Towards the Typology of Elections at Russia

Michael G.Sadovsky\textsuperscript{b,c,*}

660036 Russia, Krasnoyarsk, P.O.Box 8737
\textsuperscript{b}Institute of computational modelling of RAS
\textsuperscript{c}“Gorod” Producer Company

Alexander A.Gliskov\textsuperscript{d}

\textsuperscript{d}Krasnoyarsk regional Chamber of Attorney, barrister

Abstract

A distinction in reasons and motives for choosing a particular political leader establishes the key difference between older and young democracy. The former is based on electoral history, while the latter is based on feelings and personal attitude. Besides, a comparatively abundant number of political figures (persons or parties and associations) is specific for young democracies. The problem of a reference votes’ distribution is analyzed. Lefebvre’s theory of a reflexive control is supposed to make the basis for indifferent choice of political figures. This theory yields a golden section split of votes (or the series of Fibonacci numbers, for the case of multiple choice). A typology of political campaigns based on this theory is proposed. A proximity of ratings of competing persons means the highest electoral tension, a leadership of a person means a high level of mobilization; a neutral situation corresponds to Fibonacci numbers distribution of votes.

\textit{Key words:} indifferent choice, reflexion, golden section, Fibonacci numbers

1 Introduction

Democratic nations exhibit rather stable, apparent and efficient pattern of public life. This pattern results from a rather long electoral history of the

* To whom the correspondence should be addressed

\textit{Email addresses:} msad@icm.krasn.ru (Michael G.Sadovsky),
gliskov@yandex.ru (Alexander A.Gliskov).
nations. Young democracies, which appeared due to a communist system collapse have to run through the same experience in considerably shorter period of time. Free, direct and independent elections constitute a key issue of any democratic regime. As a rule, an effective democracy exhibits a considerably short list of political parties, which take part in the social and political life. On the contrary, young democracies usually exhibit an extended list of such entities, in comparison to the elder ones.

Not discussing the origin and current state of political situations in younger democracies in this paper, lets us instead concentrate on the question concerning the interpretation of the elections results in the situation when an abundance of political parties taking part in a race exists. A main objective of any elective system is to establish and legitimatize an authority responsible for a nation, or for a region within a country. That latter is determined by the elections results. To get a clear and comprehensive ideas about the legitimate power, one must understand pretty well what kind of elections results should be considered as typical, proper and indicative from the public point of view.

Here we propose an approach to determine such “reference” distribution in the election rankings of candidates or parties. This approach is based on the theory of reflexive control developed by Vladimir Lefebvre [Lefebvre, 1987a; Lefebvre, Smolyan, 1975]. This approach yields a basis for typifying election campaigns. Basically, these campaigns could be separated into three classes: the first class includes the campaigns with high mobilization of voters, the second class includes the campaigns with high electoral tension, and the last one includes the campaigns of indifferent (or proximal to that latter) choice of voters.

2 Elections under indifferent choice of voters

Further, we shall consider the electoral processes (and its peculiarities, in turn) of the Russian Federation. Russia has bicameral parliament, with State Duma as the lower house, and the Council of Federation as the upper chamber with the lower house members elected through the mixed electoral system. That latter implies that a half of the seats at the State Duma (225 seats of total 450) are to be filled through the party list system, while the other half is filled through the elections at the 225 single constituencies. Here we shall consider both options.

Let’s start from the simplest hypothetical situation. Suppose two candidates race in a single constituency, say, to occupy a position, which must be occupied through the elections process (like the President of the Russian Federation, or a governor). Suppose, then, that these two candidates are indistinguishable
persons from the voters point of view. Of course, such hypothetical situation never occurs in real political campaign: every candidate always tends to figure out his/her differences from the rival candidates. Anyway, let us suggest at the first step that two candidates do not differ, in the minds of voters, and all the revisions and sharpening of our theory would be done later, starting from that original point.

