Marvinter: A case study of an inclusive transmedia storytelling production

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Abstract
This article examines how the unique characteristics of Marvinter, an inclusive transmedia Advent calendar, affected its production and the individual media workers involved in this. In the native transmedia Marvinter project, a radio series and a mobile game were created and released simultaneously. Using ‘partly shared’ resources, the project was developed by two collaborating, non-profit organisations. Each chapter of the digital game had to match the corresponding radio episode. The whole had to be designed to provide a shared cultural experience that included people with hearing or visual impairments. The authors of the present article were part of the game development team and thus directly experienced the complexity of developing a digital game as part of a transmedia project. This article presents the results of a case study with an insider perspective. It is supplemented by semi-structured interviews with key people in the project. The transmedia nature of Marvinter was justified by the need to include people with complementary disabilities. Although sometimes associated with negative connotations of ‘naked commercialisation’ in transmedia contexts, the marketing strategy was here an important element in promoting inclusivity. However, owing to the concurrent work processes, game production became overly complex.

Keywords
Collaboration, game accessibility, game development, inclusive design, mobile game, organisation, transmedia, transmedia production, transmedia storytelling, universal design

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Introduction

The Marvinter transmedia storytelling project involved producing a radio series, a paper calendar, a mobile game and a website for the 2017 Swedish Radio (SR) Advent calendar. It further entailed collaboration between two non-profit organisations, namely SR and a team of game researchers and developers at the University of Skövde (UoS). The authors were part of this latter.

The Marvinter game was a continuation of a previous, universal design (see, e.g. Story, 1998), research project at the UoS in 2015. This project resulted in the Swedish game Frekvens saknad (hereinafter FS), a game that includes visually impaired players (Östblad et al., 2014). It aimed to provide the same gaming experience regardless of whether it was played with or without graphics. This made it possible for sighted and visually impaired players to share the experience (Engström et al., 2015; Wilhelmsson et al., 2017). Unfortunately, as FS never reached a broader audience, its ideal of a ‘shared experience’ was never fulfilled.

In the same way that people with visual impairments are often excluded from gaming experiences (see, e.g. Archambault et al., 2007), people with hearing impairments are, to a high degree, excluded from audio-based media such as radio. In collaborating with SR to make a transmedia Advent calendar, the goal was to enable a range of able and disabled children to share a cultural experience. Visually impaired people were to be included in the gaming experience and, via the game, people with hearing impairments were to be included in the storyworld.

It was decided that Marvinter should be a native transmedia storytelling project. Thus, it was conceived as a transmedia storytelling project from the start (Weaver, 2013) with ‘[s]tories that unfold across multiple media platforms, with each medium making distinctive contributions to our understanding of the world’ (Jenkins, 2006: 334). The idea behind this was that it would give the audience reasons to explore both the game and the radio series – but without punishing those who did not (Ryan, 2015). Production was designed top-down (Ryan, 2015), that is, all media platforms were included in the planning from the beginning and developed concurrently by the different organisational units. Development was in a closed system that excluded audience participation and users as co-producers (Gambarato, 2013). However, throughout production, there was user testing of the game with the target audience.

This article aims to examine how the unique characteristics of Marvinter affected its production and the individual media workers involved in this – thereby adding ‘different perspectives than those of the transmedia producers’ (Norton and Kovacs, 2017: 56). Thanks to the authors’ dual roles as researchers and game developers, the production process is here examined from an insider perspective (see Evered and Louis, 1981). It is supplemented by semi-structured interviews with people who had key roles in the project.

The Advent calendar

The Advent calendar has a strong tradition in Sweden. SR broadcast the first Advent calendar radio series in 1957. Just like its Danish counterpart (see Agger, 2013), this has become a national institution. Since 1960, an Advent calendar has also been broadcast on Swedish Television (SVT). Although the primary target group is children, the whole family typically listens to or watches the Advent calendar series together (Agger, 2013).

The paper Advent calendar illustrates the radio story and has one window for each episode. SVT and SR co-produce the paper calendar. This can be bought in most supermarkets and stores in
Sweden. The website features marketing materials, competitions, a variety of puzzles and links to the episodes that have been broadcast.

The *Marvinter* game was the first Advent calendar game produced for the radio. However, the idea of creating a digital game for the Advent calendar was not new. SVT had been co-producing games for its Advent calendar for over two decades. Unlike *Marvinter*, the production of these was outsourced to an external developer. Furthermore, the games were also released commercially. This stopped in 2009. Pan Vision, the publisher behind many of the titles, declared that, owing to cumbersome negotiations and low profits, it no longer wanted to be involved:

> Because we rarely have more than eleven months to make each game, production often becomes expensive. Negotiation is tricky. It involves several rights holders, who also often have opinions about the game. This further complicates production. Moreover, the connection to the calendar itself is also not as strong as it used to be. SVT seems to be sensitive about linking the calendar too strongly to a game (Egil Strunke, interview for ComputerSweden, 2009).  

In the above-mentioned interview, it was also pointed out that a further factor in poor profitability was the market for the games vanishing after Christmas. Hence, several reasons contributed to the difficulty of making a commercial success of an Advent calendar game for a public service media company: a tight, strict deadline; rights and agreements (exacerbated by the television and radio legislation governing public services); creative limitations; and the short sales period.

Nonetheless, such games have large audiences. Unlike previous Advent calendar games, *Marvinter* was a non-profit game developed as part of a research project. Furthermore, it was designed to be accessible to people with disabilities. Consequently, focus group testing requirements were more stringent than usual. Apart from this, the conditions were very similar.

**Transmedia storytelling productions**

Transmedia storytelling productions are complex in that they often require collaborations between different media producers, each with their own production logics and cultures (Dena, 2009; Denward, 2011). According to the transmedia producers in the 2017 Norton and Kovacs study, the key factors for successful collaboration are as follows: human (e.g. openness and flexibility), face-to-face communication and ensuring that transmedia producers are granted intellectual property rights.

