



## ***D 5.2.***

### ***Linguistic structures and mechanism of disinformation materials***

#### **Report**

**Linguistic structures and mechanisms of disinformation in the Polish and Slovak language. Comparative report.**

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## Introduction

The purpose of the study was:

1. To identify the dominant linguistic structures and mechanisms in narrowly understood disinformation messages (fake news): elements of content and narrative, as well as elements of applied persuasion / influence on the recipient.
2. To compare the occurrence of mentioned above elements in Polish and Slovak languages.

For this purpose, the texts that were categorized as "false", and therefore considered as fake news, by AFP in Poland and Slovakia between January 2020 and December 2022 were analyzed. In the first step, the portal <https://sprawdzam.afp.com/list> was used, and then the links (provided on this portal in fact-checking texts) to the fake news archiving programs used by AFP fact-checkers<sup>1</sup>.

The analysis included 435 fake news messages in Polish and 182 in Slovak. The difference in the number of texts analyzed is due to the fact that far fewer fake news appeared in Slovak than in Polish during the period under study.

Fake news were described in the following areas:

1. topics
2. narratives
3. linguistic structures

## Topics

The first stage of the analysis focused on the topics of fake news during the period under analysis. For the purposes of the study, 5 main categories were adopted (+Other). The scheme of categories is as follows:

1. Health (H): for example Covid-19; history (stories from the past); sex life
2. Climate (C): for example global warming; RES
3. Social topics (S): for example Ukrainians (as a national group), church/religion; social control (in context other than health); Polishness; protests (in context other than health); LGBT+; economic issues; global conspiracy (in context other than health);

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<sup>1</sup> For help in data collection in Poland, we thank Maria Jurasz and Adam Majchrzak.

ethnic minorities; nature (in context other than threats); public figures (non-politicians, members of governments; in context other than health); sports

4. Security (S): for example Russian aggression in Ukraine; uniformed services in Poland; Western attitudes toward Russia
5. Politics (P): for example politicians; political connections; elections; Zelenski; legislation
6. Other (O)



Chart 1 Topics in Poland

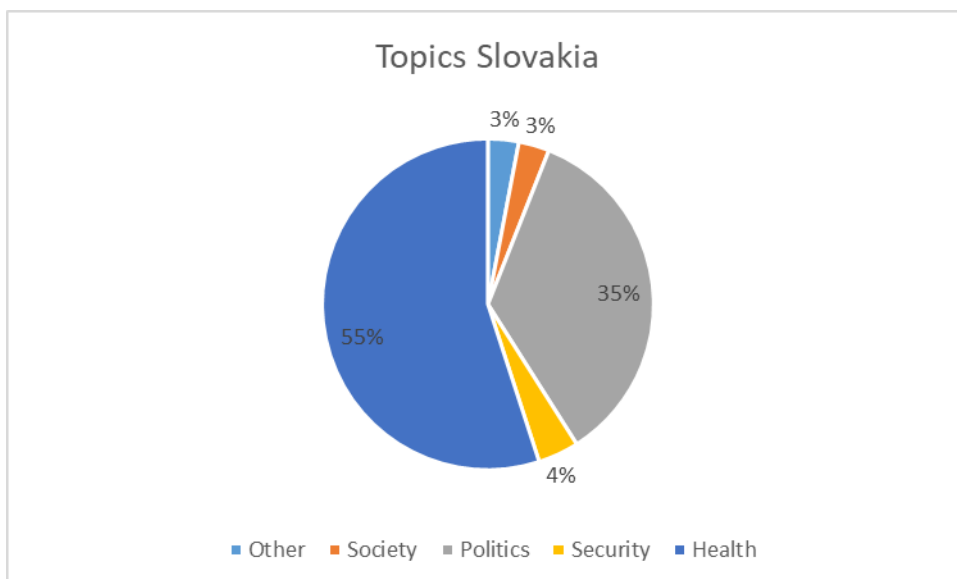


Chart 2 Topics in Slovakia

As can be seen, the thematic structure of disinformation messages does not differ substantially in the countries analyzed. In both cases, the dominant category is "health", which is, of course, related to the Covid-19 pandemic, coinciding with this period. Thus, it is clear that the subject matter of fake news is transnational and constitutes a reaction to the dominant theme of the institutional media.

### Narratives

In the context of narratives, all fake news was analyzed, without dividing it into subject categories. This allowed us to capture some recurring themes and interpretations of reality. The catalog of narratives is as follows:

- 1. Negative emotions (generating conflicts, producing the sense of threat, etc.)
- 2. Questioning (of measures, authorities; disclosure, alternative knowledge, conspiracy theories, etc.)
- 3. Advice (instruction, recommendations, how to resist, examples of resistance, etc.)



