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## PHONETIC AND GRAMMATICAL FEATURES OF ABBREVIATIONS

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### ABOUT ARTICLE

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**Abstract:** This article explores the phonetic, orthographic, and grammatical characteristics of abbreviations, analyzing their structural variability and functional significance in different linguistic contexts. The study examines how abbreviations transition from graphical representations to fully integrated lexical units, highlighting the influence of writing conventions, pronunciation norms, and linguistic standards. Special attention is given to the variability in spelling, phonetic adaptations, and grammatical categories such as number, case, and gender, particularly in English, German, French, Russian, and Uzbek. The paper also discusses stylistic synonyms of abbreviations, their phonetic transformations, and the role of conversion in their integration into different parts of speech. The findings underscore the complexity of abbreviation usage and its dependence on language-specific rules and communicative practices.

### Introduction

#### Phonetic and Orthographic Features of Abbreviations

The functioning of abbreviations is associated with a wide range of important linguistic issues. In this section, we will attempt to highlight some of them by examining the phonetic,

orthographic, and grammatical features of abbreviations, which become most evident in the process of their use in speech.

Unlike commonly used words, abbreviations have a number of phonetic and orthographic characteristics that often significantly affect their meaning. It is important to consider that many abbreviations (graphical abbreviations) were originally created for visual perception, and their phonetic form emerged later, when they were transformed into lexical abbreviations based on their graphical form. “By analyzing the interrelation of ‘writing – meaning – pronunciation’ in abbreviations, one can clearly see that at the modern stage of language development— in the era of mass communication through printed texts—writing has essentially become the second material shell of language.” [8, 230]

### **Materials and methods**

The graphical form plays a much more significant role for abbreviations than for other types of words. First of all, the instability of abbreviation spelling is noticeable, allowing for the simultaneous existence of multiple orthographic variants. The same abbreviation may be written in uppercase or lowercase letters, with or without periods between the letters. For example, the abbreviation AM = amplitude modulation has orthographic variations such as A.M., a-m, and a.m. Similarly, the abbreviation EUCOM = European Command exists in forms such as EuCom and Eucom. In French, an example is the abbreviation SITA (Société Internationale de Télécommunications Aéronautiques), which has a variant with periods: S.I.T.A.

At the same time, in some cases, orthographic differences may be used to distinguish homonymous abbreviations. For example, D.C. stands for District of Columbia, while DC means direct current. U.S.A. is more commonly used to mean United States of America, whereas USA refers to the United States Army. An abbreviation written with an uppercase letter, such as Cal (calorie), denotes a large calorie (kilocalorie), while cal refers to a small calorie. Similarly, VAB (Van Allen belt) signifies the Van Allen radiation belt, while vab denotes a small Van Allen belt.

Sometimes, periods are placed after abbreviations to distinguish them from homonymous commonly used words. For example, fig. = figure (illustration), figs. = figures (illustrations), where periods are used to prevent confusion with fig (the fruit, “fig”). Similarly, no. = number is marked with a period to avoid confusion with no (the negative particle).

Abbreviated formations, even if they retain the original form of the abbreviation, can acquire a new spelling according to the orthographic rules of regular words. For instance, O.K. has developed alternative spellings such as to O.K., to o.k., to okay, and to okeh (to approve).

Similarly, MC (master of ceremonies) has given rise to to MC, to emce, and to emcee (to act as a master of ceremonies), much like how Russian ЧК (Чрезвычайная комиссия – Cheka) led to чекист (Chekist).

“The unique structure and orthography of abbreviations create the possibility of multiple variations in their realization in speech. Many abbreviations with a fixed graphic form may have different pronunciations.” [8, 230]

For example, the abbreviation AA = antiaircraft can be pronounced as ['ei'ei] or ['dubl'ei], while AWOL = absent without official leave may be realized as ['ei'dʌbl'ju-'ou'el] or ['ei wol].

In addition to the neutral pronunciation variants mentioned above, there are also stylistically marked forms. Their emergence is driven by the general tendency to simplify the phonetic structure of letter-based abbreviations and make them more convenient for pronunciation.

For example:

HFDF (high frequency direction finder) is officially pronounced as ['eitz'efdi:'ef], but in colloquial speech, it becomes ['hʌf'dʌf].

ICBM (intercontinental ballistic missile) may be pronounced informally as ['ik bum].

AAFSS (Advanced Aerial Fire Support System) transforms into ['eifəs].

RADVS (radar altitude and Doppler velocity sensor) is colloquially rendered as [rædviz].

