Politician`s image of the world: graph-semantic modelling

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Abstract. Image of the world lies at the heart of the worldview as a structuring base of a person`s consciousness. Boris Nemtsov is a professional Russian politician, former Deputy Chairman of the State Duma and nowadays leader of the opposition. Nemtsov`s image of the world reconstruction is a corpus-based research performed by means of the graph-semantic modelling in the Information System *Semograph* on the text material of his public appearances in 2011. The obtained graph-semantic model reveals the hierarchy of relations between semantic fields and detects Nemtsov`s current communication and activity strategies and ways of embedding himself in contemporary political discourse.

Introduction

Political discourse is the most productive environment for implementation of effective communication strategies, and all significant changes in the society are reflected in the political communication. Thus, the rapid spread of the Internet and its intensive effect on the forms of interaction in the community should not but are shown in the social policies [1]. The production, distribution, storage and perception of information have undergone a sea of changes in connection with the universal digitalization and are already inseparable from the reality of the Internet. With these changes people`s perception of the objective world has also transformed. (Cf. Castells reasoning about contemporary culture where virtual world is perceived as a reality on the same (or even greater) level than objective world [2, p. 132]).

It is logical that every politician seeks to use the properties of the media environment to broadcast his views. Modern media are part and parcel of the Internet that turns them into a tank of spontaneous yet targeted communicative acts, which at the same time are a reflection of the communicants` images of the world.

According to G.V. Caprara, "personality includes behavioural tendencies and systems, structures and mechanisms that regulate affective, cognitive and motivational processes" [3, p. 152-153]. Caprara reviews two approaches to the study of the personality: the first one views personality as an architecture of traits or a system of habitual behaviours. The second one views personality as a self-regulatory agentic system that is capable of reflecting on its own experiences and that interacts with the environment in conformity with personal criteria and goals. Both perspectives complement each other in making sense of the influence that the personality may exert in political domain [3]. Following these approaches we combined two methods to uncover the personality of a Russian politician taking into account his verbal self-presentations ("the way individuals present themselves and behave" [3, p. 152]) to construct his image of the world ("organization of affect and cognitions that guide individuals` behaviour from within" [3, p. 153]).

Image of the world is a core notion of this study and it lies at the heart of the worldview as a structuring base [4] of a person`s consciousness. It is an important though nearly neglected focus of study, unlike worldview (or "world view"), which is defined as a system of subjective generalizations about reality and that is well described and patterned in contemporary humanities: there is an integrated theory of worldview function in its relation to personality traits, motivation, affect, cognition, behavior, and culture [5]. There are researches 1) outlining Russian elite`s worldviews during the Yel`tsin years revealing its four main dimensions: "ideological orientation", "organisational culture", "style of governance", and "image" [6]; 2) focusing upon Margaret Thatcher's black-and-white thinking (her cognitive style of information processing) and uncovering her worldview by means of quantitative content analysis approach and a qualitative analysis of the role of this worldview in British foreign policy [7]; 3) approaching worldview structure with ultimate meanings technique to make a close study of different age and clinical groups (normal, mentally deficient, alcoholic, and somatically troubled adults and normal and delinquent adolescents) [8] and so on [9]; [10].

Conceptualization and categorization of the political reality demands modelling text projections of politicians` and voters` consciousness. Detecting a person`s worldview for this purpose seems insufficient, for the worldview in its entity is fragmentary (because it is reconstructed on the basis of the speech material available to the observer) and, therefore, it may contain contradictions [11], unlike the image of the world that is logical and internally consistent.

We understand the image of the world as a system of principles that are used to organize a person`s worldview: ideas, categories, attitudes and assumptions about the world inherent to a person and guiding his/her behaviour. A person`s image of the world being an underlying layer of the personality [4] structures and regulates his/her worldview [11].

Since image of the world as a scientific notion has not yet been explored adequately and up to now there are no papers constructing persons` images of the world and particularly of political elites, this study aims to research the mechanisms of political reality conceptualization and categorization by modelling the politician`s image of the world.

