Why do people stop playing games, and how can we change that?

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INTRODUCTION

The idea for this project came to us after listening to a talk by Brie Code, aptly titled “Video Games are Boring” [[2]}. In it, she shares her examination of an interesting facet of her life: Brie is a video game developer, but her friends don’t like video games. That seemed peculiar to her: Movies, Books and other media, in contrast, held more or less universal appeal. A problem she identifies is that games are made mainly by people who already enjoy and play existing games, and not often create outside of a narrow set of expectations. They (consciously or not) prioritize their interests over other (potential) audiences.

As gamers ourselves, we want to find out how to make this hobby more appealing to a wider audience. It is a hobby we like, and we want to share it with our friends. We acknowledge that this question has a strong political component, especially since GamerGate and similar campaigns tried to cement the image of the gamer as a white, heterosexual, affluent man. Vicious attacks against people who do not fit these criteria were carried out in order to keep them out of the community. This means that advocacy and community management play a huge role in making gaming more accessible. In this study, however, we will focus on factors that are part of the games themselves; the needs addressed, mechanics used, and others, which are in- and excluding factors and reveal assumptions about the imagined audience.

METHODS

Digital ethnography

From the very start of the research, we began to collect the information on the topic using the digital ethnography approach. This method was chosen as preemptive, in order to gather ideas as a starting point for other methods and explore the problem space. This method involves the collection of information in the digital space, namely blogs, forums, news, videos and comment sections. [1] The most relevant were often found in forum threads.

During the research, we searched for suitable sources using search queries like "games are boring", "do not like video games anymore", "loose appeal games" and similar. During the study, more than 40 sources were found, with 30 comments on average each.

With this approach, it is possible to obtain the opinions of a large number of people from different cultures and with various background in a short period of time and it is not difficult to prepare such data for further analysis.

Autoethnography

In the beginning of the project, we wanted to reflect on our own gaming habits. This served two main purposes. On the one hand, it could inform further research design, inspire interview questions and the like. On the other hand, we wanted to be aware of our motives for playing games so we don’t push them on our participants. To achieve this, we kept track of our gaming habits over the course of a few weeks. We tried to take notice of how much we played, when, what and why. When the same motivations and games kept repeating, we stopped. As this step was primarily for self-reflection, it was not formally analyzed.

Interviews

A good chunk of our data was generated by doing semi-structured interviews. These filled an important niche regarding depth and number of participants. While it was impossible to reach as many people as with a survey or by doing ethnography, we could engage with each participant in more depth. On the flipside, they were more lightweight than probes or similar methods that collect data over a long period of time. Additionally, in comparison to probes, we could ask more specific and detailed questions in interviews, where the probes were more effective in engaging participants’ creativity. [5]

We conducted nine interviews, and they were between 30 and 60 minutes in length. Depending on the contact to the participants, there were one or two researchers present. The interviews were conducted in a language of the participants choice, which in practice meant German and Russian. Each interview was or will be conducted, transcribed and analyzed by a researcher proficient in the language spoken. The results of the analysis and illustrative quotes were or will be translated into English.

Participants were recruited through our social networks (online as well as offline). They were friends, friends of friends, acquaintances from university, neighbors and the like. This approach suggested itself, as some of the researchers had discussed the topic with their friends before. Additionally, we recruited through online social networks

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like Facebook; and asked participants if they knew anyone who could be interested. Our specific research question posed an unexpected challenge for recruitment: It proved hard to find people who are explicitly *not* part of a specific group. Often, we got responses from people who didn't consider themselves to be playing a lot of video games, but were clearly outside of our target audience, playing multiple hours every week.

The interviews were conducted at places chosen by our participants. We tried to establish a friendly and colloquial atmosphere, since our participants were also students. Because of this shared background, it was easy and quick to set up the dates and locations, a week in advance was often enough to schedule an interview. The interviews were recorded with our smartphones, and the recordings shared through a private server to protect participants' privacy.

Unfortunately, due to time constraints, two interviews had to be cancelled. The additional interviews would have been impossible to transcribe and analyze, and we decided it was better not to waste anyone's time.

