Some Characteristics of Sound Patterns in English Verse

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Abstract

The paper discusses a certain kind of sound repetition in English poetry. Our task is to find out whether our concept of phonosyllabic patterns consisting in repetition of groups of identical or similar consonant sounds within a potential syllable is valid when applied to verses written in English. The material of the research comprises randomly chosen works by English and American poets of different centuries and literary schools, from T. Wyatt to D. Thomas. Only accentual-syllabic and accentual verses were considered. G. Byron's poem “Sun of the sleepless! Melancholy star...” was chosen as the material for detailed analysis.

1 Introduction

This paper contains some reflections which have appeared in the process of work of the English version of the Phonotext computer program and web-service, the Russian version of which is already in progress. The program is being designed for automatic detection and further quantification of repeated grapho-phoneme combinations in the text.

Methods used in the program for measurement of sound cohesion in a poem are based on a syllabo-centric view of the sound composition of text (Vekshin 2006). This approach proceeds from the fact that the elementary speech constituent is the syllable, outside of which no sound and rhythmic associations of text segments are possible. The sound chain of the verse is granulated in accordance with the syllabic organization of speech and its prosody. The functional significance of individual granules is provided by analogies in the structure of the chain—by sound repetitions that, being embedded in the rhythmic and prosodic contours of words, phrases and text, complicate and redistribute its syntactic and morphological links and thereby ensure the multidimensionality of the poetic form.

The simplest unit of the text that forms series of repetitions and thus creates the aesthetically significant sound texture of the poem, is defined as phonosyllabeme
A phonosyllabeme is a repeatable group of consonants of variable order, that mainly disregard the quality of the vowel, and act within the limits of one potential syllable, i.e. a segment comprising the whole consonant surrounding a vowel and the nucleus of the syllable itself. The text-forming potential of phonosyllabic repetition is determined by the type of distribution of phonosyllables and their configurations (cf. Červenka 2002) as well as by their internal configurative structure, which implements the “elementary formative principles within a series” (Levý 1966). Here, two main formal types of relations are distinguished: equiphony (echo-repetition, including rhyme and alliteration) and metaphony—accentually and inversely varied morpheme-like phonosyllabic repetition (Vekshin 2008; cf. Obruchnykova 2017). Thus, in E. Poe’s line *Still is sitting, still is sitting*, in which Roman Jakobson paid attention to the metaphonic chain “/ stí ... / - / sít ... / - / stí ... / - / sít ... /” lining up variants realizing the common invariant, where “the invariance of the group is particularly stressed by the variation in its order” (Jakobson 1981: 43; cf. Brik 2014). This kind of sound repetition consists of grouping segmental sound units around syllable cores, occasionally transforming the syllabic structure of speech so that the syllable unity in certain parts of the text is perceived in view of the recurrence of the substantial sound structure.

The numerous existing algorithms for identifying sound repetition in the text are designed for detecting individual sounds and are aimed mostly at automatic analysis of euphony or at finding out the frequency of this or that sound in the text, which may also serve for the analysis of euphony and other specific phonetic features of the author’s idiostyle (see Baevskii et al. 2010; Benner 2014; Plamondon 2005; Plecháč–Říha 2014).

The role of phonosyllabemes in poetic texts is not only embellishing and contributes not only to the euphony or harmony of the poem, but also to some other kinds of sound repetition (which, however, are not discussed in the paper, apart from alliteration). Repetitions of groups of sounds tend to alter the cohesive fabric of the text and thus seem to affect the very grammar of the text, emphasizing (“rhematizing”) fragments which otherwise remain less conspicuous against the background of more pronounced poetic devices such as meter and rhyme. The way phonosyllabic cohesion works in an analytical language like English in which the fall of inflection and the establishment of the fixed word order had once “devoured” the Old English alliterative verse, is of especial interest for us.

The preliminary analysis involved about 10,000 lines by English poets from T. Wyatt to D. Thomas, all written in rhymed verse, either accentual-syllabic or tonic verse. As the computer program in question is at present “half-baked”, it could show only very approximate results, nevertheless, they were sufficient to understand two important facts: firstly, chains of phonosyllabemes in English poetry are about twice as frequent as in English prose; secondly, the number of phonosyllabemes vary greatly not only from author to author but also from period to period. Rather scarce in the 16th–18th centuries, they seem to have reached their quantitative peak in the era of Romanticism and in the late Victorian era (this concerns also alliterations). These were the periods when the “music” of poetry was especially highly valued, and at the same
time when the attempts to somehow “reform” the English verse were especially numerous. Calculations made by hand on a small number of texts confirms this conclusion. But our main task is understanding the way the English sounds behave in poetic texts in general and in the repeated combinations, or phonosyllables, representing phonosyllabemes. The types and modes of phonosyllabic patterning of text will be shown by means of analyzing Byron’s poem “Sun of the Sleepless! Melancholy star...” (1815). The poem, being short and convenient for analysis contains all the types of sound repetition that we are interested in.

