

PETER MARIOT

A CONTRIBUTION TO DELINEATING THE BOUNDARIES OF THE RECREATIONAL HINTERLAND OF LARGE TOWNS

The recreational hinterland of large towns is one of the types of economic-geographical regions. Its origin is mainly tied up with the increased concentration of population in large towns and the influences of the highly urbanized environment upon the behaviour of urban man. The structure of this type of economic-geographical regions is characterized by nodal links combining a large town with its environment. The intensity of these links is determined by the interest of the inhabitants of a large town in the participation in short-term recreation. The orientation of these links is significantly affected by the quality of the landscape potential for short-term recreation.

The rise in the proportion of urban population showing in all states of the world especially in the postwar period, has brought about, *inter alia*, also an intensified development of the recreational hinterland of large towns. The increased intensity of links in the recreational hinterland of large towns has produced a series of actual problems mainly connected with the impairment of the autochthonous functional landscape structure. Since areas close to large towns are part of territories whose landscape was utilized with an extraordinary intensity in the past, the endeavours to find new areas apt to satisfy the interest of participants in short-term recreation, gave rise to many conflict situations.

Only in exceptional cases areas were found in the vicinity of large towns, where the transformation from the original into the new, recreational function did not produce major problems. Almost regularly such endeavours got into conflict with the interests of other social activities, especially of agriculture, forest management, nature protection, traffic, settlements and the like. The confrontation of these interests cannot be forestalled because the interest of large town population to participate in short-term recreation is continuously on the increase and must inevitably materialize outside the urban environment.

This fact is illustrated, for example, by the results of an inquiry into the differences of environmental preference within short-term recreation by inhabitants of rural communities and large towns in Czechoslovakia.

The solution of the problem of the scheduled development of the recreational hinterland has been included, owing to these facts, in the significant and actual tasks of those authorities who are concerned with setting up conditions for a rational utilization of the landscape in the

Proportion of inhabitants placing their environment to the 1st or 2nd place

in rural communities	%	in large towns	%
1. town	44,5	1. forest, water	50,9
2. village	34,9	2. forest	33,2
3. forest, water	27,4	3. village	32,8
4. forest	19,4	4. mountains	29,2
5. mountains	14,2	5. town	15,2
6. water	9,8	6. water	13,0
7. cultural relics	5,8	7. cultural relics	5,8

vicinity of large towns. The methodology of handling these problems has hitherto not been sufficiently evolved. The results of the actual research, but also the generalization of findings characteristic of the general developmental laws of the recreational hinterland of large towns will have to contribute to its development in future.

This paper tries to summarize and generalize the knowledge of the boundaries of the recreational hinterland of large towns.

Under a recreational hinterland of a town a territory is understood in which roughly 80 per cent of its inhabitants can realize short-term recreation. The boundary of the recreational hinterland thus delineates the territory in which the weekend leisure is spent by an essential majority of its population. The dimensions of such territory are defined by several factors.

A decisive role among them is played by temporal accessibility, expressed by isochrones, exhibiting the involvement of various part of the large town vicinity into their recreational hinterland more thoroughly than territorial accessibility expressed by isochores. Owing to a considerable spatial distribution and to the complex problems of downtown traffic it is not suitable to set up accessibility isochrones only to one area or to the big city centre, respectively. A particularly oriented and temporally limited flow of people interested in short-term recreation emanates mostly from every large town district. The intensity of the downtown differentiation of interest inside the recreational hinterland is the more pronounced, the more inhabitants the town has.

It is not possible to define unambiguously and generally the isochrone delimiting the recreational hinterland of large towns. It can be said, however, that in a majority of large towns it is the isochrone of 60 to 90 minutes interval. In various directions, indicated mainly by the course of road communications, the recreational hinterland boundary of a town is defined by a different time measure of accessibility.

The isochrone delimiting that part of large towns vicinity in which approximately 80 per cent of their inhabitants realize their short-term recreation, does not exhibit with sufficient accuracy the boundary line of the recreational hinterland. In view of various circumstances of a physico-geographical and socio-economical character, it is more appropriate to take a zone around this isochrone for the boundary of the recreational territory. The boundaries of the recreational hinterland of large towns are thus not formed by a line but by a zone that offers more favourable chances for taking into account various particularities of the territory.