Survey

We conducted an online survey to find out about contradicting trends and opinions in interviews, as well as inform about more widespread opinions and beliefs about games, from non-gamers. It was conducted as a self-hosted Lime-survey, to circumvent the issue of a third party potentially having access to the data. The recruiting was done by spreading the survey on our personal facebook pages, encouraging sharing, and posting it on select communities.

The survey started out with some demographic questions, inquiring about gender and age (to be answered in brackets to avoid giving away personally identifying information), and then continued to ask about their history with gaming (age and available platforms) and current habits. Then, it moved on to asking about various aspects of games, ranking them by perceived importance, and concrete reasons for not playing games more often. Another section was dedicated to describe their use of other media and unaddressed needs in daily life. Finally, a free text allowed them to give personal suggestions on how to make games more interesting.

After designing the initial set of questions, a pilot study was done with select candidates. This process made a few issues apparent, such as unclear questions and vocabulary; it also exposed a flaw in logic, as participants that often played games would still be asked about why they weren't playing games often. Fixing this turned out to be important, as a considerable portion of participants turned out to be gamers.

We had a few goals. We wanted to find tendencies of non-gamers, both in regard to thoughts and experiences about games, as well as other media and leisure time activities. We hoped to find common beliefs, and perhaps misconceptions, about games, and concrete reasons for not playing them more often. Information about other hobbies and needs was also sought, exploring the space available in people's lives, their needs, and potentially identify common unaddressed needs (that games could address).

Based on the interviews, there were some conflicting perspectives on video-games from non-gamers. One example of this is the perception of challenge, commonly suspected as a barrier of entry. In our interviews we received responses covering the whole spectrum, some participants stating that failure to do something is a big incentive to practice and improve, others state losing interest, some would also get angry. Another topic of interest is the level of activity while gaming. This topic arose during some interviews, and while there was a tendency towards gaming being perceived as a deliberate activity that demands concentration, further exploration of opinions on that topic were deemed necessary. Finding trends and the most common opinion about these topics among non-gamers was one goal of the survey.

One last goal of the survey was to discover correlations between various factors. Sadly, the sample size was not enough to make statistically meaningful distinctions; with only 35 participants fully completing the survey, testing for hypothesis was not reasonable. However, a different opportunity became evident through the responses of apparent gamers. This suggested a comparison of habits between gamers and non-gamers, allowing the isolation of gamer/non-gamer-specific patterns. We hope that focusing on these allows us to better understand the difference in needs, and shortcomings of many current games for non-gamers.

Design Probes

Design Probes, as invented by Bill Gaver [3], were a perfect fit for our research question. Instead of being a method to collect data for analysis, the aim of design probes is to inspire the design of an artifact [4]. Rather than directly asking questions like in an interview, design probes aim to be playful and engage participants' creativity. To this end, participants are given an envelope full of material and activities, and are asked to complete the activities and return everything after a time. It is crucial to design the probes to be appropriate to the task at hand. [6]

In our case, the probe materials consisted of a partially filled-out notebook and a few markers and stickers. Our participants should play games, and record their experiences in the notebooks. To facilitate creative responses, the notebooks included sections on how to draw and make screenshots in games. Practical instructions on how to get games to play were also included. To give the notebooks a more personal touch, they were handwritten and illustrated by creatively competent members of our research group. We were aiming for a personal and sketch-like quality, inspired by Mike Rohde's sketch notes. [10]