As regards more practical issues such as the planning and execution of transmedia projects, there are helpful analytical tools, guidelines and handbooks that can be consulted (e.g. Gambarato, 2013; Pratten, 2015). However, these do not necessarily address the challenges the media workers (e.g. radio producers, game developers and creative artists) may face as a direct consequence of cross-sector collaboration. To fill this gap, Norton and Kovacs suggest that there could be future studies ‘on interorganizational collaboration that adds different perspectives than those of the transmedia producers’ (Norton and Kovacs, 2017: 56). Just such a perspective is provided by the present study.

Further complexity is added when a transmedia project involves a digital game. The most common instances are adaptations or expansions of blockbuster films into AAA titles (see, e.g. Jenkins, 2006; Kennedy, 2019; O’Donnell, 2011) aimed at expanding the market (Jenkins, 2003, 2006; Scolari, 2009). However, as Jenkins notes: ‘film producers don’t know the game market very well’ (Jenkins, 2003). First of all, games are designed for play, and the ‘shift in subjectivity from
viewer to player is critical to understanding the distinctive nature of transmedia games’ (Kennedy, 2019: 72).

Games are cultural artefacts designed for interaction via a mix of game mechanics, artwork and other artistic content. ‘Narratives can of course be placed in games, but if the player is too constrained in a linear fashion, it ceases to be a meaningful play experience’ (O’Donnell, 2011: 280). Games are also software products. Thus, they inherit the problems associated with traditional software development but differ in that they are designed for ‘fun’ (Murphy-Hill et al., 2014; Petrillo et al., 2009). This is something that cannot be fully controlled by the developers. Consequently, evaluation of the player experience must be included in the production process (Marklund et al., 2019; Tschang and Szczypula, 2006). To accommodate this uncertainty, most game development companies now use agile approaches (with their inherent greater flexibility) in the development process (Marklund et al., 2019; Murphy-Hill et al., 2014).

Poor understanding of these nuances might explain ‘the differences in status between the game and the feature films’ that Carr (2005: 36) observed in her analysis of the Enter the Matrix video game (part of the Matrix franchise). She notes that the game ‘serves the story arc of The Matrix franchise, and, in the process, the game’s ability to offer gamers compelling play is compromised’ (Carr, 2005: 38–39, emphasis original).

Thus, there is tension between linear media (represented, in the present case, by the radio drama) and digital games. This can have consequences for the media producers’ work processes (something O’Donnell discusses) and the quality of the game (as in Carr’s example). Given the strong tradition of the Advent calendar radio series and the radio’s long experience in producing it, this was a potential point of conflict for Marvinter.

The Marvinter case

The project started as a pilot study (conducted by UoS in 2016) to investigate the possibility of creating an inclusive game for SR’s Advent calendar. Besides formal and informal meetings, the pilot study comprised workshops with key people from SR. These encounters were aimed at project personnel: getting to know each other, establishing a common ground (Clark and Brennan, 1991) and identifying the collaboration’s possibilities and expectations. The pilot study’s results then formed the basis of an application for funding to develop the game as part of a research project on inclusive design. On funding being cleared in January 2017, a contract was signed to formalise the pilot study’s unofficial collaboration.

The Marvinter transmedia project

Targeting children (7–12 years old) and their families, Marvinter comprised the following products:

- A radio series of 24, 10-min episodes, one for each December day up until Christmas Eve. There were also pod casts and web transmissions of the series.
- A game for mobile platforms — 24 chapters/levels with an average playtime of 17 min per level.
- A website with pictures, puzzles, competitions, a character library and all kinds of extra material and information about the Marvinter storyworld. It also had links to the radio episodes and the game.
A paper calendar with 24 windows – one for each December day up until Christmas Eve. The illustrations behind the windows had references to both the corresponding radio episode and the game.

*Marvinter* is a storyworld (see, e.g. Ryan, 2013) that has a Swedish folklore setting and is populated by characters from Swedish mythology (e.g. trolls, hobgoblins and Christmas elves). This is a common theme for the Advent calendar (Agger, 2013) – see Figure 1, for a graphical reference. Said world has two parallel stories (Ryan, 2013; Scolari, 2009), one for the radio and one for the game.

![Figure 1. Promotional picture for Marvinter, published on SR’s website. SR: Swedish Radio.](image)

The radio story follows Hugo, a 9-year-old boy travelling with his grandmother, Signe, to celebrate Christmas at an old guest house faraway in northern Sweden. For Hugo, the trip is an escape from a traumatic incident that took place in school. His grandmother visits the guest house every Christmas. Unbeknown to Hugo, she is the ‘light knight’. Every year, to prevent the sun going out, she has to light the four eternal candles. On their very first night at the guest house, Hugo wakes up and discovers that Signe has disappeared. He leaves the room to look for her, but she is nowhere to be found. As the story unfolds, he gets to know Signe’s secret and that the evil Mara is trying to foil her mission. Hugo realises that, unless he finds his grandmother, he must fight the Mara and save the world himself before it is too late.

Simultaneously, in the game story part of the *Marvinter* world, Jenny, a young Christmas elf, is walking through the woods on her way to start her first day as a trainee at the guest house of her uncle, Yngve Gräspik. On the way, she encounters an unfriendly troll, Stenkross, bullying a little girl who is carrying a lantern. Jenny decides to intervene. This delays her arrival at the guest house. Her uncle is very upset and under a great deal of stress. The house is full of impatient guests who
have gathered for the big haunting convened by the evil Mara. As Jenny learns about the guests, she sees that the trolls are planning to get rid of Yngve and take over the guest house. They will use violence if necessary. Yngve is too obliging with the guests and ignores her warnings. Jenny, the protagonist in the game story and the character the player controls, realises that she is the only one who can save him and the guest house from the trolls.

