REPRESENTATIONS OF THE PUBLIC ATTITUDES TOWARDS UKRAINIAN-POLISH RELATIONS IN WEB COMMUNITIES

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Abstract

This research demonstrates public opinion on particular aspects of Ukrainian-Polish relations in two aspects: historical and cultural. A commentary system on two Polish and Ukrainian Wikipedia articles is analyzed. The research methodology is based on synthesis, analysis, comparison, which allows to investigate the features, problems and possibilities of the web communities in the context of public opinion formation. It is concluded that web communities are a significant tool for both manipulating the

public in shaping and developing international communications, and for forming the united public opinion on international relations at the state and public levels.

Key words: public opinion formation, source of social memory of the society, public opinion indicators, virtual communication

INTRODUCTION

The current state of Ukraine's European integration is closely linked to the stronger development of international relations in the world political arena. Today, foreign policy of Ukraine is aimed not only at developing diplomatic relations between the states but, first of all, at establishing friendly relations between the societies, especially with the neighboring states. Due to historical processes, Ukraine has a significant layer of common historical and cultural heritage with other countries, among which Poland is a key strategic partner today. That is why it is important to analyze the public opinion on certain aspects of Ukrainian-Polish relations.

According to the current trends in the information society development, the scope of such analysis is increasing, mainly because of the virtual communication through web communities has an increasing role.

Today, diverse web communities are a unique element of the informational space in the political system and international relations. They are not just a form of communication, but an understanding of what is happening in the country and how the progressive part of the population in the region responds to it. If we define social networks as a kind of web forums, the "contingent" of such communities is quite diverse in all the criteria: age, education, professional sphere, etc. Often, social networks are used to shape public policy and manipulative practices of constructing political reality. However, in order to avoid this kind of manipulation in the planned analysis, it is important to choose a web community where political reality is not distorted. In our view, a tool for such analysis may be the publicly available, multilingual encyclopaedia "Wikipedia", where articles are created and edited by members of the online community. At the same time, as a rule, authors and editors of such articles are people who clearly analyse current trends in international relations and are able to distinguish true news from "fakes" and use the proven sources.

Analyzing the research of modern scholars it can be stated that the level of development of online encyclopedic resources today adds up to the general level of intellectual development of the society. Wikipedia's undeniable advantage over other (Interpedia, Encyklopedia Internautica, Internetowa electronic encyclopedias encyklopedia PWN, Ukrainian Electronic Encyclopedia, etc.) is its multilingualism. Ferron M. compares the scale and quality of each national Wikipedia's sector with the measure of a nation's contemporary social potential to create a new cultural product. "The complex of Wikipedia's language sections is a platform for competitions and representations of world cultures, an indicator of their current potential. Therefore, the strategic objectives of each national Wikipedia are commensurate with the place of one or another culture in today's global cultural space. The dynamics of Wikipedia's development, its quantitative and qualitative characteristics, are significantly correlated with the future of national cultures and languages" [Ferron 2011: 27]. Therefore, Wikipedia can be considered a tool for analyzing the development of a contemporary public opinion.

Foreign researchers interpret the web encyclopedia Wikipedia as a global "memory place". Citing the basic elements and basic characteristics of wiki and Wikipedia, scholars address four issues related to social memories research: collective memory, communicative and cultural memory, "memory place" and "soft break" [Pentzold 2007: 263].

Wikipedia article in individual studies is analyzed as a representation of crystallized collective memories that are specially constructed through direct editing of the article and comments on a related Wikipedia discussion page [Ferron 2011: 35].

1. THE ANALYSIS OF THE ARTICLE ABOUT POLISH-UKRAINIAN WAR

Table 1 provides an analysis of the visual and content levels of the Polish-Ukrainian War of 1918-1919 (Wojna polsko-ukraińska) as of April 2019.