Chart 3 Narratives in Poland

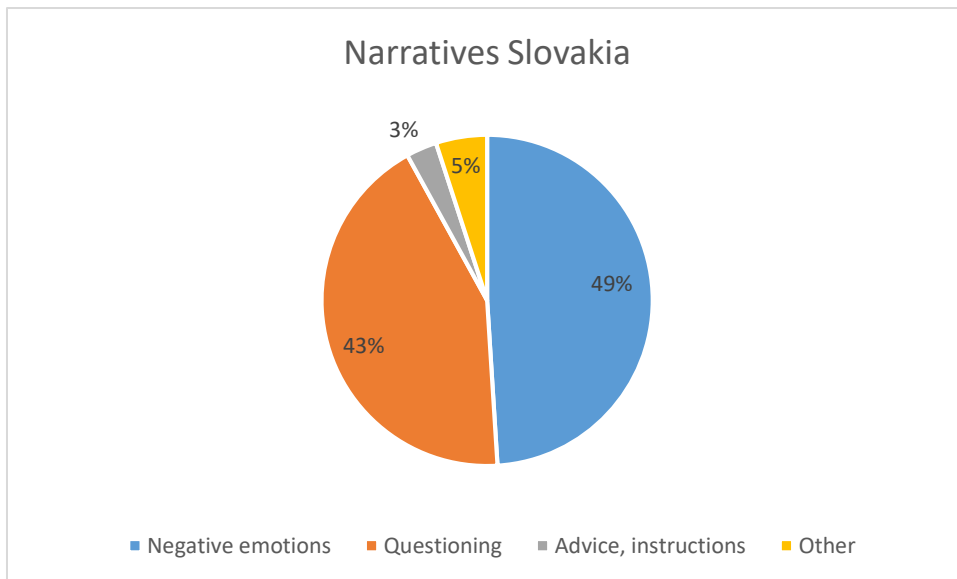


Chart 4 Narratives in Slovakia

As can be seen, both countries are clearly dominated by narratives aimed at generating negative emotions and undermining authorities, especially politicians, institutions at the national or state level, traditional media and scientific knowledge. It is interesting that this type of narrative is slightly more popular in Poland than in Slavonia, which can be interpreted in the context of the general level of criticism (distance from the authorities) in both countries.

## Linguistic structures

When examining linguistic structures, attention was paid to the following features:

1. the format of the message (Text + Photo; Text + Film; Text; Text + Photo + Film; Photo), the analysis did not include messages that consisted only of a film (of which there were very few in the analyzed material, about 2% of the messages)
2. title (if present): the modality of the title (in terms of the pragmatics of language)
3. punctuation marks occurring in the text (exclamation point, question mark, ellipsis)
4. the tense that dominates the text
5. emotionality, in this context, firstly, the negative and positive connotations encoded by the presence (or absence) of a certain type of lexemes were studied. As for the negative connotations, the following were taken into account: diminutives, euphemisms, and invectives; as for the negative connotations: thickenings, vulgarisms, pejoratives. The possible presence of capital letters was also considered important in

terms of emotionality. In addition, the overall sentiment of the statements was estimated.

