

Rock and Roll Never Dies -Will Holograms Dominate
Live Performances in Rock Music in the Future?

The Hologram of Deceased Singer Ronnie James Dio

in the Context of Rock Authenticity



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Abstract

Nowadays, technology is an inevitable part of our world. It keeps developing rapidly, resulting in new ways of entertainment and simplification of our everyday lives. Naturally, technology has an influence on live music performances as well. In 2016, the "hologram" of deceased rock legend Ronnie James Dio had its debut at the Wacken festival in Germany, later followed by a world tour. This hologram performance was not the first of its kind, and it will probably not be the last. However, the potential success of hologram technology in the music industry appears to be genre-specific: what is accepted in pop music is not necessarily accepted in rock music. Like every other genre, rock is defined by its own underlying values, traditions and politics of authenticity.

This thesis is based upon the results of a survey which was designed to examine how hologram technology is perceived by rock audiences. The aim of this research was finding an answer to the question if hologram performances can dominate or even replace live performances in rock music in the future. The survey results show that hologram performances in rock music are predominantly perceived in a negative way. This thesis examines the survey outcomes in the light of rock authenticity and aims at explaining the negative perception of hologram performances in rock music. For this, the survey results are put into context of several literature sources from the music and art sector. I will argue that for several reasons it is not possible for holograms to dominate rock live performances in the future. Furthermore I will argue that the only way a hologram can achieve success in rock music is as an additional show effect during live performances or on its own, but only when the performing artist has passed away.

“...Deaths lead the record companies, estates of deceased artists and the entertainment business...to get creative on how they exploit the persona of the deceased artists. This often occurs in ways that society might never have thought possible.”

- Michael Spiro Drecolias¹

¹ In “Tupac and Beyond: The Implications of the Tupac Hologram on Copyright and the Right of Publicity and What it May Mean for the Future of Music.” (2014: 3)

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1. Introduction

I will introduce this thesis with a small anecdote from my personal life. About a year ago, some friends and I gathered for a nice evening of chatting and drinking. Since most of us were fans of rock music, we played *Rock Science*, a trivia board game centered around all kinds of questions about (classic) rock and metal. The vibes were good and the beer was flowing, and almost every question from the game led to a heated discussion. At some point - I don't exactly remember the content - one question was about the hard rock band DIO. Of course, everybody in our group knew the band and their deceased singer Ronnie James Dio, who already has a legendary status amongst rock fans. One of my friends however told us something that most friends in our group didn't know yet. The conversation went something like this:

A: "Have you heard that they are going on tour again this year?"

B: "How, without Ronnie?"

A: "No, they are making a hologram of him!"

C: "Really?...That's stupid." / B: "Oh, how cool!"

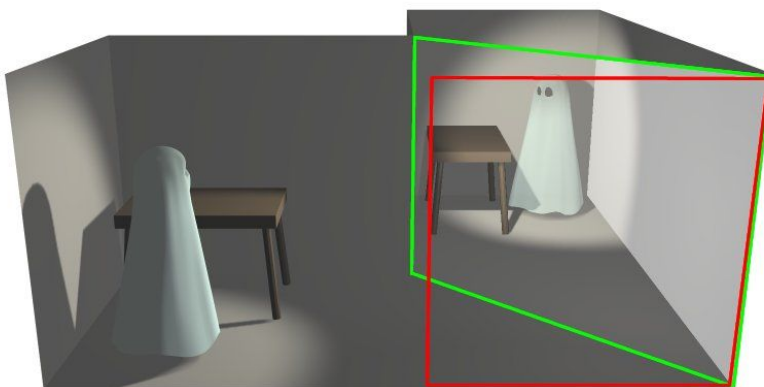
Apparently, our opinions were split concerning this topic. One of my friends, a guy who is very open-minded towards other music genres, really liked the idea of a hologram-version of a dead singer, while I quickly found myself on the contra-side of the discussion. Without knowing why, I immediately felt strongly opinionated and even sort of angry. I thought "that is something you can do in pop music...but not in rock!". Not for a single moment it occurred to me that I might like hologram performances myself, and I decidedly stuck with the point that this technological concept of performance somehow betrays the values of rock and roll.

Apparently, the Dio hologram plus band² had its debut at the Wacken festival in Germany in 2016, followed by a world tour starting in 2017. However, it was not until the beginning of

² The band accompanying the hologram consists to a great deal of the original DIO members.

this year that I first looked at a recording from the “DIO Returns” tour on Youtube. I was surprised by the technological quality and detailedness of this performance, but I was even more surprised that the fans seemed to be really into it, since I found it really awkward - and I was just watching it on a screen. Maybe the fact that I did not see that performance live was the reason that it seemed so cold and distant to me. Maybe I would have clapped and sung just as much if I would have been really there? A series of other questions came to my mind: How can it be that so many people pay for this? Do I have the wrong ideas about the values of rock live performances? And most importantly - is this the future of rock music now?

From the technological side it is noteworthy that the word “hologram” does not accurately describe what is happening on stage. The image the audience sees is projected with a simple trick called “Pepper's Ghost”, which became popular through magician shows in the 19th century. The trick is a plexiglas wall, or any other reflective surface, which is set up in a 45 degree angle towards the audience. The glass wall is transparent and can be made invisible with the help of correct lighting. On the other side of the reflective surface, an object or person is placed which is then reflected in the glass wall, resulting in a ghostly image (see Figure 1). The sound for the Dio hologram stems from recordings of previous, “real”³ live performances. This interplay between sound and image might be simple in structure, but it is scarily effective. If one does not know it better, the illusions can appear so real that they could be mistaken for the actual artist.



³ With “real” live performances I refer to live performances with human beings.

Fig. 1: The Technique Behind “Pepper's Ghost”⁴

After some research I found out that Ronnie James Dio’s hologram was not the first of its kind. At the Coachella festival in 2012, the artist announced as secret special gig was Tupac⁵, seemingly alive and well, performing the tracks "2 of Amerikaz Most Wanted" and "Gangsta Party" alongside Dr. Dre and Snoop Dogg. Also in the pop music world holograms and the like are nothing new: The Black Eyed Peas, The Gorillaz and even Michael Jackson have been digitized for entertainment purposes on stage, and in Japan Hatsune Miku, an entirely digital and fictional pop star fills whole stadiums.

Certainly, hologram performances are a great success in pop music; if this is also the case in rock music still needs to be figured out. However, in this world we cannot deny that technology is an essential part of our lives. It constantly develops and changes all kinds of things, whether we like it or not. Since Thomas Edison invented the phonograph in 1878, the recording of sound has come a long way and went through many different stages. Entertainment technologies have become more advanced, and their development went rapidly. Just think about virtual reality concerts, which allow us to clap and cheer for our favorite musicians in our own living room; or “Compressorhead”, a metal band which performs covers of famous rock and metal songs and consists of robots only⁶.

With every new technological discovery, one might wonder if the limits have yet been reached. Mostly, the answer is no. In the case of hologram performances, it seems like the fun has only begun. Just imagine the countless scenarios this technology can make real: what if we could watch Jimi Hendrix perform live on stage one more time? What if we could watch the Beatles reunite for a concert? The possibilities of reunions, comebacks and features are endless, even if (or especially if) the actual artists have already passed away. Besides the mesmerizing effects that holograms might or might not have on their audiences, they also appear lucrative for the music industry from a business point of view. There are basically no limits⁷ to what performance one could do with which artist and how. Despite all the reunions, feature gigs, and

⁴ Image taken from Wikipedia.

⁵ Tupac Shakur was an American rapper who was shot during a drive-by in 1996.

⁶ See also Auslander, Philip “Lucille Meets GuitarBot: Instrumentality, Agency, and Technology in Musical Performance”, *Theatre Journal*, Volume 61, Number 4, December 2009, pp. 603-616.

⁷ Now disregarding the legal side of it, since it would exceed the limits of this thesis

comebacks, artists and bands could perform in different places at the same time, and therefore make a lot more revenue from the ticket sale⁸. Retired artists could let their holograms perform in their place and cash in the money later, just to name a few ideas for possible ways to make money with holograms.

However, just because one can do something, it does not mean that one should do it. Just because something is new, it does not mean that it will be successful. When it comes to the delicate topic of hologram performances, there are many issues at hand, including moral ones, commercial ones, legal ones, etc. Who owns the rights of performances after an artist has died? Should we not let the dead be dead? Would the deceased artist even favor such performances? And when we can overcome death so easily in the entertainment branch, which value does being alive still have?



Fig. 2: Ronnie James Dio's Hologram performing at the Pollstar Awards in 2016⁹

In the case of the Dio hologram, few people might question the moral issues behind it. Wendy Dio, Ronnie's widow, collaborated with a company called *Eyelluison* to raise her husband from the dead. After the first hologram performance at Wacken, she told the listeners

⁸ Another question here would be if and how much money people would spend on this.

⁹ Image taken from Loudwire.com.

during a radio interview¹⁰ that she “...thought it was a really good idea...especially with Ronnie, because he was always into so many fantasy and theatrical things...so I thought it was something that he probably would want to do...and it was something to keep his memory and his music alive”. With a statement like this coming from Ronnie’s own wife, it becomes more difficult to accuse somebody of commercial ulterior motives, especially if the artist himself probably would have given his blessings. Leaving the moral issues aside, there is still the question how such a hologram performance is perceived by the fans.

Popular Music lives from the value judgments of its fans, and many musicologists stress the importance of these value judgments for popular culture. In *Performing Rites - On the Value of Popular Music*, Simon Frith writes “... relationships between aesthetic judgments and the formation of social groups are obviously crucial to popular cultural practice, to genres and cults and subcultures” (1998, 18). In other words, fan cultures are groups of people that share (predominantly) the same values and opinions about a certain cultural product, e.g. rock music, and define themselves according to these values and opinions, and vice versa. This influence that fans have on rock music stresses their importance: to be approved as “true rock”, music, artists and performances have to follow certain standards and values which are associated with the genre, and which together form the construct of authenticity. These standards and values do not only describe the style of music, but also refer to historical and cultural developments and ideologies of a particular genre¹¹. Of course, these structures are very complex and consist of social, behavioral, ideological, technical rules, etc., and they vary per music genre. Although genre ideologies are complex, some of the most important core values that people attribute with rock music are authenticity, sincerity, rebellion and resistance¹².

With these values on one side, and the seemingly commercial and entertaining technology of the Dio hologram on the other side, it seems like there is some kind of bias. The

¹⁰ Radio interview with Eddie Trunk on 15.08.2016, 00:21:08

<https://www.youtube.com/watch?v=Pu4nQWmkYYg>

¹¹ Simon Frith writes that “genre labels describe musical skills and ideological attitudes simultaneously” (1998, 87).

¹² As described by Philip Auslander: “The ideological distinction between rock and pop is precisely the distinction between the authentic and the inauthentic, the sincere and the cynical, the genuinely popular and the slickly commercial, the potentially resistant and the necessarily co-opted, art and entertainment” (2008: 80, 81).

question is if a hologram holds the values of authenticity and sincerity, which can best be answered by rock fans themselves. However, I believe that it is impossible for a rock performance to employ both sides at once, because this would simply betray rock ideology. However, holograms undoubtedly affect the music industry and the audiences in some way. How holograms are perceived by rock audiences and in which relation they stand to rock authenticity will be the topic of this thesis. The central issue will be finding out if it is possible that live performances in rock music will be dominated by hologram technology in the future.

2. Methodology and Theoretical Framework

2.1. Methodology

In order to research the potential success of hologram technology in rock music, I will examine the Dio hologram performances in the context of rock authenticity. For this, two methods of research have been combined. As has been argued earlier, the consumer, or the fan, is of essential importance for the success of live performances. Collecting different opinions and impressions of holograms from rock fans from all over the world will give an indication about the opinions and judgements dominating this rather new and still developing trend.