These simplified pronunciations often move abbreviations into a different stylistic category. Over time, such spoken forms can acquire new written representations, for example:

HFDF → huff-duff

ICBM → ick-boom

AAFSS → Aphis

Once established in writing, especially in journalism and literature, these variations become detached from their original abbreviations. They develop new graphic forms resembling those of regular words and transform into stylistic synonyms of the original abbreviations. The meanings of these stylistic synonyms may slightly differ from the corresponding abbreviations and evolve independently.

Thus, formations like huff-duff and ick-boom become distinct lexical units—stylistic synonyms of abbreviations.

During World War II, the British Armed Forces widely used the following stylistic synonyms for abbreviations:

Naffi ['næfi], Narfy ['na:fl] = NAAFI (Navy, Army, and Air Force Institution) – the military canteen service

Waff [wæf] = WAAF (Women's Auxiliary Air Force) – Women's Auxiliary Air Force

Arsop ['a:sop] = RSOP (Reconnoitering, Surveying, and Occupying a Position) – Reconnaissance and position occupation

Reemy ['ri:'mi] = R.E.M.E. (Royal Electrical and Mechanical Engineers) – Engineering repair and recovery service

Stylistic synonyms of abbreviations are used in contexts where the official abbreviation would be unsuitable. For example, in the British Armed Forces, the campaign medal given to all participants was jokingly called a “Naffi gong”, implying that this medal did not have to be earned through combat but could simply be bought at the military canteen. Similarly, “Naffi break” meant a mealtime break, literally referring to a pause when soldiers could visit the canteen.

Stylistic synonyms of abbreviations can also be formed based on associations. For instance, the difficult-to-pronounce INSSCC (Interim National Space Surveillance Control Center) resembles the word insect, leading to its stylistic synonym Insect. Likewise, NROTC (Naval Reserve Officer Training Corps) resembles the word neurotic, which resulted in the synonym Neurotic referring to a cadet in this training program.

The graphic form of abbreviations creates opportunities for their specific pronunciation. Letter abbreviations containing identical letters can be pronounced using a “mathematical method.” [10, 75]

For example:

CCDD (Command and Control Development Division) can be read as C square D square ['si:'skweə 'di'skweə] ( $C^2D^2$ ).

HHMU (Hydrazine Hand-Held Maneuvering Unit) can be pronounced as H-Cubed MU ['eitʃ'kju:bid'em'ju:] ( $H^3MU$ ).

CCCCA (Command Communications Control Center Agency) can be read as Four C-A ['fo:'si:'ei] ( $4C-A$ ).

This pattern is also observed in French. For example, G.A.A.A. (Groupement Atomique Alsacien-Atlantique – Atomic Industry Group) is pronounced as G trois A ( $G^3A$ ).

Pronunciation methods, in turn, influence the graphic representation of abbreviations. In some cases, a “mathematical” notation appears in writing:

Command and Control Communications (System) → CCC →  $C^3$

Combat Service Support System → CSSS → CS<sup>3</sup>

Command and Control Development Division → CCDD → C<sup>2</sup>D<sup>2</sup>

American Military International Insurance Association → AMIIA → AMI<sup>2</sup>A

Tactical Command, Control, and Communications → TCCC → TC<sup>3</sup>

Sometimes, a new word emerges based on a variant of the mathematical pronunciation.

For instance:

True Temperature Tunnel (an aerodynamic tunnel for simulating real aerothermal flight conditions of hypersonic vehicles) → TTT ['traɪpl ti:] → Tripletee.

Abbreviation reduces the degree of redundancy in a word or phrase. However, under certain conditions, when abbreviations are used in speech (e.g., in radiotelephone communications), it becomes necessary to increase redundancy. This is achieved through the so-called “phonetic alphabet,” in which each letter is replaced by a word, most often a name that begins with that letter.

For example, the abbreviation RTO (radio-telephone operator) is read in radiotelephone communication as Romeo Tango Oscar. A command and control helicopter (C & C helicopter) is referred to as Charlie-Charlie helicopter or simply Charlie-Charlie. Such names from radiotelephone conversations often make their way into colloquial vocabulary. Some of them become quite stable and even generate derivative words.

For instance, the term ack-ack (anti-aircraft artillery, anti-aircraft guns, anti-aircraft fire) originated during World War I from the abbreviation AA (anti-aircraft), which was pronounced ack-ack according to the phonetic alphabet used in the British Army at the time. Although this phonetic alphabet was replaced many years ago, the words ack-ack and ack-acker (anti-aircraft gunner) have remained in English military vocabulary.

