

LATIP 2021

International Conference on Language and Technology in the Interdisciplinary Paradigm

**COMPARATIVE ANALYSIS OF RHYTHM IN ADVERTISING
TEXTS SUPPORTED BY PROSERHYTHMDETECTOR
AUTOMATED TOOL**

Elena Boychuk (a)*, Inna Vorontsova (b), Mariya Johnson (c)

*Corresponding author

(a) Yaroslavl State Pedagogical University named after K.D. Ushinsky, Respublikanskaya street, 108/1, Yaroslavl, Russia, elena-boychouk@rambler.ru

(b) Yaroslavl State Pedagogical University named after K.D. Ushinsky, Yaroslavl, Russia, arinnal@yandex.ru

(c) Yaroslavl State Pedagogical University named after K.D. Ushinsky, Yaroslavl, Russia, petrosyan.maria@yandex.ru

Abstract

The article presents an overview of works discussing tools for advertising text analysis as well as advertising text rhythmic characteristics. Based on the theoretical knowledge gained, we conclude that linguistics lacks a comprehensive understating of algorithms for advertising text rhythm analysis. The aggregate of rhythmic devices has a fragmented structure. The article in hand provides analysis of rhythmic devices that have not so far been covered in other works. The authors present a comparative research of English and Russian advertising texts identifying their language-specific rhythmic characteristics. The research was conducted using the ProseRhythmDetector automated tool which permits the search and statistic analysis of such rhythmic devices as *anaphora*, *epiphora*, *simploce*, *epanalepsis*, *epizeuxis*, *polysyndeton*, *chiasmus*, *aposiopesis*, *repetition of sentences of a similar communicative purpose type*. According to the research, *diacope* proves to be the most frequent rhythmic device both in English and Russian advertising texts, followed (in the descending order of their frequency) by *epiphora*, *anaphora* and *polysyndeton* in English, and *anaphora*, *polysyndeton* and *repetition of interrogative sentences* in Russian. Generally, the number of rhythmic devices in English advertising texts is 22% bigger than in Russian.

2357-1330 © 2021 Published by European Publisher.

Keywords: Advertising, diacope, PRD, ProseRhythmDetector, rhythm

1. Introduction

It is well established that advertising texts have their own structure and language peculiarities, which directly follows from their aim to influence people's minds and motivate them to spend money. There are many works by English-speaking researchers dedicated to the study of rhythmic, stylistic and linguistic proper means employed in advertising texts. The article presents an overview of works discussing advertising text rhythm in general, as well as compares their rhythmic peculiarities in English and Russian. The research is based on the use of PRD (ProseRhythmDetector) automated tool that allows to extract and automatically analyze rhythmic devices in a text. The data are presented in tables, graphs, heatmaps and box plots. The main aim of the research is to compare the frequency and diversity of text rhythmic characteristics in two unrelated languages, which will further allow for pointing out the peculiar features of the advertising language as well as developing some ways to influence the recipient, a customer, who unavoidably finds themselves under the influence of “tricks and stunts” advertisers employ.

2. Problem Statement

Advertising text as a linguistic phenomenon has been explored in multiple works by Russian linguists including (Antonova, 2019; Kara-Murza, 2003; Kostromina, 2017; Makedontseva, 2009; Stepanov & Chibisova, 2015; Ukhova, 2011; Volobuev, 2013) to mention just a few. According to the above research, the most difficult one is the problem of finding tools and algorithms for advertising text structure analysis. Taking into account the disparate views on the research problem as well as the multiple tools and algorithms implemented in advertising text structure analysis, we present an overview of this material in the *Research questions* section of the article. Special attention is given to text rhythm which we consider a powerful linguistic means for boosting sales. The authors focus on rhythmic devices that are deliberately used in copywriting in order to increase sales. As has been mentioned, the collection and processing of data were conducted using the PRD (ProseRhythmDetector) automated tool designed to automatically process large amounts of text data. The accumulated figures help to solve another problem, i.e. identification of rhythmic peculiarities of English and Russian advertising texts, which permits to define the most rhetorically effective devices in unrelated languages.