Table 1. Analysis of the visual and content levels of the article "Polish-Ukrainian War of 1918-1919" (Wojna polsko-ukraińska – in Polish)

Criteria of analysis	Article in Ukrainian Wikipedia	Article in Polish Wikipedia		
The scope of the article	36 643 characters	15 899 characters		
Volume of discussion	-	3 branches of discussion		
Last editing time of the article	February 18, 2019	April 05, 2019		
Number of main sections	1. Reasons and prerequisites 2. The course of hostilities 2.1. The battle for Peremyshl' 2.2. The battle for Lviv 2.3. The first attack on Lviv 2.4. The second attack on Lviv 2.5. The battle near Volodymyr- Volynsky 2.6. Volchukhiv operation 2.7. Further fighting 3. Consequences 4. Heritage	1. Mastery of Eastern Galicia by Ukrainians, street fights in Lviv 2. Battles in Eastern Galicia and Volhynia from December 1918 to March 1919 3. Fights from March to July 1919 3.1. The May attack of Józef Haller 4. After the fighting 5. Entente powers and ZURL and the question of Eastern Galicia		
Number of related articles	1. Ukrainian Galician Army	 Ukrainian Galician Army Curzon Line Participants of the Polish-Ukrainian war Honorary Badge "Orleta" Commemorative Medal for the War of 1918-1921 Cross for participation in the War of 1918-1921 		

Source: Authors' research according to the articles in Wikipedia

Therefore, despite the significant difference in the volume of articles, it is necessary to analyze their content in more detail.

Quality of content. First of all, it is worth paying attention to the very definition of the concept of "Ukrainian-Polish war": in the Ukrainian version, the Encyclopedia presents this concept as an armed conflict between the Polish and Western Ukrainian People's Republics (after the Unification act – Western United Ukrainian People's Republics) in the territory of Galicia, which has spilled over into large-scale November 1, 1918 – July 17, 1919 [The Polish-Ukrainian War (1918-1919): article in Ukrainian Wikipedia]; in Polish Wikipedia, the Polish-Ukrainian War is presented as an armed conflict of citizens over nationality in Eastern Galicia, where Poles and Ukrainians live [The Polish-Ukrainian War (1918-1919): article in Polish Wikipedia]. In fact, contradictions in the interpretation of the issue are already presented in the definition of the main term.

While analyzing the text of the articles, we conclude that general historical events are transmitted according to established facts, but in each of the articles there is an imprint of national identity.

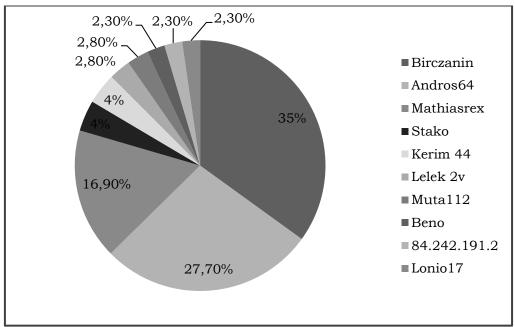
On the other hand, we should pay attention to the number of relevant articles to the Wikipedia's article. Such links indicate the relatability of content, relatedness and the link between related articles. So in the article "Wojna polsko-ukraińska" there are active links to the following articles: "Uczestnicy wojny polsko-ukraińskiej", "Ukraiński Generalny Komisariat Wojskowy", "Bitwa o Lwów (1918-1919)", "Walki o Przemyśl w 1918 term", "Pogrom lwowski (1918)", "Obóz internowanych i jeńców polskich w Kosaczowie", "Ofensywa czortkowska" and others. Particularly noteworthy, in our view, is the article "Ukraiński Generalny Komisariat Wojskowy", which contains references to biographies of 502 participants in the Polish-Ukrainian War and articles about the cemetery of Polish defenders in Lviv and the Polish National Committee in Lviv. The biography of Ukrainian defenders has been scattered across various online resources, which make the search much more difficult.

The article "Polish-Ukrainian War 1918-1919" contains active links to the following articles: "Battle for Peremyshl", "Battle for Lviv (1918)", "December Attack on Lviv (1918)", "January Attack on Lviv (1919)), "The Battle for Volodymyr-Volynsky (January 1919)", "Vovchukhiv Operation", "Soviet annexation of Western Ukrainian lands" and others. Thus, the topics of related articles is almost the same, which testifies the identity of the historical facts perception by Ukrainian and Polish society. Another indicator of content analysis of a wiki-article is **the number of references used**. So, in the Polish article there are 16 footnotes and 7 bibliography items. All references are made to Polish online sources and Polish researchers. As for the references in the Ukrainian article, there are 3 bibliography items, including the work of the famous Lviv researcher of the Ukrainian-Polish War, the historian Mykola Lytvyn. Thus, it can be argued that the article in the Ukrainian version of Wikipedia is more subjective, which makes it impossible to make a clear critical analysis.

