### **UNIVERSITY OF PÉCS**

Doctoral School of Earth Sciences

# The time-space activity of tourists in the development of destinations — the example of Lake Balaton

Theses of PhD dissertation

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#### 1. Introduction

The conscious and long-term planning of destinations as well as the product development in target areas are based on the knowledge of tourist habits. The latter is in the interest of the supply-side to enter the tourism market successfully and to preserve its contestability in the tense competition between destinations. For the supply-side the latter is essential nowadays, in terms for the offering side to step on the tourist market successfully, and be able to keep its competitiveness in the tense contest amongst target areas. Hence during the destination development process it is especially important to be familiar with the motivation of the guests arriving to the target areas — one of the main factors affecting the demand -, which fundamentally determines the guests behavior and the time-space activity of tourists.

In terms of the demand, the borders of the destinations are difficult to define, since the perception of an area depends on each tourist and their motivation. The variety of attractions and areas visited by tourists perfectly show the main directions of mobility, in the territorial distribution of which high concentration can be observed.

In my dissertation, I investigate the differences and similarities in touristic areas coordinated by the touristic destination management organizations and the tourists destination image. I decided to conduct an exploratory analysis and evaluation in one of Hungary's most famous destinations, at Lake Balaton. My research has focused on the extent to which areas visited by tourists are overlapped by areas that are artificially defined by management organizations.

The emergence of EU funds in tourist regions with increasing numbers of guests and overnight stays, such as Lake Balaton, has created a key opportunity for product and service development. Due to the developments made in the last decade, besides the original centers new ones have been established at Lake Balaton and nationwide as well.

According to the Government Decree 429/2016. (XII. 15.), the studied area of the dissertation is defined as Lake Balaton Priority Resort Area.

### 2. Objectives

The goal of my dissertation is heavily influenced by the development and the separation of destinations which perceived severe lack of attention from tourists, and the issues caused by this. The empirical studies I did make it possible for me to introduce how Lake Balaton develops into a highly popular tourist destination, which settlements are the center of visitors' attention, what activities are pursued by them and in what ways does the work of the destination management organizations influence the development of certain areas. The Lake Balaton, as a tourist destination is used in many ways, which were was discovered by the following methods:

- Through the overview of national and international professional literature I could explore the investigation methods of the usage of tourist destinations, the possibilities behind their application, evaluating the advantages and disadvantages in case of Lake Balaton.
- According to the official statistic data on the demand and the offer, I could explore the spatial structure of Lake Balaton's tourism.
- The developments helped and supported by the European Union, especially the developments dedicated to tourism and the unfold of the territorial and temporal changes of allocation, considering the differences between inshore and offshore settlements.

- Introducing the activities of destination management organizations around Lake Balaton and measuring the usefulness of attraction and visitor management methods and equipment.
- The efficiency of regional cooperations and the positions of the suspected and real borders of destinations can be measured by the exploration of land use in the Balaton region, id est the mapping of intra-destination mobility.
- Identifying the influence and the role of the time-space activity of tourists on the demand.

The dissertation is revolving around the analyzation and evaluation of these following questions:

- 1. How did the touristic developments (founded by the European Union) affect the compound of the touristic supply and its regional concentration?
- 2. Do the differences in the territoriality of the tourist offer also return to the time-space activity of tourists by the guests visiting the destination area?
- 3. Due to the innovative activities of destination management organizations active leaders of the time-space activity of tourists when it comes to supplies, or they just create possibilities?
- 4. Are the borders of regional destinations created by the common work of the local level destination management organizations and governments overlap the destination borders appointed by the tourists arriving to the destination?

### 3. Research methods

### 3.1. Primary research

For the writing of this essay, I used the primary researches below:

- Surveying the inland visitors of Balaton region about the activities and their contributing factors in the destination.
- Questionnaire survey of Tourism Destination Management (TDM) organizations operating in the Balaton region, exploring attempts and methods for shaping the timespace activity of tourists, focusing on their collaborations, external and internal relations, product development, branding and marketing activities.
- Producing professional interviews with Lake Balaton TDM managers, as well as with the supervisors and leaders of the Regional Operative Programs Contributory Organizations and Leading Authorities.

The primary method that needed the most resources and was the most important part of the research happened to be the surveying of the tourists, which took place between the 29<sup>th</sup> of June, 2019 and the 23<sup>rd</sup> of August, 2019 in the settlements of Balaton region. The base of the sampling in the settlements of Balaton region was the registered cumulated number of inland visitors in the year of 2018. The goal of the questionnaire survey was to identify movements within the destination and their triggers, going beyond the classical guest survey, using areaspecific questions.