To create a basic pool of data, a survey consisting of questions with both qualitative and quantitative value¹³ has been conducted amongst people involved with the rock scene. It is important to mention that the genre rock was defined very broadly for the purpose of this research, and includes all kinds of sub-genres from hard rock to heavy metal. By defining the genre rock in a wider sense, the access to more responses became more likely, and the answers tended to be more various and opinionated¹⁴. To gather the data that forms the basis of this

¹³ Some questions require the respondent to give phenomenological (the description of personal feelings) answers, other questions were multiple-choice questions, giving the respondent limited possible answers to choose from.

¹⁴ The main reason for describing the term rock as broad as possible is the short period of time that was available for this research. Although a less specific target group promises more various outcomes, it also limits the research in such a way that fans of for example stadium rock probably have different opinions about holograms than fans of punk rock music.

thesis, the survey, which can be found in the appendix¹⁵, was created with Google Forms¹⁶. The survey

was created in both English and German language to make it more accessible to a broader target audience. The link for the questionnaires was shared on social media platforms such as Facebook, Reddit and Twitter. Since Facebook offers possibilities for like-minded people to connect through groups, the survey-link was shared in multiple groups which were created for rock fans and focus on music, bands, stories and other rock-related topics. Furthermore, the link was shared amongst my friends on my personal profile and in several student- and expats groups. Next to that, I have joined a number of survey-exchange groups on Facebook¹⁷.

The second research method used for this thesis is a literature research. For the purpose of placing the Dio hologram in the context of rock authenticity, the survey outcomes have been analysed with reference to two literature sources from the music and art sector, which thematize the politics of (rock) authenticity. These sources are the book *Liveness - Performance in a Mediatized Culture* (2008) by Philip Auslander and the essay “The Work of Art in the Age of Mechanical Reproduction” (1936) by Walter Benjamin.

2.2. Theoretical Framework

In the book *Liveness - Performance in a Mediatized Culture* Philip Auslander explores music live performances in relation to contemporary culture and media. Next to providing overviews of today’s technological possibilities for live performances, their law, history and development, he focuses on the meaning of live performances in rock music specifically, while also critically thematizing discourses of rock authenticity.

¹⁵ Appendix III

¹⁶ Google Forms is a program that allows the user to create customized surveys that can later be shared through a link or via email. The program includes an automated visual representation of the outcomes (charts, graphs and a summary of the comments) summarized altogether as well as one by one.

¹⁷ These groups follow the principle of exchanging mutual favors by filling out each others questionnaires. Since there is a certain risk that surveys are filled out mindlessly and hastily in order to gain more respondents for one's own survey, I stressed the fact that my questionnaire is only to be filled out by people who are willing to take the time to complete the questionnaire with care.

In order to place the Dio hologram into the context of rock authenticity, a comprehensive elaboration of the term is necessary.

To begin with, authenticity is a broad concept that calls for a definition. Rock music itself is a very broad genre which includes many subgenres, possibly leading to several forms of authenticity. Auslander argues that “the specific semiotic markers of authenticity vary by musical genre and subgenre” (2008:82) and “what is considered authentic in the context of one subgenre is not necessarily seen that way in another” (2008:79). Throughout musicology, there are many different definitions of rock authenticity that refer to the artist, the performance or the content and display of the music itself. Generally, one can say that authenticity is reflected in the music itself, but it is also strongly centered around the beliefs and practices within rock culture. For some, rock authenticity might include the instrumental virtuosity, an attitude of rebellion, social criticism and originality (Douglas in Auslander, 2008:81), for others it might be easier to define rock authenticity by defining what it is not: pop music. As Auslander writes, the difference between pop and rock is “precisely the distinction between the authentic and the inauthentic, the sincere and the cynical, the genuinely popular and the slickly commercial, the potentially resistant and the necessarily co-opted, art and entertainment” (2008:81). Therefore, commerciality and entertainment only for the sake of entertainment¹⁸ have no place in the rock music scene and are not accepted by rock communities, which the analysis of the survey aims to prove.

In order to understand how rock audiences judge an artist as authentic or not authentic, Auslander proceeds to describe the elements that constitute rock authenticity. In the chapter “Tryin’ to Make it Real” he stresses that live performances in rock music are the vessel of authenticity in the way that performances are the very moment when value judgments in rock music are created, and the very place where authenticity in rock music is created. Auslander argues that “rock music is performed live and that, within rock culture, live performance is important and demanded” (2008:76).

It is noteworthy that rock music is a genre predominantly organized around and consumed through recordings (2008:74). Still, rock music is performed live, and these live

¹⁸ Which is possibly the case with the Dio hologram.

performances are demanded by the fans. The relationship between recordings and live performances in rock music is a complex and interdependent one: on one hand, an audience judges a live performance according to the standards of a recording. On the other hand, the listener resorts to visual images of previous live performances in order to enjoy a recorded piece. As Simon Frith has stated¹⁹, listening to music is in itself a performance that occurs whenever a fan consumes a rock music recording (1996:203). As Auslander underlines, rock music “has always stressed the visual as a necessary part of its apparatus—in performance, on record covers, in magazine and press photographs, and in advertising” (2008:86). Therefore, the availability of visual images during live performances helps the listeners of a rock recording to evoke a performance in their heads, or to say it more clearly: the rock fan’s ability to visualize a performance is dependent on the available visual cues, which are not least and in their most realistic form found in rock live performances.

However, visual cues are only one reason why live performances are important for rock music. Auslander suggests that authenticity in rock music is established and defined to a great deal during live performances through gestures, movements and visual images, but also through sounds, technical skills, etc., which have to work together to generate authenticity. He continues to argue that live performances contribute to the “creation” of authenticity in rock music in two crucial ways.

First, to be considered authentic, the musician must have a history of live performances. The rock musician must have gone through the traditional steps to “work his way up” as a live performer by going through the trouble of finding an audience and being picked out by a record company through those live performances, which eventually created authority and authenticity for the later produced recordings (2008:88, 89).

Second – and this point again stresses the crucial importance of the listener for the creation of authenticity – live performances are the only event where a listener can decide if a musician who appears authentic on photographs, in interviews or on recordings, is authentic in real life, and can indeed produce the sounds heard on the recording, convey the right emotions and images, and so forth. In Auslander’s words, before seeing a band play live, the listener can

¹⁹ In *Performing Rites - On the Value of Popular Music*.

never be sure of their authenticity, but “the visual evidence of live performance, the fact that those sounds can be produced live by the appropriate musicians, serves to authenticate music as legitimate rock and not synthetic pop in a way that cannot occur on the basis of the recording alone; only live performance can resolve the tension between rock’s romantic ideology and the listener’s knowledge that the music is produced in the studio” (2008:91). In order to examine the Dio hologram in the light of authenticity, these two pretenses for authenticity according to Auslander will guide the analysis.

Furthermore, a live performance brings with it several characteristics that a rock audience value. These values include uniqueness, spontaneity, being together with fellow fans and the bond or interaction that is created between the audience and the performers (2008:76, 82, 96). In the following analysis, I will examine if and to what degree the Dio hologram possesses these characteristics.

The second literature source I refer to in order to place the Dio hologram performances in the context of authenticity is “The Work of Art in the Age of Mechanical Reproduction” (1936) by Walter Benjamin. In his iconic essay, Benjamin discusses artworks and their perception in the age of a growing media and technology presence. Although the text was written nearly a century ago, Benjamin recognized that the perception and the being of an artwork change as soon as it is reproduced in some form.

In Benjamin’s age, this reproduction refers to print copies, copies of paintings, photography and film mostly, but nowadays this reproduction includes many more media: an artwork can be shared on social media and the internet, music can be captured with various forms of recording and, not least, performances can be reproduced with hologram technology. Reproductions of an artwork however lack or lose, according to Benjamin, something that he calls “aura”. The aura refers to an almost spiritual emission that is embodied in the artwork and that is connected to its original time, place, history, ownership and (religious) purpose.

Interestingly, Benjamin also connects his notion of aura with the concept of authenticity. He writes that “the presence of the original is the prerequisite to the concept of authenticity” and that “the whole sphere of authenticity is outside...reproducibility. Confronted with its manual reproduction...the original preserved all its authority” (1936:3). In other words, his main

argument is that reproductions of an artwork can never have the same aura, or authenticity as the original.

3. Survey Outcomes

In this part of the thesis, the most significant survey outcomes are presented. Since the discussion of all survey questions would exceed the limits of this thesis, other, less significant results and individual responses and comments that were given in the survey are included in the appendix²⁰. The survey outcomes here are structured into four sections, while each section treats a different subject and serves a different purpose.

3.1. Demographic Results - Introducing the Survey Respondent

In total, 100²¹ people from different countries from all over the world participated in the research. The respondents are split into the following demographic groups and age groups as shown in figure 3 and 4.

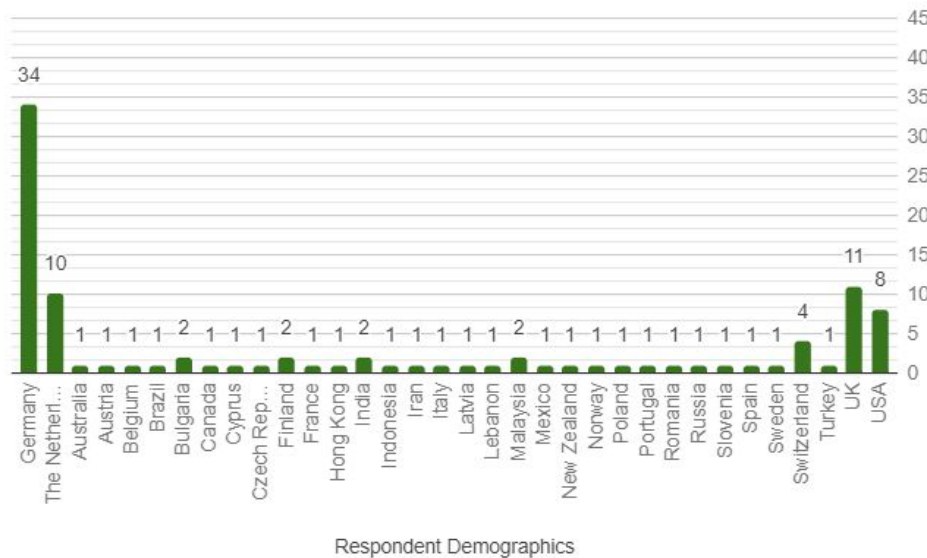


Fig. 3: Demographic Distribution of Survey Respondents

²⁰ See Appendix I and II

²¹ After 100 have filled out the survey, the survey was closed.

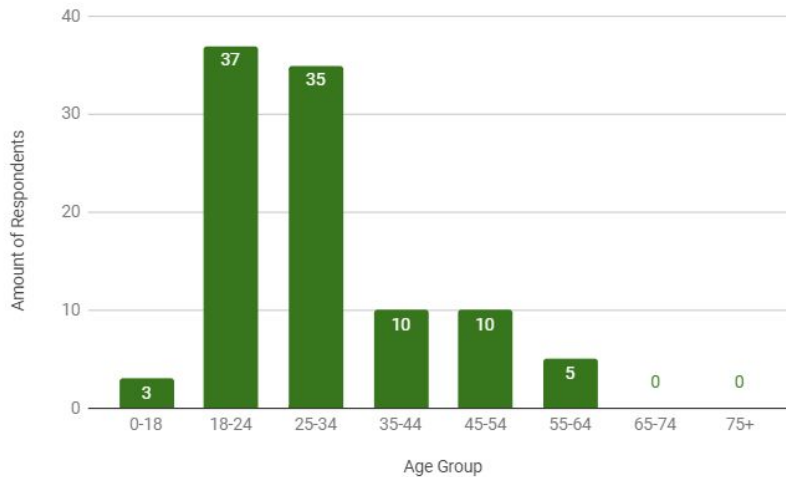


Fig. 4: Age Groups of Survey Respondents

Of all respondents, 67 people identify as fans of rock music in some of its form, 21 people are more or less fans of rock music and 12 people do not identify as fans of rock music.

