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Examining 360° storytelling in immersive music videos

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Abstract

Music videos invite the viewer to an enhanced experience of a song, and by combining it with 360°, a new dimension of immersion emerges. However, a new wave of complex narrative and user interface unfolds when intertwining 360° and the contemporary way of telling stories in music videos.

This thesis used an experimental mixed method research design, focusing on collecting, analyzing, and mixing both quantitative and qualitative data in a series of studies. A survey was first conducted to get an overview of consensus with respect to music videos, VR, and 360°. The majority of the respondents had tried VR and 40% of stated that they felt immersed while trying it. Around 18% argued it was experience-dependent and 42% did not feel immersed at all. The survey was followed by experiments showing two 360° music videos with different storytelling techniques. After the participants had seen the videos, they discussed the experience in focus groups in a semi-structured interview. The results were then coded and benchmarked with theory, which led to the rise of six key 360° storytelling guidelines.

All three focus groups concluded 360° music videos enable a deeper level of immersion. However, when combining novelty and a sometimes overwhelming visual experience, 360° music videos can distract the audience if not told right. The guidelines discuss the purpose of a music video, how the technology affects the experience, if the medium is passive or active, and how different types of interaction can be used as a storytelling mean. They also discuss ways to pedagogically intertwine audio and visuals. Additionally, the guidelines include discussions of how different cues and POVs can be utilized to ensure that the filmmakers and viewers experiences are somewhat aligned, they also tackle the fear of missing out, and finally compare 360° and traditional music videos.

Conclusively, the research shows that storytelling in a 360° sphere will entail a journey of trial and error, and that the audience have scattered preferences of what different narrative styles they find work and do not.

Keywords

360° Music Videos, 360°, Music Videos, Virtual Reality, Storytelling, Narrative, Immersion, Presence, HMD, Point of view (POV), Interaction, User motivation
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1 Introduction

VR can be an extremely isolating technology... but is there a way we can use that, rather than to isolate, to let you have the closeness of a more human experience? It’s a weird thing that we had to remove all the human iconography to do that.

Kulash Jr., D. 2018

1.1 Background and problem definition

Immersive artist and filmmaker Chris Milk (2016) argues Virtual Reality (VR) is going to play an important part in the history of media, and that in fact it will be the last one since it closes the gap between audience and storyteller. In the video “The birth of virtual reality as an art form”, Milk (2016) argues VR achieve the integration of physical and digital and states “It’s the first medium to jump from our internalization of an author's expression of an experience, to our experiencing it first hand.” According to the 2018 Fjord trend report, organizations need to create new services that are integrated in the physical world and that the future of service design is about blending physical and digital and stop viewing them as separate.

VR and 360° videos in entertainment has been expanding since Facebook bought Oculus for approx. two billion US dollars in March 2014 (Health, 2017). One year later, in March 2015, YouTube made it possible to stream and upload 360° videos. Today some refer to VR as a mainstream media (Alexander, 2017). But despite the success, there are still some areas of development that need research and adjustment. VR comes with new conditions and ways to be creative; the quest for immersion accelerates and the classic way of storytelling is being challenged.

In an interview, Chris Edwards, CEO of the virtual reality company The Third Floor, explains the technological and entertainment/artistic industries need each other’s expertise in order to take VR storytelling to into the future. (Bucher, 2018) Rubio-Tamayo, Barrio, and García, (2017) argue that immersive digital media needs new approaches regarding its interactive and immersive features and further states this will be done with the design of new narratives and relationships with users. Doug Buffone of VAR Consultants and Renaissance Media maintains that the rules of VR are not set yet, and warns creatives to get dogmatic about “where you put the camera, where action is oriented, what pieces look like.” (Kelly, 2016).
When discussing VR and 360º videos, there’s a big conflict on what will be the medium’s breaking point, and what will make it cross the chasm\(^1\). Some state that the technology is too clumsy; some say it’s not yet convenient and too expensive. Some argue it’s a mixture of everything, and some that the medium is mainstream and in fact already made the jump. A recurring argument is, however, that the content is not yet fully utilizing the potential of the medium, and that content is still in a trial and error-phase. Chris Milk compares VR with television and tells TechCrunch: “It’s hard to sell 50 million televisions if there’s only a week’s worth of television to watch” (Matney, 2016).

A lot of content creators today are using VR as an excuse for being unique, which is much alike to how film first started out; with video recorded plays (e.g. Joe De Grasse’s film “A doll’s house” from 1917). The storytellers didn’t instantly find the possibilities and feelings one could achieve by e.g. shooting in different angles and manipulating the viewer’s perspective. Film too met both trial and error. Bronikowski, SVP and head of innovation and business development at Warner Music Group, also compares VR to the early days of movies, and points out the industry is now figuring out how to make a compelling story. (Dredge, 2017)

Google Spotlight Stories, a company specializing in storytelling for VR, produced a VR music video for “Gorillaz” (Gorillaz, 2017), a virtual band from England. It was released on YouTube March 23, 2017, and just over one year later, it had over 65 million views. Music videos is a way for creators, fans, and musicians to explore their creativity and VR gives endless new and creative options for telling a story. According to Sarah Boardman, the head of music at Pulse Films, VR videos often lack the story, concept or narrative thrust that propels a traditional video, and argues VR is very much still a gimmick at this stage. (Kelly, 2016) However, both numbers and corporate giants involved imply that there is a big market and interest. Niclas Johansson, CEO of VR Sweden, points out that VR only has been around “for real” for approximately two years, and that a newborn technology needs time to get everything in place (Friman, 2018). VR Developer Marko Permanto theorizes that good content will make more people buy the hardware (Friman, 2018). Will the stipulation of immersive storytelling expand the market and media? According to Alexander (2017), music, audio, and dialog deepen our immersion, and shape our awareness of the setting in a film. From a storytelling point of view,

\[1\] When a technology makes the jump from the market segment “early adopters” to “early majority”. See section 2.4 *Moore’s Chasm*, for a thorough explanation.
the purpose of music videos is to reinforce the immersion that music can give and to connect the artist and listener.

1.1.1 The difference between 360° and Virtual Reality

Overall, both technologies are interesting and have shaped the way that we view content on a regular basis. Virtual reality seems to be a more in-depth technology that allows players to explore a brand new universe, whereas 360° video is great for real-life applications.

Brown, 2017

All though 360° and VR are viewed in the same head mounted device (HMD), there’s a difference between the two. In a 360° video the viewer is not able to move around or make choices; just like in a traditional medium the viewers are invited to an experience made by someone else. Even though the story is curated, and that the video has a certain storyline, all experiences are bound to be different due to the fact that the viewer is able to look wherever and whenever wanted. The better this is understood and utilized from a storytelling point of view, the stronger the immersion and presence will become. 360° videos can also be shown via YouTube, Facebook, and HMD allowing mobile devices, whereas Virtual Reality can only be shown in a VR-headset. (Dana, 2017; Gardonio, 2017) In a virtual reality experience the viewer is invited to sit behind the wheel and decide where to go, and depending on the software’s limitation it is common that the viewer is able to interact with the environment. Video support manager at Vimeo, Dana (2017) points out VR experiences can involve other devices such as joysticks, gloves, and suits all aiming to enhance the feeling of presence and immersion. Dana (2017) further states the interactions and self-curating possibilities make VR hard for some filmmakers to handle, and thus VR is more often used in video games or simulation systems.

All though some of the presented theory in this study covers Virtual Reality, they are also applicable for 360°-videos since it solely discuss the storytelling possibilities within a 360° sphere. According to Goldman and Falcone (2016) VR has become the overall name for all manner of things experienced with a HMD. Goldman and Falcone (2016) point out the difference between VR and 360°-videos but also argue there’s no real harm done all though they are not synonymous. (Goldman and Falcone, 2016)
1.1.2 Music videos as a real-life application in a 360° sphere

Tessarolo (2011) argues that music videos are a new way for music groups to promote their songs and amuse the audience. Oliva, Bidarra and Araújo (2017) argue music videos actually tell stories, and highlight that music videos today incorporate performances of characters and insertion of dialogues, inter alia.

Brown (2017), web editor at the multimedia website Filmora, with rich knowledge about video editing, claim 360° videos are great for real-life applications, which according to Oliva, Bidarra and Araújo (2017) contemporary music videos, in a great majority, actually portraits. In 2004, Chris Milk directed a music video (see image 1) for the song “When it all falls down” by Kanye West (2009). The video is interesting as it intertwines an illusion of a 360° video with traditional storytelling techniques. Milk explored the conventional language of music videos by giving the viewer the protagonist’s eyes, putting the viewer in a real life situation by letting them figuratively becoming the artist.

Image 1. The music video for All Falls Down by Kanye West, directed by Chris Milk (West, 2009).

1.2 Research Question

Oliva, Bidarra and Araújo (2017) claim the elements today seen in music videos are not typical of the classic and conventional paradigms of a language. This paradigm; portraying art with new storytelling means, is something this thesis sees could be further leveraged in a 360° sphere. With this taken into consideration, this study seeks out to answer the following question:
What storytelling- and narrative techniques can potentially be utilized in 360° music videos to further immerse an audience?

1.3  Aim and purpose

The goal of this thesis is to create an understanding on how to best leverage storytelling in 360° music videos to strengthen immersion and presence and thereby also the bond between visual and sound. By analyzing user motivation and examining 360° storytelling techniques, the hope is to find useful narrative techniques and styles to which filmmakers can relate when creating 360° music videos.

1.4  Target Audience

The primary target audience are professionals that in some way produce 360° music videos, or content in a 360° sphere. The secondary target audience is students, professionals from the entertainment industry, and VR enthusiasts.

1.5  Limitations

It was necessary to limit the research to one application scope since VR is applicable in various areas throughout entertainment. One of the initial purposes of traditional music videos is to make the music experience more immersive, innately, 360° videos can help taking that immersion to another level, thus this study will solely discuss 360° music videos.

It’s rare to produce an interactive music video in VR. Music videos are a passive medium: the viewer watch, whereas Virtual Reality is active: the viewer interacts with the surroundings; thus, VR is not commonly used as a medium for music videos.