In the research plan I wished to reach my goal with 800 surveys, from which I achieved 773. The defined sampling in the research plan succeeded with 96,625% accuracy. The structure of the sample is territorially representative based on the total number of domestic guests registered by the CSO in commercial and private accommodation in the designated area in the full calendar year (2019) prior to the survey, which is provided by stochastic modeling on the initial data. As a result of the process, the difference in absolute share between the number of guests registered in some settlements (actual numbers) and the share in the sample was 12.767%.

To get to know the characteristics and activities of the TDM organizations working in the Balaton region, I surveyed them in 2020. The form shared online was sent out to 21 local and 3 regional TDM organizations, to which 18 local and 3 regional answered. The goal of the survey, containing 68 questions, is to find out the experiments present at the local and regional level, as well as the potentially applicable tools and methods for shaping the tourists' space-time activities, based on the characteristics and activities of these TDM organizations.

Due to the interviews and the local and regional touristic participants, I could get more familiar with these TDM organizations' activities, and the differences between the local and regional tasks. The conversation with the colleagues of the tourism developing programs contributing organizations and leading authorities helped with tracking the allocations of the European Union developing resources and the changes of priorities of the spatial and temporal intervention, assisting the cognition of the decisions made behind closed doors.

#### 3.2. Seconder research

- The international literature of the theme, especially the tourists' space-time activities experimental methods, equipment and results literature in English meant the base of the dissertation and the primary research theoretical.
- The native literature attached to the theme processed the center parts besides the touristic destination and destination development the TDM organizations activities connecting works meant.
- The other major group of the seconder sources are the national development policy documents (National Development Policy Concept, National Territorial Agenda Concept, National Development and Territorial Agenda Concept) and the tourism policy departmental plans (National Tourism Development Strategy 2005-2013, National Tourism Development Strategy 2030) meant. Connecting to the source allocation examination the touristic themed call for tender (21 pieces) got under review.
- The territorial and structural differences in the subsection titled "In the tourism of Lake Balaton", the used data of the characteristics on tourism supply and demand are originated from the Central Statistical Office's (CSO) databases "Informational database" and "Tourism, hospitality" available online.
- The presentation and evaluation of the attraction base and program offer of the Balaton region was built by the Hungarian Tourism Agency (formerly Hungarian Tourism Ltd.) On the tourinform.hu website, supplemented by Blue Wave Flag beaches and certified baths included in the National Health Tourism Development Strategy. I collected the varieties of programs at Lake Balaton and their characteristics from two websites (csodasbalaton.hu and welovebalaton.hu). According to the database, between 2019. 01.01. and 2019. 12. 31., 868 event was organized in the region of Balaton. Following the methodology used in my previous co-authored publication, the elements of the offer were classified into three groups based on their

- attractiveness, and then I estimated the absolute tourism potential (the sum of the attraction values of the attractions in the settlement) at the settlement level.
- For the examination of the European Union sources dedicated to the development of tourism, 185 settlement 8541 (from this 285 touristic themed supported application) I created a database for the details of applications receiving support between the 1<sup>st</sup> of May, 2004. and the 31<sup>st</sup> of March, 2019. To build up the database, I used the supported project searcher, palyazat.gov.hu and terkepter.nfu.hu websites. The pertinent information of the project was assigned to the 185 settlements by the main executional area. After the build of the database, we analyzed the variance in the 23.0 version of the IBM SPSS Statistics, to unravel the spatial and temporal changes of received developing sources.
- Instagram, one of the biggest social media platform designed to share pictures in an
  instant, helped me through the analysis of the content to find the most common
  keywords and checking in locations in the agglomeration of Lake Balaton, providing
  me with intriguing information. However, by itself it is not an eligible form of
  measuring the movement patterns of tourists.
- To depict the Balaton region's demand and supply aspects, the distribution of source allocation as in spatial and temporal, as well as the measuring of the visitors, I portrayed the characteristics of time-space activity of tourists on maps, using the ArcGIS 10.2 geoinformatic software.

### 4. Summary of the results

## 4.1. I overviewed the methods and results of testing the time-space activity of tourists, together with the aptitude of the area of sample, evaluating the possibilities of methods application.

To reach the goals I set for this essay, at first I excavated the research methods of the tourists' space-time activities, utilizing native and international literature. After this, to be able to select the most appropriate research method, I evaluated those methods' possibilities, advantages and disadvantages referring to the Balaton region.

