# THE IMPERIAL COUNCIL ELECTIONS IN 1907: GERRYMANDERING IN BOHEMIA?

M. Fňukal<sup>1</sup>

Department of Geography, Natural Science Faculty, Palacký university, Olomouc, Svobody 26, 771 46 Olomouc, Czech Republic - <a href="mailto:fnukal@prfnw.upol.cz">fnukal@prfnw.upol.cz</a> Head of Department: Ass. Prof. Dr. Miroslav Vysoudil

Received: March 1, 2004, accepted April 1, 2004

#### **Abstract**

The paper deals with the electoral system used in Bohemia in 1907 for the House of Deputies of the Imperial Council. The aim of this study is to determine whether gerrymandering or malapportionment was intentionally used in defining the constituencies, and, if so, how it influenced the results of the elections (especially results of Czech social democracy).

**KEY WORDS:** gerrymandering, malapportionment, Bohemia, 1907 elections, Austrian Parliament

# 1. GERRYMANDERING AND MALAPPORTIONMENT

Election results can be – in addition to other factors – influenced by the method of defining constituencies BUTLER - CAIN (1992), KOSTELECKÝ (2000). Generally, there are two types of manipulations of constituencies leading to deformations of the voters' will: malapportionment and gerrymandering. In the Czech literature, both manipulation methods are generally labelled as electoral geometry ("volební geometrie", KREJČÍ (1994).

Malapportionment is the intentional influence of election results by an unequal size of constituencies. With malapportionment there is discrimination against voters in larger constituencies, as a higher number of votes is necessary for winning the seat than in smaller constituencies. Malapportionment often appears together with a majority electoral system, where it is easy to identify it, but it can also be found in systems of proportional representation. It can be used for discrimination against a certain political party or ideology. It is considered legitimate only in those cases when it helps to align the representation of members of federations or unions<sup>1</sup>, or ensures the representation of minorities<sup>2</sup>.

Gerrymandering does not refer to a manipulation of the constituency size, but of its borders. Gerrymandering means that the borders of a constituency are delineated in such a way that one party is discriminated against in favour of another party when calculated as votes per seat. Gerrymandering can be largely used in the majority electoral system with one-seat electoral constituencies, where it can essentially influence the number of elected representatives of particular parties. With the increase of the proportional elements of the electoral system, the possibility of affecting the election results by the territorial delineation of constituencies is significantly reduced, but not entirely eliminated. Gerrymandering is motivated by the effort to privilege one political party/group against another either with the goal of maximizing its representation and simultaneously minimizing the representation of the opposition in the elected body, or of ensuring the representation of groups that would not have any

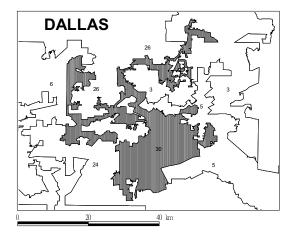


Figure 1. Affirmative racial gerrymandering (Afro-American 30th Congress District of Texas, 1992, data source: U.S. Census Bureau)

chance to get elected unless gerrymandering were used (American "affirmative racial gerrymandering", see Fig. 1).

According to POWEL (2004), main techniques of gerrymandering are:

1) Stuffing most of one party's voters into as few districts as possible ("packing")

- 2) Dispersing blocs of one party's voters into several districts so that they become a harmless minority ("cracking")
- 3) Drawing district lines so that two incumbents from the same party must now run against each other ("kidnapping").

The first two classical techniques of gerrymandering are practically described in every work dealing with this issue. "Kidnapping" is a complementary technique used in the U.S.A., where the relationship between deputies and their constituency is very strong. The basic methods of gerrymandering are presented in Fig. 2.

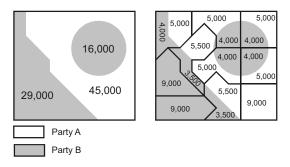


Figure 2. The basic techniques of gerrymandering (own instructive material)

Voters are evenly distributed within the area, but the supporters of parties A and B are territorially separated. The total number of voters is 90,000; the numbers of voters of party A and B are balanced. All constituencies have the same number of voters, party A has absolute majority in 8 constituencies, party B in 2. "Packing" was used to eliminate the southwest concentration of voters of party B; "cracking" eliminated the northwest concentration of voters.

Gerrymandering is possible only if the following two conditions are simultaneously met: one of the parties must, unlike the others, have control over the delineation of constituencies and the voters of particular parties must be unevenly distributed within the given territory (failing that, the election result does not depend on the distribution of constituencies).

"Invented" at the beginning of the 19<sup>th</sup> century, gerrymandering has a long-term tradition, especially in the U.S.A. The attempts to find mechanisms to stop it arose only a couple of years later. There are two possible methods for the regulation of gerrymandering: to eliminate the delineation of constituencies from the powers of executive branch (i.e. from the influence of the parties presently in power), or to set exact and controllable regulations for defining the constituencies in order to prevent

any manipulations (KOSTELECKÝ (2000)). The former method was applied, for example, in the United Kingdom<sup>3</sup>, the latter, with disputable success, was adopted by the United States.

The issue of regulating the delineation of constituencies in the United States is analyzed below; a failure to maintain the regulations can be a symptom (but obviously not evidence) of gerrymandering. The regulations are not embodied in a law, but they have gradually developed according to decisions of the Supreme Court in particular controversial cases. Kostelecký (2000) divides them into three categories: constitutional, political-geographic and political criteria.