Each story can be experienced as a separate entity. However, the experience is expanded when both stories are told in conjunction. Jenny, Hugo and the other figures mentioned earlier appear in both stories along with a few more overlapping characters. There are also characters that appear in only one of the media. The website has a character library with background information on all the storyworld’s characters.

In accordance with the Advent calendar tradition, a new radio episode was broadcast daily in December up until Christmas Eve. The corresponding game chapter was unlocked simultaneously. At the end of each radio episode, the programme host guided listeners to the daily window in the paper calendar. The same host appeared in the game to help the player navigate the menu and learn how to manipulate the interface. Since the audience could choose the order in which the media were consumed, precautions (e.g. the use of time anomalies or the avoiding of references to critical events altogether) had to be taken to avoid spoilers that could ruin either experience.

Thus, several restrictions associated with the Advent calendar’s characteristics required specific attention in the project. First of all, the release dates for the game and the radio broadcasts had to be synchronised. These release dates were strict and non-negotiable. Furthermore, each corresponding episode/chapter had to work independently as well as together. Hence, references between the media had, to some extent, to be independent of chronology. Although the Marvinter game was specifically designed to include people with visual and hearing impairments, accessibility was considered in all media. These defining characteristics of the Advent calendar and the consequences they had for both production and consumption differentiated Marvinter from most other transmedia experiences.

The project was released on time and received a positive response in the press, by the audience and in social media. We also received personal letters, of which one specifically points to the inclusivity aspect of the game. Listener figures for the radio series increased compared to previous year and the game was downloaded by more than 70,000 players. Of these, over 12,000 finished all 24 chapters. Unfortunately, it has not been possible to gather data concerning hearing or visual impairment among the users for ethical and legal reasons.

**Organisation**

The radio series, the website and the paper calendar were produced by different organisational units within SR. Each of these had their own project manager. Radio production (i.e. casting, voice recording and directing) was outsourced to an external production company. SR also appointed a person to be responsible for coordinating production and maintaining contact with UoS.

In charge of developing the game, the team at UoS comprised researchers and teachers who ordinarily collaborated in university courses, research projects and other faculty work. Although the designated project manager had decision-maker status, most decisions were made through consensus within the core team.

A team of three freelance writers was hired to write the stories for both the radio series and the game. This team was also responsible for writing promotional texts, character descriptions and so on for all platforms. The 2-D artist recruited for the game project was additionally hired to illustrate
the paper calendar and produce graphics for the web. An animator in the game team also produced marketing materials for social media and the web.

**Study method**

A qualitative approach was used based on this being a case study from the inside, that is, the authors themselves were ‘part of the phenomena of study’ (Evered and Louis, 1981: 389). Additionally, there were semi-structured interviews with key informants (see, e.g. Marshall, 1996). Said interviews were analysed using thematic analysis (Braun and Clark, 2006; Guest et al., 2012).

Owing to the authors’ roles as researchers and game developers, the insider perspective was unavoidable. However, given that non-disclosure agreements make it difficult to get relevant access to game companies (Jørgensen, 2017; O’Donnell, 2011), this duality had the advantage of providing insights that would otherwise have been difficult to gain from just studying the project from the outside. In this respect, as the analysis is inevitably imbued with the authors’ subjective experiences and perceptions of the project, the present study has elements of autoethnography (e.g. Ellis et al., 2011). The authors’ involvement also influenced the interview questions (i.e. these latter reflected not only the authors’ perceptions of what was found challenging in the project but also other observations made during production). Nonetheless, the study is not a personal narrative of the kind Ellis et al. propose (2011: 4). Rather, it relies primarily on the reports from the informants. To minimise any damaging impact of author involvement, special attention was given to preparing and conducting the interviews.

**Interviews**

The interviews were conducted post-production, 4–8 months after release. All but one of the interviews were conducted via Skype and recorded using Piezo, a tool for recording sound from computer applications. Owing to technical problems in one interview, only the informant’s voice was recorded. This was not discovered until after the recording. However, since this interview adhered to the standard protocol, identifying the questions asked was straightforward. One interview was conducted face-to-face and recorded using an iPhone’s built-in microphone. The recordings were transcribed orthographically with additions for marking hesitations, rephrasings and sounds such as laughing and coughing. The quotes in this article were translated from Swedish to English by the main author. To overcome a number of problems inherent in this process (register, culture, etc.), a certain degree of emphasis was placed on conveying core meaning. Thus, for example, some repetitions, hesitations and self-corrections were removed. Naturally enough, sentence structure was changed to respect English grammar and so on.

**Participants.** The interviewees were people with key roles in the project (e.g. project managers, producers and creative artists, see Table 1). To protect their identities, pseudonyms have been used throughout the text. However, as the project is in the public domain, full anonymity was impossible. All the interviewees agreed to participate and to have their interviews recorded.

The relationship between interviewers and interviewees was professional and, in some cases, collegial. Interviewing colleagues and collaboration partners has the advantages that the researchers and the informants share a common ground and that this makes it easier to get the informants to open up and speak freely (Coar and Sim, 2006). A possible disadvantage is that, forgetting the material is to be used publicly, informants might reveal things (e.g. sensitive or
private information shared in confidence) ‘by mistake’ (Coar and Sim, 2006). There is also a risk
that they may feel they are under professional scrutiny and, therefore, withhold information that
might put them in disfavour (Coar and Sim, 2006).

In the light of the above, great importance was attached to assuring interviewees that sensitive
information, information that could harm any of the participants or information given in confi-
dence would not be revealed. To avoid the research interviews turning into informal post-mortems,
strict formality was maintained throughout. Similarly, to create distance between the role of the
interviewer and the role of a friend and co-worker, a formal tone was consciously adopted.

