QO‘QON DAVLAT PEDAGOGIKA INSTITUTI ILMIY XABARLARI
(2026-yil 10-son)
FILOLOGIYA
PHILOLOGY
https://doi.org/10.70728/b.series.fil.v08.i10.181

A CONTRASTIVE-TYPOLOGICAL ANALYSIS OF VOWEL AND CONSONANT SYSTEMS OF ENGLISH AND UZBEK

Akhmadjonova Yulduzkhon Adkhamjon kizi
PhD researcher at FSU

Abstract: This article compares the vowel and consonant systems of English and Uzbek, two genetically unrelated and typologically distant languages. Using a contrastive-typological framework with an explicit basis of comparison (articulatory and acoustic description plus phonological function), each English segment is classified against Uzbek as identical, similar, divergent or absent, and the analysis then moves from inventories to system organisation, phonotactics and prosody. The principal finding is an asymmetry between size and organisation. The inventories are of comparable typological size and the consonant systems share a large core, but English uses vowel length, centralisation and diphthongs, which standard Uzbek lacks, while Uzbek has a back consonant series absent from English and English has interdental fricatives absent from Uzbek. Divergence increases from segments to syllable structure and stress. Because descriptions of Uzbek vary by source and dialect, the comparison is made relative to a stated variety. Pedagogical implications are acknowledged only briefly.

Keywords: contrastive phonology; English; Uzbek; vowel system; consonant system; linguistic typology; phonotactics; *tertium comparationis.*

Annotatsiya: Ushbu maqola genetik jihatdan bog'liq bo'lmagan va tipologik jihatdan uzoq bo'lgan ingliz va o'zbek tillarining unli va undosh tovushlar tizimlarini taqqoslaydi. Aniq taqqoslash asosiga ega bo'lgan kontrast-tipologik asosdan (artikulyatsion va akustik tavsif va fonologik funksiya) foydalanib, har bir ingliz tili segmenti o'zbek tiliga nisbatan bir xil, o'xshash, divergent yoki yo'q deb tasniflanadi va keyin tahlil inventarizatsiyadan tizimni tashkil etish, fonotaktika va prosodiyaga o'tadi. Asosiy topilma o'lcham va tashkil etish o'rtasidagi assimetriyadir. Inventarizatsiyalar o'xshash tipologik o'lchamga ega va undosh tovushlar tizimlari katta yadroga ega, ammo ingliz tilida standart o'zbek tilida yo'q bo'lgan unli uzunligi, markazlashtirish va diftonglardan foydalaniladi, o'zbek tilida esa ingliz tilida yo'q orqa undosh undoshlar qatori va ingliz tilida o'zbek tilida yo'q tishlararo ishqalanishlar mavjud. Divergentsiya segmentlardan bo'g'in tuzilishi va urg'usiga qadar oshadi. O'zbek tilining tavsiflari manba va lahjaga qarab farq qilganligi sababli, taqqoslash ko'rsatilgan turga nisbatan amalga oshiriladi. Pedagogik natijalar faqat qisqacha e'tirof etiladi.

Kalit so'zlar: kontrast fonologiya; Ingliz tili; O'zbek tili; unli tizim; undosh tizim; lingvistik tipologiya; fonotaktika; tertium comparationis.

Аннотация: В данной статье проводится сопоставление систем гласных и согласных звуков английского и узбекского языков — двух генетически неродственных и типологически далеких языков. В рамках контрастивно-типологического подхода, опирающегося на четко определенную базу сравнения (артикуляционное и акустическое описание, а также фонологическая функция), каждый сегмент английского языка классифицируется по отношению к узбекскому как идентичный, сходный, расходящийся или отсутствующий. Анализ охватывает как сами инвентари звуков, так и организацию систем, фонотактику и просодию. Основной вывод заключается в наличии асимметрии между объемом и организацией систем. Инвентари звуков сопоставимы по своему типологическому объему, а системы согласных имеют значительное общее ядро; однако в английском языке используются долгота гласных, централизация и дифтонги, отсутствующие в стандартном узбекском, в то время как в узбекском языке имеется ряд заднеязычных согласных, не представленных в английском, а в английском — межзубные фрикативные, отсутствующие в узбекском. Степень расхождений возрастает при переходе от отдельных сегментов к слоговой структуре и ударению. Поскольку описания узбекского языка варьируются в зависимости от источника и диалекта, сравнение проводится относительно конкретного языкового варианта. Вопросы методического применения затрагиваются лишь вкратце.

Ключевые слова: контрастивная фонология; английский язык; узбекский язык; система гласных; система согласных; лингвистическая типология; фонотактика; tertium comparationis (база сравнения)

Introduction

Contrastive linguistics compares languages synchronically to establish their similarities and differences (James, 1980; Krzeszowski, 1990). Its central methodological requirement is an independent basis of comparison, the *tertium comparationis*. For phonology this is best stated phonetically, in articulatory and acoustic parameters written in IPA notation (International Phonetic Association, 1999), and supplemented by functional criteria, namely whether a sound is contrastive, allophonic or marginal (Trubetzkoy, 1969). The early contrastive tradition tied the method to the prediction of learner difficulty (Lado, 1957). The present study treats the comparison as a structural description in its own right.

