voiced obstruents in Javanese. The phonemes in the table rendered with voiced SAMPA symbols /b, d, d', g, dZ/ are voiceless with breathy (or slack) voice on the following vowel (Brown et al., 2008).



7.1 List of rare phonemes

None of the native Javanese phonemes are rare. Two of the foreign phones /z/ and /S/ are rare.

7.2 List of foreign phones

The foreign consonant phone /f/ is regularly used in loan words from European languages or Arabic, often in variation with /p/. The foreign phones /z/ and /S/ are not as common, although they may occur in variation with /s/. The phone /v/ is pronounced as /f/ or /p/.

7.3 Vowel allophones

Javanese is subject to vowel raising and vowel harmony as well which results in a number of vowel allophones. According to Nothofer (2006), these occur in the following environments, for the standard variety:

1. [I] is an allophone of /i/ in closed syllables.
2. [U] is an allophone of /u/ in closed syllables.
3. [E] is an allophone of /e/:
 - in closed syllables;
 - in open syllables where the vowel in a following open syllable is high;
 - in open syllables where the vowel in a following syllable is [E] or /@/.
4. [O] is an allophone of:
 - /o/ in closed syllables;
 - /o/ in open syllables where the vowel in a following open syllable is high;
 - /o/ in open syllables where the vowel in a following syllable is [O] or /@/.
 - /a/ word-finally;
 - in penultimate syllables where the word-final open syllable has /a/ (i.e., [O]).

Morphological processes can mask these general rules so that underlying and derived syllable structures must also be taken into account when analyzing surface forms. For instance, the first phoneme of a suffix can block the allophony mentioned above in most dialects. If the suffix is consonant-initial, the stem-final vowel is treated as though it is in a closed syllable.

Vowel raising and vowel harmony have spread from the Surakarta and Yogyakarta dialects to other Javanese dialects. However, these phonological processes are not found in geographically removed dialects such as Banyumas (Andarini et al., 2007).

8. Other language items

8.1 Table of Digits

Numeral	Javanese	Speech Level
0	enol	<i>ngoko</i>
	kosong	<i>ngoko</i>
1	siji	<i>ngoko</i>
	setunggal	<i>krama</i>
2	loro	<i>ngoko</i>
	kalih	<i>krama</i>
3	telu	<i>ngoko</i>
	tiga	<i>krama</i>
4	papat	<i>ngoko</i>
	sekawan	<i>krama</i>
5	lima	<i>ngoko</i>
7	gangsal	<i>krama</i>
6	enem	<i>ngoko, krama</i>
7	pitu	<i>ngoko, krama</i>
8	wolu	<i>ngoko, krama</i>
9	sanga	<i>ngoko, krama</i>

8.2 Other Numbers

Numeral	Javanese	Speech Level
10	sepuluh	<i>ngoko</i>
	sedasa	<i>krama</i>
100	satus	<i>ngoko</i>
	setunggal atus	<i>krama</i>
10,000	sepuluh ewu	<i>ngoko</i>
	sedasa ewu	<i>krama</i>
100,000	satus ewu	<i>ngoko</i>
	setunggal atus ewu	<i>krama</i>
10 million	sepuluh yuta	<i>ngoko</i>
	sedasa yuta	<i>krama</i>

8.3 Spelling alphabet

Orthography	Usual pronunciation (SAMPA)
a	a
b	b e
c	tS e
d	d e
e	e
g	g e
h	h a
i	i
j	dZ e
k	k a
l	E l
m	E m
n	E n
o	o
p	p e
r	E r
s	E s
t	t e
u	u
w	w e
y	j e



Foreign letters	Usual pronunciation (SAMPA)
f	E f
q	k i
v	f e
x	E k s
z	z E t

9. References

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Wetonan Cycle Javanese Calendar. n.d.¹ In *Wikipedia*.

https://en.wikipedia.org/wiki/Javanese_calendar#Wetonan_cycle, retrieved August 11th, 2014.

¹n.d. means no date.