Before starting, participants were informed of the purpose of the interview and how it would be
used. They were also asked whether they consented to being recorded. Although participants could
expect to share the same ground as the interviewers, they were encouraged to expand on the
interview subjects. It was also stressed that the interviewers were interested in getting participants’
personal experiences of working on the project.

### Table 1. List of participants.

| Pseudonym             | Organisation                        | Role                                                        |
|-----------------------|-------------------------------------|-------------------------------------------------------------|
| SR_Commissioner       | Swedish Radio                       | Commissioner at SR                                          |
| SR_Coordinator        | Swedish Radio                       | Project manager and coordinator for the radio production    |
| SR_PaperCalendarAD    | Swedish Radio                       | Art director and project manager for the paper calendar      |
| SR_DramaProducer      | Swedish Radio                       | Producer at SR Drama¹²                                      |
| SR_WebManager         | Swedish Radio                       | Project manager for SR web                                  |
| UoS_ProjectManager    | University of Skövde                | Project manager for the game                                |
| 2D_Artist             | University of Skövde                | 2-D artist for the game, web and paper calendar             |
| Writer1, Writer2,     | Freelance writers                   | Writers for the radio series, game, web and paper calendar  |
| Writer3               |                                     |                                                             |

Note: SR: Swedish Radio.

**Questions.** The interview protocol contained general questions (e.g. about role in the project and
attitude towards the cooperation) that each informant was asked. Informants were also asked
questions that gave them the opportunity to further expand on their roles and their personal
experiences of working in the project. The aim was to get an understanding of how the colla-
boration had affected the work of individuals (e.g. the challenges they faced and what they learnt
from each experience).

### Analysis

Using thematic analysis, primarily with an exploratory inductive approach (Guest et al., 2012), the
transcripts were coded and analysed to find themes and patterns. To this end, because it offers a
structured yet flexible way of analysing data, the protocol proposed by Braun and Clark (2006) was
followed. The aim was to identify themes that were not directly associated with the questions and
which, owing to the authors’ own preconceptions of the project, might otherwise be missed.
Nonetheless, as the interviews were clearly directed towards the informants’ personal experiences
of the project and, in particular, the collaborative aspects, the analysis also had a theory-driven,
deductive, dimension (Braun and Clark, 2006). Thematic analysis was chosen over content analysis because it allows for themes that capture ‘something important in relation to the overall research question’ (Vaismoradi et al., 2013: 403) and therefore ‘move[s] beyond counting explicit words or phrases’ (Guest et al., 2012: 10). Figure 2 shows a schematic overview of the themes identified in this process.

Figure 2. Schematic overview of the identified themes.

**Project initiation**

Each informant was asked how the project started for him/her, his/her role in it and how his/her ordinary work plan was affected by the collaboration. From the interviews, it is evident that there were some critical steps to go through before the idea of developing a game for SR’s Advent calendar could be put into effect.

The collaboration initiative came from UoS, which had received funding to conduct a pilot study aimed at investigating the possibilities of creating an Advent calendar game that included children with hearing or visual impairments. The idea was successfully presented to the commissioner at SR, who decided to initiate collaboration, but that it was to be informal until ‘economic, practical and concrete solutions’ (SR_Commissioner) had been found.

As regards gaining children’s attention, Swedish traditional media (e.g. TV, newspaper and radio) now compete with social media, streaming services and games (see, e.g. Ohlsson, 2018; Swedish Media Council, 2017). Thus, SR’s incentive for getting involved in the project was reaching new target groups through the game. From previous experience gained via FS (UoS, 2015), the University team’s expectation of the collaboration was that the attention attracted by the Advent calendar would raise the game’s profile and encourage able and disabled children to play it and, through it, share an experience. Hence, via the transmedia production, both SR and UoS hoped to reach audiences larger than would be reached by each product on its own (see, e.g. Jenkins, 2006; Ryan, 2015; Scolari, 2009).

SR’s programming division commissioned the Advent calendar for SR Drama. Because game production lay outside the ordinary commission, one of the first steps for SR_Commissioner was to sell the idea to the different units ‘to get everyone on board and get them thinking it would be fun’ (SR_Commissioner). Attitudes towards the project were positive, but there were also some questions that needed to be resolved:
There were a lot of questions in the beginning. How were we to talk about the game? Who would be the sender? Would it be [SR Drama’s] or the university’s game? And… well, just how would we present this collaborative project to the audience. (SR_WebManager)

At this early stage, SR personnel were told that the radio series and the game should be treated as separate projects with separate budgets. They had no formal obligations towards the game development team. It was up to the divisions to decide to what extent they would involve the game team and, as SR_PaperCalendarAD put it: ‘The game project would simply have to fall in with radio production’.

The game team was thus formally excluded from decision-making in the choosing of writers and the choosing of an illustrator for the paper calendar. However, these decisions would have major impact on the game project. First of all, the university team had already recruited 2D_Artist to do the game’s artwork and had agreed to recruit SR’s chosen writers on a contract separate from that they had with SR. Thus, the university team was dependent on the creative artists recruited by SR being willing to collaborate with it in ensuring consistency across platforms.

Although the university team was formally excluded from the recruitment process, SR Drama explicitly requested writers who would accept being involved in the production of a game: ‘We were looking for writers with a background in games, or with a game habit’ SR_DramaProducer. Similarly, SR_PaperCalendarAD chose to recruit 2D_Artist to do the illustrations for the paper calendar:

After our first meeting […] I understood that there would be tougher demands on what an illustrator was to deliver […] Thus, I chose not to start a recruitment process but instead hold back… until I had spoken to you [UoS] […] However, I pretty soon realised […] that [2D_Artist] was the best alternative or, rather, the only alternative given the time frame. (SR_PaperCalendarAD)

Thus, before the formal contract was entered into, the two productions were kept separate. Consequently, as shown by the above-mentioned example, collaboration was highly dependent on the goodwill and mutual trust of the individuals directly involved in the project.

