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**SEMANTICAL ANALYSIS ON THE MATERIAL  
OF MASS MEDIA IN KAZAKHSTAN**

Kazakhstan mass media space and respectively the market of periodicals in recent years started its developing in absolutely different directions. The main thing consists in intensive development of processes of mobilization and coordination in mass media funds in Kazakhstan modern media market. The process of research was carried out to this period within the political discourse analysis. This method allows to restructure the initial semantic categories applied at submission of information from a communicator to the public. In course of research the attention was paid on the main political and social ideas which are found in the materials under analysis, and political activity was transformed according to the used semantic categories. Application of the content analysis in political researches differs in working-out of the standard method allowing to explain equally one text with several persons and also to prove the hypothesis of the text adoption on the basis of the document, and the subjectivity of researcher decreases because of that. Sufficient experience of the traditional analysis of the contents is now gathered. Its essence consists in isolation of some main concepts (or semantic categories), calculation of frequency of the categories use in the text of the document, the relations of various elements of the text with each other, and the total amount of information.

**Key words:** Kazakhstani mass media, semantic analysis, content-analysis, socio-political contents, category of registration, indicators from the text, correlative pairs, factor loadings.

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**Қазақстандағы бұқаралық ақпарат құралдарына семантикалық талдау**

Қазақстандық бұқаралық ақпарат құралдарының кеңістігі және тиісінше, мерзімді басылымдар нарығы соңғы жылдары мүлдем басқа бағыттарда дами бастады. Ең бастысы, бұқаралық ақпарат құралдарында Қазақстандағы заманауи медиа-нарықта жұмылдыру және үйлестіру үдерістерінің қарқынды дамуы. Зерттеу процесі осы кезеңде саяси дискурсты талдау шеңберінде жүргізілді. Бұл әдіс коммуникатордан ақпаратты жұртшылыққа ұсынғанда пайдаланылатын бастапқы семантикалық санаттарды қайта құрылымдауға мүмкіндік береді. Зерттеу барысында талданатын материалдардағы негізгі саяси және әлеуметтік идеяларға назар аударылды, ал саяси белсенділік қолданылатын семантикалық санаттарға сәйкес өзгертілді. Саяси зерттеулерде контент талдауын пайдалану бірнеше адамның бір мәтінін ашуға мүмкіндік беретін стандартты әдісті өзірлеуден, сондай-ақ құжатқа негізделген мәтінді қабылдауға арналған гипотезаны дәлелдейді және зерттеушінің субъективтілігі төмендейді. Қазіргі уақытта дәстүрлі контент талдауында жеткілікті тәжірибе жинақталған. Оның мәні кейбір негізгі ұғымдар (немесе семантикалық санаттар) оқшаулануын, құжат мәтініндегі санаттарды пайдалану жиілігін, мәтіннің әртүрлі элементтерінің өзара қарым-қатынасын және жалпы ақпараттың көлемін қамтиды.

**Түйін сөздер:** Қазақстандық бұқаралық ақпарат құралдары, семантикалық талдау, мазмұнды талдау, әлеуметтік-саяси мазмұны, тіркелу санаты, мәтіннің көрсеткіштері, корреляциялық жұптар, факторлық жүктемелер.

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### Семантический анализ на материале СМИ в Казахстане

Казахстанское пространство средств массовой информации и, соответственно, рынок периодических изданий в последние годы начали развиваться в совершенно разных направлениях. Главное заключается в интенсивном развитии процессов мобилизации и координации в фондах средств массовой информации на современном медиарынке Казахстана. Процесс исследования был проведен в этот период в рамках анализа политического дискурса. Этот метод позволяет реструктурировать исходные семантические категории, применяемые при представлении информации от коммуникатора публике. В ходе исследования внимание было обращено на основные политические и социальные идеи, которые нашли в анализируемых материалах, а политическая деятельность была преобразована в соответствии с используемыми семантическими категориями. Применение контент-анализа в политических исследованиях отличается разработкой стандартного метода, позволяющего одинаково разоблачить один текст несколькими лицами, а также доказать гипотезу принятия текста на основе документа, а субъективность исследователя уменьшается из-за этого. В настоящее время собран достаточный опыт традиционного анализа содержимого. Его суть заключается в изоляции некоторых основных понятий (или семантических категорий), вычислении частоты использования категорий в тексте документа, отношениях различных элементов текста друг с другом и об общем объеме информации.

