

Thai

Author(s): M. R. Kalaya Tingsabadh and Arthur S. Abramson

Source: *Journal of the International Phonetic Association*, June 1993, Vol. 23, No. 1 (June 1993), pp. 24-28

Published by: Cambridge University Press

Stable URL: <https://www.jstor.org/stable/44594809>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

Cambridge University Press is collaborating with JSTOR to digitize, preserve and extend access to *Journal of the International Phonetic Association*

Thai

M. R. KALAYA TINGSABADH

Department of Linguistics, Faculty of Arts, Chulalongkorn University, Bangkok 10330, Thailand

AND

ARTHUR S. ABRAMSON

Haskins Laboratories, New Haven, CT and Department of Linguistics, The University of Connecticut, Storrs, CT 06269-1145, U.S.A.

Standard Thai is spoken by educated speakers in every part of Thailand, used in news broadcasts on radio and television, taught in school, and described in grammar books and dictionaries. It has evolved historically from Central Thai, the regional dialect of Bangkok and the surrounding provinces.

The transcription of *The North Wind and the Sun* is based on recordings made by three cultivated speakers of the language, who were asked to read the passage in a relaxed way. In fact, we find them all to have used a fairly formal colloquial style, apparently equivalent to Eugénie J.A. Henderson's "combinative style" (Henderson 1949). In a more deliberate reading of the text many words in the passage would be transcribed differently. The main features subject to such stylistic variation are vowel quantity, tone, and glottal stop. Thus, for example, /tè/ 'but' is likely under weak stress to be /tè/ with a short vowel; the modal auxiliary /tɕāʔ/ 'about to' becomes /tɕā/, with change of tone from low to mid and loss of final glottal stop. The prosodic and syntactic factors that seem to be at work here remain to be thoroughly explored.

Consonants

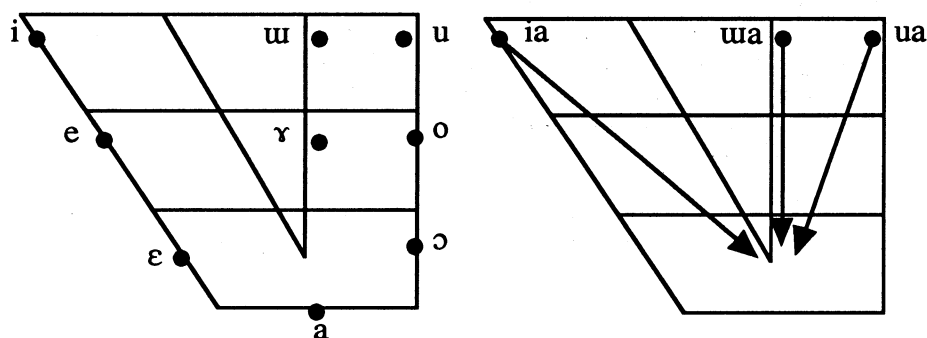
	Bilabial	Labio-dent.	Dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p p ^h b			t t ^h d			k k ^h	ʔ
Nasal	m			n			ŋ	
Fricative		f		s				h
Affricate					tɕ tɕ ^h			
Trill				r				
Approximant						j	w	
Lateral Approx.				l				

Journal of the International Phonetic Association (1993) **23:1**.

p	pā:	'elder aunt'	t	tām	'to pound'	k	kā:ŋ	'fish bone'
p ^h	p ^h ā:	'cloth'	t ^h	t ^h ām	'to do'	k ^h	k ^h ā:ŋ	'side'
b	bā:	'insane'	d	dām	'black'	ŋ	ŋā:	'tusk'
m	mā:	'to come'	n	nā:	'ricefield'	w	wān	'day'
f	fāj	'pimple'	s	sāj	'clear'	j	jā:m	'watchman'
			r	rāk	'to love'	ʔ	ʔuān	'fat'
			l	lāk	'to steal'	h	hāj	'earthen jar'
			tɕ	tɕā:m	'to sneeze'			
			tɕ ^h	tɕ ^h ā:m	'dish'			