The way abbreviations are realized in speech is primarily determined by the phonetic system of a specific language. For example, if we analyze how a series of similar Russian abbreviations are pronounced—ПВО (противовоздушная оборона = air defense), ПКО (противокосмическая оборона = space defense), ПРО (противоракетная оборона = missile defense), and ПЛО (противолодочная оборона = anti-submarine defense)—we can observe that the first two are pronounced letter by letter: [пэ-вэ-'о] and [пэ-ка-'о], while the last two are pronounced as whole words: [про] and [пло]. The reason lies in the phonetic structure of Russian: the sound combinations [п] + [л] and [п] + [р] are common at the beginning of syllables (плохой, плоский, площадь; прорыв, провал, прописной), whereas [п] + [в] and [п] + [к] are not.

Linguistic norms have an exceptionally strong influence on how abbreviations are pronounced. For example, in Russian, the abbreviations ФБР (Федеральное бюро расследований = FBI) and ФРГ (Федеративная Республика Германии = FRG) are traditionally pronounced [фэ-бэ-'эр] and [фэ-эр-'гэ]. However, in nearly all other Russian abbreviations containing the letter ф, it is pronounced with its standard alphabetical reading [эф].

In the British Armed Forces, it is customary to replace officer rank abbreviations with their full forms in spoken language. For example:

Col. (Colonel) is pronounced [kə:nl],

Sqn-Ldr. (Squadron Leader) is pronounced ['skwodrən 'li:də].

At the same time, there are exceptions: abbreviations for the two lowest officer ranks in the British Air Force—

P.O. (Pilot Officer)

F.O. (Flying Officer)

—can be pronounced letter by letter as ['pi:'ou] and ['ef'ou].

Thus, in these cases, it is the linguistic norm that determines whether an abbreviation functions as a purely graphic representation or evolves into a lexical unit.

Norms also have a significant impact on the graphical representation of abbreviations.

In French, for example, superscript letters are commonly used in abbreviations:

Bde (brigade) – “brigade,”

Bie (batterie) – “battery,”

Bon (bataillon) – “battalion” or “division,” etc.

In contrast, English and German abbreviations do not use superscript letters.

It is interesting to note that borrowed abbreviations in French can also adopt superscript notation. For instance, the typical English abbreviation Ltd. (limited – “(company) with limited liability”) appears in French texts as Ltd.

In German abbreviations, the initial letters of compound words are capitalized:

BefPz (Befehlspanzer) – “command tank,”

DivKdo (Divisionskommando) – “division headquarters,”

HFlgTrspStff (Heeresflieger-transportstaffel) – “army aviation transport squadron,” etc.

The Relationship Between Graphical and Phonetic Structures of Abbreviations

An especially interesting issue is the correlation between the graphical and phonetic structures of abbreviations and their full forms. In the vast majority of cases, an abbreviation's

phonetic structure is based on its graphical form and does not depend on the phonetic structure of the full phrase it represents.

For example, the acronym SHAPE (Supreme Headquarters, Allied Powers, Europe – “NATO Supreme Headquarters in Europe”) is pronounced [ʃeɪp]. This pronunciation follows standard English reading rules without any connection to how the individual letters in the full phrase are pronounced.

Thus, abbreviations exhibit a highly complex and specific interaction between their graphical and phonetic structures. They demonstrate variability in both pronunciation and spelling, while remaining strongly influenced by linguistic norms.

#### Grammatical Features of Abbreviations

Lexical abbreviations, as a distinct type of word formation, are characterized by extreme variability in their core grammatical categories. This is due to their unconventional formal structure and the fact that abbreviation as a word-formation method is still in the process of development, often lacking rigidly established norms. As a result, subjective interpretation plays a significant role in choosing and using particular grammatical categories.

#### Number Category

In English, the plural form of abbreviations is typically formed by adding the suffix -s, regardless of how the plural form of the full phrase (correlate) is constructed:

POW (prisoner of war) – “prisoner of war” → POWs (prisoners of war) – “prisoners of war”

OD (order of the day) – “military order” → ODs (orders of the day) – “military orders”

PFC (private first class) – “private first class” → PFCs (privates first class) – “privates first class”

EM (enlisted man) – “enlisted serviceman (sergeant)” → EMs (enlisted men) – “enlisted servicemen (sergeants)”

sig (signalman) – “radio operator” → sigs (signalmen) – “radio operators”

However, abbreviations can also form plural with a zero suffix (i.e., no visible change). Thus, in English texts, the same abbreviation may appear in the plural both with and without -s:

These MOSs (military occupational specialties) – “military occupational specialties”

Those NCOs (non-commissioned officers) – “sergeants”

These MOS, those NCO (without -s)



The orthography of plural abbreviations is also inconsistent. The suffix -s may be attached with or without an apostrophe:

ICBM's (intercontinental ballistic missiles) – "intercontinental ballistic missiles"

ICBMs (same meaning, but without an apostrophe)

This variability highlights the lack of strict grammatical norms in abbreviation formation, making their usage flexible and context-dependent.