Regulations: Legal and financial issues. Even though SR and UoS had started to collaborate informally, there were still several issues to resolve before the project could get under way. First, the game project needed funding and, as the Norton and Kovac study (2017: 49) concludes, ‘securing funding during project initiation is described as a key success factor in the very early phases of design’.

The pilot study resulted in a funding application for developing the Marvinter game as part of a research project on inclusive design. The application was accepted in January 2017. It was subject to the reservations that funding would be retracted if SR decided to withdraw from the project or if satisfactory milestone reports could not be delivered.

Legal issues regarding the nature of the collaboration also needed to be resolved. These revolved around the regulations governing public service media. Swedish public service radio is subject to the rules stated in the broadcasting permission issued by the government on the basis of the Radio and Television Act (Swedish Code of Statues, 2010: 696). Whether the collaboration with the university fell within this framework was, for example, unclear:

When we started to look deeper into this, we had to ask why we were collaborating. I then frequently returned to the fact that it was a research project that you [UoS] had initiated and that we were not
involved in it in any way. Things came to a complete stop when the lawyers suddenly stated ‘Swedish Radio cannot do anything unless it is Swedish radio that has the need’. (SR_Coordinator; emphasis original)

As SR is a ‘client organisation’ (SR_Commissioner), the initiative and a formal request had to come from SR. Without a formal contract, SR would not be able promote the game via its channels (radio, social media, web, etc.). The matter was handed over to the lawyers who finally concluded that SR could collaborate with the university on condition that the partners ‘partly shared resources’ (SR_Commissioner). In effect, this meant that voice recording, music and sound were shared. However, composers and actors are typically freelancers who adhere to the agreements negotiated by their respective unions. To ensure that they would also participate in game production, appropriate conditions had to be negotiated and made explicit in their contracts:

I was extremely resolute about … what rules should apply to the collaboration. This was so that we would be able to use the music in both directions and have the right to use the actors for more than just the radio. At that point, I was mentally eliminating any people who would have firm demands along the lines of, for example, ‘I will not participate in a game’ or ‘I must be very well paid to do it [the game stuff]’. […] Extortion situations had to be avoided. Thus, it was really important that everything was clearly set out in the contracts […] so we wouldn’t end up constantly negotiating every detail. (SR_Coordinator)

Furthermore, there was a clause in the collaboration contract stating that SR could withdraw if it doubted the game would be finished in time or might not be of sufficiently high quality: ‘Right up until May 2017, when the paper calendar went to print, we were still asking “will there be a game or not?”’ SR_Commissioner. Had SR decided to withdraw from the project at any time, the game project would have been cancelled altogether.

Collaboration and communication

SR produces the Advent calendar series every year. Consequently, it has developed a solid production pipeline for this. However, although SR personnel had co-produced simple games for SR websites, they had no, or very little, prior experience of practical game development. Similarly, the university’s game team had no experience of radio drama production and only limited experience of developing mainstream games.

In game development projects, a mix of different roles (e.g. graphic artists, software engineers, game designers and sound designers – each with their own culture and jargon) needs to collaborate and understand each other (see, e.g. O’Hagan and O’Connor, 2015; Petrillo et al., 2009). However, ‘[t]his mixture of people, even though it provides the more creative work environment, seems to produce a split in the team, dividing it into “the artists” and “the programmers”’ (Petrillo et al., 2009: 19). In the case of the Marvinter game, communication was further challenged by inter-organisational collaboration with people that ‘use different design and production techniques, as well as different vocabularies’ (Norton and Kovacs, 2017: 45).

Managing transmedia collaborations is thus about coordinating people who have different backgrounds and work cultures and negotiating their expectations and motivations in respect of the project (Dena, 2009; Rohn and Ibrus, 2019). Thus, in the Marvinter project, communication issues could be expected owing to opposing production cultures that could potentially lead to a lack of
Many points of contact and unclear decision-making process. When the informants were asked how the collaboration affected their work, most of them mentioned that there were too many points of contact and that this had consequences for how decisions were made and communicated.

As coordinator for the radio production, SR_Coordinator was the main contact at SR. However, the project managers and the radio producer were in charge of, and could make decisions for, their respective parts of the project. Hence, they had direct contact with the content creators and other involved parties. Within the game team, the appointed project manager handled all communication concerning contracts and agreements. However, all members of the team had individual responsibilities that required direct contact with key people working in other organisational units within the project.

There were thus many points of contact in the project. This rendered decision-making inefficient: ‘It almost turned into endless cross-checks before making any decision’, according to SR_PaperCalendarAD. Furthermore, as SR_Commissioner put it, ‘[SR] had to ensure realisation of the Advent calendar [...] It was a bit like we were boringly dictating conditions because we had to get a broadcast out on the air’. This suggests that there was also a power imbalance in the interorganisational relationship and that this sometimes caused tension:

There were so many points of contact at [SR] and several of them had... sort of felt they had to control their part. This is something that affected the game and... and we had to navigate around the change decisions they had taken without having us in the loop. (UoS_ProjectManager)

According to Lewis et al. (2010b), ‘relationship tension’ occurs when loyalty to the home organisation trumps the collaborative project. In the present case, there were size and resource imbalances between the organisations. Even though the organisations worked towards the same goal, they each had individual objectives that also had to be met. Thus, the stakes were high for both the organisations that were party to the collaboration contract but for different reasons. As the SR_Commissioner stated, SR had to ensure the Advent calendar (one of its most important and expensive productions) was realised. This might also explain why decisions were sometimes made regardless of the consequences they might have for game production. The university team, on the other hand, was dependent on SR. Without SR, funding would be retracted. Nevertheless, even though collaboration was perhaps more imperative for the university team, the informants indicated not only positive attitudes towards the project but also a mutual willingness to ensure its success.