2 Sound repetition in Byron’s poem

2.1 “Sun of the Sleepless”

Sun of the Sleepless! melancholy star!
Whose tearful beam glows tremulously far,
That show'st the darkness thou canst not dispel,
How like art thou to Joy remembered well!
So gleams the past, the light of other days,
Which shines but warms not with its powerless rays:
A night-beam Sorrow watcheth to behold,
Distinct, but distant—clear—but, oh, how cold!

The poem from the cycle “Hebrew Melodies” has a simple structure: it consists of eight lines rhymed in couplets (AABB...), written in iambic pentameter with a movable caesura on the second foot. This form, introduced into English poetry by Geoffrey Chaucer and usually defined as “heroic couplets” (couplets in iambic pentameter) was widely used by poets up to the beginning of the 19th century. A specific feature of the heroic couplet is its “closed” nature, i. e. each couplet and each line being grammatically and semantically complete.

Byron here does not resort to either complex stanza or exquisite rhyming scheme, although he skillfully uses these in other works.

The relative semantic and syntactical independence of the couplets seems to hint that the sound structure of each of them also should be “closed”, i.e. that there should be separate sound devices for each couplet. On the other hand, the text is short, and the rules for “heroic couplets” by the beginning of the 19th century had ceased to be strictly obeyed, so the sound repetition can be observed in the whole text. And the external simplicity of the text allows one to pay close attention to what is going on at the sound level in each couplet and in the excerpt as a whole.

2.2 Alliteration

The first thing that draws attention in the very first line is the alliteration:

*Sun of the Sleepless! melancholy star!*
This chain of alliterating words is conspicuous not only because it stands in the initial, strong position of the poem but also because it consists of three members, all of them stressed. The further alliterative chains are pairs or triads of words which do not stand out so openly but still are quite noticeable:

- tearful – tremulously
- darkness – dispel
- that – thou
- which – warms – with
- beam – behold
- distinct – distant
- clear – cold

Of course, such pairs as “that – thou” and “which – with” containing auxiliary words may arouse doubt as to whether the alliteration in them is deliberate or just dictated by sheer syntactic needs; but as the first line offers the alliterative reading of the text they are included in the alliterative chains. We should remark that alliteration here is understood as “the agreement in sound of initial syllables” (Noyes 1914: 63; cf. Oertel 1892; Polivanov 1930; Vekshin 2012).

From the 60 words of this short poem 18 words alliterate, which constitute 30% of the lexical body of the text. This appears to be a lot even without comparing the text with other poems. Still, for comparison, let us randomly take two of Shakespeare’s sonnets: alliterating words (including auxiliary and repeating words) constitute 21% in Sonnet XXI and 13% in Sonnet LXI. But, for instance, in the initial 14 lines of J. Swift’s “Verses on the death of Dr Swift” only 6.1% of words alliterate. For Pope’s “Sound and Sense” the figure is 11.2%, and for Shelley’s “Ozymandias” it is 19.4%. Of course, an average value may be deduced from all these calculations, but even the untrained eye can see that the Romantic poets were more inclined to use alliteration than the Elizabethans and especially the poets of the Age of Reason. Byron’s poem is intensely alliterative and deviates strongly from the average figure which we can receive by simple arithmetic methods of adding and dividing.

Although English poetry had mostly ceased to be alliterative as early as the 14th century, in Chaucer’s time, alliteration frequently occurs in the works of Chaucer himself—whose general attitude to the “rum, ram, ruf”, as one of his characters calls it, tends to be negative—and in the works of later authors as well. The peaks of its use seem to fall in the periods when the attention to the sound texture of the verse was especially high: those of Romanicism and the late Victorian era in which a certain “boom” of alliteration can be observed. G.M. Hopkins was the most outstanding representative of this boom, and “Tennyson uses it so extensively that he is forced to say: ‘Alliteration comes so natural that when I speak my lines first they come out so alliteratively that I have sometimes no end of trouble to get rid of the alliterations’” (Thoma 1949, 14). Still, the purpose of alliteration, which has long lost its fundamental function for the Old and Middle English poetry of the “front rhyme” organizing the verse, is often disputed. The question which arises most frequently is whether alliteration is just an ornament or whether it has some semantic value. Sometimes, especially in popular and scholarly texts, we come across statements like “The appearance
of repeated letters signifies that these words are important, or that an important message is being conveyed beyond simply the dictionary meanings of the individuals words themselves” (Smith n.d.).