Some of the theory presented in this study applies to both VR and 360°, therefore, both terminologies will occur in the text.
Related work

Until about 30 years ago, the average American did not have access to any medium that could satisfy each of their specific interests. All they had was the mass medium, which could somewhat successfully satisfy many of their generic (i.e., “mass”) interests.


When Sensorama (the first immersive multi sensor machine) and the first head mounted device (HMD) was launched in the 60’s, technology was not yet fully evolved to reach a mass market. Around 30 years later VR had its first prime time. In 1984, the VR researcher Jaron Lanier founded VPL research that became one of the first companies to sell VR products, implement VR systems, including a programming language to develop such applications. A while after VPL had received funding and left patent in collateral, VPL research was forced to bankruptcy (Steinicke, 2016; Rubio-Tamayo, Barrio, and García, 2017). But despite the bankruptcy VPL and Lanier left with the legacy of popularizing the term “Virtual Reality” (Virtual Reality Society, n.d).

In February 1998, VPL’s patent portfolio and technical assets were bought by Sun Microsystem (today Oracle) according to a press release from Lanier's website. Lanier declares: “Virtual reality, which received recognition earlier in the decade for its impact on the entertainment industry, has recently gained widespread interest for its importance to the emerging market of interactive communications. Many experts believe real-time computer generated 3D synthetic environments are rapidly becoming the user interface to the Internet.” (Lanier, 1998)

Another key player at the time was the Virtuality Group PLC, who just like VPL, produced principal components required for a VR experience, including headsets, 3D graphics systems, position and orientation trackers, joysticks, and multi user gaming network units. However, when the audience tried the new technology, it was obvious that the innovation was ahead of its time technology wise. Low resolution, bad latency, and not being accessible in households, led to the bust of VR in the mid 90’s, and the media was replaced with Internet technology, WWW, and the smartphone era. As the system requirements were not yet fulfilled during the first rise and fall of Virtual Reality in the 1990’s, the technology wasn’t off to a good start. (Steinicke, 2016)
One might question why some technologies (e.g. cell phones and internet) developed around the same time or even later than VR, are ubiquitous today, while VR is not. The question we’re facing is what will make VR and 360° video clips reach mainstream today?

Steinicke (2016) concludes that we’re communicating with computers in a totally different way today than 30 years ago and that VR has a new and complex user interface paradigm. Steinicke (2016) argues the biggest difference of the 1990’s and today is the milieu, and that following system requirements should be fulfilled to achieve a compelling VR-experience: High quality visual graphics, displayed at interactive frame rates, high resolution, precise and accurate tracking, fast connection and low end-to-end latency.

2.1 Transparent immediacy and hypermediacy

Bolter and Grusin explain hypermediacy as a “visual interpretation whose goal is to remind the viewer of the medium”. Transparent immediacy is described as “a style of visual representation whose goal is to make the viewer forget the presence of the medium.” (1999, p. 272). Bolter and Grusin (1999) claim new digital media oscillate between immediacy and hypermediacy, and that this oscillation is a key to understanding how a medium refashions its predecessors and other contemporary media. Bolter and Grusin further discuss VR to be at the forefront of transparent immediacy, but that the HMD required makes the disappearing act hard. In order to create a sense of presence, Bolter and Grusin argue VR should come as close to our daily visual experience as possible (1999). Evens (2009) explains that the media characteristics presented by Bolter and Gruisin are based on an inadequate traditional fundamental structure: “sender -> channel -> receiver, or author -> content -> audience”, and further point out the interactivity of new media as a challenge to the traditional image. Evens (2009) further concludes: “This scrambling of the medial position engenders a risk, a dissolution of the subject, when the audience can no longer be separated from the content with which it interacts. Exciting and powerful, interactivity is thus also dangerous, because it threatens to dissolve actors and medium, an information soup.”

2.2 Head mounted displays capture the audience full attention

According to Oliva, Bidarra and Araújo (2017, p. 460), the writer and film analyst Raymond Bellour, argues, “The cinema audience is active, has little time for contemplation and cannot
close the eyes for fear of missing something relevant. “Oliva, Bidarra and Araújo (2017) puts this in relation to online video clips, and point out ruptures to look at in the discussion of video consumption in an online environment. Oliva, Bidarra and Araújo (2017, p. 461) argues the small screens alters the audio-visual experience since it provides less resolution and doesn’t offer the possibility to see fine details. They further assert this issue is diminishing the impact in scenes with perspective, because it alters the depth-of-field. (Oliva, Bidarra and Araújo, 2017)

The following parallel can be drawn from aforementioned work of Oliva, Bidarra and Araújo; just like the cinema, an HMD almost forces the audience to be active since they in both cases are cannot close their eyes because of the fear of missing something relevant. However, 360° videos come with complicated and expensive technology and still contain ruptures; these issues almost demand instant compensation. At least, the issues point to that filmmakers ought to create high quality experiences with compelling storytelling. Bucher (2018) argues film and video probably wouldn’t have become what they are today if it would not have been for all the ways made up to tell stories with them. Creator and host of the immersive podcast No Proscenium, Noah Nelson contends immersion achieved by storytelling is fragile since immersion can be broken at any moment. Nelson further asserts the narrative precision required for storytelling in VR may be higher than any other medium and that it never should be overlooked or taken lightly. (Bucher, 2018, pp. 91-92)

### 2.3 Presence through technology and storytelling

Newton and Soukup (2017) explain that presence is not only partly achieved through technology, but also through consistency and richness of the story-worlds created. To immerse the audience Newton and Soukup (2017) suggest the storyteller to ask “Does this information lend to feeling present, or will it send the audience into their heads—and which mode do I want them in right now?”. Finally, Newton and Soukup (2017) argue the feeling of presence within a VR experience enables the audience to pick up on feelings and rely on abstractions.

In an interview, Chris Edwards (Bucher, 2018), the founder and chief production manager at The Third Floor, explains the technological and entertainment/artistic industries need each other’s expertise in order to take VR storytelling to into the future. Edwards, explains they are trying to brainstorm the same limitless way as they’ve done for linear media, and that they hand it over to the tech team as soon as they’ve put their pencils down. Edwards further explains it
must be an iterative process, and that the production will be a negatively affected if a tech team doesn’t validate the idea first. (Bucher, 2018)

2.4 Exposure by desired audience segments

Today corporate giants such as Facebook, Google, Microsoft, Sony, and Samsung have invested a lot of time and money in VR, which has helped the media/technology reaching a mass market. When a value proposition is discovered that can predictably be delivered to a targetable set of customers at a reasonable price, initial leaders of a new mainstream market can become very successful. (Moore, 1991)

Andersson (2008) stated the Hollywood box-office revenue was down by more than 6 percent in 2005, and that the numbers were reflecting that the theatergoing audience was falling even as the population grew. Andersson (2008) argues that this could look like a battle between traditional media and the Internet from a mainstream media and entertainment industry perspective, and that this was the result of a scattered market fragmentation. However, Statista (2016) provides a forecast of revenue for TV and video industry worldwide in 2015 and 2020, stating that it’s increasing. According to the source, the revenue for the industry will grow from 286.17 billion U.S. dollars in 2015 to 324.66 billion in 2020, which is a 13% increase over a five-year time span. Statista (2017) presented another forecast for the global augmented and virtual reality market size for 2016, 2017, 2018, 2020, and 2021, showing that the augmented and virtual reality market is expected to reach a market size of 215 billion U.S. dollars in 2021, which is a 3400% increase over a five year time span. These figures imply this is only the beginning and that we are looking into a future enabling new ways of consuming media.

The prioritization of maximizing exposure by desired audience segments has lead to the growth of an attention economy (Goldhaber, 1997). As a result the commercial systems used to measure media audiences focuses on what type of, and how many people were exposed to the content (Napoli, 2010). Napoli (2010) further points out that how the audience actually responds to the content either cognitively or behaviorally is residing at the margins of the audience marketplace.
2.5 How can Virtual Reality reach out to the early majority?

According to Thiel and Masters “proprietary technology is the most substantive advantage a company can have because it makes your product difficult or impossible to replicate” (2014, p. 40). Thiel and Masters (2014) further explains that a good rule of thumb when increasing value of a new technology, and the audience corollary, is to make the experience 10 times better than its closest substitute. It’s debatable if VR is being a 10x experience. Sivan Iram, VP of Business Development at Lumus Ltd, argues, “to get there, we must become better at storytelling in VR, and using the unique characteristics of VR (such as presence) to content’s advantage.” (Iram, 2016). Newton and Soukup deem that we first have to put ourselves in the audience’s shoes and understand their cognitive, emotional and physical experience. “We need to embrace human-centered design lens of “audience experience,” and let that guide our choices.“ (Newton and Soukup, 2017)

2.6 Catching the audience’s attention using storytelling as a mean

Comparing traditional storytelling with storytelling in 360°, one important difference is the user freedom. Different cues can be used to prevent the viewer to get lost in other details and direct them down the experience the filmmaker want them to endeavor (Fictum, 2018). A VR storytelling experiment was conducted with filmmaker and experience designer Katy Newton, creative director and experience designer Karin Soukup, independent filmmaker Paisley Smith, and Stanford’s d.school Media Experiments. By asking how to tell a story when the audience is present within it, Newton and Soukup (2017) bring up another unique 360° storytelling attribute. The study concludes that the storyteller needs to shift perspective from director and “robe the role of a matador by waving in the direction they want the audience to run” (Newton and Soukup, 2017).