Vowels

There are nine vowels. Length is distinctive for all the vowels. (In some phonological treatments, /V:/ is analyzed as /VV/.) Although small spectral differences between short and long counterparts are psychoacoustically detectable and have some effect on vowel identification (Abramson & Ren 1990), we find the differences too subtle to place with confidence in the vowel quadrilateral. The vowel /a/ in unstressed position, including the endings of the diphthongs /ia ua ua/, is likely to be somewhat raised in quality. The final segments of the other two sets of phonetic diphthongs: (1) [iu, eu, e:u, ε:u, au, a:u, iau] and (2) [ai, ai, ɔi, ɔ:i, ui, ri, uai, uai] are analyzed as /w/ and /j/ respectively:



i	kɿt	'dagger'	i:	kɿ:t	'to cut'	ia	riān	'to study'
e	ʔēn	'ligament'	e:	ʔē:n	'to recline'	ua	rūān	'house'
ε	p ^h éʔ	'goat'	ε:	p ^h é:	'to be defeated'	ua	rūān	'to be provocative'
a	fān	'to dream'	a:	fā:n	'to slice'			
ɔ	klɔŋ	'box'	ɔ:	klɔ:ŋ	'drum'			
o	k ^h ōn	'thick (soup)'	o:	k ^h ō:n	'to fell (a tree)'			
u	sùt	'last, rearmost'	u:	sù:t	'to inhale'			
ɤ	ŋɿn	'silver'	ɤ:	dɿ:n	'to walk'			
u	k ^h uūn	'to go up'	u:	k ^h luū:n	'wave'			

Tones

There are five tones in Standard Thai: high /˥/, mid /˨˩/, low /˩/, rising /˨˩˦/, and falling /˥˩/.

k ^h ā:	‘to get stuck’	k ^h á:	‘to engage in trade’
k ^h ǎ:	‘galangal’	k ^h ǎ:	‘leg’
k ^h â:	‘I’		

Stress

Primary stress falls on the final syllable of a word. The last primary stress before the end of a major prosodic group commonly takes extra stress.

Conventions

The feature of aspiration is manifested in the expected fashion for the simple prevocalic oral stops /p^h, t^h, k^h/. The fairly long lag between the release of the stop and the onset of voicing is filled with turbulence, i.e., noise-excitation of the relatively unimpeded supraglottal vocal tract. In the special case of the "aspirated" affricate /tʃ^h/, however, the noise during the voicing lag excites a narrow postalveolar constriction, thus giving rise to local turbulence. It is necessarily the case, then, that the constriction of the aspirated affricate lasts longer than that of the unaspirated one (Abramson 1989). Not surprisingly, it follows from these considerations that the aspiration of initial stops as the first element in clusters occurs during the articulation of the second element, which must be a member of the set /l, r, w/.

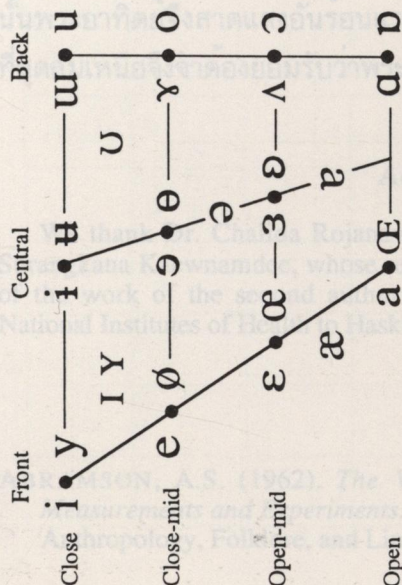
Only /p, t, k, ʔ, m, n, ŋ, w, j/ occur in syllable-final position. Final /p, t, k, ʔ/ have no audible release. The final oral plosives are said to be accompanied by simultaneous glottal closure (Henderson 1964, Harris 1972). Final /ŋ/ is omitted in unstressed positions. Initial /t/ and /f/ are velarized before close front vowels.

The consonant /r/ is realized most frequently as [r] but also as [ɾ]. Perceptual experiments (Abramson 1962: 6–9) have shown that the distinction between /r/ and /l/ is not very robust; nevertheless, the normative attitude among speakers of Standard Thai is that they are separate phonemes, as given in Thai script. This distinction is rather well maintained by some cultivated speakers, especially in formal speech; however, many show much vacillation, with a tendency to favor the lateral phone [l] in the position of a single initial consonant. As the second element of initial consonant clusters, both /l/ and /r/ tend to be deleted altogether.

