# Video Games and Museums Educational Digital Tools for the Participatory GLAM Space

VENUE National Museum of Finland + University of Helsinki TIME 6 – 7 May 2018

**BOOK OF ABSTRACTS** 

Day 1 (Sunday 6 May, 13:30-18:00) VENUE National Museum of Finland

13:45 - 15:45

VIDEO GAMES, HISTORY AND MUSEUMS

Chair: Amber L. Cushing (University College Dublin, Ireland)

Attentat 1942: Designing a Serious Game on Contemporary History

Vít Šisler, Charles University

This paper critically discusses the possibilities and limitations of videogames in dealing with contentious and emotionally-charged issues from contemporary history, in particular civilian perspectives on war and the trauma therefrom. It briefly examines how history and war are represented in mainstream videogames and, subsequently, how these dominant frames of representation are challenged and refashioned within the emerging genre of historical serious games. Regarding the latter, this paper focuses on a case study of Attentat 1942, a serious game on contemporary history, which we developed in 2017 at Charles University and the Czech Academy of Sciences. It specifically examines how the Czech historical memory of World War II is presented via the game and it critically discusses design challenges stemming from adapting real persons' - oftentimes ethically-and emotionally-loaded - testimonies in order to construct in-game narratives. In particular, the paper discusses the intersections and tensions between authenticity and fiction, realism and schematization, and narrativity and procedurality. Finally, the paper critically investigates the perception and acceptance of Attentat 1942 by Czech and global audience and its implementation in Czech National Museum.

Playing with Postdigital Heritage: Designing Mixed Reality Media Games for New Engagements with The Past

Lissa Holloway-Attaway, School of Informatics at the University of Skövde, Sweden + Rebecca Rouse, Department of the Arts at Rensselaer Polytechnic Institute Troy, NY, USA

As museum studies scholar Ross Parry has argued, museums (and by extension the larger GLAM space) has entered a "postdigital" age, in which the incorporation of transmedia digital technologies is no longer new, and is instead expected. Parry makes the case this shift in the media landscape for GLAM institutions means new opportunities for deepening engagement, both in practice and theory, with digital technologies, pushing beyond the one-off works that many organizations have experimented with up to this point:

Postdigitality in the museum necessitates a rethinking of upon what museological and digital heritage research is predicated and on how its inquiry progresses. Plainly put, we have a space now (a duty even) to reframe our intellectual inquiry of digital in the museum to accommodate the postdigital condition. [Parry, 36]

In this talk we present a suite of projects designed in collaboration with partner GLAM organizations within the Designing Digital Heritage Network (an international network exploring heritage and game design technologies, founded at the University of Skovde, Sweden). Through examples, we discuss theoretical models and practices for working with the integration of digital game technologies and techniques to present play as a mode for interacting with and learning heritage in new ways, all with the focus on a critical engagement with how history is shaped, narrativized, and disseminated. We discuss both formal characteristics of design with mixed and augmented reality technologies for heritage, as well as the implications for the player/user moving through transmedia space and time. We argue that digital games designed for museum and heritage experiences are uniquely generative opportunities for imagining the continued postdigital development of new forms of learning and engagement.

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From Stories to Games - Development of Virtual Reality Games for Museums

Tanja Korhonen, Kajaani University of Applied Sciences, Game Solutions + Pauliina Kinanen, Finnish Museums Association

Using games for serious purposes is increasing. Virtual reality (VR) enables more immersive way for learning and experiencing different environments. This paper presents the recent development in the area of VR games that are used in Finnish museums.

The primary objective of a serious game (SG) is more than simply entertainment [1], [2], [3]. These games, also called applied games, can be used to either change a player's behavior or motivate them in a particular way [4], [5]. Due to the many different potential applications of SGs (see, e.g. [3], [6], [7]), their development requires the involvement of experts from a variety of disciplines [8],[9].