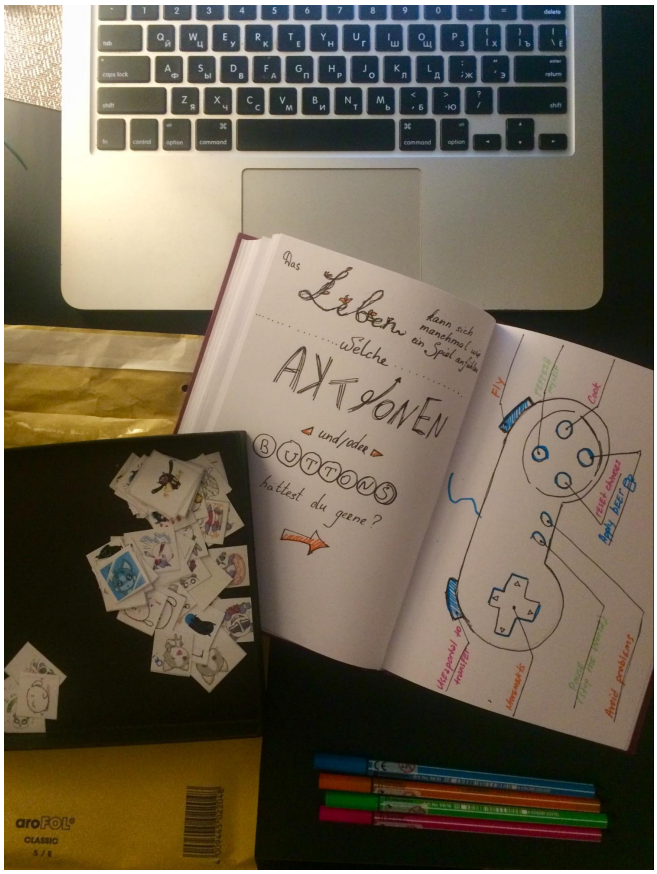

Figure 1. Probe materials

It was important for us to include a variety of activities for participants to choose from. There were straight-forward ones, like asking the participants to note their experiences playing different games. The traditional one-way camera was replaced by a few activities that instructed participants to take screenshots. We tried to keep the screenshot instructions abstract, asking for things such as "beauty" or "fun".

Most of the activities had the goal of inspiring game design ideas. These were a bit more creative and open than the previous ones. One of these instructed the participants to draw a game character they would like to play. Another one asked them for video game actions they would like to have in real life. The third activity in this category asked participants to set a challenge for themselves, and then record the process of meeting it. Finally, there was a more abstract activity, which had participants write down songs they associated with games.

Designing and preparing the probes was very time-intensive, but it was a very fun and interesting process. The effort paid off, as the participants really appreciated it, and responded very thoughtfully and creatively in turn. Participants were recruited through our social networks, as for the interviews. The probes were delivered and picked up personally, to allow for questions and feedback. One probe is still scheduled to return, because the participant asked for more time. It will be used in possible follow-up projects.

ANALYSIS

Our qualitative data will be analyzed using Qualitative Content Analysis (QCA), as described by Philipp Mayring [7]. QCA is tool for analyzing qualitative data, such as interviews or ethnographic documents. It aims to make the process of analysis accountable by introducing a handful of techniques with clear rules and steps. Additional emphasis is put on being explicit about sources of information and including frequent steps of reflection.

In this research project, we will use QCA to analyze the data gathered in interviews and digital ethnography. Specifically, we will use Inductive Category Formation. This is a technique to create a system of categories from a given text. So instead of assuming a predefined set of answers and identifying *where* and *how often* they appear, we primarily want to find out *which* answers to our questions appear. Location and quantity will of course also be noted, but our data set is not large enough to do any kind of meaningful quantitative analysis. This effort will be supported by QCAmap, which is an online tool specifically designed to support this framework of analysis. [8]

An important point for us is to use our participants' own words to describe their experiences. In doing so, we want to minimize the influence our preconceptions have on the results of analysis. That means that in practice, we will try to use phrases found in the text to name and

illustrate the categories we find. Since our interviews were not held in English, this means we have to translate the phrases we want to use here. We hope that most of the meaning is preserved despite this, and think it's still preferable to inventing names and examples on our own.

Since we didn't get enough responses, we couldn't do a statistical, quantitative analysis of our survey data. Nonetheless, we examined the data and took note of a few interesting trends.

FINDINGS

Unfortunately, we experienced some scheduling troubles due to poor planning and sickness of researchers. That prevented us from analyzing the material as well as we'd liked. We still got quite a few useful insights, as detailed below.

Preferences and Obstacles

Our participants all had in common that they currently weren't playing videogames often. Some used to play a lot, but stopped due to time constraints, others grew out of it (Paula, Elise). Paula and Agathe were encouraged by others to try videogames again, more recently (but outside of this study). Through those experiences, they were able to describe very recent opinions and feelings about the issue.