In plurisyllabic words, the low tone and the high tone on syllables containing the short vowel /a/ followed by the glottal stop in deliberate speech, become the mid tone when unstressed, with loss of the glottal stop.

+	Alveolar lateral	g	uvular	k'	Alveolar fricative
		G		S'	

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

- M Voiceless labial-velar fricative
 - W Voiced labial-velar approximant
 - ɥ Voiced labial-palatal approximant
 - H Voiceless epiglottal fricative
 - ʕ Voiced epiglottal fricative
 - ʔ Epiglottal plosive
 - ɕ ʑ Alveolo-palatal fricatives
 - ɻ Alveolar lateral flap
 - ɰ Simultaneous ʃ and X
- Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
- kp ts

Extra-short	è	Low	ē	Low rising
Syllable break	̣	Extra low	ẽ	Rising-falling etc.
Minor (foot) group		Downstep	↗	Global rise
Major (intonation) group		Upstep	↘	Global fall
Linking (absence of a break)	˘			

DIACRITICS
Diacritics may be placed above a symbol with a descender, e.g. ɲ̥

◦	Voiceless	n̥ d̥	ː	Breathily voiced	b̤ a̤	˘	Dental	t̪ d̪
˘	Voiced	s̬ t̬	˘	Creaky voiced	b̰ a̰	˘	Apical	t̪ d̪
h	Aspirated	tʰ dʰ	˘	Linguolabial	t̬ d̬	˘	Laminal	t̪ d̪
˘	More rounded	ɔ̜	˘	Labialized	tʷ dʷ	˘	Nasalized	ẽ
˘	Less rounded	ɔ̜	j	Palatalized	tʲ dʲ	n	Nasal release	d̪ⁿ
+	Advanced	ɥ	˘	Velarized	tʷ dʷ	˘	Lateral release	d̪ˡ
˘	Retracted	ɨ	˘	Pharyngealized	tˤ dˤ	˘	No audible release	d̪̚
˘	Centralized	ɘ	˘	Velarized or pharyngealized	t̬ d̬			
˘	Mid-centralized	ɘ	˘	Raised	ɛ̠ (ɛ̠ = voiced alveolar fricative)			
˘	Syllabic	ɹ̩	˘	Lowered	ɛ̞ (ɛ̞ = voiced bilabial approximant)			
˘	Non-syllabic	ɛ̥	˘	Advanced Tongue Root	ɛ̠			
˘	Rhoticity	ɐ̰	˘	Retracted Tongue Root	ɛ̠			

Transcription of recorded passage

kʰā'nà? tʰi̯ ,lōm'nūa lé ,pʰráʔā'tʰit | kām'lāŋ tʰi̯ǎŋ kām 'wā: | 'kʰrāj tɕā 'mī:
 pʰā'lāŋ 'mā:k kwā 'kām | kō 'mī: 'nák,d̥ɿ:n'tʰā:ŋ 'pʰū: 'nu̯ŋ 'd̥ɿ:n 'pʰā:n 'mā: |
 'sāj 'sūa,kān'nā:w || ,lōm'nūa lé ,pʰráʔā'tʰit tɕu̯ŋ ,tòk'lōŋ kām 'wā: | 'kʰrāj tʰi̯
 ,sā:mā:t 'tʰām hāj 'nák,d̥ɿ:n'tʰā:ŋ 'pʰū: 'nī: | tʰò:t 'sūa,kān'nā:w ʔòk 'dā:j
 ,sām'rèt 'kò:n | tɕā 'tʰū: 'wā: | pēn 'pʰū: tʰi̯ 'mī: pʰā'lāŋ 'mā:k kwā: || 'lé? 'lé:w |
 ,lōm'nūa kō krāpʰū: 'pʰát 'jaŋ 'sūt 'rēŋ || tē 'jīŋ 'pʰat 'rēŋ 'mā:k 'kʰūn 'pʰi̯aŋ
 'dāj | 'nák,d̥ɿ:n'tʰā:ŋ kō 'jīŋ 'dūŋ 'sūa,kān'nā:w 'hāj krā'tɕháp káp 'tūa 'mā:k
 'kʰūn 'pʰi̯aŋ 'nán || 'lé? 'nāj tʰi̯ 'sūt | ,lōm'nūa kō 'lī:k 'lōm 'kʰwā:m
 pʰājā'jā:m || tɕā:k 'nán | ,pʰráʔā'tʰit tɕu̯ŋ 'sāt 'sēŋ ʔān 'ró:m 'rēŋ ʔòk 'mā: ||
 'nák,d̥ɿ:n'tʰā:ŋ kō tʰò:t 'sūa,kān'nā:w ʔòk 'tʰān 'tʰi̯: || 'nāj tʰi̯ 'sūt | ,lōm'nūa
 tɕu̯ŋ 'tɕām 'wōŋ 'jō:m 'ráp 'wā: | ,pʰráʔā'tʰit mī: pʰā'lāŋ 'mā:k kwā: 'tōn ||