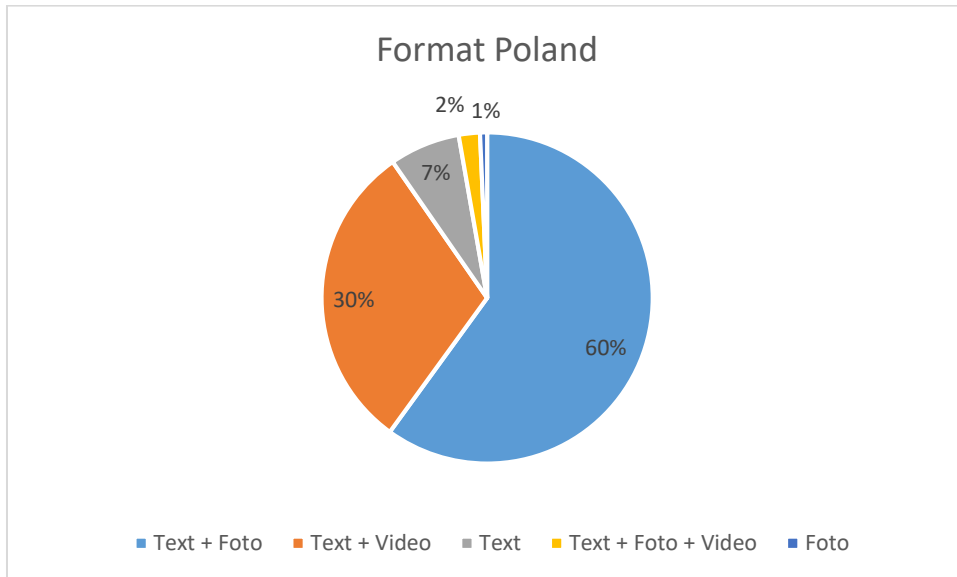


Chart 5 Format in Poland

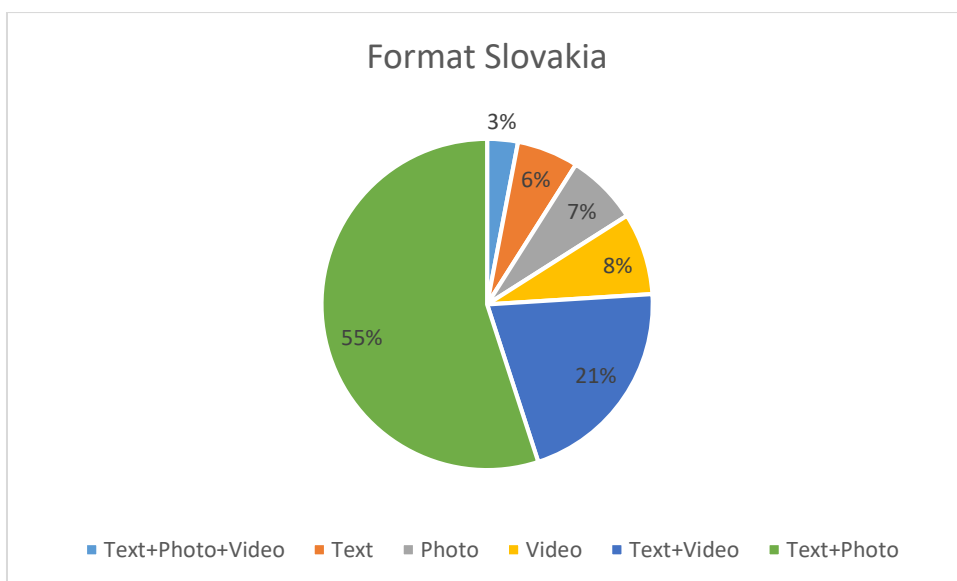


Chart 6 Format in Slovakia

As far as the format is concerned, messages in which text and a photo are present definitely dominate. It is clear that disinformation is strongly dependent on visual (or audiovisual) communication. Detailed results are shown in the chart below:

In this case, no significant differences can be seen between the countries surveyed, confirming the thesis of the transnational nature of fake news, not only in the context of its content, but also the basic format, which is text combined with a photo.

As for the title, understood as an extracted text at the beginning of the post or underneath the video/photo, it occurred in the vast majority of messages, as shown in the chart below:

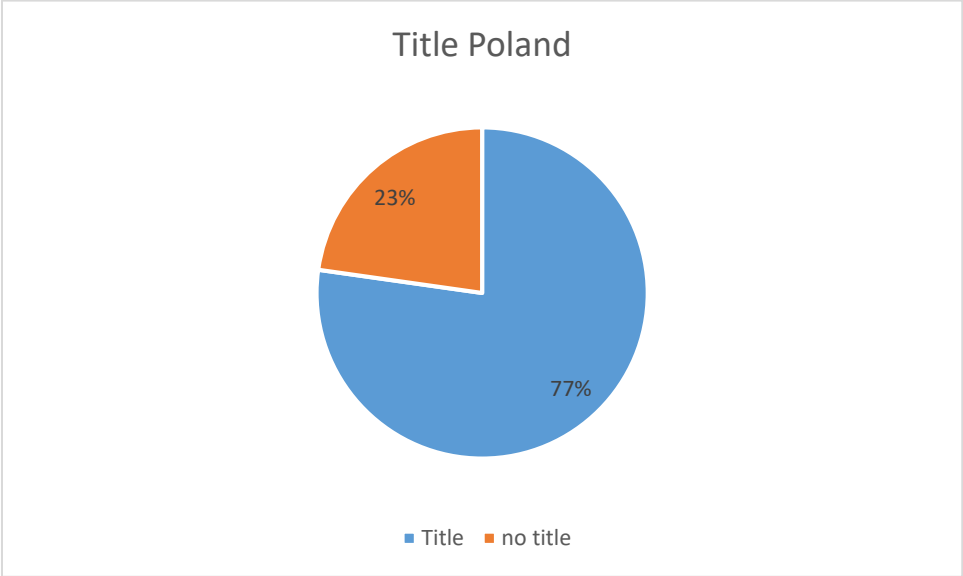


Chart 7 Title in Poland

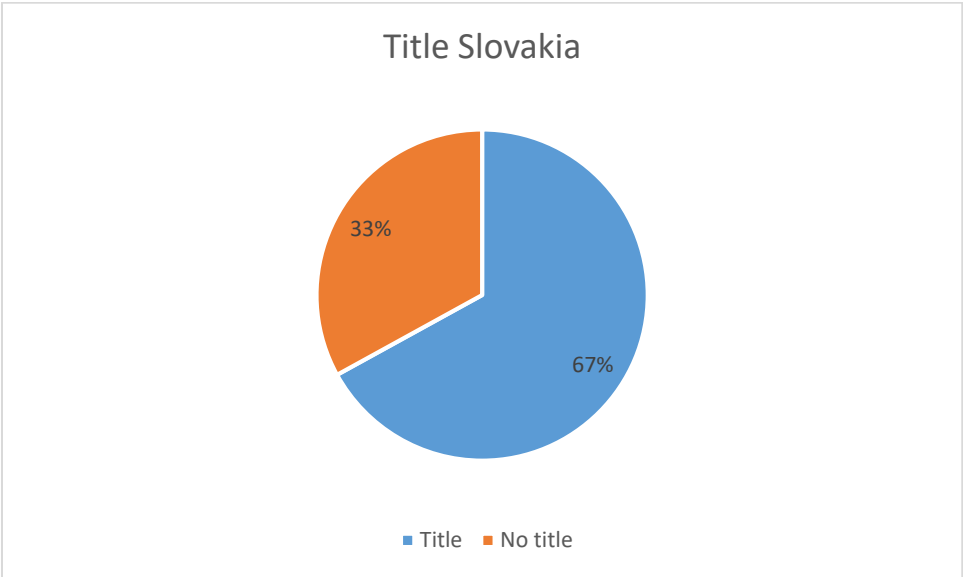
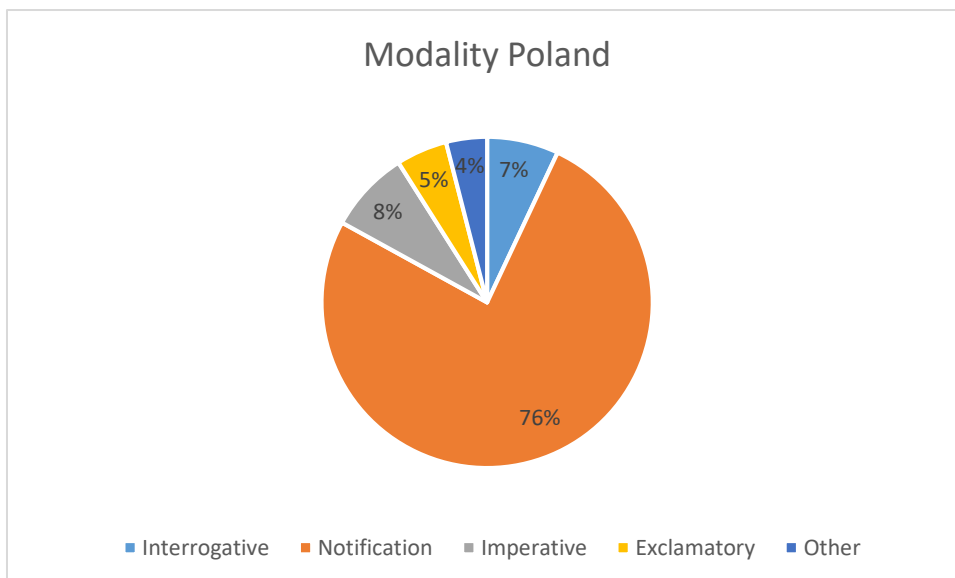


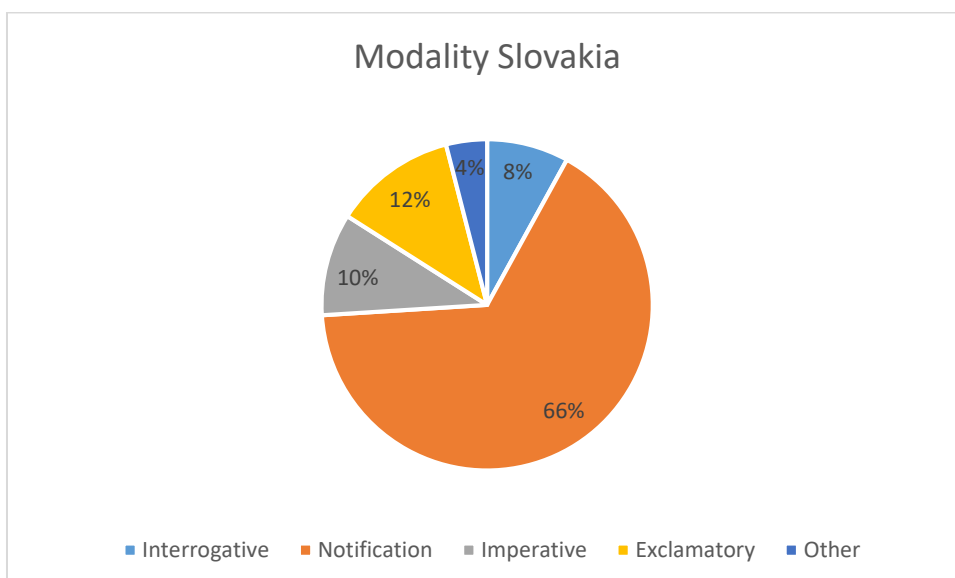
Chart 8 Title in Slovakia

The prevalence of the title is evident in both countries surveyed, but the phenomenon is more pronounced in the case of Poland. The presence of the title in fake news is important and interesting - in this way these messages become similar to daily news. The title also attracts attention and directs the recipient's interpretation

In both countries in the vast majority of cases, the title was indicative, although there were also questions, imperatives and exclamatory titles. Details are shown in the chart below:



*Chart 9 Modality in Poland*



*Chart 10 Modality in Slovakia*

As can be seen, here, too, no significant differences were revealed between the countries studied, although the results obtained in Poland are somewhat more unequivocal. Titles are in the vast majority of cases in the indicative form, which again makes them similar to daily titles. It also gives the impression of higher information content and greater objectivity.

The presence of specific (expressing emotions) punctuation marks in the texts is shown in the charts below.