According to the literature overview, the passive observation using electronic technologies on the Balaton region's 174 settlements did not prove itself to be practical. The GPS monitoring system, used in the international researches, helped to locate the exiting and entering points of visitors, for example in a thematic park or historical small town, but they did not make such researches in bigger geographical categories like recreational areas. In the case of a complex area with many settlements and a large number of accommodation and attraction offers, it was not possible to adapt the method. Setting up a toolkit and finding collaborating partners also places a significant burden on researchers.

The use of *mobile phone cell information* is present in international research, and the Hungarian Tourism Agency has also reported on its use at professional events. The method is suitable for accurately tracking the spatial and temporal movements of people in large spatial destinations, such as Tibet, but the large amount of data thus generated already leads to the issue of "Big Data". The disadvantage of this method is the limited availability, as it assumes the availability of a virtually priceless resource for non-profit research.

The analysis of user generated *social media content* offers help in building a brand and learning more about the guests' opinion not just today, but even more so in the future. Its application in the surveying of movement patterns of tourists has been questioned in relation to the sample area. On the one hand, the content shared on the most frequently studied social media platforms in the international literature (Flickr and Twitter) peaks in the big cities, in

the case of the Balaton region it lags behind the number of elements examined in international research. On the other hand, the content analysis of Instagram - which appears as a novel research method - is complicated by the high ratio of private profiles, and the disconnection between the geographical position and the content of the post, which happened in 2018 due to the limitation of accessing from public content discovery APIs.

For the preparation of this dissertation I used a questionnaire survey, the disadvantages of which have been pointed out several times before in the international literature, and been experienced by my previous surveys as well (for example: data loss). However, by compiling the questions, it is also possible to get an idea of the activities and intra-destination mobility of the guests, which have not been attempted to assess so far.

### 4.2. Relying on the statistical data of the Central Statistical Office (CSO), I explored the territorial and structural differences of tourism in Lake Balaton.

In the dissertation I presented the regional differences of the demand and supply elements of the Balaton region with the help of map diagrams. It is typical for the tourism of an area with wider geographical boundaries to be less intense in all parts about the appearance of demand and supply. In some areas, tourism is more concentrated, in other parts it is more moderate, and elsewhere there is no tourism at all. The composition and quality of the accommodation offer, the attractiveness and location of the attractions and programs, as well as the time of its availability all influence the tourists' space-time activities.

Among the characteristics of the supply, in addition to the statistical data of the accommodation capacity, I also tried to evaluate the spatial location and composition of the attraction supply. The attractions of the Balaton region have been selected from the database of the tourinform.hu website. The attractions were classified into three categories based on their intensity of attraction and role in tourism. The first group included the image-forming attractions with outstanding attractions, natural and cultural values. In the second group, I listed the attractions that, although are not the primary destinations for guests arriving in the targeted area, but will most likely visit them during their stay there. The third type included attractions visited by guests with a narrower special interest, as well as primarily cultural and historical monuments, in which the presentation of the attraction and the adventure to be experienced appear less attractive or interactive. In my rating system, when weighting the attractions, I associated 6 points for the attractions belonging to the first group, 3 points to the second group, and 1 point for the ones belonging to the third type. I estimated the absolute tourist potential of each settlement with the total amount of the attractions' appeal worth.

I collected the Balaton program supply and its characteristic features from two Balaton program recommendation websites (csodalatosbalaton.hu and welovebalaton.hu). According to the database, 868 events were organized in the Balaton area between 1 January 2019 and 31 December 2019. The map created using the database demonstrates the territorial, temporal and type-based distribution of Lake Balaton region's events (*Figure 1*).

Rendezvények száma

>50

21:50
11:20
6-6:10
1:5

Rendezvények jijusa

Kiállitás
Előadás
Unnep
Fesztiválkoncert
Gasztro
Sportrendezvénye
Vízi rendezvénye
Vízi rendezvénye
Vízi rendezvénye
Vízi rendezvénye
Vízi rendezvénye
Nizi rendezvénye
Vízi r

Figure 1.: The territorial, temporal and type-based distribution of Lake Balaton touristic area's events in 2019

Sources: csodalatosbalaton.hu and welovebalaton.hu, created and edited by myself

Kiemelkedően átlag feletti (>20%) Jelentősen átlag feletti (10-20%) Átleg feletti (<10%) Átlag alatti (10%)

Jelentősen átlag alatti (10-20%) Kiemelkedően átlag alatti (<20%)

With mapping the touristic data that is suggested by the establishment capacity of Lake Balaton region, I have unraveled the region's characteristic regional and structural differences (*Figure 2*). There are significant dissimilarities in certain settlements in the external and internal dispersion of registered tourist traffic. It can be ascertained that the foreign guests' proportion is greater on the northern shore, while the southern shore is destination to more nationals.