The essential question is what pattern of votes distribution one should expect in such situation of a shortage of definiteness? Probability theory makes one expect 50 % to 50 % breakdown of votes. Human nature, nevertheless, fails to simulate really random behaviour; this failure yields in a distortion of the ratio of votes, according to the golden section law:

\[ 0.618034 \ldots \div 0.381966 \ldots . \] (1)

Probably this fact was originally found by Vladimir Lefebre (see (Lefebvre, Smolyan, 1975; Lefebvre, 1980, 1987a,b, 1995; Adams-Webber, 1996)). Here one may expect to meet the same behavioral pattern, when any differences between two candidates seem to be negligible. Actually, three candidates take part in a racing, not two. The third candidate is not a physical person, rather it is an “Against all candidates” option in a ballot. A relation (1) must be replaced, then, with

\[ 0.50000 \ldots \div 0.30902 \ldots \div 0.19098 \ldots . \] (2)

Here one might assume that the least value of (2) corresponds to the option “Against all candidates”. This assumption sounds natural, since a leading choice of that option means a comparatively greater definiteness in an electoral preference of voters, that it is supposed by the original hypothesis. And, more generally, if \( N \) candidates (or parties) take part in the race, then the portions of ballots gathered by the racing participants should be ranked proportionally to Fibonacci numbers (Vorobiev, 1976). These are defined with the recursion relation

\[ \phi_{i+2} = \phi_{i+1} + \phi_{i}, \] (3)

with \( \phi_{1} = \phi_{2} = 1 \). A motivation behind this approach is a premise that a person makes an indifferent choice in any neighboring couple of candidates. A background theory for the distorted choice in a case of two options is described in detail by V.Lefebvre.

\footnote{We do not discuss the way how one may head in such competition.}
3 Some cases of elections at Russia

Let now consider some specific cases of the elections run in Russia. Both personal and party list elections would be considered.

3.1 Elections of the governor of Krasnoyarsk Krai, September 2002

The election of governor of Krasnoyarsk Krai took place in September 2002. Two rounds have been carried out; Alexander Khloponin (future winner) and Alexander Uhss advanced to the second round. 46.82% of all registered voters had taken part in the elections. A winner (Alexander Khloponin) gathered 48.07% of votes, and Alexander Uhss gathered 41.83% of all votes; 9.15% of all voters voted against both candidates.

There was a high level of electoral (and political) tension during these elections. It was evident from outer features, such as an abundant drive, both outdoor, and via electronic mass-media one, and from numerous scandals; the hottest one was with the approval of the election results by the regional Election Commission. Also, a number of staff involved in the campaign and various events was very high, from both sides, for such type of racing.

3.2 Election of Mayor of the city of Krasnoyarsk

The Mayor elections took place in December of 1999. Three candidates had taken part at these elections, including the empowered major. There were one-round elections; i.e. the winner (same person had been elected for the major position) gathered 87.91% of the votes, the option “Against all candidates” had been chosen by 7.85% of the voters who entered the polling stations. Candidate came in the second position gathered 3.42% of the ballots. It should be stressed, that the option “Against all candidates”, not the real candidate, captured second rank.

These elections were characterized by the lowest possible electoral tension. On the contrary, the elections to the city Council exhibited a high level of the electoral tension (simultaneously, the members of the city Council had been elected). The major’s block (that was an entity to be elected via party list system) had gathered less than 25%. Three issues played the key role in the victory of Mr Pimashkov (who won the major position): first, he was the major already in the office before the racing; second, he provided opposition to governor Lebed (who met with the minimal support of the residents of the city.
of Krasnoyarsk); and, third, all other contenders were beyond any criticism, frankly speaking.

### 3.3 Election of Mayor of the city of Norilsk

The elections of the major of the city of Norilsk took place in October 2003. Several candidates have taken part in the elections, which were carried out in a single round, with 34.2% of all registered voters coming to the polls. The winner (Mr Melnikov) gathered 51.34% of the ballots, and the secondly ranked contender gathered 33.21% of all the ballots; 15.45% of all voters had chosen “Against all candidates” option.

