SOME FEATURES IN THE DEVELOPMENT OF TOWNS
IN THE HUNGARIAN PLAIN

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Introduction

The development of the productive forces is accompanied by a deepening of the division of labour, what can be studied and interpreted both in social and territorial terms. Naturally this process greatly differentiates the economic space and the differentiation changes in time as well. Urbanization, accompanying this process is in close connection with these phenomena.

The differentiation following the development of productive forces is reflected in the whole system of settlement, but can be felt better in the centre of the system, the towns. The growth of the number of towns, changes in the ratio of people living there (urbanization) are important factors in the increase or decrease of value of some districts occurring in the course of territorial division of labour and in the change of role played there. Owing to the functional coupling of this tight system of interdependencies, changes occurring in urbanization well illustrate the shaping of the role in the division of labour of some areas. Based on this system of relationship the present paper aims to reveal what tendencies in the long run are to be felt in macro- and mezo level in the growth of the population of towns, what is the role of certain towns in the territorial division of labour during a relatively long period, and how can the changes of role of certain areas be observed and pointed out in and through town development.

In this study changes in the number of population are regarded as an overall indicator for the study of differences in the rate of town development. The population number quite well includes and reflects all the functional changes occurring in the role played in the division of labour of the given area. In the time range of 110 years we regarded the dates of population census as main indicators. Of these we distinguished three main phases, each of which were of differing character in the development of our country. The first phase in the 40 years' period starting from the first civil population census in 1870 lasting till 1910, the time of the last before the first world war census comprising the whole of historical Hungary. The second phase are the four decades from 1910 to 1949, when two world wars, territorial

changes, historical-economic-social events of the utmost importance took place. Finally, in the last phase. from 1949 to the last census in 1980, we follow the main features of the period after the Second World War.

In the course of our study although data given by the 1980 census are treated as last values, we examine 109 towns that is we take the picture of 1st January. 1985. Administrative changes, annexations between 1980 and 1985 are considered here. For territorial analysis we use the macro regions as defined by *Gyula Krajkó* (KRAJKÓ GY. 1981 Central Region, Transdanubia, North Hungary, the Great Plain), ecomic regions and counties functioning only as frames for researches, projecting and study.

For the numerical treatment and registration of changes studied below we use the so called grade coefficient. In our case the grade coefficient is given as quotient of the position number of the certain town in the list of population of all the towns, held in different times.

R $= H_1/H_2$, where
R = Grade coefficient
H_1 = place number of settlement at the beginning of the time interval
H_2 = place number of settlement at the end of the time interval.

Thus, if R is greater than 1, the town has a better position, stepped forward in the rank of towns owing to favourable changes in its functional development. in its situation in the territorial division of labour. If R = 1, we cannot speak of a marked change, and if R is less than 1, the relative situation of the town has become worse.

The grade coefficient (R) can be interpreted in several aspects. In the present study we use this indicator when interpreting changes in the list of towns in counties (R_1). within projecting-economic regions (R_2), in macroregions (R_3) and nation wide rearrangement of places (R_4).

In a previous study (TÓTH J. 1966) we successfully used the grade coefficient in a more restricted area and with more moderate purpose. Now, besides attempting to use it in a richer subject matter for study, with a multilateral approach, we also carry on the analysis of the development, of the change of the relative place of some towns in the Hungarian Plain, a work started years ago (TÓTH J. 1976, 1978, 1979. 1984). Our present work is also connected with researches in the list of hierarchy of Hungarian settlements (BELUSZKY P. 1973) and of towns in the Hungarian Plain (PAPP A. 1984).

Results

The Great Hungarian Plain and Other Macroregions

The list of our towns according to number of population (Table 1) given relying on data of the 1980
census is a very interesting reading, gives rise to some meditation, moreover, is very informative as regards the order of magnitude of our towns. Accordingly besides