Vendégéjszaka (darab, 2019)
1 000 000 felett
-500 001 - 1 000 000
-150 001 - 250 000
-100 001 - 150 000
-50 001 - 100 000
-100 001 - 150 000
-50 001 - 100 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 150 000
-100 001 - 100 000

Figure 2.: The accommodational establishments' number of overnight stays' areal dispersion and sending region-based distribution in the touristic are of Lake Balaton (2019)

Source: based on the data of KSH, created and edited by myself

## 4.3. It was established, that the touristic developments which were enabled by the utilizing of Union funds have expanded the touristic supply's composition and raised the territorial degree of concentration.

Mapping is the best way to display the territorial differences in the touristic developments' source-allotment's regional research (*Figure 3*). During the source-distributional research it was determined, that along the settlement territorial position there were significant discrepancies. The inshore settlements' typically allotted touristic subsidies are 8,48 times greater that the not inshore settlements'. The focus is clearly on the shore side. Based on the development supporter operational programs which occur in certain development cycles, it can be ascertained, that the differences increased with the programming period's progress (*Table 1*).

Studying the encroachment's priority on the settlement's territory, it was found that the largest difference was in facility-development, and the least amount developed in TDM. The difference is smaller between inshore and inner towns in the TDM organization's support, thus many settlements which do not have shore at its disposal acquired from the destination management subsidies.

Turizmusfejlesztésre megítélt támogatások (millió Ft)

20 429

ROP II.

GINOP

TOP

Balaton Kiemelt Üdülökörzet

Balaton kiemelt turisztikai fejlesztési tráség új települősei

Figure 3.: The territorial distribution of funds which were dedicated to developing Lake Balaton's tourism between the 1<sup>st</sup> of May, 2004 and the 31<sup>st</sup> of March, 2019

Source: based on palyazat.gov.hu/tamogatott\_projektkereso and a ropter.nfu.hu websites, created and edited by myself

During the allotment of tourism-developmental funds, the inshore towns showed a greater fund absorbance, thus the supplementary product developments in tenders tend to go towards the shore and they increased even more the supplement's territorial concentration.

*Table 1*: The characteristics of inshore and inner towns' touristic subsidies by operational programs

Operational program	The average of inshore town's subsidies/ The average of inner town's subsidies	The rate of ANOVAF -test	The level of significance
Regional Operational Program (ROP) (2004-2006)	4,15	3,527	0,062
Regional Operational Programs (NYDOP, KDOP, DDOP) (2007-2013)	7,05	20,164	0,000
Economic Development and Innovative Operational Program (EDIOP) (2014-2020)	11,37	11,444	0,001
Region- and Settlement Development Operational Program (RSDOP) (2014-2020)	6,83	23,964	0,000
In total	8,48	16,843	0,000

Source: based on palyazat.gov.hu/tamogatott\_projektkereso and ropter.nfu.hu websites, created and edited by myself

### 4.4. The TDM organizations' situation, actions, and instruments which were applied in configuring the spatial infrastructure

The TDM organizational structure is present in the Balaton region, however, the repeal of tender subsidies hindered them. It is clear from professional interviews, that beside their compulsory tasks, there is not enough funds available for other developments. Operational resources are formed by the local authorities' preferences. With the founding of the Hungarian Travel Agency, and the new National Tourism Development Strategy's orientations the role of their actions and professional legitimacy were called into question, and as a consequence many local TDM organizations attend a narrower range of responsibilities conforming to the previous Tourist Information Service role.

Based on surveys their actions are diversified, but the suspension of duties between the different levels (local and areal) is not that distinct in practice, while the regional level is officially, yet in practice it does not achieve anything substantive.

Based on surveys and professional interviews it can be stated that there are neither two destinations nor destination management organizations that struggle with the same possibilities and problems. The Lake Balaton touristic area's TDM organizations apply a large proportion of the modern day's recent attraction- and guest management, as well as the sales incentive methods.

The usage of *touristic discount* cards is not just present, but exceed the national average due to the areal card system developed by TDM organizations, although, the adjudication of the cards' utility is diverse even within the TDM organization workers. This explains why according to a survey barely 2% of the high season guests have used a destination's discount card.