The constitutional criteria of the delineation of constituencies (in accordance with the U.S. Constitution) – include the requirement of equal population size of constituencies (malapportionment is prohibited), i.e. the requirement of, if possible, a balanced number of inhabitants within individual constituencies. In elections for the U.S. Congress, the permissible deviation from the average within one state is 2%. Similar regulations are common in other countries, permissible deviations are higher: e.g. in the United Kingdom, the maximum ratio of number of voters in the largest constituency and the smallest constituency is 1.25:1 (KOSTELECKÝ (1993)), in the Czech Republic (Senate) the maximum permissible deviation of the number of inhabitants of the constituency from the average is 15%<sup>4</sup> (i.e. the ratio of the largest constituency and the smallest constituency is 1.35: 1). Another constitutional criterion applied in the U.S. is the rather controversial requirement of equal probability of representation for various racial or language minorities that is practically applied only in the case of disadvantaged minorities.

The political-geographical criteria of delineation call for the application of the principle of representation of political units. For better voter awareness concerning the constituency, the constituencies should, at the maximum extent, correspond with the existing political units (counties, states) and for logistic reasons, the constituencies' delineation should to the maximum possible extent respect the borders of the existing administrative unit.

Political criteria of delineation especially include the recommendation not to make changes to the constituency borders too often, and if changes are necessary, they should not be too radical. It is not recommended to establish too many constituencies with equal chances for various political parties. Political criteria should help to avoid undue unpredictability of election results and the dependence of the results on small fluctuations in electoral support.

## 2. THE IMPERIAL COUNCIL ELECTIONS IN 1907

The elections to the House of Deputies of the Imperial Council that were held in May 1907 were the first elections to the Austrian Parliament conducted on the basis of the universal suffrage. The issue of the electoral system was one of the thorny problems for the country at the beginning of the 20<sup>th</sup> century. The existing electoral system to the Central Parliament as well as to the provincial assemblies had been based on unequal and limited suffrage, reflecting the idea that the individual political interests should be represented in accordance with the weight of the contribution that is brought by the representatives of these interests for maintaining and development of the state (KREJČÍ (1994)). The central Austrian Parliament consisted of two chambers: the House of Deputies (Abgeordnetenhaus / Poslanecká sněmovna) and the Upper House (Herrenhaus / Panská sněmovna). The Upper House consisted of major princes of the Imperial House, hereditary members from the upper aristocratic classes and members appointed by the Emperor, the number of members was not stable. The House of Deputies consisted of 425 members and it was elected in accordance with the estate principle. The landowners elected 85 deputies, municipalities and industrial centers elected 118 deputies, villages had 129 deputies, the commerce and trade chamber elected 21 deputies, and the remaining 72 deputies were elected by all adult men older than 24 years (so called general electoral curia). The suffrage was plural (citizens can belong to several estates) and unequal.

At the end of 1905, the Austrian Council of Ministers (Cabinet) decided to accept the growing demands for the introduction of equal, universal suffrage. At its session on 23<sup>rd</sup> November 1905, it settled on the basic principles of the reform, including the majority electoral system. Balanced (not equal) representation of particular nations in the Parliament should have been ensured by small constituencies delineated with respect to national borders. In allocating the seats, the tax yield and cultural importance should have been taken into account instead of the number inhabitants in order to "reinforce the national structures" (TOBOLKA (1936)).

On 23<sup>rd</sup> February 1906, the Cabinet submitted the particular bills in the Parliament. The proposal was negotiated by the Parliamentary Committee, which worked from 23<sup>rd</sup> March 1906 until 29<sup>th</sup> October 1906. Discussion of political parties naturally focused on proportional representation of individual nations in the Parliament. Another point of controversy was the issue of the possible division of constituencies into rural and urban. This division had a

long tradition in Austria and political parties focused on rural populations (agrarians, clericals) had a strong position in policy and were afraid of the urban population gaining a majority. Therefore they demanded a political compromise that divided constituencies into rural and urban. Furthermore, the issue of the election law was intentionally linked with other political problems concerning the Czechs, for example with the internal official language in Bohemia, a Czech university in Moravia, etc.

The major point of the controversy was obviously the issue of allocating the seats. The inability to find a feasible solution caused a demission of the Cabinet in two cases (Paul Freiherr Gautsch von Frankenthurn – 30<sup>th</sup> April 1906, Konrad Prinz von Hohenlohe-Waldenburg-Schillingsfürst – 28<sup>th</sup> May 1906); the final success of negotiations was achieved by the Cabinet of Max Wladimir Freiherr von Beck.

Table 1. Proposals of dividing seats of the House of Deputies

	Proposals of dividing seats of the House of Deputies					
	Feb. 1906 (Gautsch)	May 1906 (Hohenlohe)	Jun 1906 (Beck)			
total	455	495	516			
Bohemia	118	122	130			
Czech: German ratio	70:48 72:50 75:55					

Source: TOBOLKA (1936)

The proposals negotiated in the Parliament, despite the strong protests of the Czech political parties, gradually decreased the ratio of the Czech seats in Bohemia (from 59.3% to 59.0% and finally to 57.7% - see Tab. 1), although the "furthest acceptable" limit acceptable by the Young Czechs (mladočeši / Jungčechen, leading Czech political party) was 60% (i.e. 78 Czech seats), and the Czech National Socialistic Party required even 62.5% (TOBOLKA (1936)).