3. Research Questions

Generally, text rhythm exhibits itself at different levels of the language system: phonetic, lexical, grammar, stylistic, structural and compositional. This basically refers to literary texts where the correlation of the plot structure and the author's style appear most vital. Analyzing advertising text rhythm, Morilova (2017) believes that it mainly reveals itself at the graphical, phonetic, lexical, morphological and syntactic levels.

In the synthesis of advertising text and advertising image, rhythm is more concerned with the text itself. Conceptually, these components are indivisible, but in terms of rhythm, they can complement each other or explain what characterizes their interaction within a lingo-visual complex. When combined in a

text with other expressive or coercive means, the various rhythmic devices form a structure of relations that allows the information to be taken to a new level. Morilova analyzes such rhythmic devices as alliteration, assonance, morphological repetition, lexical repetition, syntactical parallelism.

Boltaeva sees a peculiarity of rhythmic manifestations in the repetition of lexico-semantic and phonetic units. The author considers repetition of sensually perceptible elements a formal sign of rhythm. In the context of suggestive text studies this is the repetition of pragmatically powerful words and sounds of speech. According to Boltaeva (2003), the recipient experiences a double effect of phonetic and lexical rhythms. At the phonetic level, the author distinguishes such means of decomposed alliteration as *prolepsis*, *syllipsis*, *intercalation* and *totalitance* (p. 18).

Lexical rhythm can reveal itself explicitly – through the use of anaphora and full lexical repetition, and implicitly – through repeated synonyms, word-forming derivatives, vocabulary semantically close to the concept at the association level, as well as through contact and distant, simple and complex, accurate and inaccurate reverse repetitions. The repetitions merge into systems: serial, cross and girdle (Boltaeva, 2003, p. 19). The author presents the interchange of rhythmic patterns and interruption of rhythm in certain fragments of speech as a way to impact the recipient. Rhythm alternation “destroys a trans state created by repeated stimuli. The recipient is confused and caused to understand the content of speech more fully” (Boltaeva, 2003, p. 18).

Some copywriting websites offer their own ways of creating rhythmic text. Among them are *alternation of sentences and paragraphs of different length*, *use of talking points, lists and markers*, *sub-headings*, *use of echoes at the end of the text*. All this makes it easier to acquire and absorb the information, as well as makes visual rhythms more prominent. Thus, copywriters are advised to use the following sentence structure: two long sentences (over 10 words), one of middle length (5-10 words), one short sentence (1-4 words). Paragraphs should visually create a similar structure: big, middle-length, and short. All this helps to structure the visual rhythm of the text. The role of short sentences in advertising should not be overemphasized, though: the shorter the phrases, the slower the speed of reading, as the full stop is perceived as an obstacle.

Rhythm promotes the perception of text as vibrant or monotonous, which depends, among other things, on the construction of sentences and their character: vibrant texts reveal few sentences exceeding 11 words (mostly simple sentences), while monotonous texts can have sentences of up to 25 words (mostly complex sentences). The purpose of the copywriter from this angle is to organize the text properly. According to copywriters, alternation of sentences of different length as well as text rhythm is one of the principles of Sugarman's ‘slippery slide’, a manual for writing an advertising text.

Chumicheva (2008) believes that the repetition of pragmatically powerful sounds, words and syntagmatic constructions is a typical feature of rhythmic suggestion at the language level. The author also discusses techniques applying the suggestive elements of prosody, sound symbolism, rhyming, audio-visual styling, pathopsycholinguistic techniques etc. for creating emotional tension and subconscious “adaptation”.

Putyatina (2020) considers phonetic and lexical repetition (*anaphora*, *epiphora*, *refrain*) to be rhythmic devices. *Anaphora* and *repetition* are attributed to rhetorical devices by Ukhova, alongside with *metaphor*, *comparison*, *hyperbole*, *synecdoche*, *personification*, *parceling*. In her study, the author has

identified several types of interaction of rhetorical figures at verbal and visual levels. Thus, anaphora (8.2 %) mostly characterizes the type of interaction, where “the verbal series is based on the use of polysemantic words in their metaphorical meaning, while the images are perceived clearly and unambiguously” (Ukhova, 2011, p. 100). Repetition (11%) mostly appears in the type of interaction, where “the verbal series is based on the direct perception of word meanings, while the images convey a metaphor” (Ukhova, 2011, pp. 100-102).

