$T_{\rm HE}$ nature and status of abbreviation. Morphophonological specificities and gender of modern-day bulgarian abbreviations^1

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Абревиацията – считана от мнозина за непрототипна – е един от най-активните словообразувателни процеси днес. Тази статия разглежда част от когнитивната ѝ обосновка, лексикалните единици, които произвежда, и – в по-конкретен план – някои черти на българските абревиатури. Достига се до определение за абревиация, избягващо повечето сблъсъци между различните школи. Що се отнася до българските абревиатури, текстът прави преглед на ограничения от ортографски и фонологичен тип (най-вече фонотактика и акцент). Разгледани са и зависимостите при определяне на рода на абревиатури съществителни имена. За целта са дискутирани резултатите от емпирично изследване, проведено през 2013 г.

Ключови думи: абревиация, български език, когнитивна обосновка, фонотактика, акцент, оптимална дължина, определяне на род

Abbreviation, considered by many non-prototypical, is one of the liveliest word-formative processes nowadays. This paper examines part of its cognitive background, the lexical items it results in, and – from a more narrow perspective – some features of Bulgarian abbreviations. A definition of abbreviation is arrived at that avoids most of the clashes between schools of thought. As regards Bulgarian abbreviations, the text looks into constraints of orthographic and phonological nature (mainly phonotactics and stress). It also examines the regularities of gender assignment with noun abbreviations. For this purpose, the results of an empirical survey carried out in 2013 are discussed.

Key words: abbreviation, Bulgarian, cognitive background, phonotactics, stress, optimal length, gender assignment

The matter of abbreviation and its status as a word-formative process has received attention from linguists mainly in terms of its marginal nature, and has, thus, been explored only scantily. The lexical items produced have been understudied and analyses of their properties are yet to reveal some important insights into the ways they function. In this paper, I carry out a discussion of abbreviation and its general cognitive background, and identify stages in the development of formations.

¹ This paper is devoted to my family and friends. I would like to thank Dr. Alexandra Bagasheva for her comments and for helping me carry out my survey, and my family.

More specifically, I address matters of orthography and phonological constraints of Bulgarian abbreviations and observe and comment upon general principles. I give the issue of gender assignment with abbreviations a new reading in light of an empirical study carried out recently, bringing up questions of paradigm simplification.

There are several points this text aims to tackle. The first one has to do with what an abbreviation is, and how it can be distinguished from units of similar orthographic form. I will be looking at letter-based (each letter is pronounced as a separate syllable) and sound-based (the whole abbreviation is pronounced in a fashion similar to that of prototypical words) abbreviations² in an attempt to put right a few terminological inaccuracies in that respect and provide a communicatively driven perspective on the matter. My main objective will be to contrast processes of form reduction with derivational ones, putting the two poles on a cline that indicates the fuzzy boundary between them.

Specific problems of Bulgarian abbreviations will also be discussed. Notably, I aim to prove that abbreviations in Bulgarian, although not necessarily following strict pronunciation patterns, are still subject to regularities in terms of stress placement and pronunciation. And, since stress is to a large extent non-phonemic in Bulgarian, such regularities can be examined as a feature of abbreviations as a class of words, making them a distinguishing factor in setting the boundary between formal reduction and derivation here.

An issue which has to do with pronunciation as well as with orthographic form is that of gender assignment. In a newspaper article of his³, Brezinski claims that abbreviations in Bulgarian cannot have gender different from that of the word(s) they are based on. I will attempt to argue a different view, and generalize as to the nature of gender assignment with noun abbreviations, commenting upon observable patterns.

For the purposes of this short study, I have made use of a questionnaire distributed among 100 native speakers of Bulgarian between the ages of 18 and 23, aimed at exploring gender marking with abbreviations, and more specifically, the discrepancy between the gender of the words on which abbreviations are based and that of the abbreviations themselves. Utterances are taken from discourse in order to ensure their authenticity. The first question targets the assignment of gender and the second one – whether the speaker is familiar with the words each abbreviation is based on.

² See Манолова (1993: 11) for specific examples of each.

³ See <http://www.trud.bg/Article.asp?ArticleId=262149> [Posted on 25.10.2009]. [Retrieved on 23.07.2014].