The turning point of the negotiations came on 21<sup>st</sup> July 1906, when the Parliamentary Committee adopted dividing the Czech seats between the Czechs and Germans in a ratio of 75:55. It was not a compromise – both the representatives of the Czech political parties and Czech Germans voted against it – the proposal was adopted due to the votes of other countries. The Czechs did not agree with the disproportional representation of individual nations that did not correspond with the ratio of their populations determined by the census. Germans unsuccessfully attempted to gain German seats for Prague, Budějovice / Budweis and Plzeň /

Pilsen. On the same day, 21st July 1906, the division of constituencies between urban and rural was adopted and the Czech parties settled an agreement concerning their number (33 urban and 42 rural Czech constituencies in Bohemia). After 21st July rather technical issues were negotiated, and on 1st December 1906, the electoral law was adopted in the House of Deputies (194 yes votes / 63 no votes). The final version of the law did not meet general acceptance. However, the majority of Czech deputies voted for the law, as stated by TOBOLKA (1936): "neither of the Czech parties had wished the electoral amendment to come to naught, as they were aware of the fact that this electoral remedy would bring them more political powers." The procedure for the vote of approval continued in the Upper House and was crowned by the approval of the Emperor Franz Joseph I on 26<sup>th</sup> January 1907. The laws came into force by the day of the dissolution of the Parliament on 31st January 1907 as follows:

- 1. Law no. 15/1907<sup>5</sup> increased the total number of members of the House of Deputies to 516 and allocated the seats among the countries and also extended the active equal suffrage to all Austrian male citizens older than 24 years (with the condition of having stayed in the municipality where the election took place for at least for one year), passive from 30 years of age (with the condition of having had Austrian citizenship for at least three years);
- 2. Law no. 16/1907<sup>6</sup> established so called numerus clausus in the Upper House (number of appointed members could not exceed 170 nor drop below 150).
- 3. Law No. 17/1907<sup>7</sup> contained the electoral regulations themselves including the delineation of the constituencies and regulations excluding some people from the elections (professional soldiers, insane people, people under public assistance or convicted for criminal activities),
- 4. Law No. 18/1907<sup>8</sup> established a criminal sanction for the obstruction of the free course of elections.

After the Reform, the House of Deputies had 516 members from 480 constituencies elected by the majority system. One deputy was elected in 444 constituencies; two deputies were elected in 36 constituencies. In one-seat constituencies, it was necessary to win the absolute majority of collected, valid votes. If none of candidates managed to gain an absolute majority, the two most successful candidates in the first round of elections qualified for a second round where the candidate with the highest number of votes was elected. In two-seat constitu-

encies, the two most successful candidates were elected in the first round provided the first won more than 50% of the vote and the second at least 25% of vote. Otherwise the elections continued to the second round where various procedures were applied in accordance with the ratio of votes for the first two candidates.

The constituencies were primarily delineated according to the language of the inhabitants, but there were three different practical approaches for individual countries:

- 1) in the majority of countries, the constituencies were delineated in accordance with the national borders and typically the individual constituencies were nationally homogenous,
- 2) in Moravia, this model of elections to the Provincial Assembly (see MALÍŘ (1906)) was adopted: voters were divided into electoral groups according to their nationality and the whole territory of Moravia was divided into separate constituencies for each nationality (each municipality belonged to one Czech constituency and to another German constituency)
- 3) In Galicia, the rural constituencies were comprised of two seats; the nationality of the elected deputies partially reflected the national conditions of the particular constituency (2 Poles, a Pole and a Ukrainian, 2 Ukrainians)

### 3. BOHEMIA: MALAPPORTIONMENT?

As mentioned above, Bohemia was divided into 130 constituencies of which 75 were comprised of Czech majority and 55 of German majority<sup>9</sup>. The delineation of borders between Czech and German constituencies was carried out at the municipal level. For the first time in Czech history, the designated "Czech / German political dependency" (thus HAVLÍČEK (1910)) in Bohemia, or Czech Bohemia (České Čechy / Tschechischböhmen) and German Bohemia (Německé Čechy / Deutschböhmen)<sup>10</sup> were precisely defined as far as territory was concerned. For simplification, we will denote the territory of the Czech constituencies as Bohemia A, and the territory of the German constituencies as Bohemia B. Naturally, their border in 1907 was very similar to other attempts at a national division of the country that have appeared since 1880 (the effort to divide Bohemia into nationally homogenous regions in 1918, attempts of German provinces to split when Czechoslovakia was established, etc.).

The borders of Bohemia A and Bohemia B were delineated in a very tactful way, individual municipalities were ranked according to the nationality of the majority (unless otherwise stated, all population data in this paper refer to the census of 1900, data on voters refers to the elections of 1907). However,

real number of Czechs and Germans (82:48), not even with the ratio of the number of inhabitants (81:49), the number of Austrian citizens (81:49), or the number of voters in 1907 (80: 50). If the Czechs were to win 82 seats in accordance with the number of inhabitants, then 1 seat was lost due to the ap-