Immersive director and VR filmmaker Jessica Brillhart, argues it is unlikely for someone to come out of an experience with the exact story as the filmmaker came up with, unless the viewer is forced to look in one direction all the time (Buchner, 2018). Brillhart recommends filmmakers to first figure out what story they want to tell, and then assess what potential stories can come out of it (Buchner, 2018). Finally, Brillhart argues that filmmakers, who force their
viewers to look in some direction, should not be working with VR (Bucher, 2018). Chris Edwards, however, points out it’s not necessary to always use full 360° and argues it’s ok to play with the environment sometimes by just working in an 180° sphere. Edwards further problematizes people who believe that VR is a binary decision and that it has an on or off switch. (Bucher, 2018) Nelson also argues filmmakers won’t be able to tell a story if they don’t have some of the tension captured, and problematizes filmmakers who don’t restrict the vision of the audience based on the reason they can look anywhere (Bucher, 2018). Fictum (2018) determines the 180° is greater than 360° rule, and suggests the filmmakers to create a sense of direction so the user feels like there’s a sense of direction in story and an actual narrative at play. This will give the viewer better control of the story, since they don’t have to look around because the action is happening within 180° (Fictum, 2017, p. 115). Dooley suggests the VR writer to create an illusion of choice when actually creating audio and visual cues resulting in a preconceived narrative experience (Dooley, 2018).

VR Screenwriter Eric Darnell, asserts he doesn’t want VR gimmicks to get in the way of telling a story and argues it’s important to include the audience in that process. Darnell argues the audiences’ autonomy and ability to choose where they want to focus their attention can cause problems. In order to naturally guide and inspire the viewer where to look, Darnell studied how magicians use misdirection. Darnell explains that some of the borrowed cues are: something/someone looking at a direction, art, sound, and lighting. (Flores, 2017)

2.7 Narrative structures

Bucher states that many writers spend a lot of time avoiding tropes, whilst for example architectures never avoid including windows, doors, and floors. Bucher further argues that creators in this way of exploring their creativity fail to recognize that the basic narrative structure is based on the way the human brain solves problems. Bucher emphasize structure is about form and not formula, and compares structure to the skeleton that must be present to create a living narrative, however, what actually makes the creation unique, is the flesh, hair and features. (Bucher, 2018, p. 158)
Baobab Studios CEO, Maureen Fan, argues that the three-act structure\(^2\) is imperative to make a story bond with the viewer and states “If you deviate from the three-act structure, your brain doesn’t release the chemicals the way it would otherwise. It’s literally in our DNA, so you release cortisol and oxytocin to help you bond with other persons at certain points, and you have to follow that three-act structure to make it work.” (Edwards, 2017)

Bucher (2018) argues that every story needs a catalyst that accelerate the narrative action; in first-person experiences, the narrative first moments should give the viewer/participant orientation. Bucher further explains many VR narratives have been focusing on external experiences, and predicts that the future of immersive experiences will involve more nuanced internal journeys, which will allow the viewers to confront their most basic desires and struggles. (Bucher, 2018, pp. 161-162)

### 2.8 Applying Virtual Reality to new fields

Rubio-Tamayo, Barrio, and García, (2017) states that the challenge of technologies and applications based on VR is conceiving new ways to design information, narratives, and storytelling for a medium in which possibilities have not yet been fully explored. Rubio-Tamayo, Barrio, and García, (2017) also point out the challenge of virtual reality is not only focused in a technological sense, but also in the way this medium is going to develop its own dynamics for interaction with users (comprising gameplay), with potential applications in new fields. Alexander (2017) suggests that we are glimpsing the contours of a new storytelling form; a technology presenting its own affordances; powerful settings and audience presence.

### 2.9 Storytelling in music videos

In 1981, MTV (Music Television) became the first platform to solely broadcast music videos. The first video shown was “Video Killed The Radio Star”, by the Buggles. According to the culture critic and philosopher Steven Shaviro (2017), the video makes two points that still applies for music videos to this day: “The first is that the popularity of music videos means that musicians need to pay attention to visual presentation as well as to sound. The second is that

\(^2\) The three-act structure consists of the following three acts: 1. Set up 2. Confrontation 3. Resolution
music videos are the product of cutting-edge audiovisual technologies and are bound to change as these technologies change.” (2017, pp. 3-4).

Shaviro asserts music videos experiment with new modes of visualization and expression. The culture critic further argues the videos are free to ignore narrative structures and older modes of audiovisual organization because of their (usually) short length and superfluous character. Shaviro point out that structures such as “alternating between shots the same actor in different locations, wearing different clothes, and with a different look”, would be disruptive in narrative films but are conventional in music videos. In that sense music videos in juxtapose to traditional movies, are often non-narratives, and not dependent on time, space and causality even if they do tell stories occasionally. (pp. 9-15, 2017) As mentioned in the introduction, Oliva, Bidarra and Araújo (2017) claim that music videos tell stories. The study also highlights that new media users are not tied to old formats, and that digital amplification and fragmentation in fact is not opposing storytelling. Though the research admits videos and films tend to have fast, fragmented and dynamic presentations it also present information that dispute it. The study opposes the fragmentation tendency by arguing storytelling in video clips is still connected to key narrative constructions such as time, space, dramatization, characters, actions, dialogs and others. (Oliva, Bidarra and Araújo, 2017) By analysing important remarks such the music timing, the advertising and marketing of the songs, and the artist’s image and performance, Oliva, Bidarra and Araújo (2017) unveil a complexity of storytelling. Furthermore, the study highlights a necessity to beware of the connection between the rhythm of the songs and the visual images (Oliva, Bidarra and Araújo, 2017). Tessarolo (2011, p. 2) argues the success of a music video depends on the ability of integrating audio (songs) and visual (images) stimuli, and states that it is hard to blend the two since eyesight has physiological prominence over hearing. Finally, Tessarolo (2011, p.2) concludes the images must give echo to the music and that emotion appears to prevail over narration.

2.10 Reflection

From the research given, it is clear that storytelling could be leveraged to elevate the true potential of the media. According to Dooley (2017, p. 162) “very little research has been done into the emerging forms, structures and writing approaches associated with the 360-degree virtual reality narratives that have appeared in the last two to three years”.

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With regards to transparent immediacy, Bolter and Grusin (1999) argue VR should come as close to our daily visual experience as possible. Bolter and Grusin asserted that VR in 1999 contained too many ruptures, such as slow frame rates, jagged graphics, bright colors, bland colors, and system crashes, and that the simplicity was nowhere near the reality which the viewer was greeted by when taking the HMD off. Bolter and Grusin (1999) also pointed out VR-enthusiasts at the time implied technological limitations of VR simply were pointing to its great potential.

Today, approximately 20 years later, VR enthusiasts are still pointing to its great potential, and the technology is still facing ruptures impacting the feeling of immersion. When researching areas of improvement for 360° videos, the literature point to different ways of approaching storytelling and narrative techniques, and also that it’s a course of trial and error. As an example, Bronikowski hypothesize that VR’s biggest challenge by far is the storytelling or experience aspect, and argues this hasn’t been iterated enough by enough companies (Dredge, 2017).

Both guidelines and structures are provided to simplify the filmmaker’s work to immerse the audience. However, very little is said about 360° music videos, and even less on how the concept can be leveraged from the storytelling techniques presented. However, looking at the Gorillaz - Saturnz Barz (Spirit House) 360° music video, more than 65 million views imply that 360° music videos, when conducted right, can be a success. The success also manifests the two points foreseen by the Buggles in “Video Killed The Radio Star”.

3 Method

A solid theoretical foundation was first built to better understand how to shape the method. This thesis uses a mixed method research design, focusing on collecting, analyzing, and mixing both quantitative and qualitative data in a single or series of studies. As opposed to using one method, mixed methods can give an additional insight (Creswell and Clark, 2011). When a researcher needs qualitative information to shape an intervention or explain the results of an intervention, Creswell and Clark (2011, p. 69) point out sequential approaches as useful. The literature clarifies that storytelling in VR is a complex user-oriented question, since the director’s idea of the story can be interpreted in many different ways and that the media is user oriented. A survey was therefore first carried out to comprehend the audience consensus in regards to VR, music videos, immersion, and storytelling.

Denscombe (2014) argues that surveys are generally used to snapshot the current state of a situation and to provide a panoramic view of a situation. The result of the survey presented an initial set of storytelling guidelines/approaches that clarified what people want from a music video, thus what features in music videos should be taken into consideration setting up the experiment and focus groups. After the survey was conducted the organizing method affinity mapping was used to compile the data and extract relevant findings. After extracting data from the survey, an initial set of guidelines was formed. Relating to these initial guidelines made it easier to form a relevant experiment.

The experiment was set up so that a group of people was exposed to two different types of 360°-music videos that had different storytelling techniques and styles. The content was then discussed in focus groups. The focus groups were audio recorded and later transcribed. Data was then extracted from the transcription and new storytelling techniques were formulated, now based on results from literature, survey, and focus groups. The final storytelling guidelines and features were finally discussed and reviewed in a deep interview with an industry expert.

An embedded experimental design (Figure 2) was used as an overall method. This design includes the collection of both quantitative and qualitative data, wherein one of the data types plays a supplemental role within the overall design (Creswell and Clark, 2011).
Figure 2. The embedded design adapted from Creswell and Clark's Embedded Experimental Model (2011).
4 Study

To examine what storytelling techniques in 360° music videos can potentially be utilized to immerse an audience, their take on immersion was examined and analyzed by results from a survey, experiments, and focus groups. The research resulted in guidelines based on their needs, expectations, and reactions, and later discussed and benchmarked with theory.

4.1 Survey

Since the research aims to study what storytelling techniques can be used in 360° music video to immerse an audience, the first step became to examine what actually makes music videos immerse a viewer. To get an overview of consensus, a survey was chosen as the first step since it enables answers from a larger group.

The survey was first shared on the researcher’s personal Facebook page. The average completion time was approximately five minutes. The survey was additionally shared by five people in different ages and occupations and got a total of 70 responses. Denscombe (2014) claims recent evidence state surveys conducted via Internet is not significantly different than a traditional method. The purpose of this survey was to get a grasp of the audience’s current take on virtual reality and traditional music videos, and then, from that result, extract data to see what type of music videos to show in the experiment. The findings and initial guidelines were also formed as a foundation for the focus group discussions. Fontana and Frey (1994, p. 366, quoted by Brennen 2017), argue that the goal of structured interviewing is to obtain accurate and precise data that can be coded and may help “to explain behavior within pre-established categories”.