Another criteria of content analysis of a article is the **presence of backlinks** – links in other sources to the article [Gabrilovich et al. 2007: 1608]. According to the statistics obtained from the analysis, 1063 references were made to the article in Polish Wikipedia and 835 references to the article in Ukrainian Wikipedia. At the same time, the number of links from this page in the Ukrainian article (1149) is much higher than in Poland (159). Such fluctuations in the statistics demonstrate the "power" of the articles content: the higher the number of links to an article, the more important the article is for the public.

With regard to the user-level analysis of articles, it is characterized by **the number of active users** (personalized editors and editors of articles) and **the number of edits and comments** (Fig. 1-6).

Fig. 1. Top 10 Editors by Editing the article «The Polish-Ukrainian War of 1918-1919» (in Polish)



Source: Authors' research according to the articles in Wikipedia

Fig. 2. Top 10 Editors by Editing the article «The Polish-Ukrainian War of 1918-1919» (in Ukrainian)

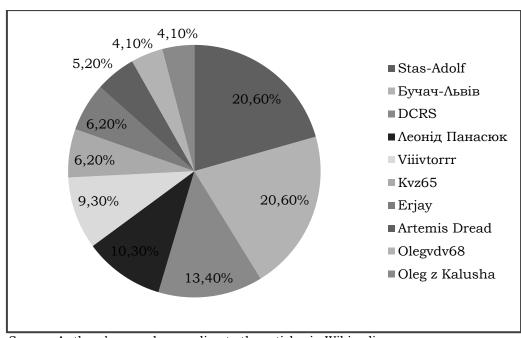


Fig.3. Top 10 editors by volume of text added to the article «The Polish-Ukrainian War of 1918-1919» (in Polish)

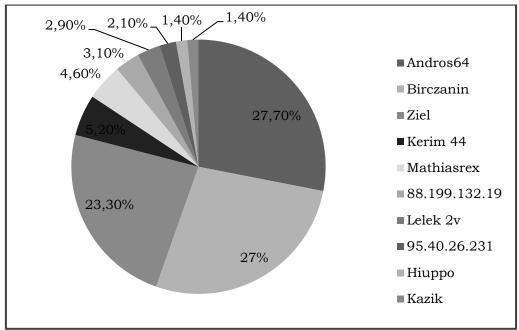
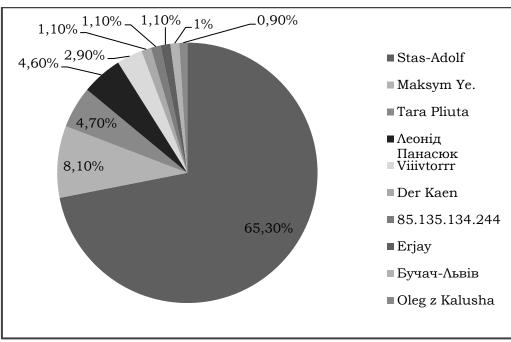


Fig. 4. Top 10 editors by volume of text added to the article «The Polish-Ukrainian War of 1918-1919» (in Ukrainian)



60 50 40 ■ Editing Article the Polish article «The Polish-Ukrainian War of 1918-30 1919» ■ Editing Article the Ukrainian article «The 20 Polish-Ukrainian War of 1918-1919» 10 2011 2012 2013 2014 2015

Fig. 5. Statistics of editing articles about the Polish-Ukrainian war on Wikipedia in 2002-2019