**Ключевые слова:** казахстанские СМИ, семантический анализ, контент-анализ, социополитическое содержание, категория регистрация, индикаторы из текста, коррелятивные пары, факторные нагрузки.

#### 1 Introduction

Process of research of political and analytical materials in the Kazakh press is subdivided into three stages:

- the stage of acquaintance and control;
- the stage of processing and calculation;
- the stage of analysis and discussions on the received data.

At the first investigation phase, the political, analytical, and information materials of the above-mentioned newspapers published in 2007-2009 were considered. Chronology of the selected publications was also created. Publications were chosen in accordance with social and political value; besides, propaganda and materials of political campaigns were excluded.

The term of “discourse analysis” for the first time was represented in scientific works of the American linguist, professor Z.Harris. Harris applied this term on a situational context in research of language communications. That is, the theory of a discourse and the discourse analysis originates in linguistics and philology. Further sociologists and political scientists started using the term of the discourse analysis.

The theory of political discourse analysis became a basis of political truth formation by means of a discourse, i.e. by means of the main ideas and symbols, and in the course of political communication the certain discourse was processed by.

In course of research the attention was paid on the main political and social ideas which are found

in the materials under analysis, and political activity was transformed according to the used semantic categories.

#### 2 Methods and methodology

Thus, explanations were discussed, estimated and the materials published during the considerable socio-political, economic, spiritual changes happening in our society, were explained. Also those materials were taken on a basis of the content analysis and should be treated as an auxiliary method in creation of system of the semantic categories which are necessary for their registration.

In recent years, such forms of researches as “the semantic analysis” or “content-analysis” are applied very often. Not only this term was known as a method, but it was also applied to the feedback expected from interests of the author of the text or from the addressee and allowed to draw concrete conclusions.

Success of this method proves that in comparison to traditional methods, the content analysis is rather good in texts analysis. By means of this method it is possible:

- to draw conclusions on the socio-political contents on the basis of the description of the text unnoticed after reading;
- to compare texts to different contents on concrete signs of research;
- to investigate peculiar language features of the document, to analyze separately the contents and the form of explanation.

The method of the content analysis has qualitative and numerical character. As the method considers existence or it is considered lack of this character (certain attributes) qualitative, and as the numerical analysis considers separate subjects, frequency of the words and symbols which are found in the text.

The most important characteristics for the qualitative analysis are novelty, importance, and value. In the numerical analysis as such criterion the frequency of hit takes the main place.

In our scientific work, the researches were conducted by means of the direct numerical analysis in which the account of answers is calculated as they were brought. Procedure of the content analysis comprises three stages:

- the definition of category of registration;
- the search of their indicators from the text;
- statistical processing.

As it was showed in the process of analyses which was carried out on information, political and analytical materials of the Kazakhstan press in this research the category of registration has to be admitted as the indicator of a political and economic situation Kazakhstan:

- social values or the most significant events in public life;
- characteristics of the priority directions of a state policy covering external and internal policy.

As in contents of the document only one semantic element can be given in different verbal forms, it is necessary to find such forms in the text which would cover all semantic categories of the expressed thought. Therefore at the second investigation phase we looked for indicators of the chosen categories. They consist of figurative elements of these semantic categories.

At the final stage of research, considering different indicators, the account of frequency of use of the registered categories begins.

For the content-analysis the information and analytical articles with 50 registered indicators were taken from each edition. As it was said before, they were published during the period from January, 2007 to May, 2009 in the specified newspapers. The histogram of statistical processing and their frequency of repetition.