There has been ever increasing interest in the use of VR and augmented reality (AR) in museums. Recent examples of museums experimenting with new technologies include for example The National Museum of Finland's VR feature which transports visitors into an iconic painting [10].

Kajaani University of Applied Sciences (KAMK) and Finnish Museums Association have jointly started a project called From Stories to Games (Tarinat peliin) that aims to bring museums stories and collections to life through games. This paper will discuss the project 's two main goals. The first main goal is to find new innovative ways to introduce the museum content for a larger audience. Project will produce 4 individual and educational game experiences either for virtual reality or augmented reality. The second main goal is to connect and increase the awareness and understanding between the experts from museums and game development sectors.

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Enlivening history with Virtual Reality – Case study: The Finnish National Museum Kadja Manninen (National Museum of Finland)

In February 2018, the Finnish National Museum launched its first VR feature, with the main goal to enliven history by making historical events virtually accessible to its visitors. R.W. Ekman's painting "The Opening of the Diet of 1863 by Alexander II" was chosen as a setting for the VR experience that is now displayed at the museum's 1860s section.

In the late 19th century, Finland was an autonomous Grand Duchy of Russia. As the 1860s exhibition section already included items such as the original throne and coat of the Emperor Alexander II, the aim for the VR experience was to establish a dialogue between the authentic museum artifacts and contemporary digital world. Additional emphasis was set on expanding the visitor experience to by showing the unique historical items in their original, yet digitally recreated, environment.

The target audience were young digital natives, who most often visit the museum with their school class. In 2017, the Finnish National Museum attracted over 45 000 school students, a customer segment that formed nearly one third of its annual visitors.

After putting on a HTC Vive VR headset, the audience is invited to step into Ekman's painting, where they can discuss with the representatives of different social classes and the Emperor Alexander II himself. They can also visit the Hall of Mirrors of the former Imperial Palace, which is now known as the Presidential Palace.

This case study explores the process of planning, designing and launching the VR experience and analyses the aims set for the project and the customer feedback received. It also sheds light into additional and upcoming objectives. The study is based on interviews with the museum staff and other professionals involved in the making of the VR experience, as well as randomly selected museum visitors.

16:15-17:45

VIDEO GAMES MADE IN ASIA. CULTURAL HERITAGE AND GAME DEVELOPMENT PROCESSES

Chair: Suvi Sillanpää (Helinä Rautavaara Museum)

Panel abstract

Video Games Made in Asia. Cultural Heritage and Game Development Processes

Video games actively contribute to construct perceptions of norms, values, identities, and in general, society. In times of deep mediatization, actors obtain information and ideas from many sources, including various media, and games increasingly rank among them. It is thus obvious that game narratives impact on meaning making, in general, and on the construction of society, in particular. Video games today are one of the most influential media genres, especially for the younger generation – but in research, they have so far often been overlooked. Understanding video games matters for two reasons. First, video games are already with the people. They are a popular mainstream media that pervades society regardless of age, gender and social status. Second, games are increasingly complex, interactive virtual worlds in which cultural heritage is, literally, constructed by game designers: they are 'secondary worlds' in which e.g. histories are reconstructed, and traditions are (re)invented.

Game development and production often is a complex and highly reflected process, among other things (e.g. business interests) grounded in the understanding of game developers and many influential actors in society (e.g. politicians) that game narratives may mould and transform society. On a global scale, we find two different developments in recent game development: whereas most blockbuster 'triple A' games are developed in the USA and partly Europe for global audiences, many smaller ('indie/independent') gaming companies successfully develop regional games. Currently, we find new games with regional cultural (e.g. historical, religious, artistic) narratives produced in Asia, a development which is intertwined with implementations and (re-)constructions of cultural heritage. Such games may e.g. promote a certain worldview, advertise a political party or authority figure. The speakers in this panel discuss game development and its relation to cultural heritage, each focussing on one of four exemplary Asian nations — Nepal, Japan, the Philippines, and India.