The survey included different types of questions to get a broader range of answers. Multiple-choice questions were used to quantify some of the responses and to get a better overview of their diversity. Open questions were used as a mean trying to find patterns in the discussions, and to see what the respondents felt was relevant to share. An exploratory sample was used to provide means for generating insights and information. Denscombe (2014, p. 33) argues that exploratory samples are used as a way of probing relatively unexplored topics and to discover new ideas. Denscombe further claims that the respondents might be inclined to provide “socially acceptable answers”, and suggests ensuring the social network site users “that their
responses are kept private and are never communicated via a public forum as an approach to solve the potential problem. (Denscombe, 2014, p. 33)

Google Forms was used to create the survey because it’s convenient to share cross-platforms and to extract data from. The survey started off with general questions regarding people’s music video consumption and preferences, and later evolved to questions about their interest in technology and VR and their take on 360 music videos (Appendix 1 – Survey Questions). The survey was first posted on the researcher’s private Facebook, and then shared by five people in different ages and occupations in order to increase the engagement. It was additionally shared in a VR Facebook group (Virtual Reality, 2018), with the intention to get replies from industry people as well. In total, the survey reached 2181 possible respondents. The Facebook group had 41812 members.

Table 1 shows how the survey was distributed. The numbers following each person shows how many Facebook friends they have. The survey received a total of 70 replies, which is approximately a 3% answer rate.

Table 1. Distribution of survey

<table>
<thead>
<tr>
<th>Distributors, occupation, age</th>
<th>Potential reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher (Media technology student, 25 years old)</td>
<td>650</td>
</tr>
<tr>
<td>Person 1 (University lecturer, 65 years old)</td>
<td>207</td>
</tr>
<tr>
<td>Person 2 (Swedish teacher for adult immigrants, 62 years old)</td>
<td>246</td>
</tr>
<tr>
<td>Person 3 (E-commerce manager, 40 years old)</td>
<td>251</td>
</tr>
<tr>
<td>Person 4 (Media Freelancer, 34 years old)</td>
<td>261</td>
</tr>
<tr>
<td>Person 5 (Sexology student, 25 years old)</td>
<td>566</td>
</tr>
<tr>
<td>Total</td>
<td>2181</td>
</tr>
</tbody>
</table>

4.1.1 Affinity diagram

An affinity diagram method was used to map and structure the collected data from the survey. According to Payton (Medium, 2016) the purpose of affinity diagrams is to find trends and to put things into categories. Dam and Siang argue the process is great for grouping data gathered
during research. The method simplifies organizing a large amount of data and helps the researcher to go from analysis to synthesis. (Dam and Siang, 2018)

As an example: the categories emerging from the question “What do you think is the purpose of music videos?” were: Promotion, Reach A Broader Audience, Involving the audience, For Fun, Enhancing the Artistic and Creative Value, and Visualize the Meaning of the Song. The diagram thus gave the researcher seven categories instead of 70 answers. The categories made it easier to select 360° music videos to include in the experiment.

4.2 Qualitative experiment and focus group discussions

The mixed methods are based on an experimental research design, as the survey is quantitative and experiment is qualitative. Since the research aims to examine storytelling techniques, the researcher wanted to ensure that the focus groups:

– Had an idea of how different storytelling techniques can affect a 360° experience
– Would be able to discuss the storytelling from a relevant perspective

To make sure that the participants could meet the aforementioned requirements, it was inevitable to first conduct the experiments. The experiment included the participant watching two different music videos in 360°. The videos had a linear story, a first person peripheral, and action in 360°. When conducting the experiment the participants were sat down in a spinning chair, which allowed them to turn around however they wanted. Letting the viewer sit down decreases the risks of having any height related issues: if the viewer is standing up and their height is not aligned with the experience, the viewer run a higher risk of having bodily identity distractions or feel sick while taking part (Fictum, 2017).

Before participating in the experiment, they were all informed on what they would expect, and that they could stop the video whenever they wanted to. Fictum (2018) argues it’s important to warn the viewer if the content is intense, since VR is more personal than other mediums.

The participants experienced the 360° music videos in a HTC Vive headset, that according to the technology site Wearable (2018), is at the forefront in terms of technological aspects. A favorable aspect of the HMD (head mounted device) is that it accepts external headphones,
enabling good sound. Fictum (2018) argues headphones ensure the ears to be properly immersed in the virtual world.

After conducting the affinity diagram the following variables were highlighted in regards to what the audience defined as good music video traits. When choosing 360° music videos, the following variables were taken into consideration:

- **Emotional:** Makes you feel something, reflecting the artist, enhancing the song
- **Aesthetics:** Surroundings, high quality, creative
- **Storytelling:** Good flow, original, visualizing the meaning of the song

Where to place and how to move a 360° camera is crucial since the viewer’s point of view (POV) becomes the camera lens when putting on a HMD. Two videos with different POV’s was therefore chosen. In the first video shown, Future Of Music Is Here by Hello Play! (2016), the camera was statically placed in the middle of a room with action in 360°. The video was chosen primarily with the intention to open the viewer’s mind since it’s colorful and playful. The video didn’t force the viewer to look in any specific point of direction – but let the viewer decide.

*Image 2.* A focus groups participant using the HTC Vive during one of the experiments.
where and when to look, which the researcher thought could be relieving for someone who haven’t tried VR or 360° videos before.

The video showed a man talking towards the camera, explaining different sounds that he’d created. Surrounding the man was a handful of people creating visuals to the sounds with their bodies. Their movements were then looped to strengthen the experience and make it possible to follow the concept.

The second video shown was Saturnz Barz (Spirit House) 360° by Gorillaz (2016), which is an animated 360°-music video. This video has got a clear linear storyline with storytelling features and guidelines matching those extracted from the survey and research/theory. The video engages the viewer into an immersive and absurd storyline, and takes advantage of the narrative techniques provided by the medium. The video is a textbook case when comparing it to the literature’s rules as it uses discrete cues to influence the viewer where to look. The “camera” is not statically placed; instead, the POV follows the action.
The videos also have different ways of incorporating the music; video 1 visualizes the instruments in a pedagogical way, whereas the song serves more as a soundtrack in video 2.

The purpose of the experiment was to let all participants in the focus group have similar prerequisites, in order to stimulate the followed discussions. The goal of the experiment was to understand how the participants perceived the storytelling- and narrative techniques.

4.2.1 Focus groups

Three focus groups were formed and the discussions were conducted immediately after the experiment. The goal was to stimulate discussions, and according to Berger (1998) focus groups can come in handy when determining how people think and act individually within a social group. Wilkinson (2000) claims that group discussions are suitable when a researcher wants to understand how people think, perceive an idea or an experience. The focus groups were held since the research aims to understand how people react to different storytelling techniques in 360° music videos.

Group B and C consisted of people that in different degrees had a work relation to the entertainment industry. These groups were put together because there was a higher likelihood that they’d discuss some of the important features in music videos from an industry point of view. The counter group A, consisted of two people, not work related to the entertainment industry, but with an expressed passion for music and music videos. The counter group was
chosen due to their input regarding what features in storytelling are important to the audience. Two people opted out last second in groups A and C, however, the experiment and focus group was still conducted. See table 2 below for a focus group overview.

Table 2: Focus group overview

<table>
<thead>
<tr>
<th>Group A</th>
<th>Respondent</th>
<th>Age</th>
<th>Occupation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>26</td>
<td>Pedagogy Student</td>
<td>Big interest in music and produces music in her free time.</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>25</td>
<td>Clerk</td>
<td>Big interest in music and has been involved in the making of three different music videos</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group B</th>
<th>Respondent</th>
<th>Age</th>
<th>Occupation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>20</td>
<td>Musician</td>
<td>Producer and singer</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>23</td>
<td>Musician</td>
<td>Artist, producer, and singer</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>35</td>
<td>Producer</td>
<td>Have been producing music videos for over 15 years.</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>40</td>
<td>Entertainer (Music, Stand-up comedian, cartoonist)</td>
<td>Have been working in the entertainment industry for over 20 years.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group C</th>
<th>Respondent</th>
<th>Age</th>
<th>Occupation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>28</td>
<td>Videographer</td>
<td>Big interest in experimental filmmaking and has been producing a lot of music videos.</td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>25</td>
<td>Writer and storyteller</td>
<td>Big interest in experimental storytelling</td>
<td></td>
</tr>
</tbody>
</table>

The researcher acted as moderator and facilitated the group sessions. Brennen claims many researchers in media-related fields choose to serve as the facilitator for their own focus groups. Whether the researcher choose to serve as the facilitator for their own focus group, or if they hire a moderator, Brennen argues the most important factor for a successful focus group is for the moderator to gain the participants’ attention and quickly create a welcoming environment of
openness and trust. (Brennen, 2017, p. 92) In order to create a welcoming environment the focus groups were held in a bright conference room and fruit, sweets, coffee, and tea were provided as an incentive and to make the participants more relaxed.

Since each focus group included 2–4 people, it was not an issue to control the group dynamics and let everyone speak their mind. During the discussions the moderator practiced both passive and active listening. According to Brennen (2017), passive listening (also known as non-reflective listening) encourages participants to talk. When the moderator responds by nodding his or her head or by replying “mm-hmm”; he or she is illustrating their interest and thereby reinforcing a non-threatening environment and conducting passive listening. (Brennen, 2017, p. 93)

Brennen (2017, p. 94) claims active listening, or reflective listening has four different responses that can aid the communication process: clarifying responses, paraphrasing responses, reflecting responses and summarizing responses. These types of responses were often carried out throughout the discussions. The questions were predefined and outlined but since the goal was to have unbiased and open discussions, the questions thus the discussions organically took different shapes and paths. Open-ended questions such as “How do you think the VR experience was in terms of presence” were primarily asked to even further help stimulate unbiased and open discussions. The predefined questions can be found in Appendix 3 – Focus Group Questions.

