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Phonetic and phonological variation in digital discourse: perception and evaluative attitudes of future philologists

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Abstract. The article aims to systematize the theoretical foundations of phonetic and phonological variation in electronic media and to determine how such variation is recognized and evaluated by students of English philology. The relevance of the topic lies in the fact that digital platforms function not only as channels of language distribution but also as active mechanisms that shape pronunciation, prosody, speech rate, and socially marked patterns of spoken performance. The study combines a theoretical review of research in phonetics, phonology, sociolinguistics, and digital linguistics with observation of authentic media speech in video, audio, and text-based environments, as well as quantitative and qualitative analysis of questionnaire data obtained from 102 English philology students. The article identifies the most typical forms of media-induced variation: consonant cluster reduction, non-standard spelling as a written reflection of spoken reduction, stylized intonation, algorithm-driven articulatory accommodation to speech-recognition systems, and the formation of new pronunciation habits under the influence of TikTok, YouTube, podcasts, and voice interfaces. The findings indicate that intensive exposure to digital content correlates



with a higher ability to recognize non-standard phonetic and phonological forms and with a greater degree of acceptance of such forms in informal communication. Most respondents interact with electronic media for several hours a day, which increases their contact with variable models of English pronunciation. The conclusions show that electronic media accelerate the circulation of phonetic innovation, blur the boundary between normative and stylized speech, and require a reconsideration of practical phonetics instruction. It is therefore advisable to include samples of authentic digital speech in pronunciation courses, develop sociophonetic awareness, and strengthen students' critical media-linguistic literacy.

Keywords: electronic media, pronunciation variation, prosody, sociophonetics, digital communication, English philology.

**Фонетична та фонологічна варіативність у цифровому дискурсі:
сприйняття та оцінні ставлення майбутніх філологів**

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Анотація. Мета статті полягає в узагальненні теоретичних засад дослідження фонетичної та фонологічної варіативності в електронних медіа й у визначенні того, як такі варіації розпізнаються та оцінюються студентами англійської філології. Актуальність теми зумовлена тим, що цифрові платформи сьогодні виступають не лише каналами поширення мовних зразків, а й активними чинниками зміни вимови, просодики, темпу мовлення та соціально маркованих



способів фонетичного оформлення висловлення. Методи дослідження поєднують теоретичний аналіз наукових праць із фонетики, фонології, соціолінгвістики та цифрової лінгвістики, спостереження за автентичним медіамовленням у відео-, аудіо- та текстових середовищах, а також кількісно-якісне опрацювання результатів анкетування 102 студентів англійської філології. У статті розглянуто найхарактерніші типи медіаіндукованої варіативності: редукцію приголосникових кластерів, нестандартне написання як графічну фіксацію усного скорочення, стилізовану інтонацію, алгоритмічно зумовлену артикуляційну адаптацію до систем автоматичного розпізнавання мовлення, а також формування нових вимовних звичок під впливом TikTok, YouTube, подкастів і голосових інтерфейсів. Результати показують, що інтенсивне споживання цифрового контенту корелює з вищим рівнем розпізнавання нестандартних фонетичних і фонологічних форм, а також із більшою толерантністю до них у неформальній комунікації. Більшість респондентів щодня тривалий час взаємодіє з електронними медіа, що посилює їх контакт із варіативними моделями англійської вимови. Висновки засвідчують, що електронні медіа пришвидшують поширення фонетичних інновацій, розмивають межу між нормативним і стилізованим мовленням та потребують перегляду підходів до викладання практичної фонетики. Доцільним є включення до навчальних курсів прикладів реального цифрового мовлення, тренування соціофонетичного розпізнавання та розвитку критичної медіамовної обізнаності.

Ключові слова: електронні медіа, варіативність вимови, просодія, соціофонетика, цифрова комунікація, англійська філологія.

Problem Statement

The contemporary media environment has transformed the ecology of spoken language. English pronunciation is now acquired and evaluated not only through textbooks, classrooms, and canonical audio materials, but also through streaming



platforms, short-form video, podcasts, gaming spaces, voice assistants, and social media feeds. These environments circulate highly variable speech models marked by reduction, stylization, performance, algorithmic adaptation, and accent mobility. As a result, the traditional distinction between “standard” pronunciation and “actual” usage has become less stable in everyday perception.

For students of English philology, this shift has both theoretical and pedagogical consequences. They encounter not a single norm but a continuum of phonetic realizations shaped by platform affordances, audience design, identity work, and machine mediation. In this context, the problem is not merely to describe isolated non-standard forms, but to explain how media-driven phonetic and phonological variation functions, how it is interpreted by learners, and how it should be addressed in university-level pronunciation training. The broader thesis material on which this article is based demonstrates that this issue is especially relevant in multilingual educational settings and that students’ media exposure directly affects their ability to notice and evaluate variable pronunciation patterns.