### Exclamation Mark Poland

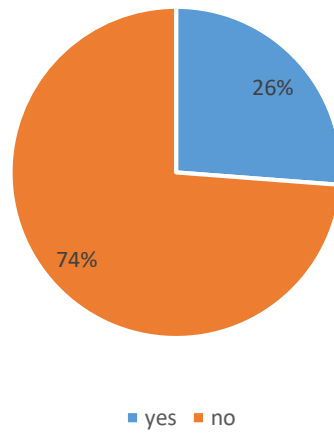


Chart 11 EM in Poland

### Exclamation Mark Slovakia

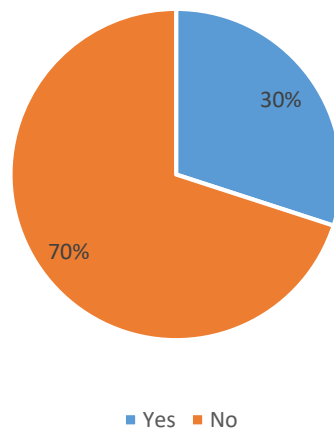


Chart 12 EM in Slovakia

### Question Mark Poland

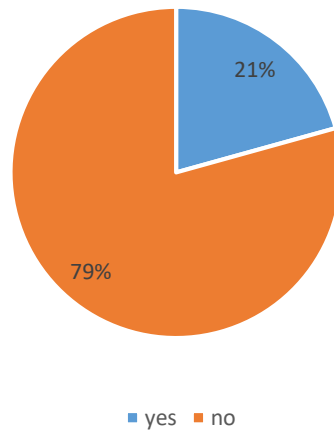


Chart 13 QM in Poland

### Question Mark Slovakia

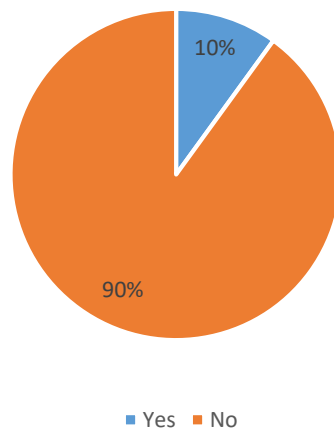
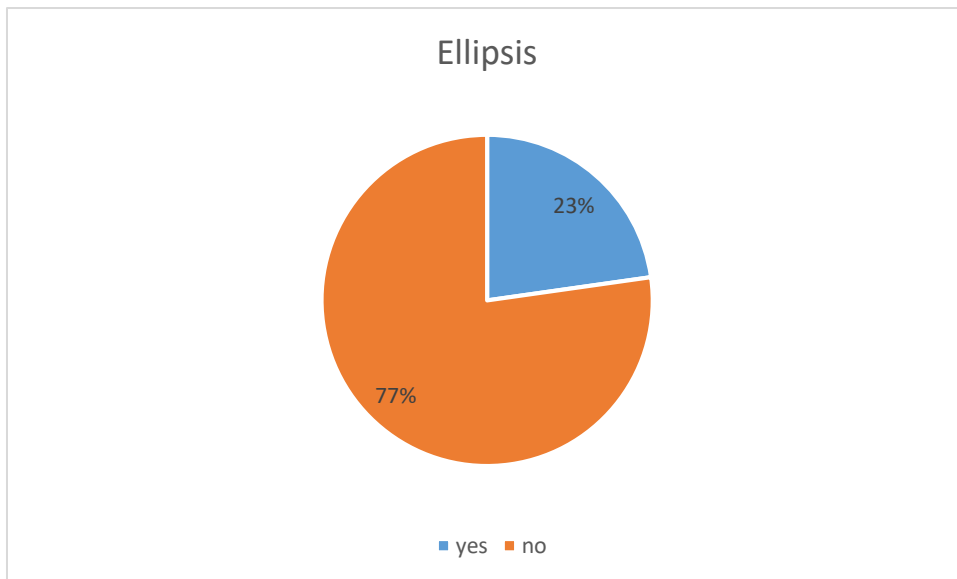
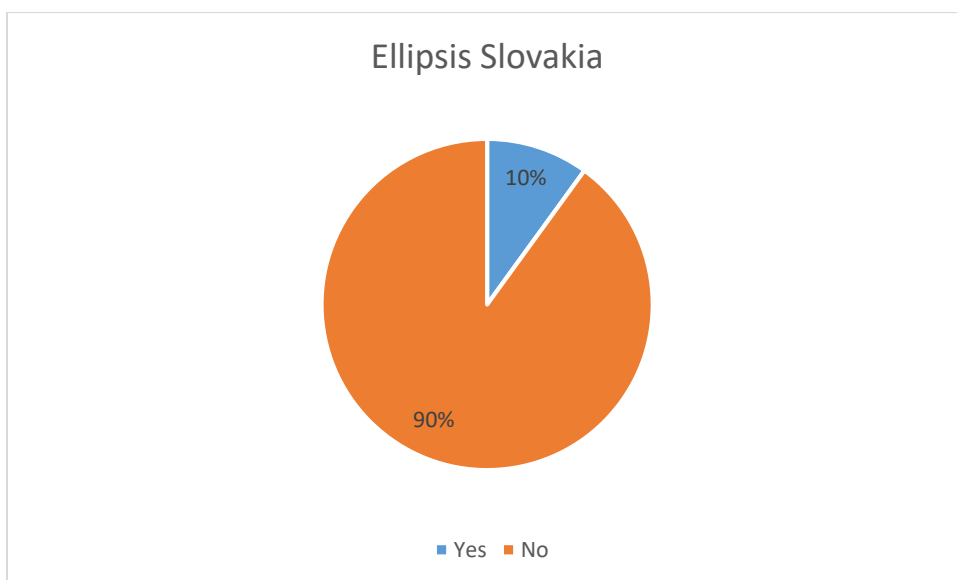