99% of all respondents have never been to a hologram concert or performance before.

3.2. Live Performances

This section presents the outcomes of questions which were designed to map the participants behavior concerning live music and live performances.

Almost half of the respondents (46%) went to concerts or live performances more than 5 times in the past year, which shows that they are frequently involved with live performances and therefore have an understanding of what aspects rock audiences value during live performances. Furthermore, they are qualified to place themselves within the hypothetical situations regarding hologram performances, which are thematized as part of the survey²². Additionally, the frequent concert-going shows that the participants are, at least to a certain degree, familiar with the rules that govern live performances in rock music, which are discussed in this thesis.

²² Some questions required the participant to imagine being at a hologram performance or to imagine the future success that hologram performances might have in the rock music scene.

Figure 5 below indicates how important the respondents regard live performances. The blue bars show the general survey responses, while the red bars indicate how many people out of these respondents identify as rock music fans.

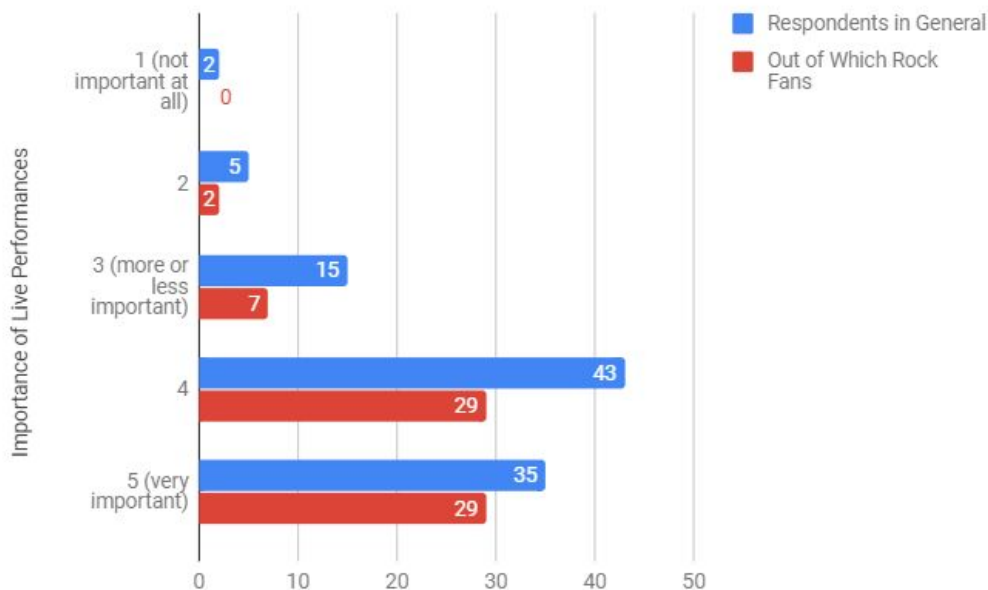


Fig. 5: The Importance of Live Performances According to Survey Respondents

It is visible that the vast majority of rock fans places a high value on live performances. This outcome underlines the importance of live performances for rock music fans as described by Philip Auslander²³.

In relation to this, figure 6 displays which characteristics of live performances the respondents value most. All values have been selected multiple times with only a slight difference in the amount they have been selected. However, the by far most valuable feature for live performances appears to be the interaction between the fan and the artist, followed by the factor of uniqueness. More than half of the respondents also selected the factors spontaneity and closeness to the artist.

²³ See “Methodology and Framework” above.

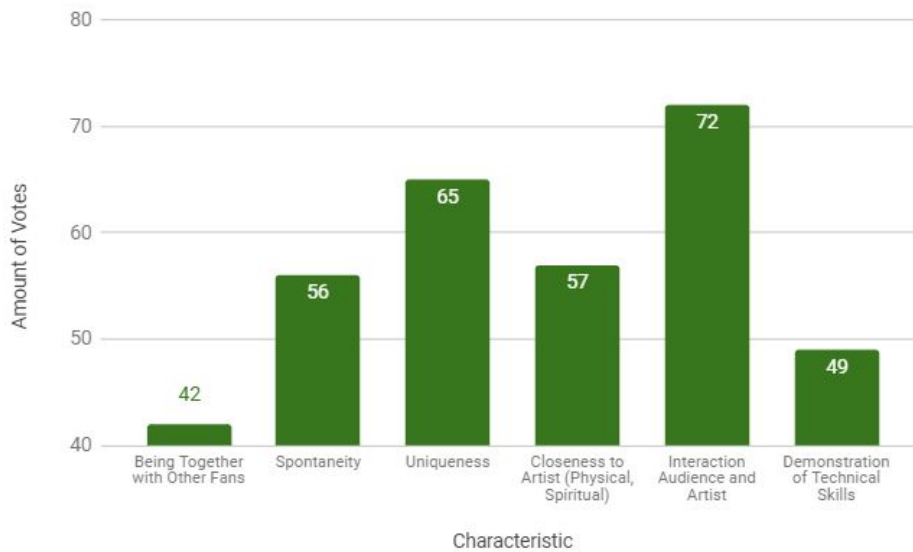


Fig. 6: Most Important Values of Live Performances According to Survey Respondents

3.3. *The Dio Hologram and Hologram Performances in General*

This section focuses more specifically on the respondent’s perception of hologram performances. For this, the participant was asked to watch two clips of live performances of the Ronnie James Dio hologram²⁴.

The majority of respondents (41 people) had a negative first impression of the shown clips. Out of these, 28 respondents identify as rock music fans. 39 respondents had a neutral impression, out of which 25 people are rock music fans. 20 people tended to perceive the hologram performances in a positive way. Out of these respondents, 14 people are rock music fans. Concludingly, the majority of respondents as well as the majority of rock fans had a negative first impression of the Dio hologram performances.

77% of all respondents find the Dio hologram cold and distant. Additionally, 52% percent of respondents find hologram performances awkward.

91% agree that the Dio hologram performances definitely differ from “real” live performances. Above this, 52% disagree that a hologram performance created by someone else

²⁴ The first clip shows the performance of “We Rock” at the Pollstar Awards in 2017, the second clip is an excerpt from a show in Warsaw as part of the DIO Returns tour in 2017, showing the performance of “Heaven and Hell”. Both songs are considered popular Dio songs.

than the artist (with previous vocal recordings and e.g. green screen suit) is a live performance at all. However, 50% of respondents perceive the Dio hologram as more real than a recording they would watch on television. Still, 96% of all respondents agreed, that it makes a difference if one sees the real artist perform live or just a hologram of it.

Only 19% of respondents would feel comfortable to clap, sing, dance, shout, etc., while 41% would not feel comfortable participating this way and the remaining 40% were not sure.

Regarding authenticity of the Dio hologram, the following observations were made according to figure 7. Out of the 55 people who regard the Dio hologram as inauthentic, 38 people identify as rock fans.

Figure 8 shows how the respondents would perceive holograms of deceased and alive artists in the context of authenticity. Although in general the majority agrees that holograms of neither a deceased nor a living rock artist appear authentic, there is still a difference in the results. Apparently, the majority of respondents perceives a hologram as more authentic when the artist has passed away. This result is supported by the outcome of the statement that holograms are a nice tribute to deceased or retired musicians. 63% agreed with this statement, while 37% of the respondents disagreed.

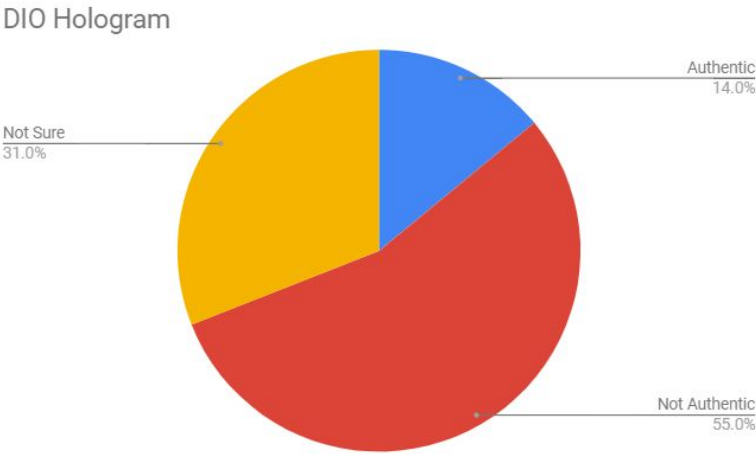


Fig. 7: Authenticity of the DIO Hologram According to Respondents

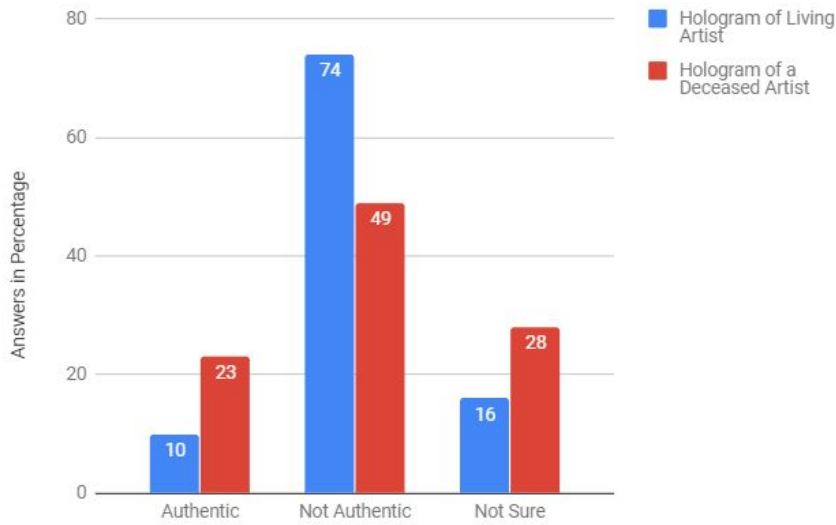


Fig. 8: Authenticity of Alive and Deceased Artists as Perceived by Respondents

Additionally, these observations are confirmed by the following responses. 56% would attend a hologram performance of one of their favorite deceased artists, while while 44% stated that they would not go. On the other hand, only 30% would consider attending a hologram performance of one of their favorite musicians who is still alive but has retired or split up with his/her band, while the vast majority of 70% would definitely not go.

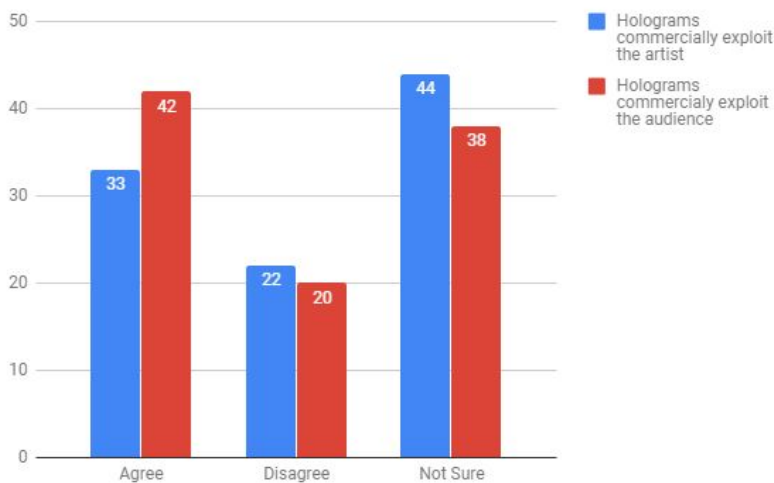


Fig. 9: The Commercial Aspects of a Hologram as Perceived by the Respondents

Figure 9 shows how hologram performances are perceived from a commercial angle. It is visible that the respondents mainly agree that holograms commercially exploit the artist to a certain degree. However, the respondents appear to relate the commercial characteristics of a hologram performance to the exploitation of the audience rather than the exploitation of the artist.