Analysis of Recent Research and Publications

Recent scholarship confirms that pronunciation is no longer adequately described as a fixed subsystem detached from digital communication. Research on pronunciation pedagogy in university EFL settings has shown a persistent gap between the recognized importance of pronunciation and the actual practices used in instruction [1]. Experimental work on high-variability pronunciation training further demonstrates that multimodal digital tools can improve pronunciation accuracy and positively shape learner attitudes toward media-based input [2]. Studies of TikTok as a learning environment show that platform-based short video can support oral proficiency and pronunciation practice when learners engage with repeated audiovisual models [3; 4].

At the same time, more critically oriented media-linguistic studies have shown that pronunciation content on TikTok is ideologically loaded. Pronunciation teaching videos often reproduce native-speaker assumptions and frame certain accents as

inherently more legitimate than others [5]. This is important for phonological research because media variation is not neutral: it is filtered through prestige, desirability, and platform visibility. Another strand of recent research concerns human-machine interaction. Evidence from speech technology studies indicates that AI tools and speech-recognition systems shape both speech perception and speech production, encouraging clearer articulation in some contexts while also normalizing specific prosodic or segmental patterns [6–10].

Within broader applied linguistics, recent work also emphasizes that digital tools affect not only segmental accuracy but learner confidence, intelligibility, and reflective awareness [8–10]. These findings intersect with sociophonetic concerns about accent exposure, stylized speech, and the circulation of indexical forms in online environments. However, despite this growing body of research, there remains a shortage of studies that directly connect media-driven phonetic variation with the perception and acceptance of such variation by philology students in multilingual academic settings. This gap is especially visible when the focus shifts from isolated classroom interventions to everyday digital language input, including entertainment media, comment sections, podcasts, and voice interfaces.

For the purposes of the present article, the most relevant recent publications are those published in 2021–2025 and dealing with pronunciation teaching, digital media use, TikTok-based learning, automatic speech recognition, AI-mediated speech, and teacher or learner perceptions of pronunciation. These studies provide a strong recent basis for the argument that electronic media not only disseminate variable pronunciation, but actively restructure the conditions under which it is recognized, imitated, normalized, or resisted.

Identification of Unresolved Aspects of the Problem

Previous studies have offered valuable insights into pronunciation instruction, short-video learning, and speech technology, yet several aspects remain insufficiently explored. First, many works focus on pedagogical effectiveness while paying less



attention to the linguistic substance of media-induced variation itself: reduction, stylized prosody, eye-dialect spellings, or hybrid spoken-written forms. Second, research often examines a single platform or tool, whereas contemporary learners consume mixed media ecologies in which TikTok, YouTube, Netflix, Spotify, messaging applications, and AI voice interfaces interact. Third, recent studies do not fully explain how students distinguish between forms they merely recognize and forms they consider acceptable or even adoptable in their own speech.

Another unresolved issue concerns the relationship between recognition and sociolinguistic evaluation. Being able to identify a reduced or stylized form does not automatically mean understanding its pragmatic value, contextual appropriateness, or ideological load. This article addresses that gap by connecting phonetic description, media analysis, and learner perception within one framework.

Formulation of the Aim and Objectives of the Article

The aim of the article is to analyse the main types of phonetic and phonological variation circulating in electronic media and to determine how these forms are perceived by English philology students. To achieve this aim, the article addresses the following tasks:

- (1) to summarize key theoretical approaches to phonetics, phonology, and sociophonetic variation relevant to digital communication;
- (2) to identify the most salient forms of media-induced pronunciation variation;
- (3) to characterize the role of platforms, algorithms, and speech technologies in the circulation of these forms;
- (4) to interpret questionnaire-based evidence concerning students' media habits, recognition of variation, and evaluative attitudes toward non-standard pronunciation in informal contexts.

Main body of the research

Phonetic and phonological variation in electronic media may be grouped into several interrelated domains. The first domain concerns segmental reduction. In fast,



informal, or performance-oriented media speech, speakers frequently simplify consonant clusters, weaken final consonants, omit /h/, reduce unstressed syllables, and merge function words with surrounding material. In film dialogue, music, livestream speech, and casual online commentary, such reduced forms enhance spontaneity, local identity, or stylistic credibility. Such variation is not new in itself, but digital repetition, circulation, and memetic imitation amplify its visibility and pedagogical relevance.