Method and data collection

The reconstruction of the image of the world of a Russian politician in this study is based on verbal output data by Boris Nemtsov, who, in our opinion, is interesting enough to address the issue of mastering new forms of communication by political agents, since he was in different political roles during his long career as a professional politician: a representative of the current government and the opposition. In 2011, elections were held to the State Duma of Russia. Although Boris Nemtsov was not taking part in the election as a leader of an admitted political party, this election year was a period of his increased activity, as it was necessary for him to express himself, to clarify his position and to get the maximum amount of supporters.

The material of the study represents a text corpus of politician`s spontaneous verbal self-presentation in the course of 17 unprepared interviews and interviews with radio listeners in 2011 (720 Nemtsov`s utterances).

We preferred politician`s radio interviews as a quite reliable data source for two reasons: the first one is that they are more spontaneous than set piece speeches, and so more likely to give an accurate picture of the politician under study (otherwise there is also the "danger, if the researcher is not careful, of analyzing words spoken by leaders that may in fact have been written by aides" [7, p. 35]).The second reason is based on the statement by [12, p. 512] that the verbal output of political leaders can reveal

information which helps us to understand the beliefs, motives, and personalities of the political key figures, as "thought processes underlie spoken or written communication" [13, p. 246].

To ensure the authenticity and accuracy of the study, we took advantage of corpus technologies, as the value of corpora for linguistic tasks is difficult to overestimate: a comprehensive analysis of the entire body, as opposed to a sample of contexts, provides a greater degree of reliability and validity of the results [14]. The collected material formed a database that includes frequency dictionaries of Nemtsov`s speeches, concepts of his image of the world with linguistic means of expression of concepts of political reality.

This corpus-based research was performed by means of the Information System *Semograph* [15] (http://semograph.com) which allows to reconstruct a politician`s image of the world on the basis of graph-semantic modelling. Graph-semantic modelling method is software-based and implemented in the Information System *Semograph* designed for the extraction of domain knowledge from texts and text corpora. Graph-semantic model makes explicit the structural connections between the semantic fields of a text, of a text sample or a text corpus. It reveals the dominant and peripheral semantic fields and the relationship between them. Ultimately, a topology of the semantic space where each semantic field has a hierarchical and topological correlation with other fields and a whole system, is simulated. This structural contextuality, in its turn, allows us to interpret each component of the model.

The Information System *Semograph* implements a number of methods for primary text analysis which form a general scheme of the graph-semantic modelling. Frequency analysis is one of these methods applied to our study. It is conducted in several steps.

Step 1 is to generate a list of words with their rates of occurrence in the corpus. As a word can have several meanings, it is logical to make the frequency analysis of texts and text corpora counting the occurrence of word meanings implemented in specific contexts. As the token is understood as a word sign, considered in the totality of its forms (word forms) that have the same meaning (lexical-semantic variant), in *Semograph* each use of a word in the same sense in the aggregate of all the grammatical forms is put in a separate token, unlike other similar software (WORDij, Concordance, T-LAB Tools for Text Analysis, etc.) also designed for quantitative content-analysis.

Step 2 is to make up the tokens analyzing meanings of words realized in contexts of the corpus.

Step 3 is to group created tokens in common semantic blocs – semantic fields – according to an integral semantic feature (we have got 39 semantic fields) and to determine the weight of each field in each context.

Step 4 is to generate a matrix of correlations between semantic fields using Pearson's correlation coefficient which is quite applicable to our data.

And step 5 is to visualize the correlation matrix of a text corpus in the form of an S-graph (see Figure 1) in which the nodes represent the semantic fields, and edges – connections between these fields.

Results and discussion

Graph-semantic model allows reconstructing the hierarchy of relations between semantic fields, i.e. organization principles of semantic trends present in Nemtsov`s speech, hence, it allows reflecting how he embeds himself in contemporary political discourse. This model represents the politician`s image of the world. The model shows that B. Nemtsov`s image of the world consists of three blocks or substructures that reflect the politician`s current activity strategies in the period under review.
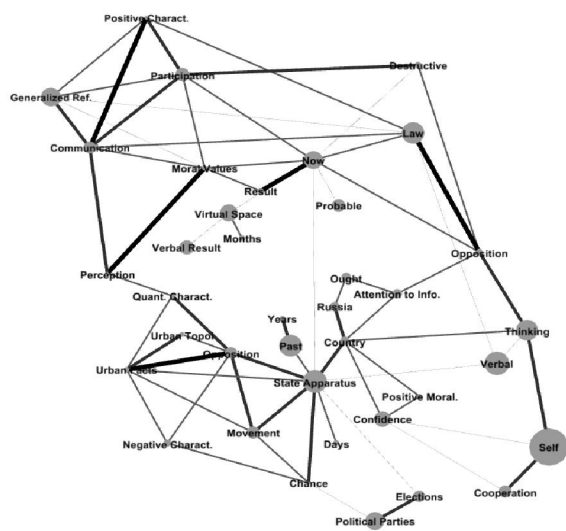