Table 1.
List of order of Hungarian towns according to their 1980 population

1.	Budapest	2.059.347	50.	Hatvan	24.772
2.	Miskolc	207.303	51.	Tata	24.088
3.	Debrecen	191.494	52.	Hajdúszoboszló	23.396
4.	Szeged	170.794	53.	Békés	22.265
5.	Pécs	168.715	54.	Csongrád	22.217
6.	Győr	124.147	55.	Mezőtúr	22.024
7.	Nyíregyháza	108.235	56.	Keszthely	21.736
8.	Székesfehérvár	103.310	57.	Mohács	21.383
9.	Kecskemét	96.133	58.	Oroszlány	20.613
10.	Szombathely	82.851	59.	Szarvas	20.608
11.	Tatabánya	75.971	60.	Siófok	20.125
12.	Szolnok	75.362	61.	Dombóvár	19.985
13.	Kaposvár	72.374	62.	Komárom	19.918
14.	Békéscsaba	68.612	63.	Paks	19.509
15.	Eger	60.897	64.	Sátoraljaújhely	19.262
16.	Dunaújváros	60.736	65.	Leninváros	18.677
17.	Veszprém	57.249	66.	Kalocsa	18.660
18.	Zalaegerszeg	55.348	67.	Balassagyarmat	18.543
19.	Hódmezővásárhely	54.486	68.	Mezőkövesd	18.426
20.	Sopron	53.945	69.	Hajdúnánás	18.170
21.	Salgótarján	49.603	70.	Kisvárda	17.837
22.	Nagykanizsa	49.247	71.	Mátészalka	17.804
23.	Ózd	48.466	72.	Tapolca	17.161
24.	Érd	41.330	73.	Szentendre	16.901
25.	Cegléd	40.664	74.	Berettyóújfalu	16.454
26.	Baja	38.503	75.	Kiskőrös	;5.616
27.	Kazincbarcika	37.442	76.	Sárospatak	15.320
28.	Gyöngyös	36.928	77.	Sárvár	15.112
29.	Orosháza	36.255	78.	Bonyhád	14.716
30.	Kiskunfélegyháza	35.414	79.	Tiszafüred	14.341
31.	Szentes	35.317	80.	Százhalombatta	14.292
32.	Vác	34.866	81.	Nagyatád	13.944
33.	Szekszárd	34.648	82.	Kisújszállás	13.700
34.	Gyula	34.533	83.	Mór	13.620
35.	Ajka	32.656	84.	Nyírbátor	13.371
36.	Pápa	32.212	85.	Kőszeg	12.704
37.	Hajdúböszörmény	32.177	86.	Balatonfüred	12.697
38.	Jászberény	31.402	87.	Celldömölk	12.558
39.	Kiskunhalas	30.604	88.	Marcali	12.478
40.	Esztergom	30.473	89.	Pásztó	12.148
41.	Komló	30.319	90.	Szigetvár	12.136
42.	Makó	29.942	91.	Csorna	12.115
43.	Mosonmagyaróvár	29.728	92.	Dorog	11.844
44.	Várpalota	28.392	93.	Körmend	11.783
45.	Gödöllő	28.096	94.	Barcs	11.464
46.	Nagykőrös	27.808	95.	Túrkeve	11.398
47.	Törökszentmiklós	25.603	96.	Kapuvár	11.251
48.	Karcag	25.230	97.	Heves	11.184
49.	Dunakeszi	25.137	98.	Szeghalom	10.704

99. Siklós	10.625	105. Vásárosnamény	8.654
100. Zirc	10.520	106. Szentgotthárd	8.515
101. Szerencs	10.094	107. Fehérgyarmat	8.414
102. Tamási	9.568	108. Lenti	8.132
103. Sümeg	9.027	109. Encs	5.759
104. Zalaszentgrót	8.921		

Budapest, holding the first place in the hierarchy of the settlement system in Hungary with its more than two million population we have in this period seven other towns with a population over 100,000, twelve with a population between 50,000–100,000, forty with 20,000 and 50,000 and finally fifty-nine with a figure lower than the above. These categories according to the structural pecularities of the Hungarian settlements, besides the capital — can be regarded as large towns, medium-size towns, little medium-size and little towns. Their number,their proportion in the whole body of towns changes depending on the pecularities and level of the process of urbanization.

In the period between1980 and 1985 remarkable changes happened in the population of the country. For years on the population is decreasing. For the time being this decrease does not affect townspeople: urbanization going on the population of towns is ever increasing, true, the pace is slower than before. In the five years from 1980 there happened several important changes when comparing the picture with that described in Table 1. Among these we can mention that Kecskemét stepped over the 100,000 population limit, Sopron and Hódmezővásárhely changed place, Szolnok now is before Tatabánya. Similarly, Nagykanizsa is before Salgótarján while the population in both towns exceeded 50,000.