The stance in tackling each problem set out above will be essentially theoretical and the questionnaire data will be used mainly as illustration (with relevant comments where necessary). I will base my discussion mainly on comments upon separate articles and Тилков, Стоянов, Попов (1983) referring to other sources, too, as well as to the introduction and part of the content of Крумова-Цветкова, Чаролеева, Холиолчев (2003) – the most recent dictionary of contractions in Bulgarian, which also boasts some useful explanatory notes. As the discussion progresses, it will become evident that the treatment of one and the same issue is not the same throughout sources, and thus, requires clarification. This stance to approaching the treatments is seen as best suited to the goal of the paper – to arrive at a streamlined, balanced system of terms, general enough to accommodate abbreviations as a product of word-formation, and specific enough to allow for the study of their specific grammatical properties.

Let us begin by examining two orthographic shapes both of which are considered by mainstream grammars to be abbreviations in Bulgarian:

(1.1.) ДДС

(1.2.) ПУДЦРЮЛНЦОПДМП

In Симеонова (2012:2) a claim already voiced in Крумова, Чаролеева (1982) is defended that formations such as ДДС are lexical abbreviations, while those such as ПУДЦРЮЛНЦОПДМП should be regarded as graphical ones⁴. Lexical abbreviations are defined as new lexical items which are used both orally and in written language, while graphical abbreviations are said to be used in written language only. While lexical abbreviations can be autonomous from the words they are based on, the argument goes, graphical ones are entirely dependent on it, i.e. they are contracted forms rather than lexical items. These definitions beg the question of why two different phenomena (derivation and formal reduction) should be subsumed under the same term. This clearly goes against the nature of these phenomena as their results are similarly quite different.

If we adopt the stance of Dirven ⁵& Verspoor (2004: 79)⁶ and Plag (2003: 160– 165) and treat abbreviation as an exclusively word-formative process, we will talk of

⁴ The terms *lexical* and *graphical abbreviation* are very broad and in fact cover not only instances such as the ones attested above, but also clippings, contracted forms, etc. This, among others, is a reason why the terms are seen as unfit for the purposes of this text, which is much narrower in scope.

⁵ They use the term *acronym* which for our purposes is equivalent to *abbreviation*.

⁶ This is also true for the NP европейски съюз (evropejski sajuz). The compound and the NP share the same core conceptual content. The former, however, is more specific in terms of the background data it assumes. Compounds also rely heavily on the smaller units that make them up. Abbreviations, on the other hand, at least at the moment of their creation, derive their content from the whole of the compound or phrase.

abbreviations and contracted forms instead of lexical and graphical abbreviations respectively. From a purely structural point of view, the idea of ПУДЦРЮЛНЦОПДМП as an abbreviation is improbable. Since Bulgarian is not a language for the deaf, it requires a linguistic sign to have both a sound shape and a corresponding meaning. (1.2.) lacks phonetic shape and its meaning, as discussed above, hinges on the words it is based on. The case with (1.1.) is quite different. It has a phonetic shape and its meaning can be argued to be independent from the compound данък добавена стойност (danak dobavena stojnost).

There are two stages of development an abbreviation could be at in terms of meaning independence from the words it is based on. At the initial stage, observing the law of lexical economy (Zidarova 2008: 1), speakers produce new lexemes that boast the same core conceptual content as earlier ones. These abbreviations, however, exist parallel to the compounds and phrases they share (the better part of) their semantic component with.

Many compounds, however, are – to varying degrees – semantically transparent. One can infer from Европейски съюз (Evropejski sajuz), for example, that the compound denotes an official institution that is European in its history and relies on some sort of unity between its constituents⁷. Abbreviations lack this kind of transparency and a speaker of Bulgarian would have trouble understanding the meaning behind EC if they have not been previously acquainted with the matter of European institutions.

Most often, abbreviations start gaining currency only after the compound or phrase they are used instead of is already entrenched in the lexicon of a language. This happens as the need to compress the form of well known lexical items grows. Their general use and high token frequency (their overuse even leads to their becoming cliché) ensure that abbreviations will also be received with ease by native speakers. Also, should the compound or phrase be too long for speakers to remember and/or produce, it is replaced by a more compact, yet often equally difficult to retrieve, abbreviation.

