

Experience Tracking – Evaluating Methods for Studying Experiences in Time and Space

Malin Zillinger
Mid Sweden University, Sweden
malin.zillinger@etour.se

Abstract

In the current study, micro-scale mobility is analyzed in connection to visitors' experiences. Methods are examined in two different surroundings to test their eligibility: GPS devices and questionnaires are tested in combination with interviews and overview camera. Empirical results show that visitors are fairly mobile, and that experience hotspots exist in time and space. It is concluded that especially the GPS method works well, but that advancements are welcomed to further refine the methods, individually and in combination with each other.

Keywords: tracking technology; tourist mobility; GPS; methodology

1 Introduction

Mobility is at the heart of tourism. The travel to, on and between places is integral to journeys, be they short or long. Mobility can be seen as a necessity to reach the destination in question, but it can also be considered as a desirable part of a visit (Hall, 2005). At the same time, experiences account for an important part of tourism production, and this development is supposed to even increase in future. The study of experiences is of great importance, not least because tourists' attitudes, together with the individual satisfaction, can reveal something about the likelihood of revisits to a place (Pearce, 2005).

Studies on tourist mobility exist, and this is especially the case for macro and meso-perspectives (Zillinger, 2007). Micro level studies are rather rare, most probably because of methodological difficulties so far (Shoval & Isaacson, 2009). Another reason for the relative shortage of such studies may be a lack of interest by the supply side in tourism, presumably influenced by the fact that still today, much focus is lying on economic questions. Shoval & Isaacson (2006, 2007a, 2007b) have done notable work on spatial behaviour, among others by pedestrians. Yamanaka et al. (2006) analyzed spatial behaviour by means of video cameras, while Lau & McKercher (2007) did so with GPS. Others who have worked with the GPS method are Arrowsmith *et al.* (2005) and Warnken (2006). So, while contemporary research on mobility does exist, there is a need for further studies, both when the questioning by tourist operators and the more academic analysis of methods are concerned. This is especially the case in connection to experiences. A satisfying amount of research has been done on experiences themselves: traditional research has to a great degree focused on the experience economy, flow and *communitas* (see e.g. Pine & Gilmore, 1999, Mossberg, 2003). However, experiences have not been studied in combination with questions of time and space. Getz (2007) suggests that experiences are situated in

a special place, but in a time out of time, thereby strongly pointing at the importance of time and space for experiences. This conception is taken as point of departure at this juncture.

In this paper, methods are presented which can contribute to understanding visitor mobility and experience. The aim is to generate knowledge on how to collect data. In this research context, three field studies have been conducted during the last 1 ½ years: two events in the town of Östersund, and one tourist destination, Åre, which is located in the Swedish mountains. In this paper, a focus is put on one of the events in Östersund, which was the Biathlon World Championships, and on the destination of Åre. The cases are presented departing from the following research question: In which way can a triangulation of methods contribute to our understanding of micro scale mobility and experiences in time and space? Both factors, mobility and experience, are of importance for knowledge on visitors – be they on an event or in a destination. The hypothesis is that people's level of mobility is relatively high, which means that they would usually not head for a main attraction and then back again, but that they make detours, which, again, can contribute to experiences and satisfaction in time and space.

2 Studying the Biathlon World Championships in Östersund

In February 2008, the Biathlon World Championships were hosted in Östersund, a town with some 60.000 inhabitants, located 550 kilometres north of Stockholm. More than 300 competitors, who came from over 40 nations, took part in the championships, and during those ten days, more than 120.000 visits were registered in the stadium. In other words, this was a huge event for the rather small town of Östersund, and the managers stood under great pressure.

Three different kinds of methods were employed to study mobility in the Biathlon study: these were GPS-devices, follow-up questionnaires, and overview camera. Dialogue was initiated between the research group at the university, the organizers and the municipality several months before the championships. Being the first of several studies to come, it was of great importance to test the methods and to evaluate how they can be developed in future.

In order to study mobility in time and space, visitors were equipped with GPS devices of the type *Ebontek DL.3200 BT Pro*. In this way, individual itineraries could be mapped at the end of each research day. In addition, the tools were endowed with a button that was to be pressed by their carriers in situations in which they felt they were having a peak experience – this could, in the one group, be a positive experience, and, in the other, a negative one. By this way of approach, visitors' experiences could be analyzed in respect to the time and place, in which they occurred. These experience dots were also visible on the maps that were generated for each participant at the end of each study day.

Twenty devices were handed out on three days, resulting in 60 participants. Evidently, one aim was to learn about the specific mobility and experiences on this event. The other purpose was to generally learn about how to use the technique, both in itself, as well as in combination with other methods. Once the tools were turned on, itineraries were recorded automatically. A new position was charted every ten metres, a set that was chosen before a time-dependent registration. In the analysis, the city of Östersund was divided into zones, in order to study time-spatial mobility: these zones were i) the arena, ii) the market place with its cafés, bars and temporary activities, and iii) the lake park, where awards were handed over.

The GPS study was accomplished by a questionnaire that the participants were to fill out at the end of the day. The aim of using questionnaires was to get additional information both on socio-demographic background and on the experiences that had been registered on the GPS-device. The respondents described their experiences of the day, and rated them on a five point Likert scale. Lastly, the respondents could also mark the experiences on a map that was printed on the questionnaire. In this way, it was easier for the researchers to match the experience on the GPS-device with the experience described on the questionnaire.