Considering Byron’s poem, we can see that alliterations are used mostly in a very rational way: it may be regarded as a means of increasing the integrity of the verse, and serves to cement together semantically significant words, to put them into relations of affinity (tearful – tremulously) or opposition (clear – cold).

It may seem that alliteration here is quite sufficient to make the poem “euphonic”. But the analysis of a larger corpus of English poetic texts shows that alliteration, no matter how widely it is used by an author, never “walks by itself” and is combined with other kinds of sound repetition, some of which support the alliteration, and some of which then work separately from it, and then interact with it.

### 2.3 Phonosyllabic metaphonic repetition

Even in the Old and Middle English alliterative poems we can notice a certain variety of sound repetition:

\[ \text{Hwæt! Wé Gárdena in géardagum... (Beowulf)} \]

Or:

\[ \text{...folce tó frófre- fyrenðearfe ongeat...} \]
\[ \text{...héah Healfdene héol ðenden lifde... (Beowulf)} \]

In the works of poets who wrote in the Modern English language (starting from Thomas Wyatt) other types of repetitions dominate, in particular, metaphonic (inversive) repetitions of consonants located within a syllable. In this case, probably, it would not be erroneous to suppose that in the analytical Modern English which had replaced the inflectional Old English, sound repetitions began to perform not only a euphonic, but also a more important functional task of enhancing the cohesion of the text and establishing excess poetic morphology of interacting words.

In Byron’s poem which, as it was mentioned above, consists of 60 words including auxiliary words, apart from alliterations and consonances of a single sound, we have revealed 22 chains of syllable-like repetitions:

3. S-L-P: sleepless – dispel
5. F-L: tearful – tremulously far
It can be argued that in some cases not sounds but letters are repeated in this list. In
general, the discrepancy between pronunciation and spelling in the English language
causes a lot of difficulties in identifying sound repetitions in the text. Often it is rec-
ommended to use phonemic or phonetic transcription in the analysis of the sound
(and not only sound) level of verse (cf. Hervas–Robinson–Gervas 2007: 538). But the
thing is, poets do not write in phonetic transcription, nor do readers read in it. The
tradition of the silent reading of poetry is long enough to provide readers with the
habit of seeing a poetic text as well as hearing it (cf. Baudouin de Courtenay 1963: 212;
Pertzov–Pilshchikov 2011; Pilshchikov 2016). That speaks for the fact that the func-
tional share of graphics is high, but, on the other hand, poetry is a sound medium as
well; if it is based on written forms, it becomes visual word art, which is a different
genre. And the observations of English poetry show that the graphic image of the
word is no less significant for many poets than the phonetic one. A poetic text is not
just a speech, but a written speech phenomenon. Certain types of phonetic structures
may tend to graphic, others to acoustic similarity, and all this demands achieving a
balance between the graphic and phonetic image of the text that can serve an objec-
tive evaluation and quantification of various grapho-phonic phenomena.

In this regard, we have conducted an internet survey among English-speaking stu-
dents in order to identify which sounds are perceived by native speakers as phonetically
similar and how important the graphics are in perceiving poetic texts (special thanks for the support in conducting the quiz to Mark Davydov and our colleagues at American universities). But there was no unanimity among the respondents, in particular, to the question: “What is more important for you when you perceive a poetic text: sound or letter?” 20% answered “letter”.

Therefore, we found it possible to take into account combinations that include mute consonants if they are included in repetition chains containing more than two members (as is the case with r in “remembered” and “powerless” in the text under consideration, especially since in the rhotic variants of the English language the sound / r / is not mute. In addition, we share the common opinion about the phonetic similarity of voiced and unvoiced consonants: English-speaking phoneticians are increasingly inclined to abandon the very terms “voiced / unvoiced”, considering the terms “lenis / fortis” (weak / strong) more relevant for the opposition they describe. Digraphs denoting one sound (sh, ch, wh, mb, etc., as well as the mute combination of gh) are considered one "sound-letter" in terms of A.N. Zhuravlev (1974: 36) or “graphophoneme” in terms of V.P. Grigor’ev (1979: 291).