Cognitively speaking, an abbreviation starts its "life" as a semi-metonymical extension of the compound or phrase. Each letter *stands for* the word it is an element of (usually the first or last letter of the word, or - in cases of compounds which are presented as one orthographic whole - the first letter of the first and second root respectively). So, at first, a speaker's knowledge of what an abbreviation refers to, for instance, will be secondary in nature. One - when trying to find the referent - will first

⁷ This term is henceforth to be contrasted with the typical arbitrary link that exists between a word and its referent.

decode what the abbreviation stands for (i.e. one identifies the compound or phrase) and only after that will one decipher what extralinguistic object it designates.

So, the first stage of the meaning-allocation process is based largely on the correlation between an element of the compound and its initial letter, while the second one relies on an arbitrary link between the compound and the object referred to. The situation described usually remains unchanged in specialized discourse exclusively. That is, a specialist will always rely on the described chain mechanism (see the figure to the left) every time they encounter an abbreviation. In other words, a complex

balancing of processing and storage takes place. It is easier for the speaker to produce the word, but more difficult for them to remember it due to the complex chain mechanism.



The second stage in the development of an abbreviation sees it used in general discourse. It is only there that it becomes a full-fledged lexical item. As such, it boasts the typical symbolic link between form and meaning. That is, the second stage of the above figure does not exist anymore and a word such as ΓYM is just as easy for a speaker to retrieve and produce as, say, the word *flower*. This second stage takes us further towards the derivational pole of the formal reduction-derivation cline below.



So, abbreviation as a word-formative process can be described as the emancipation of graphically shortened versions of words or word strings from their original sources which results in a new lexical item with specific orthographic shape (the letters being mainly in capitals) and a corresponding phonetic shape (which is generally governed by observable tendencies that are to be discussed below). The emancipated lexical item, when at the end of its second stage of development, has the same symbolic link between form and meaning as the majority of other items in the lexicon.

I would like to make a few remarks regarding the status of abbreviations as a product of a fairly active word-formative process. In Крумова-Цветкова, Чаролеева, Холиолчев (2003: 12–13) abbreviations are on several occasions contrasted with 'normal/ordinary words', the meaning of 'normal/ordinary words' left unclear. This immediately leads the prospective reader to believe that abbreviations are somehow abnormal in terms of their status as lexical items – something which from a linguistic standpoint they are not. Certainly, they are marked in terms of orthographic shape, but their phonetic shape still has to generally conform to the phonotactic constraints of the language whose lexicon they are part of. Moreover, although they do not in some ways comply with the general paradigms of their respective part-of-speech classes, they still display some of their morphological features. For instance, abbreviations that are nouns can – mainly in oral discourse – be marked for gender, number and definiteness (Крумова-Цветкова, Чаролеева, Холиолчев 2003: 14). This clearly makes them non-prototypical, or – in some extreme cases – even marginal members of part-of-speech classes, but certainly not abnormal.

As discussed above, the phonetic shape of abbreviations has to generally conform to the phonotactics of the language whose lexicon they are a part of. There are some observable regularities that will be spelt out here. Naturally, an abbreviation cannot consist of one letter (character) only. From this, several complications ensue in Bulgarian. Since Bulgarian does not generally tolerate hiatus, abbreviations of the type *AEEEOH are impossible in terms of pronunciation, because it is not possible (even cross-linguistically) to have a single vowel with such fluctuation in quality, let alone of such length (this hypothetical vowel will have to be long enough for native speakers to register the quality fluctuations that set it apart from other vowels) and the stringing of so many vowels would result in hiatus. The phonotactics of Bulgarian also rules out letter combinations of the sort * $\Pi X \amalg \square \Phi$. So, any orthographic shape having strings similar to those of the two examples cited above is most certainly a contracted form rather than an abbreviation proper.

Examining the entries in Крумова-Цветкова, Чаролеева, Холиолчев (2003) on a quantitative principle⁸, we observe that – orthographically – there is a tendency for abbreviations to consist of between two and five symbols, and – phonetically – to be mono-, bi- or trisyllabic. This general feature will henceforth be referred to as *op*-*timal length*. Abbreviations conforming to the optimal length tendency are formally prototypical.