Stepanov and Chibisova study the interaction of rhythm and synesthesia to implement suggestion mechanisms. The authors define several levels of rhythm manifestation: the phonetic level reveals assonance and alliteration; the lexico-semantic aspect is presented through the use of antonyms, conversive terms and exotic borrowings; the level of grammar is represented by the repetition of particular voice and mood (mostly imperative) verb forms; the stylistic level is manifested in the use of tropes and figures of speech (homonyms, inversion, anaphora, epiphora, syntactical parallelism, aposiopesis). The authors highlight the synesthetic perception of information in advertising text: the paper presents a complete classification of synesthesia types in terms of various parameters of influence on the subconscious (Stepanov & Chibisova, 2015).

Comparing the language of advertising in English and Lithuanian, Jurgita Vaicenonienė calls attention to some important factors that influence the advertising language and linguistic devices expressing persuasion. Thus, discussing the influence of the advertising language, the author focuses on the most important features of a successful advertisement: the target audience, the hidden message and the structure of the advertising text (the slogan and the body). The linguistic devices used in this type of texts are lexico-grammatical and rhetorical. The lexico-grammatical devices include adjectives, adverbs, verbs and nouns and their role in the blurb. The author differentiates rhetorical devices into schemes and tropes. According to Vaicenonienė (2006), a scheme is an artful deviation from the ordinary arrangement of words. Here the author points out the figures of repetition, the figures of omission and the figures of composition. The researcher believes that repetition of the key words makes an advertisement vivid and expressive. Ellipsis as a figure of omission is used in order to stimulate the reader’s interest. Among the figures of composition, the author highlights metaphor, personification, rhetorical question, simile and overstatement. Hers is a comparative study of advertising text translations from English into Lithuanian.

Bala Nagendra Prasad explores the language and style of English advertising texts. The author believes that advertising texts always resort to techniques similar to those of poetic texts (Bala Nagendra Prasad, 2017). An advertisement should include rhyme to make the text sound more esthetically powerful, allusion to express a view with economy, rhythm to make the text easy to remember, which can be attained through the use of prosodic features (intonation, rhythm, lexical stress). The author lays a special emphasis on the importance of alliteration which is popular in slogans and makes them strong beating as well as parallelism used to enhance the memorability of the advertisement, alongside with the assonance and the graphic aspect of the text.

Conducting a study of the language and style of cosmetics advertisements, Zhihong Bai highlights the use of adjectives, verbs and rhetorical devices. The author believes that metaphor, metonymy, personification, parallelism, pun, rhyme and alliteration are employed in such texts in order to convince people as well as to make the text more expressive (Bai, 2018). Sentence structure is important for a good

advertisement, too. According to the author, primitive and imperative sentence structures should be used in this type of texts.

In their analysis of the stylistic features of English advertising texts and slogans Maryna Zembytska and Yulia Mazur (2018) focus on linguistic tools applied to the study of language material of the phonetic, morphological, syntactic and lexical levels. Here is the use of capitalization to attract the reader's attention or to highlight the most important information as well as the use of 'you' as an addressee, the repetition of pronouns and adverbs such as *every, everything, everyone, always*. For example, the authors have examined over 100 online commercial advertisings and defined the most frequent stylistic devices which include alliteration, assonance, consonance, onomatopoeia, antisthecon, all of them belonging to the phonetic level. Anaphora, epistrophe and anthimeria have been identified at the stylistic level. The semasiological level is represented by pun, rhetorical questions, metaphor, simile, hyperbole, antithesis, chiasmus and ellipsis. These devices are used as a strategy for persuasion.

The analysis of works on the rhythm of advertising texts allows for the conclusion that most researchers are involved with the studies of rhythm of audio-visual advertising, repetition of lexical units and their auditory perception. Thus, the study of rhythmic characteristics of text advertisements placed in advertising magazines, newspapers or banners, posted on shopping websites etc. is deemed more relevant having lacked the researchers' attention so far.

4. Purpose of the Study

The aim of the research is to define the function of rhythmic devices in English and Russian advertizing texts based on the use of the PRD (ProseRhythmDetector) automated tool designed to extract and analyze rhythmic devices.