The width of the boundary zone differs. Rarely, however, it reaches more than 20 km.

In densely populated areas, in which the distance between the neighbouring large towns is relatively small, the recreational facilities overlap. Especially striking is the concentration of participants in short-term recreation in localities which exhibit the highest values of the landscape potential (banks of water surfaces, valleys in mountains, and the like).

The landscape potential for recreation plays the decisive role in defining the acreage, configuration and boundary line of the recreational hinterland of large towns. The fact that participants in short-term recreation are trying to materialize their interests in the closest vicinity of the place of their permanent residence is a law that holds generally. Within the frame of the recreational hinterland of a majority of large towns 4 bands can be differentiated that are characterized by particularities in the structure of the material-engineering basis, the utilization rate and the time of utilization.

1. The **d o w n t o w n b a n d** is made up of areas situated within the city limits. They include recreational areas accessible to the public (parks, playgrounds, open air pools) that facilitate certain recreational activities in the urban environment. The occurrence of several areas of this type is responsible for each of them having a hinterland of its own and most of its users being inhabitants of the closest neighbourhood. This produces a certain scatter of interest, although in every town there are also recreational areas upon which the attention of all inhabitants of the town is focussed. The advantageous position of these areas in regard to the residence of their visitors affects not only their intensive use but also their every day utilization. The length of their visitors' stay, however, is short (predominantly up to 120 minutes). It rises only on off-time days.

2. The **s u b u r b a n b a n d** of individual recreation is made up of areas with recreational function mostly located at the fringes of the town. Their utilization already mostly bears individual features. In this band gardening forms the predominating recreational activity, manifested in several variants. Some areas used for these purposes often arose on devastated or previously uncultivated territories. The upswing of short-term recreation is acting here positively as a revalorizing factor of the functional structure of the territory. The utilization of these recreational areas is characterized by a pronounced seasonality. In winter they are visited and used minimally. In summer these recreational areas are visited mostly more than twice a week. The mean length of stay on working days makes up to 4 hours, on off-time days up to 10 hours. As to the town inhabitants, the recreational areas of this type usually do not have a marked hinterland of their own. Their users are residing in various districts of the town.

3. The **n a r r o w e r r u r a l r e c r e a t i o n a l b a n d** is mostly made up of wooded areas situated at the smallest distance from the town. They already lie outside the city limit but are usually connected with the town by urban traffic. They serve the broad public. The feature of the dominating recreational activities depends on the quality of the landscape potential. In case of favourable ground and climatic conditions the usually prevailing tourism is also completed by winter sports.

These recreational areas are visited by town inhabitants mostly irrespective of the place of their permanent residence. Only in especially favourable cases, if there are several wooded areas in the close vicinity of the town, a certain differentiation of their hinterland arises. This band of recreational areas is frequented at a markedly rising rate on off-time days. In their material-engineering basis sport and boarding facilities of various types prevail. In spite of a certain scatter of visitors, a pronounced concentration of participants in recreation to several localities and along certain lines may be observed in this recreation band (touristic lines, pathways, ski tracks and the like). An inevitable complement of the material-engineering basis of these recreational areas are parking places, the distribution of which is a significant scatter regulator of visitors.

4. The wider rural recreation band forms part of the town's vicinity in which recreational areas occur only in certain localities. The other parts of the territory satisfy other social functions. It is a general rule that the rate of utilizing the recreational areas of this band declines with the rising distance from the town. The quality of the landscape potential for recreation in this band is to be judged only relatively, with regard to the conditions within the recreational hinterland. This fact implies that in the recreational hinterland of large towns also such territories are intensively utilized that have relatively low absolute values of landscape potential quality for recreation. In the neighbourhood of large towns lacking higher mountains in their recreational hinterland, such territories are also frequented very intensively in winter that offer essentially worse winter sport conditions than the more distant areas beyond the boundaries of the recreational hinterland.

In the first stage of their development recreational areas arose primarily on agricultural and sylvan land and on the shores of larger water reservoirs. As a result of these processes new functional areas in the unsettled landscape came into being. To enable a larger stay of participants of short-term recreation, facilities started to arise providing overnight accommodation. This may be looked upon as the main stimulus for building objects of individual recreation (second homes) which are the most characteristic elements of the material-engineering basis of recreational hinterland of large towns. To the initially small and simple buildings larger parts were added later under the influence of various socio-economic factors, their equipment displaying a higher niveau of the furnishing than is usual with rural houses. New cores of settlements came thus into being which, in spite of not being permanently lodged, imparted several features of the urban settlement to the rural landscape (the character of architecture, pools, playgrounds, cultivated greenery and the like).