This list of the Hungarian towns shows a relatively rapid modification not only at present, but reflects a momentary state as a result of great changes going on for a long time. These complicated changes reflect a lot of individual varietiés and differ from each other even when studying macro regions. A list of these is given in Figure 1. (Order numbers for 1980 are the same as given in Table 1.) The shifts suggest several types of development. Besides some relatively stable towns, mostly found only in the upper regions of the figure we can easily distinguish on the basis of four data connected with the three examined intervals two basic types: the one of gradually declining and the one of dynamically developing settlements, the latter sometimes jumping ahead with dozens of places. It can already be seen that especially the towns in the Hungarian Plain are declining and socialist twowns formed in the period of extensive industrialization in Transdanubia and North Hungary show a rapid dynamism (RUISZ R. 1959, BOROS F. 1968).

Figure 1: Changes in the order of Hungarian towns according to population in macroregions (1870–1980)
    1 = Central Region
    2 = North Hungary
    3 = Transdanubia
    4 = Great Plain
    (The towns can be identified by their order in 1980 — Table 1 –)
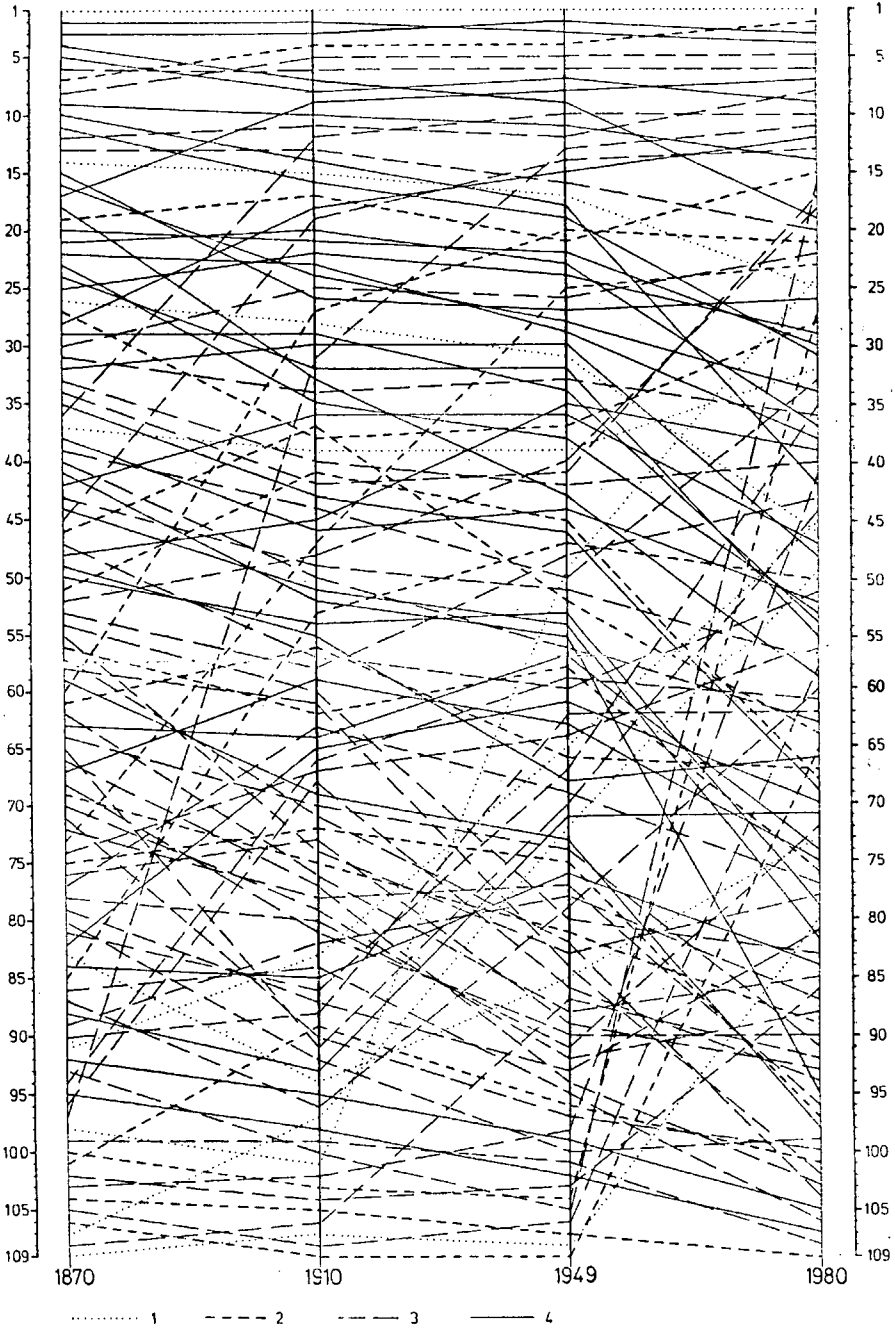
We have calculated the grade coefficients of each of the Hungarian towns for the examined three time intervals, for the whole period and following this, the territorial grade coefficient for the single macro regions. For the whole period it is the towns in the Central Region which have the largest grade coefficient, followed by Nort Hungary and Transdanubia all the three micro regions having a value over one and it is only the Hungarian Plain which has a value less than one (0,72). When examining this period in parts according to the time intervals mentioned in the Introduction, we can see that in the period between 1870–1910 the most dinamic town development was observable in Nort Hungary (already industrializing at that time).The overall grade coefficient of the 16 towns was over 1,1. There is a relatively small difference between the other macro regions: the value for the Central Region (including the capital which developed fairly rapidly even on a world scale but showed scarcely any dynamizing effect upon the neighbouring small towns) is 1,00; that for Transdanubia is somewhat lower and the grade coefficient calculated for the Hungarian Plain is not too bad either (0,94). In the period betweeen 1910–1949, first of all because of Budapest holding a relatively more important place in the territory of the country which got smaller, the agglomeration was greater here as well, only the grade coefficient of the towns in the Central Region was greater than 1 (1,21), while the value for the other macro regions was somewhat below the average. The relative position of the Hungarian Plain is the best just in this time. It is characteristic that this period with its general stagnation can be regarded as such when the backwardness of the towns in the Hungarian Plain compared to the central settlements of other macro regions was the least. There is a striking contrast to this when examining the grade coefficients in the time interval after the liberation. Then — a period of fairly dynamic character — the Great Hungarian Plain gets a place largely behind the other macro regions (the overall grade coefficient of its towns is only 0,78). This value for towns in the Central Region (first of all because of the dynamism of smaller towns having close attachment to the agglomeration in Budapest) is 1,25 and the values of the other two macro regions are also over 1. (Table 2)