Table 2. The development of the national structure of Bohemia A and Bohemia B (1900 – 1921)

	area	Number			%			theoretical division of 130 seats, ratio:		
census		citizens*)	therefrom		Czechs	Ger-	other	Bohemia A	Czechs /	
			Czechs	Germans	other	Czeciis	mans	other	/ Bohemia B	Germans
1900	Bohemia A	3,918,669	3,828,118	87,715	2,836	97.69	2.24	0.07	81:49	82:48
	Bohemia B	2,352,336	101,975	2,249,294	1,067	4.33	95.62	0.05	1	
	Bohemia	6,271,005	3,930,093	2,337,009	3,903	62.67	37.27	0.06		
1910	Bohemia A	4,194,208	4,097,270	94,617	2,321	97.69	2.25	0.06	81:49	82:48
	Bohemia B	2,518,566	144,648	2,372,937	981	5.74	94.22	0.04		
	Bohemia	6,712,774	4,241,918	2,467,554	3,302	63.19	36.76	0.05		
1921	Bohemia A	4,172,005	4,086,380	70,344	15,281	97.95	1.69	0.36	83:47	87:43
	Bohemia B	2,395,592	289,603	2,100,492	5,497	12.09	87.68	0.23		
	other**)	9,228	6,805	2,403	20	73.74	26.04	0.22	-	-
	Bohemia	6,576,825	4,382,788	2,173,239	20,798	65.70	32.58	1.72	-	-

<sup>\*) 1900, 1910:</sup> Austrian citizens, 1921: Czechoslovak citizens

some exceptions appeared: on the whole, 70 villages and towns became parts of constituencies with the opposite national character<sup>12</sup>. These municipalities included small settlements of mixed villages (in this case, the goal of maintaining ..national propriety" was subordinated to the principle of not dividing municipalities), other cases included 19 municipalities with a slight Czech majority where the local authorities were probably under German control. This case mostly involved rapidly growing industrial centers in the region of Most (5 municipalities, but 19,517 inhabitants on the whole, i.e. 63,24 % of the inhabitants of "incorrectly ranked" Czech settlements)<sup>13</sup>. The failure to respect the national majority in dozens of settlements slightly privileged the German side, but it did not cause the difference between the theoretical ratio of seats converted in accordance with the number of Austrian citizens living in Bohemia A and Bohemia B (81:49) and the ratio of Czechs and Germans within Bohemia's population (82:48). Even if the national structure of municipalities and settlements were consistently respected, the first ratio would not have been changed. The difference of one seat was caused by smaller national homogeneity of Bohemia B, which was continually gradually decreasing (see Tab. 2).

While the delineation of the Czech-German border was basically correct and it did not cause any substantial discrimination against Czech voters, the division of 130 seats between Bohemia A and Bohemia B in the ratio 75:55, which was a result of political decision that did not correspond with the

plied election system, and 1 seat was lost due to the lower ratio of voters (different age structure and probably a higher ratio of people excluded from the suffrage), and another 5 seats were lost due to the political decision.

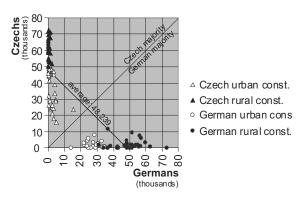


Figure 3. National composition of constituencies (Bohemia, 1907 elections, 1900 census<sup>14</sup>)

Naturally, the political manipulation influenced the size of the Czech and German constituencies. In average, 48,239 citizens were apportioned to one seat, the average German constituency was 18.14% smaller than the average Czech constituency. The differences in size of rural and urban constituencies were even greater: smaller urban constituencies were weaker in population than rural constituencies by 35.18% in Bohemia A and by 42.30% in Bohemia B (see Tab. 3, Fig. 3). Naturally, these two

<sup>\*\*)</sup> small corner of the Upper Austrian district of Gmünd that was ceded to post-1919 Czechoslovakia own research<sup>11</sup>

cases of inequality influenced the election results in favour of the German parties at the expense of the Czech parties (the above mentioned shift of 5 seats) and even more substantially privileged urban areas against rural (a shift of 8 seats in Bohemia A, and 7 in Bohemia B).

The large range of the size of the constituencies arouses suspicion that malapportionment was applied not only in the proportion of nationality (Czech-German) and estate (urban-rural) — with all the subsequent deformations of the election results, but also of political parties (some political parties within the same nationality and estate group were disadvantaged in favour of others). Considering the fact that we do not have detailed demographic statistics of constituencies for the period in question,

tion of Young Czechs and Old Czechs (Staročeši / Altčechen) and Czech state democracy (the majority of urban voters), the disadvantage of agrarians and clericals (clear superiority among rural voters), the neutral position of social democracy (practically equal support in both urban and rural constituencies).

#### 4. BOHEMIA: GERRYMANDERING?

Unlike malapportionment, gerrymandering is difficult to prove. As the results of elections in municipalities are missing, we can only examine the election results in constituencies or use indirect methods ("suspicious" forms of constituencies, "suspicious" neighbourhoods). This method allows us to

area	area	citizens	voters	seats	citizens per	
	(km <sup>2</sup> )	(1900)	(1907)		seat	
Bohemia A – urban	2,065	1,313,648	287,747	33	39,808	
Bohemia A – rural	30,395	2,605,021	561,466	42	62,024	
Bohemia B – urban	1,314	618,087	135,948	21	29,433	
Bohemia B – rural	18,173	1,734,249	390,664	34	51,007	
Bohemia A	32,460	3,918,669	849,213	75	42,770	
Bohemia B	19,487	2,352,336	526,612	55	52,249	
Bohemia	51,927	6,271,005	1,375,825	130	48,239	

Table 3. The differences in size of constituencies<sup>15</sup>

we can only analyze the election results. We will restrict ourselves to Czech constituencies (limited area and less complicated political spectrum).

