

Thai η Is Not Russian "g": The Problem of English Transliteration Interference in Teaching Thai to Russian Speakers

Тайский η — не русский «г»: проблема интерференции англоязычных транскрипций при обучении русскоговорящих тайскому языку

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Abstract

This article examines a phonetic error commonly observed by Thai language teachers among Russian-speaking learners, who pronounce the Thai consonant η as the Russian voiced velar plosive [g] instead of the voiceless unaspirated [k]. The error is caused by the influence of English-based transliteration systems that represent η with the symbol "g". A comparative analysis of 12 English transliteration systems is presented, along with descriptions of the phonetics of η from Russian-language academic and educational publications. It is demonstrated that the "g" notation in English systems is a pedagogical device intended for native English speakers and does not imply voicing. Recommendations are proposed for preventing this interference when teaching Thai to Russian speakers.

Keywords: Thai language, phonetics, transliteration, interference, unaspirated consonants, teaching Russian speakers

Ключевые слова (RU): тайский язык, фонетика, транскрипция, интерференция, непридыхательные согласные, обучение русскоговорящих

The Russian version is available at: [thai-kor-kai-pronunciation.md](https://rianthai.pro/en/thai-kor-kai-pronunciation.md).

1. Introduction

The Thai consonant ก (ko kai) is the first letter of the Thai alphabet and one of the most frequently used in the language. Yet it is precisely this sound that triggers a chain of phonetic errors among Russian-speaking learners.

Russian-speaking learners frequently pronounce ก as the Russian "г" (voiced velar plosive [g]). The cause is the influence of English-language teaching materials that transcribe ก as "g" (*go gai, gor gai*) and describe it as a "hard g". When a Russian-speaking learner encounters the Latin letter "g" in a transliteration, they automatically substitute the phoneme from their native language — the Russian voiced [g] — which constitutes a serious articulatory error.

The problem is systemic: it affects not only ก but the entire series of Thai unaspirated plosives (ก, ข, ฉ, ช, ฎ, ฏ, ฐ, ฑ), which in several English systems are written with voiced consonant symbols (g, j, d, dt, b, bp).

2. Materials and Methods

This work is an analytical review based on a systematic comparison of transliteration systems and expert descriptions.

Materials. 12 English-language transliteration systems for Thai were analyzed, selected for their wide use in textbooks and online resources for Thai learners: Paiboon+, Paiboon, TLC, Tiger, TYT, T2E, IPA, Haas (AUA), ALA-LC, LP, RTL, RTGS. Three Russian-language academic sources [1, 2, 3] were additionally consulted.

Method. For each system, the grapheme used to represent Thai /k/ unaspirated in syllable-initial position was identified. Systems were classified into two groups: *g-oriented* (using a voiced consonant symbol as a pedagogical device for English speakers) and *k-oriented* (following the phonetic/linguistic tradition).

Sources. Official documentation for each system, supplemented by comparative reviews [4] and [5].

3. Description of ก in Russian-Language Sources

3.1. Lipilina, Muzychenko, Thaphanosoth (2018)

The most precise and detailed phonetic description of ŋ is found in the Thai language textbook for students of IAAS (Institute of Asian and African Studies), Moscow State University [1]. The authors are Thai studies specialists at the Department of History of Far Eastern and Southeast Asian Countries at IAAS MSU (I. N. Lipilina – Candidate of Historical Sciences, Associate Professor; Yu. F. Muzychenko – Senior Lecturer; P. Thaphanosoth – Senior Lecturer, native Thai speaker).

The authors classify ŋ according to the following features:

Feature	Value
Place of articulation	velar (back of tongue)
Manner of articulation	plosive (stop)
Voicing	semi-voiced
Additional articulation	unaspirated

Key articulatory description:

*"To produce the sound, the back of the tongue is drawn back toward the soft palate, i.e., the closure is formed somewhat further back than when producing Russian /k/ or /g/. This sound is also typically pronounced **slightly more voiced than the voiceless Russian /k/, but not as voiced as Russian /g/**" [1, p. 17].*

Additional important general remarks on Thai consonantism from [1, p. 14]:

*"Thai consonants are distinguished not only by voicing / voicelessness, but also **by the presence or absence of aspiration.**"*