Phone applications are more popular among local TDM organizations, however these data content is mostly confined to their town's assets. Shortly, cooperation between certain destinations has not appeared yet, and in my opinion it will not, because the local identity is still very dominant, which hinders the segregation of the level's suspension of duties.

Furthermore, the last TDM tender was cancelled and probably it will not appear in the next developmental cycle. So much the more, because the Hungarian Tourism Agency has not taken a stand on what kind of role they would want to give to the bottom-up touristic organizations in the future.

With the selection of *thematic routes*, those settlements can join the list of touristic destinations which lie further to the shore, which themselves do not have such alluring assets would ensure they would end up on Balaton vacationers' destination list. But with a well-chosen theme the TDM organizations could guide some attention to these locations too. In the Balaton region primarily the bike paths offer and opportunity to involve towns further from the lake, an example of which appear in the studied area. The development of bicycle tourism can be significant in the future, because beside the dominant summer season it could create opportunity for the strengthening of the spring and fall season.

Most of the TDM organizations strike to influence the touristic spatial use in the Balaton region, however, I believe these initiations role might be greater in the non-high seasons. Management organizations acquire instruments for influencing spatial usage, but their role can be more significant in the other seasons.

### 4.5. Using the questionnaire about spatial usage I studied the frequency of mentioning and visits, moreover, I called attention to the dissimilarities between the six most alluring destination's catchment area.

### The frequency of mentioning the Balaton region's towns

Studying the spatial management, the density points and dead spots can be discovered, the more active zones in terms of tourism can be determined. The locations searched up by guests map out the main direction of tourists' spatial usage.

During the research of spatial usage, I studied the settlement's mention frequency, which show the visited settlements and accommodation locations, thus the examined territory's most popular and busiest places. The paths trodden by visitors show a picture about Lake Balaton's territoriality, in which stark concentration can be observed (*Figure 4*).

Because it contains the respondent's accommodation's location, the primary suprastructure's elements are greatly influenced the rates. Balatonfüred, Keszthely, Siófok and Tihany are with more than 20% the busiest locations. Based on my questionnaire Balaton region's touristic spatial usage's centers are the inshore towns, but because of their health touristic features also Hévíz and Zalakaros belong to the center, plus because of its cultural heritage, richness in programs, and its zoo, Europe's Cultural Capital, Veszprém too.

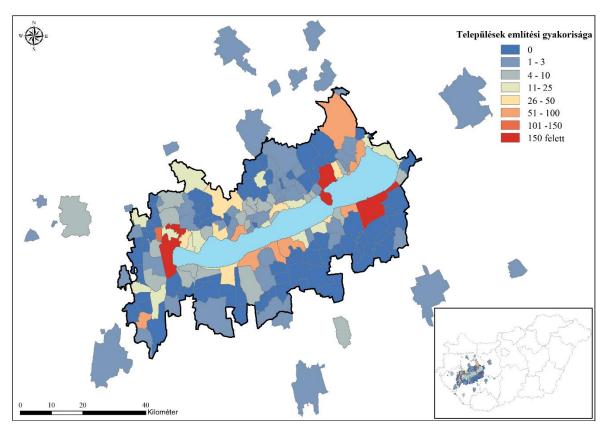


Figure 4.: Balaton region's settlement's mention frequency

Source: own surveying, n=773

In my thesis I studied the mobility within destination, the distribution of those vacationers who stay in their accommodation's territory and of those who travel within their destination. The quarter of respondent's (25,74%) were only in the territory of their accommodation. The largest proportion of their accommodation remained in the settlements of Siófok (two thirds), and in Zalakaros more than half of the tourists did not leave the spa town. In both settlements,

the hotel guests carried out tourism activities in a higher than average proportion (3.5-3.5 marked activities), so they were able to satisfy the needs related to their motivation in the highest proportion in these settlements.

### The frequency of visiting destinations in the Balaton region

There are several differences between the destination-image illustrating the *frequency of visiting* destinations in the Balaton region, id est the intra-destination mobility (the density of mobility) and the geographical patterns illustrating the frequency of mention. The frequency of visits shows the destinations in or outside the region to which tourists travel from the place of accommodation. Accordingly, the services or experiences offered by these destinations are so attractive that tourists are willing to leave their accommodation. Respondents visited 1.8 destinations on average, while this figure was 2.5 by those visiting other destinations.