4.3 Study discussion

Since 360° music videos and storytelling in 360° is a fairly new phenomena that is overshadowed by the more common terminology Virtual Reality, very little theory and related work were found on 360° music videos as a sole concept. VR was therefore examined as a foundation to explain their common ground; the complicity with telling stories in a 360° sphere. Only relevant theory, that didn’t mention storytelling with interaction features, was used to explain the background and certain storytelling techniques, attributes, and theories. It was also of huge importance to find literature that was up to date and relevant. As a result a lot of alternative sources such as websites with a strong focus on technology was considered to complement the theory and previous research. These alternative sources were critically viewed with factors such as bias, ulterior motives, and the author's body of work.
As discussed in section 2.11, the literature states that storytelling in a 360° sphere is a complex and user-oriented matter. Consequently, it was important to have the user-oriented focus in mind when forming a method that served the research purpose.

An embedded experimental design, which includes a collection of both quantitative and qualitative data, was used as a research strategy. The quantitative data acted as support to the qualitative part of the research.

The survey provided closed-ended information on the audience attitude towards music videos and its purpose. Theory was benchmarked with results from the survey and the data illuminated storytelling traits that later served as a foundation for the experiment. The experiment and focus group discussion was transcribed, analyzed and then compared to earlier findings.

Brennen (2017) argues that 8-12 participants are considered the optimum size for a focus group, but also state that 3-14 is common. The researcher encountered some problems when recruiting people for the focus groups. In total, four people from group A and C opted out last minute. The focus groups were still conducted but with fewer participants than first intended. This may have had a negative effect on the validity, since it’s hard to draw generic results from such small groups. However, the researcher noticed that the small sized groups enabled more in-depth interviews with brief and open-ended questions which according to Brennen (2017, p. 183) “encourage the interviewee to talk and to provide examples and stories to illustrate their experiences”. Finally, the researcher only had access to one HMD, so making the groups bigger would also lead to an increased wait time for the participants.

4.4 Ethics

This chapter will present the ethical dilemmas this research faced and what proceedings the researcher took.

4.4.1 Anonymity and letter of consent

To ensure the integrity of the survey respondents a paragraph (Appendix 2 – Anonymity Paragraph) was written to explain in what way their anonymity and safety was respected. Before conducting the experiment and focus groups, letters of consent were signed by each participant. The letter of consent (Appendix 4 – Letter of Consent) ensured their understanding, safety and integrity.
Hammersly and Traianou (2012) argue the principle of autonomy should be respected and that
the people being researched should become at least equal partners in the research process. They
further conclude that the principle often relates to the data collection process (Hammersly and
Traianou, 2012). They also state there are two matters that concurrently go under the heading
‘informed consent’:

- Consent to allowing some particular kind of data to be collected about them or
to provide data themselves.
- Information that research is taking place, notably where this will involve their
being observed. (Hammersly and Traiano, 2012)

The practical necessity of the written consent in this thesis was to set the participants
expectations before the study started. Hammersly and Traianou (2012) also point out that
researchers should recognize that consent doesn’t necessarily have to be given due to ethical
reasons, but that it could also be a prudential issue.

4.4.2 Validity and reliability

Denscombe (2014) argues a reason for a low response rate could be: Literacy, Sight capacity,
Vulnerability and Memory. The response rate of the survey was low, however, the completion
rate was 100%. According to Denscombe (2014) questionnaires have no value at all unless they
are completed and returned to the researcher. The low response rate had an effect on the
reliability and validity and thus the results.

The researcher shared the survey with a short message clearly stating the purpose, what effort it
would take, and how helpful it would be. Since completing a questionnaire is a favor,
Denscombe (2014) recommends the researcher to think carefully about what they can do to
motivate people and to take the following factors into account: Interest, enthusiasm, goodwill
(topic, money, prize draw). Denscombe further argues that the response rate will suffer where
people are not able to answer or if they find it hard to complete the questionnaire. One reason to
why the survey had a low response rate could be that some of the questions were open ended
and demanded an answer from the respondent, however the completion rate oppose that theory.
Another reason could be that people didn’t relate to the topic. To prevent people from opting
out, the researcher clearly stated every answer was valuable, even if it’s an “I don’t know”.
Just because a post has a big potential reach doesn’t necessarily mean it will get a lot of impression and engagement. The social media metrics reach, impression and engagement, is important to have in mind when measuring how well a post performs on social media. According to Jackson (2018) reach is the total number of people who see the content; Impressions are the number of times the content is displayed (e.g. one person can do several impressions for one post if it’s shared by many). To improve reach and impressions, it’s important to look at the third metric Engagement. York (2018) explains engagement a metric that measures how many unique people have clicked, liked, commented on, or shared your post during the last seven days. After first posting the survey, it was shared by five unique people a total of 10 times. The total number of shares therefore did not necessarily affect the engagement of the survey.

The post did not receive engagement on the VR group, which decreased the posts’ potential reach and impressions. When looking at the respondents’ occupations in the survey’s result only three people that replied worked with VR, which indicates the engagement rate from the Facebook group was low. However, this indication is not completely reliable since people can be a member of the group without working in the field. However, it’s not obvious how the low response rate affected the thesis validity, since the extracted material later was coded into categories rather than hard data. In addition, the results were iterated and discussed with focus groups.

4.5 Data analysis procedure

An affinity diagram method was used to map, visualize, and structure the collected data from the survey. According to Widjaja and Takahashi (2016) this method has been the industry standard for product development and creative problem solving in design collaborative work.

The focus group discussions were audio recorded and later transcribed. The transcription was later analyzed and refined guidelines were sampled. According to Hylander (2011) there is not much written about analysis of focus group data. Hylander (2011) explains that different forms of analysis can be applied to focus groups as a data collection method, and that the method doesn’t define a certain type of analysis. Qualitative methods can be applied if the interviews are transcribed. (Hylander, 2011)

The inductive analysis procedure method used in this case was grounded theory (GT). GT is the discovery of emerging patterns in data (Walsh et al., 2015, p. 594). Bernard argues GT is based
on inductive or “open coding” (2011). “The justification for the type of data needed in a GT study is provided by the requirements of theoretical sampling” (Walsh et al., 2015, p. 586). Walsh et al. (2015) further unfolds the process as collecting slices of data, analyzing it, and then based on that analysis—decide on the next wave of data gathering.
5 Results

The results of the research will be presented in the following chapters. The first section covers the survey and affinity diagram, and the experiment and focus group results will follow. Tables and figures acts as support to visualize the data.

5.1 Survey and affinity diagram

The survey was used as a tool for collecting user-oriented data on purpose and storytelling features in music videos inter alia. The affinity diagram was used as a tool to organize and structure the data and to simplify getting representational outtakes and results. The result showed that 77% of the respondents state that they watch music videos once a month or more, and that YouTube is the most common platform to watch music videos on. The result further shows the majority finds new technology interesting but that the minority has an interest in virtual reality.

When asking the respondents to elaborate their answers to why, or not, they were interested in VR, the majority expressed a positive attitude towards the medium and the most recurring word in their answers was “future”. Lack of interest was the most common explanation for the respondents having a negative attitude towards VR. Additionally, some people expressed a fear towards where technology is going, and some were neutral.

![Chart 3: Answers to the question “Why 1-5 interest of Virtual Reality?”](chart3)
Of 70 respondents, 41 had tried VR before and 29 had not. The majority of the people that had tried VR had tried it more than once. 39% of those who had tried VR stated they had seen a 360° music video. 40% stated that they felt immersed while trying VR, and 42% stated that they didn’t - the rest argue it’s experience-dependent. To get a better overview of the different responses, the affinity diagram results were coded into the following categories: ‘Business’, ‘Fans’, ‘Creators’, and ‘Musicians’. These categories are the researcher’s own interpretation and idea of how the different purposes could be divided. They are not representative since the survey was anonymous. Table 3, 4, and 5 represents an overview of the result.

Table 3. Purpose of music videos

<table>
<thead>
<tr>
<th>Business</th>
<th>Listeners</th>
<th>Creators</th>
<th>Musicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>Involving the audience</td>
<td>Adding to the artistic value of the music</td>
<td>Broaden reach</td>
</tr>
<tr>
<td>A new way for fans to listen to the song</td>
<td></td>
<td>Create a recognized identity for the song</td>
<td>For fun/To flex</td>
</tr>
<tr>
<td>Something visual for the listener to connect to</td>
<td></td>
<td>Visualizing the song’s meaning</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. What do you think defines a good music video?

<table>
<thead>
<tr>
<th>Business</th>
<th>Listeners</th>
<th>Creators</th>
<th>Musicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving the song another level of complexity thus enabling a bigger outreach</td>
<td>Emotionally captivating</td>
<td>Costumes</td>
<td>Reflecting artist</td>
</tr>
<tr>
<td>Not offensive</td>
<td>Surroundings</td>
<td>Enhancing the song’s meaning</td>
<td></td>
</tr>
<tr>
<td>Aesthetically pleasing</td>
<td>High quality</td>
<td>Creative</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Why a VR music video?

<table>
<thead>
<tr>
<th>Business</th>
<th>Listeners</th>
<th>Creators</th>
<th>Musicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>It’s a part of the future</td>
<td>Immersion</td>
<td>Storytelling options</td>
<td>Letting your fans come closer</td>
</tr>
<tr>
<td>Being a part of the progress</td>
<td>Being a part of it</td>
<td>Making sure it’s not an unnecessary implement/VR not excuse for unique</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Qualitative experiment and focus group discussions

Half of the participants had experienced VR or 360° before. Table 2 presents an overview for the focus group participants, and can be found in chapter 3.4. The results from the experiment and focus group discussion mainly consist of data from open-ended questions, and the transcriptions were coded into the following guidelines and headings:

- The purpose of a music video
- How the technology (HMD and headphones) affected the experience
- Passive or active medium? Interaction as a storytelling mean
- POV and presence
- Fear of missing out
- 360° music videos vs. traditional music videos

5.2.1 The purpose of a music video

The participants discussed the purpose of music videos and, amongst other, concluded it should add a new dimension to the music. Table 6 presents an overview of the focus groups discussions. C2 says music videos is giving access to places the viewer usually can’t reach and argues that make music videos work even better in a 360°. B1 claims the purpose of music videos is to spread energy and enhance the purpose of the song.