The second domain is graphic-phonetic interaction. Digital writing often captures spoken reduction and social stance through spellings such as *gonna*, *lemme*, *kinda*, *gurl*, *dis*, *em*, or *shook*. These forms are not merely orthographic deviations; they index pronunciation, attitude, stance, and group alignment. In comment sections and memes, non-standard spellings become compressed representations of speech style. This means that learners are exposed to phonological cues even in text-only environments. Electronic media therefore collapse traditional boundaries between speech and writing by turning spelling into a visual cue for accent, informality, irony, or affect.

The third domain is prosodic stylization. Platforms such as TikTok and YouTube favor attention-grabbing speech characterized by exaggerated pitch movement, marked stress placement, accelerated tempo, slowed emphasis, and formulaic discourse rhythm. These prosodic patterns are often imitated because they carry platform-specific meanings: confidence, irony, tutorial authority, entertainment value, or emotional intensity. The effect is especially strong in short-form video, where voice becomes a key semiotic resource for instant recognizability [3–5]. Prosody in this context is not merely expressive; it is algorithmically incentivized because high-retention content often depends on immediately salient vocal performance.

The fourth domain is technological mediation. Voice assistants, ASR systems, automated pronunciation scoring tools, and AI-generated voices shape user expectations about what counts as “clear” or “recognizable” speech. Recent research shows that speech technologies do not simply mirror human phonetic processing; they

selectively reward certain speaking rates, lexical conditions, and segmental realizations [6; 7; 10]. In educational contexts, ASR can improve pronunciation practice and learner reflection, yet it may also push students toward hyper-clear or technology-oriented speech styles [8; 9]. This matters for phonology because digital media now include non-human agents that influence both perception and production.

To connect these theoretical observations with learner experience, the article draws on empirical material obtained from a mixed-methods questionnaire administered online to 102 English philology students in a multilingual academic environment. The data show a high degree of immersion in digital media. Fifty-seven respondents reported spending 3–6 hours per day interacting with electronic media, and 24 reported more than 6 hours daily. Only one respondent reported less than 1 hour of exposure. Regarding media type, 64 respondents indicated that they most frequently consume a mixed environment of audio, video, and text-based content, while 31 primarily consume video. These data demonstrate that the majority of participants are immersed in multimodal digital input rather than isolated language formats.

Key Empirical Indicators Used in the Research

Table 1.

Indicator	Value	Interpretation
Total respondents	102 students	Mixed-methods student sample in English philology
Daily media exposure	57 students: 3–6 hours; 24 students: more than 6 hours	High and sustained contact with digital English input
Primary content type	64 students: mixed audio/video/text; 31 students: mainly video	Pronunciation input is multimodal rather than single-channel
Academic distribution	34 BA I; 34 BA IV; 19 BA II; 12 BA III; 3 MA	The sample is dominated by undergraduate learners



The findings indicate that students with greater exposure to English-language electronic media demonstrate stronger recognition of phonetic and phonological variation and show more willingness to accept such forms in informal communication. This tendency supports the view that digital input functions as a powerful informal learning environment. Importantly, the issue is not that students abandon standard pronunciation norms; rather, they become more capable of mapping speech forms onto contexts. Media-rich learners appear better prepared to distinguish between institutional pronunciation expectations and the variable realities of digital discourse.

From a pedagogical perspective, these findings have at least three implications. First, pronunciation teaching should expand beyond isolated segment drills and include authentic media examples that illustrate reduction, stylization, and context-bound variability. Second, students should be trained not only to hear phonetic differences, but also to interpret their social and pragmatic meanings. Third, teachers need to address the influence of AI and speech technology, since many learners increasingly practice pronunciation through digital feedback systems rather than exclusively through teacher-led correction.

Thus, the analysis confirms that electronic media have become a major environment for phonological socialization. They distribute forms, attach values to those forms, and shape how learners evaluate intelligibility, naturalness, prestige, and appropriateness. For this reason, media-induced variation should be treated not as peripheral noise but as a legitimate object of contemporary phonetic and phonological inquiry.

Conclusions

The article has shown that electronic media act as a powerful accelerator of phonetic and phonological variation in contemporary English. The circulation of reduced forms, stylized prosody, non-standard spelling, and technology-mediated pronunciation models makes digital communication a central site of spoken-language change. The empirical material indicates that English philology students who are more



deeply immersed in digital English are more likely to recognize such variation and to regard it as acceptable in informal settings.

The stated aim of the article has therefore been achieved: the main forms of media-induced variation have been identified, their communicative and pedagogical significance has been interpreted, and the role of student perception has been clarified. The results support the view that practical phonetics instruction should include authentic digital speech, sociophonetic awareness tasks, and critical discussion of algorithmically shaped pronunciation norms. Further research should examine longitudinal changes in student pronunciation behavior, compare different media platforms more systematically, and investigate how AI-generated speech may influence future phonological expectations.

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