In terms of visits, Siófok, Balatonfüred have the largest number of visitors, although they remain significantly below those of Tihany and Keszthely. A megkérdezettek háromnegyede Balaton-parti településeket választott úti célul. Destinations on the shores of Lake Balaton were chosen by three-quarters of the respondents. Based on intra-destination mobility, the centre of tourism also includes some significantly attractive destinations far from the shore (Sümeg and Tapolca), some spa towns (Hévíz, Zalakaros and Kehidakustány) and the town of Veszprém is becoming increasingly integrated into the Balaton region (*Figure 5*).

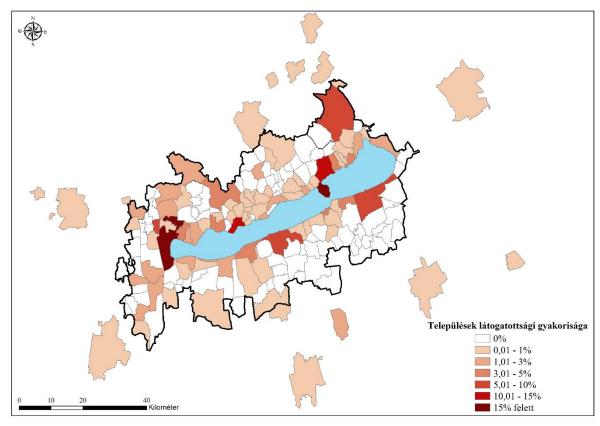


Figure 5: Frequency of visits to the settlements of the Balaton region

Source: own surveying, n=773

If we apply the indicators established by the evaluation and classification of tourist attractions and programs, a strong, linear link can be demonstrated between summer programs, tourism potential and the targets of intra-destination mobility. The significant link is somewhat stronger between the attractiveness of events and the attractiveness of a destination (0.832),

than between tourism potential and the attractiveness of destinations (0.745). Based on the arrival of guests, events play a significant role in facilitating intra-destination mobility.

The clientele survey has also shown that the available statistics on guest demand are obsolete and not sufficient to define destinations. As regards the number of registered guests, there are several places in the Balaton region remaining significantly below the average, even below neighboring settlements; and yet, a large number of guests in the region visit them. An example of such a destination is Tihany, the most popular target of the intra-destination mobility. Other examples are Szigliget, Tapolca and Sümeg, which became popular destinations thanks to their significant tourist attractions. Keszthely belongs to them, too. Although the tourist traffic in Keszthely is considerably lower than the neighboring Hévíz, it is the second most popular target of the intra-destination mobility.

### The internal agglomerations of destinations in the Balaton region

As regards the largest and most popular targets of intra-destination mobility (Tihany, Keszthely, Balatonfüred, Badacsontomaj, Siófok, Balatonboglár), I designed the internal agglomerations of the chosen destinations by reversing the logical direction of the frequency of visits.

Tihany is the most visited destination in the region. Balatonfüred is the most significant place with potential tourists. Overall, less than a quarter of tourists visiting Tihany stayed only a short time (1-3 nights) in the region.

The agglomeration of Keszthely is smaller and includes settlements located in closer proximity than that of Tihany. Its agglomeration expands even to Badacsony on the northern shore and to Fonyód on the southern shore. It attracts only few from distant places, who typically (82.3%) spend 4 nights or more in the region. Most tourists are from Hévíz. The 42.8 % of tourists arriving from Hévíz to Keszthely have chosen this destination for the purpose of recreation on the shores of Lake Balaton, which reveals the poor structures of accommodation in Hévíz.

Balatonfüred is the third most visited destination in the Balation region. The number of guests staying only a short time in the region (29.9%) was the largest here. More than half of the tourists arrived from surrounding settlements (Alsóörs, Balatonalmádi, Csopak, Tihany, Veszprém, Zánka).

More than 10 % of the tourists in the region were interested in what Badacsonytomaj has to offer. Most tourists in the region arrived from Balatonfüred, Keszthely, Fonyód and Balatonlelle, although it attracted tourists even from distant parts of the region, mainly from settlements on the shore. In comparison with popular destinations, it can be concluded that proportionally larger number of tourists (37.6%) have visited it from the southern shore of Lake Balaton. Despite the wide array of programs, less than 15% of the tourists arrived specifically because of the programs. Other motivational factors such as the culinary repertoire together with wine consumption (28.9%) and catering (22.4%) were more successful.

Among the destinations on the southern shore, Siófok (8.9%) and Balatonboglár (6.7%) facilitated the intra-destination mobility the most. The agglomeration of both towns in the region expands typically to the southern shore of the lake; however, settlements around the eastern basin of Balaton can better integrate into that of Siófok.