Commuting to work and the migration of the population from rural communities into larger towns also produces favourable conditions for a functional change in the utilization of buildings in rural communities. For recreational purposes different outbuildings are adapted which lost their original use. Later, buildings with a dwelling function become the result of these transformation processes which have developed very quickly especially because they solve simultaneously two significant problems produced by the migration of population to the vicinity of large towns.

The rural population, losing possibilities of employment in the country and finding them in large towns, gets the chance to give up their original residence in the country and come nearer to the place of their work. The urban population, which continues to feel the lack of free sites suitable for building any objects of individual recreation, finds in houses abandoned by rural inhabitants suitable objects for satisfying their recreational needs. These changes of functions have gradually appeared in the recreational hinterland of all large towns. They primarily affect communities lying in the most attractive environment.

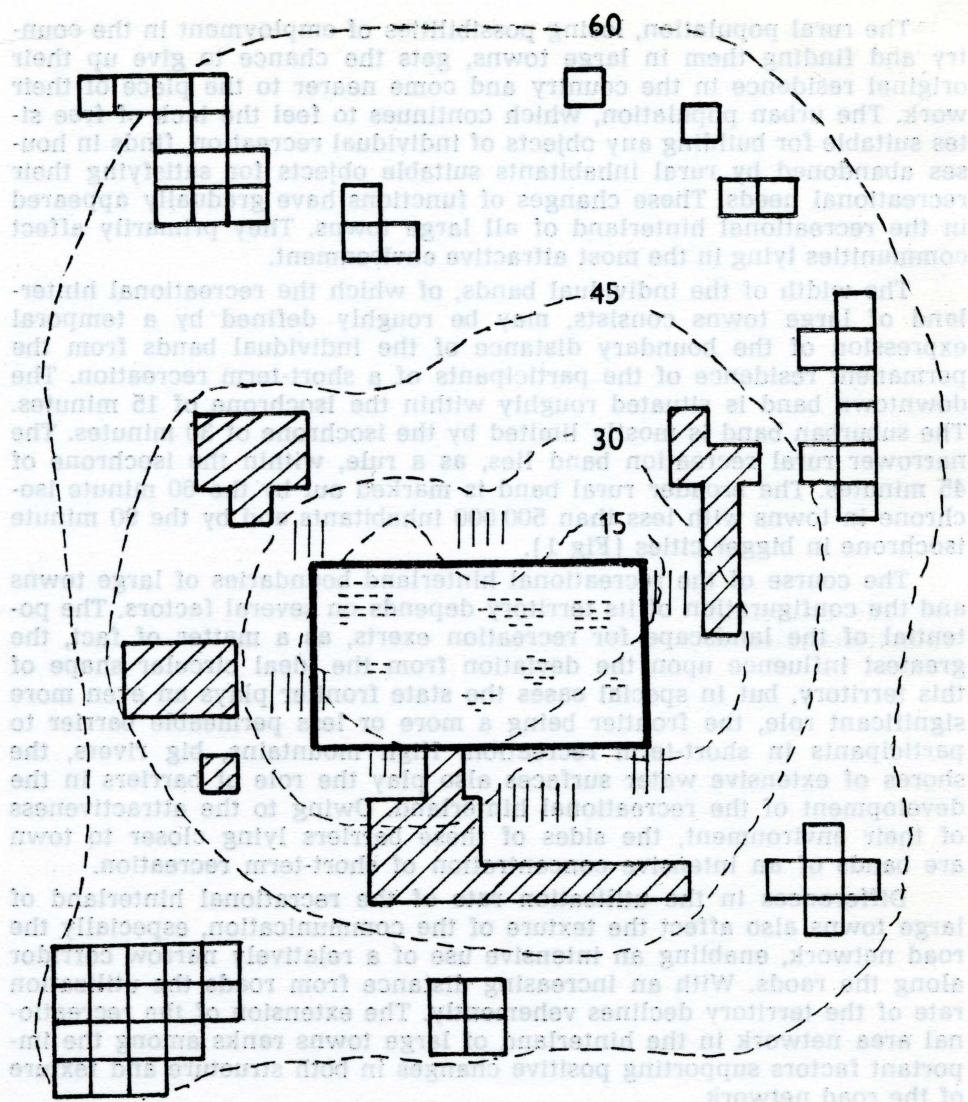
The width of the individual bands, of which the recreational hinterland of large towns consists, may be roughly defined by a temporal expression of the boundary distance of the individual bands from the permanent residence of the participants of a short-term recreation. The downtown band is situated roughly within the isochrone of 15 minutes. The suburban band is mostly limited by the isochrone of 30 minutes. The narrower rural recreation band lies, as a rule, within the isochrone of 45 minutes. The broader rural band is marked out by the 60 minute isochrone in towns with less than 500 000 inhabitants and by the 90 minute isochrone in bigger cities (Fig 1).

