Where are the top destinations? Assessment of the online data from activities related to geographic position

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Internet is a huge and easy-to-access source of information, including data about visitation of various localities. Such data is searched by managers of protected areas, sometimes it is really time and money consuming activity, when done manually or with various sensors and dataloggers. In this contribution, following activities have been studied: Geocaching, Waymarking, GeoSpy, Munzee and TripAdvisor. Data from such internet-outdoor activities are free. However, there are limits of the quality of the data, which may differ country from country and may change in time. But the data could be very useful and ready-to-use. No standardised methodology was used for this contribution, all the activities have been analysed for their rules, for the ways of usage by their users, for conditions of the field part and for amount and quality of data about visitation of localities.

Geocaching – www.geocaching.com

Situation

Geocaching was established in the U. S. A. in 2000 and has already spread all over the world. In developed countries the cache density is high. For instance, the density is 0.71 caches per km^2 in Germany and 0.03 in Estonia (Vítek 2012). Cache containers must not be placed closer than 0.1 miles to each other that limits the density.

There are several types of geocaches, majority of them are represented by a container hidden somewhere and the finder must sign in the paper logbook in the cache prior to logging his visit on the cache web page. Most caches contain only one point to visit, but some of them (especially multicaches) lead the cacher through several points to find the final location. In some countries, i.e. Poland, **opencaching** (the same activity but with almost no rules) should be observed as well because of its higher popularity.

Data useful for visitor monitoring

All logs from finders (found / did not find / note) are stored on a geocache webpage including the date of the visit and are accessible for everyone. Each found-it log represents at least one person that attended the locality. Most of did-not-find logs represent a visit as well, but it is recommended to read the log to ensure about that. A note could also represent a visit in some cases, for example

from a cacher who found it previously and came here again. From this data average visitation per month or per year can be evaluated. For comparison of higher amounts of caches only total number of found and did-not-find logs could be taken (these are listed in total on the web page), the date of cache publication must be taken into account.

Waymarking – www.waymarking.com

Situation

Waymarking originated from geocaching in 2005. Waymark has no container and the visit is proven by a picture from camera uploaded with log on a waymark webpage. Waymarks are sorted in 1074 thematic categories (creating new ones is still possible) and there is no limit for the placement in opposite to geocaching. The highest density of waymarks according to states is in Vatican (159 waymarks/km^2). There is much less waymarks all around the world than geocaches: over 500,000 in total, the density in Germany is 0.032 and in Estonia 0.005 waymarks/km^2. Often the same feature (position) could be found as different waymarks in different categories, as most of categories are user-created and could overlap. The map application is uncomfortable, which could be a reason for limited number of users. Finders' logs consist only of a date, a comment and a picture.

Data useful for visitor monitoring

Visitation data could be analysed in a similar way as in geocaching with a respect to much lower numbers of finders. For example, only four visits are logged so far for the Tallinn Airport waymark created in 2006. The number of waymarks or the number of waymark creators in an area could be used instead.

GeoSpy – www.geospy.org

Situation

GeoSpy is similar to Waymarking, but much younger (2013) and with a comfortable map application. There are only 12,000 objects so far, sorted in five main categories (each has 7-8 subcategories). The objects do not overlap; one registered object can be described with more additional categories (similarly as keywords) for searching purposes.

Data useful for visitor monitoring

Utilisation of the data is similar to waymarking data. For visitation analyses, establishing objects of similar type at the same time could be recommended. Current low density of GeoSpy objects is

therefore a temporary advantage for visitation monitoring. Favourite points of the place could be assessed as well.

Munzee – www.munzee.com

Situation

Munzee objects are recognised by a QR code in the field. Visit has to be recorded online from the place, therefore mobile internet connection is needed. Munzee density is limited with the distance between each, which is 150 ft between munzees of the same player and 50 ft between munzees of different players. There is over 1.5 million munzees deployed, almost 16 million visits logged and over 160,000 players registered worldwide. The most visited munzee is in Denmark and has almost 2,500 visits.

Data useful for visitor monitoring

The number of visits of a particular munzee and munzee density in an area seem to be helpful for monitoring of visitors.

TripAdvisor – www.tripadvisor.com

Situation

Trip Advisor is a much different activity by its philosophy from the above mentioned ones. It was developed to share experience with tourist destinations – often hotels and other services. The database of places is huge – over 1,700,000 only in Europe. Described and assessed places are distributed all over the world where tourists come. Although users are encouraged to share their experience, not all of them do that.

