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EFFECTS OF COMMUNITY & GENRE ON INDIE GAME PRODUCTION

A case study of the retro-inspired First-Person Shooter scene

ABSTRACT

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The goal of this thesis is to examine the effects of community and genre on indie game production. This was done by conducting an exploratory study into the retro style First-Person Shooter scene, which has seen notable growth in the last two years. The goal is to discover how working within an active scene and a well understood genre impacts the developers' game production process. Production process was defined broadly so as to include not only the development of the game, but also the facilitating factors such as promotion and learning.

The research was done by using a qualitative methodology. Background research was done into several of the most relevant topics, which formed the basis for a set of semi-structured interviews with the developers of retro style First-Person-Shooters. These interviews were then analysed through thematic analysis, which formed the basis of this research's findings.

The research found that there exists a variety of ways in which an active community and a well understood genre impacted game production. The genre had its own enthusiasts, who were heavily invested in the genre and gave the developers a small but active core audience which they could rely on for word-of-mouth promotion and discovery. It also introduced a set of strong expectations through its genre tropes, which influenced how the developers looked at their game. They also improved the developers' ability to position themselves both in terms of market as well as the broader game culture. The genre and its origins in indie development and fandom created a sense of camaraderie amongst the developers, which resulted in a notable amount of mutual assistance between them. These effects were heavily interconnected and drew back to the many different precursors of the retro style First-Person Shooter scene.

The research found that working within a community and a well understood genre clearly alters indie game production from how it has historically been understood. This highlights the need for a broader understanding of game production, which accounts not only for local and industry contexts, but also includes cultural aspects and audience expectations. This thesis ultimately offers a broad ranging and multifaceted picture of the retro style First-Person Shooter scene and can hopefully serve as an example, of the varying ways a genre and its surrounding community might impact the creation of video games.

Keywords: Video game production, Genre, Fandom, Indie games, First-Person Shooter, Community

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

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1 INTRODUCTION

Game production is an increasingly studied subject. As the video game industry has gained prominence through its profitability and cultural relevance, the interest in the political, cultural, and economic factors impacting the creation of video games has increased. To quote Sotamaa & Švelch (2021) in the introduction of *Game Production Studies*, "public awareness about the production context of video games has arguably never been higher" (p.8). Despite this interest, there is still plenty of ground to cover within the rapidly evolving field of game production, especially when it comes to recent trends and developments. This thesis looks at one of these developments. Specifically, it examines the production impacts of genre and community in the notably active scene around retro style First-Person Shooters, hereafter referred to as retro style FPS. The goal of this examination is to make apparent the variety of impacts that working within an active genre or community can have on game production and to further emphasise the need for a broader understanding of game production, which accounts for a variety of possible cultural and social contexts.

The Retro inspired FPS scene makes for a particularly good case study for the examination of community impact on video game production due to the activity of the community surrounding these games. The digital event Realms Deep centred around retro style FPS started running in 2020, and there two kickstarted magazines Reload Magazine and M1E1 which focus on FPS games with an eye towards the independent and retro style scenes. FPS as a genre also have a history of their surrounding fandom community impacting the success of various games. As a particularly historic example, the business model of the original *Doom* (Id Software, 1993) relied on the swapping of mods within the hobbyist scene, as the players buying the game got access not only to the original game, but also the notable amount of fan created content (Sotamaa, 2022). There is also a well-documented history of similar hobbyist scenes laying the groundwork for the later emergence of game industry (Jørgensen et al., 2017), though this has academically mostly been looked at in geographical terms. As such the retro style FPS genre makes for a good object of research for an exploratory study of this type, as it constitutes an easy-to-identify genre with a lot of community activity which is relatively spread out rather than being locality-based.

The beginning of the current trend of retro style FPS is generally placed around the late 2010, with 2018 often being cited (Jensen, 2022; Kinnun, 2022) as the start of the genre's explosive growth with the release of *Project Warlock* (Buckshot Software, 2018) and *Dusk* (Syzmanski, 2018), as well as the early access of *Amid Evil* (Indefatigable, 2019). However, these weren't the first modern games to take inspiration from 1990s shooters with the remakes of *Doom* (Id Software, 2016) and *Shadow warrior* (Flying Wild Hog, 2013) not only using the names of old franchises, but also bearing some mechanical similarities to their antecedents. However, the genre has seen clear growth throughout the early 2020's seeing a steady increase in both the number of games released and the amount of outside attention being paid to the scene (Jensen, 2022; Kinnun, 2022; Yumol, 2023).