3.4. The Future Potential of Hologram Performances in Rock Music

In this section, the survey outcomes which focus on the future potential of hologram performances in rock music according to the survey respondent are presented.

Figure 10 indicates how the respondents estimate the hypothetical future of hologram performances. It is visible that hologram performances are generally and predominantly not perceived as a threat for live performances with human artists, be it the actual artists or their cover bands. In fact, in a scenario where the respondent has the choice between seeing a cover band or a hologram performance of a deceased artist, the majority of 53% would prefer the cover band. Only 28% would rather attend the hologram performance while 19% remained uncertain.

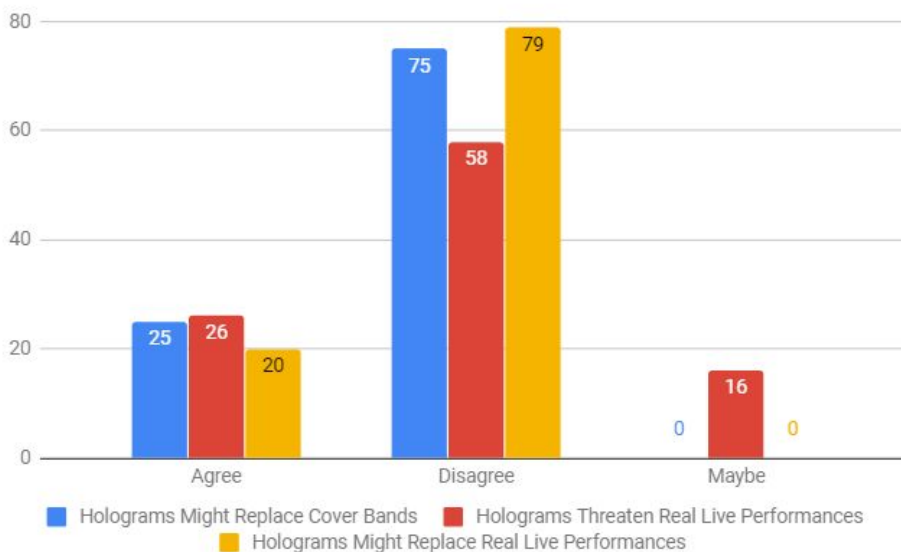


Fig. 10: The Potential of Holograms in the Rock Music Industry According to the Respondents

However, 34% percent of all respondents agreed that holograms can offer great opportunities for live performances. Still, 37% chose to disagree while 29% were not sure. Some survey comments regarding this issue suggested that holograms can function as an additional show effect for live performances, as long as they do not aim to replace the actual live performance. This attitude is also mirrored in the following outcome: the respondent was asked to imagine a still active favorite musician or band. The hypothetical context was that this artist or band brought out a new album recently, but does not tour the participants continent. Instead, there is a row of hologram performances planned in countries on the participants continent. 75%, the vast majority, would not attend a hologram concert under these circumstances.

Figure 11 shows the ticket price which the respondents would pay for hologram performances of both alive and deceased artists. Generally, people are willing to invest more money in seeing a performance of a deceased artist.

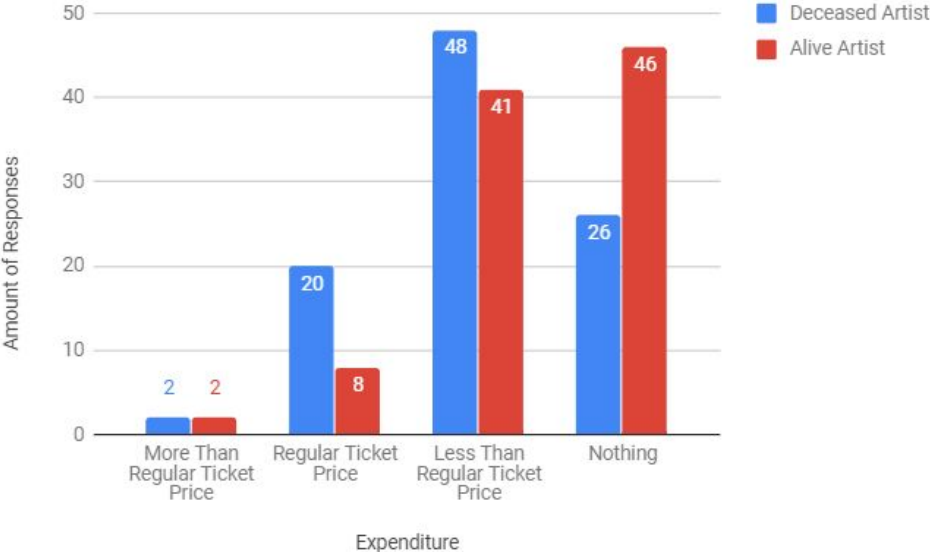


Fig. 11: The Price Respondents Would Pay to See a Hologram Performance of a Deceased Artist vs. Alive Artist

4. Analysis and Discussion

4.1. The Dio Hologram Lacks Authenticity and Liveness

According to Auslander, there are two crucial ways in which live performances contribute to the creation of authenticity in rock music²⁵.

First, the artist must have a history of live performances and an audience which he/she has “won” over the years. Auslander argues that an artist who “worked his way up” appears more authentic than an artist who has not (2008:88, 89). In the case of the band DIO, this authenticity through experience and work is given. The band was formed in 1982, produced numerous albums and performed countless times. Additionally, lead singer Ronnie James Dio fronted Rainbow, a famous hard rock band formed in 1975, and replaced singer Ozzy Osbourne in the band Black Sabbath for several years. All three bands enjoyed great fame and had (and still have) a large fan base. Accordingly, Ronnie James Dio (and his band) and his musical productions must be perceived as authentic by the definition of Auslander. However, the survey outcomes presented in section 3.3. show that for the audience a hologram is not as authentic and real as the actual artist. The majority of respondents perceives the Dio hologram as inauthentic, showing that the authenticity of an artist, no matter how hard earned it is, can not simply be taken over by his hologram.

Second, Auslander explains that live performances contribute to the creation by authenticity through the judgment of the audiences. Live performances are events where the listener can confirm an artist’s authenticity through the skills, sounds, movements, emotions, etc. he conveys (2008: 91). In the case of the Dio hologram all these skills, movements and emotions have been produced in the studio and are therefore not really coming from the artist, which explains why audiences perceive the hologram as less authentic.

Furthermore, live performances themselves are highly valued amongst rock audiences. The survey results according to figure 5 show that the majority of respondents who identify as rock music fans place a high importance on live performances. However, as the results presented

²⁵ See Methodology and Framework section above.

in section 3.3. show, the majority of respondents does not even agree that hologram performances are actual live performances. Live performances possess certain characteristics which are important to rock audiences and make a live performance “live”.

Figure six shows the most significant characteristics, which have been described by Philip Auslander as the fan’s needs that are fulfilled during live performances (2008: 76, 82, 96). The survey results show that the most chosen (and therefore most valued) characteristics are the interaction between the artist and the audience, followed by the uniqueness of a live performance. Furthermore, a great deal of respondents also chose spontaneity during live performances and the physical and/or mental closeness to the artist.

To place these results into the context of the Dio hologram performances, the following observation can be made. The Dio hologram is not in state to truly fulfill these demands and values according to the rock fans: the hologram can neither improvise on stage, nor can it interact with its fans spontaneously. Although interactions can be, and have been, programmed into the holograms movements (such as encouraging the fans to sing the lyrics by holding the microphone towards the masses), the interactions are predictable and limited, and there is no guarantee that the fans will fulfill their end of the bargain by responding to these interaction attempts. Additionally, there is no real uniqueness in hologram performances. The performance can be (and given the expensive production costs and high expenditure of time very likely has been during the “DIO Returns” tour) projected over and over again during different performances. Regarding the value of closeness to the artist, the Dio hologram fails to convince as well: although the artist is present in his digital form (the rest of the band is truly present, but the main character is lead singer Ronnie James Dio), he is not really on stage, which the audience is aware of. The only values of live performances that are really met during hologram performances are the being together with other fans and, to a certain degree, the live demonstration of technical skills and musical qualities²⁶.

This is an important observation, since it seems to challenge or at least limit the opportunity for the Dio hologram to be perceived as authentic by rock fans. The Dio hologram only fulfills some of the demands (or values) a rock fan has during a live performances, and

²⁶ The musical qualities and live demonstration of technical skills are performed by the band which actually plays live and interacts with the programmed performance of the hologram on stage.

these are the ones that are regarded as less important according to the survey results. If the values of rock live performances (uniqueness, spontaneity, interaction) are so important for the creation of authenticity, how can the Dio hologram be perceived as authentic when it does not fulfill these values?

According to Auslander's definition of authenticity above (see page 8) the difference between rock music and pop music is amongst others the difference between the authentic and the inauthentic, the genuinely popular and the commercial. This quote in itself bears the statement that authenticity in rock can never be connected to the commercial, as these two characteristics are contradictory. According to figure 10 the survey respondents assign commercial characteristics to hologram performances, and they agree that both the artist and the fan are commercially exploited by the hologram to a certain degree. Even if a hologram is produced with no ulterior motive of exploitation, which is the case with the Dio hologram²⁷, commercialism has no place in the rock music scene. The fact that hologram performances are perceived as commercial nevertheless contributes to the argument that a hologram performance simply can not be authentic.

The fact that the majority of survey respondents had a negative first impression after watching the clips of the Dio hologram and the fact that most survey respondents perceive the hologram as rather inauthentic therefore suggests that the main reason for this is the hologram itself. However, as the survey outcomes in figure 7 show, there are respondents who perceive the Dio hologram as authentic or are at least not sure if it appears authentic to them. I argue that this is connected to the fact that the Dio hologram is the hologram of a deceased artist.

The results in figure 8 depict the difference in perception of authenticity between a deceased artist and an alive artist. A hologram of a deceased artist is mainly perceived as inauthentic (49%) compared to the respondents who would perceive it as authentic (23%). However, it is visible that considerably fewer people would perceive a hologram of a living artist as authentic (10%), and that more people would clearly perceive it as inauthentic (74%). In other words, a hologram performance can (although not unanimously agreed upon) only appear authentic when the "performing" artist has passed away.

²⁷ See Wendy Dio's comment on page 6 above

This phenomenon might have to do with something that I will here refer to as “legend status”. According to rock journalism²⁸, artists like Jimi Hendrix, Lemmy Kilmister or Ronnie James Dio often have been labelled as “legends of rock”. Despite that they have been successful, popular and there from the beginning, they seem to share the dedication, respect and continuous worship of their fans throughout their deaths²⁹. They have been turned into almost saint-like icons and representatives of rock music.

As soon as an artist has passed away, their legacy can be carried on in only limited forms, be it through existing recordings, captured performances or interviews (videos, pictures, sound recordings, written texts, etc.), merchandise, remastered or newly published (raw or never heard) material. However long this list is, the possibility that the particular deceased artist will ever produce new material technically does not exist. However, with the possibility of holograms, it exists technologically. The “spirit” of the artist is captured in a never seen form: although the vocals are recorded and not more than a ghost of previous live performances, the artist performs again and moves in ways he has never moved before (since the movements are made-up and put together in the production studio). Judging by the survey responses however, this is not sufficient for a successful future of holograms in rock music, but it at least creates a place and time for rock fans to remember and pay tribute to deceased artists, which makes the hologram “performance” less of a performance but a commemoration.