The extent of privilege for individual political parties can be calculated by a comparison of the number of votes won with the number of votes that would have been sufficient for the party for the same result even if the malapportionment had not been applied<sup>16</sup>, as follows:

$$A_i' = \frac{X}{n} \cdot \sum_{j=1}^n \frac{A_{ij}}{X_j}$$

where  $A_{ij}$  is the number of votes for party  $A_{i}$  in the  $j^{th}$  constituency,  $X_j$  is the total number of votes in the j<sup>th</sup> constituency, and n is number of constituencies. By comparing the actual number of votes won by A<sub>i</sub> with A<sub>i</sub> we can determine the extent of privilege / discrimination of the party as a result of malapportionment. The calculated results are stated in Table 4 – and they are not very conclusive. If we set aside parties that nominated their candidates in only a few constituencies, we can observe a slight discrimination of social democracy (in urban constituencies). The values are much higher if we use the same procedure for quantification of the estate malapportionment (urban-rural) - however, the results reflect the ratio of urban and rural voters of a particular party: the privilege of the electoral coalirule out gerrymandering (if the adverse effects did not appear), but not to prove it (coincident characteristics can appear accidentally – or due to other factors). As in our examination of malapportionment, we will restrict ourselves to Czech constituencies.

The basic consequence of gerrymandering is the disadvantage of a party. Social democracy is mentioned in literature in this context. The idea of discrimination against social democracy by the electoral regulations (TOBOLKA (1936): "the electoral regulations were developed in order to face the social democratic flood") is probably based on the relatively significant difference between the ratio of votes in the first round of elections (in Bohemia A 38.68%) and the number of seats won (17, i.e. 22.67%), which is particularly obvious in comparison with the coalition between Young Czechs and Old Czechs (the same number of seats for one third of the votes) and agrarians (more seats, but half the number of votes).

If we concede gerrymandering within the social democracy, the following partial list of effects should occur:

1) within the distribution of electoral support, there should be a several constituencies with a significantly above-average ratio of votes (consequence of "packing"), and, on the other hand, the number of constituencies with the result slightly lower than 50 % should be also suspiciously high (consequence of "cracking"). However, this effect is not easy to detect – see Fig. 4.

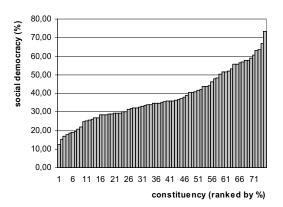


Figure 4. Social democracy: 1907 Election results by constituency (Bohemia A, 1st round) 17

- 2) constituencies with an "unusual form" should correspond to the group of constituencies mentioned in paragraph 1. It is a fact that a number of constituencies are "suspicious" considering their form, some constituencies are assembled from several non-contiguous territories (see Fig. 5), some constituencies have a very curious shape, but these cases appear exclusively in the area along the border of Bohemia A and Bohemia B (the reason for the unnatural shapes of the constituencies' borders is obvious) and urban constituencies.
- 3) the theoretical relationship between the total number of votes garnered by a political party and the number of seats gained should not reflect the reality.

KOSTELECKÝ (2000) states that results of elections under the majority election system can be considered natural and undistorted if the relationship between the total number of votes garnered by a political party and the number of seats gained is ruled by the cube law, i.e.:

$$\frac{a_1}{a_2} = \frac{A_1^3}{A_2^3}$$

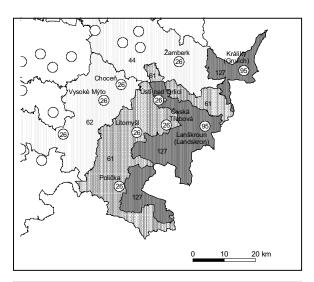
where a is the number of seats won by party A (the number of first places won in the first round in majority systems with an absolute majority), A is the total number of votes won by party A etc. The cube law relatively precisely reflects the situation in the United Kingdom, but it is obvious that the extent of "majority effect" must also depend on the distribution of support for political parties within the area. If only two parties took place in elections

and their supporters were distributed absolutely equally, the victorious party could win all seats. On the contrary, if they were clearly separated and the constituencies' borders would respect this fact, the ratio of seats would be the same as that of votes. Then, the cube law is a practical interpretation of the relationship:

$$\frac{a_1}{a_2} = \frac{A_1^{\gamma}}{A_2^{\gamma}}$$

where  $\gamma \ge 1$ , while  $\gamma = 1$  in the case when voters are territorially separated and their concentration in the area is decreasing with the rising ratio. Then, the ideal number of seats of a particular party is:

$$a_i = \frac{A_i^{\gamma}}{\sum_{i=1}^p A_i^{\gamma}} \cdot n$$



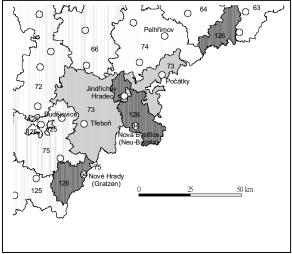


Figure 5. Constituencies No. 61, 73, 126, and 127 (1907 elections)<sup>18</sup>

where n is the number of seats and p is the number of political parties that took part in the elections. As the result would be deformed by massive malapportionment, we will apply this pattern not on the real number of votes for individual political parties  $(A_i)$ , but instead on the votes adjusted for the influence of malapportionment  $(A_i)$ :

$$a_i' = \frac{A_i'^{\gamma}}{\sum_{i=1}^p A_i'^{\gamma}} \cdot n$$

For our calculations, we let  $\gamma=1.5$  (as the value that experimentally brought the most expected results and without the effort of discussing the issue of theoretical substantiation – which has been extensively carried out, for example by MALONEY – PEARSON – PICKERING (2001)). The results of the calculations are presented in Table 4. Theoretical numbers of first positions in the first round correspond with the real results so closely (correlation in urban constituencies is +0.9968, in rural +0.9761)