Table 6. The purpose of a music video

<table>
<thead>
<tr>
<th>The purpose of a music video</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
</tr>
<tr>
<td>B4</td>
</tr>
</tbody>
</table>
“Spreading energy in another way than just through the music. In a video you can add details that doesn’t fit in the song. You also enhance the songs’ purpose.”

5.2.2 How the technology (HMD and headphones) affected the experience

HTC Vive was used as a head mounted display (HMD) and external in-ear headphones was used to enable good sound. The 360° music videos shown in the experiment were streamed from YouTube, which was also the most commonly used platform for watching music videos according to the survey. All participants expressed positive attitudes towards the HMD, and no one felt it was interfering with the quality of the experience.

Group B discussed the quality of Hello Play!’s music video. All four participants mentioned that pixels was the first thing that crossed their mind, however, they all stated they didn’t think about the pixels more than once and the pixels didn’t have an effect on the overall quality. C1 said the HMD respects the art craft since it forces the viewer to look and be alert, and says the traditional formats is getting smaller screens which he says doesn’t give his art justice. Table 7 presents three quotes with different takes on how the participants felt the technology affected the presence.

Table 7. How the technology affected the experience

<table>
<thead>
<tr>
<th>How the technology (HMD and headphones) affected the experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 “If I watch a 360° music video at home and would like to eat potato chips, there will be a problem trying to find them.”</td>
</tr>
<tr>
<td>B2 “I can see myself dedicating a Sunday to just explore these types of music videos. It was so isolating since it covers two senses…. I can really see myself getting immersed with this, and that’s what I like about it.”</td>
</tr>
<tr>
<td>C1 “Whether I do a film or have a photo shoot, I can feel that the viewer doesn’t do it justice by watching it on their phone - I’m like what? I worked with this so hard and now you want to see it on two inches… That’s a positive thing with VR, the viewer kind of gets forced to look.”</td>
</tr>
</tbody>
</table>
5.2.3 Passive or active medium? Interaction as a storytelling mean

A discussion whether the experience was active because it allowed the viewer to look around and choose where to look, took place in all three groups. However, the discussions culminated into an overall agreement in which the majority felt they were passive when watching 360° music videos since they weren’t able to affect anything in the virtual world. A1 thought the experience was a mixture of both passiveness and activeness. B4 felt passive and argued it was a guided experience. C2 argued the viewer makes the same active choices in a 360° sphere as with all other media.

There was an overall wish for more interaction, but also a general agreement that it depends on what type of experience you want to see or produce. Table 8 show some of the arguments and attitudes regarding 360° as a passive or active medium, and table 9 shows how that correlates to interaction as a way to further absorb the viewer. In table 6, B4 explains he didn’t think the interaction was missing but said it could be an interesting addition and B3 had a positive attitude towards being steered throughout the experience.

Table 8. Passive or active medium

<table>
<thead>
<tr>
<th></th>
<th>Passive or active medium?</th>
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<tbody>
<tr>
<td>A1</td>
<td>“You can choose to either be a passive spectator or to be a part of the experience and get really immersed. You’re active because you discover so many new things by moving, listening and looking around. I’d say it’s both active and passive.”</td>
</tr>
<tr>
<td>B4</td>
<td>“I felt it was obvious that someone was guiding me where to look in the Gorillaz video. Like when I was looking at the gray and dull bathroom wall it was very clear that I was supposed to look at the guy who was moving around instead. I’d say I was guided because I couldn’t affect anything by interaction.”</td>
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<tr>
<td>C1</td>
<td>“In the very beginning I felt active, but quickly realized I wasn’t. I especially felt I was controlled in the Gorillaz video when I was transported between different rooms.”</td>
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<tr>
<td>C2</td>
<td>“You can choose where to look and do active choices but you could do the same on a regular widescreen. The problem is I can’t affect anything in the video - the story will continue regardless. Of course, I decide where to focus but I can do that in everything else too, so I’ll say it’s a passive medium.”</td>
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Table 9. Interaction as a storytelling mean

<table>
<thead>
<tr>
<th>Interaction as a storytelling mean</th>
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<tbody>
<tr>
<td><strong>C2</strong></td>
</tr>
<tr>
<td><strong>C1</strong></td>
</tr>
<tr>
<td><strong>B4</strong></td>
</tr>
<tr>
<td><strong>B3</strong></td>
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5.2.4 Point of View (POV) and presence

All participants seemed to agree the sense of presence increased when letting the camera become the viewers’ eyes. In the first video shown (Hello Play - The Future of Music), the camera was statically placed in the middle of a room and the viewer was only able to look around. When the POV was static the participants said they felt disconnected and trapped. Transporting between rooms and cutting scenes affected the participants positively and made them feel that someone was taking them on a journey. In the second video shown, Gorillaz - Saturnz Barz (Spirit House) 360, the “camera” became the eyes of the viewer and the other characters interacted with the viewer. All participants agreed that interaction with the viewer increased the sense of presence. And the majority agreed that the Gorillaz video utilized the 360° format in a more compelling way. C2 explains the first video of Hello Play! made her feel claustrophobic and B4 felt more presence when experiencing that same video. C1 felt like a piece of machinery when the camera was static and said he felt more like a character in the Gorillaz video. B4, however, argued he had felt more presence in the Hello Play! video since he could better identify with a real world that was not animated and steered him in a certain direction. Table 10 displays an overview of aforementioned discussions.
Table 10. POV and presence

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<tr>
<td><strong>POV and presence</strong></td>
<td></td>
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<tr>
<td>C2</td>
<td>“I don’t like to feel trapped as I did in the first video. I almost felt claustrophobia - I could work with that feeling depending on what type of music it is...”</td>
</tr>
<tr>
<td>C1</td>
<td>“In the first video I felt like a camera who recorded an interview. I felt as the man was talking through me and that I was a piece of machinery. In the second video I was a subject and a character, especially when I sat on the train. It didn’t happen a lot really, but they were singing to me and I was spinning around in their universe. The videos were so different - but I definitely felt more like a person or something in the second video.”</td>
</tr>
<tr>
<td>B4</td>
<td>“I was more enthralled by the Gorillaz video because it was more entertaining. I felt more presence in the first video because they were focusing more on photo and film. The Gorillaz video was animated and you identify more with the real world. Even though the angle was weird, I could feel that I was standing in a real room looking around. The Gorillaz video was more controlling on where to look.”</td>
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<tr>
<td>C2</td>
<td>“The format also really benefited the music in the Gorillaz video. I also felt really immersed when I was sitting in the train, looked down and saw that I was sitting on a couch. I never felt an urge to even look down in the first video - at least I never thought about doing so. I think the perspective played a crucial role, especially when I was placed in relation to other things...... I felt less immersed when the perspective changed or when they changed rooms to fast. I felt I didn’t want to miss anything, I wanted to see the whole room and know if someone was standing behind me that wanted to eat me.”</td>
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5.2.5 Fear of missing out

The fear of missing out (FOMO) was a recurring matter of discussion. A2 felt more freedom and less FOMO when the camera was statically placed and C2 felt she missed important parts of the Hello Play! video because she was looking around too much and was afraid missing something. Quotes from these discussions can be found in table 11.

Table 11. Fear of missing out

| **Fear of missing out (FOMO)**                                                                 |
| B4   | “I felt a FOMO when I was in space in the Gorillaz video. I understood that I should focus on the singing creature and that it would be the most entertaining thing to look at but I still wanted to look around. I think the FOMO made stopped me from doing so.” |
A2 “I thought it was nice to feel so free in the first film of Hello Play!, it wasn’t like I couldn’t look around in Gorillaz video, but I didn’t feel I would miss anything when I was looking around in the first film. I think it worked in favor to the first video, it was a bit more exciting in that sense, but also since it’s a unique attribute for VR. But I would probably lose focus in the Gorillaz video if it’d have 360° action, it already had so much going on. It would probably not make any sense. I think it all comes down to what type of movie your making and what you want to mediate."

C2 “After watching about half of the first video I realized, maybe because of the novelty, that I never listened to what the guy was talking about. I was thinking ‘ok, he’s showing me something about music but I would not be able to record what he’d said’. I was so focused on my fear of missing out that I wasn’t able to concentrate at all.”

5.2.6 360° music videos vs. Traditional music videos

An overall positive attitude towards 360° music videos was expressed throughout the focus group discussions. C2 preferred 360° music videos to traditional music videos and argues 360° music videos is leveraging the purpose better. B4 prefers 360° music videos but also sees a problem from a marketing point of view and argues the music falls by the wayside when the visual experience is so strong. Table 12 shows the participants express an overall curiosity of how this will affect the relation between artists and listeners.

Table 12. 360° vs. Traditional music videos

<table>
<thead>
<tr>
<th>360° music videos vs. traditional music videos</th>
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<tbody>
<tr>
<td><strong>C2</strong> “I actually think I prefer 360°... I think 360° households the time in a more effective way, even though it’s a short sequence, it feels much longer. To get immersed so quickly and have all your feelings amplified, is exactly what music is all about. I think it’s hard to catch that feeling with traditional music videos - even if the storytelling is easier and more clear. . . I think they succeeded with telling us the story they wanted and made us feel whatever they wanted us to feel. Maybe they don’t have the same control imagery-wise. I would love to see something new happening to music videos.”</td>
</tr>
<tr>
<td><strong>A1</strong> “I don’t watch a lot of traditional music videos anymore so I could easily see myself switch to 360°. I can get kind of bored in a regular music video, but I don’t think I’d get bored in a 360° video. I only watch my favorite artists and my favorite songs, and I would 100% be with them in a virtual world than to watch a regular music video. Yeah, I could definitely ditch traditional videos.”</td>
</tr>
</tbody>
</table>
“I think this was a bigger experience. It’s maybe because of the novelty and that it’s new and all. But if my favorite band would release a new video I’d definitely rather see it in 360° than traditional. But of course there are some downsides as well. I tried to concentrate on the song and in the Gorillaz video I thought that this song is actually quite good, I’d appreciate listening to this song at a club or on Spotify. But I had to try really hard to listening and concentrating on the music because the other impressions made me distracted.”