The list of 150 articles selected for carrying out the content analysis is given in the appendix B, the frequency of repetition of their semantic indicators is given in the Appendix G separately in three tables. The quotes having political value, interview and analytical materials belong to materials of the table. In the table the relevant numerical data are appropriated to each semantic indicator.

For numerical data processing, received as a result of the content analysis which is carried out for deepening of concepts about semantic space of political events statistical methods were applied. In researches of this purpose the correlation analysis allowing to measure close connections between the signs which are widely applied in political researches was applied to further statistical processing.

By means of a professional package of statistical data processing (“Statistic”) at first, the coefficient matrix of materials correlation in each edition 50x50 was used, and then correlation between three editions 150x150 was calculated.

As one of the main measurements of the correlation analysis the ordinary pair coefficient of correlation is considered. It shows mutual coordination of the studied signs and is measured in limits-1 and +1. The coefficient is closer to number 1, the communication between semantic signs is closer. If the coefficient is equal 1, then between signs there is a direct functional dependence and vice versa if the coefficient equals to-1, the inverse functional relationship and if this number equals to zero takes place, so such dependence is absent.

At first a matrix of coefficients of correlation of articles was taken, and then a matrix of coefficients of correlation of signs (appendix G) was used. After consideration of these data there was a need for deep revision of values and a position of each edition. For this purpose the first received data according to results of the first correlation analysis were grouped among Egemen Qazaqstan, Zhas Qazaq and Zhas Alash newspapers. Each group passed the secondary correlation analysis.

In the correlation matrix analysis of mass media materials, one of methods is the multidimensional mathematical statistics, which is called the factorial analysis. By means of the factorial analysis similarity of signs of the published materials and set of these collected signs, that is to pass on the level of accumulation of initial changes.

So, by means of the factorial analysis method, the provision of studied phenomenon will be adjusted, and new hypotheses are proposed. In this research work one of the main methods of the factorial analysis – a method of the main components (1) was applied.

The phenomenon described and investigated as main system of signs it is possible to determine by small numbers of other signs called factors. Factors are considered as independent phenomena, the system of initial signs can be grouped, so, if the correlation coefficient between signs of one group is higher, in the following group it happens low.

The most important concept in the factorial analysis the factor loading defining communication of a factor with an initial sign is considered. At application of methods of the main components linear models are considered, that is each initial signs are considered as linear combinations of factors. The factor loadings showing the level of impacts of these factors on formation of the specified signs belong to coefficients.

Factor loadings as the alternative to correlation coefficient of factors of these signs, changes from -1 (inverse relationship) to +1 (direct dependence) (Dennis E. 1997:158).

Political discourse analysis and the content analysis applied in research of political materials in the press, a mathematical method, i.e. correlation and factorial researches gave necessary qualitative and numerical data. A combination of the applied methods gave the chance to improve shortcomings of these methods.

### 3 Research

In modern Kazakhstan the role of mass media increases. By means of mass media the state and other political subjects notifies the people on the purposes and values, and also interest in strengthening of the public relations influencing formation of elite and competent authorities of the power is observed.

Efficiency of publications in mass media, the comment in television news increases the government activity. Need of the solution of any problems of the population shows need of a specification of actions of the power.

As it is shown in results of the analysis of many semantic factors defining national idea, different positions, included in monitoring, concepts of economic welfare and the fair state covered in the newspaper of the power "Egemen Kazakhstan" the national and independent weeklies "Ana Tili" and "Zhas Qazaq" and oppositional "Zhas Alash", depend on a position of these editions.

As it was noticeable by the results of monitoring, the problem of Kazakh language is considered as a topical subject in mass media. Problems of development, protection of the Kazakh language against influence of foreign languages are actively covered in the national weekly "Ana Tili", the independent edition "Zhas Qazaq", in the pro-government edition "Egemen Qazaqstan".