that we can state that (regarding paragraphs 1 and 2) gerrymandering was not used in the delineation of constituencies. The substantial disproportion between the number of seats and the electoral support of social democracy would not have occurred if the elections had been organized in a one-round system. In the first round, social democrats won in 32 constituencies – in 17 with an absolute majority. In 38 constituencies they advanced to the second round but failed to win any seats. In these 38 constituencies they won 132,094 votes in the first round. In the second round, they slightly increased their electoral gains to 141,149 votes. The poor ratio of votes won in the first round and the final number of seats was not caused by an unfair election system (the irony is that this system was least advantageous for the victorious agrarian party), but by the plain fact that the program of social democracy was not acceptable for the majority of voters. The results of calculations of ai may indicate a slight gerrymandering effect in the division of constituencies into rural and urban. However, this result is logical: social democrats have different rivals in rural and urban areas. Under normal conditions,

Table 4. Malapportionment in Bohemia (1907 elections)

patry / group	Ai	candidates	won seats	Ai <sup>/</sup>	Effect of malapportionment		ai	ai <sup>/</sup>
					Ai' - Ai	%		
Constituencies No. 1 – 33 (urba	n, Czech):							
social democracy	91,731	33	7	87,109	-4,622	-5.04	14	14.8
agrarians	0	0	0	0	0	0.00	0	0.0
Young Czechs + Old Czechs	64,960	31	17	67,864	2,904	4.47	11	10.2
Czech state democracy	54,827	33	8	53,174	-1,653	-3.02	7	7.0
clericals	5,646	20	0	6,116	470	8.32	0	0.3
realists	3,406	4	1	2,947	-459	-13.48	0	0.1
independent candidates	3,174	5	0	3,417	243	7.64	0	0.1
German candidates	6,192	16	0	9,191	2,999	48.43	1	0.5
write-in candidates	1,043	1		1,162	119	11.43	0	0.0
in total	230,979		33	230,979	0	0	33	33
Constituencies No. 34 – 75 (rura	al, Czech):							
social democracy	186,382	42	10	184,822	-1,560	-0.84	18	19.2
agrarians	154,331	43	23	155,827	1,496	0.97	13	14.9
Young Czechs + Old Czechs	23,651	29	0	23,989	338	1.43	0	0.9
Czech state democracy	34,724	26	1	33,642	-1,082	-3.12	1	1.5
clericals	77,873	35	7	78,619	746	0.96	9	5.3
realists	2,727	5	0	2,527	-200	-7.33	1	0.1
independent candidates	5,898	3	1	6,154	256	4.35	0	0.0
German candidates	286	3	0	256	-30	-10.53	0	0.0
write-in candidates	2,161	ı		2,198	37	1.70	0	0.0
in total	488,033		42	488,033	0	0	42	42
Constituencies No. 1 – 75 (Czec	ch):							
social democracy	278,113	75	17	271,796	-6,317	-2.27	32	37.9
agrarians	154,331	43	23	128,563	-25,768	-16.70	13	12.3
Young Czechs + Old Czechs	88,611	60	17	112,742	24,131	27.23	11	10.1
Czech state democracy	89,551	59	9	100,587	11,036	12.32	8	8.5
clericals	83,519	55	7	73,241	-10,278	-12.31	9	5.3
realists	9,072	8	1	9,757	685	7.55	1	0.3
independent candidates	6,133	9	1	6,121	-12	-0.19	0	0.1
German candidates	6,478	19	0	12,799	6,321	97.58	1	0.4
write-in candidates	3,204	-	0	3,405	201	6.27	0	0.1
in total	719,012	0	75	719,012	0	0	75	75

own research<sup>18</sup>

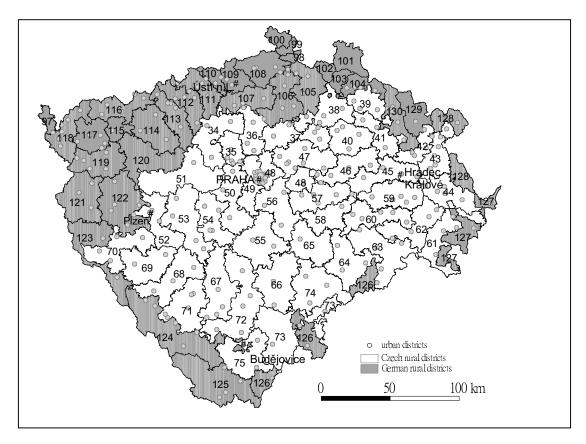


Figure 6 Rural constituencies in Bohemia  $(1907)^{18}$ 

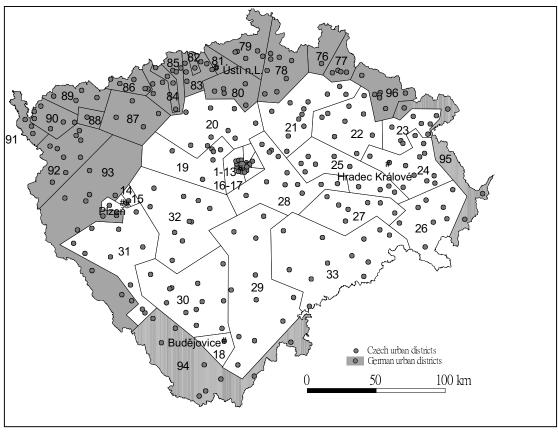


Figure 7 Urban constituencies in Bohemia  $(1907)^{18}$ 

these rivals would have competed which each other, which could have increased the chances of social democracy to win in the first round, but in the second round this effect would probably have lost its importance and any increasing in the number of seats is not probable.

