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USAGE OF ARTIFICIAL INTELLIGENCE IN INTERNET DISCOURSE

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**Abstract:** The authors' method of discourse analysis of Internet discussions on relevant socio-political themes is fully described in the article. Initially, the methodology supposed only manual mechanisms of data processing, including coding and analyzing parameters of deliberative standard, created on basis of Habermas' concept. However, authors' experiment detected opportunities of artificial neural networks' usage for deeper comprehension of public discussions' results. On the grounds of outcomes, gained during approbation of automatized program for Internet deliberations' analysis, a few perspectives for further investigations with use of machine training as research instrumentation were noticed: the first one is to use AI technologies as research tools for encoding and analyzing parameters of the deliberative standard, the second one is related to the creation of methods for recognizing parameters such as argumentation and civility, the third one is to provide researchers with statistical analysis based on ML results with visualization elements.

**Keywords:** Internet Discussions, Discourse Analysis, Neural Networks, Deep Learning, Artificial Intelligence, Natural Language Processing, Machine Learning

**Introduction**

Nowadays, the definition of discourse is trendy because of frequent usage in scientific texts, political speeches, debates. Reference to opportunities that let artificial intelligence in all spheres, including discourse analysis, develop is extremely significant. However, understanding the discourse is a complicated thing due to the fact that, on the one hand, the definition is blurry, on the other hand, has a narrow, more accurate meaning depending on context. There is no common opinion on discourse and the way to analyze it because of a good quantity of various approaches where we can see a competition while determining discourse and discourse analysis. The discourse is a difficult and multidimensional phenomenon that should be considered from different theoretical points of view.

The approach to discourse as communicative act and communicative event is demonstrated by linguist T. Van Dijk. The scientist claims that discourse is

complicated unity of language form, meaning and acting that corresponds to the definition of communicative event. In his point of view, discourse as a complex communicative phenomenon comprises social context. The notions of scientist have a huge sense for understanding a correlation of discourse with political sphere.

Due to unlimited and pervasive character of informational pluralism, expression of citizens' opinion on different online platforms, argumentation of positions can be considered as social practices of public civil dialogue and interaction, realized in online environment.

Based on diverse approaches to studying political discourse, it can be re-searched not only as information and communication and psychological and political phenomenon, but political sphere, containing opportunities for multilateral and multi-functional public dialogue and interaction. The political discourse as applied category can be a resource and instrument of public speech integration because it provides with contacts and socio-political actions, including participation of citizens and their involvement in authority.

Political online discourse is simultaneously an electronic political environment and electronic political life of person who can act as anonymously as openly. We consider political Internet discourse (online discourse, electronic discourse) as one of the PR instruments in political and governmental spheres. Political online discourse can form and reflect moods, citizens' opinions with aim of influence on making political decisions, management of governmental affairs, regulation of society, manipulation, pressure on government and etc.

Therefore, for government it is important to manage to analyze Internet discourse competently. To do this, special methods, generated with usage of the most modern technologies, are required. One of authors' method of discourse analysis, based on manual data processing and with incorporation of machine training will be represented in the article.

Internet discussions on various socio-political themes are currently becoming more relevant for researchers due to the fact that online deliberations more focus on critical discussion and reasoning of communicators' views on acute public issues. Therefore, the value of deliberations is that their participants can articulate their interests, openly express their positions and support them with significant arguments.

Subsequent paragraphs, however, are indented. In fact, online deliberations contribute to the development of democratic communication as they allow participants to demonstrate their political creativity, openly argue about serious political themes, lobby their interests without mediators. Thanks to exchange of views, positions on different social and political matters a public dialogue between government and society which is aimed at addressing certain problems, where citizens actively take part.

Thus, the presented method of discourse analysis can be gradually translated into a machine (computer) format and implemented using the power of AI.

For text analysis on Internet there are a wide range of tools of Natural Language Processing methods such as Word2Vec and Doc2Vec, TF-IDF, bag-of-words, lemmatization, stemming, stop-words removing and so on. It is expected that the proposed solutions for the use of AI and ML will contribute to a deeper understanding of the results of any public discussions.

The design and prototype development of an application will also allow to arise the content analysis of public discussions to a qualitatively new level and help participants to assist in Internet discussions by smoothing out contradictions by using well-trained neural networks. Targeted on-demand discussions are assumed to be in a case when participants understand and consciously accept the role of such an application as a discussion assistant. Such an app should work on different platforms, including social networks and discussion forums.

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