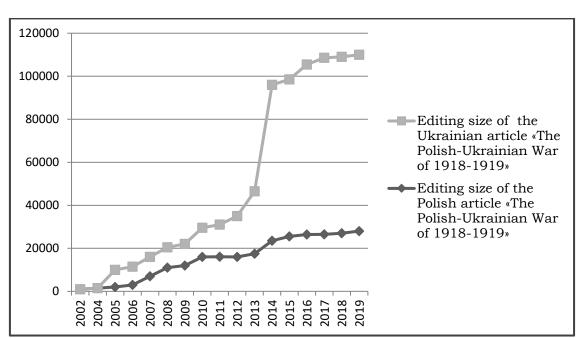


Fig. 6. Dimensions (number of characters) of edits made in the article about the Polish-Ukrainian War on Wikipedia in 2002-2019

The activity of discussing an article is an indicator of its social significance. The article on this topic in Ukrainian does not contain any discussion. At the same time, there is a discussion on this article in Polish on three autonomous branches: «Discussion: The Polish-Ukrainian war», «This is a scandal» «article only about the war with WUPR». Despite such discussions, the number of commentators and commentators themselves (2 persons) suggests that modern Polish society, like Ukrainian, is not too interested in historical events.

Analyzing the wiki-articles on historical joint events in Ukrainian and Polish Wikipedia, we obtain the following results:

- 1. The time of articles creation on Wikipedia is different: the article in Polish was created 3 years earlier, which indicates that the Polish society is more aware of the need to inform a wide range of readers of the encyclopedia about these events;
- 2. The number of edits by year shows that the article in Ukrainian has undergone more editing during 2011-2018, while the article Polish has been edited most times in 2011. Such an analysis can be interpreted as an indicator of the quality of the article's primary text. That is, the content of the article at the stage of creation in Polish Wikipedia was of higher quality, which testifies to the higher level of knowledge of the author of the article about the described facts.
- 3. The number of active links to other articles indicates the extent of coverage of the study. Despite the slight difference in the number of such hypertext references in both articles, their subject is practically the same, which indicates the same coverage of the historical events considered.
- 4. The presence of backlinks demonstrates the degree of the article's importance to the society. Thus, with a small advantage (200 references), the figures of the article in Polish prevail. But, on the other hand, this is explained by the longer period of existence of the article.
- 5. The amount of references indicates the degree of disclosure of the topic. Taking this into account, it can be noted that the article in Polish has been expanded more fully;
- 6. The presence of inter-user comments provides information about the degree of interest of the topic in contemporary society. Therefore, it can be stated that historical issues don't greatly concern the modern citizens of both countries.

2. THE ANALYSIS OF THE ARTICLE ABOUT EUROPEAN FOOTBALL CHAMPIONSHIP 2012

For a more complete analysis of Wikipedia as a tool of public opinion it is important to carry out more analysis of articles which by nature are more relevant to a modern society. Such articles may be ones concerning contemporary political or economic relations or articles on culture and sports. In order to find a common ground for analysis, an article from the category "Culture and Sport" – "European Football Championship 2012" was selected. The reason for the review of the articles about the 14th European Championship is that the final part took place in Ukraine and Poland from June 8 to July 1, 2012. In addition, given the number of comments on the article and lively discussion, the article is relevant to a modern society.

Table 2.

Analysis of the visual and content levels of the article "European Football Championship 2012" ("Mistrzostwa Europy w Piłce Nożnej 2012" – in Polish)

Criteria of analysis	Article in Ukrainian Wikipedia	Article in Polish Wikipedia	
The scope of the article	26 663characters	24 073 characters	
Volume of discussion	11 branches of discussion	17 branches of discussion	
Last editing time of the article	August 16, 2018	March 14, 2019	
Number of main sections	1. Choosing the host country of the final stage of the championship 2. Preparation for holding 3. The prize 4. Cities and stadiums 5. Selection stage 6. Drawing of the final stage 7. Arbitrators 8. Warehouses of teams 9. Regulation of the final stage 10. The final stage 11. Statistics 12. Broadcasting 13. Attributes	,	
Number of related articles	2	1	

Quality of content. Analyzing the content of the articles, we have come to the conclusion that, despite the preference for the article in Polish in the number of sections of 6 units, the essence of the issue is solved at the same level. In both articles, the same issues of organization and holding of the Championship are analyzed. The only difference is the consistency of the information. For example, in Polish-language Wikipedia the issue of logos and symbols is discussed in section 3 [European Football Championship 2012: article in Polish Wikipedia], and in Ukrainian-language Wikipedia – in section 13 [European Football Championship 2012: article in Ukrainian Wikipedia]. However, the content is not affected by the sequence.