5. Research Methods

The PRD (ProseRhythmDetector) automated tool has been developed by a research group from Yaroslavl State Pedagogical University named after Ushinsky and Yaroslavl Demidov State University with the objective of searching, extracting and performing a statistic analysis of rhythmic characteristics in texts of different type and size in Russian, English, French and Spanish (Lagutina et al., 2020). Based on this automated method, the authors have made a series of text rhythm studies of the 19-21 century literary prose having identified specific features of rhythm in four novels (Boychuk et al., 2020). The article in hand provides the analysis of advertising text rhythmic features for two unrelated languages: English and Russian.

6. Findings

The rhythm of text advertisements is mainly manifested through repetition at the lexical level. In this study we propose to expand the analysis of the lexical repetitions described above by offering such means of expression as diacope, symploce, epanalepsis, anadiplosis, epizeuxis, polysyndeton and repetition of sentences of a similar communicative purpose type.

Analysis of English and Russian advertising texts (50,000 characters with spaces in each language) shows that diacope (repetition of words or phrases broken up by other intervening words) proves to be the most frequent rhythmic device in both languages:

*This version of the classic game makes a great birthday **gift** for kids, or holiday **gift** for kids ages 3 and up.*

*Если **посуды** нет или ее диаметр меньше размеров активации, или **посуда** немагнитна, конфорка отключится через 20 секунд.*

Diacope is followed by epiphora, anaphora and polysyndeton (in the descending order of their frequency) in English:

***Connect** Bluetooth speakers for instant surround sound. **Connect up** two speakers, including LG XBoom Speakers (anaphora);*

*The scented foaming shower gel produces a generous lather gently cleanses **the skin**. Its fresh formula brings beauty and comfort to **the skin** (epiphora);*

*And it's not because of the cheesy IG captions **or** the in-your-face decorations **or** the fancy romantic dates **or** the existential crisis that can creep up on you if you're single on V-Day and not a fan of it (polysyndeton).*

Sequences of question and exclamation sentences give single figures on the given sample (being more frequent in Russian), which is determined by the subject of the advertisement focused on consumer goods for mass market (Table 1).

Table 1. Frequency of rhythmic devices in advertising text

Devices	English language texts	Russian language texts	Total (devices)
anaphora	5	11	16
epiphora	8	2	10
anadiplosis	2	0	2
diacope	135	75	210
polysyndeton	5	7	12
symploce	0	1	1
epizeuxis	2	2	4
epanalepsis	1	0	1
chiasmus	0	0	0
aposiopesis	0	0	0
repetition of interrogative sentences	0	3	3
repetition of exclamation sentences	1	2	3
Total	159	103	262

Obviously, the number of rhythmic devices is bigger in English advertising texts; the greatest gap appears in the use of the most frequent device – diacope. However, Russian advertisements are characterized by a greater use of *anaphora*, *polysyndeton*, *repetition of interrogative and exclamation sentences*:

7. Conclusion

The comparative analysis shows that diacope is the most frequent rhythmic device in both languages: it amounts to 85% of the total number of devices in English and 73% - in Russian. This difference is balanced to some extent by the use of other rhythmic devices such as polysyndeton, anaphora and repetition of sentences of the same communicative purpose type. However, Russian advertising texts have a smaller number of rhythmic devices. The difference between the total number of devices in English and Russian texts constitutes 22% from the total number of devices in both languages.

Aposiopesis and chiasmus have been resorted to neither in English, nor in Russian. To complement this, Russian texts have produced zero cases of epanalepsis and anadiplosis. English has had no examples of symploce and repetition of interrogative sentences. Lack of these devices in the sampled texts can hardly be an indication that they cannot be used in advertising in principle. It is possible that when analyzing larger text corpora, we would encounter these rhythmic means, however few in number. Nonetheless, some justification for the frequent use of diacope and the rare use of other types of repetition (e.g., epanalepsis, anadiplosis, epizeuxis) can be provided: this is a relative freedom of the repeating element in diacope and its fixed position in other devices. Advertising texts cannot be replete with poetic devices, otherwise it might create a somewhat comical effect, if it concerned a chainsaw, for example.

As far as anaphora and epiphora are concerned, their use is to some extent related to the actual division of the sentence, where the rheme is emphasized by the starting or the final position of the advertising text keyword.