The values of town grade coefficients for the whole period greatly differ and by plotting them (Figure 2) we can see the basic territorial characteristics indicating

Table 2
Town grade coefficients by regions and their change in time

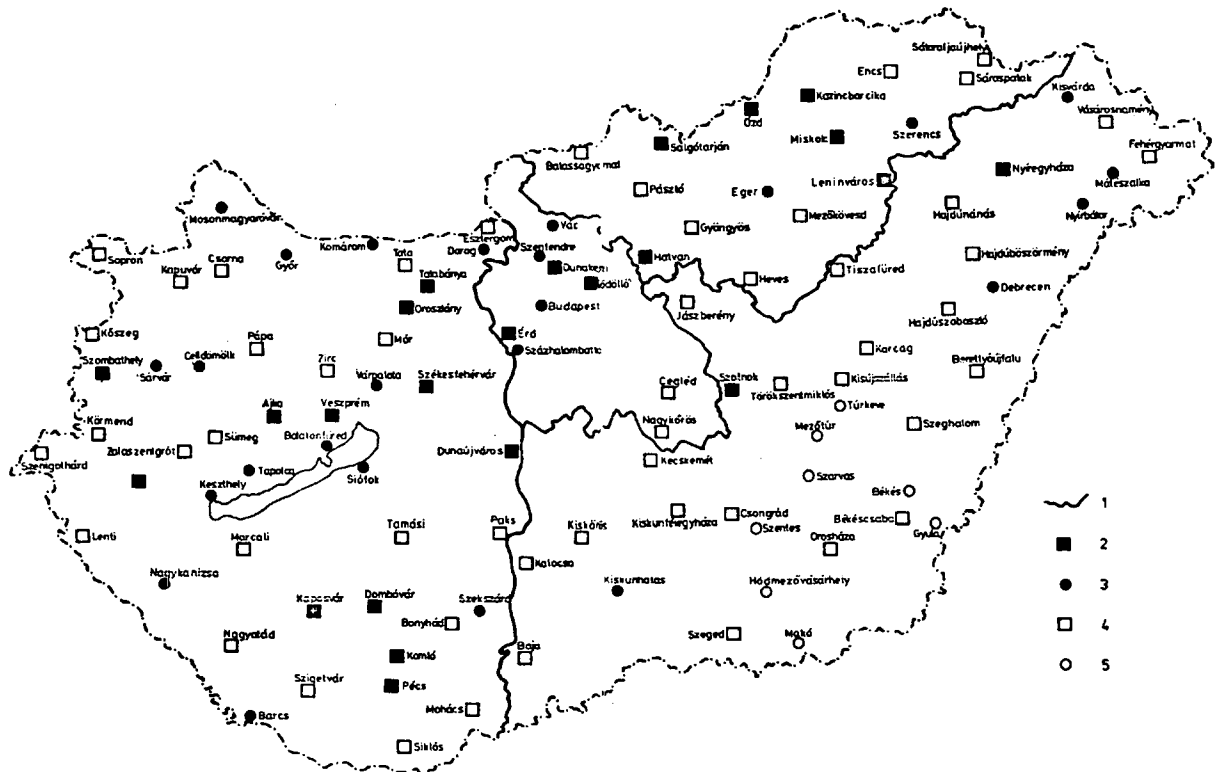| Region	No of towns	1870–1910	1910–1949	1949–1980	1870–1980
Central	9	1.00	1.21	1.25	1.51
North Hungary	16	1.11	0.99	1.05	1.15
Transdanubia	48	0.99	0.98	1.09	1.06
Hungarian Plain	36	0.94	0.98	0.78	0.72
Together	109	1.00	1.00	1.00	1.00