#### Plural Formation in German Abbreviations

Unlike English, German does not have a single marker for the plural category, and the formation of plural forms depends primarily on the gender of the noun. However, there is a noticeable tendency to form the plural of abbreviations by adding the suffix -s, regardless of how the plural of the full phrase (correlate) is formed.

This trend toward standardization of plural abbreviations in German suggests an attempt to establish abbreviations as a distinct structural type of words. The choice of the -s suffix for this purpose—despite its relatively rare use for forming plurals in German—was explained by V. G. Pavlov as follows:

"Perhaps this slight peculiarity, the exceptional nature of the -s suffix, combined with its neutrality toward grammatical gender (as it can be used to form plural nouns of all three genders: Saisons, Leutnants, Porträts), contributed to its establishment as a plural marker for abbreviated words, which are also somewhat unusual in their pronunciation and graphical representation. To some extent, the influence of English and French may also have played a role in this process." [13, 40]

#### Gender Category

As is well known, the English language lacks a grammatical gender category. When necessary, natural (biological) gender is expressed lexically, using personal pronouns (e.g., he-wolf – "male wolf," she-wolf – "female wolf") or proper names.

As a result, English abbreviations do not have a grammatical gender either. In the rare cases where it is necessary to indicate the gender of a person referred to by an abbreviation, English uses lexical means typical of the language:

GI Joe – "male soldier"

GI Jane – "female soldier"

This flexibility in English contrasts with languages that have strict gendered word forms, further demonstrating the unique grammatical properties of abbreviations across languages.

#### Gender Category in Abbreviations



In languages that have a grammatical gender category (such as German, French, Russian, etc.), determining the gender of a specific abbreviation can be quite challenging. The gender of an abbreviated lexical unit may be assigned based on different criteria:

The main word of the correlate (the full form from which the abbreviation derives).

The formal structure of the abbreviation itself.

The semantics (meaning) of the abbreviation.

### **Results and discussion**

The possibility of applying different principles to the same noun-abbreviation leads to instability in the gender category.

The most natural and common approach is to assign an abbreviation the same gender as the main word in its full form. In this case, the abbreviation acts as a simple substitute for the correlate. For example, the French abbreviation CIRE (Comité international de la radioélectricité – “International Committee for Radioelectricity”) is considered masculine because the word comité is masculine in French.

#### **The Influence of Language Structure**

As abbreviations evolve into a distinct category of words, the formal structure of the abbreviation itself plays a greater role in determining its grammatical gender. This reflects the pressure of the language system on word formation.

The first principle (assigning gender based on the full form) is universal and applicable in any language. However, how this principle manifests depends on the specific grammatical rules of each language.

For instance, in Russian, it has long been observed that any word signifying an object becomes a masculine noun if it ends in a consonant sound. As a result, the vast majority of Russian abbreviations ending in a consonant are considered masculine nouns, regardless of the gender of their full form.

ВУЗ (высшее учебное заведение – “higher educational institution”) is masculine.

ДОТ (долговременная огневая точка – “permanent fire point”) is masculine.

In German and French, there is a tendency to assign abbreviations of certain lexical-semantic categories to a specific grammatical gender.

In German, abbreviations referring to aircraft types, machines, and motorcycle brands are typically feminine, while those referring to car brands are masculine.

In French, abbreviations for technical devices and systems are most often feminine.

Gender in Uzbek

In Uzbek, there is no grammatical gender category at all. Uzbek belongs to the Turkic language family, where gender is absent—one of its defining characteristics. Instead of grammatical gender, natural gender (male or female) is expressed lexically, either by using different words or adding clarifying words to indicate gender.

#### Case Forms in Abbreviations

In English, the standard -s ending, used to form the possessive case, is applied to the entire abbreviation, regardless of which part of the correlate it refers to:

DOD's directive – “directive of the Department of Defense” (Mudofaa vazirligi direktivasi) → Department's of Defense directive.

However, the use of the -s ending is unstable and optional. Notably, omitting the -s shifts the abbreviation into a different grammatical category:

In NATO's arsenal – “NATO's arsenal” (NATO qurol-yarog'i), NATO functions as a substantive unit (noun-like).

In NATO arsenal – “NATO arsenal” (NATOni qurol-yarog'i), NATO functions as an attributive unit (adjective-like).