Besides the agglomerations of the TOP6 destinations defined by the intra-destination mobility, the demographic patterns of tourists visiting these destinations have some interesting results (*Figure 6*). Examining the age structure of the tourists, it can be concluded that Siófok and Badacsonytomaj attract proportionally larger number of young travelers, than the other destinations. Almost four-fifths of the tourists visiting Keszthely were beyond the age of 36 suggesting that it is popular among families, middle-aged and the elderly. In

contrast, the percentage of those under the age of 18 and that of 36-50 year old were the largest in Balatonboglár. Consequently, it is a popular destination among those travelling together with family with a negligible proportion of tourists beyond the age of 50.

 destination mobility:

 Tihany
 4%
 12%
 20%
 38%
 18%
 8%

 Siófok 0%
 28%
 20%
 37%
 8%
 7%

 Keszthely 1%
 11%
 9%
 40%
 26%
 13%

 Balatonfüred
 3%
 16%
 22%
 38%
 15%
 5%

 Balatonboglár
 8%
 18%
 16%
 53%
 4%2%

 Badacsonytomaj
 1%
 25%
 14%
 40%
 14%
 5%

 0%
 10%
 20%
 30%
 40%
 50%
 60%
 70%
 80%
 90%
 100%

 ■18 év alatti
 18 - 25 éves
 26 - 35 éves
 36 - 50 éves
 51 - 65 éves
 65 év feletti

Figure 6.: The age-scale of tourists visiting the TOP6 destinations defined by the intra-

Source: survey created and edited by myself

# 4.6. The following research focuses on the overlapping between the boarders of destinations, which are defined by the operational field of regional Tourism Destination Management (TDM) organizations, and the destination defined by the spacial usage of tourists staying in the region.

The suspected borders of the region consist of borders established due to the cooperation between local TDM organizations and municipalities, and the borders of regional TDM organizations enlarged by different marketing related associations. Since these borders are defined on the basis of cooperations, they cannot be considered as permanent, but constantly changing units significantly influenced by management. TDM organizations, which possess several different techniques of managing attractions as well as visitors, can expand the range of areas worth visiting.

In my understanding, exploring the mobility of tourists within the target area as well as between the destinations is necessary to define the real borders of destinations. Moreover, each tourist is an individual whose mobility is influenced by personal motivations and the period of residence.

The location of TDM organizations operating in the Balaton region as well as the social network of regional TDM organizations are illustrated in *Figure 7*. The operational fields of all three TDM organizations in the Balaton region as well as the spatial mobility of tourists staying in destinations defined by the cooperation were compared in the dissertation, but due to length constraints, it has been illustrated on map, through the example of the TDM organization in the West-Balaton region.

Nyugat-Balaton - helyi TDM
Nyugat-Balaton - onkormányzat
Nyugat-Balaton - onkormányzat
Nyugat-Balaton - helyi TDM
Bakony-Balaton - helyi TDM
Bakony-Balaton - helyi TDM
Bakony-Balaton - honlap
Bakony-Balaton - honlap
Bakony-Balaton - honlap
Balaton Best - helyi TDM
Balaton Best - honlap
Balaton Best - honlap
Balaton Selvi - honlap
Balaton Best - honlap

Figure 7.: The local TDM organizations in the Balaton region and the social network of regional TDM organizations

Source: west-balaton.hu, balatonbest.hu, bakony-balaton.hu, edited by myself based on the Hungarian TDM Association (MTDMSz) 2016

Comparing the areas defined by demand and the managed ones, I have come to the conclusion that the studied area represents varying degrees of overlapping between the operational fields of local TDM organizations and the areas of tourist mobility.

Areas defined by the operation of TDM organizations in the West-Balaton had the highest tourist percentage (exceeding 70%). The wide range of products, the increasing diversity of services as well as the effective local marketing have all contributed to the high level of tourist satisfaction. The town descriptions on destination website, the uniformly harmonized way of product marketing in the region (tourist discount cards, thematic publications) have made an effective contribution to encouraging tourists to stay in the target area during their trips (*Figure 8*).

Thanks to the Balaton Best regional Tourism Destination Management Organization, cultural tourism and lacustrine tourism are equal partners, but the management activity focuses on destinations on the shore to such an extent that it fails to keep tourists on its own area. A complicating factor is that Veszprém and Siófok attract tourists who arrive in the region. Thanks to its cultural heritage and zoo, Veszprém has become a popular destination among tourists who arrive in the region. It also has the third highest tourist traffic within the suspected borders of the region. 60.4% of the intra-destination mobility of those staying in the region was targeted at the cooperative areas.