Gregory P. Grieve (University of North Carolina, USA)

Escaping Sangri-La: Difference and Disjunctures in Nepali Game Development

Christopher Helland (Dalhousie University, Canada)

Gaming Doujin Style: Examining the Cultural Dimensions of Indie Game Development in Japan

Kerstin Radde-Antweiler (University of Bremen, Germany)

How innocent is Cultural Heritage? Indie Games in the Philippines between Information and

Propaganda

Xenia Zeiler (University of Helsinki, Finland)

Gaming Cultural Heritage: Upcoming Indian Indie Games

Day 2 (Monday 7 May, 10:00-17:30) VENUE University of Helsinki, Consistorium Hall

10:00 *KEYNOTE* 

Recasting the Goddess: Whose Stories? Whose Heritage?

Padmini Ray Murray, Srishti Bangalore

"Cultural heritage" is fast becoming one of the libraries of source material being used in videogames - be it the use of iconography, or the use of narrative motifs, it is very visible as a repository of ideas and images that informs the creation of video games today. However, ideas of cultural heritage itself can (and should be) contested; especially since it is all too easy to read any representation of culture as a signifier that flattens and makes homogeneous a much larger, complex space, such as a space as India.

My current research, exploring the narratives that have defined the Hindu goddess Durga, has thrown up important questions of representation and how narratives reinforce hierarchies, and in this talk I will consider how it might be possible to use game mechanics to ensure that different voices, histories and narratives can subvert entrenched structures of power.

10:30-12:00

APPROACHES AND EXPLORATIONS IN VIDEO GAMES AND MUSEUMS

Chair: Suzie E. Thomas (University of Helsinki)

'These were actually people like you': History, Imagination and Digital Games in the Museum

Catherine Beavis (Deakin University, Australia) + Joanne O'Mara (Deakin University, Australia) + Roberta Thompson (Griffith University, Australia) (skype presentation)

There is increasing research into the educational potential of digital games, and the use of games to support learning in museums and other cultural institutions, as part of a broader repertoire of digitalization. Research addresses the ways in which learning through digital games occurs in contexts such as these, the ways young visitors take up and play the games, and how this connects with both disciplinary knowledge, as they might study it back at school, formal connections with material aspects of museum collections, and with curriculum requirements back at school. It focuses, too, on the kinds of imaginative engagement and historical imagination made possible through historically based digital games. However, less is known about how games developers and those who commission games negotiate the multiple demands involved, and the decision-making process and factors that shape the forms and priorities taken on in games. Taking the example of maritime archaeology, this paper addresses the considerations, pressures, and priorities faced by multiple stakeholders – museum educators, maritime archaeologists and game designers - in creating games for educational purposes. Based on interviews held across the early stages of the games design period in an Australian museum, the paper tracks the differing priorities and purposes in each area, what each group saw as paramount. It identifies what each saw as key affordances and values in the creation of the game, potential conflicts and the management of priorities to achieve three aims: to meet the needs of diverse stakeholders, tailor content to meet curriculum in a range of areas and produce and enjoyable and effective game consistent with the technology and structure inherent in games design.

From Dog Brain Specimen to "Brainy", the Evil Game Boss: Exploring Curation, Representation and Agency in Museum Visitors' Game Designs

Angeliki Symeonidi (University College London, UK)