In Byron’s poem, each word is involved in one or more sound chains, with the exception of the word joy, which in fact emphasizes its semantic isolation in the text. Such a density of sound tissue, of course, is not typical for English-language poetry in general and for Byron’s work in particular; the poet here, apparently, deliberately demonstrates the phonetic possibilities of the English verse—just as E. Poe does in his “The Raven” or A. Swinburne in the poem “The Forsaken Garden”—but he does it in a “condensed” form on a small text space. Such concentration makes the poem convenient for characterizing some of the techniques of the phonetic (or grapho-phonetic) organization of the poetic text in English.

Thus, it is easy to see that syllable-like repetition rarely affects root morphemes. Since English is not an inflectional language, the word in it, as a rule, has no morphological signs and coincides with the root morpheme, most often one-syllable and consisting of one closed syllable or two open syllables in writing, giving one syllable with a long vowel or diphthong. It is noteworthy that English “written” syllables do not necessarily correspond to the actually spoken syllables, a facts that allows us to presume that the formation of phonosyllabemes in poetic texts does not necessarily respond to the English phonotactic rules, which are rather “liberal”, i.e. allow onsets of up to three consonants and codas of even more that three consonants (such as strengths or prompts).

Therefore, the grouping of repeated consonants “around the vowel”, that of CVC type, is often associated with a change in the semantics of the word (cf., for example: lip – lap – loop; big – bag – bug, etc.) or its grammar (as in the cases of internal inflection: come – came, tooth – teeth, etc.), and therefore looks like a pun, a play on words. Such wordplay sometimes occurs in English humorous poems, such as, for example, O. Nash’s well-known limerick:

Said the fly, “let us flee!”
“Let us fly!” said the flea.
So they flew through a flaw in the flue.
Quantitative Approaches to Versification

This device may also be used to attach ironic connotation to a serious utterance, like in W.H. Auden's “O Where Are You Going?”:

“O where are you going?” said reader to rider,
That valley is fatal where furnaces burn,
Yonder’s the midden whose odours will madden,
That gap is the grave where the tall return”.

It is, apparently, not by chance that the first and second lines of Byron's poem contain two long (four-syllable) words of foreign origin where the root morphemes are not very obvious: melancholy and tremulously. Besides the fact that they are isomorphic to each other and occupy the same position in the line, all consonant sounds of these words are included in certain syllable repetitions throughout the text. They have a common syllabic repeat “mel-mul”, and the similar syllables have different positions in the words and in the lines and different morphological status, except for the syllable “-mel-” which goes first, is stressed, and the “-mul” syllable is unstressed. Unstressed syllables which occupy “weak” positions in the verse, also count when it goes about repetitions, this shows that they are not just background for beats, but are of importance of their own, for without them a verse changes its rhythmic structure.

The chain “sun – darkness – canst (not) – warms not – distant” is indicative as to the possible structure of phonosyllabemes: the repetitive sounds s and n are located in the root, in suffix, at the junction of the root and the suffix, at the word juncture, and distantly (with the inclusion of an epenthetic consonant).

Syllabic repetitions can take place both in different (not necessarily neighboring) words and within the same lexeme. Thus, the word “sleepless”, which gives the longest repetition chain, is according to its consonant structure, “s-l-p-l-s” a phonetic palindrome centered on the sound “p”. This sound, if we follow both the formal syllabification and the division into morphemes, belongs to the first syllable, i.e. root, but due to the mirror position of the surrounding consonant sounds, can serve as part of the consonant complexes for both syllables, i.e. the sequence “s-l-p-l-s” can also be read as a phonetic chiasm—“s-l-p- + -p-l-s” (cf. Keyser 2011).

We see a similar, but simpler vibrating (Vekshin 2010: 135) phonosyllabeme (with the participation of two, not three consonants) construction in the word “tremulously”, where two sounds surround the sound s in the same mirror way, including the latter in two sound sequences: -lous and -sly. Such a grouping of identical or phonetically similar consonants or groups of consonants around the third, which is, as it were, a part of two syllables, is characteristic not only of this poem and not only of Byron:

Some heart once pregnant with celestial fire... (Th. Gray)
Just for a handful of silver he left us... (R. Browning)
He parted, with great strides among his dogs. (A. Tennyson)
Glad did I live and gladly die... (R.L. Stevenson)

Again, we see that repetition can take place within one polysyllabic word or else capture the gap between two words, which is another way to avoid root repeats, especially since words longer than two syllables do not so often occur in English.
Repetition of consonants belonging to two adjacent words is quite frequent in the poem in question. Among them the phrase “so gleams”. Of course, according to phonotactic rules the combination of “sogl” can hardly be recognized as a syllable, although formally there are no obstacles not to consider it as such (CVCC), especially in the sound environment in which it is followed by a vowel and the so-called phonesteme “gl” is not syllabic. In the phrase “so gleams” the mentioned “s-l-s” sequence is contained, but not in its pure form: here it includes two epenthetic consonants, in both cases standing between the ones we are interested in. The center of the consonant sequence is the sound “l”, which at the same time enters both the “legitimate” syllable “-leams” and the hypothetical “-sogl”. Here the phonetic chiasm is complicated by two epentheses. The adverb “so” is glued to the verb “gleams” by sound repetition at the juncture, reinforcing the weak syntactical connection between the two words.