The Bakony and Balaton regional TDM organization combines the characteristics of the two lands that have different repertoire of attractions, but their promotion ("Bakony and Balaton - Noble lands, unforgettable experiences) places greater emphasis on rural tourism as well as the current and cultural tourism of Bakony. The area of destination is located significantly beyond the borders of the Balation region, still, its most popular settlements (Veszprém, Sümeg, Tapolca, Eplény) belong to the Balaton region. Based on the survey conducted during the high season, the opportunity to have a holiday on the shores of Lake Balaton has drawn tourists of the destination. As a consequence, the percentage of intradestination mobility is significantly lower (22.8%) than that of the other two regional organizations. Except for Veszprém, the centers of land use (Alsóörs, Balatonalmádi, Balatonfüred and Tihany) are beyond the borders of the area. The results of the land use survey are not questioning the work of the Bakony and Balaton regional TDM organization. They can, however, draw attention to the fact that the intra-destination mobility of tourists, who booked accommodations further away from Lake Balaton during the summer period, is becoming increasingly directed towards the lake tourism offers of Balaton.

Szálláshely településéről felkeresett településéről felkeresett települések látogatottságának aránya

0,01 - 1%
1,01 - 3%
3,01 - 5%
5,01 - 10%
15,8%
46,7%
működési terület desztináció honlapján szereplő települések

Figure 8.: Spatial mobility of tourists staying in the operation fields of TDM organizations in the West-Balaton region

Source: west-balaton.hu and survey created and edited by myself, n=198

### 4.7. Balaton is on Instagram!

Social listening, the process of monitoring social media and content analysis, allows us to analyze discussions of social media users, which could prove useful in branding, monitoring competitor activity or improving customer satisfaction by getting familiar with their experiences. Social listening allows a better understanding of the tourists' attitude towards a destination. I have analyzed the content of social media in order to survey the mental map of the Balaton region. I have selected keywords related to having a holiday at Balaton, whose geographical position outlined the territorial characteristics of tourism in the Balaton region. My aim was to add a further dimension to this illustration. I studied public contents shared during 2018 with the help of SentiOne content analysis software. (*Figure 9*).

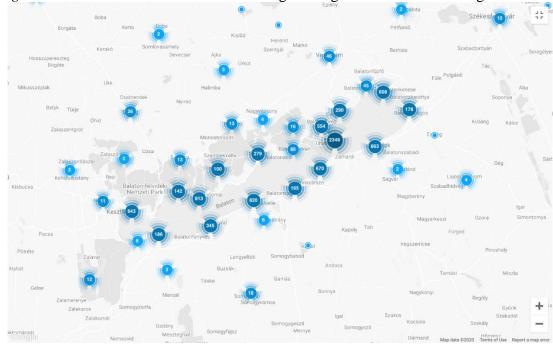


Figure 9.: The territorial distribution of images using the #balaton on Instagram in 2018

Source: edited by myself, SentiOne

The territory of the most frequent keywords and the location of log-ins has provided interesting information about the territorial characteristics of the tourist attraction zone of Lake Balaton.

### 5. Options for utilizing the results

The dissertation calls for further research on the suspected and real borders of the destination. Besides the classic, tourism demand indicators, in particular the index based on the number of overnight stays, the delimitation of destinations based on spatial movements of tourism demand should be stimulated.

In the coming year(s), control analysis could be conducted by a newly-established research party or by an existing research party making the analysis part of their work. Besides the high season, the research could be extended to the spring and fall seasons, which could provide a better understanding of the movement patterns of tourists in the Balaton region. A new destination development strategy for the Balaton priority development area could be built on that.

Another research focus could be the weighting and modelling of factors affecting time-space activity of tourists, such as the supply-side or the transport infrastructure.

Conducting a research targeted at not only tourists, but on people having a second home in the holiday region, could also bring interesting results.

In connection with the allocation of resources devoted to tourism development at Lake Balaton, another possibility for further research could be, first, the determination of optimal aid amounts for groups requiring support or the invitation to submit such calculations, and second, connecting the results of the most popular destinations with the study results of timespace activity of tourists.

### List of publications on the topic:

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- 10. **Horváth Z.** Magyar-Papp J. Pálfi A. (2016b): A turisztikai térhasználat és a desztináció menedzsment összefüggései. *MODERN GEOGRÁFIA*, 2016/IV. pp. 1-14.
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