These results seem to be the closest to the theoretical situation of a low definiteness of voters. Indeed, a high political tension did not transform into an electoral one. The point is that the result of the elections was the matter of interest of two powerful financial groups, while the interests of voters felt off a discussion of any political forces taking part in the elections. Such situation appears to be rather close to an indifferent choice, while the preference of voters was the matter of habit. The winner connected well with his constituents.

### 3.4 Preliminary survey of the cases

It is evident, that the ranking observed in the races is far from the theoretically expected. This fact is obvious: any real campaign must differ from a situation of an indifferent choice. Probably, the situation of the election of the major of the city of Norilsk (see 3.3) looks the closest one to a “reference” distribution. The data show that the preferences of voters were rather clear and founded. It is a well known fact, that a significant part of voters taking part in elections makes their decision upon entering a polling station. It does not mean that they choose indifferently; however, the key difference in Western and up-to-date Russian electoral experience is the difference of the background for a choice development. While western voters tend to base their choice on a history of voting, the Russian voters pay very much attention to attitude, mood and feelings.

On the contrary, the case of election of the major of the city of Norilsk shows that the situation of a low definiteness (or rather proximate to that one) may occur, when public leaders or politicians do not express their programme clearly. Such conspiracy fails to present the public interests in the programs of the candidates (see Section 3.3). The main political players prominent in Norilsk, did not express their position towards the presumptive victory of Mr Melnikov (currently, the mayor of the city). In particular, top managers
of “Norilsk Nickel” failed to say explicitly that they would not cooperate with Mr Melnikov, in case of his election. This conspiracy yielded a widespread confidence of the voters that the policy of the corporation (and their well-being, which totally depends of the corporation policy) would remain the same. In consequence, the choice was irrational and was determined by emotional and psychological reasons. Mr Melnikov was emotionally closer to the residents of the city.

4 Party list system elections

Practically, one can never meet the ideal situation of indifferent choice. Even experimental conditions could hardly provide such situation. Following factors severely damage the original assumption about the complete ignorance of voters and indifferentness in their choice. A specificity of human mind procedures of multivariant classification is the first factor. This specificity may manifest in the occurrence of stable and long-term preferences towards the entities within the list, but not for any couple of them. Say, a voter always prefers “Union of Right Forces” for “Yabloko”, but fails to place this (strictly ordered) couple within a line of other parties and entities. An impact of the external conditions (advertising, political sketches, etc.) is the second factor. This factor may manifest itself through the specific electoral technologies, ranging from activity of an entity’s double (or a person’s double) to the dissemination by a candidate of the negative information concerning himself, or herself. Such information may be not appreciated by the voters thus yielding a growth in the candidate’s rating.

Let’s now consider some results of the elections carried out on a party list system. The results are shown in charts, where the left axis represent a real rating of an entity, and the right one shows the deviation index between real and theoretically expected (3) rating observed for a completely indifferent choice. The excess of the index over 1 means that the entity gathered more ballots, than may be expected for a completely indifferent choice.

4.1 Elections of Legislative Assembly of Krasnoyarsk Krai, 2001

Figure 1 shows the results of elections of the Legislative Assembly of Krasnoyarsk Krai, which took place in 2001. The pattern in this figure is rather far from the one expected for the situation of completely indifferent choice. It

\[ \text{Index} = \frac{\text{Real Rating} - \text{Expected Rating}}{\text{Expected Rating}} \]

It should be stressed, we do not discuss the issue of a leadership in such line of entities.
looks very natural, since the elections were running in the highly polarized political situation, where two coalitions competed relentlessly for the seats in the Assembly. The extended markers point out the portion of “Against all entities” option. Following are the entities, as they are enumerated in the figure: 1 stands of “Ours!” coalition; 2 stands for coalition for Anatoly Bykov; 3 stands for “For Lebed!” coalition; 4 stands for the Communist party of the Russian Federation; 5 stands for “Medved” coalition; 6 stands for the Northern party; 7 stands for “Against all entities”; 8 stands for “Hope and buttress” coalition; 9 stands for Zubov’s coalition; 10 stands for “Communists and patriots of Krasnoyarsk motherland for the soviet power” coalition; 11 stands for Union of Right Forces; 12 stands for Liberal Democratic Party; and 13 stands for “Yabloko”.