Figure 2: Overall grade coefficients (R_1) of Hungarian towns (1870–1980).

1 = macroregion-border
2 = R_1 = 1,50
3 = R_1 = 1,00 – 1,50
4 = R_1 = 0,50 – 0,99
5 = R_1 = 0,50

differences among the macro regions and within the macro regions themselves. Of these we can emphasize the importance of the Budapest and its environs' agglomeration and the very important role of the NE–SW economic-industrial-urbanizational-infrastructural axe what also appears in the grade coefficient values of towns. In the other regions a few county seats are important, revealing the importance of the administrative-organisational function in town-growth, and there are a few smaller towns as well with a more dynamic development owing to their marked role in transport, industry, administration, showing values over the average. The Hungarian Plain, with rare exception, has R-coefficient values markedly below the average. In the order of Hungarian towns according to the values of R coefficient the first place is held by Tatabánya followed by some other towns with extreme values. Among the first ten towns there are industrial settlements, those belonging, to the Budapest agglomerat, county seats and socialist towns. None of them is in the Hungarian Plain. All the settlements holding the last ten places in the list are in the Plain. Among them there are towns with a grade coefficient below 0,5, that is in 1980 they are twice much lower in the list of order of Hungarian towns according to population than were in 1870. Of them the last place is held by Hódmezővásárhely with a grade coefficient of 0,21.

The table showing the first and last ten towns in this sense (Table 3) contains time interval values for the period as well, thus it makes possible a more exact timing of the magnitude of the shifts.

Table 3.

The first and last ten towns given by the nationwide grade coefficient (R_4) for 1870–1980

No.	Town	1870–1910	1910–1949	1949–1980	1870–1980
1.	Tatabánya	3,13	2,38	1,18	8,82
2.	Dunújváros	0,93	0,95	6,56	5,81
3.	Érd	0,97	2,06	2,04	4,08
4.	Kazincbarcika	0,97	0,99	3,85	3,70
5.	Szombathely	3,00	1,20	1,00	3,60
6.	Miskolc	1,75	1,00	2,00	3,50
7.	Kaposvár	2,37	1,36	1,08	3,46
8.	Ózd	1,55	1,88	1,09	3,17
9.	Zalaegerszeg	1,08	1,20	2,22	2,89
10.	Salgótarján	2,22	1,35	0,95	2,86
...	...	...	...	...	...
100.	Hajdúnánás	0,81	0,93	0,67	0,51
101.	Szeged	1,00	0,67	0,75	0,50
102.	Gyula	0,67	0,86	0,82	0,47
103.	Mezőtúr	0,75	1,00	0,58	0,44
104.	Békés	0,66	0,92	0,72	0,43
105.	Túrkeve	0,79	0,95	0,58	0,43
106.	Szentes	0,69	0,84	0,61	0,35
107.	Szarvas	0,55	0,77	0,73	0,31
108.	Makó	0,71	0,78	0,43	0,24
109.	Hódmezővásárhely	0,57	0,78	0,47	0,21