I argue that hologram performances of deceased artists are not real live performances, but a high-tech version of something that Roger Beebe calls “mediated mourning”³⁰. This argument is supported by the fact that 63% of survey respondents would deem a hologram performance a nice tribute to a deceased artist. Additionally, the survey results in section 3.3 show that people would be more willing to go to a hologram performance of a deceased artist than to a hologram

²⁸ See for example Kreps, Daniel, “Lemmy Kilmister, Motorhead Singer and Heavy Metal Legend, Dead at 70”, *Rollingstone.com*, December 29, 2015, <https://rol.st/2BnaGEG>. (August 16, 2018); Wunsch, Silke, “Jimi Hendrix Legend Lives on 75 Years after His Birth”, *dw.com*, November 27, 2017, <https://bit.ly/2PcaPhg>. (August 16, 2018).

²⁹ Think here about cover bands, revivals, reissues, new merchandise, documentaries, etc.

³⁰ In his article “Mourning Becomes...? Kurt Cobain, Tupac Shakur, and the 'Waning of Affect'” in the book *Rock over the Edge: Transformations in Popular Music Culture* (2002), Roger Beebe examines how masses mourn and react to the deaths of musicians in a mediatized culture. According to his argument, deceased artists are commemorated with the help of mass media (e.g. a compilation of pictures over one of their tracks, etc.).

performance of an alive artist.

To summarize, a hologram of a deceased artist is perceived as more authentic than the hologram of an alive artist. However, it is still the question if this relative authenticity is sufficient for holograms to persist in the rock music scene.

According to Walter Benjamin, a reproduced artwork can never be as authentic as the original. The Dio hologram performances are obviously reproduced performances: the visual movements were created from scratch in the production studio and the vocal tracks stem from recordings of live performances, which in itself is a reproduction already. Although it is questionable if a recorded soundtrack would be inauthentic in the eyes of Benjamin as well, since one could argue that it is in itself an artwork with its own aura, the creation of a hologram performance is in total an attempt to reproduce a (previous) live performance of Dio. According to Benjamin, the aura refers to a spirit which is embodied in the original artwork and which is connected to its original time, place, history, ownership and (religious) purpose. A reproduced artwork does not have the connection to these characteristics anymore, because it is not the original. In the case of the Dio hologram, one could argue that because the hologram is not the original live performance, it does not possess its aura either. No matter how real and lifelike a hologram performance is, there seems to be something missing, something that is essential to rock ontology³¹.

The survey respondents had the chance to describe which characteristics a hologram performance lacks according to their opinion, under which were the following terms: Soul, interaction, personality, reality, humanity, integrity, spontaneity, presence, authenticity, uniqueness, heart, connection. I argue that these terms, some more than others, all are descriptions or synonyms of the notion of aura, and that aura is the thing that is missing in these hologram performances. However, one can not simply condemn the Dio hologram for lacking aura, because there seems to be something that discerns it from a simple TV reproduction, as seen in 3.3.

I suggest that the Dio hologram can be analysed from two different angles when it comes to the concept of aura. On one hand, the hologram itself as an object lacks the aura that a human

³¹ Ontology refers to a set of paradigms and concepts in a certain subject area. Rock ontology includes genre rules, behaviors, fan culture, politics of authenticity, etc.

live performance has. On the other hand, the hologram can capture, or embody the aura of these live performances, making it a relic of the artist and his performances but, as I argued before, only when the artist has deceased. In this case, the hologram of a dead artist is as close as the audience will ever get to a real live performance of this artist again. The only thing that is left is the reproduction because the original “artwork” (in this case artist) has passed away. This explains again why the respondents agree on holograms of an alive artist being less authentic than holograms of a deceased artist.

As literature from the material turn has laid out, it is in the human nature to assign meaning (and spirit) to objects that are in some way connected to an event, a person, a time, etc. At this point, I would like to refer to André Bazin, who in his text “The Ontology of the Photographic Image” (1960) argued that paintings, photography, film and other forms of reproduction of real life serve the purpose to overcome death, time and the decay that comes with it. According to Bazin “photography does not create eternity...it embalms time, rescuing it simply from its proper corruption” (1960:8). This effect of overcoming time is even more present in the technical reproduction of a DIO performance, with all its lifelike appearances, sounds and movements, allowing the “legendary artist” to live on, at least in some form. One survey respondent expressed his opinion in a way that sums up this argument: “If Linkin Park would do a hologram show I would go and watch it. Of course, it wouldn't bring back Chester but it would bring back the memories, so I would give it a chance”. Another respondent added that “holograms are a great opportunity to let artists and their work ‘live on’. One should not necessarily think about the commercial side. It just has to be great for a fan to see a great artist more or less live again, although he actually has no chance to do so”.

4. 2. The Future of Hologram Performances in Rock Music

So far it has been established that hologram performances lack authenticity for various reasons. First, they are not really live performances and do not fulfill the characteristics a rock fan demands from live performances (spontaneity, uniqueness, interaction with the fans) and second, the listener is aware that holograms are reproduced artworks which in their nature lack

aura and authenticity. The only occasion a hologram is relatively accepted by rock audiences is when the artist has passed away and the performance becomes a tribute or commemoration instead of a live show. According to figure 10 holograms are not perceived as a threat for real live performances. The respondents neither expect hologram performances to replace live performances, nor do they expect hologram performances to replace cover bands: the authenticity and the characteristics that come with live performances are too valued by rock communities. To allow hologram performances to take the place of actual live performances, the ideologies and paradigms of the rock music scene would have to undergo a drastic change first, since rock music is a genre with fixed, clear and strongly implemented values, rules, expectations and behaviors.

Although hologram performances are very unlikely to replace live performances in the future, rock communities are open minded about their use for additional show effects. Several survey respondents think that there will be a place for hologram performances in the music industry somewhere. A few respondents called holograms a nice way of entertainment, which could be an additional element of live performances without replacing them³². It appears that most respondents accept an expect hologram performances to be around in the future, due to the ever increasing development of the media and technological possibilities today. One respondent finds that “they could be interesting as tributes to deceased stars. At one point, perhaps with AI and VR it would be next to impossible to tell the difference. But they should not take away from new, upcoming artists or current artist's possibilities”. As has been established earlier, the respondents agree that a hologram performance is not the same as a performance with an alive artist, and that it will never be, no matter how technologically advanced they get. However, holograms are accepted as an additional effect in live performances: “Holograms can be great for extra dressing for the show or used as alternatives for normal screens at bigger shows instead of a big tv, you project a live hologram of what's happening on stage but larger or closer to crowds in the back”.

Still, it seems that a hypothetical success of holograms in the future is connected to conditions. As figure 10 shows, the ticket price for a hologram performance should not be too

³² See Appendix II

expensive. Several respondents mentioned that they would only visit a hologram performance if it is reasonably affordable, and definitely cheaper than a “real” live performance. Furthermore, the technology of hologram performances needs to be improved according to some survey respondents: “I think hologram technology needs to be more advanced and maybe incorporate AI to create more natural movements of the models and implement some interactivity”³³.

5. Conclusion and Reflection

Of course, the opinions about the place of hologram performances in rock music will be split. What may appear as a limitless, fantastic opportunity to see deceased idols perform on stage for the one, may be an immoral and commercial exploitation for the other.

This thesis underlines that rock music is a genre which builds on the necessary concept of authenticity. Without fulfilling the premises of authenticity, there is hardly a chance for artists to be successful in rock music. It has been established that holograms are not in state of conveying authenticity in the way a live performing artist does for several reasons. Through this lack of authenticity, the success of hologram performances in rock music, if at all possible, is limited to being used for additional show-effects and tribute performances to deceased musicians. Even if hologram performances are created with the pretense that they serve as tribute without commercial ulterior motive, the commerciality that comes naturally with hologram performances is not, or only to a certain degree, accepted in rock music.

This is different for a genre like pop in which holograms have had several successful performances already. However, a hologram in rock music does not fulfill or even contradict the values and beliefs that are present in rock communities. This difference between rock and pop has been made obvious by Philip Auslander as mentioned above³⁴. The characteristics of a hologram contradict the values and beliefs that constitute rock ontology, which is why they simply can not be authentic. Concludingly, this thesis strengthened my assumption that

³³ See Appendix II

³⁴ “The ideological distinction between rock and pop is precisely the distinction between the authentic and the inauthentic, the sincere and the cynical, the genuinely popular and the slickly commercial, the potentially resistant and the necessarily co-opted, art and entertainment” (2008: 80, 81).

holograms will neither dominate live performances in rock music nor will they be able to replace them in the future.

5.1. Problems and Limitations

Reflecting on the problems and limitations of this research, several observations were made in different areas. Although the survey was tested by volunteers prior to its publication, there are several things that should have been changed in hindsight.

First of all, available answer-options for many questions in the survey often included “maybe” or “not sure”. After analysing the results, it seems that many people have chosen these options because it appears like an “easy way out”. The aim of this survey was collecting answers that are as precise and determined as possible from different individuals. My suggestion for improvement would be to either leave out the neutral answers or to extend the answer options with both “tending to negative” and “tending to positive”. This way, when people themselves feel not sure about their answer, they can at least give an indication which direction their opinion goes. Another way to prevent indecisive answers would be formulating more drastical statements instead of open questions. Drastical statements express a strong opinion which would be easier for the respondent to agree or disagree with (e.g. “hologram performances will definitely replace live performances” instead of “do you think that hologram performances might replace live performances in the future?”).

Another obstacle was the categorization of answer possibilities for the question “in the last year, how often did you attend concerts/live performances?”. The option 0-5 times is not accurate enough, as it results in a gap. Since many people chose this option, this answer affects the results greatly, while it remains unsure if people visited 5 concerts in the past year, or none at all. Instead, the answer 0-5 times should have been split up into 0 times and 1-5 times.

Furthermore, there should have been a section in which the participant can specify their preference for rock sub-genres. Rock music is a wide genre and includes many sub-genres that can differ greatly from one another, e.g. the difference between blues and hard rock. A person who identifies with stadium-rock might have a different view on hologram performances than a

person who identifies with punk rock. Both these genres are attributed with different values which probably affect the view on hologram performances: stadium-rock is a genre connected to commercialism, huge shows and excess, while punk rock rather tends to take place in small settings (bars, small venues) and has rebellious, non-commercial attributes.

Another limitation of this survey was the rather low number of participants. I believe that, in order to make assumptions about the general opinion of rock fans, it is necessary to collect a large amount of data. Although the respondents come from a great demographic variety and consist of mixed age groups, one could still argue that the results have been affected by the low turnout of participants. Ideally, there would be the same amount of respondents from every age group and country.

Additionally, all questions should have been marked as obligatory, as sometimes questions were accidentally left out or skipped in the survey. However, since the number of people who left out some questions is not significant³⁵, the results have not been affected.

5.2. Ideas for Further Research

In order to verify the findings of this research, they need to be tested in a real-life environment. Only one of the respondents has claimed to have visited a hologram performance in his/her life, which makes the remaining results hypothetical and theoretical. It could very well be that people have a different perception or change their point of view when they actually visit a hologram performance.

Another interesting starting point would be the comparison of the success of hologram performances in different genres. As established in this thesis, it seems far more likely that hologram performances have a higher success rate in pop music than in rock or jazz music.