*"Most Thai consonants differ from similar Russian sounds **in their place of articulation.**"*

3.2. Fomicheva (1990)

M. F. Fomicheva is a Thai studies specialist and lecturer at IAAS MSU, co-author of the foundational work *Thai Language* (1961, with L. N. Morev and Yu. Ya. Plam) [8], who authored its phonetics section. In her textbook for first-year students [2], she provides a detailed articulatory description of ŋ , including a direct comparison with both Russian "r" and English "k":

"The Thai consonant /k/ sounds like the Russian sound /ɤ/ in the word 'гол' [goal], if pronounced somewhat further back in the mouth and not as voiced as usual, or like the English sound /k/ in the word 'sky', if pronounced energetically and without aspiration" [2, p. 39].

Fomicheva also provides a precise explanation of the articulatory mechanism:

"The vocal cords begin to vibrate only at the moment of releasing the obstruction in the airflow path, and not before the burst, as occurs in Russian. Furthermore, when producing the Thai sound /k/, the closure vibrates less strongly than when producing the Russian /ɤ/" [2, p. 39].

This description is valuable because it reveals the **physical mechanism** of *ŋ*'s semi-voicing: the vocal cords engage later than in the Russian "r" — hence the intermediate character of the sound.

Additionally, in the introduction to her textbook, Fomicheva formulates an important general rule:

"Thai voiced consonants are less voiced than Russian ones, which is explained by the weak vibration of the vocal cords during their production" [2, p. 6].

3.3. Morev (1964)

L. N. Morev was a Thai studies linguist at the Institute of Oriental Studies of the USSR Academy of Sciences and the author of several fundamental works on Tai languages, including *A Comparative Grammar of the Tai Languages* [7]. In the phonetic appendix to his Thai-Russian dictionary [3], a more concise description is given:

"к — a voiceless, noisy, plosive, velar, unaspirated consonant; resembles the Russian hard 'k' (as in the word 'kino')" [3, pp. 927–928].

Morev takes a more conservative approach: he states that *ŋ* "resembles" the Russian "k", which is a valid first approximation for a dictionary but omits the nuances of semi-voicing described in detail in [1] and [2].

All Russian-language sources unanimously transcribe *ŋ* with the Cyrillic letter "к" — not "г".

It is worth noting that the textbook [1] is distinguished by its instrumental-phonetic approach: for each of the 5 Thai tones, tonal contour graphs (pitch × time) with intensity curves are provided, based on recordings of native speakers. Consonant descriptions, including that of *ŋ*, are structured according to articulatory features (place, manner, voicing, aspiration) with detailed articulatory instructions.

3.4. Observations from RTL School Teachers (Bangkok)

The Bangkok-based [Rak Thai Language School \(RTL\)](#) [6] employs an immersive teaching method: the first months are devoted to conversational practice, and only in the 4th month do students begin studying the Thai alphabet, the phonetic system (consonant classes, aspiration, vowel length, etc.) — with instruction conducted entirely in Thai. RTL teachers are graduates of Thai universities with advanced linguistic training. According to their observations, Russian-speaking students often arrive at the school with an already-established habit of pronouncing *ŋ* as [g] — a result of prior self-study or instruction at other schools using English-language materials.

4. Comparative Analysis of English Transliteration Systems

4.1. Summary Table

Analysis of 12 English transliteration systems [4, 5] shows that the majority represent *ŋ* as either "g" or "k", with the choice reflecting different approaches to phonology:

System	<i>ŋ</i> represented as	Approach
Paiboon+	g	Intuitive for English speakers
Paiboon	g	Same
TLC (thai-language.com)	g	Same
Tiger	g	Same
TYT (Thai Your Way)	g	Same
T2E	g	Same
IPA	k	Strictly phonetic
Haas (AUA)	k	Linguistic
ALA-LC	k	Library standard
LP	k	Linguistic
RTL (Rak Thai Language School)	k	Linguistic, pedagogical
Thai Govt (RTGS)	k	Official Thai standard

Among the authors of these systems, two key figures should be highlighted: **Benjawan Poomsan Becker** – a Thai linguist and founder of Paiboon Publishing, author of the *Thai for Beginners* textbook series, which became among the most popular resources for English-speaking learners; and **Mary Rosamond Haas** (1910–1996) – an American linguist, Professor at the University of California, Berkeley, President of the Linguistic Society of America, and member of the National Academy of Sciences. During World War II, Haas developed a Thai language training program for the U.S. Army, and in 1964 published the *Thai-English Student's Dictionary*, which remains an authoritative reference to this day. It was Haas's transcription system that was adopted by the AUA (American University Alumni) school and the U.S. Peace Corps.