Figure 1. A graph-semantic model of Boris Nemtsov`s image of the world

NOTE. Semantic fields were used to build the model. In the figure, there are the following abbreviations: Attention to Info. – to draw attention to information; Generalized Ref. – a generalized reference to a group of people; Positive Charact. – positive characteristics; Negative Charact. – negative characteristics; Quant. Charact. – quantitative characteristics; Positive Moral. – positive moral characteristics; Movement – movement in space; Virtual Space – a virtual space; Now – nowadays,

Past – past tense; Perception – the acts of perception; Destructive – destructive actions; Participation – active participation; Verbal – verbal actions; Thinking – intellectual activity; Communication – activities involving a direct contact; Probable – the possible action; Result – the outcome of the action; Moral Values – moral values and moral character; Verbal Result – the outcome of a verbal action; Opposition – opposition activities; Law – the legal domain; Elections – the election domain, Self – I-words (I, me, my, am, etc.).

By convention, in accordance with the main guidelines clustering semantic fields in a structural unity, we have designated these substructures as a Communicative Unit, a Self-Identification Unit and an Activity Implementation Unit.

The Communicative Unit of Nemtsov`s image of the world is organized around the field *Self*, which is the most frequent in the lexical group of *Subject-Role Domain* and reflects Nemtsov`s basic communicative setting – individualism – which imparts his organic direction of the communication. This emphasizes Nemtsov`s predominantly self-closed, egocentric image of the world [10].

The self-presentation process is presented by opposing communication scenarios: one of them is aimed at cooperation, the other – at opposition. The *Intellectual Activity* is closely connected to *Confrontation* and *Self*. The field *Confrontation* has a low frequency, but it is this field that links the Communicative Unit with the Activity Implementation Unit, demonstrating the status of the opposition in Nemtsov`s image of the world, as well as defining the conflict as a necessary condition for activity planning and implementation.

Description of Nemtsov`s communicative intention of cooperation can be fulfilled by a Self-Identification Unit analysis. This Unit reflects the spectrum of political subjects Nemtsov identifies his actions with.

The first subject is the field *Country*. The increased attention to the *Country* is due to the goals of his political self-presentation, and that is why the need to influence the electorate becomes the main activity motivator. Here it is necessary to draw attention to the fact that in Nemtsov`s speech country is primarily refers to Russia. However, the activity of other subjects – *State Apparatus* and *Opposition* – which form a structural-semantic unity with *Country*, gives a ground to suggest in this case that Nemtsov has some additional purposes of propaganda: a political self-identification problem.

Country is obviously related to Nemtsov`s communicative position, but is not directly related to the communicative *Self*. We see a direct, albeit weak link with the Communicative Unit through

Confidence. At the same time there is an indirect link with the Communicative Unit through the fields *Ought* and *Drawing Attention to Information*. But in this model linguistic means of expressing Nemtsov`s attitude to the statements content are found outside the Communicative Unit, because in this case they have become a part of the country's image deliberately created in Nemtsov`s speech more so than the characteristics of his communicative settings. Another confirmation of the possible deliberate construction of the country image by Nemtsov is the link between *Country* and *Intellectual Activity*.

It is interesting to point out the remoteness of *Self*'s modal intentions considering *Confidence* which represents dominant modality of the communication. Nemtsov`s confidence in Russian society`s high moral qualities is evident, as *Confidence* is closely connected with the fields *Country* and *Positive Moral Character*. But at the same time it is very weakly tied to the *Self*, which suggests a certain artificiality of this confidence based on the politician`s desire to exert influence upon *Country* rather than his moral certainty.