Previous linguistic researches prove that rhythmic devices including those based on repetition are extensively used in advertising texts, however none of the linguists has ever pinpointed that diacope is the most frequent device. In addition to this, the present study indicates the relative frequency of anaphora and epiphora. Finally, the system of advertising text rhythmic devices has been complemented by polysyndeton, epizeuxis and repetition of sentences of the same communicative purpose type.

Acknowledgments

The reported study was funded by RFBR according to research project No. 19-07-00243.

References

- Antonova, L. G. (2019). Topical issues of genre and style in the concept of "marketing linguistics". *Philological readings. Text. Discourse*. Yaroslavl.
- Bai, Zh. (2018). An Analysis of English Vocabulary Learning Strategies. Shanxi Normal University, Linfen, China.
- Bala Nagendra Prasad, B. (2017). Stylistic and Linguistic Features of English in Advertisements. *National Conference on Marketing and Sustainable Development October 13-14*. <http://www.aims-international.org/myconference/cd/PDF/MSD3-5224-Done.pdf>
- Boltaeva, S. V. (2003). Implicit rhythms of suggestive text. *Program materials of the international scientific conference on May 15-18, 2003*. Ekaterinburg.
- Boychuk, E., Lagutina, K., Vorontsova, I., Mishenkina, E., & Belyaeva, O. (2020). Evaluating The Performance Of A New Text Rhythm Analysis Tool. *English Studies at NBU*, 6(2), 217-232. <http://doi.org/10.33919/esnbu.20.2.3>

- Chumicheva, N. V. (2008). Metrorhythmic technologies of advertising programming. *Bulletin of the Adyghe State University. Series "Philology"*. Adyghe State University, 3, 42-46.
- Kara-Murza, E. S. (2003). Linguistic examination of advertising texts. *Language of the mass media as an object of interdisciplinary research. Textbook. Benefit*. Publishing house of Moscow State University.
- Kostromina, T. A. (2017). Sound organization of texts in English-language social advertising. *Scientific and practical electronic journal Alley of Science, Belgorod*, 11, 127-131.
- Lagutina, K., Poletaev, A., Lagutina, N., Boychuk, E., & Paramonov, I. (2020). Automatic Extraction of Rhythm Figures and Analysis of Their Dynamics in Prose of 19th-21st Centuries. *Conference of Open Innovation Association FRUCT: Russia, Yaroslavl, 22-24 April, 2020*, 247-255. <https://www.elibrary.ru/item.asp?id=42830737>
- Makedontseva, A. M. (2009). Convincing and inspiring functions of advertising announcements (based on the material of English-language texts). *Bulletin of Tver State University. Series "Philology"*, 7(1), 196-199.
- Morilova, E. S. (2017). Methods for creating rhythm in modern advertising messages. *Philological sciences. Questions of theory and practice. Diploma*, 10(76), 120-124.
- Putyatina, A. (2020). Rhythm in the advertising text - the secrets of shamans and hypnotists. *Advertising techniques*. <https://kaplunoff.com/blog/reklamnye-tekhniki/228-ad-rhythm>
- Stepanov, V. N., & Chibisova, E. A. (2015). Suggestion and mechanisms of its implementation in the advertising text: rhythm and synesthesia. *Bulletin of TVGU. Series Philology*, 1, 206-215.
- Ukhova, L. V. (2011). The use of rhetorical figures in printed advertising texts: on the issue of the effectiveness of communication. *Bulletin of Leningrad State University. A.S. Pushkin*. Moscow.
- Vaicenonienė, J. (2006). The Language of Advertising: Analysis of Original and Translated Texts, DARBAI ir DIENOS. 215-237. https://www.vdu.lt/cris/bitstream/20.500.12259/32302/1/ISSN2335-8769_2006_N_45.PG_215-237.pdf
- Volobuev, I. V. (2013). Language means of expressiveness of advertising text in English. *Bulletin of Adyghe State University. Series 2: Philology and art history*, 3(126), 37-41.
- Zembytska, M., & Mazur, Y. (2018). *Stylistic features of English advertising slogans*. Ukraine, Khmelnytskyi. <https://doi.org/10.32447/2663-340X-2018-4-39-43>