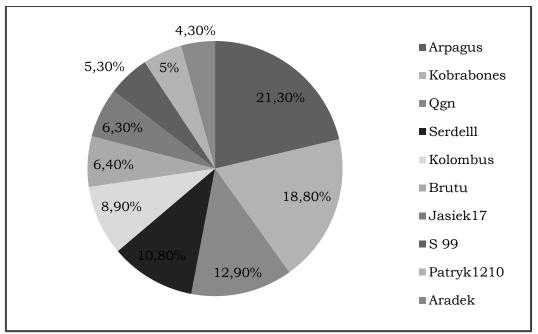
Number of sources used. The Polish-language Wikipedia-article uses 63 sources that are links to other foreign online resources, including the UEFA official website. When creating the Ukrainian article about EURO 2012, the authors used 45 sources of various origins: domestic and foreign sites, including the UEFA official website. The analysis of the number of references showed that the authors approached the creation of the article thoroughly and used a sufficient number of primary sources.

Backlinks. There are 1493 external links to the Ukrainian-language article "European Football Championship 2012". At the same time, the corresponding article in Polish Wikipedia is cited in 1159 other online sources. Thus, the degree of

relevance of the subject matter to Polish and Ukrainian society is almost at the same level.

A **custom level** of article analysis is presented in Figures 7-12.

Fig.7. Top 10 Editors by editing the article "European Football Championship 2012" (in Polish)



Source: Authors' research according to the articles in Wikipedia

Fig.8. Top 10 Editors by Editing article "European Football Championship 2012" (in Ukrainian)

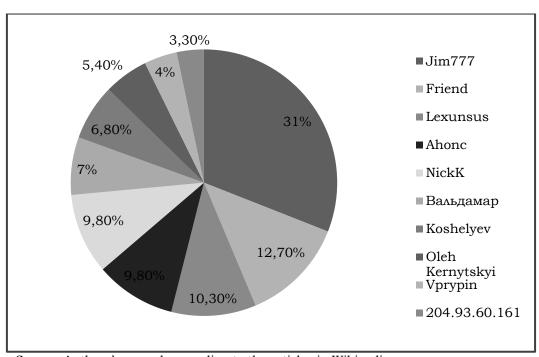


Fig.9. Top 10 editors by volume of text added to the article "European Football Championship 2012" (in Polish)

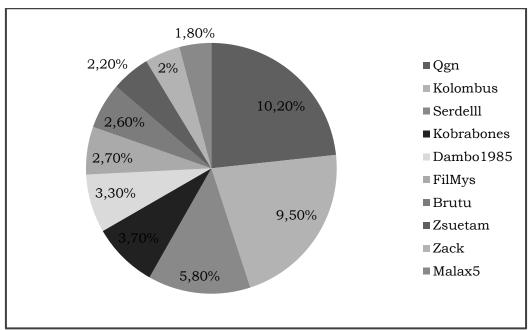
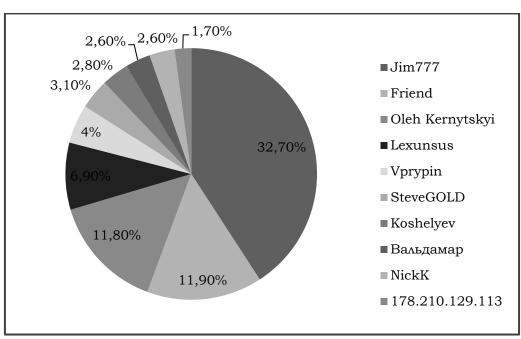


Fig.10. Top 10 editors by volume of text added to the article "European Football Championship 2012" (in Ukrainian)



#Editing Article the Polish article «European Football Championship 2012 »

#Editing Article the Polish article «European Football Championship 2012 »

#Editing Article the Ukrainian article «European Football Championship 2012 »

Fig.11. Statistics editing articles about the European Football Championship 2012 on Wikipedia in 2005-2019