The way museums as cultural institutions curate and represent the past has been an ongoing controversy in the museum sector. From their historical formation to date, museums have been described as "sacred temples", "cemeteries with glass coffins" (Henning, 2006) and disciplinary institutions (Hooper-Greenhill, 1989, Bennet, 1995) which bear the responsibility to educate their visitors. In an era, which museums' role is openly questioned and challenged, museums are trying to reflect on their work and redefine their social role. Museums' responsibility to share their authority with their visitors has now become central in most museum discussions on policy-making. In the UK, the interest in inclusive participatory strategies and popular culture representation in the museum setting is partly illustrated by the increasing number of video games exhibitions (Game on, 2002, London in Video Games, 2016, Videogames, 2018), sold-out video game jams (Power up, 2018) and regular game design workshops (V&A Museum, 2015, British Museum, 2018). This paper presentation will focus only on game design in the museum setting and on how museums involve different groups in participatory game-making workshops. Although the most recent museum practices on game design, fortunately, promote inclusion, play and participation, they tend to either oversimplify or glamourize the way museum visitors benefit from games' co-creation and play. They overlook how visitors experience agency while creating games inspired by museum objects and what games design brings to the notion of co-curation and representation that perhaps other digital media do not. This paper presentation will report the findings of two research fieldworks conducted at UCL Grant Museum of Zoology and Museum of London Docklands with families in 2016 and 2018. It will discuss how families with young people interpreted and interacted with the museum space and its collections, and how they stretched and manipulated the objects' materiality in their game designs.

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Darkroom Mansion and Arvaa kuka? (Guess who) - Two play(ful) Approaches to the Collection of The Finnish Museum of Photography

Erja Salo (The Finnish Museum of Photography)

Darkroom Mansion, a mobile game produced by the Finnish Museum of Photography introduces how the darkroom works. As the game progresses, players will become familiar with print making and equipments used in a darkroom. Also, the Finnish photographers and their works are presented. All images in the game are from the collections of the Finnish Museum of Photography.

More in english: https://www.valokuvataiteenmuseo.fi/fi/hankkeet/darkroom-mansion

More in finnish: <a href="https://www.valokuvataiteenmuseo.fi/en/projects/darkroom-mansion">https://www.valokuvataiteenmuseo.fi/en/projects/darkroom-mansion</a>

The other tool which I am going to present is *Arvaa kuka?* (*Guess who*) which is an educational tool (hopefully ready in the end of April) to use with mobile devices and practice visual literacy with the help of museum's free to use, open digital collection materials. The tool is a third part of a project called *Interpretations and information – learning paths with open materials*.

More about the project: <a href="https://www.valokuvataiteenmuseo.fi/en/projects/interpretations-and-information-learning-paths-open-materials">https://www.valokuvataiteenmuseo.fi/en/projects/interpretations-and-information-learning-paths-open-materials</a>

An Adventure in Iron Age Finland - a Minecraft Modification Based on Archaeological Record Lauri Kemppinen + Kim Krappala

Digital history learning games are still few and far in between in Finland. As a popular sandbox video game with approximately 100 million users, the familiarity of Minecraft's to school-aged children makes it an especially easy learning environment to adopt.

This paper discusses the scientific aims of the recently created Minecraft modification, *Ulfberhtin Miekka* (*Ulfberht's sword*), in a learning context. *Ulfberhtin Miekka* is based on archaeological sites of late Iron Age Finland, taking place in the Viking Age (approx. 800-1000 AD) landscape of Kokemäenjoki, which is an archaeologically rich area and works perfectly as a setting to this storybased adventure game. This modification is set to be launched in April 2018 and will be first introduced at Emil Cedercreutz museum and later to schools across Finland.

Although many aspects of learning in children from video games remain unanswered, it is already possible to point out certain relevant, learning enhancing features of *Ulfberhtin miekka* from Beta testing results. Unlike typical learning games, *Ulfberhtin Miekka* is not a linear game, but an open world game, in which the player can make choices to influence the outcome of the story and spend time exploring the landscape. Freedom of choice in this type of game presents its own problems from a learning point of view, since the player's increase in knowledge depends on the actions they take whilst playing. However, the open world system also encourages the players to play the game many times as these games do not have a single storyarc to follow, making them replayable and thus enforcing learning.