The unclear decision-making process and the many points of contact had further consequences as regards coordinating media content production. For example, the creative artists were working under two separate contracts and could, therefore, be exposed to different opinions and opposing directives: ‘I had like two different art directors, almost three’, says 2D_Artist. Consequently, it was sometimes difficult for them to keep track of what had been said; separate decisions from opinions; and even know who had the final say:

There were ongoing dialogues between us and [UoS], us and the radio and then also between [UoS] and the radio. I guess it was sometimes a bit hard to keep track of what had been said and what had not. (Writer2)

Each media platform had its own schedule, but these were interdependent. Writing the radio manuscript preceded all other text production. Thus, if writing for the radio was delayed, writing for the other platforms would be delayed too. This is also what actually happened:
It turned out that [...] some of [the writers] had lots of work on the side. This resulted in them being very particular. For example, ‘We can’t… We really need to postpone this deadline… We must have…’ and things like that. (SR_DramaProducer)

Of course, to secure their incomes, many freelancers (e.g. the writers in the present case) must have projects and commitments that they run in parallel (see, e.g. Hesmondhalgh and Baker, 2010). On top of this, changes to the radio manuscript could be requested even after the final version had been handed over to the director at the production company. The writers thus had to revise the radio manuscript while working on the game script:

[They] could demand changes that were… that affected our schedules in a destructive way. (Writer3)

As a consequence, the game script was further delayed and, to finish it in time for voice recording, the writers ended up in crunch-time situations (Deuze et al., 2007; Petrillo et al., 2009):

I worked five more weeks than scheduled. And it sort of became really stressful for everyone. People had to cancel their holidays. (Writer1)

Many of the difficulties mentioned here arose because of the tight deadline and the production processes running in parallel (with the same creative artists working in all of them). This, in turn, was a consequence of Marvinter being an Advent calendar and all media thus having to be released contemporaneously. For SR, the radio production had priority over the game. Even though SR adjusted its planning to make room for game production, the director had creative freedom to adjust the manuscript after delivery and to request rewrites even after voice recording had begun. To avoid situations like this, several of the informants suggested that the writing process should have started earlier. They also stressed that, to simplify communication and the decision-making process, the project should really have had a coordinator.

Sharing resources and consistency across media platforms

Inspired by O’Donnell’s critical examination (2011) of Jenkin’s theoretical concept of ‘media convergence’, that is, ‘a situation in which multiple media systems coexist and where media content flows fluidly across them’ (Jenkins, 2006: 322), the authors were keen to examine (possible) synergies in the production of Marvinter. An explicit example of this was the previously mentioned agreement to ‘share resources’. The creative artists also discussed issues regarding content coordination to ensure consistency across platforms.

To establish a consistent storyworld and to create an atmosphere common to the radio and the game, there was some overlapping of characters, dialogues, sounds and music. Furthermore, selected scenes from the radio drama were replayed in the game from the protagonist’s (Jenny’s) perspective. Things the player had been doing in the game could also be reflected in a corresponding radio episode. A biography of the storyworld characters was presented on the website along with additional information about the myths associated with each of them. However, even though there were synergies across platforms, most of the content was custom-made. The synergy effect centred more on becoming increasingly familiar with the world and the environment and how this could speed up production:

I thought there might be some kind of synergy effect, that I would be able to take material from the paper calendar and put it in the game and so on, but that was not the case. Everything was custom made. Everything was completely unique [...] However, there was the advantage that since I only worked
with this game and only in this project, I gained some mastery of the environment and could quickly visualise. (2D_Artist; emphasis original)

The game story was mainly written after the radio manuscript had been delivered. When the writers had to continue revising the manuscript after delivery, it became difficult to handle the potential consequences these changes would have for the game:

Radio’s process whereby it is possible to make changes up to the bitter end, and even make big changes in content after recording has already begun, works really badly in transmedia storytelling where you need to coordinate content between different platforms. (Writer3)

This reflection further shows that the radio series had precedence over the game and that radio production could, if necessary, override joint planning. Clearly enough, late changes in the radio script had repercussions for the game. In the end, this led to fewer overlaps and/or references of lesser importance. This is similar to what Carr (2005) observed in the Enter the Matrix game.

Even though the writers and the graphic artists created content for all platforms, it was difficult to coordinate content to ensure consistency across platforms. For example, in the game and the paper calendar, Näcken (a Scandinavian water sprite who tries to lure people into the river by playing enchanted music on his violin) does not look the same as on the website:

There was a discussion around the look of one of the peripheral characters [. . . ]. Even though there was already a picture or a Näcken visualisation in the game, I chose another expression for the web. (SR_WebManager)

The Näcken character had already gone through several iterations (see Figure 3). When SR_WebManager required a new version, 2D_Artist was reluctant:

We had already decided that it worked. [then SR_WebManager said] ‘No, you have to repaint it.’ I responded that then, unlike all the other characters, we would not have the same visualisation on the web and in the game. Was there a point in that? (2D_Artist)
The reason Nääcken had to be repainted for the website was that, in one of the background stories, he featured as a love interest for one of the young characters in the radio series. Thus, from SR_WebManager’s perspective, it was inappropriate to picture Nääcken as a creepy old man. When this was discovered, it was too late to do anything about it in the other products. The paper calendar had already gone to print and it would take too much time to change the game visualisation. Hence, similar to O’Donnell’s findings (2011), the media content in Marvinter did not easily ‘flow’ across the different media.

Accessibility

One of the goals of the research project was to develop a game that included players with visual or hearing impairments. However, there was a mutual interest in inclusiveness being an integral part of the whole production. For example, as regards accessibility and programme content, SR has a stated mission to meet the needs of people with disabilities (Sveriges Radio, 2014: 66, paragraph 7:6).

