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GRAPHO-SEMANTIC MODELLING OF CONCEPT SOCIETY: CASE STUDY OF RUSSIAN NEWSPAPER'S HEADLINES

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Abstract

There is a variety of ideas about society in the modern print media, for understanding of which it is necessary to model the conceptual potential of this definition, revealing its content orientation. Using the method of grapho-semantic modelling, the authors create an integral model that represents the concept SOCIETY created on the basis of the headlines' analysis of the "Russian newspaper" - the periodical of the Russian Federation. The construction of grapho-semantic model of the concept SOCIETY was carried out by identifying significant conceptual units which determine the content specifics of the publication. The research was realized with the help of newspaper's readers - respondents from Orenburg (Russia). The construction of such model was carried out on the headlines of the newspaper through their component analysis. This allowed to distinguish the conceptual component-units; field analysis, providing the formation of semantic fields; grapho-semantic representation, including the definition of quantitative relationships between fields within the semantic space of the newspaper headlines and counting the number of their interactions. Based on the analysis of the headlines of the "Russian newspaper", lexical-semantic interpretation of the concept "society" was carried out. This allowed to assess thematic specificity of the newspaper focused on solving various issues. The article concludes that the newspaper is more focused on the solution of state problems, issues of regulation of society within the country and the functioning of the subjects of economic relations; indirectly refers to public issues and almost does not affect the topic of culture and media.

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1. Introduction

In the modern periodical press there is a variety of ideas about society which requires a systematic integrated approach to understanding this concept (Copp, 1992), objectively reflecting its essence in general and thematic representation in the print media in particular. Modelling the conceptual potential of the concept SOCIETY was carried out on the basis of three numbers of the state national "Russian newspaper" (№ 40 (5713)-42 (5715), February, 2012), published before the election of President of the Russian Federation on March 4, 2012, due to the interest of Russians in the upcoming significant political event for the country, as the period chosen for the analysis is representative.

2. Problem Statement

- To reveal meaningful conceptual units of the concept SOCIETY with the help of respondents, allowing to determine meaningful specificity of the edition.
- To analyze the headlines of the "Russian newspaper" interpreting SOCIETY from lexical-semantic point of view, through which the general characteristics are determined and its direction and social significance are highlighted.
- Construct a grapho-semantic model of the concept SOCIETY with the help of selected conceptual components in the headlines of the "Russian newspaper".

3. Research Questions

- Formation of conceptual fields that carry the main characteristic features of the definition of "society", as a result of component analysis of headlines.
- Interpretation of the relationships between the conceptual components of the grapho-semantic model that are the most popular for the interpretation of the concept SOCIETY.
- Determination of quantitative relations between the fields of the grapho-semantic model within the conceptual space of each headline, reflecting the concept SOCIETY.

4. Purpose of the Study

To determine the content specificity, thematic focus and social significance of the official state periodical of the Russian Federation "Russian newspaper" by analyzing the headlines through the construction of a grapho-semantic model of the concept SOCIETY, revealing the attitude of Russians to the political, economic and social situation in the country before the election of President of the Russian Federation.

5. Research Methods

The following methods are used: the method of grapho-semantic modelling, including component and field analysis of the newspaper headlines (Dymova & Semenova, 2008), the method of grapho-semantic representation; theoretical analysis of scientific literature on the problem under study; establishment of cause-and-effect relationships in the study; structural and statistical methods.

6. Findings

Modelling of the conceptual potential of the concept SOCIETY (the totality of knowledge about this object) on the headlines of the "Russian newspaper" was carried out by constructing an integrated model that allows you to see the conceptual component of the concept using the method of grapho-semantic modelling developed by Belousov and Zelyanskaya (2005). This method makes it possible to present a set of data in the form of a system, where each component has a pronounced hierarchical and topological relation to each component and the whole system (Belousov & Zelyanskaya, 2005). The construction of grapho-semantic model of the concept "society" was carried out through a number of stages.

6.1. Component analysis of the headlines in order to distinguish the conceptual component of the unit shown in the example of the "Russian newspaper" №42 (5715) February 28, 2012

1) 55 headlines were allocated by the method of continuous sampling in this issue of the newspaper (for example, "Fighting for reform", "For Pushkin", "On a solid platform", "Away with television servility", "Preparing for change", "The cat in a bag", "Investment: step by step", "Attracting young people", etc.).