Confidence is also loosely coupled with *Cooperation*. In this context the focus on cooperation without a specific target is becoming the *Self* characteristic, which Nemtsov tries to correlate to the image of the *Country* employing declaratory certainty.

The fields *Ought* and *Drawing Attention to Information* have no direct links with *Self* and other semantic groups of the Communicative Unit, and therefore they serve only to organize and enhance the image of *Country*, of *Russia* (they are coupled only with these fields).

However, in our opinion, concepts of *Country* and *Russia*, while overlapping, cannot be considered only in the context of structuring the political propaganda texts. The very division of this phenomenon in two images points at Nemtsov`s conscious or unconscious desire to comprehend semantic boundaries of this speech object not only as a political target.

In Nemtsov`s speech there is a nomination with a generalized semantics, the *country*, which shows most of the activity according to the number of semantic connections. In this case, to our mind, two strategies of perception and comprehension of reality are felt at the same time: a tendency of consolidation of discussed objects, making them common rules, and a tendency of create a euphemism, suggesting a 'ritual' communicative component. Together with the nomination – *country* instead of *Russia* – are changing the conditions of communication and the target of the statement. In the politician`s speech the

field *Russia* is closely related only to the field of *Ought* which puts the image of Russia into a perfect idealistic context. As the concept *Russia* has no other specification in the graph-semantic model of Nemtsov`s image of the world (see Figure 1) except for modality, we can assume that it is deliberately taken out of the political propaganda discourse. At the same time all the communication tricks of Nemtsov`s campaign speech are connected with the field *Country*.

In addition, it is *Country* that has a strong correlation with another political subject relevant to B. Nemtsov, *State Apparatus*. The division of the concept of *country* in the politician`s image of the world is not accidental: the opposition of the state machine and the society – ordinary people – is traditional in reflection about the country`s structure, development, and history. The multiple meaning of this image explains the distancing of the politician`s *Self* from *Country* in the structural and semantic space of his public appearances: B. Nemtsov tries to maintain his position as an objective observer, who is able to an adequate evaluation. At the same time, in our opinion, there is an inevitable process of self-identification among political forces.

State Apparatus occupies a very powerful position in the described Unit (Self-Identification Unit). According both to the frequency and activity of semantic connections this field proved to serve as a link between two other political subjects, the politician`s self-identification takes place with. Only *State Apparatus* is imbedded in a time perspective: the state apparatus structures are discussed in the context of the past and related to the present in Nemtsov`s image of the world. On the one hand, the power structures analysis in time period becomes the ground for the opposition. On the other hand, as already noted, Nemtsov is a former part of this system and he is aware of its functioning in different time rhythms both over the years (the field *Year*) and important for Russia days (the field *Days*), in particular.

Interestingly, in Nemtsov`s speech the link between *Country* and *Opposition activity* is adjusted by the field *State Apparatus*. *Country* as Nemtsov`s speech recipient has no relation to the opposition and, consequently, cannot initiate any opposition activities. Its interaction with the state apparatus appears to be more logical, even if dissatisfaction and injustice are involved.

The field *Elections* is an additional context which creates a weak link with the *State Apparatus* in Nemtsov`s image of world. Striving to prove himself as the ruling power and not the opposition is quite obvious and natural for the politician. But the field *Party* has no direct correlation with *State Apparatus*

(see Figure 1), its strong link with *Elections* characterizes the activity of the semes constituting the field of *Party,* but does not reflect the typical, according to Nemtsov, script of entry into power, because *Elections* is weakly tied to *State Apparatus* in the reconstructed structural and semantic system.

The only possible way to enter the state agencies is expressed by components of the field of *Chance*, which has a strong connection with *State Apparatus*. The opposition field *Movement in Space* in this context, apparently, gives a greater chance of victory, rather than pre-election party activities: the link between *Chance* and *Movement in Space* is much stronger than between *Chance* and *Party*.

The opposition is another political subject of the Self-Identification Unit which is represented by *Opposition Activity*. In contrast to *State Apparatus*, *Opposition Activity* fits into the spatial context of Nemtsov`s image of the world. Nemtsov`s current way of political space exploration – the opposition struggle in form of rallies and demonstrations that removed 'to the streets' – is reflected in the model by means of the field *Movement in Space*.