Typological databases give a neutral reference. Maddieson (1984) compared segment inventories across languages, and the *World Atlas of Language Structures* classes consonant inventories of roughly 19 to 25 segments as average, and vowel inventories of five to six qualities as average and seven or more as large (Maddieson, 2013a, 2013b). Vowels also tend to be dispersed in acoustic space (Lindblom, 1986), and small systems favour the peripheral vowels /i a u/ (Crothers, 1978).

Methods

English is documented in great detail: Received Pronunciation (RP) by Roach (2009) and Cruttenden (2014), and accent variation by Wells (1982). Uzbek is described less uniformly. Sjoberg (1963), Boeschoten (1998) and Johanson (1998, 2021) place it in the Karluk group of Turkic. The standard is based on Tashkent-area urban speech, shaped by Persian contact, and lacks the vowel harmony typical of Turkic, whereas Khorezmian and Kipchak-influenced varieties retain harmony and are reported to have larger vowel systems. Sources therefore differ on the number and values of Uzbek vowels and on the status of marginal consonants, and Uzbek- and Russian-language phonetic descriptions should be consulted alongside those cited here. A comparison that classifies relations segment by segment and links them to system organisation and phonotactics is the gap addressed below.

Results

Vowels. RP has twelve monophthongs, /iː ɪ e æ ʌ ɑː ɒ ɔː ʊ uː ɜː ə/, and eight diphthongs, /eɪ aɪ ɔɪ əʊ aʊ ɪə eə ʊə/ (Roach, 2009). Standard Uzbek has six vowels, written *i, e, a, o, o‘, u* and commonly transcribed /i e æ ɑ o u/, where *a* is a front-to-central open vowel and *o* a back open vowel, sometimes slightly rounded (Sjoberg, 1963; Boeschoten, 1998). On the WALS classification English is large and Uzbek average (Maddieson, 2013b). Table 1 summarises the correspondences.

English (RP)	Closest Uzbek	Relation	Comment
/e/	/e/	Near-identical	Both front mid unrounded.
/iː/, /uː/	/i/, /u/	Similar	Same quality; English is longer and tenser, and Uzbek has no length contrast.
/æ/	/æ/ (*a*)	Similar	Uzbek *a* ranges from near-front to central by context.
/ɑː/, /ɒ/	/ɑ/ (*o*)	Similar	English /ɑː/ is longer and unrounded; /ɒ/ is short and rounded.
/ɔː/	/o/ (*o‘*)	Similar	Both back rounded; English longer and often lower.
/ɪ/, /ʊ/	/i/, /u/	Divergent	Lax, centralised English vowels have no separate Uzbek phoneme.
/ʌ/, /ɜː/, /ə/	none	Absent	Central vowels; unstressed Uzbek vowels may reduce phonetically.
8 diphthongs	none	Absent	Uzbek analyses vowel plus /j/ or /w/-like glide as a sequence.

Table 1. English RP vowels compared with Standard Uzbek vowels.

Of the twelve English monophthongs, one is near-identical to an Uzbek vowel, six are similar, two are divergent and three are absent; all eight diphthongs are absent. The structural contrasts matter more than the counts. English uses duration together with quality (/iː/–/ɪ/, /uː/–/ʊ/, /ɑː/–/ʌ/), and has a large central region of the vowel space, whereas Uzbek has no phonemic length in the standard and concentrates its vowels on the periphery, as expected for a smaller system (Crothers, 1978; Lindblom, 1986). Backness is contrastive in both, but in

Turkic it is also the basis of vowel harmony (Johanson, 1998). Standard Uzbek has lost harmony as a productive process, while Kipchak and Oghuz dialects keep it (Boeschoten, 1998; Johanson, 2021), so backness is a purely segmental feature in English and, in some Uzbek varieties, a systematic property of the word.

Consonants

RP has 24 consonants: /p b t d k g/, /tʃ dʒ/, /f v θ ð s z ʃ ʒ h/, /m n ŋ/ and /l r j w/. Standard Uzbek is commonly analysed with /p b t d k g q/, /tʃ dʒ/, /f v s z ʃ x ʁ h/, /m n ŋ/ and /l r j/, with /ʔ/ in Arabic-origin words and /ʒ/ in some Russian-origin words as marginal segments (Sjoberg, 1963; Boeschoten, 1998). Both inventories are average in size on the WALS measure (Maddieson, 2013a).

