

WUT2018
**IX International Conference “Word, Utterance, Text:
Cognitive, Pragmatic and Cultural Aspects”**

**METHODS OF DETERMINING THE INFLUENCE OF
DISINFORMATION IN A MEDIA TEXT**

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Abstract

It is important to identify disinformation and figure out the degree of its impact to effectively confront it. The aim of the article is to determine the impact of a misinforming media text applying a combination of methods. I calculate the number of occurrences of words, do the morphological analysis of words to build up a corpus of misinforming media texts. The pragmatic, frequency, and positional analyses reveal suggestion in media texts. The data revealed statistically corresponds to the positional distribution of repeated words and pragmatically significant lexemes. Positioned in a rhythmically structured media text, disinformation influences readers suggestively: it invokes negative public sentiments and eventually affects the public opinion. Due to deliberate misinformation in media texts, Russia appears to be an aggressor that hacks strategically important systems in order to undermine and disrupt them. A misinforming media text is used as the tool of information-psychological warfare. There are anonymous sources, generalizations, generic terms, and the repetition of pragmatically relevant lexemes among information warfare suggestive techniques.

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Keywords: Disinformation, media text, suggestion, pragmatically relevant lexeme, frequency distribution, rhythm.



1. Introduction

Media contributes significantly to the strategic information warfare. People consume news published in newspapers, TV, and social media. Information warfare uses a set of techniques such as suggestion and linguistic manipulation. In this regard, a new research area has appeared in linguistics in recent years. It is called the linguistics of information-psychological warfare. This article focuses on the linguistic techniques which recipients have difficulty to identify. The subject of the research is “the specificity of a language used as a means of information-psychological warfare” (Bernatskaya et al., 2017, p. 16). One of the threats that information warfare poses is suggestive techniques in a media text that may influence the public opinion dramatically. Most likely, the suggestive techniques will enhance the impact of disinformation in a media text.

2. Problem Statement

I assume that a misinforming media text has characteristics of a suggestive text, thus it is easily perceived, and it influences the reader’s perception and opinion. Therefore, it is relevant to study disinformation as a means of information-psychological warfare and determine the degree of its impact. To achieve this goal, the research applies an integrated approach to the analysis of disinformation. It also includes statistical indicators for the formation of more objective conclusions.

The article focuses on the analysis of media texts that are posted on the Internet. These media texts are periodically published on the website of one of the leading daily American newspapers *The Washington Post* (The Washington Post, n.d.). High-quality media is considered a reliable source of information, thus the research of 47 media texts of *The Washington Post* is relevant.

The media sometimes publishes unverified information or disinformation. To determine disinformation and suggestive techniques in media texts, I first studied the reviews made by experts and journalists in different countries who identify misleading texts, propaganda and fake news. The results of the examinations are open and available on the websites of disinformation cases databases (EU vs Disinfo, n.d.), (Fakecheck, n.d.), (FactCheck.org, n.d.), (Snopes, n.d.). Second, I analysed media text from pragmatic, statistical and structural perspective to measure the impact of misinforming texts on public opinion.

3. Research Questions

To carry out a pragmatic analysis of misinforming texts on cyberattacks, I selected media texts which state that hackers are aligned with Russia or that Russia conducts cyberattacks on election, power grids, and other systems.

The first step is to identify disinformation. What are the markers of disinformation? One of them is the manipulation of facts. For instance, the headline of one of the media texts states, *Russia has developed a cyberweapon that can disrupt the operation of the electric power system, as argued in a new study* (Nakashima, 2017, June 12). However, Russia has not been mentioned in the cited study which analysed a malware that has the potential to disrupt power system.

Second, if a media text is posted online, it can be edited any time without readers noticing it. Writers have an opportunity to include links to texts relevant to subject matter. How does a misinforming media text affect public opinion? The links create hypertext and filter bubbles that help readers to form an opinion about matters discussed in a media text. For example, the article *Russian government hackers penetrated DNC, stole opposition research on*

Trump (Nakashima, 2016, June 14) includes four links to texts of a similar topic and two links to texts of a different issue. I conclude that hypertext may create a negative image of Russia because all texts contain information discrediting Russia.