A common occurrence was the introduction to gaming by siblings and relatives. Paula stated that her first encounters were by the brother's gameboy, which would lead her to later on play Nintendogs and Animal Crossing on her Nintendo DS, Elise also used to play games on handheld platforms such as the Gameboy, and later on, PSP. Agathe also first saw videogames when watching her cousin play on his gameboy; she badly wanted to try it, too, but he wouldn't let her.

A very common theme was that participants "grew out of" playing games. This was to be expected considering who we tried to recruit. However, we gathered more information on what that meant. Commonly, participants described that other things became more interesting or that they didn't have enough time. Time here meant playing as well as keeping up with which games are available, for example Emile stated that he went back and replayed games from his childhood, but was reluctant to pick up new games. Sometimes, games were seen as frustrating and pointless; Katya remarked that she didn't feel like she had as much perseverance as in childhood. Additionally, she feels less emotional connection to games now, which mirrors Brie Code's discovery that games fail to engage with themes that are interesting to adults. (cite!)

On the topic of challenge and difficulty, we received a wide range of opinions. For Paula, challenge was often perceived as somewhat motivating, stating that she would sometimes start playing alone with the explicit goal of becoming more skillful at a game. The reason behind this was being able to overtake, or at least be equal to, her brother. Additionally, aiming to reach the next level up in role playing games was perceived as a big incentive to keep playing, even though otherwise the game in question didn't hold a lot of appeal to her ("this was actually the only aspect that kept me going"). Agathe explained that while losing a few times was okay, "dying again and again while I'm already trying my best" was very frustrating. However, even if she would make it through a difficult passage, this would commonly cause her to stop playing, as those parts were draining and she didn't want to play through another one. She also said that some challenge was necessary, as a game would be boring otherwise, but at the same time admitted to having no experience with story-focused games. The conclusion for her seems to be that a challenge in videogames is at worst a show stopper, and at best only tolerable. Elise described getting very angry in the past, sometimes even throwing her handheld system.

Comparison of Gamers and Non-Gamers (from Survey Data)

As stated before, we ended up with only 35 full responses out of 59 who opened the survey at all. This eliminates any statistical significance the following observations might otherwise have. We still want to present some patterns and trends that occured within this small sample size, and propose hypothesis for potential future research, as comparing the results of gamers and non-gamers lead to an array of interesting (albeit not generalizable) insights. For the analysis below, the following distinction was made: the sixth survey question asked participants about how often they currently played video games. 9 people responded with "multiple times per week", 1 with "once per week", 7 with "a few times a month" and 18 with "less than once a month". The ones who responded with "multiple times per week" will be referred to as gamers, the others as non-gamers.

The age when first playing video-games was less for gamers (median 4.5 years compared to 8 for non-gamers). Unsurprisingly, there were more gaming platforms available to gamers at some point, the biggest difference being consoles, while many non-gamers still have PCs, smart phones, and to a lesser extent Gameboys. When asked what they associate with games, gamers generally checked off most available options, non-gamers on the other hand only rarely associated gaming with "social activity", "skillfullness", "urge to discover" and "challenge". Gamers seemed to care about graphics a bit less.

To find out about participant's reactions to a challenge, we asked them about how they perceived getting a game-over. Approximately thirty percent of both gamers and non-gamers described it as "a motivating challenge". On the other hand, another thirty percent of non-gamers stated that it was "a reason to stop playing" (while none of the gamers chose this response). The rest found it irrelevant.