The passage in Thai script

ขณะที่ลมเหนือและพระอาทิตย์กำลังเอียงกันว่าใครจะมีพลังมากกว่ากัน ก็มีนักเดินทางผู้
 หนึ่งเดินผ่านมา ใส่เสื้อกันหนาว ลมเหนือและพระอาทิตย์จึงตกลงกันว่า ใครที่สามารถ
 ทำให้นักเดินทางผู้นี้ถอดเสื้อกันหนาวออกได้สำเร็จก่อน จะถือว่าเป็นผู้ที่มีพลังมากกว่า และ
 แล้ว ลมเหนือก็กระพือพัดอย่างสุดแรง แต่ยิ่งพัดแรงมากขึ้นเพียงใด นักเดินทางก็ยังดึงเสื้อ
 กันหนาวให้กระชับกับตัวมากขึ้นเพียงนั้น และในที่สุดลมเหนือก็เลิกล้มความพยายาม จาก
 นั้นพระอาทิตย์จึงสาธิตแสงอันร้อนแรงออกมา นักเดินทางก็ถอดเสื้อกันหนาวออกทันที ใน
 ที่สุดลมเหนือจึงจำต้องยอมรับว่าพระอาทิตย์มีพลังมากกว่าตน

Acknowledgments

We thank Dr. Chalida Rojanawathanavuthi, Dr. Kingkarn Thepkanjana, and Miss Surangkana Kaewnamdee, whose readings of the passage underlie our transcription. Part of the work of the second author was supported by Grant HD01994 from the U.S. National Institutes of Health to Haskins Laboratories.

References

- ABRAMSON, A.S. (1962). *The Vowels and Tones of Standard Thai: Acoustical Measurements and Experiments*. Bloomington: Indiana University Research Center in Anthropology, Folklore, and Linguistics, Publication 20.

ABRAMSON, A.S. (1989). Laryngeal control in the plosives of Standard Thai. *Pasaa* **19**, 85–93.

ABRAMSON, A.S. and REN, N. (1990). Distinctive vowel length: Duration vs. spectrum in Thai. *Journal of Phonetics* **18**, 79–92.

HARRIS, J.G. (1972). Phonetic notes on some Siamese consonants. In Harris, J.G. and Noss, R.B. (editors), *Tai Phonetics and Phonology*, 8–22. Bangkok: Central Institute of English Language.

HENDERSON, E.J.A. (1949). Prosodies in Siamese: A study in synthesis. *Asia Major New Series* **1**, 189–215.

HENDERSON, E.J.A. (1964). Marginalia to Siamese phonetic studies. In Abercrombie, D., Fry, D.B., MacCarthy, P.A.D., Scott, N.C., and Trim, J.L.M. (editors), *In Honour of Daniel Jones: Papers Contributed on the Occasion of his Eightieth Birthday 12 September 1961*, 415–424. London: Longmans.

Korean

HYUN BOK LEE

Phonetics Laboratory, Department of Linguistics, Seoul National University,
Seoul 151-742, Korea

The variety of Korean spoken in and around Seoul, on which the following phonetic description is based, is widely recognized as the standard language of the Korean peninsula. It differs from the speech of Pyongyang in North Korea, however, in phonetic features such as vowel and consonant qualities, vowel length, accent, rhythm and intonation.

Consonants

	Bilabial	Labio-dent.	Dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p p ^h b			t t ^h d			k k ^h g	
Nasal	m			n			ŋ	
Fricative		f		s z				h
Affricate					c c ^h ɟ			
Lateral Approx.				l				