Iron Age culture in *Ulfberthin Miekka* has been under archaeological scrutiny throughout the development process. Whilst this modification aims to represent Iron Age material culture as accurately as possible within the Minecraft framework, it must be kept in mind that current archaeological understanding is not by any means a finished depiction of Iron Age Finland, particularly as there are no written sources. Therefore exemptions were necessary in the creation of an appealing story line.

13:30-15:30

VIRTUAL REALITY, MIXED REALITY, AUGMENTED REALITY, AND MUSEUMS

Chair: Xenia Zeiler (University of Helsinki, Finland)

Suvi Sillanpää (Helinä Rautavaara Museum) + Emmi Huhtaniemi (Helinä Rautavaara Museum) + Somdatta Deb

Participatory Approach to producing Educational Digital Tools in an Ethnographic Museum – Case Durga Puja VR

Ethnographic museums are going through a transformation from repositories of exotic objects representing the "other" into places of interaction, dialogue and participation. Due to globalization and international

migration the source communities once considered geographically distant have become neighbours, whose cultural heritage often is part of the collections of museums. The source communities that were previously excluded from the active roles in the processes of handling and representing their cultural heritage in ethnographic museums are, in the multicultural societies of today, increasingly taking part in them.

Durga puja is an annual Hindu festival celebrated to honour goddess Durga. It is the biggest Hindu festival in the state of West Bengal, India. It is today celebrated by the members of the translocal Bengali community all over the world. While museums are aiming to build participatory and inclusive processes in their work, they are also striving to develop means to engage their audience through new technologies. This paper provides preliminary insights and observations from the ongoing production process where the staff of the Helinä Rautavaara Museum, the Indian Bengali community in Finland, VR technicians and a researcher are creating an immersive virtual reality experience based on the Durga puja festival organized by the Bengali community in Helsinki, Finland in the autumn 2017.

The paper examines the experience and dynamics of the collaborative and multidisciplinary production process focusing especially on the ways the creation of an educational digital tool can form a platform for the participation of the source communities in developing means of displaying and discussing their cultural heritage.

On the Design of Collaborative Mixed-Reality Experiences for GLAM Spaces: The Case of the Augmented Telegrapher for Porthcurno Museum

Tanya Krzywinska (Falmouth University, UK) + Jenny R. Lee (Cornwall Museums Partnership, UK)

The emergence of novel Mixed Reality (MR) technologies, such as the Microsoft HoloLens, presents a new set of affordances for designers working within the context of Gallery, Library, Archive, and Museum (GLAM) spaces. These new interfaces and technologies represent opportunities to help visitors to become highly engaged actors upon the stage of historically resonant and artistically charged spaces. We aim to leverage these digital tools to create a vibrant and dramatic participatory experience for visitors.

This paper describes and appraises the design and development of 'The Augmented Telegrapher: Mixed Reality for a Museum Context' project that experiments with the use of the HoloLens to create an immersive experience for the Porthcurno Telegraph Museum, located in a bunker in a remote area of Cornwall, UK. The aim of the project is to construct a blueprint that can be followed by other small rural museums as a means of diversifying their potential audiences, particularly attracting the attention of younger people. The project seeks to provide a collective MR space, where visitors can act together through challenges that combine virtual and real objects embedded within the museum space and engage more proactively with the work undertaken by the Telegraphers during World War II.

Aside from embodying the incorporation of MR technology into a museum space, the project also embodies two overlapping research challenges: the first is a design challenge around creating synchronicity of perspective at the intersection of people, place, and projection; and the second is contextual, in which we seek to ameliorate the tension between the material and the virtual in the curation and development of museum experiences. We will appraise key opportunities, constraints, limitations and considerations encountered during this case study so far. Doing so paves the way towards a blueprint for incorporating MR experiences into GLAM spaces.