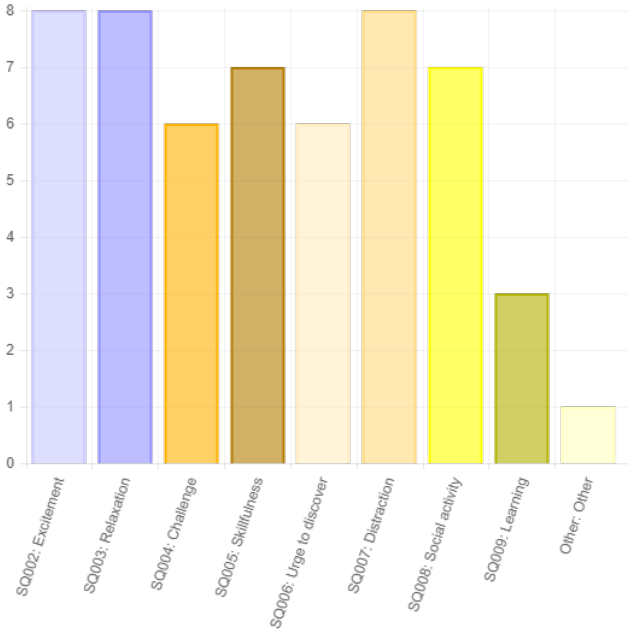

Figure 2. What gamers associate with games

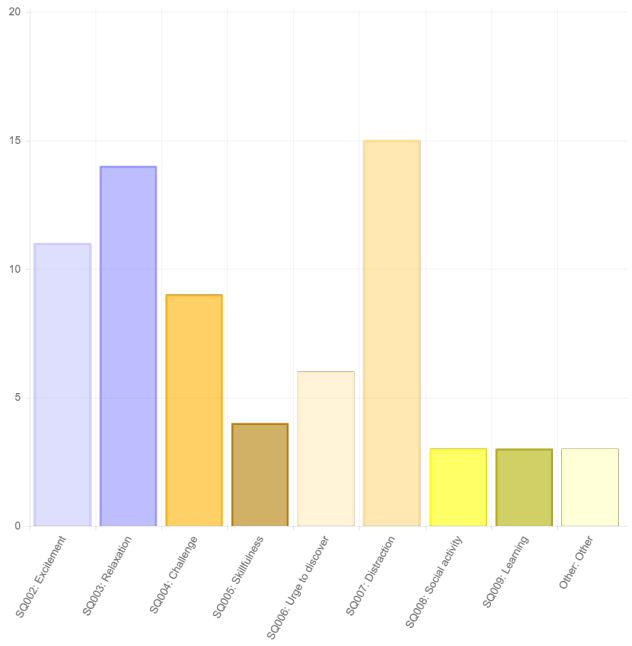

Figure 3. What non-gamers associate with games

When participants were asked why they didn't play games more often (a question only asked for non-gamers), lack of time was one big contender (11 participants agreeing strongly, 8 agreeing somewhat), as well as the option "Games are not interesting" (8 agreeing strongly, 11 somewhat). 9 people (4 of which somewhat) think that games are frustrating, although the majority disagrees to an extent. Games being too childish does not appear to be a big issue, with only 2 participants agreeing fully, and 5 more agreeing somewhat. A few more points that did not appear to have a negative impact for our participants where games being too stressful, too expensive, too cumbersome to start up, or negative experiences with gamers, all of which the majority of participants disagreed with. Two more issues that participants did agree with were not having the hardware (2 fully and 13 somewhat agreeing with this), although it seems likely that this stems from their lack of interest. Finally, 7 strongly and 5 somewhat agreed that playing games does not lead to personal gains. Some also gave interesting manual responses, such as games being "too abstract from the outside world", or encouraging developers to be more creative instead of sticking to the mold.

At one point in the survey, participants were asked to rank various aspects of a game in terms of importance. This was evaluated by weighing the responses according to the ranks (In the table presented below, the rankings were inverted - so the highest ranking aspect is listed as 12, the lowest ranking as 1). Many aspects performed similarly between both groups. However, some key differences do exist, most notable being games as "creative outlet". This achieved the rank 4 of 12 for non-gamers, while only placing on rank 10 for gamers. Roleplaying placed on rank 8 for non-gamers and rank 4 for gamers, distraction at 3 and 7, and characters at 5 and 1. Viewing games as creative outlet could lead to fundamental changes in game design, suggesting different genres and novel approaches to cover a need not commonly addressed in AAA games. Roleplaying being a less prevalent aspect of gaming suggests that non-gamers are looking for less of an escape into a fantasy; distraction on the other hand could potentially imply that non-gamers don't take it as serious.