It is remarkable that the differences in the regional (R_3) and nationwide (R_4) grade coefficients depend on the fact whether the town as a whole belongs to the dynamic region or is only part of a stagnating, relatively backward territory. This phenomenon is illustrated, in regional distribution, by a group of Hungarian towns developing much more rapidly than the average, the county seats. We can see that there are regional differences even in county seats: there are only three such towns all in the Hungarian Plain with a grade coefficient under 1.(At the same time the overall grade coefficient of county seats is much higher than the town average.) The importance of different regional dynamism as a basis for comparison is shown by the fact that e. g. the same R_3 value for Szekszárd and Békéscsaba (0,83) indicates on a nationwide scale quite different rates of development: the R_4 value for Szekszárd is 1,18 and that for Békéscsaba only 0,64. (Table 4).

Table 4.
Distribution in time and in regions of grade coefficients of county seats

County seat	1870–1910		1910–1949		1949–1980		1870–1980	
	R_3	R_4	R_3	R_4	R_3	R_4	R_3	R_4
Tatabánya	5,38	3,13	1,60	2,38	1,00	1,18	8,60	8,82
Székesfehérvár	1,00	1,09	0,75	0,92	1,33	1,50	1,00	1,50
Veszprém	0,73	0,81	1,00	1,02	1,38	2,41	1,00	2,00
Győr	0,50	1,00	1,00	1,00	1,00	1,00	0,50	1,00
Szombathely	2,25	3,00	1,33	1,20	0,75	1,00	2,25	3,60
Szekszárd	0,83	0,89	0,86	0,88	1,17	1,52	0,83	1,18
Kaposvár	2,17	2,37	1,00	1,36	1,00	1,08	2,17	3,46
Pécs	2,00	1,60	1,00	1,00	1,00	1,00	2,00	1,60
Zalaegerszeg	1,15	1,08	1,30	1,20	1,11	2,22	1,67	2,89
Transdanubia	1,00	0,99	1,00	0,98	1,00	1,09	1,00	1,06
Miskolc	1,00	1,75	1,00	1,00	1,00	2,00	1,00	3,50
Eger	1,00	1,12	0,67	0,81	1,50	1,40	1,00	1,27
Salgótarján	2,33	2,22	1,50	1,35	0,67	0,95	2,33	2,86
North Hungary	1,00	1,11	1,00	0,99	1,00	1,05	1,00	1,15
Nyíregyháza	2,00	1,89	1,25	1,13	1,33	1,14	3,33	2,43
Debrecen	1,00	1,00	2,00	1,50	1,00	0,67	2,00	1,00
Szolnok .	2,00	1,56	1,29	1,20	1,40	1,25	3,60	2,33
Kecskemét	1,00	0,63	1,33	1,14	0,75	0,78	1,00	0,56
Szeged	1,00	1,00	0,50	0,67	1,00	0,75	0,50	0,50
Békéscsaba	0,83	0,90	1,00	0,91	1,00	0,79	0,83	0,64
Great Plain	1,00	0,94	1,00	0,98	1,00	0,78	1,00	0,72
Budapest	–	1,00	–	1,00	–	1,00	–	1,00
Hungary	–	1,00	–	1,00	–	1,00	–	1,00

Territorial differences within the Great Hungarian Plain

Recently there has been a distinguished interest in the pecularities of town development in the Hungarian Plain. This is shown by the increasing number of conferences and publications following this line: (e.g. IHRIG D. — TÓTH J. — VOZÁR I. 1975), dealing with problems of country-towns (BECSEI J. 1978, ZOLTAN Z. 1980), with effects of industrialization (KRAJKÓ GY. — MÉSZÁROS R. 1978), with the administrative system (WAGNER M. 1979, HAJDU Z. 1982), with the peculiarities in the Hungarian Plain of the effect of the nationwide conception of developing settlements (TÓTH J. 1983), the possibilities in the development of small towns (DŐVÉNYI Z. 1984).