Thus, the systems divide into two groups: "pedagogical" (oriented toward English-speaker intuition, originating from Becker) and "phonetic" (following the international linguistic tradition, originating from Haas).

Notably, the **RTL** school [6] — a Bangkok-based Thai language school for foreigners — consistently uses **"k"** for *ก* (transcription: *kāy*, "chicken"), following the Haas/IPA linguistic tradition. This aligns with the choice of Russian orientalists and eliminates the risk of misreading as "r".

4.2. The Logic of Systems Using "g"

English has its own aspiration system, which native speakers are generally unaware of. In the word **"sky"**, the sound [k] is pronounced without aspiration — articulatorily identical to Thai *ก*. In the word **"kite"**, the same sound [k^h] is pronounced with aspiration — like Thai *กั*.

English orthography does not distinguish between these two sounds — both are written with the letter "k". The authors of the Paiboon and TLC systems chose **"g"** for *ก* in order to visually contrast it with the letters "k"/"kh" (*ก*/*กั*). As thai-language.com [4] explains:

"Our system uses /g-/ instead of /k-/ or /kh-/ for the Thai consonant ก, but remember, in Thai, a /g-/ sound is always hard."

The same logic applies to the pairs *ป/พ* (bp/p instead of p/ph) and *ต/ท* (dt/t instead of t/th). In these systems, **"g" does not mean voiced [g] but rather unaspirated [k]**. For English speakers, the device works: upon seeing "g", they will produce something closer to [k] without aspiration than if they had seen "k" (which they would automatically aspirate).

As slice-of-thai.com [5] explains using the word "potato": the first "t" is pronounced with aspiration [t^h], while the second is without [t]. Native English speakers do not notice this. For a foreign learner, however, it would be useful to have a dictionary that distinguishes between these two "t" sounds. This is precisely how the Paiboon+ and TLC systems work.

4.3. The Logic of Systems Using "k"

The IPA, Haas, and RTGS systems use **"k"** for *ก*, following the strict phonetic tradition in which the symbol corresponds to the articulation: [k] = voiceless velar plosive. The aspirated variant is marked separately: [k^h].

5. The Error Mechanism: Double Interference

When a Russian-speaking learner encounters the English transcription "g" (*gai, gaaw*), they substitute the Russian voiced [g], since in the Russian phonological system the Latin letter "g" unambiguously corresponds to "r". However, the authors of the English systems intended something entirely different: they wanted to tell an English speaker "pronounce [k] without aspiration", not "pronounce a voiced [g]".

The result is **double interference**:

Thai [k] → English "g" (= unaspirated for English speakers) → Russian "r" [g] (= voiced)

Each step transforms the phonetic content of the symbol. For an English speaker, "g" is a pedagogical cue about the absence of aspiration. For a Russian speaker, "g" is an unambiguous marker of voicing. The result is an articulatory error opposite to the intention of the transcription's authors.

6. Phonetic Analysis

6.1. ɳ vs. Russian "r": Key Differences

Feature	ɳ (Thai)	r (Russian)
Voicing	Voiceless / semi-voiced	Voiced
Aspiration	Unaspirated	—
Place of articulation	Velar (slightly further back)	Velar
IPA	[k] or [ᵑ]	[g]

- ɳ is voiceless, while r is voiced.** The vocal cords do not vibrate (or vibrate minimally) during the production of ɳ, whereas they vibrate fully during Russian "r". As Fomicheva explains, during the production of Thai /k/, the vocal cords begin to vibrate only at the moment of releasing the closure, not before the burst as in Russian "r" [2, p. 39].
- ɳ has no aspiration** — unlike Thai ʔ (kh), which is produced with a puff of air after the release of the closure.
- The place of articulation is slightly further back** than for Russian k/g — the closure is closer to the soft palate [1, 2].