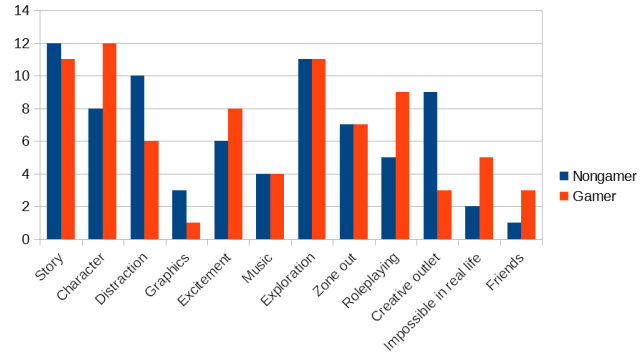

Figure 4. Importance of various aspects judged by gamers and non-gamers

When analysing the common use of other media, only few differences were found between gamers and non-gamers, aside from consistently checking gaming/leaving it unchecked. However, watching TV-series when bored was rather common for non-gamers (73%, 19 of 26), while somewhat rarer for gamers (44%, 4 of 9). Also, non-gamers more commonly use music, books and social media for self expression (53% / 22%, 23% / 11%, 46%/22%). Situations for playing videogames were relatively evenly distributed among gamers, while non-gamers barely thought of it as a social activity (averaging 20% for the other situations but only 8% for social situations).

A question about the level of physical or mental activity during various pastimes, as inspired by interview questions, lead to surprising results. For most media, the rank of activity was judged similarly between gamers and non-gamers (level of activity in descending order: listening to music, reading a book, watching a series, watching a movie). Games however, were judged as the most active by gamers, and the least active by non-gamers. Social media on the other hand was ranked rather high by non-gamers, while it was ranked lowest by gamers.

Finally, when asked about unaddressed needs in their daily life, gamers and non-gamers gave very similar responses. Lack of relaxation is the most common, while opportunities for self expression, creative outlets, and satisfaction of curiosity were also commonly picked.

Implications for design

After conducting the interview and getting the results of Probes, we analyzed Total statements and wishes of non-gamers to existing games. On the basis of these statements and the designed graphic materials, it is possible to create a concept game, which could engage this audience.

In the interview, some participants noted that they would be sympathetic to games in which the protagonists face quite real difficulties and have a similarity with ordinary people, thus reminding the players themselves.

One of the tasks in probes was to create own character, which the participant of the study would like to play. 2 out of 3 participants created characters of human resemblance with a superpower, which shape-appearance changing ability.

Participant number 1 created the concept of the action-adventure game, the main character of which is a creature that plays the role of a spy. The player himself creates a human image of his character (based on wishes, the participants of the research find the process of creating a character exciting and responsible). The game involves the espionage missions, the success of which depends on the produced transformation and the ability to adapt to external circumstances. (Figure 5)

Participant number 2 has created a concept of a platform game, the main character of which is the magician. Depending on the specific nature of the task, he can change appearance into non-living objects. (Figure 6)

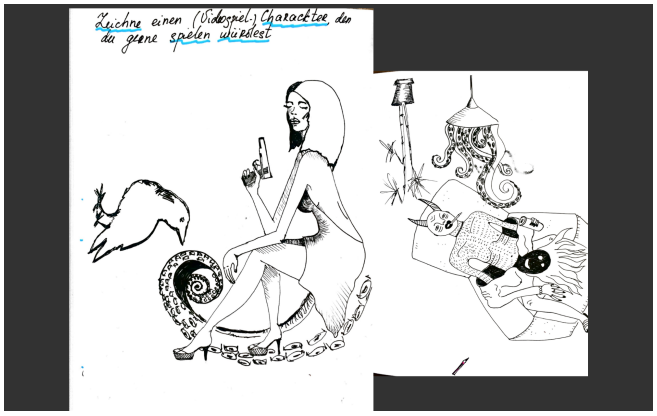

Figure 5. A shapeshifting spy

CONCLUSIONS AND FUTURE WORK

While not all went according to plan, we still learned a lot. The amount of time it takes to transcribe and analyze all the collected data took us by surprise. Combined with unlucky circumstances, this put us in a bit of time pressure. This is something we will take more seriously in future work.

An interesting follow-up project would be to take the inspiration and data gathered here, and actually implement one (or a few) game prototypes based on that. It would be very interesting indeed to see if those would be interesting to people who feel alienated by the currently available games. This is something a few of our researchers are interested in doing, so stay tuned!

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Additionally, we'd like to thank our participants. We learned a lot from this project, both about conducting research and the topic itself. That wouldn't have been possible without our participants' generous contribution of their time and thoughts.

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Figure 6. A shapeshifting wizard

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