In a row of correlative pairs of direct dependence between articles it is possible to take 19 pairs. By results of calculations, correlation of direct dependence occurs in the content analysis of articles of the Zhas Qazaq newspaper in cases of 19 pairs.

Correlation of articles of the independent

weekly "Zhas Qazaq" shows reduction of pairs of direct dependence. Correlation of direct dependence in the Egemen Qazaqstan newspaper makes 78 pairs, and in the Zhas Qazaq newspaper it is 19 pairs. That is, in comparison to pro-government edition, reduction of direct dependence of political analytical materials is observed in the independent newspaper.

The publication of actual materials in Zhas Qazaq newspaper, carrying out editorial conference with representatives of the intellectuals and polls among readers during political events, application of other effective measures shows the effective organization of editorial media management.

Frequency of correlation pair numbers is 55, and it specifies that edition materials are one-sided, and most of them are just oppositional. It means that the information policy is unilateral.

In our opinion, this edition with its rich history sharply replaced the political position into the oppositional one after obtaining independence. It is natural that in the materials of the oppositional edition directed on the analysis and examination of a social, political and economic situation of society the criticism prevails.

As the world practice shows, existence of oppositional editions is the process which always takes place in society. The compliances found in correlation between mathematically the processed articles of three editions are given in the following table.

From this table considerably that straight lines and the return correlation indicators of semantic signs seldom occur in newspapers "Egemen Qazaqstan", "Zhas Qazaq", "Zhas Alash". That is, the combination of the mathematical processed straight line or the return correlation pairs meets only on 12 signs from 49.

The corresponding positions between three newspapers are determined by some questions as follows.

The sign of "democracy" has direct dependence with a sign of "corruption", compliances between them are noticeable. And the sign of "democracy" enters feedback with the concept "patriotism".

In materials of three newspapers, the become objects of research, the specified concepts don't communicate with each other. Questions of "corruption" less often than "patriotism" are often mentioned in materials democracy. That is, if in the analysis of correlation the specified semantic signs were characteristic for one edition, now it shows correlation compliance of articles among three editions.

**Table 1** – The table of correlation compliances between periodicals “Egemen Qazaqstan”, “Zhas Qazaq”, “Zhas Alash”

#	«Zhas Qazaq» / «Zhas Alash»	«Egemen Qazaqstan» / «Zhas Alash»	«Egemen Qazaqstan» / «Zhas Qazaq»
1	2	3	4
1	$r \{91,1\} = 0,55$	$r \{150,8\} = 0,59$	$r \{112,92\} = 0,54$
2	$r \{96,1\} = 0,50$	$r \{150,35\} = 0,61$	$r \{150,90\} = 0,60$
3	$r \{86,4\} = 0,55$	$r \{150,39\} = 0,52$	$r \{143,99\} = 0,59$
4	$r \{86,8\} = 0,65$	$r \{150,46\} = 0,54$	$r \{146,99\} = 0,61$
5	$r \{97,7\} = 0,59$	$r \{131,47\} = 0,53$	$r \{150,99\} = 0,71$
6	$r \{66,10\} = 0,50$	$r \{103,47\} = 0,54$	-
7	$r \{92,11\} = 0,65$	-	-
8	$r \{66,12\} = 0,52$	-	-
9	$r \{92,12\} = 0,64$	-	-
10	$r \{62,15\} = 0,53$	-	-
11	$r \{71,18\} = 0,59$	-	-
12	$r \{64,19\} = 0,55$	-	-
13	$r \{94,23\} = 0,55$	-	-
14	$r \{86,25\} = 0,51$	-	-
15	$r \{99,26\} = 0,50$	-	-
16	$r \{80,34\} = 0,59$	-	-
17	$r \{99,36\} = 0,56$	-	-
18	$r \{96,36\} = 0,54$	-	-

We will make the short review of a straight line and inverse relationship of semantic signs. If the sign of “justice” corresponds to a sign “patriotism”, the sign of “corruption” has feedback.