The Role of Contextualising Content in learning via AR Mobile Walking Tour Apps: Reflections from the Walk1916 Project

Amber L. Cushing (University College Dublin, Ireland)

Libraries, archives and museums utilise mobile walking tour apps and augmented reality (AR) to increase user engagement with historical collections and to prompt user learning. Previous research has explored app technology features to inform design and comment on learning, whereas less research is focused on the informational content that is used to contextualise app/AR features. What is the role of the contextualising content in AR mobile apps? How might it influence learning? In this presentation, the author will reflect on results from two studies involved in the Walk1916 AR Mobile Walking Tour apps project. The app used digital surrogates of historical photos, geolocation, augmented reality and written and spoken narrative to develop a mobile walking tour app featuring 10 sites associated with the 1916 Easter Rising in Dublin, Ireland. Two versions of the app were created: version one featured a written narrative discussing male historical figures associated with the Rising and version two featured female historical figures associated with the Rising. After using version one or version two of the app for 45 minutes, users then participated in a 45 minute semi-structured interview about their experience, including what they learned after using Walk1916. After analysing data, it became clear that several trends emerged, associated with the content used to contextualise the technological features of the app. These include the role of content in enhancing knowledge of everyday surroundings, how people report wanting to learn about the historical event, and the potential for gender bias in learning about the historical event. This presentation will summarise these issues and discuss how the issue of contextualising content needs to be more deeply investigated in the use of mobile apps for learning. While new technology may allow one to learn via different platforms, attention should be paid to how information is provided within this new technology and how it may influence learning.

Augmented Reality in the Context of Cultural Heritage and Education Seppo Helle (University of Turku, Finland)

This paper will discuss how augmented reality (AR) can be and is used to create learning experiences. This is done by presenting two cases, an interactive game and a non-interactive representation set in existing physical heritage site, and describing how AR was used in these. The first case is an interactive adventure game representing the old habits and everyday life in the premises of the Luostarinmäki Handicrafts Museum. The second case is the Wordsmith, an augmented reality story in the premises of the Turku Cathedral. This application provides the user with a non-interactive window to the past and to the effects of the reformation to Finnish society. The story is told by using the fictive persons as avatars who encounter historical persons in events where effects of the reformation to society are showcased.

The results show that, despite the technical challenges with the current AR technology, both applications engaged the users. Most of the users go through all the content thus increasing the probability of effective learning outcomes as a result of the prolonged usage and exposure to historical content. Our experience with the two different types of AR applications show that both of them are capable of supporting learning. The user of AR applications can have a feeling of being present in the semi-virtual environment, which helps in grasping knowledge about the activity presented in the application - which may be previously unfamiliar to the user.

Design Practices for Creating Digital Educational Museum Collections

Deborah Elizabeth Cohen (Cognition Ignition, Raspberry Wood Productions, USA)

Museums offer unique opportunities for excellent education because of the availability of authentic materials and primary sources, but to take advantage of these resources in digital environments, effective design practices must be employed. Because the field of museum digital edu-curation is in its infancy, design practices are still being established.

The Smithsonian Learning Lab (https://learninglab.si.edu/) is an award winning repository of numerous collections authored by creators for an assortment of educational audiences and purposes; they represent a range of design practices, some of which are exemplary, that may be replicable for other applications and environments.

Between May and November of 2017, as a Senior Research Fellow at the Smithsonian center for Learning and Digital Access, I conducted a study to capture these design practices, making use of methodologies from the Educational Technology and Human Computer Interaction fields to document techniques that are effective in museum settings in developing educational collections and using digital objects for learning.

This qualitative study was conducted through analyzing the collections of over 15 digital collection creators and interviewing them about their visions for the collections, the contexts in which they were created, and the design practices they employed.

Many museums, including the Smithsonian, have prioritized digital initiatives and are hampered by a lack of knowledge of best practices. This talk, presenting the findings from this study in the pioneering field of Museum Ed-curation, will contribute to this knowledge, assisting museums internationally in achieving their digital aspirations based upon dissemination of best practices in instructional design for digital museum collections including the use of primary sources and authentic materials.