As previously mentioned, the game was developed as a continuation of a previous research project that resulted in development of an adventure game, FS (UoS, 2015). In FS, to include blind players, the interaction model is primarily audio-based (see Östblad et al., 2014). All information conveyed in the graphics is also conveyed using sound but not necessarily the other way around. The interaction model was validated for inclusivity through a research study with a total of 30 participants (sighted as well as visually impaired participants) playing the first chapter of the game. The results showed no significant difference between sighted and visually impaired players in terms of the perception of the game story (Wilhelmsson et al., 2017) and immersion (Engström et al., 2015). However, participants playing without graphics needed more time to finish the chapter.

To ensure that the Marvinter game was both fully accessible and engaging, there was continuous game testing with focus groups. Eight children, 12–14 years old with hearing impairment, and 15 children, 7–16 years old with visual impairments, participated in the focus tests. In addition, several consecutive tests were conducted with children without disabilities to ensure the game’s playability and player engagement. A majority of the participants expressed an interest in continuing to play the game. However, the tests also resulted in important insights to how the interaction model could be improved, in particular for the players with hearing impairment. As a consequence, we had to make some adjustments to the interaction model to ensure that all information conveyed aurally had a graphical representation. For example, speech bubbles with different visual styles were introduced to communicate the emotions expressed through voice in the dialogues (see Zryd, 2017). Besides having a unique sound, each ‘interactable’ object was highlighted using particle effects. Dialogue lines were also removed or cut to reduce the amount of text displayed on the screen. This increases the game tempo for players that rely primarily on graphics, while it at the same time makes it easier to follow the dialogue for those relying primarily on sound.

The accessibility work in FS as well as Marvinter included a large element of tool production that, for example, enabled automatic generation dialog audio in prototypes (Engström and Östblad, 2018).

As regards websites, SR uses standard accessibility functions such as screen readers. With Marvinter, it puts extra effort into including people with disabilities. For example:

We sought to follow the university’s line, that is, stressing that [the game] was for everyone and accessible to everyone. I guess we also had some form of textual information about it on our home
page, tips on how it could be played in class [ . . . ] and suggestions on how sighted children could try playing without looking and then discuss their experiences. (SR_WebManager)

To enable people with hearing impairments to share the radio series, there were also attempts to have the radio script published on the website. However, standard contracts for radio series writers only permit text publication of ‘voice-recorded manuscripts’. This is to protect writers’ rights. Additionally, the relevant, standard contracts were not renegotiated when radio became accessible online (thereby giving SR a platform to publish texts as a complement to audio-based content).

Although society is now to be more inclusive and it should be easy to make culture and information accessible, there are still a whole lot of rules that need to loosen up. [For example] rights and money standing in the way because the agreement is for radio recording only and not written text. I think this is something that needs to be addressed. (UoS_ProjectManager)

So even though public services have a specific mission to include people with disabilities, they are limited by rules and regulations regarding intellectual property and ownership.

Conclusions

Marvinter faced the same kinds of challenges as those identified in previous studies (e.g. Denward, 2011; Norton and Kovacs, 2017) and, in particular, challenges related to cross-media and inter-organisational collaborations. Dealing with rights and legal issues was one of the other central concerns in the Marvinter project.

As a public service company, SR must satisfy certain requirements before it can enter collaborations such as the one in this case. One of the requirements here was that the collaborating parties ‘partly shared resources’. In effect, this meant that, for example, music, casting, voice recording and sound were shared between the productions. However, artists hired for such jobs are often freelance and, unless otherwise specifically stated in their contracts, they can refuse to produce material for ‘additional’ platforms. Hence, whether media content can ‘flow’ between platforms or assets can be shared across media (as proposed by Jenkins, 2003, 2006) is not only a question of technological hurdles, as O’Donnell (2011) shows, but also a question of rights and ownership.

The uniqueness of Marvinter also presented additional challenges. First of all, Marvinter was developed by two non-profit organisations, each with its own individual mission. SR had to deliver the radio series regardless of whether or not there was a game. UoS had a research goal that could only be achieved through the collaboration. Consequently, there was hierarchical imbalance in product status. This permeated the project.

The project involved a story-driven game for mobile platforms. This game had to be released contemporaneously with a radio series. The complexities involved in developing digital games have already been mentioned. Marvinter was no exception. Thus, when the writers had to continue revising the radio manuscript after delivery for recording by the production company, there were consequences for both game production and the writers’ working conditions. This was because, in a transmedia production, substantial changes to the story in one medium can have repercussions in other media and possibly result in a chain of revisions and, perhaps, inconsistencies. This is particularly critical when the project involves a digital game.

Even though, to enhance player experience, games are tweaked and changed throughout production (Tschang and Szczypula, 2006), major story revisions late in the process can have severe consequences for game production. They may, for example, require additional voice recording,
implementation of new gameplay features or restructuring of existing game modules. All of these are time-consuming, costly and error-prone. Consequently, especially if there is no time to test changes properly, there is a risk of the game not being finished in time for release or logical lapses and/or other technical bugs being introduced and ruining the player experience (see, e.g. Lewis et al., 2010a).

To avoid such risks, the game story could be reduced to serve a supporting role, as in *Enter the Matrix* (Carr, 2005). Another solution is to have a minimum number of overlapping scenarios and references between the two stories. To a certain extent, this is what happened in *Marvinter*. However, this is diametrically opposed to how full advantage can be taken of transmedia storytelling opportunities. Instead, there needs to be better coordination and planning of transmedia projects from the beginning and a better understanding of ‘the peculiarities of each medium’ (Dena, 2009: 132). Typically, this requires a transmedia producer who will coordinate the project, ensure overall quality, identify synergies between platforms, establish a consensus around the story and negotiate and synchronise changes before implementation (see, e.g. Norton and Kovacs, 2017). This is also what the informants suggested the project should have had. By resolving at least some of the misunderstandings, inconsistencies and other communication issues (as well as providing a clearer decision-making process), such a solution could have reduced the structural tensions (Lewis et al., 2010b).