“. . . I think it’s a matter of letting go of the control - when filming and showing the video on a flat screen I have a lot more control of what the viewer will see and focus on. But it could be a huge advantage to let them look the way they want to. . . Angles are so important - in a regular video it can really affect a lot, plus it’s an expression. When you give someone else that control they can look wherever they want and do this and that. It sabotages - no - you decide yourself but I’d have such a hard time giving the viewer that autonomy. It would be cool to just convert something I’ve done into VR - super cool, but I wouldn’t want to. It all depends on what and how you want to do something and what starting position you have in mind. . .”
6 Discussion

If the goal of VR is to reach a mass market, the first step has to be to create compelling content, and to study how people actually respond to the content must be the second step. “We need to embrace the human-centered design lens of “audience experience,” and let that guide our choices.” (Newton and Soukup, 2017). These two steps should be used as a tool and course of action. In the theory section we learned to include the audience. We also saw that we can improve 360° and storytelling by understanding the audience’s cognitive, emotional, and volitional experience. The research unveiled that 360° storytelling comes with a complex user oriented interface. When taking a closer look at the result, six key headings/guidelines emerged, all explaining how to leverage storytelling techniques to increase immersion in 360° music videos. The participants showed an overall positive attitude towards 360° music videos but also reflected on factors such as novelty and technology interference.

The following main findings were identified throughout the research:

- The purpose of a music video:
  - Emotional - Makes you feel something, reflecting the artist, enhancing the feeling of the song
  - Aesthetics - Surroundings, high quality, creative
  - Storytelling - Good flow, original, visualizing the meaning of the song

- Different ways to intertwine the audio and visual:
  - The pedagogical way of incorporating and visualizing a song. The music serves as the key focus.
  - The inconspicuous way of incorporating the song using storytelling to intertwine audio and visual. The music serves more as a component in a bigger picture.

- How the technology (HMD and headphones) affected the experience:
  - The HMD respects the art craft since it forces the viewer to look and be alert. On the contrary the traditional screens are getting smaller which leaves less room for details.

- Passive or active medium? Interaction as a storytelling mean
  - The viewer makes the same active choices in a 360° sphere as with all other media. The viewer can actively choose where to look, but are often “lured” to do so by the filmmaker.
Interaction could be an interesting, but not necessary, dimension to 360° music videos. Interaction could mean two things:
- Interaction with your surroundings (VR)
- Other characters’ interaction with your subject in the virtual world.

POV and presence
- Changing rooms or scenes too fast decreases immersion.
- When the POV is static; the majority of the participants felt the presence decreased, which made them feel disconnected and trapped.
- Interaction with the subject increases the feeling of presence.

Fear of missing out
- The focus group participants said they felt less fear of missing out when they were somewhat steered to look in one direction.

360° music videos vs. traditional music videos.

More information about the key guidelines that the research sought out to illuminate can be found under each heading.

6.1 The purpose and features of a good music video

Before starting to explain which storytelling features are preferable and not, it is important to clarify what the audience and industry actually emphasize is the purpose of a music video. The results show the majority thinks music videos should visualize or add an additional value to the song. The results also show that there was an underlying promotional value and purpose. When asking what defines a “good” music video the most common answers were coded into the following headings:

- Emotional - Makes you feel something, reflecting the artist, enhancing the feeling of the song
- Aesthetics - Surroundings, high quality, creative
- Storytelling - Good flow, original, visualizing the meaning of the song

To answer the question: What do you think is the purpose of a music video?, C2 (table 6) explains music videos as a medium giving access to places the viewer usually can not reach and
points out that a 360° sphere can lever that even further. B4 (table 6) however, sees 360° music videos as a potential problem when it comes to the commercial value of the song, and said that the experience can over shine the song. Having the visuals taking over the experience can lead to consequences, and just like Oliva, Bidarra and Araújo (2017) mentioned, it is necessary to pay attention to the connection between the rhythm of the songs and the visual images. According to Alexander (2017), music and audio deepen our immersion. When using storytelling to enhance the music, the song can lose some of its intrinsic value since it leaves room for a bigger experience. The experiment showed two different ways of incorporating a song in a music video:

- The pedagogical way of incorporating and visualizing a song. The music serves as the key focus.
- The inconspicuous way of incorporating the song using storytelling to intertwine audio and visual. The music serves more as a component in a bigger picture.

The differences don’t necessarily affect the overall quality but should be taken into consideration, and the choice should be actively made depending on what mode you want the viewer in.

Additionally, the results show scattered preferences, the participants seemed to have different ideas on what details were important. This result supports what Edwards predicted: that people are going to choose the types of experiences that they identify with, and that they will follow creators that have a certain style or thing they like about how they use the medium for VR. (Bucher, 2018)

6.2 How the technology (HMD and headphones) affected the experience

During the experiment all participants used an HTC Vive HMD and were urged to sit down. The overall attitude towards the technology was positive. However, it wasn’t discussed thoroughly since the initial point of the discussions was to talk about the content. Group B collectively said they saw pixels but that they only thought about it once, and that it didn’t have an effect on the overall quality. When Bolter and Grusin discussed VR as a frontier of transparent immediacy they argued the HMD was in the way of the disappearing act, however,
B2 (table 7) argued the HMD enabled an isolation that he said was the best part of the experience. None of the other participants found the HMD was disturbing their experience notably, which advocates that VR technology is coming closer to our daily visual experience.

Steinicke (2016) concludes we’re communicating with computers in a different way today as opposed to the first VR boom, which to some extent is true. However, the technology is still facing some ruptures and waiting for further progress. Things such as 5G Internet, wireless HMD, and cheaper equipment will help to make it more mainstream as well. By excluding second-screen experiences, the HMD enables the filmmaker to utilize the full attention of the audience, which potentially could lead to a more appreciative end-to-end symbiosis.

Just like Oliva, Bidarra and Araújo (2017) implied, C1 (table 7) said the HMD respects the art craft since it forces the viewer to look and be alert and that the traditional formats is getting smaller screens which he asserts doesn’t give his art justice.

6.3 Passive or active medium? Interaction as a storytelling mean

The participants of the focus groups all agreed they were passive when experiencing the 360° music videos because they weren’t able to affect anything in the virtual world. One could argue that choosing where to look, thus deciding how the story will be told, is an active action, however, C2 (table 8) summarized the focus group consensus by arguing the viewer makes the same active choices in a 360° sphere as with all other media.

The participants, however, had different beliefs on how this affected the experience. B2 (table 9) said interaction could be an interesting, but not necessary, dimension, and B3 (table 9) on another hand, had a positive attitude towards being steered looking in certain directions and said he would find it annoying not knowing exactly where to look.

C1 (table 9) said he thought the interaction could mess up the concept, but further established Edwards (Bucher, 2018) aforementioned statement by arguing the purpose of a music video can vary a lot “... Some people want something that can help them spread their music, and some people want to visualize it. For some filmmakers, like Spike Jonze, it’s an art form and the main purpose is to “WOW” people... Yeah, there are a lot of different ideas and reasons to why people create music videos.” (C1, Table 9)
Brillhart argued the likelihood that someone would come out of an experience with the exact story that the filmmaker had come up with, would be very low, unless the viewer was forced to look in one direction all the time (Bucher, 2018). However, the idea, imposing that forcing the viewer to look in certain directions is something negative, doesn’t seem to be aligned with the participant’s belief. C2 (table 9) thought the filmmakers had succeeded telling the story they had in mind and conveying the feelings they wanted the audience to feel. It’s hard to tell if this is the case, but either way, all participants had positive 360° experiences, regardless if they felt forced or passive.

6.4 Point Of View (POV) and Presence

When telling a story in a 360° sphere, the camera placement is crucial since it decides how the viewer will perceive the experience. Newton and Soukup (2017) argued the feeling of presence within a VR experience enables the audience to pick up on feelings and rely on abstractions. This correlates with the participant’s perception of what happened when the camera or the POV was static; the majority of the participants felt the presence decreased, which made them feel disconnected and trapped. Transporting between rooms and cutting scenes (however, not too fast) affected the participants positively and made them feel that someone was taking them on a journey. Additionally, the prevailing consensus was that the presence increased when characters in the video interacted with the viewer.

When picking up on the audience feelings, Newton and Soukup (2017) argue it’s important for the storyteller to ask “Does this information lend to feeling present, or will it send the audience into their heads—and which mode do I want them in right now?”. Since the majority agreed the Gorillaz video utilized the 360° format in a more compelling way, one could argue they succeeded better to control the viewers mode by exploring different techniques leading the audience feeling engaged and present.

Bucher argued that every first-person experience should give the viewer/participant orientation to accelerate the narrative action. The Gorillaz music video succeeded to do so when placing the viewer in a train car. When looking around the viewer noticed there were people in 360° staring at the viewer which instantly made the viewer feel as a part of the story. C2 (table 10) affirms this when saying “. . . I also felt really immersed when I was sitting in the train looking down and saw that I was sitting on a couch. I never felt an urge to even look down in the first video - at least I never thought about doing so . . .”
C1 (table 10) explains he felt like a piece of machinery in Hello Play!’s video and that the man in front of him was talking straight through him. C1 (table 10) compares it to the Gorillaz video, in which he asserted feeling like a subject and a character, especially when sitting on the train. C2 (table 10) further stated she almost felt claustrophobia in Hello Play!’s video because she couldn’t move and had no function. B4 (table 10) argued he felt more presence in Hello Play!’s video because he was standing in a real room looking around and that the presence was affected in the Gorillaz video because it was steering him where to look and because it was animated. However, B4 concluded the Gorillaz video was more enthralling because it was more entertaining.

Changing rooms or scenes too fast was another element decreasing immersion; both C1 and C2 (table 10) agreed that they wanted to stay longer in some of the rooms. Changing rooms too fast led them to snap out of the immersion.

This result concurrently adds to Bucher’s (2018, p. 161-162) prediction of a future where immersive experiences will involve more nuanced internal journeys, allowing viewers to confront their most basic desires and struggles.