2) Respondents singled out key words (component-units) in each headline (40 people from Orenburg, Russia), the semantic orientation of which, in their opinion, is associated with the essence of the concept "society". For example, the headlines:

- "The clock stopped the attack", the respondents divided into 3 conceptual component units: safety, time, attack;

- "Oil extrude atoms" - 2 component-units: science, process;

- "Collection past the cash register" - 4 component-units: problem, fees, finance, economy;

- "Disputes of patriotism" - 5 component units: state, love, patriotism, homeland, person;

- "Danish time" - 5 components-units: time, state, history, period, etc.

In 17 headlines respondents did not see the connection with the concept under study ("Deep approach", "No surprises", "Risks of opportunity", "Bets are made", etc.) (Anpilogova, 2015).

Thus, after analyzing the 169 headlines of the three numbers of the "Russian newspaper", 217 conceptual component units were allocated by the respondents.

6.2. Field analysis of headlines contributing to the formation of conceptual (semantic) fields of the selected component units

From the allocated 217 component-units we have constructed semantic fields. It was taken into account that one unit can belong to more than one field. Thus, the conceptual component - the security unit - is a component of two conceptual fields: state and law.

The analysis of the headlines resulted in 7 semantic fields bearing the main characteristics of the concept "society":

- the largest field is the state field which includes 111 components united on the basis of the political form of organization of society, carrying out its management, protection of economic and social

structure, ensuring the unity of the people and its national security: unity, group, society, business, elections, security, president, etc.;

- the structure of the field of jurisprudence includes 87 components drawn up on the basis of a set of rules that determine the mandatory relationship of people in society (Brockhaus & Yefron, 2008), based on legal ideas about the possibility of making progressive changes in the mechanism and methods of regulation of society (Anpilogova & Yakupova, 2016): status, knowledge, protection, problem, agitation, laws, etc.;

- no less important is the field of economy, which includes 78 units connected on the basis of the totality of relations developing in the system of production and activity in the society (Raizberg, Lozovskii, & Starodubtseva, 2017), which represent the economy as an economic activity of the company: process, development, technology, finance, market etc.;

- the field of society includes 72 components made up of a set of people, historically united by the social forms of life and work (Yefremova, 2006): state, nation, group, person, patriotism, etc.;

- policy field consists of 66 components associated with the course of action of people to address issues relating to public life, defining the system of internal and external relations (Ozhegov, 2016): the status of the president, patriotism, nation, unity, etc.;

- 57 units are included in the field of culture, grouped according to the characteristics of historical processes, human development, reflecting the views of culture in the aspect of human activity, including any forms and ways of self-expression and human self-knowledge (Pelipenko & Yakovenko, 1998): science, history, period, talent, Internet, changes, human etc.;

- in the field of mass media there are 33 components drawn up on the basis of information exchange in the society in need of special means of information exchange, in the establishment and maintenance of permanent relations between its subjects: knowledge, technology, problem, agitation, etc.

6.3. Grapho-semantic representation which includes determining the number of connections between fields within the semantic space of headlines and counting the total number of their interactions

1) The number of connections between fields within the lexical-semantic space of each headline, reflecting the essence of the concept "society", was determined. For example, the conceptual space of the headline "Communal's oath" connects 4 semantic fields: state, society, economy and culture.

2) In all definitions of the concept "society" the total number of fields interacting with other fields was calculated.

3) The discovered connections between the conceptual fields passed the phase of graphic representation (construction of semantic graph).

Only those fields of the model that have passed the threshold of statistical significance were subjected to further analysis (the number of components with less than the average value were not taken into account). Using the data of statistical methods we determined that the following fields are significant: state, politics, law, society, economy, media and culture. The conceptual components designated by these words are most demanded for the society concept's interpretation. This is reflected in the grapho-semantic model presented in figure 01.
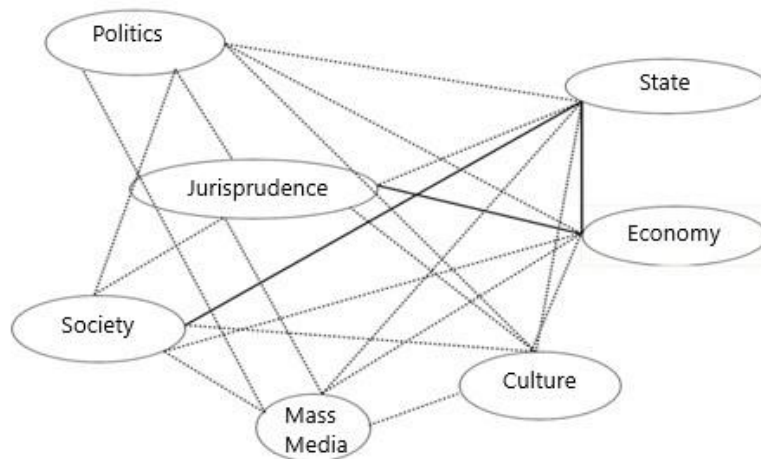
Figure 01. Grapho-semantic model of the concept SOCIETY in the headlines of the "Russian Newspaper"

It is important to take into account the thickness of the lines presented in the model, which shows the probability of dependence of the connection of one component in relation to another: ordinary lines indicate the average connections (values greater than the average); dotted lines show weak connections (values equal to the average); bold lines show strong connections (values greater than the sum of the average and the standard). There are only strong and weak connections in our model.