#### 5. CONCLUSION

In conclusion, we can state that, in the elections in 1907, malapportionment was extensively used in favour of urban inhabitants and, to a lesser extent, in favour of Germans. This privileged the German parties and parties with better support in urban areas, however no malapportionment or gerrymandering was applied in favour of a particular political party. This helped to fulfill the original intention of lawmakers, which was to reinforce the "national structures" – these elements were identified with the German nation and urban inhabitants, not with a particular political party or ideology.

#### 6. SOUHRN

### VOLBY ŘÍŠSKÉ RADY V ROCE 1907: GERRYMANDERING V ČECHÁCH?

Při volbách v roce 1907 byl celkem masivně použit malapportionment ve prospěch městského obyvatelstva a v menší míře ve prospěch Němců. To objektivně zvýhodnilo německé strany a strany mající větší podporu ve městech, nebyl však uplatněn malapportionment či gerrymandering ve prospěch nějaké konkrétní politické strany. Tím byl vlastně naplněn původní záměr zákonodárců preferovat "složky udržující stát" – tyto složky byly identifikovány s německým národem a městským obyvatelstvem, ne ale s konkrétní politickou stranou nebo ideologií.

#### 7. REFERENCES

BUTLER, D., CAIN, B. (1992): Congressional redistricting: comparative and theoretical perspectives. Macmillan Pub. Co., New York, 182 p. CABADA, L. (2000): Český stranický systém 1890-1939. Západočeská univerzita, Plzeň, 100 p. Die Ergebnisse der Reichsratswahlen in der Im Reichsrate vertretenen Königreichen und Ländern im Jahre 1907. Österreichische Statistik LXXXIV. Band, 2. Heft., Bureau der K. K. statistischen Zentralkommission, Wien, 1908

Gemeindelexikon der im Reichsrate vertretenen Königreiche und Länder bearbeitet auf Grund der Ergebnisse der Volkszählung vom 31. Dezember 1900. IX. Böhmen. K. k. Statistische Zentralkommission, Wien, 1905.

HAVLÍČEK, R. (1910): Politická država Němců a Čechů v jižních Čechách. IN: Masaryk, T. G. (ed.): Naše doba. Revue pro vědu, uměni a život sociální. XVII., p. 720 - 726, 809 – 816.

HAVRÁNEK, J. (1980): Pražští voliči roku 1907, jejich třídní složení a politické smýšlení. IN: Pražský sborník historický. Archív hlavního města Prahy, Praha, p. 170 – 212.

KOSTELECKÝ, T. (2000): Volební systémy a politický konflikt v prostoru (Klasifikace volebních systémů, jejich geografické implikace a politické souvislosti). IN: Jehlička, P., Tomeš, J., Daněk, P. (ed.): Stát, prostor, politika. Vybrané otázky politické geografie. Univerzita Karlova, Praha, p. 242 – 262.

Kostelecký, T. (1993): Volby očima geografa. IN: Sýkora, L. (ed.): Teoretické přístupy a vybrané problémy v současné geografii. Univerzita Karlova, Praha, p. 167 – 186.

KREJČÍ, O. (1994): Kniha o volbách. Victoria Pubishing, a.s., Praha, 353 p.

MALÍŘ, J. (1906): O volebním řádu zemského sněmu Moravského. IN: Chytil, A.: Volební mapa Moravy dle volebního řádu z roku 1905, Chytil, Zábřeh, p. 1 – 20.

MALONEY, J. – PEARSON, B. – PICKERING, A. (2001): Behind the Cube Rule: Implications of and Evidence against a Fractal Ectoral Gography. Discussion Papers in Economics 01/03, Department of Economics, School of Business and Economiscs, Exeter [online], last revision 22 June 2001 [cit. 2004-03-05].

<a href="http://www.ex.ac.uk/~BPearson/sobe/Research/DiscussionPapersEcon/Econ2001/Econ0103.pdf">http://www.ex.ac.uk/~BPearson/sobe/Research/DiscussionPapersEcon/Econ2001/Econ0103.pdf</a> MALÝ, K. (1993): Dějiny státu a práva v českých zemích a na Slovensku: Do r. 1918. Jinočany, H & H, 533 p.

POWEL, B.A. (2004): Berkeley experts weigh whether the Supreme Court will curtail election gerrymandering — and if it should. UC Berkeley News, 15 January 2004 [online], last revision 15 January 2004 [cit. 2004-03-05].

<http://www.berkeley.edu/news/media/releases/200 4/01/15 cain.shtml>

TOBOLKA, Z. (1936): Politické dějiny československého národa od r. 1848 až do dnešní doby. Díl III. 1879 – 1914. Československý kompas, tiskařská a vydavatelská akc. spol., Praha, 637 p.

#### 8. NOTES

<sup>1</sup> United States Senate, European Parliament, etc. <sup>2</sup> Slovenian National Assembly, Croatian Parliament (Sabor), etc.