The course of the recreational hinterland boundaries of large towns and the configuration of its territory depends on several factors. The potential of the landscape for recreation exerts, as a matter of fact, the greatest influence upon the deviation from the ideal circular shape of this territory, but in special cases the state frontier plays an even more significant role, the frontier being a more or less permeable barrier to participants in short-term recreation. High mountains, big rivers, the shores of extensive water surfaces also play the role of barriers in the development of the recreational hinterland. Owing to the attractiveness of their environment, the sides of these barriers lying closer to town are bands of an intensive concentration of short-term recreation.

Differences in the utilization rate of the recreational hinterland of large towns also affect the texture of the communication, especially the road network, enabling an intensive use of a relatively narrow corridor along the roads. With an increasing distance from roads the utilization rate of the territory declines vehemently. The extension of the recreational area network in the hinterland of large towns ranks among the important factors supporting positive changes in both structure and texture of the road network.

The summary of these as well as other factors is responsible for a different configuration of the recreational hinterland boundaries of large towns and for their lying at different distances from the town. For each big town they are therefore to be defined separately, by an underlying appraisal of the actual situation in its environment. The implementation of this task is essentially complicated by the lack of data on the distribution of short-term recreation participants in the hinterland of large towns. In abroad such data have hitherto been gained by special research and inquiries. To become more closely acquainted with these problems it is necessary to publish as many results of similar investigations as possible, and to apply these data in comparison and to formulate more generally valid statements.

Data summarized by J. Vystoupil (1981) for selected towns in the



1. Model of recreational hinterland of town. 1 — town boundaries, 2 — isochrones (in minutes); recreational areas: 3 — in the downtown band, 4 — in the suburban band, 5 — in the narrower rural recreational band, 6 — in the wider rural recreational band.

Schéma rekreačného zázemia mesta. 1 — hranice mesta, 2 — izochrony (v minútach); rekreačné plochy: 3 — vnútromestského rekreačného pásma, 4 — prímestského pásma, 5 — užšieho vidieckeho pásma, 6 — širšieho vidieckeho pásma.

Table of partial (A) and cumulative (B) values of the distribution of individual recreation objects of inhabitants of selected towns in the Czech Socialist Republic (1971)

Town	Number of inhabitants in thousands (1970)	Percentage proportion of individual recreation objects located at distance (in km)									
		A up to 10	B up to 10	A up to 20	B up to 20	A up to 30	B up to 30	A up to 40	B up to 40	A up to 50	B up to 50
Prague	1079	15	15	18	33	33	66	19	85	13	93
Brno	344	47	47	31	78	5	83	5	88	3	91
Ostrava	278	4	4	8	12	10	22	48	70	17	87
Pízeň	148	38	38	32	70	14	84	3	87	2	89
Olomouc	79	31	31	40	71	9	80	5	85	5	90
Hradec Králové	77	40	40	19	59	5	64	6	70	7	77
České Budějovice	77	25	25	43	68	14	82	8	90	3	93
Ústí nad Labem	72	52	52	31	83	10	93	4	97	1	98
Pardubice	71	27	27	23	50	35	85	11	96	3	99

Source: J. VYSTOUPIL (1981)

Czech Socialist Republic may be denoted as an interesting example of this type.