Additionally, the results could be explored from different angles. Although this thesis limited the analysis of research results, it would be interesting to explore how different age groups perceive hologram performances in the context of familiarity with media technology.

³⁵ Only four questions have been answered by 99% of respondents instead of 100%.

Younger age groups might be more tolerant towards hologram performances because they are more used to developing technology and modern means of entertainment.

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Figures and Images

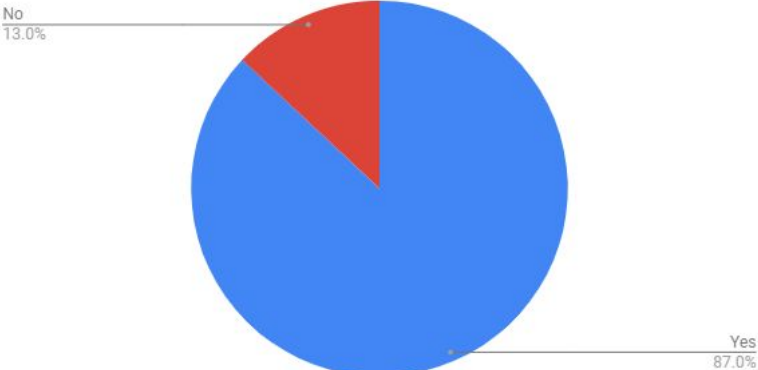
All statistical figures have been created with the analysis tool of Google Forms.

All images have been found on the web as stated in the corresponding footnotes.

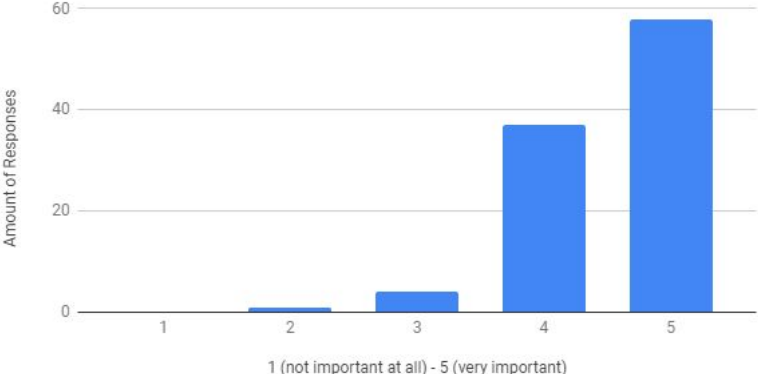
Appendix

I) Other Survey Outcomes

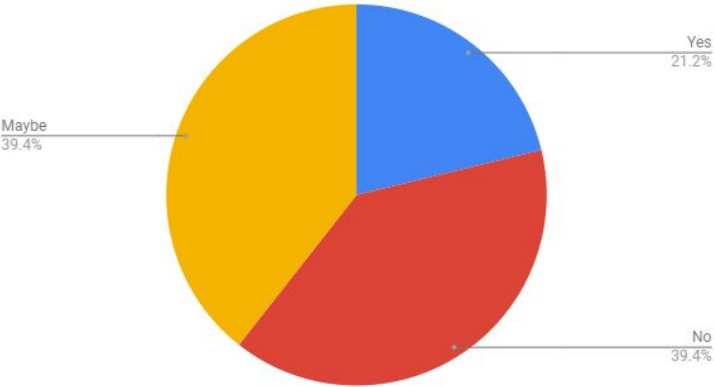
Did you ever have the chance to see (one of) your favorite artist(s)/band(s) live?



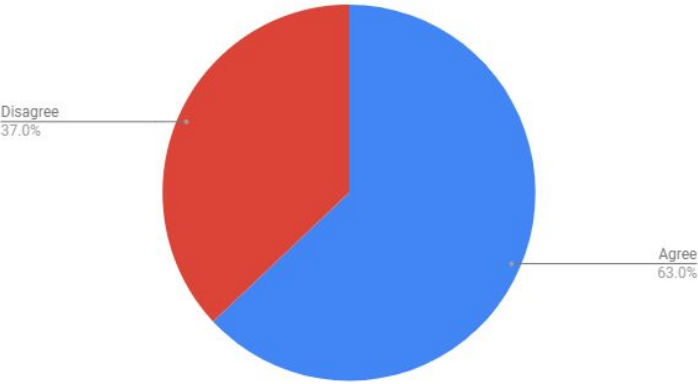
How important do you think the audience is for live performances?



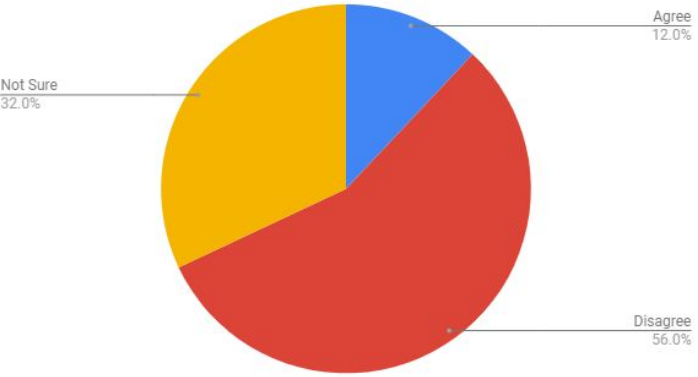
Would you be interested in going to a hologram concert?



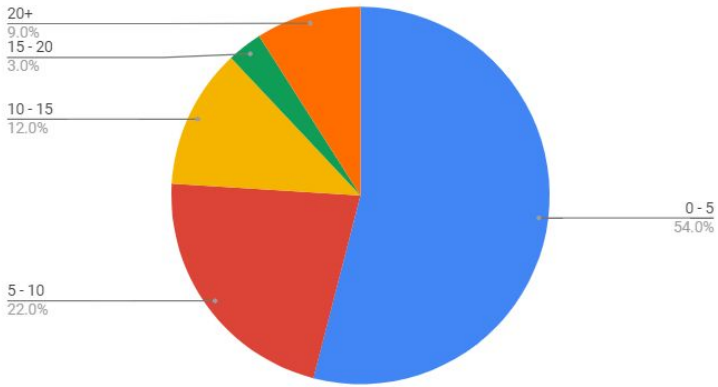
Holograms are a nice tribute to deceased or retired musicians



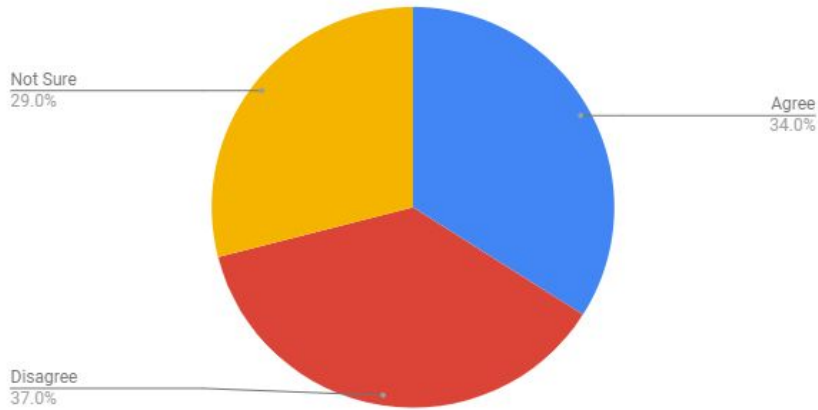
Holograms are immoral



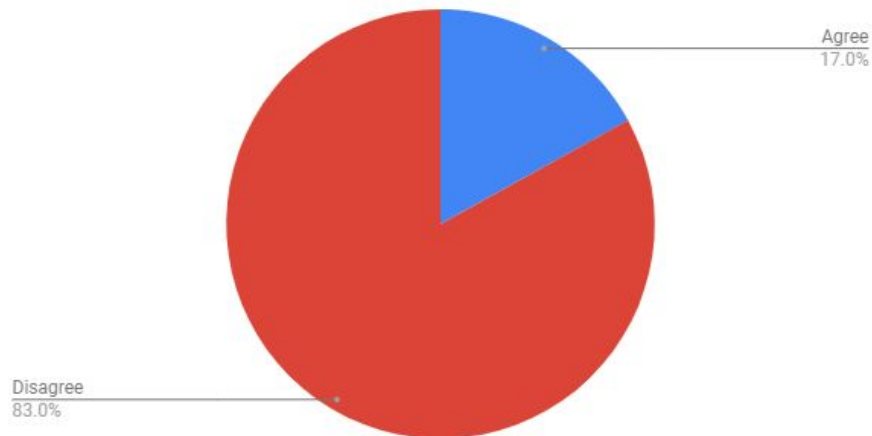
Concert Visits in the Past Year



Hologram performances offer great opportunities for live music



It is not about who/what does the performance. As long as the music is there, the "right vibes" are there



II) Survey Comments by Respondents

a) Feel free to briefly share your opinion about holograms in rock music

“Rock was always about authenticity and sticking it to "the man". Holograms feel commercial and not genuine”

“I guess it's somehow less cool of a show, as the "real" artist is not around. But that happens in rock music more often than not, for instance when a drummer gets replaced etc.”

“Hologramme sind eine großartige chance großartige künstler und ihr werk "weiterleben" zu lassen. Man sollte da nicht unbedingt an das kommerzielle denken. Für Fans muss es einfach toll sein, einen genialen Künstler noch einmal mehr oder weniger live zu erleben, obwohl er keine Chance mehr dazu hat. Wer es nicht mag, braucht ja nicht hinzugehen ;)”

“I haven't heard of holograms in rock music before that's why I don't have a well-founded opinion. But my first impression is completely negative.”

“I think a public event using holograms will be experienced as something just fun to see once; a sort of gimmick. For tributes this might be different and might actually be really successful. What I think would be most successful is when you bring hologram technology to the home. So you can experience your favourite band playing in your own living room. Also I think hologram technology needs to be more advanced and maybe incorporate AI to create more natural movements of the models and implement some interactivity.”

“Useless, boring. Could go to a (3D) cinema instead...”

“I think it is the next step from artists that lip synch and focus more on a choreographed performance, a depiction of famous artist as hologram and a collection of hits being played. Also if used a little more creative than just copy performances a nice addition to live entertainment.”

“As the core of the performance i dislike it a lot except for bands like the gorillaz. However holograms can be great for extra dressing for the show or used as alternatives for normal screens at bigger shows (instead of a big tv, you project a live hologram of whats happening on stage but larger or closer to crowds in the back.”

“Not a fan”

“Holograms are just a symptom of the dying genre. They are for intellectually challenged sheep who don't see the end of their own bodily autonomy in the future.”

“I would never pay money to see a hologram of an artist , I will save the money and watch a DVD of the artist on youtube or dvd instead”

“Hologram performances are an exploitative passing fad.”

“Good way to do Tribute Concerts. But somehow it's awkward to see a performance set up already, so the interaction with the audience will not be spontaneous.”

“Fuck that shit!”

“They're bizarre and morbid.”

“I don't think it will become that popular, and i dont think its a good idea unless the person is deceased They work well if the artist is deceased, however if the artist is alive and well, they should perform instead of having a hologram.”

“Holograms may be useful when a member of the band is dead or sick, but they do not provide the same experience a live concert would give”

“I really don't like it, it ruins the ambiance.”

“If they are good enough with good technology could be a nice thing actually”

“It doesn't seem enough realistic to me”

“Good for those artists who are no longer around, but should not replace existing artists”

“I think something interesting and artsy could be done work them. But not at substitute for artists that people expect to see live”

“Holograms could brought back artist and older music that none less could be experiences anymore and spread that music to new generations.”

“Great idea if deceased or great idea if big artist and cannot afford to see the artist themselves play live”

“I think they are commercial, and the "spirit" of rock gets lost. We say that artists are legends, sometimes because they are dead. If there is no real being dead anymore and if performances go on and on, where is the magic?”