Two main types of abbreviations are observable in terms of pronunciation. Sound-based abbreviations, as mentioned earlier, follow the pronunciation patterns of prototypical lexical items. Such abbreviations are BV3, HAII, COT, IOHECKO, etc. Monosyllabic abbreviations are only sound-based. Letter-based abbreviations involve a specific pattern of producing each character of the orthographic shape, following the

⁸ That is, the entries that have been marked as having phonetic shape in the dictionary.

phonotactic requirements of Bulgarian⁹ (БСП, НДК, ОДС, etc.). Polysyllabic abbreviations can be either of the letter-based type, or of the sound-based one.

As regards the stress of polysyllabic abbreviations, Крумова-Цветкова, Чаролеева, Холиолчев (2003) do not distinguish degrees of stress, and this leads to the paradoxical situation of having a word that bears two (or more) primary stresses. Stress, however, is a relational property of suprasegmental units – it can only be established in context and via comparison. This makes it impossible to have two syllables of equal prominence, so the notation in the dictionary is clearly not true to fact. It becomes necessary to establish which the primary-stressed syllable is and to assign prominence readings to the rest of the syllables in an abbreviation. No empirical testing has been carried out in the area to-date.

However, it seems reasonable enough to suspect that it is usually the ultimate or the penultimate syllable of an abbreviation that is stressed in Bulgarian. The justification comes from the fact that stress is generally used to maintain rhythm in the language¹⁰, as it is in English. English is also a language with left-dominant feet (Gussenhoven & Jacobs 2011: 32), i.e. the first syllable of a foot is stressed, while the rest are unstressed, and usually the most prominent foot is the rightmost one (with phrasal categories). A similar tendency – though by far not as systematic is seen in Bulgarian. These pieces of evidence, however, are not entirely sufficient and, although they provide the researcher with some direction, they still require substantiation via empirical evidence. Therefore, the claim made in this paragraph remains tentative at best.

The issue of phonetic shape and orthography largely aside, focus will now be shifted to another feature of abbreviations used in general discourse – their gender specification. As mentioned above, Brezinski, in his 2009 newspaper article, challenges the common use of gender marking with abbreviations in Bulgarian. He defends the claim that abbreviations that are nouns have the same gender as the compounds or heads of phrases they are derived from. He does not go on to justify this view of his that runs counter to the fact that gender is grammatical in Bulgarian. Moreover, it is assigned on a phonological principle. That is, if we base our discussion on the examples provided in Тилков, Стоянов, Попов (1983: 119–123), abbreviations should follow the patterns outlined there. Thus, nouns ending in consonants should be in the masculine, those ending in /a/ or / μ / – in the feminine, and the ones ending in /e/, /u/, /o/, and

⁹ This often involves producing the 'name' of the letter in the way it would sound in Bulgarian, or Russian, or alternatively even Latin (Ницолов, Георгиев, Джамбазки 1980: 10). This refers mainly to consonants which have orthographic expression in the relevant languages.

¹⁰ This, however, should be taken with a pinch of salt. Bulgarian lexical stress is notoriously difficult to pin down in terms of systematic behaviour, because it is generally free.

– more recently – /y/ should be in the neuter. Similarly, adjectives that act as modifiers in noun phrases will agree with their respective nominal heads in gender and should follow the patterns in Тилков, Стоянов, Попов (1983: 162–163). This is largely, but not entirely, the case, as is revealed by the results of a questionnaire-based survey I carried out in 2013 with the help of 100 native speakers of Bulgarian between the ages of 18 and 23. Let us look at the table below and discuss observable tendencies. The first question targets the gender abbreviations receive, and the second one – whether speakers know the compound or phrase each abbreviation is derived from.

			Q.1 Gender			Q.2 Knows the starting compound or phrase		
Ν	Abbreviation	Ends in	Masculine	Feminine	Neuter	Yes	No	
1	ДДС	/e/	28	1	71	96	4	
2	ТЕЛК	consonant	94	2	4	40	60	
3	СОТ	consonant	99	1	0	65	35	
4	НДК	/a/	0	8	92	97	3	
5	БСП	/e/	2	2	96	95	5	
6	НОИ	/и/	41	21	38	71	29	
7	НАП	consonant	94	3	3	64	36	
8	БНТ	/e/	2	6	92	98	2	
9	ВиК	/a/	4	6	90	89	11	
10	БДЖ	/e/	2	13	85	94	6	
11	ВЕЦ	consonant	93	5	2	87	13	
12	ГМО	/0/	20	0	80	95	5	
13	ДСК	/a/	9	2	89	73	27	
14	ОКС	/e/	20	36	44	47	53	
15	ЦРУ	/y/	2	1	97	92	8	