Chart 14 QM in Slovakia



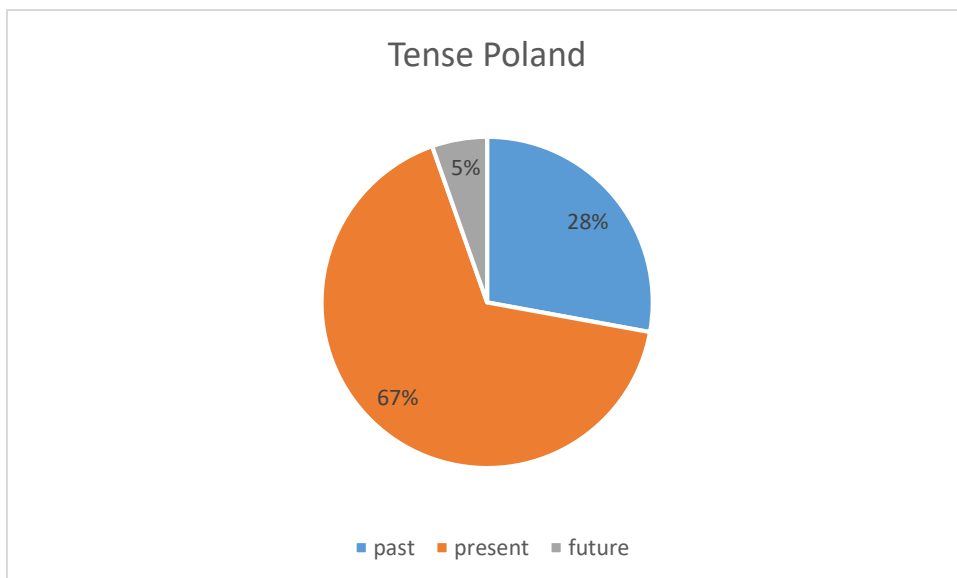
*Chart 15 Ellipsis in Poland*



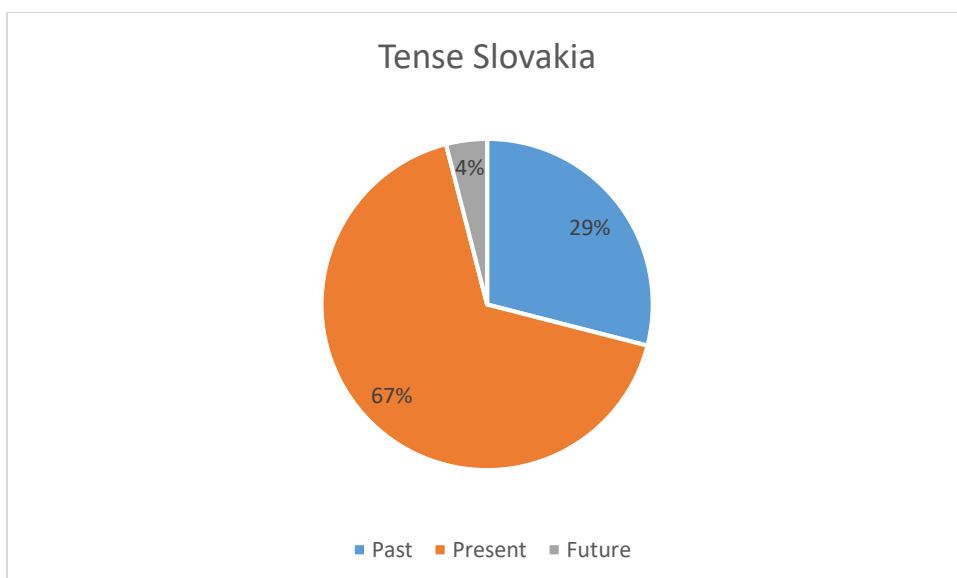
*Chart 16 Ellipsis in Slovakia*

As you can see, the results of the analysis in this area are once again converging in both countries, which supports the thesis of the transnational nature of fromal fake news. Punctuation marks encoding emotions are relatively few, giving the messages the appearance of emotional balance and objectivity

Most disinformation texts in both countries use the present tense, indicating the timeliness of the information conveyed. The past tense also appears relatively often.