GPS and questionnaire were aimed at collecting information about individual mobility. In contrast to this, the overview camera allowed for information on macro level visitor flows in the sports arena. The camera was attached to the tower in the arena at an altitude of 55 metres. Contrary to our expectations, there had to be dealt with many questions of authority, including the location of the camera and the question whether the place that is observed is public or private. In the end, however, authority questions were solved, and the camera affixed. The photographs were launched two hours before the races started, and finished two hours afterwards. The pictures were then analyzed in Windows Movie Maker, resulting in three-minute sequences per study day. Results show that the visitors were eager to attend the races early, in order to get a good position. Bottlenecks were observed at the end of and in between the races.

58 out of 60 GPS-devices were returned, and 52 out of questionnaires. Results indicate that visitors showed a high level of mobility: they hardly ever walked straight to and from the arena, but instead made many detours, both inside and outside the arena. This result confirms the hypothesis stated in the introduction of this paper, claiming that mobility in itself can be of great importance for the experience of a place. Supplemental activities beyond the races turned out to be of great importance for the visitors, and that they contributed greatly to the complete event experience.

The average distance that was covered by foot was 5,9 km. 71% of the recorded time was spent in the arena, indicating that the races with the surrounding activities were considered as important, but that other activities, located outside the stadium, draw some attention, too. Averagely, four hours were spent at the arena, which is far more than the duration of the races. The visitors enjoyed themselves, the surrounding people and the supply in and around the arena. This implies that an event like this conveys its visitors with a wide range of experiences and that, apart from the main

event, many other incidents are of importance. 52 out of 58 respondents pressed the experience button at least once during the day and those who reported positive ones did so more often than the negative group (averagely 6,3 vs. 2.8). Most recordings were made during forenoon.

All in all, the methods worked well in this first study. There were hardly any technical problems with the GPS tools, and the transfer to maps was done without difficulties. The questionnaires gave additional information, but as respondents tended to skip long questions, it was decided that the questionnaire be shortened. The overview camera worked well on this event, but dependency on weather makes this kind of method undependable. Thus, it was decided that the overview camera would not be used in future studies.

3 Studying skiers in the destination of Åre

Åre is the most important Swedish ski resort when visitor numbers are concerned. Destination organizers have wide ranging information about their visitors, but little is known about their mobility in time and space. This is the reason why cooperation was launched between the destination and the Mid Sweden university.

In this study, GPS was used in combination with questionnaires, ski lift interviews and focus groups. Based on the experiences with the Biathlon study, the questionnaire was somewhat shortened. However, it still covered questions on the experiences during the day as well as on socio-demographic background. As it turned out in the Biathlon case, the information that could be received by means of the presented methods was rather shallow. Thus, adjustments were made in the Åre case. Additional methods were employed to catch deeper knowledge, especially about the experiences that visitors come across. Interviews were employed to get deeper knowledge on visitors' perception of their experiences and on the destination. 70 visitors took part in the GPS study, and 62 of those took part in the focus group interview when returning the devices after 24 hours. The focus group interviews included 2-7 persons and took about 30 minutes. Those who did not take part referred to shortage of time. 21 ski lift-interviews were accomplished. As they were accomplished in the lifts, they lasted for some minutes only. The number of participants was between 5 and 8 persons.

According to the question of mobility, visitors averagely moved 35 km per day and through an altitude difference of 547 metres. Most respondents used a variety of different slopes and thereby moved widely in space. This result points at the fact that not only skiing in itself is of importance, but also variations in space. 181 experiences were recorded and 6 out of 10 participants pressed the experience button when they had their most positive experience during the day. As this specific drop out rate is rather high, advancements should be made in future studies. Another important methodological result with the study was that experiences that are registered cannot always be associated to a precise time and place. Several experiences were of the type "nice forenoon" or "great ski area", which are very general. However, it was still possible to relate most of the experiences to certain times and places. It turned out that

four experience clusters exist in the ski area, so called experience *hot spots*. Based on mobility and experience, seven visitor groups could be distinguished. Deriving from these groups, organizers in the destination can work further with their supply.

4 Conclusion

These first studies form a base to learn about the methods that have been presented here. The GPS technique that was used to learn more about people's mobility in time and space worked exceedingly well. It gives detailed information, at the same time as it is easy to handle. It can be properly applied to all kinds of outdoor studies. Unfortunately, this kind of technique is not suitable for indoor use. In that latter case, one would have to use other kinds of technique, like RFID.

One factor that left the researchers in this study dissatisfied was the deficient technique of the GPS tool when registered experiences were concerned. With only one button on the device, the participants in the study were to press either when they had a positive experience (group A), or a negative one (group B). Also, there were no possibilities to record more thorough information on the experiences as they occurred. This had to be done in the questionnaire *ex post*. The combination with a questionnaire turned out to be useful. However, it would be a better possibility if participants could connect some information directly to the GPS-device. For future studies, one could ask for either two buttons on the GPS (one for positive and one for negative experiences, respectively), or even for different tools, which enable its carriers to rate the type of experiences that are noted. One could also ask for a larger number of respondents in a study like this.

Questionnaires deepen the knowledge level on visitors, but one should carefully take into account the number and length of the questions, as well as the place in which they are answered. In the first case described above, the lesson learned is that bad weather conditions can contribute to a low response rate on the individual questions. In such cases, one should carefully consider the time and place where and when the questionnaire is filled in.

Future studies could combine more methods and test how such methods together contribute to sufficient study results. One-way cameras can be used to get insight in the individual impressions that visitors have of a place. Dictaphones can be used to receive a visitor's description of an experience in his/her own words. Mobile phones constitute an excellent way to collect information mobility, as has been shown in previous studies (see Tjostheim & Fesenmaier, 2008). Based on the experiences of this study group, there are many ways to learn more about micro scale mobility, and the development of useful technique may be able to further enable this progress in future.

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