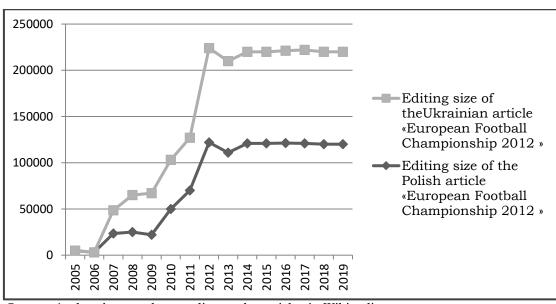


Fig.12. Dimensions (number of characters) of edits made in the article about the European Football Championship 2012 on Wikipedia in 2005-2019

Source: Authors' research according to the articles in Wikipedia

Figures 11 and 12 show that most of the edits were made in 2012 – the time of hosting Euro 2012. It is possible to assume that it was at this time that the most important information about the Championship was provided: a description of the composition of the teams, a description of the group stage, the results of the games and more.

The activity of discussing to the article. Unlike the discussion on the article about the Polish-Ukrainian War, the discussion about the European Championship 2012

is lively and rich in commentary. Comments to the article about the European Football Championship 2012 are divided into the following discussions: Questions; Lviv or Donetsk?; Image; Votes against; Explain to everyone; EuroBasket 2015; Euro boycott; Hey guys, for the saponification; Players surnames and names; Ukraine – England; Question about the number of views. Analyzing the texts of the discussions themselves, it is worth noting that the first discussion was formed in April 2012 (when preparations began for Euro 2012) and the last comment was dated July 2012 (the time of the Championship itself). In general, the activity of comments by years is as follows: 2007 – 16 comments, 2008 – 1 comment, 2011 – 5 comments and 2012 – 20 comments. All active commentators are Ukrainian-speaking. Thus, the biggest peak of the discussion activity is the beginning of Championship preparation and at the time of the event itself.

As for the discussions in the Polish article, they are grouped into the following sections: Match results, Referee, Scorers, Match results, Supporters, Scoring, Admission, Media rights to matches, Top scorers, from Wikipedia: Report an error in the article, Missing Groups, Litany with road numbers. If in the Ukrainian article there were comments of the beginning of Championship preparation, in Polish article – all available comments are recorded as of 2012 immediately. A negative feature of the discussions in the Polish article is the inaccessibility of a large number of links related to the passage of bots. Bot is a program that checks the quality of articles, compliance with their individual formal criteria, and make minor edits as needed (mark-up correction, bug fixes, internal structure refinement, link validation) [Spezzano 2019: 49]. Each new topic for discussion was created by a different user, which confirms the fact of interest of the society and the need to discuss various issues. As a result of a visual and content analysis of the wiki article about the European Championship – 2012 in Polish and Ukrainian, the following results were obtained:

- 1. The time of creation of articles on Wikipedia, as in the analysis of the previous article, is different: the Ukrainian article was created at the beginning of preparation for Euro 2012, and the Polish 2 years later. So, Ukrainian society reacted more quickly to the information about the holding of Championship in Ukraine. This is supported by the commentary in the first discussion, dated as early as April 18, 2012: Ukrainians were wondering if the Championship would really take place in their country and whether or not it was a fake event.
- 2. The number of edits by year shows that both articles were most frequently edited by users in 2012. It was during the competitions that the largest information stream about the Championship was observed, which is sufficiently stated in the articles.
- 3. The number of active links to other Internet resources in both articles is large enough. That is, the breadth of coverage is quite significant.
- 4. The number of backlinks demonstrates that the article is more relevant to Ukrainians because it is cited in more sources than the Polish version of the article.
- 5. The number of references indicates that the content of the Polish article is revealed more deeply and with more perspective than the content of the Ukrainian article. The same result was obtained in the analysis of the article about the Polish-Ukrainian war.
- 6. The presence of inter-user comments provides information on the identity or non-identity of the common interests of Ukrainians and Poles in the Euro-2012 Championship. If the Polish society is more interested in the results of matches,

meetings, referees, then for the Ukrainian society, first of all, the issues of local character are important: the choice of the stadium in Ukraine, the result of the match Ukraine – England, etc.