These modern retro style FPS, which are occasionally called 'Boomer Shooters' (Macgregor, 2022), draw strong inspiration from the aesthetics and mechanics of older FPS such as *Blood* (Monolith Productions, 1997), *Quake* (Id Software, 1996), and *Doom* (Id Software, 1993). This means that the games often employ pixelated and sprite-based retro aesthetics and gameplay centred around movement, imaginative weapons, and exploration of the levels. Thematically these games are broad, with themes ranging from fish pirates (*Fish Person Shooter*, 8AH, upcoming) to cosmic horror (*Forgive Me Father*, Byte Barrel, 2021) and a pastiche of 90s grunge (*Slayers X: Terminal Aftermath: Vengance of the Slayer*, Big Z Studios Inc., 2023). However, in general the subject matter of the games tends towards pulp and many games contain elements of humour and or horror. While the exact limits of this genre as well as some of the more specific terminology regarding it are still developing, that hasn't stopped the formation of a notably active fan and developer community surrounding the genre.

Production wise the current retro style FPS scene has notable similarities to the indie scene of late 2000s and early 2010s. Most developers within the scene work independently to some extent and many of the characteristics of indie games as noted by Garda & Grabarczyk (2016) also apply to games made within the scene. However, the scene also draws heavily from fan and modding communities around retro FPS games. These communities have a history drawing back to the 1990s and have seen some degree of participation ever since. As an example, the *doomworld.com* website, which is a key location for the sharing and discussion of mods in the Doom series, has existed since 1998, and has given out yearly awards for best mods since 2004. The influence of

these communities within the retro style FPS scene is most easily visible in the types of games made, many of which harken back as noted to the retro FPS games of 1990s and early 2000s. The influence of the historical retro FPS community is also visible in the use of the GZDoom engine, which was originally designed for *Doom* (Id Software, 1993) modding.

The retro style FPS scene then is an interesting example of both the increasing variety within indie game production and the ongoing impact that fan and hobbyist communities have on game production. The study of the community is then valuable, as it can provide insight into the increasingly varied forces that shape indie game production, and into how indie developers can potentially navigate the increasingly crowded indie market.

This thesis will be using the terms retro style FPS community and retro style FPS to refer to this community and the First-Person Shooter games which relate to it. The terms will be used relatively broadly, including both individuals with limited connections to the community and games which some would argue don't fit the genre. This will be done to get a broad overview of the variety of ways that the community and by extension the genre can impact game production. The term retro style FPS was chosen to signify this broadens as it is the name with the broadest general use within the community¹. It is also meant to distinguish the modern games made within the last ten years from the originals which inspired them, which will simply be called retro FPS.

The goal of this thesis then is to conduct an exploratory study into the retro style FPS scene in order to see what impact the genre and its surrounding community has on the production of games. To achieve this, a preliminary literature review was conducted on video game production as well as the relevant aspects of video game hobbyist communities. This literature then formed the basis for a set of semi-structured interviews, which were conducted with the developers of retro style FPS. These interviews were then analysed through thematic analysis to find common themes and other interesting aspects regarding the topic of research. The ultimate research question of this thesis is therefore: How is the production of retro style FPS games impacted by their genre and its surrounding community?

¹ This is it in contrast to terms like 'Boomer Shooter' which are seen by some as a more specific term, referring to a more specific set of tropes.

This thesis is mainly positioned within the field of game production studies, with some natural connections to additional fields such as fandom or genre studies. It is positioned as an exploratory study due to the relatively new topic of research and the limited amount of immediately equivalent research done on other closely related topics. This means that the goal of the research is to give the reader a broad understanding of the topic in question. The focus then is more on describing the variety of impacts that the community and genre of retro style FPS have on game production, rather than on deeply examining a particular aspect. This means that production itself will also be defined broadly not only encompassing the practical making of the game, but also the facilitating factors such as skill acquisition and the ability to find an audience.

This framework of exploratory research into partially known topic based on previous theory positions this research in line with exploratory research as presented by Stebbins (2001). This also positions the research in this thesis as being mostly inductive with "a certain amount of deductive prediction made possible by the emerging theory" (Stebbins, 2001, p.14). In practice, this means that while the interviews were crafted based on previous research the analysis was focused on discovery, interpretation and synthesis, rather than attempting to confirm aspects noted within previous research. This thesis then is ultimately aimed at discovering new aspects of the ever-broadening field of indie game production and considering how these findings can be interpreted in the light of previous research.

2 PREVIOUS RESEARCH/LITERATURE REVIEW

This chapter consists of a literature review regarding the topic of research. It starts by looking at game production, focusing especially on indie production as the one most likely to be closely related to the topic at hand. It will then look at how genre and cultural content have historically been looked at within game production research, examining how genre has historically been a difficult topic within game research, and finally borrowing a few concepts from the study of other media. This chapter will finish with a look at game fandoms and their general productivity, paying special attention to modding as the game related fan community with the closest ties to the retro style FPS.

