“Travel Bugs”:
Toys Traveling Socially through Geocaching

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ABSTRACT
This study explores emerging types of mobile and social play patterns through the object-based, but technologically enhanced practices of toy tourism. As our case studies demonstrate, object play practices in the digitalizing world are not only becoming increasingly social in nature, but even more mobile than before. As illustrated by our study focusing on Travel Bugs in the context of the international game of geocaching, toys become mobile through different practices partaken by players, willing to either become involved in toy tourism with their playthings. Our study consisted of 45 survey responses from geocachers traveling with Travel Bugs. According to the results, mobile and social object play practices enabled by the platform of Geocaching become gamified – i.e. more perceivable, goal-oriented and measurable. Our main contribution is a conceptual framework in which the relations between the digital, the physical and the social dimensions of toy tourism are modelled.

INTRODUCTION
This paper explores emerging types of toy tourism through a case study exemplifying players traveling with toys and toys traveling ‘by themselves’.

In this study, we defined toy tourism as follows: Toy tourism, occurs when toys travel either as companions of their owners or ‘single-handedly’ as organised by toy travel agencies (Heljakka 2013, p. 289). Further, physical toys are also made mobile through games, for example in Geocaching. Toy tourism may be categorised as free-form and open-ended – and in this way, as a creative play practice – and as a form of play structured to be goal-oriented and therefore game-like.

Geocaching is a high-tech worldwide treasure hunt game, where a player hides a cache for other to find. Geocaches are now situated in more than 185 countries (Ihmäki & Heljakka 2017). A Travel Bug used in geocaching is the standard for a trackable object. Travel Bugs are metal dog tags, typically they are attached to another object like a toy.
Each Travel Bug has its own unique tracking number stapled on it. This tracking number is used as proof by the user that they found the item. It also doubles as a way for the user to locate the personal website of the Travel Bug. The idea is by picking up and dropping off Travel Bug Trackables and reporting their movement on the on the Travel Bugs individual website, one is mirroring the Bug’s real world adventures. Each Travel Bug has its own ‘diary’ that follows its movements. Moreover, the play around Travel Bugs mirrors terminology familiar from human tourism: Travel Bugs also have hotels of their own (geocacherspoilers 2011), for example the Mae West Travel Bug Resort, which is also used to benchmark hunters to help in understanding how the ‘traveling’ of the Travel Bugs works (Mae West Travel Bug resort, 2009).

We suggest, that the game of geocaching may be seen as a contemporary platform for sending toys out to travel in the name of mobile and social play. This popular type of toy play among transgenerational players entails movement across multiple realms; physical space and digital environments.

Our case study explores players traveling with toys, and toys traveling ‘by themselves’ as Travel Bugs in the context of geocaching. The study consists of 45 survey responses with geocachers traveling with Travel Bugs. The conducted research enabled us to gain a detailed understanding of the mobile and social usage behavior and sharing of experiences with other geocachers involved in toy tourism. Based on our study, we present a conceptual framework in which the relations between the digital, the physical, and social dimensions of toy tourism are modelled. The case study is unique and informs about original values related to describing how geocachers have through their play practices related to Travel Bugs, co-created a new game format. Further, we suggest that the player generated game of toy tourism may provide interesting ideas for e.g. the adventure tourism business on how to design gamified services in relation to physical objects.

**STUDY: METHOD AND ANALYSIS**

The case study represents a qualitative approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. The case study method enables to understand the complex real-life activities in which multiple sources of evidence were used (Noor 2008). The main goal of this case study was to gain detailed understanding of the current and future geocachers’ mobility with Travel Bugs and memorable experiences in the toy tourism context. The research materials for this case study were gathered with an internet survey aimed at geocachers in August 2016, and is based on 45 responses. Data were gathered from geocachers Facebook groups with survey. Secondary material is based on Geocachers stories with Travel Bugs at Groundspeak Forum. This information is used here to expand the description of toy tourism and deepen the knowledge on of how geocaching is used in toy tourism. In our case study we have conducted a content analysis as an analysis of texts within the context of “Travel Bugs” in the geocaching game and by following content analytical rules. This means that our materials have been analyzed step by step, following rules of procedure, devising the material into content analytical units.