*Chart 17 Tenses in Poland*

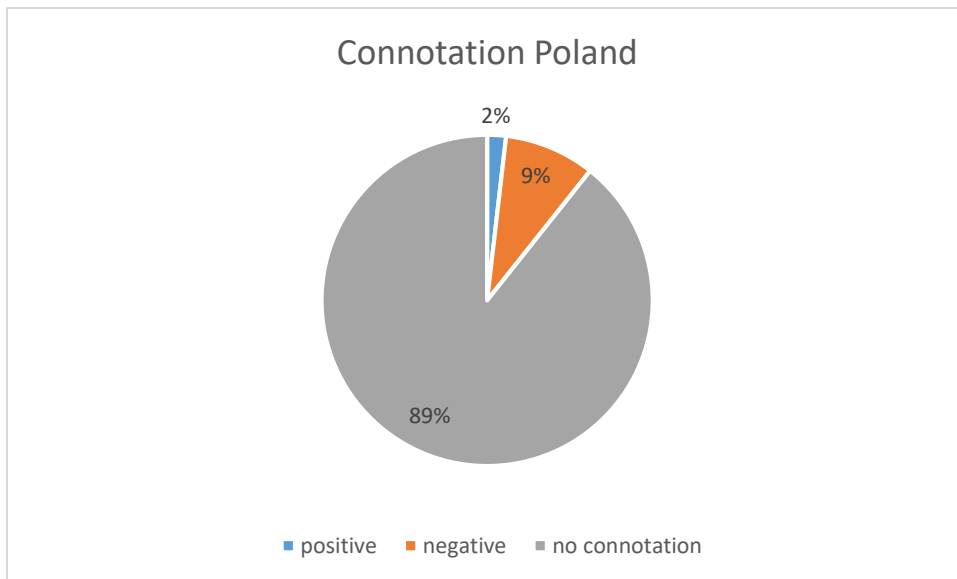


*Chart 18 Tenses in Slovakia*

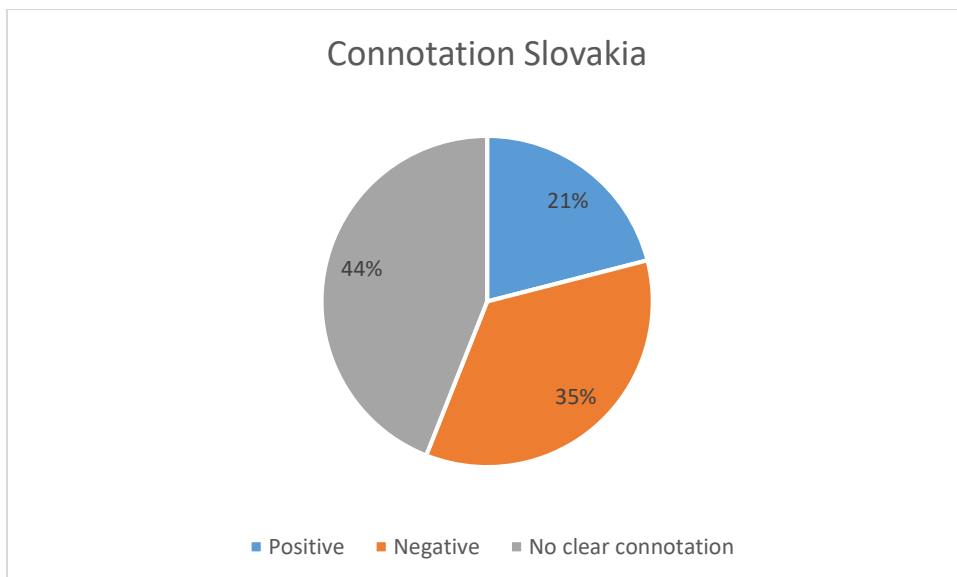
Here, too, the results of the analysis of texts in both languages clearly coincide.

In terms of the emotionality of the texts, it was noted that in Poland the vast majority of them do not encode emotionality with emotionally charged words. This fact is also confirmed by the relatively limited presence of capital letters in the analyzed material. The situation is slightly different in Slovakia, where words encoding emotions (especially negative ones, but also positive) appear more frequently.

However, it is worth noting that the encoding of negative emotions is relatively much more common than the encoding of positive emotions. Detailed data are shown in the charts below:



*Chart 19 Connotation in Poland*



*Chart 20 Connotation in Slovakia*

This is one of the more pronounced differences the study was able to capture. Its function should be considered against the broader background of the presence of emotionally charged words in both languages.

Also, the overall sentiment assessment shows disinformation messages as mixed, although with a predominantly negative sentiment.