We could get a real picture of the unfavourable situation of the of the Great Hungarian Plain in the previous chapter. It is also very important how the values of the grade coefficient had been differentiated and — measuring through this — how the place held in the territorial labour division of the given town or smaller region within the Plain had changed. The differences are remarkable already according to projecting-economic districts. The overall grade coefficient of 19 towns in the northern part of the Hungarian Plain, calculated for the whole period, is 0,79. True, it is lower than the nationwide average, but it is higher than the average for three counties belonging to the southern Hungarian Plain (Bács-Kiskun, Csongrád, Békés, 0,60). There is only one county in the Plain (Szabolcs-Szatmár) with a country-wide grade coefficient over 1,0, where all the six towns can boast with a favourable shift forward in the list of settlements of central role. In the southern part of the Great Hungarian Plain the counties Csongrád and Békés are by far in the worst situation. On the basis of this table (Table 5) we can make interesting comparison concerning counties having the characteristically differing values of the three types of grade coefficients (R_2, R_3, R_4).

Table 5.
Changes of grade coefficients of towns in the Great Hungarian Plain
in time by counties and economic — projecting regions

Region	No.of towns	1870–1910			1910–1949			1949–1980			1870–1980		
		R_2	R_3	R_4	R_2	R_3	R_4	R_2	R_3	R_4	R_2	R_3	R_4
Szabolcs-Szatmár	6	1,00	1,03	1,03	1,00	1,02	1,07	1,12	1,07	0,94	1,12	1,13	1,03
Hajdú-Bihar	5	0,92	1,00	0,91	1,00	1,01	1,02	1,06	1,01	0,73	0,97	1,02	0,68
Szolnok	8	1,05	1,08	0,96	1,00	1,02	0,97	0,86	0,90	0,67	0,89	0,99	0,62
North H. Plain	19	1,00	1,04	0,98	1,00	1,02	1,03	1,00	0,99	0,79	1,00	1,05	0,79
Bács-Kiskun	6	1,02	0,98	0,95	1,07	1,04	0,96	1,11	1,18	0,91	1,20	1,20	0,83
Csongrád	5	1,08	1,03	0,82	0,96	0,83	0,82	0,70	0,74	0,55	0,73	0,63	0,37
Békés	6	0,95	0,83	0,78	0,95	0,95	0,89	1,08	1,04	0,76	0,98	0,83	0,52
South H.Plain	17	1,00	0,93	0,86	1,00	0,97	0,91	1,00	1,02	0,77	1,00	0,92	0,60
Plain together	36	–	1,00	0,94	–	1,00	0,98	–	1,00	0,78	–	1,00	0,72

Table 6.
Towns in the Hungarian plain in their order of regional grade coefficients (R₃) between 1870–1938

Town	Order No		1870–1910	1910–1949	1949–1980	1870–1980
	H. Plain	overall				
Szolnok	1	13	2,00	1,29	1,40	3,60
Nyíregyháza	1	12	2,00	1,25	1,33	3,33
Debrecen	3	44	1,00	2,00	1,00	2,00
Orosháza	4	59	1,42	1,00	1,33	1,89
Kiskunhalas	5	32	1,13	1,21	1,27	1,73
Törökszentmiklós	6	55	1,14	1,05	1,18	1,41
Mátészalka	7	31	1,00	1,06	1,19	1,26
Kisvárda	8	36	1,03	1,07	1,12	1,23
Kiskunfélegyháza	9	81	1,09	1,10	1,00	1,20
Hajdúszoboszló	10	75	0,92	1,04	1,21	1,16
Kalocsa	11	73	0,96	0,90	1,29	1,13
Karcag	12	82	1,18	1,06	0,89	1,11
Berettyóújfalu	13	61	1,00	1,07	1,00	1,07
Kiskőrös	14	56	1,07	0,97	1,03	1,07
Nyírbátor	15	46	1,00	0,97	1,06	1,03
Kecskemét	16	95	1,00	1,33	0,75	1,00
Baja	17	90	0,53	1,15	1,63	1,00
Jászberény	18	91	1,08	0,87	1,07	1,00
Hajdúböszörmény	19	92	1,30	0,91	0,85	1,00
Vásárosnamény	20	58	1,00	1,00	1,00	1,00
Fehérgyarmat	21	57	1,00	1,00	1,00	1,00
Tiszafüred	22	88	1,04	1,08	0,83	0,93
Csongrád	23	98	1,19	0,89	0,86	0,90
Szeghalom	24	89	0,91	0,97	0,97	0,85
Hajdúnánás	25	100	0,95	0,92	0,96	0,84
Békéscsaba	26	85	0,83	1,00	1,00	0,83
Kisújszállás	27	99	1,00	0,96	0,84	0,81
Gyula	28	102	0,64	1,00	1,17	0,75
Békés	29	104	0,75	0,95	1,05	0,75
Mézőtúr	30	103	0,89	1,06	0,77	0,73
Túrkeve	31	105	0,88	0,96	0,82	0,70
Szentes	32	106	0,88	0,89	0,82	0,64
Szeged	33	101	1,00	0,50	1,00	0,50
Szarvas	34	107	0,58	0,86	0,96	0,48
Hódmezővásárhely	35	109	1,00	0,60	0,71	0,43
Makó	36	108	0,86	0,88	0,50	0,38

