Changes in the Pitch Contours of Unaccented Syllables in Spoken Thai

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(This article is in fact a summary of Chapter VIII of the author's thesis: Samang 1971. In the thesis, she has set out to investigate the role of accent in Thai Grammar. The result of the investigation has led her to conclude that accent is a phonological feature, the various degrees of which are predictable by a series of 4 phonological rules operating on the surface structures of utterances. The generative approach is used in the thesis. According to this approach, accent has two functions in the grammar: the syntactic function and the interpretative function. The four previously mentioned phonological rules serve the syntactic function as they, in assigning various degrees of accent to syllables in utterances, show how utterances, with identical phonological representations, are contrastive. The interpretative function is to map the phonological representation of an utterance in a given surface structure onto its phonetic representation. Rules which serve the second function are called "Phonetic realization rules" and the changes in the pitch contours of unaccented syllables in spoken Thai may be predicted by some of these rules. However, since this is a phonetic conference, the author will not talk about the rules in this paper; but will confine herself to a discussion on how systematic the changes in the pitch contours of the tonal configurations of unaccented syllables are.)

Introduction

The changes in the pitch contours of unaccented or unstressed syllables in spoken Thai have been mentioned by most linguists working on Thai phonology. Whitaker (1969); from his own and other linguists' findings, has summarized the changes in the following 5 rules. The symbols ~ and ←——→ are used by Whitaker to represent the changability of the tones.
(1) Rule 1: low ~ mid Applies to unstressed modals and unstressed syllables in derived polysyllabic words.

khąw tọ̀a pąj ↔ khąw tọ̀a pąj
“เข้าจะไป”

Rule 2: high ~ mid Applies to same as rule 1.

sόnthάʔnaa ↔ sόnthanaa
“สนทนา”

Rule 3: high ~ fall Applies to sentence final particles

sàʔ baaj díi rụwu khą ↔ sa baaj díi khą
“สถาบันทฤษฎี”

Rule 4: rise ~ high Applies to Q-morpheme and certain pronouns:

tʃhąj mąj ↔ tʃhąj mąj
“ใช้ไหม”

khąw pąj rụwu plàaw ↔ khąw pąj rụwu plàaw
“เข้าไปหรือเปล่า”

Rule 5: fall ~ high Applies to certain modals and neg-morpheme:

ʔaa kąat mąj tʃhąj rόon ↔ ʔaa kąat mąj tʃhąj rόon
“ยังการไม่ใช้ร้อน”

khąw mąj khόοj jàak tọ̀a pąj ↔ khąw mąj khόοj jàak tọ̀a pąj
“เข้าไม่เกี่ยวกับอะไรไป”

Whitaker calls these rules “stylistic tone changing rules”; but clearly the change which takes place in Rule 3 is a syntactic change and not a stylistic one; since by changing the tone on the final particle /kha/ from the high tone to a falling tone, we change an interrogative sentence into an answer or a statement. One thing which has been overlooked by Whitaker is the fact that the syllables in which these tone changes take place are all unaccented or unstressed (only Rule 1 and Rule 2 mention this). Moreover, the environment for these tone changing rules is much wider than what was stated by Whitaker. Rule 4, for instance, does not apply just to the so called “Q-morpheme” and certain pronouns; but also to the following unstressed syllables:
Unaccented syllables

Before going on the describe the changes in the pitch contours of unaccented syllables, it is essential that the reader knows what the author means by “unaccented” so that he may compare the author’s findings with the pitches in his own pronunciation. Without going into the author’s accent placement rules, one may define unaccented syllables as follows:

(3) (i) non-final syllables(s) in all polysyllabic words.
Examples: /wit thá jaa laj/  “วิทยาลัย”

(ii) monosyllabic words which belong to the following word classes:
a) Personal pronouns
b) Demonstrative pronouns, when used anaphorically:
Example: /thra nii tɔa? paj nɔaj/  “เรียนจะไปไหน”
c) Classifiers
d) Prenumerals
Example: /ʔiik sāam wan/  “อีกสามwan”
e) Preverbs
Example: /mák tɔa? tɔɔŋ paj tham ηaan/  “มักจะดองไปทางนั้น”
f) Postverbs
Example: /lɛn júu khà/  “เลื่อนอยู่”
g) Verb modifiers
Example: /dɔŋ tɔa? paj/  “เดินออกไป”
h) Prepositions
Example: /jùu bon tó/ "อยู่บนโต๊ะ"

i) Conjunctions
Example: /wìŋ sëa nûaj/ "วงศ์เห็นอยู่"

j) Negator
Example: /mâj mâj/ "ไม่ใหม่"

k) Sentence particles
Example: /pæj rûu mâj pæj tó/ "ไปเร็วไม่ไปเร็ว"

l) The following verbs:
/mii/ "มี" /maa/ "ม้า"
/paj/ "ป้า" /juu/ "อยู่"
/paw/ "เบ้า" /pen/ "เป็น"

(iii) The first syllable of an institutionalized compound.²
Examples: /kхаа thun/ "ข้ากุน"
/raŋ thàaaw/ "ร่างแท้" /jаа raj/ "อย่างไร"

(iv) The completely reduplicated forms:
Examples: /khon bаа bаа/ "คนบ้าบ้า"
/jаа jаа jаа juа/ "อย่างเจ้าเจ้า"

Patterns of changes in the pitch contours

The changes in the pitch contours of unaccented syllables may be summarized as follows:

(4)

All mid tone → mid pitch
low tone → \{ mid pitch, if the syllable is of the type C(C)V ? (iii)
\{ modified low pitch / elsewhere (iii)
high tone → \{ mid pitch, if the syllable is of the type C(C)V?
\{ with the exception of all proper nouns. (iv)
\{ high pitch / elsewhere (v)
falling tone → high pitch in all cases (vi)
rising tone → \{ modified low pitch, if the syllable has a voice-
\{ less initial (vii)
\{ high pitch / elsewhere (viii)
In fact, one can see that there have been a collapsing of the pitch contours of five tones (three level tones and two dynamic tones) in accented syllables into 3 level pitch namely, mid [from (i, ii, iv)], modified low [from (iii) and (vii)] and high [from (v, vi, viii)]. We may present this contrast by using the diagrams below:

(5)

pitch contours of accented syllables

[Diagrams showing different pitch contours for accented syllables, with labels for high, modified high, mid, modified low, and low.

pitch contours of unaccented syllables

[Diagrams showing simple pitch contours for unaccented syllables, labeled with numbers 1, 2, and 3.]