The nuclear components of the model are the state and economy fields with valence 6 (the number of connections formed with other fields) and the largest number of significant connections.

The number of significant connections of the state field is 2, which indicates the thematic focus of the newspaper in favour of social structure and economic relations:

1 State ↔ society. The relations arising between the society as a historical result of naturally developing relationships between people and the state as an artificial political construct, managing these relationships, show that historically society is primary and the state is secondary, as it occurs at a certain stage of development of society to protect the interests of citizens (Kravchenko, 2013).

2 State ↔ economy. This type of relationships reveals the interaction of the state, creating and protecting the conditions for the normal functioning of economic entities, and the economy, constantly reproducing the means of existence of the state. The state acts as a regulator of the economy seeking to change the conditions of functioning of all subjects of economic relations. In all existing economic systems, there is a close intertwining of market relations with elements of state control and regulation in order to influence economic processes to achieve certain results (Bogolyubov, 2018).

Fields: state↔culture; state ↔ media; state ↔ policy; state ↔ law – identifies weak connections that proves insufficient coverage of these themes in the "Russian Newspaper".

The field economy also has valency 6. The most significant connections of this field show the interest of the newspaper in covering the issues of economy and legal relations in the field of the state:

1. Economy ↔ state (discussed above in the description of the field relations of the state).

2. Economy ↔ jurisprudence. This connection is due to the fact that in the economic life of society, economic and legal relations are closely intertwined as the economy can function effectively only

on a legal basis (a set of rules governing the activities of economic entities) at the micro and macro levels (Pelipenko & Yakovenko, 1998).

Weak connections are also distinguished in the fields: economy ↔ media, economy ↔ politics, economy ↔ culture and economy ↔ society, which indicates the underrepresentation of these thematic areas in the analyzed issue of the newspaper.

The society field is connected with 5 components with one significant connection: society ↔ state, considered by us in the analysis of the state field. Less important when society↔ culture, society↔ media, society↔ politics, society↔ law, society↔ economy. The law field also has one significant connection which is studied in the description of the economy field. The remaining connections are marked as weak.

The valence of the culture, media and politics fields is 6 but no significant connections are revealed there. These fields have weak connections in the grapho-semantic model that means lack of disclosures in these numbers of the newspaper.

7. Conclusion

On the basis of analysis of the headlines, it should be noted that the "Russian Newspaper" is an official state periodical in which special attention is paid to official information within the state. As a result of the component and field analysis, the semantic fields necessary for the analysis of the printed publication related to the concept SOCIETY were identified: economy, society, media, culture, politics, state, jurisprudence. The constructed grapho-semantic model allowed evaluating the thematic specificity of the publication.

In the headlines of the "Russian Newspaper" society field has a close relationship with the largest field of the state, which indicates the focus of the newspaper on the national issues as a set of functions that reflect various aspects of the state and local government, the judiciary, financial, tax and customs authorities, etc. This is important, first of all, from the point of view of the development of society, necessary for protection of citizens' interests.

The state field has strong connections with the economy field, which shows an active regulatory role of the state in the development of an effective market economy by means of the implementation of its economic functions. In other words, through a variety of state measures of influence on economic processes, the achievement of certain goals of development of society is carried out. The state regulates the economy, especially by means of law within the legal framework, which shows the relationship between the fields of economy and law. Russian society is experiencing serious changes in its formation, tends to the unity of legal regulation aimed at making changes in the mechanism of legal activity of the society. Thus, the analyzed issue of the "Russian Newspaper" is a printed publication focused on solving, first of all, state issues, then economic and legal issues, which is explained by the status of the newspaper as a state periodical of the Russian Federation. The analyzed issue of the newspaper covers the issues of culture, media, politics, etc. less. Insufficient attention is paid to the social life of people, their routine, cultural development, education, mentality, etc., which in our opinion, is important for modern society. This thematic ratio in these issues of the newspaper is largely due to such important information occasion as the election of the President of the Russian Federation.

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