The boundaries of the recreational hinterland of large towns do not exhibit stationary features, but they are changing under the influence of various factors. Especially socio-economic factors are affecting the changes in their course. The most pronounced changes in the recreational hinterland of large towns are brought about by general codifications in the duration of the working time. The abridgement of the working time contributes to the prolongation of the leisure time which is one of the basic stimuli of the origin and formation of the recreational hinterland of large towns. The transition from a six day to a five day working week can therefore be considered the decisive moment in the development of short-term recreation of large towns. It may be presumed that a further abridgement of labour duties to a four and a half days working week will contribute to the enlargement of the area of the recreational hinterland of large towns and to an increased participation of their inhabitants in short-term recreation.

A decisive economic factor whose changes affect transformations in the recreational hinterland of large towns are the financial funds available to inhabitants to cover the expenditure connected with the participation in short-term recreation. Although the level of this fund depends on the individual views and hierarchy of values of each person, all measures contributing to the changes of the financial fund earmarked for the participation in short-term recreation are thrown back upon the recreational hinterland of large towns. In view of a great proportion of cars as the main transport means of participants in short-term recreation, power fuel prices also are important factors forming the recreational hinterland of towns.

The problems of defining the boundaries of the recreational hinterland of large towns have so far been methodically treated of only insufficiently. With regard to a great practical significance of the results of this study it would be advisable to pay greater and more systematic attention to these issues along the lines of the geography of tourism.

- BARBIER B. (1965): *Methods d'etude des résidences secondaires, l'exemple des Bases-Alpes — Méditerranée*, 6:2:89—111. Marseille.
- GARDAVSKÝ V. (1977): *Rekreační nároky městských obyvatel*. Acta Univ. Carolinae, Geogr. 12, 25—38. Praha.
- MAĽA V. (1983): Účasť obyvateľstva veľkých priemyslových miest na cestovnom ruchu. — *Životné prostredie*, 17:1:32—34. Veda, Bratislava.
- MARIOT P. (1969): *Priestorové aspekty cestovného ruchu a otázky gravitačného zázemia návštevných miest*. — *Geografický časopis*, 21:4:287—312. Veda, Bratislava.
- MARIOT P. (1976): *Objekty individuálnej rekreácie na Slovensku*. — *Geografický časopis*, 28:1:3—22. Veda, Bratislava.
- MARIOT P. (1983): *Cestovný ruch — prepych, alebo nevyhnutnosť?* — *Životné prostredie*, 17:1:6—10. Veda, Bratislava.
- MARIOT P. (1983): *Geografia cestovného ruchu*. 248 str. Veda, Bratislava.
- RUPPERT K. (1973): *Der Zweitwohnsitz — geographisches Faktum und landesplanerisches Problem*. — *WGI-Berichte zur Regionalforschung*, 11:1:54, München.
- VYSTOUPIL J. (1981): *Geografické problémy krátkodobé rekreace ČSR*. Strojopis, 146 str., Brno.
- WARSZYŃSKA J., JACKOWSKI A. (1973): *Podstawy geografii turystyki*. 333 str. Pol. wyd. naukowe, Warszawa.

Souhrn

PRÍSPEVOK K VYMEDZENIU HRANÍC REKREAČNÉHO ZÁZEMIA VEĽKÝCH MIEST

Rekreačné zázemie veľkých miest je jedným z typov ekonomickogeografických regiónov. Jeho vznik súvisí najmä so zvýšenou koncentráciou obyvateľstva vo veľkých mestách a s vplyvmi vysoko urbanizovaného prostredia na správanie mestského človeka. Štruktúru tohto typu ekonomickogeografických regiónov charakterizujú nodálne väzby, ktoré spájajú veľkomesto s jeho okolím. Intenzitu týchto väzieb určuje záujem obyvateľov veľkomesta o účasť na krátkodobom cestovnom ruchu. Orientáciu týchto väzieb významne ovplyvňuje kvalita potenciálu krajiny pre krátkodobý cestovný ruch.

Pod rekreačným zázemím určitého mesta možno rozumieť územie, v ktorom sa realizuje zhruba 80 % objemu záujmu jeho obyvateľov o krátkodobú rekreáciu. Hranica rekreačného zázemia teda vymedzuje územie, v ktorom strávi koncomtýždňový odpočinkov podstatná väčšina jeho obyvateľov. Rozmery takého územia určuje niekoľko činiteľov. Rozhodujúcu úlohu medzi nimi má časová dostupnosť, vyjadrená izochronami, ktorá vystihuje zapojenie rôznych častí okolia veľkých miest do ich rekreačného zázemia dôkladnejšie ako územná dostupnosť vyjadrená izochorami.