4. Purpose of the Study

The purpose of this article is to determine the impact of misinforming media texts conducting pragmatic, statistical, and positional analyses. These methods help to identify similarities between media texts and suggestive texts and to identify whether the same techniques are used.

5. Research Methods

To effectively confront disinformation, it is necessary to identify it and figure out to what extent it impacts readers. I carry out analyses to determine the impact of disinformation based on statistical data and structural peculiarities of a media text.

For this research, I used the method of calculating the frequency of linguistic units in media texts to determine the number of occurrences of linguistic phenomena “in the observed segment of reality” (Golovin, 1971, p. 21). The procedure implies the continuous sampling of several homogeneous texts or several homogeneous samples. Homogeneity can be determined intuitively. One of the conditions is texts should contain the same number of linguistic units. For the samples to be representative, it is necessary to have a word (as a chain of phonemes and morphemes) as the smallest unit to conduct the research because a word is recognized by researchers as the basic elementary unit, the minimal textual component that is isomorphic to a text.

The frequency analysis shows that the data revealed corresponds to the results of the analysis of positional distribution of repeated words and pragmatically significant lexemes (Moskal'chuk, 2003; Moiseeva, 2007). Within the framework of this research of information warfare, pragmatically significant (or relevant) lexemes are of complete or incomplete repetition that reduces the informativeness of a text as repeated words do not transmit new information. These lexemes are often included in a misinforming context, they have rather negative than neutral connotation, these words express more general concepts, and belong to thematic groups related to the target of information warfare.

The method of positional analysis determines the way pragmatically significant lexemes and repeated words are distributed in a text to form its structure. The rhythmic structure influences the perception and creates the effect of suggestion.

6. Findings

The analysis has shown that only 10% of the analysed media texts can be considered misinforming. Misinforming texts have few characteristics inherent in disinformation. The misinforming context is created by pragmatically meaningful repetitive units that alternate with information-intensive parts of a text. I have found out that misinforming media texts contain:

- references to anonymous authoritative sources (usually the sources are not stated), for example, *according to new research, in a secret assessment, U.S. government officials*;
- generalization which is marked by such words as *some, nation*;

- generic concepts instead of specific names: *individuals with connections to the Russian government, cyberweapon, malware*;
- means of expression and emotionally marked words which create the dramatic effect: *a cyberweapon that can disrupt power grids, to undermine confidence in the U.S. electoral system*.

The Internet environment makes a media text easier in form and more accessible to perception, it also increases the speed of information dissemination through reposts (posting links to a media textor submitting content that has already been posted on social networks) and comments (on average there are 800 comments to a media text). If these media texts contain disinformation, then they become a weapon of information-psychological warfare.

After I compared the media texts and the results of verbal impact with findings of suggestive texts studies by Leontiev(1972), Boltaeva(2003), Goncharov(2006), Medvedeva(2008), Shelestyuk(2014), I conclude that 75 % of media texts use suggestive techniques. The most frequent is a latent verbal speech influence which is created by rhythm. The repetition of pragmatically relevant words contributes to a better perception of a text. The repetition of pragmatically significant lexemes in a misinforming media texts has negative impact, suggesting false ideas and rooting a contradictory image. One of the media texts states, *Russia intervened in the 2016 election to help Donald Trump win the presidency, rather than just to undermine confidence in the U.S. electoral system*(Entous, Nakashima, Miller, 2016, December 9). This statement is rephrased six times. The total number of comments to this article is 28048. About 30% of comments include pragmatically significant words and negative views of Russia.

After I conducted frequency analysis of media texts about Russia and cyberattacks, I found out that morphological characteristics of words indicate that the type of these texts is description. There are nouns (common and proper) and adjectives in comparative and superlative forms. The analysis of repetitions and pragmatically relevant words shows that the media texts are replete with proper names, mostly anthroponyms: the names of malwares (*CrashOverride, Electrum, Sandworm, Stuxnet*) and the names of authoritative experts: *the director of the US National Intelligence James Clapper, Assistant to the President for Homeland Security and Counterterrorism Lisa Monaco*. I presume that nominal style allows controlling the text perception because ideas and events are presented as complete and/or unchangeable, for example, *Russian government hackers have shown their interest in targeting U.S. energy and other utility systems, researchers said*.