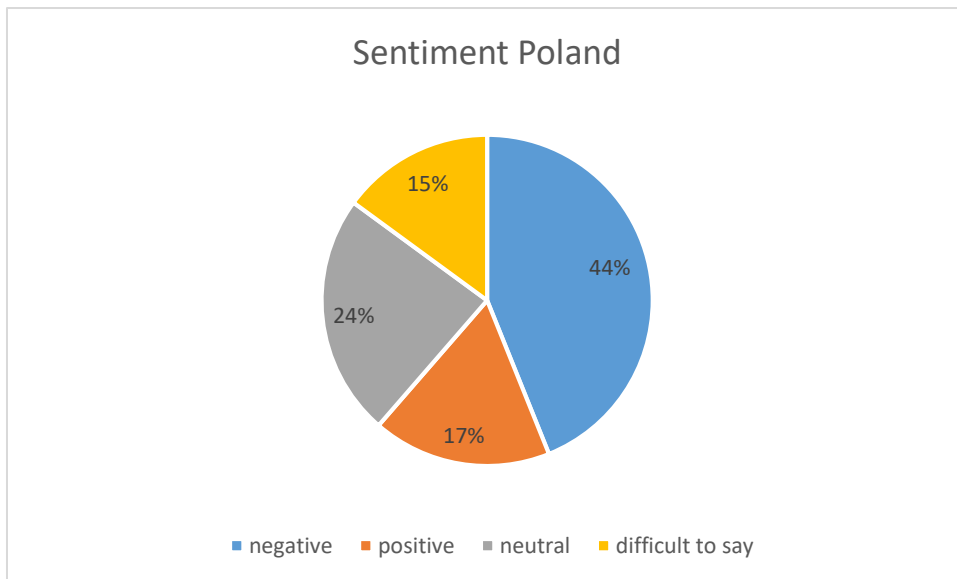


Chart 21 Sentiment in Poland

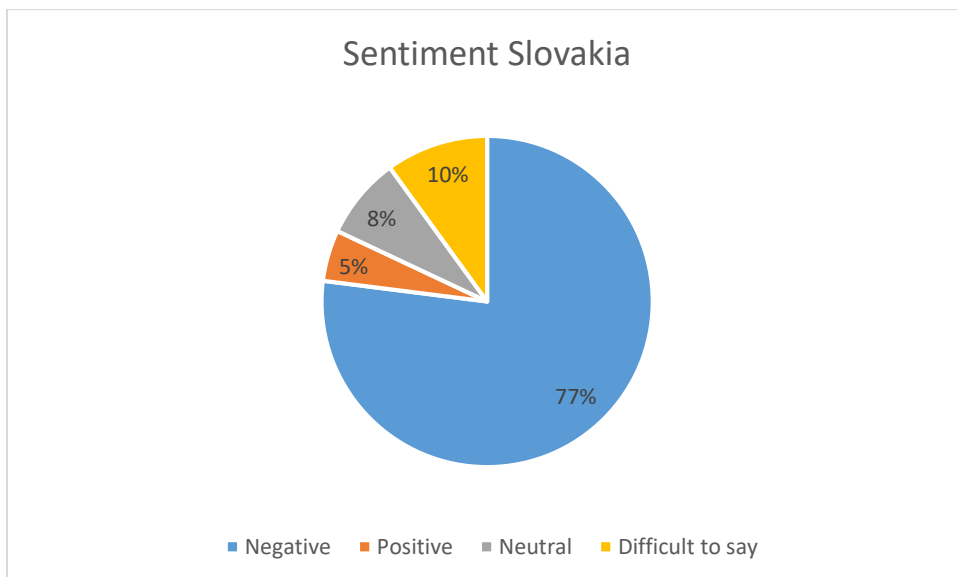


Chart 22 Sentiment in Slovakia

The result obtained correlates with the previous one. It is clear that the emotional (negative) character of disinformation messages is much higher in Slovakia than in Poland. Again, this should be linked to the different expectations of citizens of the two countries regarding the credibility of media messages.

## Main conclusions

1. The topic by far dominant in fake news in 2020-2022 was Covid-19, particularly vaccination and its harm (alleged dangers and difficulties associated with vaccination). Such a defined topic area is conducive to generating narratives built on negative

emotions and shattering the sense of security and trust in science. It is interesting that, in general, the problem of (in)effectiveness of vaccination was not mentioned at all in the analyzed disinformation messages.

2. During the analyzing the research material, it was noted that related disinformation threads appear in different subject areas. This creates an impression of coherence, comprehensiveness and logic of disinformation messages, which offer references to different spheres of the recipient's life.
3. Most of the narratives in fake news are negative in nature, dominated by those related to the revelation of deception and overall conspiracy; the production of a sense of threat is also important.
4. Disinformation needs visual (and/or audiovisual) tools.
5. Fake news mimics the texts of media information in terms of the title (functionally understood). It occurs in most of the messages analyzed, it also duplicates to a large extent the pragmatic and lexical features of the media title.
6. Disinformation messages are dominated by negative emotions, but it is worth noting that a significant part of them is characterized by a kind of emotional neutrality (at least at the level of analyzable lexical factors).
7. In the analyzed texts there is a relatively small number of punctuation marks indicating emotions.
8. The above observation is confirmed by an analysis of the dominant mechanisms of influence used in disinformation messages: namely, on the one hand, the seemingly neutral presentation of objective data (film, photo, documents); on the other hand, the building of the author's position as informed, having life knowledge and the ability to interpret in depth.

A comparative analysis of disinformation messages in Polish and Slovak led to three main conclusions:

1. The messages are similar in content, so the disinformation is transnational in narrative terms.
2. The messages are similar in structure, so disinformation is supranational in a structural context

3. Significant differences relate to emotional saturation, which is higher in Slovakia, and is also communicated in a more direct manner (this applies to the vast majority of negative emotions, but also positive ones).

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