Nie je možné jednoznačne a všeobecne určiť, ktorá izochrona ohraničuje rekreačné zázemie veľkých miest. Možno však povedať, že v prípade väčšiny veľkých miest je to izochrona z intervalu 60 až 90 minút. Pritom v rôznych smeroch, udaných hlavne priebehom cestných komunikácií, určuje hranicu rekreačného zázemia mesta rôzna časová miera dostupnosti. Hranice rekreačného zázemia veľkých miest netvorí línia, ale zóna, ktorá poskytuje priaznivejšie možnosti na to, aby sa brali do úvahy rôzne osobitosti územia. Šírka hraničnej zóny je rozličná. Málokedy však presahuje 20 km.

Rozhodujúcu úlohu pri určovaní rozlohy, konfigurácie a priebehu hraníc rekreačného zázemia veľkých miest má potenciál krajiny pre cestovný ruch. Všeobecne platí zákonitosť, že účastníci krátkodobého cestovného ruchu sa snažia realizovať svoje záujmy v čo najbližšom okolí miesta trvalého bydliska. Preto možno v rámci rekreačného zázemia väčšiny veľkých miest rozlišovať 4 pásma charakterizované osobitosťami v štruktúre materiálnotechnickej základne, v intenzite využitia a v časovom rytme využívania:

1. Vnútromestské pásmo, ktoré tvoria plochy lokalizované v intraviláne mesta.
2. Prímestské pásmo individuálnej rekreácie, ktoré tvoria plochy s rekreačnou funkciou rozmiestnené zväčša na okrajoch mesta.
3. Užšie vidiecke rekreačné pásmo, ktoré tvoria zväčša zalesnené plochy lokalizované v najmenšej vzdialenosti od mesta.
4. Širšie vidiecke rekreačné pásmo tvorí časť okolia mesta, v ktorom sa rekreačné plochy vyskytujú iba v určitých lokalitách.

Šírku jednotlivých pásiem, z ktorých sa skladá rekreačné zázemie veľkých miest, možno zhruba určiť časovým vyjadrením vzdialenosti hraníc jednotlivých pásiem od trvalého bydliska účastníkov krátkodobej rekreácie. Vnútromestské pásmo sa nachádza zhruba v izochróne 15 minút. Prímestské pásmo zväčša ohraničuje izochróna 30 minút. Užšie vidiecke rekreačné pásmo leží spravidla v izochróne 45 minút. Širšie vidiecke pásmo vymedzuje pri mestách s menej ako 500 000 obyvateľmi izochróna 60 minút, u väčších miest izochróna 90 minút.

Súhrn vplyvov rôznych činiteľov spôsobuje, že hranice rekreačného zázemia veľkých miest ležia v rôznej vzdialenosti od mesta a majú rôznu konfiguráciu. Pre každé veľké mesto ich treba preto určiť osobitne, na základe hodnotenia konkrétnej situácie v jeho okolí. Hranice rekreačného zázemia veľkých miest nemajú stabilný charakter, ale sa v dôsledku vplyvov rôznych činiteľov menia. Na ich zmeny vplývajú najmä socioekonomické činitele. Najvýraznejšie zmeny v rekreačnom zázemí veľkých miest spôsobujú úpravy dĺžky trvania pracovného času. Rozhodujúcim ekonomickým činiteľom, ktorého zmeny vplývajú na premeny v rekreačnom zázemí veľkých miest, je finančný fond, ktorý obyvateľstvu zostáva k dispozícii na krytie výdavkov spojených s účasťou na krátkodobom cestovnom ruchu.

Problematica určovania hraníc rekreačného zázemia veľkých miest je metodicky zatiaľ slabo rozpracovaná. Vzhľadom na veľký praktický význam výsledkov jej štúdií bude vhodné venovať na pôde geografie cestovného ruchu týmto otázkam väčšiu a systematickejšiu pozornosť.

(Address: Geografický ústav SAV, Obrancov mieru 49, 814 73 Bratislava.)