“Good times let's not go too far!”

“These particular examples don't seem to take advantage of the possibilities of the technology. They are following a rather realist approach. Hologram technology seems more appealing to me if it employs a less realist way of employing the technology.”

“If Linkin Park would do a hologram show i would Go and Watch it. Of course it wouldnt bring back Chester But it would bring back the memories, so i would give it a Chance.”

“I think it's a nice addition, as long as hey won't replace actual performances.”

“The hologram looked (literally) a bit far away, which would be slightly immersion-breaking”

“Can protect the artist from psycho obsessed fans”

“Cool”

“It does not seem energetic and interaction with crowd is low so may be very boring to watch. Might be useful if it was only to pay tribute to the singer that died but only on special anniversary not at every concert”

“Would prefer to see real artist than hologram.. But if hologram live concerts are cheaper, why not”

“I would never go on concert like this.. you know it is fake and the experience is not the same”

“Nil”

“I may as well watch it on YouTube”

“You don't feel that connection with the artist”

“I guess they could be interesting as tributes to deceased stars. At one point, perhaps with AI and VR it would be next to impossible to tell the difference. But they should not take away from new, upcoming artists or current artist's possibilities.”

“Ich kann dem nichts abgewinnen. Es ist für mich nicht authentisch und live, da ja ein wesentlicher Teil vom Band kommt. Für mich müssen Live-Auftritte auch wirklich live sein und die Musiker leibhaftig auf der Bühne stehen bzw. ihre Instrumente spielen.”

“Braucht kein Mensch”

“Ganz ok”

“Eine schwachsinnige Idee.”

“Hologramme bieten eine gute Unterhaltungsmöglichkeit. Ersetzen aber nicht den Live Auftritt eines Künstlers”

“Kann ein zusätzliches Element von Livauftritten sein.”

“Sind unreal - unterschiedliche Wahrnehmung gegenüber „live“ Musik - „Täuschung“, aber offensichtlich. So viel Seele, Ei und Herz wie ein Künstler live rüber bringen kann ? Das schafft kein Hologramm Ist bisschen unpersönlich”

b) Do you think a hologram performance lacks something that a "real" live performance has? What is it?

“Soul”

“Interaction”

“Interaction with fans”

“Personality. But artists being artists anyway it's show anyways.”

“Spontanität ... ein Hologramm hat keinen Bezug auf die Gegenwart.”

“Yes, I think there might be a lack of interaction between the musician and the audience. In addition I presume that concerts won't be unique anymore.”

“Live interaction between musicians and audience. Also: small flaws, technical mishaps, strange fun happenings, forgotten lyrics, broken strings, funny or concerned anecdotes”

“A hologram performance, in the sense that it's recorded beforehand, lacks the spontaneity from the artist that is portrayed both in terms of singing/playing and interaction with the audience. While the videos above show that interaction is still certainly possible and also show the importance of audience (participation), even the idea that there is no 'intent' on the side of the artist makes a hologram performance feel 'off'.”

“Yes, interaction and reality, it is a recording (with a little more)”

“Interaction with the crowd, improvisation and uniqueness”

“Connection between the performance and the crowd. No exchange of energy. Instead of an active relationship between crowd and artist, the crowd becomes a passive observer to a preprogrammed show.“

“A fine alternative for live recordings, but not for actual live shows”

“It lacks everything that a live performance has.”

“A real human being. Integrity. It's a shameless cashgrab. It's someone hitting "play." Don't infer that it is a live performance.”

“yes of course it does, it lacks human interaction”

“It's not a real performance by a living human!”

“Interaction with the audience and small breaks between the Songs”

“Yes, I think the closeness to the artist and unpredictable/nature of the communication between artist and audience is missing”

“The presence and the "soul" of the actual artist.”

“A hologram doesn't spontaneously interact with the crowd”

“Genuine interaction and responding to what is going on; interplay with the band members”

“yes, the interaction with the audience, without any there is no point to watching it live.”

“Yes, not as full of an experience as compared to the actual artist performing.”

“Seems very unrealistic”

“Yes. Authenticity”

“I believe there is not the same connection you would have with a live performer.”

“Presence on stage and bond with audience”

“can it respond to real actions? it can't take photos with the fans maybe”

“yes, interaction with audience”

“Yes the connection with the fans”

“It being real”

“Live performance”

“Reality”

“Presence of the artist is a but different, also doing so only to commercial exploit is not good.”

“Interaction with the audience, spontaneity”

“Audience interaction”

“Authenticity and live-ness”

“Your scare quotes here don't work for me. They blur the clarity of what you're trying to ask. They imply we should be cautious labelling these performances "less real" or "non-real" but also assume we don't quite believe that and do

separate these performances from a more authentic form of performance. Every performance lacks and possesses something(s) other performances have (and vice versa). These two performances lack a present living lead singer but they have a holographic one. Other performances lack a holographic lead singer and have a present living one. In terms of my personal preferences, as I stated earlier, I would find these two performances more interesting if they employed a less realist way of employing the holographic technology.”

“Even if the hologram is good you still know it’s Not the real Artist.”

“Yes, the closeness to the real artist”

“Realism”

“The actual presence of a 'favorite' artist”

“You're aware that the hologram can't acknowledge your presence as an audience member artists will not be able to react to tge audience immediately”

“Not the same immersion level”

“Energy. deviation from songs”

“When I pay for a concert, I want to have the "real" experience. The interaction with the audience, the possibility of mistakes, the feeling that the artist cares about their fans.”

“Yes, authenticity”

“The real connection and interaction”

“Yes it does, it is missing the real Artist and the feel of a live performance”

“live and spontaneous interaction”

“It just feels fake”

“Connection”

“Definitely. An artificial rendition, no matter how realistic, is no substitute for the real deal.”

“Yeah it does seem a bit fake. But if the artist is deceased and the rest of the band and the family agrees with it, I see nothing wrong.”

“Spontanität, Einzigartigkeit”

“Authentizität”

“Ja. Interaktion mit dem Publikum und Charakter der Künstler fehlt”

“Einzigartigkeit”

“Die Spontanität zum Publikum”

“Spontane Interaktion mit dem Publikum und der Band. Wenn ich was programmiertes sehen will, geh ich ins Kino.”

“Live Auftritte heißen nicht umsonst "Live" Auftritte. Die Künstler spielen live vor Publikum. Das tun Hologramme nicht.”

“Die Authentizität. Den live Charakter”

“Interaktion zwischen Hologramm und Künstler ist nicht (kaum) möglich.”

“Authentizität, Spontaneität, Überraschungsmomente”

“Seele, Ei und Herz”

“Ist nicht mein Fall”

III) The Survey (English and German Edition)

Will Hologram Technology Dominate Live Performances in Rock Music?

Dear People,

This research is conducted as part of my master thesis in the field Applied Musicology at the University of Utrecht. The questions are directed towards people that are involved with the music genre rock (note that the term rock here is defined in a very broad sense, including all sorts of sub-genres). Please answer the questions below carefully and honestly. It will take about 10 minutes to complete this survey. The survey is anonymous and does not require any form of login. Please fill out the form only once.

Research Context:

Nowadays, technology is an inevitable part of our world. It keeps developing rapidly, resulting in new ways of entertainment and simplification of our every day lives. Of course, technology has an influence on live music performances as well. In 2016, the "hologram" of deceased rock legend Ronnie James Dio had its debut at the Wacken festival in Germany, later followed by a world tour. This hologram performance was not the first of its kind, and it will surely not be the last. In the course of this research, I want to find out how hologram performances are perceived by rock audiences in the context of authenticity and performance dynamics. The aim of this research is finding an answer to the question if hologram performances can dominate or even replace live performances in rock music in the future.

* Required

1. Demographic Questions

1. How old are you? *

Mark only one oval.

- 0-18 years
- 18-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65-74 years
- 75+ years

2. Which country are you from? *

2. Live Performances

3. In the last year, how often did you attend concerts/live performances?*Mark only one oval.*

- 0-5
- 5-10
- 10-15
- 15-20
- 20+

4. Are you a fan of rock music? **Mark only one oval.*

- Yes
- No
- More or less

5. How important are live performances for you?*Mark only one oval.*

	1	2	3	4	5	
Not important at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

6. Did you ever have the chance to see (one of) your favorite artist(s)/band(s) live?*Mark only one oval.*

- Yes
- No

7. How important do you think the audience is in live performances?*Mark only one oval.*

	1	2	3	4	5	
Not important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

8. What do you value most during live performances? (Multiple answers possible)*Check all that apply.*

- Being together with other fans
- Spontaneity: Anything can happen on stage
- Uniqueness: No performance will be exactly like the other
- The closeness to the artist(s)
- The interaction between artist(s) and audience
- The live demonstration of technical skills
- Other: _____

3. Holograms

To get an idea about DIO's hologram performances, please watch (part of) the following clips. The vocals stem from recordings of previous live performances, the rest of the band plays live. The bodily movements of Dio are entirely made up and have been created after an image of his "signature" movements. The "hologram" is projected through a 19th century illusion-trick called "Pepper's Ghost".



<http://youtube.com/watch?v=7eiWahgEnFg>



<http://youtube.com/watch?v=ou75pdrXk8s>

9. What is your first impression of these performances?

Mark only one oval.

- Negative Impression
- Neutral
- Positive Impression

10. Have you ever been to a hologram concert?

Mark only one oval.

- Yes
- No

11. Would you be interested in going to a hologram concert?

Mark only one oval.

- Yes
- No
- Maybe

12. A hologram performance that was created by someone else than the artist (with previous vocal recordings and e.g. green screen suit) is still a live performance.

Mark only one oval.

- Agree
- Disagree
- Not sure

13. To me, these performances are authentic rock performances.

Mark only one oval.

- Agree
- Disagree
- Not sure

14. These performances are different from "real" live performances.

Mark only one oval.

- Agree
- Disagree
- Not sure

15. These performances seem more real than watching a performance on a screen.

Mark only one oval.

- Agree
- Disagree

16. The Dio hologram seems cold and distant.

Mark only one oval.

- Agree
 Disagree

4. Your Personal Opinion

Opinions are split when it comes to hologram performances. For some it is a great opportunity, for others it is immoral. This section is about your personal opinion regarding hologram performances. Please bear in mind that this survey only focuses on the genre rock.

17. Holograms are a nice tribute to deceased or retired musicians.

Mark only one oval.

- Agree
 Disagree

18. Holograms commercially exploit the artist.

Mark only one oval.

- Agree
 Disagree
 Not sure

19. Holograms commercially exploit the audience.

Mark only one oval.

- Agree
 Disagree
 Not sure

20. Holograms are immoral.

Mark only one oval.

- Agree
 Disagree
 Not sure

21. Hologram performances are awkward.

Mark only one oval.

- Agree
 Disagree
 Not sure

22. Holograms threaten "real" live performances.*Mark only one oval.*

- Agree
 Disagree
 Not sure

23. Holograms might replace "real" live performances one day.*Mark only one oval.*

- Agree
 Disagree

24. Hologram performances offer great opportunities for live music.*Mark only one oval.*

- Agree
 Disagree
 Not sure

25. I don't care if I see the real artist or a hologram of him/her. It doesn't make a difference.*Mark only one oval.*

- Agree
 Disagree

26. Feel free to briefly share your opinion about holograms in rock music:

27. Do you think a hologram performance lacks something that a "real" live performance has? What is it?

28. It is not about who/what does the performance. As long as the music is there, the "right vibes" are there.*Mark only one oval.*

- Agree
 Disagree

29. **A hologram of a deceased rock artist is authentic to me.**

Mark only one oval.