16:00-17:30 ROUNDTABLE PANEL

From Juvenile Entertainment into a Historical Artifact: Game Museum Lineages

Chair: Veli-Matti Karhulahti (University of Turku, Media Studies, Finland)

Discussants: Sarah Brin (IT University of Copenhagen, Digital Design, Denmark) Ellinoora Havaste (University of Turku, Brahea Centre, Finland) Johannes Koski (University of Turku, Cultural Production and Landscape Studies, Finland) Solip Park (Aalto University, Nordic Visual Studies and Art Education, Finland)

Board games, dice, puzzles, toys, and other affiliated playthings have been exhibited and researched in museum spaces at least since the late 19th century (Culin 1893). Along with the progress and proliferation of computers that gave birth to the videogame industry in the 1970s, it is natural that such spaces have nowadays come to include also these market-driven ludic proceedings, the impact of which is indisputably of aesthetic and historical relevance regardless (or because) of their commercially disposed status in culture. While the institutionalization of videogames within art historical frames is more widely accepted as a museological practice (e.g. Flanagan 2009; Leino 2011; Karhulahti 2013), concerns for preservability, performability, and the means of presentation have arguably come to form the most interesting challenges that the contemporary efforts to make ludic realities publically perceptible face on a daily basis.

This panel tackles the topic by probing how the videogame's transformation from a pop culture product into an artifact worthy of institutional exhibition and conservation has come to generate a particular "game

museum" concept and other stages of ludic specialization. Numbers of gamededicated museums and exhibitions opened worldwide just within two decades alone, providing variety of possibilities to display digital games in the museum space (Naskali et al. 2013). While answering the question of the concurrent status and the role of game museums, our four panelists will approach this area of focus respectively as follows.

#### Sarah Brin

GIFT is an EU Horizon 2020 research project focused on developing playful experiences intended to connect museum visitors with exhibition content. In this presentation, Sarah Brin delivers preliminary observations derived from her work coordinating the GIFT action research process. In the GIFT Action Research Module (ARM) representatives from 10 museums participate in an 18-month design and capacity-building process, resulting in the development and iteration of small scale "experiments" relating to GIFT's core concepts of: playfulness, audience engagement, and personalization. While the GIFT ARM process is still underway, Sarah will share her observations of the project as well as mention tools developed to assist organizations looking to develop their digital capacities and engage more playfully with audiences.

## Ellinoora Havaste

A hands-on museum educator and guide in Aboa Vetus & Ars Nova museum of history and contemporary art who has and is using games and game-like environments to engage primary school children with the exhibitions and collections of the museum, as well as the cultural history of the region. In addition to piloting digital game-like environments such as Seppo, she has designed and constructed non-digital games and playful tours for the museum's exhibitions. Havaste has written her thesis on ableism in video game structures and her research interests include disability and gender studies in video games, eSports and art games.

### Johannes Koski

Working at the intersection of culture, communication, and academia, Koski is a PhD student at the University of Turku and a long-time employee at various cultural institutions. He is currently finalizing his thesis on pop culture production, mediated intimacy, affect, and their assembly in the playful supersystem of Pokémon. As a communications specialist at the Kiasma museum of contemporary art, Koski took part in projects that brought games into the museum as well as sometimes turned the museum into a game. In this capacity, and through his research interests on pop culture, art, and affective aesthetics, he has closely followed the developing relationship between cultural institutions and games.

#### Solip Park

One of the founding members of Nexon Computer Museum (NCM), the first permanent museum in East Asia dedicated to the history of games and digital computers, located in South Korea. Together with NCM team (2012-2015), Solip also delivered various game history-related events and pop-up exhibitions. She is also an author of various publications, including the game history web-comic "NCM-Museumtoom" and "A Brief History of Digital Play." She is currently a master student in Aalto University, focusing on the societal frame of game through the cases of game museum's representations.

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