<sup>3</sup> Delineation of constituencies is in the hands of "advisory non-departmental public bodies funded by Office of the Deputy Prime Minister" (Boundary Commission for England, Boundary Commission for Scotland, Boundary Commission for Wales / Comisiwn Ffiniau i Gymru, Boundary Commission for Northern Ireland) that must observe a number of rules that should minimize all, including even potential, possibilities of manipulation - *Rules for Redistribution of Seats*, Newsletter No.1 of 2000 Issued 22 February 2000, Boundary Commission for England [online]. 2000, last revision 1 January 2001 [cit. 2004-03-02].

<http://www.statistics.gov.uk/pbc/bcnews1a-00.asp>
§ 59 article 2, Zákon č. 247/1995 Sb., o volbách do Parlamentu České republiky a o změně a doplnění některých dalších zákonů. Sbírka zákonů, č. 65, 1995, str. 3529
Gesetz vom 26. Jänner 1907, wodurch die §§ 1, 6, 7, 12 und 18 des Grundgesetzes über die Reichsvertretung vom 21. Dezember 1867, R. G. Bl. Nr, 141, beziehungsweife die Gesetze vom 2. April 1873, R. G. Bl. Nr. 40, vom 12. November 1886, R. G. Bl. Nr. 162, und vom 14. Juni 1896, R. G. Bl. Nr. 168. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, IX. Stück (30. Jänner 1907), p. 57
Gesetz vom 26. Jänner 1907, wodurch der § 5 des Grundgesetzes über die Reichsvertretung vom 21. Dezember 1867 abgeändert wird. Reichsgesetzblatt für die im Reichspate vertretenen Königreiche und Länder.

Dezember 1867 abgeändert wird. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, IX. Stück (30. Jänner 1907), p. 59

<sup>7</sup> Gesetz vom 26. Jänner 1907, betreffend die Wahl der Mitglieder des Abgeordnetenhauses des Reichsrates. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, IX. Stück (30. Jänner 1907), p. 59

<sup>8</sup> Gesetz vom 26. Jänner 1907, betreffend strafrechtliche Bestimmungen zum Schutze der Wahl- und Versammlungsfreiheit. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, X. Stück (30. Jänner 1907), p. 109 <sup>9</sup> in the election law: "Die Wahlbezirke mit überwiegend

böhmischer / deutscher Bevölkerung" - Gesetz vom 26. Jänner 1907, betreffend die Wahl der Mitglieder des Abgeordnetenhauses des Reichsrates. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, IX. Stück (30. Jänner 1907), p. 59

10 thus Dringliche Interpellation der Senatoren Jelinek, Dr. Spiegel, Dr. Naegle, Zuleger, Dr. Mayr Harting und Fahrner an die Regierung betreffend des der Friedenskonferenz im Jahre 1919 überreichte Memoire über das Problem der Deutschen in Böhmen, Prag, am 9. November 1920. Senát Národního shromáždění R. Č., r. 1920, I. volební období, 2. zasedání, Tisk 211.

1920, I. volební období, 2. zasedaní, 11sk 211.

11 data sources: Gemeindelexikon der im Reichsrate vertretenen Königreiche und Länder bearbeitet auf Grund der Ergebnisse der Volkszählung vom 31. Dezember 1900, Podrobný seznam míst zemí rakouských zpracován na základě výsledků sčítání lidu ze dne 31. prosince 1910. IX. Podrobný seznam míst pro Čechy. C. k. statistická ústřední komise, Vídeň, 1916. Statistický lexikon obcí v Čechách, Státní úřad statistický, Praha, 1924, 598 p.,

<sup>12</sup> In Bohemia A 25 villages, in total 3,291 inhabitants, of which 2,419 were Germans, in Bohemia B 45 towns and villages, in total 30,861 inhabitants, of which 19,696 were Czechs (census in 1900)

<sup>13</sup> For example, the towns of Bruch (from 1920 Lom u Mostu, 7,654 inhabitants, 57.77% Czechs, the Czech candidate won 53,30% of votes in the first round of elections in 1907), Kopisty / Kopitz (4,044 inhabitants, 68,97% Czechs) and Čouš / Tschausch (from 1920 Souš, 3,803 inhabitants, 69,55 % Czechs) were ranked within the German constituency

<sup>14</sup> own research, data source: Gemeindelexikon der im Reichsrate vertretenen Königreiche und Länder bearbeitet auf Grund der Ergebnisse der Volkszählung vom 31. Dezember 1900

<sup>15</sup> own research, data source: Gemeindelexikon der im Reichsrate vertretenen Königreiche und Länder bearbeitet auf Grund der Ergebnisse der Volkszählung vom 31. Dezember 1900, Die Ergebnisse der Reichsratswahlen in der Im Reichsrate vertretenen Königreichen und Ländern im Jahre 1907.

<sup>16</sup> Generally, it is the conversion of votes of a particular party so that the total sum of votes of all parties is preserved and the balance of the individual constituencies is equaled.

<sup>17</sup> own research, data source: Die Ergebnisse der Reichsratswahlen in der Im Reichsrate vertretenen Königreichen und Ländern im Jahre 1907.

<sup>18</sup> own research, data source: Gesetz vom 26. Jänner 1907, betreffend die Wahl der Mitglieder des Abgeordnetenhauses des Reichsrates. Reichsgesetzblatt für die im Reichsrate vertretenen Königreiche und Länder, Jahrgang 1907, IX. Stück (30. Jänner 1907), p. 59

© RNDr. Miloš Fňukal, Ph.D. Palacký University, Olomouc, Natural Science Faculty Department of Geography Svobody 26 771 46 Olomouc Czech republic

Reviewed:

doc. RNDr. Stanislav Řehák, CSc.