The sounds of the word “gleams” related to the semantic field of “light” which is key for the text, are involved in several repetitions: “-leam-”,”-mel-” - “-mul-” (see above); “beam glows”. If the first three cases are a simple metaphonic repetition (in which only one part of the “gl” phonesteme participates), in the fourth one another “queer” pseudo-syllabic “eamgl” (VCCC) combination is formed. Nevertheless, it is not difficult to notice that it represents a complete anagram of the word “gleam”; in fact, the anagram is still more complex: “eamglows – sogleam”. Anagram is a special, semantically loaded kind of sound repetition; in this case, the phonesteme “gl” itself may be treated as semantically loaded, for it is often part of roots associated with the meanings of “light” and “look”. Besides, the words “glow” and “gleam” are partial synonyms. Thus, the phrase “so gleams” introduces the parallelism of the images of “moonlight” in the first part of the poem and the “past” not only lexically, but also with the help of phonetic means.

It should be noted that not only words of increased significance are involved in sound repetitions, but also those that do not have independent lexical meanings (auxiliary parts of speech). The frequency of use of auxiliary words in English is very high due to the analytical structure of the language, and in the poem under consideration prepositions, articles, etc. make up a third of all the vocabulary used by the author. Not surprisingly, they are included in repetition chains either as self-sufficient syllables (“that”, “but”), or in combination with consonants at the beginning and at the end of adjacent words (“of other”, “to behold”, etc.). It should be noted that many English service words sound similarly, alliterate with one another (the, that; with, which, etc.), therefore they are very “convenient” for inclusion in the series of repeated syllabic groups of consonants.

3 Conclusion

The flow of verse speech every time is performed as a process of establishing prosodic and sound forms that overcome the regularity of syllabification. While the “natural” rhythm of the words is based on the organic division into syllables, configurative metaphonic repetitions “overcome” this kind of rhythm and underline the
non-identity of the syllable as a pronounced unity to the phonosyllabeme as a functionally determined entity. In particular with the mirror arrangement of repeated consonants around a certain consonant center, the same central sound can be perceived as the end of one syllable and at the same time the beginning of the next. Sound repetition overcoming the power of the “echo” demonstrates its ability to influence the strength and the weakness of syllabic unities, to form additional syllabic links and interruptions, to redistribute the degree of cohesion of the segment units in a super-segment, to rebuild the perception of the sound flow. It is obvious that metaphonic associations cause a significant breach of self-identity not only of the syllable, but also of the morpheme, which opens up the prospect of using syllable-like sound groups and complexes (phonosyllables) to form an alternative, poetic morphology of words and of the text, and also to use them as special syntactic or actual syntactic markers. "Pseudo-syllables", or phonosyllabemes, can occur both inside the word and at the word juncture, thus increasing the strength of the syntactic ties between words and the cohesion of the text on the whole. At the same time, taking into account the typical (for the English language) coincidence of a syllable and a word, while the latter in turn coincides with the root morpheme, there is a kind of redistribution of logical connections, in which attention is drawn to constructs that have no lexical or grammatical meaning but are capable of functioning at the metasemiotic level and in their structure are isomorphic to the word/root morpheme.

A phonosyllabeme is an unevenly actualized “sound foot”. Like a syllable, let alone a metric foot, it cannot be considered a unit of language as such, but it is developed in poetry as a unit of language faculty, an operational unit that adapts a syllable (the basic unit of speech flow) to the tasks of text composition and poetic “estrangement” of the word and phrases.

The mechanism of morphologization of phonosyllabemes and phonosyllabic complexes is based on the principle of metathesis, the same way as symbolization in the language is based on the principles of divergence and metaplasm. Convergent repetition is emblematic, allegorical, and forms the iconic principle of designation. Divergence is the basis of the mechanism of symbolization, the way of creating signs that transfigure things, unveil senses of a different, higher order in a sign, as compared to logical and utilitarian-pragmatic meanings. “Allegory and symbol provide the conceptual frame within whose channel of vision the artwork has long been characterized” (Heidegger 1993: 146).

References