There are also elements of reasoning in the analysed texts, as modal verbs *can, may* denoting the probability, conjunctive adverbs *also, instead* that can indeed function as simple adverbs, and generalizations *as overall* indicate.

7. Conclusion

After comparing statistical data and the structure of media texts with their content, I conclude that misinforming media texts include create the suggestive effect by rhythm which is the repetition of pragmatically significant words that alternate with information-intensive parts. The suggestive techniques are beneficial for the actor(s) of information-psychological warfare as well as the linguistic manipulation which includes the repetition of pragmatically relevant lexemes, generalizations, generic terms, and references to anonymous sources. Being posted online, media texts become elements of a thematically homogeneous hypertext which may create the impression of development or course of events. The filter bubble in which the recipient eventually occurs affects the perception and opinion significantly.

References

- Bernatskaya, A. A., Evseeva, I. V., Kolmogorova, A. V., Kopnina, G. A., Skovorodnikov, A. P., Sharifullin, B. Ya. (2017). *Linguistics of Information-Psychological Warfare*. Krasnoyarsk: Siberian Federal University.
- Boltaeva, S. V. (2003). *Rhythmical Organisation of Suggestive Text* (Dissertation abstract). Retrieved from <https://search.rsl.ru/ru/record/01002653518>
- Entous, A., Nakashima, E., Miller, G. (2016, December 9). Secret CIA assessment says Russia was trying to help Trump win White House. Retrieved January, 18, 2018, from https://www.washingtonpost.com/world/national-security/obama-orders-review-of-russian-hacking-during-presidential-campaign/2016/12/09/31d6b300-be2a-11e6-94ac-3d324840106c_story.html?utm_term=.49902a286738
- EU vs Disinfo. (n.d.). [Data file]. Retrieved January, 18, 2018, from <https://euvdisinfo.eu/>
- FactCheck.org. (n.d.). [Data file]. Retrieved January, 18, 2018, from <https://www.factcheck.org/>
- Fakecheck. (n.d.). [Data file]. Retrieved January, 18, 2018, from <https://fakecheck.rt.com/>
- Golovin, B. N. (1971). *Language and Statistics*. Moscow: Prosveshhenie.
- Goncharov, G. A. (2006) *Suggestion: Theory and Practice*. Moscow: KSP.
- Leont'ev, A. A. (1972). *Linguistic Manipulation*. Moscow: Nauka.
- Medvedeva, E. V. (2008). *Advertising Communication* (3rd ed.). Moscow: Publishing house LKI.
- Moiseeva, I. Yu. (2007). *Synergetic Model of Text Formation* (Doctoral dissertation). Chelyabinsk State University, Chelyabinsk, Russia. Retrieved January, 18, 2018, from <https://search.rsl.ru/ru/record/01004399390>
- Moskal'chuk, G. G. (2003). *Structural Organization and Self-organization of a Text*. Moscow: Editorial URSS.
- Nakashima, E. (2016, June 14). Russian government hackers penetrated DNC, stole opposition research on Trump. Retrieved January, 18, 2018, from https://www.washingtonpost.com/world/national-security/russian-government-hackers-penetrated-dnc-stole-opposition-research-on-trump/2016/06/14/cf006cb4-316e-11e6-8ff7-7b6c1998b7a0_story.html?utm_term=.ff45f7e2f275
- Nakashima, E. (2017, June 12). Russia has developed a cyberweapon that can disrupt power grids, according to new research. Retrieved January, 18, 2018, from https://www.washingtonpost.com/world/national-security/russia-has-developed-a-cyber-weapon-that-can-disrupt-power-grids-according-to-new-research/2017/06/11/b91b773e-4eed-11e7-91eb-9611861a988f_story.html?utm_term=.54c463690254
- Shelestyuk, E. V. (2014). *Linguistic manipulation: Ontology and Methodology of the research*. Moscow: Flinta.
- Snopes. (n.d.). [Data files]. Retrieved January, 18, 2018, from <https://www.snopes.com>.
- The Washington Post. (n.d.). [Data file]. Retrieved January, 18, 2018, from <https://www.washingtonpost.com/>