Given the critical time frame, the specific limitations and pressures under which SR works to produce high-quality, prestige output, SR suggested that such a coordinating role should go to someone at SR. However, considering the complexity of game production in general, and transmedia production in particular, having deep insight into only one of the media is probably not enough. Instead:

> A director in the transmedia context may be a person who assumes the functions that are akin to mono-medium practices, but do not just involve the knowledge and skills specific to a medium. In other words, a film or theatre director is not immediately qualified to direct a transmedia production. Instead, they would need to understand the various peculiarities of each medium, and importantly transmedia craft. (Dena, 2009: 132)

Hence, a transmedia producer needs to understand the different production cultures and logics of each medium. Given the complexity of game development and that games have components that require special consideration, for example, game mechanics and branching stories (see, e.g. O’Donnell, 2011), an experienced game producer might have been a better choice for the *Marvinter* project. However, such a person would also need to be able to navigate the complex organisation and regulations of public service media. Furthermore, given the particular, previously mentioned circumstances of *Marvinter*, it is unlikely that there was an obvious transmedia producer to be found among those involved in the project. Thus, the *Marvinter* case confirms the need for the type of producer characterised by Dena (2009). Do such producers exist?

An important condition of the project was that it should include people with visual or hearing impairments. As transmedia production involves ‘multiple media platforms’ (e.g. Jenkins, 2003; Long, 2007; Scolari, 2009), it is particularly suitable for including, in a shared storyworld, people with complementary disabilities. This can be very difficult when only one platform is offered. Given today’s great number of publications on transmedia storytelling, it is surprising that this perspective has been overlooked in the transmedia context.

*Marvinter* took advantage of the different affordances of each medium. For all media, effort was also put into increasing accessibility. However, not having the legal rights to publish the radio
manuscript (and thereby make it accessible for people with hearing impairments) worked against this. The regulations behind the relevant, standard contracts have not been updated to accommodate the consequences of transitioning from one platform to multiple platforms (e.g. as in radio becoming accessible on the web). Hence, it is not enough to have an accessibility policy. Contracts with freelancers need to be renegotiated to include the right to publish media content in a way that makes it accessible for people with disabilities.

Finally, Ryan (2015) claims there are no successful, or rather ‘mega-hit’, native transmedia projects and presents two explanations of this. First, the projects have been developed first and foremost as a marketing strategy. Second, they fail because ‘transmedia storytelling [...] is an experimental project that still needs to find its true calling’ and that ‘the criterion for success is not to produce a mega-hit but, more modestly, to create a work that justifies its transmedia buildup’. Marvinter was a transmedia ‘buildup’ justified by the need to include people with complementary disabilities. Furthermore, it was the combination of the marketing strategy and the native transmedia structure that enabled the production and dissemination of an inclusive Advent calendar.

Concluding remarks

Marvinter is an example of a native transmedia project. The transmedia nature of the project was justified by the need to include people with disabilities in a shared cultural experience (i.e. the traditional Advent calendar output of a Swedish public service). In line with this, the marketing strategy, rather than being commercially motivated, sought to expand the market to meet a societal need. This was possible because the organisations collaborating to achieve a common goal were both non-profit. The unique characteristics of the project (an inclusive transmedia Advent calendar with concurrent production processes) created an overly complex game production environment with high workloads and fewer synergies than had been hoped for at project start.

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Notes

1. An English version of the game, Frequency Missing, was released in 2018.
2. https://sverigesradio.se/barn/julkalendrar/index.stm.
3. Translated into English by this article’s main author.
4. https://sverigesradio.se/julkalendern2017marvinter (still available 1 October 2019).
5. The Swedish newspaper *Uppsala Nya* writes that ‘Swedish radio [...] has once again managed to create a calendar that is both exciting and fun. Don’t miss it!’ (https://www.unt.se/kultur-noje/roligt-och-spanande-4833177.aspx).

6. The game was rated 4.4 of 5 stars at App Store and 4.6 of 5 stars at Google Play (as of December 2018). Some of the players also provided written comments (translated from Swedish): ‘It is so very well done and so incredibly fun to play! I recommend it for all seasons!!!’ (NN, 10 September 2019). ‘I love this game. Even though it’s not this year’s [calendar], I play it every year (TheCrazySwedishBanana, 20 December 2018) (Translated from Swedish).

7. For example, one player, a blind boy, posted a review on his YouTube channel in which he highly recommends the *Marvinter* game (https://youtu.be/ySj_M5zsFRs) (in Swedish).

8. A mother of two daughters sent a letter in which she writes (translated from Swedish): ‘I just want to thank you warmly for a fantastic game! My daughter NN is severely visually impaired (has been sighted). For her, one of the great sorrows of losing sight is that she can no longer play, from being an active gamer. I introduced your game to her, and she was completely sold and has played it several times, even her younger sister thinks it is fun (she is sighted), which means they can also play together. I tell everyone we know in the visually impaired world about *Marvinter* and I think there are many who hope that more games will come from you’ (Quoted with her consent).

9. In comparison, *Frequency Missing* was downloaded less than 1000 times.

10. Severe visual/hearing impairment among the target group is estimated to be less than 500/1000 people.

11. See https://sverigesradio.se/sida/gruppsida.aspx?programid=3113&grupp=5119.

12. Informants spoke about ‘SR drama’, ‘radio for Kids’, ‘radio theatre’ and so on. However, in the quotes, SR Drama (the formal name of the division) is used to simplify reading.

13. Some of the participants were completely blind and some of them also had a cognitive disability.

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