6.5 Fear of missing out

The fear of missing out was a recurring matter of discussion during the focus group and prominent issue with VR and 360° videos. A 360° sphere opens up for storytelling issues when not utilized right. Darnell agrees by arguing the audiences’ autonomy and ability to choose where they want to focus their attention can cause problems (Flores, 2017). There are, however, different techniques that can come in handy when doubtful, Fictum (2018) promotes the 180° is greater than 360° rule, suggesting the filmmaker to create a sense of direction to make the user feel like there’s a sense of direction in story and an actual narrative at play. Screenwriter Dooley (2018) even studied magicians to find discrete cues, and came up with a similar suggestion: to create an illusion of choice when actually creating audio and visual cues resulting in a preconceived narrative experience.

When a medium with new storytelling attributes is in a trial and error phase, it’s almost inevitable that a disconnection between creator and audience arises. It reflects what Brillhart (Bucher, 2018) stated; it’s unlikely the viewer and filmmaker have aligned perceptions of the same story in a 360° sphere. The focus group results showed that both videos, for different reasons, gave rise to a fear of missing out (FOMO). For example, A2 (table 11) said that the
Gorillaz video gave clear instructions on where to look which made it harder to look in other directions, and that she preferred the first video that enabled more freedom to look around. On the contrary, C2 (table 11) said she missed everything the guy had said in the first video, because she was so focused on looking around and scared to miss out on anything.

Be that as is may, it’s likely the audience, with time, will give their trust to the storyteller and become more confident in the experience when the novelty wears off. The cinema audience once screamed out loud when a train was moving towards them. Even though some people tend to be open and dynamic, seen to history, changing old ways takes time and adjustment. From a storyteller’s point of view, much points to this as an issue that falls into the trial and error phase. However, having scriptwriter Eric Darnell studying how magicians use misdirection tells us we’re not far from figuring it out.

6.6 360° music videos vs. traditional music videos

Oliva, Bidarra and Araújo (2017) point out a future with media users considering small mobile screens unabling details and full focus. As a counterbalance, something new, allowing details and immersion, should emerge. Edwards argues the language of VR is sophisticated and envisions it will increasingly create new subgenres or media (Bucher, 2018). The focus group discussions also showed a positive attitude towards 360° music videos. C2 (table 12) said 360° music videos households the time in a more effective way, and expressed that the format levers the concept; getting mesmerized and having all your feelings amplified. B4 (table 12), problematized the marketing point of view, and argued the music falls by the wayside when the visual experience is too strong. However, this is an issue that most likely will fade when the novelty wears off. A1 (table 12) said she no longer watch a lot of traditional music videos anymore and that she easily could see herself switching to 360°. A1 further argued she would much rather see and be with her favorite artist in a virtual world than to “just” watch them in a traditional music video.

As Alexander (2017) suggested, we are glimpsing the contours of a new storytelling form; A technology presenting its own affordances; powerful settings and audience presence. It’s exciting and compelling, and like Chris Milk (2016) argued, it’s the first medium to achieve to jumping from our internalization of an author's expression of an experience, to our experiencing it first hand.
## Conclusion

Similar to other media experiences, fragmented preferences and dichotomy show that the audience of 360° music videos will follow creators that live up to their style preferences. However, there are a few guidelines for filmmakers to approach when trying to immerse a viewer in a 360° music video. First and foremost, the research shows that it’s essential to put yourself in the shoes of the audience. Understanding their cognitive, emotional, and volitional response to certain types of content is essential. By figuring out what purpose the music video should have, it will become easier to outline a story and an idea that the audience can relate to. It is also important to figure out how the song will be incorporated in the video since the visual experience easily can exceed the sound. The HMD excludes second-screen experiences, which enables the filmmaker to utilize the full attention of the audience. Leveraging the opportunity to fully cover two senses means respecting the audience and their time. The symbiosis can also open up for protracted relationships between the audience and filmmakers.

It’s important to establish the role of the viewer early on into the experience to make them feel as a subjective and a part of the experience. This could be done by e.g. using interaction as a mean. Interaction in this sense could mean either enabling the viewer to walk around in a virtual world (VR) or it could mean that characters in the video interact with the viewer.

Discussing POV and presence should be mandatory when creating a 360° music video, and the conclusions drawn from the discussion are:

- Having a dynamic POV can make the viewer feel more captivated and less trapped.
- Changing scenery too fast can make the viewer snap out of their immersion, as they need time to look around.
- By asking what mode you want the viewer in you can gain a better control of their presence.
- Having other characters interacting with the viewer will make the latter feel more like a subjective that will increase the presence.

By thoroughly iterating the aforementioned guidelines and techniques with all parts of the company, with tech-crew included, you decrease the risk of giving the audience a fear of missing out. Conclusively, we are looking at a media empowering new forms of storytelling,
and just like film and radio first started out, we are probably facing a few more years of trial and error.

### 7.1 Future work

If further studies were to be continued, it would be interesting to validate the results and guidelines by conducting expert reviews. Taking their knowledge into consideration would further ground the final guidelines and increase the thesis reliability.

In addition to an expert review, it would be interesting to further expand the methodology by conducting more thorough experiments with larger focus groups. A more thorough experiment could include e.g. analyzing the participant’s body language during the experiments; discovering unconscious behaviors and patterns could add another dimension.

Another interesting step for this study could be to actually test the results. By producing a 360° music video taking the presented guidelines into consideration, the researcher could conduct new focus group discussions to see whether the guidelines could be further modified and improved.
References


Hello Play! 2016, Hello play! presents “THE FUTURE OF MUSIC” (360° video), video recording, YouTube, viewed 17 April 2018, <https://www.youtube.com/watch?v=Tf0aU4RKCmM>


Virtual Reality Society (n.d). VPL Research Jaron Lanier. [online] Available at:


Appendix 1 – Survey Questions

1. What’s your most listened/favorite music genre?
   [Country, Electronic, Folk, Hip-hop, Jazz, Funk, Latin, Pop, R&B, Soul, Rock, other state]

2. How often do you watch music videos?
   [Every day, once a week, once a month, once a year, never]

3. On what platform/s do you usually watch music videos?
   [iTunes, Spotify, YouTube, Bandcamp, Vimeo, Tidal, TV, Google Play, Personal website, other state]

4. What do you think is the purpose of music videos?
   [free text]

5. Describe what variables you think defines a good music video?
   [free text]

6. On a scale of 1-5*, how interested are you in new technology?
   (*1 = not interested at all and 5 = really interested)

7. On a scale of 1-5*, how interested are you in Virtual Reality?
   (*1 = not interested at all and 5 = really interested)

8. Please elaborate your answer to the previous question (why 1-5 interest of VR?)
   [free text]

9. Have you ever tried Virtual Reality? (If no please jump to question 17)
   [Yes/No]

10. IF YES: How often do you consume Virtual Reality?
    [Everyday, once a week, once a month, every six months, once every year, just tried it once]

11. Did you feel immersed while using Virtual Reality?
    [Yes/No]
12. Please elaborate your answer to the previous question - why did you/did you not feel immersion?

[Free text]

13. What factors do you think makes the viewer become fully immersed in virtual reality?

[Checkbox] [Storytelling, HMD (head mounted device), technology (end-to-end latency etc.), quality, other state]

14. Have you ever seen a music video in Virtual Reality? (If no please jump to question 17)

[Yes/No]

15. IF YES: What do you prefer?

[Traditional music videos, Virtual Reality music videos]

16. Please elaborate your answer to the previous question – why do you prefer either?

[free text]

17. What gender do you identify yourself as?

[free text]

18. What’s your age?

[20 or younger, 21-30, 31-40, 41-50, 51-60, 60 or older]

19. What’s your current occupation? (e.g. Media Technology Student or Nurse)

[free text]

20. Would you be interested participating in a Virtual Reality experiment* and a group discussion connected to it? (*Watching a snippet of a music video in Virtual Reality and discussing it in a closed group of approx. 4 people) (If no – thank you so much for your very valuable answers and for taking your time helping me!)

[Yes/No]

21. IF YES: Date and time suggestions/other. Please fill in your name, email address and phone number and I will contact you within the coming week

[Name, Email, Phone number]
Appendix 2 – Anonymity Paragraph

A paragraph that ensured the participants of the survey's anonymity:

- I hereby affirm that I shall not disclose or provide to anyone, directly or indirectly, any information related to this survey, unless consent is given.
- No harm is done to any survey respondent
- No survey respondent is unduly pressured or made to feel obligated to participate in a survey
Appendix 3 – Focus Group Questions

Introduction

– Have you tried VR before?
  
  o Yes - How do you think this experience relates to your previous experience?
  
  o No - How do you think this experience related to your expectations?

– Do you think 360º videos, as an experience is passive or active? Why?

Key questions

– What were the differences between the videos? How did they correlate? What was good/bad with either?

– How would you describe the experience in terms of presence? Did you want to interact more or less with musicians or protagonists? Why/why not?

– Did you experience immersion? Was there any scene/part that made you feel more or less immersed?

– Did you feel the experience was passive or active?

– Did you feel in control? How did that make you feel?

– What POV did you enjoy more?

– Did you experience any fear of missing out?

– What do you think about the music video’s purpose? Did the purpose have an effect on the overall quality?

– What would you improve if you could?

– What medium would you prefer to watch a music video in? Why?

– What do you think is the most important thing in a music video?

Closing question

– Is there anything anyone would like to add to the discussion?
Appendix 4 – Letter of Consent

All participants signed the letter of consent before participating in the experiments.

- I am willing to take part in the study called "Storytelling for Virtual Reality Music Videos”
- I understand that the student/researcher from Malmö University are aiming at exploring different storytelling guidelines for virtual reality music videos.
- I understand that I will take part of a qualitative experiment
- I understand that I will take part in a focus group.
- I will be asked to share my ideas and contribute to the focus group.
- I am taking part of my own free will.
- I am aware that VR may cause motion sickness and discomfort to some people.
- I have received information concerning the study in question
- I have been told that I can stop at any time, and if I do not like a question or an activity, I do not have to answer it or participate.
- I agree to let the focus group be documented through audio-recordings.