Also signs of “stability”, “welfare of the people” are called together with signs “patriotism”. The interesting combination is observed with this sign “patriotism”: this sign meets in direct dependence signs “fight against corruption”, “interests of women”, “the social conflicts”. To how a sign “patriotism” meets in cases of 7 pairs, it is the special correlation formation of a straight line and inverse relationship equal  $3 \times 4$ .

Signs of “a social order” and “a social guarantee” were also analysed. The sign of “a social order” meets in direct dependence “corruption”.

It means that in the Kazakhstan society of a problem of “corruption” and fight against it are actual. In this regard it should be noted that on the international rating Kazakhstan still is in a number of such coun-

tries. By definition of the highest rating on corruption of the countries of the world of the Forbes magazine, Kazakhstan occupies 17 place. The first three is formed here by the countries of Africa – Chad, Zimbabwe, Cambodia, and Kazakhstan takes a place after Azerbaijan (Kus'men O.V. 1996:102).

It is a problem is especially actual for Kazakhstan. Besides, it is specified together with the concept “social order”.

In any society “social guarantee” is important for social groups. In the press the sign of “a social guarantee” often meets with a sign of “cultural development” and vice versa, the sign of “cultural development” enters feedback with “patriotism”.

For example, during years of independence, since 1997, in annual messages of the President N. Nazarbayev to the people of Kazakhstan the special attention to the matters is paid:

The factorial analysis which is carried out during research defined separate and mutual, general

semantic signs of a straight line and inverse relationship in this edition. During expeditious development of information society such analyses are necessary in development of communications between the power and the public, the power and mass media, identification of factors, forming an obstacle in their development and the offer on the basis of it improvement mechanisms.

For determination of frequency of repetition and mobilization of factor loadings of semantic signs in the materials offered for the content analysis the mathematical analysis among 6 groups was carried out.

Mobilization of materials of the first group on semantic signs showed the following results. "Interests of the intellectuals" in the third group is in direct dependence, and in the first group in inverse relationship. It shows that the matter in the press is discussed in a row.

Finding of signs "restoration of the Union", "mutually beneficial cooperation", "multistage economy" in inverse relationship shows that these problems already lost the relevance for our society. The low indicator of a sign "safety" is the proof of a factor of lack of national or economic danger in the country.

For the factorial analysis of the second row signs from the weekly newspaper "Zhas Qazaq" were taken. Here it is possible to note such signs which are between the first and fourth group on high direct dependence as "restoration of the Union", "transformation", "military power", "support of a domestic producer", "justice", "safety", "reformism", "regional integrity", "collectivism", "civil society", etc.

Reduction of such semantic signs as "the status of the Kazakh language", "prosperity", "patriotism", "investment", "public unity and consent" doesn't designate that these questions lost the relevance for the newspaper, and shows that they are considered individually and mutual independence.

As show results of the matrix factorial analysis, prevalence of such signs as "democracy", "cultural wealth", "international economic community", "multistage economy" in the newspaper Zhas Alash it is connected with an edition position in the information market.

It is natural that the sign "democracy" is the main subject of political editions. And "cultural wealth" of society is defined by such measurements as national idea, spiritual education.

Affection of an important factor of "international economic community" edition "Zhas Alash" in spite of the fact that it is the opponent of the power, shows that this edition keeps development of the

state at the international level and pursues information policy in this direction.