It is evident from the table that indeed abbreviations largely behave as other nouns in terms of gender assignment, following some, but not all, of the patterns already discussed. The results also disprove Brezinski's claim, and this is seen in examples such as [1], [4], [5], and [13] among others in the questionnaire¹¹. Example [14] has been marked because it displays curious results, the neuter and the feminine

¹¹ The gender of the compounds these abbreviations are derived from is different from that of the abbreviations themselves.

being very close in their values. This necessitates a horizontal counting (seen in the table below)¹².

Masculine (+)	Feminine (+)	Neuter (+)	Masculine (-)	Feminine (-)	Neuter (-)
3	28	16	17	8	28

We observe that the feminine is opted for by participants who are aware of the starting compound or phrase, while the masculine and – more notably – the neuter is chosen by those who apply the grammatical gender assignment principle. This is further proof in support of the predominantly grammatical mechanism of gender assignment with Bulgarian abbreviations. The typical phonological dependence of gender on the last segment of a lexeme seems to be broadened somewhat in examples [4] and [13], where the final /a/ or / $_{\rm b}$ / should immediately class the abbreviations as being in the feminine. However, the overwhelming majority of speakers opt for the neuter. In fact, the feminine remains unattested.

This is in line with a tendency observed with many of the abbreviations ending in /a/ and /b/ in Крумова-Цветкова, Чоролеева, Холиолчев (2003) – ВМА, НСА, КСА and ОТК:

Спри да зяпаш в чинията му като някакво ОТК!13								
Spr-i	da	zjap-a-š	v	čini-ja-ta=mu	kato	njakakv-o	oteka-Ø	
stop-	COMP	stare-PRS-	into	plate(F)-SG-	like	some-N.	oteka(N)-	
IMP.2SG		IND.2SG		DEF.F.SG=3SG.M.DAT ¹⁴		SG	SG^{15}	
'Stop staring into his plate like some OTK!'								

So, there is clearly a tendency to suspend the feminine-neuter contrast and to collapse the two into a neuter-only option when an abbreviation ends in $/a/^{16}$. Thus, the gender contrast with abbreviations is usually a two-way one – masculine (or, alternatively, common) vs. neuter (the abbreviation ending in a consonant, or a vowel respectively). This paradigm simplification makes noun abbreviations less prototypical than other members of the noun class, which retain three-way gender contrast. It also

¹² A '+' indicates that speakers know the compound or phrase, while a '-' indicates they do not.

 $^{^{13}}$ This example was heard during a mealtime conversation. We see agreement in terms of gender and number between the determiner *nyakakvo* and the head noun *OTK*

¹⁴ The forms for the dative and the genitive are conflated in Bulgarian. This is a typical feature of the Balkan sprachbund.

¹⁵ Here, the /a/ is interpreted as marking the neuter.

¹⁶ Most likely, this is due to the semantic component overriding the grammatical one, following from the fact that most abbreviations are {-animate}.

constitutes proof of the fact that abbreviation is an active modern-day word-formative process, because it aims not only to simplify, but also to regularize paradigms, thus maintaining with high efficiency the law of lexical economy.

Although abbreviations are often regarded as marginal in terms of word status, this paper has proven otherwise. Further, I have defined abbreviation as a word-formative process and have briefly explored the cognitive background that motivates it.

Looking at abbreviations in modern-day Bulgarian, I have observed a preexisting division into letter-based and sound-based. Matters of optimal length, phonotactic constraints and stress placement have been discussed, and a stress-related hypothesis has been spelt out.

As for the issue of gender assignment, following an emprical survey carried out in 2013, I have established that abbreviations in Bulgarian display a two-way phonologically driven gender contrast between masculine and neuter, thereby simplifying the gender paradigm.

Thus, abbreviations have been shown to exhibit properties that make them less than prototypical in the noun class (abbreviations are predominantly nouns). These properties, however, are not all too sufficient to class them as marginal, since features of definiteness, gender, and number still suggest their membership to the group.

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