- Agree
 Disagree
 Not sure

30. **A hologram of an alive rock artist is authentic to me.**

Mark only one oval.

- Agree
 Disagree
 Nor sure

5. Hypothetical Questions

In this section you will read a number of hypothetical situations. Please reflect on them and answer the following questions.

31. **Think about a musician you like who has passed away. Would you go to a hologram performance of that musician?**

Mark only one oval.

- Yes
 No

32. **Think about a musician you like who has passed away. How much would you spend on a ticket to see a high quality hologram performance of that musician?**

Mark only one oval.

- More than the regular ticket price, since there is no way in seeing that artist perform live anymore
 The regular ticket price
 Less than the regular ticket price
 Nothing
 Other: _____

33. **Think about a musician you like who has already retired, or a band that has split up and will not get back together. Would you go to a hologram performance of that musician/band?**

Mark only one oval.

- Yes
 No

34. **Think about a musician you like who has already retired, or a band that has split up and will not get back together. How much would you spend on a ticket to see a high quality hologram performance of that musician?**

Mark only one oval.

- More than the regular ticket price, since there is no way in seeing that artist perform live anymore
- The regular ticket price
- Less than the regular ticket price
- Nothing
- Other: _____

35. **Think about one of your favorite musicians who is still active. Assume he/she brought out a new album, but will not be touring your continent. Assume there are a row of hologram performances prepared for your home country instead. Would you go to one of them?**

Mark only one oval.

- Yes
- No

36. **I think I would feel comfortable to clap, sing, dance, shout, etc. during a hologram performance.**

Mark only one oval.

- Yes
- No
- Maybe

37. **Hologram performances could be the end of cover bands.**

Mark only one oval.

- Agree
- Disagree

38. **Think about a musician you like that has passed away. Which scenario would you prefer?**

Mark only one oval.

- Going to a hologram performance of that musician
- Going to a high quality coverband performance
- Not sure

Wird Hologramm Technologie Zukünftig Live-Auftritte in der Rock-Szene Dominieren?

Liebe Leute,

Ich führe diese Umfrage als Teil meiner Master Arbeit im Fach Angewandte Musikwissenschaften an der Universität Utrecht durch. Die Fragen sind an Menschen gerichtet, die Teil der Rock-Musik Szene sind (in diesem Zusammenhang ist "Rock" sehr umfassend definiert und beinhaltet sämtliche Unterkategorien). Bitte beantwortet die Fragen gründlich und ehrlich. Es wird etwa 10 Minuten dauern, dieses Formular auszufüllen. Die Umfrage ist anonym und es ist kein Login erforderlich. Bitte füllt die Umfrage nur einmal aus.

Kontext:

Heutzutage ist Technologie ein unvermeidbarer Teil unserer Welt. Sie entwickelt sich in schnellem Tempo weiter, bringt stets neue Formen der Unterhaltung hervor und vereinfacht unser alltägliches Leben. Technologie ist überall, selbstverständlich beeinflusst sie auch Live-Auftritte in der Musikwelt. In 2016 trat das "Hologramm" der verstorbenen Rock-Legende Ronnie James Dio zum ersten Mal während des Wacken Festivals in Deutschland auf. Später tourte die Band sogar mit dem Hologramm zusammen um die Welt. Dieser Hologramm-Auftritt war nicht der erste seiner Art - und wird sicherlich nicht der Letzte gewesen sein. Im Laufe dieser Umfrage möchte ich herausfinden, wie Hologramm-Auftritte von Rock-Fans im Kontext von Authentizität und Auftritt-Dynamik aufgenommen werden. Ziel dieser Umfrage ist es, die Antwort auf die Frage "Können Hologramm-Auftritte Live-Auftritte in der Rock-Szene in Zukunft dominieren oder gar ersetzen?" zu finden.

* Required

1. Demographische Fragen

1. Wie alt bist Du? *

Mark only one oval.

- 0-18 Jahre
- 18-24 Jahre
- 25-34 Jahre
- 35-44 Jahre
- 45-54 Jahre
- 55-64 Jahre
- 65-74 Jahre
- 75+ Jahre

2. Aus welchem Land kommst Du? *

2. Live-Auftritte

3. Wie viele Konzerte hast Du im vergangenen Jahr besucht?*Mark only one oval.*

- 0-5
- 5-10
- 10-15
- 15-20
- 20+

4. Bist Du ein Rock-Musik-Fan? **Mark only one oval.*

- Ja
- Nein
- Mehr oder weniger

5. Wie wichtig sind Live-Auftritte für Dich?*Mark only one oval.*

	1	2	3	4	5	
Überhaupt nicht wichtig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sehr wichtig

6. Hattest Du je die Chance, eine/n deiner Lieblingsmusiker/innen live zu sehen?*Mark only one oval.*

- Ja
- Nein

7. Wie wichtig ist deiner Meinung nach das Publikum für einen Live-Auftritt?*Mark only one oval.*

	1	2	3	4	5	
Gar nicht wichtig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sehr wichtig

8. Was ist Dir bei Live-Auftritten am wichtigsten? (Mehrere Antworten möglich)*Check all that apply.*

- Mit anderen Fans zusammen zu sein
- Spontaneität: Alles kann auf der Bühne passieren
- Einzigartigkeit: Kein Auftritt wird je wie der andere sein
- Die Nähe zum Künstler
- Die Interaktion zwischen Künstler und Publikum
- Die Live-Demonstration von musikalischen und technischen Fähigkeiten
- Other: _____

3. Hologramme

Bitte sieh Dir (teilweise) die folgenden Videos an, um eine Idee von DIO's Hologramm-Auftritten zu bekommen. Der Gesang wurde während früherer Live-Auftritte aufgenommen, der Rest der Band spielt live. Die Bewegungen des Hologramms wurden komplett erfunden und sind Dio's typischen Bewegungen und Gesten nachempfunden. Das "Hologramm" wird durch einen einfachen Trick aus dem 19. Jhd. namens "Pepper's Ghost" projiziert.



<http://youtube.com/watch?v=7eiWahgEnFg>



<http://youtube.com/watch?v=ou75pdrXk8s>

9. Wie ist Dein erster Eindruck dieser Auftritte?*Mark only one oval.*

- Negativ
- Neutral
- Positiv

10. Warst Du jemals bei einem Hologramm-Konzert?*Mark only one oval.*

- Ja
- Nein

11. Wärest Du interessiert, ein Hologramm-Konzert zu besuchen?*Mark only one oval.*

- Ja
- Nein
- Vielleicht

12. Ein Hologramm-Auftritt, der nicht vom Künstler selbst kreiert wurde (z.B. mit Green-Screen-Suit und aufgenommenem Gesang), ist immernoch ein Live-Auftritt.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

13. Für mich sind diese Auftritte authentische Rock-Auftritte.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

14. Diese Auftritte unterscheiden sich von "richtigen" Live-Auftritten.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

15. Diese Auftritte scheinen realer als ein Live-Auftritt auf einem Fernseh-Bildschirm.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu

16. Das Dio-Hologramm wirkt kalt und distanziert.

Mark only one oval.

- Stimme zu
- Stimme nicht zu

4. Deine eigene Meinung

Natürlich sind die Meinungen unter Fans gespalten, wenn es um Hologramm-Auftritte geht. Einige halten sie für eine großartige Innovation, andere finden sie unmoralisch. Dieser Abschnitt der Umfrage behandelt Deine persönliche Meinung zu Hologramm-Auftritten. Bitte denke daran, dass es hier um das Genre Rock-Musik geht.

17. Hologramme sind eine tolle Möglichkeit, verstorbenen Musikern oder Musikern im Ruhestand Tribut zu zollen.

Mark only one oval.

- Stimme zu
- Stimme nicht zu

18. Hologramme beuten den Künstler kommerziell aus.

Mark only one oval.

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

19. Hologramme beuten die Fans kommerziell aus.

Mark only one oval.

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

20. Hologramme sind unmoralisch.

Mark only one oval.

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

21. Hologramm-Auftritte sind unbehaglich/seltsam.

Mark only one oval.

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

22. Hologramme bedrohen "echte" Live-Auftritte.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

23. Hologramme könnten eines Tages "echte" Live-Auftritte ersetzen.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu

24. Hologramme bieten großartige Möglichkeiten für Live-Musik.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

25. Mir ist egal, ob ich den echten Künstler oder ein Hologramm von ihm/ihr sehe. Es macht keinen Unterschied.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu

26. Hier kannst Du Deine persönliche Meinung zu Hologrammen teilen.

27. Denkst Du, dass Hologramm-Auftritten etwas fehlt, das "echte" Live-Auftritte sehr wohl besitzen? Was ist es?

28. Es geht nicht darum, wer oder was auf der Bühne steht. Solange die Musik da ist, ist die richtige Stimmung da.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu

29. Ein Hologramm eines verstorbenen Musikers ist authentisch.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

30. Ein Hologramm eines lebenden Musikers ist authentisch.*Mark only one oval.*

- Stimme zu
- Stimme nicht zu
- Ich weiß nicht

5. Hypothetische Fragen

In diesem Teil der Umfrage wirst Du einige hypothetische Szenarien lesen. Bitte reflektiere gründlich über diese Szenarien und beantworte die folgenden Fragen.

31. Denke an einen Musiker, den Du magst und der verstorben ist. Würdest Du zu einem Hologramm-Konzert dieses Musikers gehen?*Mark only one oval.*

- Ja
- Nein

32. Denke an einen Musiker, den Du magst und der verstorben ist. Welchen Preis würdest Du für ein Ticket für ein Hologramm-Konzert dieses Musikers zahlen?*Mark only one oval.*

- Mehr als den regulären Ticket-Preis, da es keine Möglichkeit mehr gibt, diesen Musiker live zu sehen
- Ungefähr den regulären Ticket-Preis
- Weniger als den regulären Ticket-Preis
- Nichts
- Other: _____

33. Denke an Musiker/eine Band, die Du magst und die bereits im Ruhestand sind/kein Comeback planen. Würdest Du zu einem Hologramm-Konzert dieser Musiker/Band gehen?*Mark only one oval.*

- Ja
- Nein

34. **Denke an Musiker/eine Band, die Du magst und die bereits im Ruhestand sind/kein Comeback planen. Welchen Preis würdest Du für ein Ticket für ein Hologramm-Konzert dieser Musiker zahlen?**

Mark only one oval.

- Mehr als den regulären Ticket-Preis, da es keine Möglichkeit mehr gibt, diesen Musiker live zu sehen
- Ungefähr den regulären Ticket-Preis
- Weniger als den regulären Ticket-Preis
- Nichts
- Other: _____

35. **Denke an einen Musiker, den Du magst und der noch immer aktiv ist. Nimm an, dass dieser Musiker ein neues Album veröffentlicht hat, aber nicht in Deinem Kontinent touren wird. Nimm an, dass stattdessen eine Reihe von Hologramm-Auftritten für Dein Heimatland geplant sind. Würdest Du zu einem dieser Auftritte gehen?**

Mark only one oval.

- Ja
- Nein

36. **Ich denke, dass ich mich wohl fühlen würde, während eines Hologramm-Auftrittes zu klatschen, singen, tanzen, rufen, etc.**

Mark only one oval.

- Ja
- Nein
- Vielleicht

37. **Hologramm-Auftritte könnten das Ende von Cover-Bands sein.**

Mark only one oval.

- Stimme zu
- Stimme nicht zu

38. **Denke an einen verstorbenen Lieblingsmusiker/Band. Welches Szenario wäre Dir lieber?**

Mark only one oval.

- Einen Hologramm-Auftritt dieses Musikers/Band zu sehen
- Einen guten Cover-Auftritt dieses Musikers/Band zu sehen
- Ich weiß nicht