CONCLUSIONS

Nowadays, the Internet is being used more and more extensively in the interest of informational influence. It provides ample opportunities to influence the formation of public opinion, political, economic and military decisions and enemy's information resources and disseminate specially prepared information (misinformation). In our analysis, it is necessary to assume that the authors of articles and commentaries on Wikipedia are politically unengaged representatives of a society. This is due to the fact that information drives in the usual social networks (Facebook, twitter etc.) are more likely to influence the development of general public opinion than in the Wikipedia community. The primary reason for such information drive is aimed to awaken the consciousness of the average citizen, who will not immediately come to meaningful conclusions. Users of this electronic encyclopaedia are more responsible for creating articles and comments.

Taking into account the fact that public opinion performs a number of functions (evaluative, orienting, educative, regulatory, social control function, regulation function) and assuming that Wikipedia's articles are created by "Internet Intelligence" it can be argued that the analyzed articles perform an orientation function and comments and discussions about them perform an evaluative function.

Table 3 presents indicators of public opinion as a result of the analysis of discussions to Ukrainian and Polish articles on two different topics. One method of sentiment analysis (Sentiment analysis, Opinion mining) is selected on the rating scale – the use of a scaling system whereby words usually associated with negative, neutral or positive tonals are assigned numbers according to the scale.

Table 3. Indicators of Wikipedia public opinion analysis of historical and cultural events of the two countries

Evaluation criterion (scale)	Article about the Polish- Ukrainian war		Article about the European Football Championship 2012	
	Ukrainian article	Polish article	Ukrainian article	Polish article
Orientation of opinion within one discussion (-11)	0	0,5	0,5	1
Intensity of opinions of users (01)	0	1	1	1
Stability of users' opinions (01)	0	0	0,5	1
Information saturation of comments (01)	0	0,5	1	1
Social support of users (-11)	0	0	0,5	0,5
Co-orientation (degree of public interest) (01)	0	0,5	1	1
The degree of accuracy of the comments (01)	0	1	0,5	0,5

Source: Authors' research according to the comment's statistic of articles in Wikipedia

The table shows that the issues of events that are a historical common past are not of much concern to a modern society. There is a little interest in history among Polish users. This interest is directed more towards identifying the initiators of an armed conflict. The discussions of such users are not sufficiently saturated with evidence, which may indicate that they are not fully aware of the issue.

With regard to current events, network users are more active in expressing their opinions. Stability and intensity of thought, high level of information commentary are observed. The degree of public interest has reached the highest scale (co-orientation is 1). In the criteria of directionality and stability of thought, within the same discussion of the users themselves, the indicators of Polish and Ukrainian society differ slightly: comments in the Polish-language article about the Football Championship have a clearer direction and stability of the opinion, while the opinion expressed in the comments on the same Ukrainian-language article is often influenced by the discussion itself.

Thus, analyzing the discussion aspect of Wikipedia articles on cultural and historical aspects, it can be argued that contemporary society is not too concerned with historical issues but, instead, it is more interested in contemporary events. However, it is important not to forget the fact that precisely through historical events there is a manipulation of society by ambiguous interpretation of socially significant historical facts. For example, the beginning of the Polish-Ukrainian War in the two online encyclopaedias (Ukrainian and Polish) is interpreted somewhat differently. These interpretations, as we have already noted, have a national imprint of each of the states. Of course, for the average citizen, such a difference in the formulation of the fact may not have an important role, but for the creation of a negative information reason (such as inciting hostility between neighbouring states, which are now strategic partners), even such a difference can serve as an initial stage of misunderstanding. We should not forget about "herd instinct" in web communities and a great deal of trust in the information published online. The latter is proved by the Wikipedia online encyclopaedia.

However, it should be understood that web communities can significantly improve the effectiveness of public self-organization mechanisms - that is, contribute to the emergence of the civil society. New forms of communication between the state and society create the preconditions for the development of civil society institutions and organizations that ensure the social capital of all participants of a particular communication.

Therefore, it should be understood that the web community is a new, but very dynamic phenomenon of the information society (the formation of which happens in Ukraine and in other countries of the world), whose problem area requires further research in various aspects, including political ones.

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