Relation	Segments
Identical or near-identical	/p b t d k g/ (aspiration differs), /tʃ dʒ/, /f/, /s z/, /ʃ/, /m n/, /ŋ/, /l/, /j/
Similar or divergent	/v/ (Uzbek varies between [v] and [w], whereas English /v/ and /w/ contrast), /h/ (restricted in both), /r/ (English approximant against Uzbek trill or tap), /ʒ/ (marginal in both)
Absent from Uzbek	/θ ð/; /w/ as a separate phoneme
Absent from English	/q/ (voiceless uvular stop), /ʁ/ (voiced uvular or velar fricative, written *g‘*), /x/ (voiceless velar or uvular fricative), /ʔ/ as a phoneme

Table 2. Consonant correspondences between English (RP) and Standard Uzbek.

The shared core of bilabial, alveolar and postalveolar obstruents, nasals and the palatal glide is expected, since these segments are cross-linguistically common (Maddieson, 1984). The differences lie at the periphery. English /θ ð/ are typologically rare, and their absence from Uzbek is unremarkable. English lacks uvular consonants altogether, which is the more common state of affairs (Maddieson, 2013c), so the Uzbek back series (/q ʁ x/) is a point of complete divergence. English [ʔ] is only an allophone, for example of /t/ in some accents, whereas Uzbek has it as a marginal phoneme. Both languages contrast voiceless and voiced obstruents, but English voiceless stops are aspirated in stressed syllable-initial position (Roach, 2009), and the timing of Uzbek stops is less well described, so similarity in contrast may coexist with difference in phonetic implementation.

3.3 Phonotactics and prosody

English permits onsets of up to three consonants (*spring*) and codas of up to four (*texts*) (Roach, 2009). Native Uzbek words have the syllable types V, CV, VC, CVC and, restrictedly, CVCC, with no initial clusters. Loans with initial clusters are often repaired by inserting a vowel, as in colloquial *istakan* from Russian *stakan* and *ustol* from *stol*. English has lexical stress that varies in position and is linked to vowel reduction, giving stress-timed rhythm (Cruttenden, 2014). Uzbek stress is generally word-final, with exceptions for some suffixes, and rhythm is closer to syllable-timed (Boeschoten, 1998). These facts correlate with the vowel findings: a language with strong, variable stress tends to develop reduction and central vowels,

as English has with /ə/, while a language with predictable final stress and a compact vowel system does not.

Discussion

The main result is that the two languages are alike in size and unlike in organisation. Their consonant inventories fall in the same typological band and share a large core, and the Uzbek vowel inventory is average while the English one is large, but the informative differences concern whether length is contrastive, whether the central vowel space is used, whether diphthongs are phonemes and whether syllables may be complex. Divergence thus forms a gradient. The consonant core and peripheral vowels are identical or similar; marginal segments diverge completely (English interdental fricatives, Uzbek uvulars); and vowel organisation, phonotactics and stress diverge systematically. Such a gradient is plausible for unrelated languages, in which shared phonetic constraints produce common cores and language-specific histories produce the periphery and the structure.

Conclusion

English and Uzbek have inventories of comparable typological size but different organisation. The consonant systems share a substantial core and differ at the periphery, where English has interdental fricatives and Uzbek has a uvular and back-fricative series. The vowel systems diverge more strongly, in length, centralisation and diphthongs, which English uses and Uzbek does not, while Uzbek vowel harmony survives only in dialects. Divergence increases from the segmental level to syllable structure and stress. Future work should add acoustic data for Uzbek, extend the comparison to dialects and examine the diachronic factors that produced these differences.

REFERENCES

1. Boeschoten, H. (1998). Uzbek. In L. Johanson & É. Á. Csató (Eds.), *The Turkic languages* (pp. 357–378). Routledge.

2. Crothers, J. (1978). Typology and universals of vowel systems. In J. H. Greenberg (Ed.), *Universals of human language: Vol. 2. Phonology* (pp. 93–152). Stanford University Press.

3. Cruttenden, A. (2014). *Gimson’s pronunciation of English* (8th ed.). Routledge.

4. International Phonetic Association. (1999). *Handbook of the International Phonetic Association*. Cambridge University Press.

5. James, C. (1980). *Contrastive analysis*. Longman.

6. Johanson, L. (1998). The structure of Turkic. In L. Johanson & É. Á. Csató (Eds.), *The Turkic languages* (pp. 30–66). Routledge.

7. Johanson, L. (2021). *Turkic*. Cambridge University Press.

8. Krzeszowski, T. P. (1990). *Contrasting languages: The scope of contrastive linguistics*. Mouton de Gruyter.

9. Lindblom, B. (1986). Phonetic universals in vowel systems. In J. J. Ohala & J. J. Jaeger (Eds.), *Experimental phonology* (pp. 13–44). Academic Press.

10. Maddieson, I. (1984). *Patterns of sounds*. Cambridge University Press.

11. Maddieson, I. (2013a). Consonant inventories. In M. S. Dryer & M. Haspelmath (Eds.), *The world atlas of language structures online*. Max Planck Institute for Evolutionary Anthropology. https://wals.info

12. Maddieson, I. (2013b). Vowel quality inventories. In M. S. Dryer & M. Haspelmath (Eds.), *The world atlas of language structures online*. Max Planck Institute for Evolutionary Anthropology. https://wals.info