In German, the genitive singular form is also optional. However, there is a growing tendency to use the -s inflection for abbreviation-nouns of all three grammatical genders.

#### Declension Paradigm Differences

There are significant differences between Russian and Uzbek abbreviations and compound abbreviations in terms of declension paradigms.

In Russian, declinable abbreviations are inflected according to three main declension types (I, II, III), with over 50 case endings.

In Uzbek, although both languages have six grammatical cases, abbreviations are declined according to only one traditional type and have no more than five case endings.

#### Comparison of Declension in Russian and Uzbek

##### Russian Uzbek

Химзащита – “химическая защита”      Кимҳимоя – “кимёвий ҳимоя”

Nominative (И.п.): химзащита      Кимҳимоя (В.к.)

Genitive (Р.п.): химзащиты      Кимҳимоянинг (Қ.к.)

Dative (Д.п.): химзащите      Кимҳимояга (Ж.к.)

Accusative (В.п.): химзащиту      Кимҳимояни (Т.к.)

Instrumental (Т.п.): химзащитой      Кимҳимояда (Ў-р.к.)

Prepositional (П.п.): о химзащите      Кимҳимоядан (Ч.к.) [15, 106-107]

It is important to note that declension applies only to declinable abbreviations and compound abbreviations. Other Russian and foreign abbreviations remain unchanged lexically and grammatically.

This confirms that, despite some national characteristics, Uzbek abbreviation formation follows and develops according to the principles and norms of Russian abbreviation formation.

#### Conversion in Abbreviations

In English, almost any lexical abbreviation, unlike graphic abbreviations, can undergo conversion—a word-formation process where only the word's paradigm serves as the derivational tool.

Noun-based abbreviations can form verbs, adjectives, and adverbs through conversion. The semantic relationships between the original form and the newly derived word are highly diverse, which is a typical feature of conversion in English. Since a full classification of these relationships is beyond our scope, we will limit ourselves to a few examples:

From the noun abbreviation PERT (= Program Evaluation and Review Technique – “method of program evaluation and control,” *dastur baholash va nazorat qilish usuli*, PERT *usuli*), the verb to PERT is derived, meaning “to control using the PERT method” (PERT *usuli yordamida nazorat qilish*).

In the phrase to be MIRVed – “to be equipped with a multiple independently targetable reentry vehicle” (*belgilangan maqsadlarga har bir elementni alohida yo‘naltirish bilan ko‘p elementli jangovar qism bilan jihozlangan bo‘lish*), the verb MIRVed is derived by conversion from the abbreviation MIRV (= multiple independently targetable reentry vehicle – “a multiple warhead with individually targeted elements,” *har bir elementni belgilangan maqsadlarga alohida yo‘naltirish bilan ko‘p elementli jangovar qism*).

Sometimes, conversion is accompanied by spelling changes:

to emcee, emceed, emceeing (derived from MC = Master of Ceremonies – “ceremony host,” *marosim boshqaruvchisi, konferansye*).

A particular challenge for understanding and translation comes from adverbs formed through conversion from noun abbreviations, as they lack formal markers other than their position in a sentence:

to go AWOL – “to be absent without leave” (*o‘zboshimchalik bilan xizmatdan tashqarida bo‘lish*),

to fly IFR – “to conduct a flight using instrument flight rules,”

to talk BBC – “to speak in standard literary English, like a BBC announcer” (standart adabiy tilda gapirish, Bi-Bi-Si diktori kabi so‘zlash).

A key proof that such cases involve “secondary-order” abbreviations lies in the impossibility of replacing them with their full “primary” correlates.

### **Conclusion**

This study highlights the complexity and variability of abbreviations in phonetic, orthographic, and grammatical aspects. The research demonstrates that abbreviations are not merely shortened forms of words but dynamic linguistic units that undergo transformations influenced by writing conventions, pronunciation norms, and grammatical rules. The analysis of abbreviations across English, German, French, Russian, and Uzbek languages reveals significant structural and functional differences, shaped by linguistic norms and communicative needs.

One of the key findings is that abbreviations exhibit instability in spelling, pronunciation, and grammatical categories, making their usage context-dependent. The study also emphasizes the role of stylistic synonyms and phonetic adaptations in facilitating easier pronunciation and integration into speech. Additionally, the process of conversion further expands the functional capabilities of abbreviations, allowing them to transition into different parts of speech.

Overall, the research underscores the importance of linguistic norms in shaping abbreviation usage and highlights their evolving nature in response to communication demands. The findings contribute to a deeper understanding of the role of abbreviations in modern language systems and their impact on lexical development.

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