Theoretically, if one cumulates the ballots gathered by two opposing coalitions (that are “Ours!” coalition Bykov’s coalition) into a single pool, then the deviation index (0, 94) becomes very close to 1. This fact shows that any splitting of political players under the strong electoral tension would yield a decrease of the ballot portion which might be gathered by a leader under the indifferent choice. Surprisingly, these elections show a non-monotonous behaviour of the deviation index.
4.2 State Duma elections

There were three elections to the State Duma since 1993. State Duma has been reinstated in 1993, just after the dismissal of the Supreme Council of the Russian Federation. Here we analyze the results of the elections of 1999 and 2003. Below are two lists of parties and associations, which had taken part at these elections; the entities are enumerated according to the ballot-paper.

There were 26 entities taking part in the elections of 1999: Conservative movement of Russia is number 1; Russian nationwide union is number 2; “Women of Russia” movement is number 3; Stalin block for USSR is number 4; “Yabloko” party is number 5; “Communists and work people for the Soviet Union” movement is number 6; “Peace. Labor. May.” movement is number 7; Block of Nikolaev and Fyodorov is number 8; “Intellectual heritage” national movement is number 9; Congress of Russian communes is number 10; Peace and Unity party is number 11; Russian party of women defense is number 12; Medved (later “United Russia” party) is number 13; “Social democrats” movement is number 14; Nationwide movement for the army support is number 15; Zhirinovsky block (later Liberal Democrats party) is number 16; “For civic dignity” movement is number 17; “Motherland – All Russia” is number 18; Communist party of Russian Federation is number 19; “Russian line” movement is number 20; All-Russian political party of peoples is number 21; Union of Right Forces is number 22; “Russia – our Motherland” is number 23; Socialist party of Russia is number 24; Party of pensioners is number 25; Russian socialistic party is number 26; and Against all entities option is number 27.

Twenty three entities took part in the elections of 2003: “Unity” movement is number 1; Union of Right Forces is number 2; Party of pensioners is number 3; “Yabloko” party is number 4; “For saint Russia” is number 5; Joint party “Russia” is number 6; “New line — Russia on Car” is number 7; Republican party is number 8; “Greenpeace” is number 9; Party of farmers is number 10; Real patriots of Russia is number 11; All-Russian political party of peoples is number 12; Party of constitutional democrats is number 13; “Great Russia – Euroasian Union” block is number 14; “SLON” party is number 15; “Fartherland” block is number 16; Peace and Unity party is number 17; Liberal Democrats party (former Zhirinovsky block) is number 18; Russian party of life is number 19; “United Russia” party (former Medved) is number 20; Democratic party of Russia is number 21; Party of business development is number 22; Communist party of Russian Federation is number 23, and finally, number 24 stands for Against all entities” option.

Both lists of parties look rather long and very pretentious. Twenty six and twenty three entities took part in the elections of 1999 and 2003, respectively. Only nine parties and associations had taken part in both elections, with
respect to the transformations and integrations of smaller entities. This pattern is an evidence of high instability of political entities in Russia. Probably two or three more entities from the list of the elections of 2003 could be derived from some entities from the list of the elections of 1999, while formally they seem to be independent.

4.2.1 Elections of 1999

Six parties had overcome the legislatively established threshold of 5% ballots, to be represented in the State Duma. The pattern of ballot distribution differs significantly from the one observed for the Legislative Assembly of Krasnoyarsk Krai elections (see above section 4.1). Figure 2 shows the results of the State Duma elections in 1999. A number in the horizontal axis in Figure 2 corresponds to the entities as they listed in a ballot and ranked in descending order with respect to the votes gathered by a party.