Factor loadings (signs) in newspapers "Egemen Qazaqstan", "Zhas Qazaq", "Zhas Alash":

1. "regulation of the conflicts social, etc." –  $f\{1, 14\} = 0,56$
2. "privatization" –  $f\{1,43\} = 0,58$
3. "stability" –  $f\{2, 4\} = 0,56$
4. "reformism" –  $f\{2, 21\} = 0,51$
5. "justice" –  $f\{4, 3\} = 0,52$
6. "collectivism" –  $f\{5, 19\} = 0,65$
7. "not centrality of the power" –  $f\{5, 26\} = 0,56$
8. "radicalism" –  $f\{3, 22\} = -0,66$
9. "prosperity" –  $f\{6, 29\} = -0,56$

The general compliance of a problem of "regulation of the conflicts social, etc." shows in various republican newspapers existing in information space of Kazakhstan that the matter is very often raised, discussions on this subject are constantly led. And a question "strengthening of the relations of property and protection of interests of owners" in the country became one of actual measures of support of a private property, economic development (Soloduhin Yu.N. 1995:204). Factor loadings of signs of high direct dependence can be characterized "stability", "reformism", "justice", "collectivism" as follows.

"We have to mobilize society round the main three priorities: the world, stability and a consent", – the President proclaimed during performance on the sessions of Assembly of Kazakhstan people. Thus, the President N.Nazarbayev defined "stability" as the main value of the Kazakhstan society. In this regard it is possible to note importance and a role in the society of the general direct dependence between three editions.

"Reformism" on pages of newspapers forms a basis of mutual compliance of a semantic sign the power of a state policy in this direction. The president in the performance at a meeting of the commission "On development and a specification of the program of democratic reforms" called the people to: "The fatherland, independence, stable development" and by that reported on political changes in the country.

Correspondence of a sign of the general dependence "justice" also shows in three editions that it is an important factor for the Kazakhstan society which seeks for leadership within independence, identity and the sovereignty.

In our opinion, it is natural that the power and opposition will have the views of the measures directed on carrying out (behind some exceptions) democratic reforms in society. Therefore in the

conditions of Kazakhstan, on a joint of these inconsistent interests, mass media became the powerful tool of distribution of information, carrying out propaganda and promotion, and also increase of cultural and political literacy and education of the population.

For improvement of the open, fair, reliable and effective relations between the state and the public and development of the political communication processes influencing further modernization of society by means of channels of mass communication, the author offers the concept of development of political communication in the responsible mass media (Kurginyan S.E. 1992:190-196. 190-196).

#### 4 Conclusion and results

As a result of the conducted applied researches on political positions of mass media channels and materials of periodicals the following concepts were offered:

1) in the mass media market mobilization of the state mass media, and also development of the new directions in giving, processing, transfer and the offer of information in public funds of mass communication is observed;

2) the politician of everyone of mass media seeking for management of the audience and public

consciousness, development of the political events occurring in the country I created the mass media new market depending on the new direction of founders and creative editorial group;

3) In the information market together with mass media of the state character, in the field of competitors there were oppositional, independent, branch mass media.

4) Kazakhstan was recognized as the state of new undertakings, great opportunities, formations and preservations of the economic benefits, accepting democratic processes and values and also as the country with stable statehood;

5) Kazakhstan is recognized as the state uniting the nations and ethnic groups, developing interfaith communications. In this research “media democracy” it is considered as the public phenomenon defining national idea of each citizen and each class in society, feature, characteristic for the Kazakhstan society, and also the uniting socio-political and economic factors as the mechanism which is carrying out these complex challenges;

6) In the conditions of Kazakhstan the media democracy has to develop as the national idea defining unity, integrity, coordination of the power and the people.

#### References

- 1 Obshaya i prikladnaya politologiya: Uchebnoe posobie / Edited by V.I.Zhukov. – M: MGSU “Soyaz”, 1997. – 992 p.
- 2 Dennis E. Besedy o mass-media. –M.: Vagrius, 1997. – 158 p.
- 3 Kus'men O.V. Sociologiya obshestvennogo mneniya. – Novosibirsk, 1996. – 102 p.
- 4 Soloduhin Yu.N. Rossiiskie sredstva massovoi informatsii; yavluatsya li oni “chetvertoi vlast'yu”? // SMI v politicheskikh tehnologiyah. – M.: Enigma, 1995. – 204 p.
- 5 Kurginyan S.E. “Sed'moi stsenarii”. – M., 1992. – Ch. 2. – P. 190-196.