Opposition Activity has a strong connection with *Negative Characteristics* and the *Quantitative Characteristics*. Nemtsov`s opposition activity itself is explained by the negative features of the political, social and economic reality that is expressed in the politician`s speech by negative reviews of authorities` actions. However, the image of the world is constructed by these opposition characteristics and there is a steady intention 'opposition– discontent'. The model shows that negativity essentially correlates to opposition, whereas the state apparatus is only indirectly relevant to it. *Quantitative Characteristics* display Boris Nemtsov`s aspiration for a precise description of his own opposition activity. So it is logical that this field is related to the semantic group *Perceptual Actions*, formed by the words indicating the personal presence (to see, to hear).

The third part of the graph-semantic model of Nemtsov`s image of the world (see Figure 1), an Activity Implementation Unit, reflects the ratio of his important activity with the objects this activity is directed at. In this part of the model there is a communicative informal You that is poorly differentiated in Nemtsov`s image of the world as it is expressed by the field *Generalized Reference to a Group of People*. It is a functional-semantic division of the recipient – *Country*, *Russia* and *Generalized Reference to a Group of People* – that attracts our attention. Country appears in the politician`s speech as a reference point of his communicative position building. People become the main point of Nemtsov`s activity application. For Nemtsov people

are the purpose of his propaganda activities: establishing contacts (*Actions Involving a Direct Contact*). Though Nemtsov`s representation of the people for whom he is planning his activities is undoubtedly over-generalized, he endows them with a lot of positive features and fields related to *Generalized reference to a group of people* consist of words having positive connotations: *Positive characteristics* and *Moral Values*.

Moreover in Nemtsov`s image of the world people appear as the main active force: there is a link between *People* and *Active Participation* in the model (see Figure 1). The perception of people as a real force explains Nemtsov`s desire to succeed in establishing contacts. Building rapport, obviously, determines Nemtsov`s image of the world. The fact that *Communication* is correlated not only to *Active Participation*, but to *Positive Characteristics* and *Moral Values,* attests to Nemtsov`s feeling of his rightness. Besides, the politician also relates the concepts of truth and morality to the expectation of some results of his activity now, in the present. There is a correlation between *Outcome of the Action* and *Moral Values* and *Nowadays* in the model.

But in any political activity manifestation there is a destructive component: *Active Participation* has a strong link with *Destructive Actions*, which correlates to *Opposition*. But the recognition of the very possibility of some devastating consequences in Nemtsov`s image of the world is very weakly correlated to the current situation in Russia, as the link with the field *Nowadays* is negligible.

Legal Domain has a significant place in the image of the world model, as there is a high frequency of *Legal Domain* and a considerable amount of semantic connections to other fields. For Nemtsov the legal way of meeting public and social challenges has the greatest prospects.

Another area of activity implementation in Nemtsov`s image of the world is a *Virtual Space*. The fields *Outcome of Verbal Action* and *Months* are correlated to the *Virtual Space*, and this fact demonstrates the politician`s recognition of media and Internet productivity as a stage for public appearances. However, it is necessary to point out the low significance of this field though it has a high frequency. The link with *Nowadays* is very weak, i.e., Nemtsov does not use enough the virtual space potential.

Summary

Thus, Boris Nemtsov`s verbal self-presentation in 2011 reflects a significant contradiction for his image of the world between the verbal communicative reality and extralinguistic being. In order to harmonize them, the politician

develops a clear communicative plan which is evidently calibrated conceptually and rhetorically, and which is definitely aimed at establishing contacts, but stranger to the Self-speaking. The most important factors for formation of the politician`s image of the world are the need for self-identification among political forces and the definition of acceptable ways of political activity. Control of the verbal sphere distances Nemtsov as an addresser from his addressee and from the message built by him according to the pre-given communicative criteria. Nemtsov`s reflection on his target leads to the construction of a generalized and idealized image of a person (citizen of Russia), with whom a cooperation should be established, and of Russia, the country in which and for which the politician develops his activities. This Nemtsov`s idealized image of Russia results in the bifurcation of country and people, in the categorical division of the world into the sharp axiological and ethical opposites from positive to negative poles of the evaluation, even within a single utterance.

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