**RESULTS**

By elaborating on the concept of toy tourism through the Travel Bugs geocaching game and the impact of toyification and the gamification of traveling, we summarise and review the qualitative data regarding three relevant areas: the sharing of Travel Bugs experiences with other players (social gameplay), the play value of Travel Bugs within the geocaching game (play value) and the overall outcomes of traveling with toys (toy tourism). Given the limited sample size (45 geocacher participants), we used content analysis to draw provisional conclusions on the conceptual framework with respect to relations between the virtual, the physical and the social dimensions of toy tourism in
the case of Travel Bugs in the geocaching game. Overall, Geocaching offers a large-scale platform for toy tourism, and opportunities for the gamification of object play, such as mobile and social interaction with toys.

Travel Bugs Traveling through Geocaching - A conceptual framework:

Digital, Physical and Social Play Patterns that Generate Play Value
- Collecting of Travel Bugs (Physical dimension of Play)
- Photoplay and storytelling with Travel Bugs (Digital dimension of Play)
- Sharing and exchanging Travel Bugs on social media channels (Social dimension of Play)

Social Gameplay
- Virtual social interaction through sharing of stories and pictures of Travel Bugs
- Physical social interaction, meeting other players at Geocaching events and exchanging Travel Bugs

DISCUSSION AND FINDINGS
In this case study, toy tourism can be viewed as social gameplay that motivates players to send toys all over the world. The toys are meaningful for players, and when mobilized, they become play objects which resemble playing pieces in a game. First, social gameplay encouraged active interplay between players on the Travel Bugs’ own websites. Travel Bugs allow geocachers more play(ful) engagement when the Bugs already have personal meaning for the geocacher. The second part of our study served as a large-scale platform to study the play values of players collecting and sharing Travel Bugs stories once they are taken from one cache to another. Instead of offering only puzzles with single solutions, the Travel Bugs gave players opportunities for open-ended and imaginative, creative productions that promoted a deeper, interest-driven ‘storytelling’ and ‘photoplaying’ investment in the game experience. In our study, participants reported having been interested in documenting the Travel Bugs’ journeys, and some geocachers only logged in for the Travel Bugs. But some geocachers wanted to document their journeys by taking pictures and making stories with toys found in different cache locations and in this way made use of both open-ended and goal-oriented play practices.

CONCLUSIONS
The main contribution of this study is increased knowledge of toy tourism, especially of how geocachers travel with Travel Bugs and share their positive and memorable geocaching experiences. The paper’s findings can be used to discuss broader implications for location-based toy tourism games and further develop the conceptual framework in which the relations between the virtual, the physical and the social dimensions are modelled in the context of toy tourism. The case study is unique as well as informative about original values related to describing how geocachers have, through their play practices, identified with Travel Bugs and created a new format of gamified play within toy tourism and in the adventure tourism business.

We believe that the knowledge generated by our study can be used in designing new mobile, social and hybrid play experiences related to games and play in the tourism industry. For example, the Geocaching game that includes Travel Bugs can be seen as a motivational tool to gamify other traveling experiences.

BIOS
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BIBLIOGRAPHY

Arango-Forero, G., Roncallo-Dow, S., Uribe-Jongbloed, E. 2016. Rethinking
Convergence: A New Word to Describe an Old Idea. In (Eds.) Lugmayar,

Retrieved September 8, 2017 from
https://www.youtube.com/watch?v=pLio9tY9Vlw

Heljakka, K. 2013. Principles of adult play(fulness) – From Wow to Flow to
Glow. A PhD Dissertation for the School of Arts, Design and Architecture.
Helsinki: Aalto University.

Well-Being Through a Gamified Art Experience. In GamiFIN Conference
https://www.researchgate.net/publication/316717426_Ihamaki_P_Heljakka
_K_2017_The_Sigrid-Secrets_Geocaching_Trail_Influencing_Well-
being_through_a_Gamified_Art_Experience

Larry, L. M 2004. Hide and Seek, GPS and Geocaching in the Classroom, In

Mae West Travel Bug Resort, (2009) A cache by SSO JOAT. Retrieved September
8, 2017 form https://www.geocaching.com/geocache/GC20CMW_mae-
west-travel-bug-resort?guid=983f07e0-f3b5-4387-ac21-f7e6dc82de05


Tb-run.com, Geocaching Travel Bug Races. Retrieved September 8, 2017 from