Data useful for visitor monitoring

Visitation data could be estimated from the number of reviews by each place. All the reviews contain satisfaction assessment and are written in English, that is a significant advantage compared to previous games.

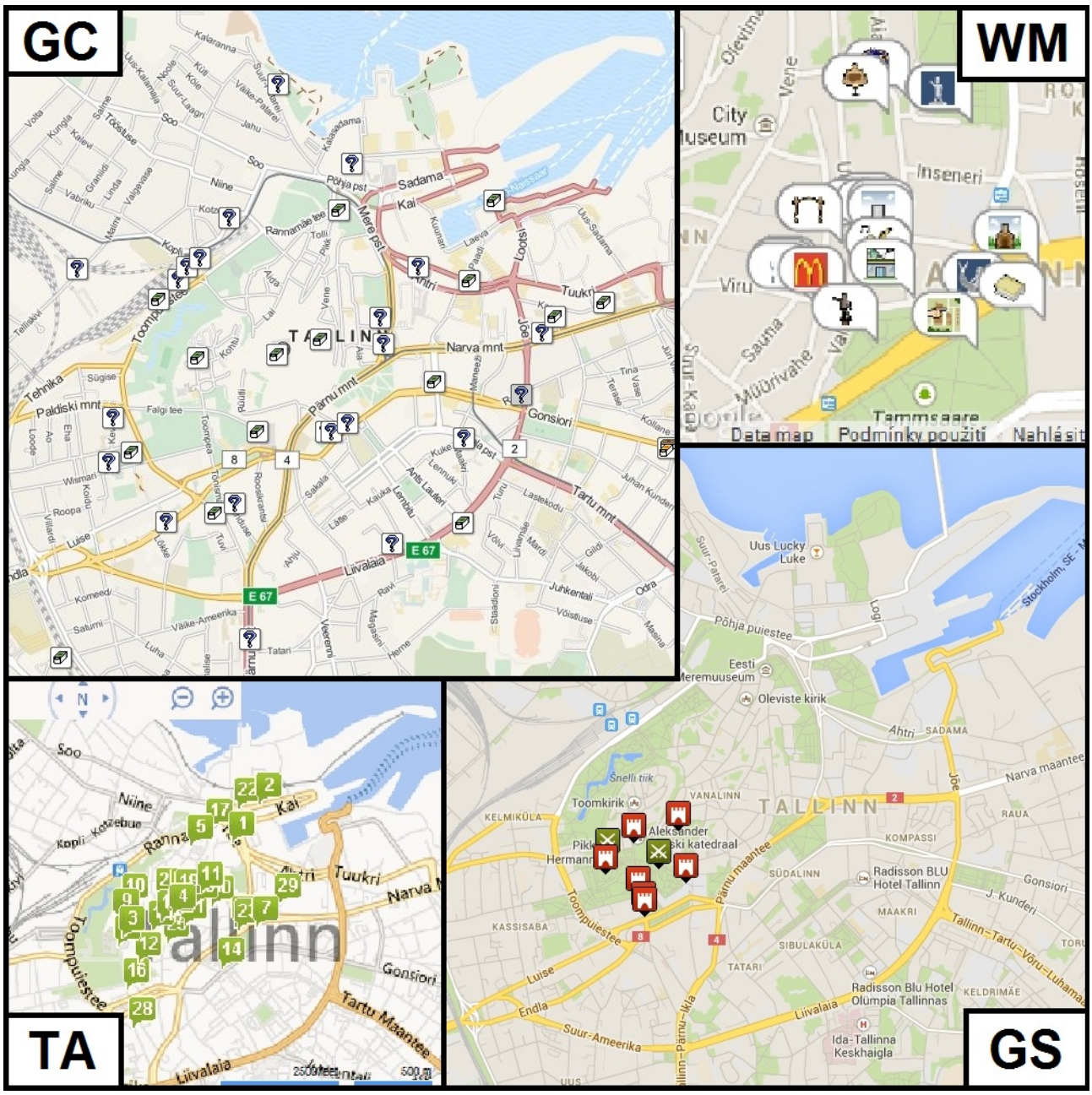

Fig.1. Situation of geocaches (GC), waymarks (WM), GeoSpy objects (GS) and TripAdvisor places (TA) in Tallinn.

References

Vítek, O. (2012). Let's count with Geocaching. In Fredman, p. et al. (eds.), MMV 6th Conference Proceedings, pp. 228-229.