![Figure 2: State Duma elections of 1999. Left axis shows the party's rating, but the right one represents the deviation index between real and theoretical rating. The parties and entities are ranked according to the ballot; see details in the text.](image)

4.2.2 Elections of 2003

Figure 3 shows the results of the elections of 2003. The parties (or associations) in this figure are ranked in descending order according to their rating. Again, the enlarged label on the chart indicates the “Against all entities” option. This picture reveals a significant difference of the elections from those
Fig. 3. State Duma elections of 2003. Left axis shows the party’s rating, but the right one represents the deviation index between real and theoretical rating. The parties and entities are ranked according to the ballot; see details in the text.

of 1999. Firstly, those former show much more concordant pattern of the observed ballot distribution, than the theoretical one (see (3)). It means that these elections were running in a situation of significantly less definiteness, in comparison to the previous ones. Secondly, the deviation index exhibits a three-fold decay. Thirdly, a two-fold growth of the ballots given Against all entities is manifested. We believe that this manifestation corroborates the increased trend to vote “by guess-work”. These data show that all the minor entities that fail to pass 5% threshold nevertheless managed to pick up much greater number of ballots, in comparison to the situation of completely indifferent choice.

5 Discussion and Conclusion

Basic purpose of this paper is to develop a tool to classify electoral campaigns from the point of view of the rationality vs. irrationality of the voter’s choice. The key issue is the question of a definition of “equilibrium” or “indifferent” voting. That latter is the voting where a voter fails to figure out his (or her) rational arguments for choosing a specific candidate of a specific party from the list. We believe that the outcome of the elections under such circumstances should follow the proportion described by Fibonacci numbers (Vorob’ev, 1976).
One should distinguish such “by guess-work” voting from the really random one. That latter should be interpreted according to the probabilities theory. A voter fails to avoid a reflexive pattern in the behavior, so an indifferent choice would exhibit a bias in ballot distribution, among two options. The bias is defined by the golden section law. Such bias in preferences is peculiar for a human being, and constitutes a core feature of human psychology (Lefebvre, 1987b, 1995; Adams-Webber, 1996).

Any real electoral campaign would obviously differ from the indifferent choice situation. This fact is evident due to the behaviour of the deviation index which compares real rating and theoretically expected one (3). Roughly, one can compare any electoral campaign to the reference situation of the indifferent choice. There are two poles around this “zero point” pattern. The former is the situation of high mobilization of voters (voters become the supporters), and the latter is the situation of increased political (or electoral) tension. The mobilization is manifested through the strong leadership of a candidate, in comparison to the leadership with indifferent choice of voters. High electoral tension manifests through the closer ballots gathered by two competitors. Such proximity of ballots means an occurrence of practically equal pools of supporters of each contestant. Another reason of a discrepancy between golden section theory and real vote distribution is a diversity of people. We believe, the people differ among themselves, from the point of view of their attitude to political issues; it may result in permanent occurrence of a “tail” in the deviation index.

No one real electoral campaign could be considered as the indifferent choice situation. This latter is just a theoretical issue which introduces a reference point for the analysis of efficiency and public processes underlying the campaign. Evidently, the societies with developed democracies never meet the situation close to the indifferent choice. Probably, such pattern of public attitude to politicians and parties could be observed in transitional societies with lack of experience in democratic institutions. Nevertheless, both practitioners and researchers of that type of societies may capitalize on the campaign typifying developed above.

References

Adams-Webber, J., 1996. Comparing Self and Others in Fast Reflexion. Intern. J. of Psychology, 31, 319.
Lefebvre, V.A., 1980. An Algebraic Model of Ethical Cognition. J. of Math. Psychology. 22, 83–120.
Lefebvre, V.A., 1987a. The Fundamental Structures of Human Reflexion. J. of Social & Biological Structures. 10, 129–175.
Lefebvre, V.A., 1987. The Fundamental Structures of Human Reflexion. J.of Social & Biological Structures, 10, 129–175.
Lefebvre, V.A., 1995. The Anthropic Principle in Psychology and Human Choice. PSYCOLOQUY, 6, 29.
Lefebvre, V.A., Smolyan L.G., 1975. Conflicting structures. Soviet radio, Moscow.
Vorobyev, N.N. 1976. Fibonacci numbers. Nauka, Moscow.