6.2. ɲ vs. Russian "κ": Subtle Differences

Feature	ɲ (Thai)	κ (Russian)
Voicing	Semi-voiced (slightly more voiced)	Fully voiceless
Aspiration	Strictly unaspirated	Slight aspiration possible
Place of articulation	Slightly further back	Standard velar

According to [1], ɲ falls **between** the Russian "κ" and "r" in terms of voicing: "slightly more voiced than κ, but not as voiced as r". Fomicheva describes the same effect through a comparison with the Russian "r": ɲ "sounds like the Russian /r/ in the word 'гол', if pronounced not as voiced as usual" [2, p. 39]. This semi-voiced character is the key distinguishing feature.

6.3. Voice Onset Time (VOT)

The distinction between ɲ, Russian "r", and Thai ʔ can be precisely described in terms of **Voice Onset Time** (VOT) — a parameter introduced by Lisker and Abramson in their seminal cross-linguistic study of stop consonants [9].

VOT is the time interval between the release of the closure and the onset of vocal cord vibration. By VOT value, stop consonants fall into three categories:

Type	VOT	Examples
Voiced (voicing lead)	Negative (vibration <i>before</i> release)	Russian г [g]
Voiceless unaspirated (short lag)	Near zero	Thai ก [k]
Voiceless aspirated (long lag)	Positive (delayed vibration)	Thai ก़ [k ^h]

Thus, Russian "r" and Thai ɲ occupy **opposite sides** of the VOT scale: Russian "r" has negative VOT (the vocal cords vibrate before the closure is released), whereas ɲ has VOT near zero. Substituting [g] for ɲ is not merely an "imprecision" — it is a shift into a fundamentally different phonetic category.

6.4. Triple Opposition of Thai Velars

Thai has a triple, not double (as in the Russian κ/r pair), opposition:

Thai	Transcription	Character	English approximation
ก	k	Voiceless unaspirated (semi-voiced)	Between "k" and "g", closer to "k"
ข	kh	Voiceless aspirated	"k" with a strong puff of air
ค	kh	Voiceless aspirated (low class)	Same as ข, but different tone class

A Russian speaker unfamiliar with this system hears ก and perceives it as "something between k and g" — and chooses "g" because the English transcription suggests "g". In reality, the correct strategy is to pronounce the **Russian "к"**, but: - without aspiration (hold your palm to your mouth — no air should be felt); - slightly further back in the mouth; - softly, without tension.

7. Practical Recommendations

When teaching Thai to Russian speakers and developing educational applications, the following is recommended:

1. **Use the transcription "κ"** for ฦ, not "r". This aligns with the Russian orientalist tradition [1, 2, 3] and eliminates interference.
2. **When first introducing the letter ฦ**, provide the following explanation:

Pronounced like the Russian "κ", but softer and without aspiration. NOT like the Russian "z". The English transcription "g" is misleading – in Thai, this is a voiceless sound.

3. **Warn students** about the incompatibility of English transliterations with Russian phonological intuition when working with English-language textbooks and applications.
4. **Extend the recommendation to the entire series** of unaspirated plosives: ฦ [k], ฦ [tɕ], ฦ [d], ฦ [t], ฦ [b], ฦ [p] – in all cases, rely on Russian transcription rather than English.

The comparative analysis of transliteration systems presented in this work informed the design of the [thaiphon](#) library – a tool for automatic transcription of Thai text that implements multiple systems, including k-oriented transcription for Russian speakers.

8. Limitations and Future Work

This work is an analytical review, not an empirical study. The following limitations should be noted:

- **The prevalence of the error** is assessed based on teacher observations (RTL school, author's personal experience), not a systematic corpus study.
- **Acoustic measurements** (VOT, spectrograms) were not conducted; phonetic characteristics are described based on the cited sources.
- **The sample of transliteration systems** is limited to the 12 most widely used English-language systems; lesser-known systems were not considered.

Promising directions for future research: - Corpus analysis of Russian-speaking learners' errors (learner corpus with pronunciation error annotation) - Instrumental VOT measurements for Russian-speaking

learners producing Thai unaspirated stops - Survey of Thai language teachers working with Russian-speaking students

The author invites collaboration from researchers with access to acoustic measurement data or learner corpora.

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