Changes in The Hungarian Plain indicate changes in the role of towns within regions, their growth or loss of importance. Of 36 towns in the Plain Szolnok and Nyíregyház have got the highest values of regional grade coefficients (R₃) regarding the whole period.

These grade coefficient values were formed in various ways in the three time intervals of the examined period and vary in a different way in each territory. In the four decades between 1870 and 1910 it is striking to observe a decline of the majority of towns in Békés county, of Kalocsa and Baja near river Danube, as well as of Mezőtúr, Túrkeve, Hajdúszoboszló; and the getting of better positions of Orosháza, Hajdúböszörmény. It is also very important that of the 36 towns the place held by 10 of them within the region did not change. In these years Hódmezővásárhely is in this group.

During the next four decades Debrecen changes place with Szeged (the latter having become a border-town), thus it becomes the town in the Great Hungarian Plain with the highest population. Then come Kecskemét, Szolnok and Nyíregyháza, having held a leading position in the previous period. Baja, Berettyóújfalu, Mátészalka got a better position (they became county seats) as did Mezőtúr, Hajdúszoboszló. The position of Békéscsaba, Gyula, Orosháza gets more stable (their starting points were differing), while Jászberény, Kiskőrös, Hajdúböszörmény lost their former positions. What is remarkable: the worsening situation of Szentes, Makó and Hódmezővásárhely could not be counterbalanced by the fact that they were county seats and municipal boroughs, respectively.

In the three decades following the liberation the position of only seven towns changed: besides the largest and smallest ones only of Békéscsaba, Kiskunfélegyháza and Berettyóújfalu. R_3 values became polarized, Baja, Kalocsa and (again) Orosháza got to the rank of leading towns, due to industrialization Jászberény and Török-szentmiklós, to recreational role and tourism Hajdószoboszló and Gyula showed a markedly dynamic development. The Hajdú– and Nagykun towns, as well as earlier countrytowns with large territories in Csongrád county had an even worse position.

There are six towns in the Great Hungarian Plain holding the same place in the list throughout the whole period of 110 years. Disregarding the two smallest settlements, Vásárosnamény and Fehérgyarmat, the „same place" is a resultant of differing changes in various times. All the towns in Szabolcs-Szatmár and Bács-Kiskun counties at least hold their positions as it was 110 years ago. The same cannot be said of Hajdú-Bihar county, since Hajdúnánás lost its position. The towns in county Szolnok are differentiated fifty-fifty while in Békés (with the exception of Orosháza) and in Csongrád (without exception) the R_3 coefficient calculated for the whole examined period has a value below 1,00.

Summary

The present study is restricted — of the great number of data (list of 109 towns based on population number as given by censuses between 1870 and 1980, their individual grade coefficients and those calculated according to territorial units of different level) — first of all to show macroregional differences and territorial differences in the Great Hungarian Plain. We can state that of the three examined time intervals that after the second world war resulted in the greatest macroregional

differentiation in Hungarian town development. Although there were diferences in the previous two periods, it is first of all the consequence of the decades following the liberation that town development in the Hungarian Plain, considering the whole period, is considerably slower than in the other macroregions. This reflects the unfavourable situation in the nationwide territorial division of labour of the Hungarian Plain, what is a lasting phenomenon becoming especially observable after the second world war. Within regions of the Hungarian Plain (owing to demographic reasons, variations in structure and policy of development of settlements,) only the situation of county Szabolcs-Szatmár appears to be acceptable on the basis of a nationwide comparison, while the whole of the Southern Hungarian Plain, especially in counties Békés and Csongrád, has very bad grade coefficients.

    Evaluating the results of analysis as described in the study, (and on comparing these with results of studies following other methods), from methodical points of view we can state: the grade coefficient, in spite of the various quantitative differences between the elements following in order, can be used as a very promising method to study changes in time and regions.