2.1 Indie game production

Video game production has historically been seen as a challenging industry with everrising costs of production and highly uneven profits (Whitson, 2013, p.123). The game industry has also been historically associated with bad working conditions, low pay and rapid turnover of employees (Keogh, 2021a, p.30). While the causes for these conditions are complex and multifaceted, factors such as the historically precarious positions of cultural workers (Keogh, 2021a), globalisations of cultural labour (Banks et al., 2015), and the historically formalised nature of the game industry (Keogh, 2019) are often cited reasons for the current state of the industry. The video game industry then has historically been a challenging field to work in with precarious and rapidly changing work conditions.

These conditions within the industry have contributed to increasing number of developers choosing to start independent or 'indie' studios (Browne, 2015, p.13). The exact definitions of indie development are somewhat unclear as indie in the production sense tends to be used more as a contrasting term opposite to the more traditional triple-A industry (E.g., Farmer 2021; Sotamaa 2021). However, for the purposes of this thesis indie development will be defined along the lines of Garda and Grabarczyk (2016) as referring mostly to specific type of game that emerged around the mid-2000s with specific contingent properties (p.6). While the term indie is perhaps used more broadly (E.g., Keogh 2021a, p.37; Browne 2015, p.14), this definition is used as it provides both a good baseline of production practices with which to compare and a way to highlight the mutual dependence of cultural content and production. Indie production then will be

used in this thesis as a generally understood baseline, to which the conditions within the retro style FPS scene can be contrasted.

Indie game production is generally a very perilous endeavour. Many indie developers end up measuring their success simply in terms of survival (Lipkin, 2020; Browne & Schram, 2021, p.88). While the indie scene has seen a few high-profile successes such as Super Meat Boy (Team Meat LLC, 2010) and Hotline Miami (Dennaton Games, 2012) most indie games make relatively little money (Banks & Keogh, 2021b, p.161) and fight for visibility in an increasingly crowded marketplace (Browne & Schram, 2021, p.87). Like triple-A development, indie development is also vulnerable to difficult work conditions. Since indie developers can occasionally see the self-exploitative practises of long hours and unpaid work as a precondition for making it in the industry, they can easily end up replicating the difficult conditions present within the broader game industry (Keogh 2021a). Indie production is therefore not immune from the exploitation of cultural labour, and it has been argued that rather than empowering developers' indie development is in fact a form of forced entrepreneurship (Keogh, 2021b, p.122), meaning that developers are forced into entrepreneurial role due to worsening conditions. Indie game production can therefore be seen to be just precarious as Triple-A production, if not more so due to indies generally working with smaller resources and less access.

To make up for this precarity, indie developers generally support and help each other. The broadly communal attitude of developers is one of the most often noted aspects of indie game production (Guevara-Villalobos, 2011). In contrast to the heavily secretive Triple-A game industry, independent game developers are generally happy to share knowledge (Keogh, 2021b), help each other with work or funding (Banks & Keogh, 2021, pp.169-171) and enable each another to better develop their skills (Guevara-Villalobos, 2011). This means that despite the increasingly crowded market, indie developers treat each other more as colleagues rather than as competition. This attitude is present on both globally and local level, with developers often identifying themselves as part of a local scene and as a part of a global *imagined community*² of indie developers (Browne, 2015, p.55; Parker & Jenson, 2017). Indie development then can be seen as being constituted from multiple nested and overlapping communities.

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² Imagined community is reference to imagined communities as presented by Anderson (2016), imagined communities rather than being imaginary in the traditional sense are rather 'imagined into being' (p.6)

In previous studies these communities have mostly been researched on a locational basis (E.g., Keogh, 2021b; Farmer, 2021; Jørgensen et al., 2017), with the benefits and challenges of working in an active development hub with a localised community being generally well understood (Browne & Whitson, 2020). Other types of communities have also been noted, such as the community of queer developers centred around the Twine game engine (Harvey, 2014). However, the specific impacts of such communities on the practicalities on game production is notably less researched, as is their role in the broader network of indie communities.

A lot of the work done in connecting this vast network of communities, as well as the broader industry and the public, is done by cultural intermediaries. Cultural intermediaries play a notable role within indie game development as the individuals doing a lot of the supporting tasks around the game development itself (Browne & Schram, 2021). While cultural intermediaries can occupy positions such as co-working space coordinators, festival curators, awards panel judges and public advocates, the labour they undertake is often broad, ranging from networking to conflict resolution and even accounting assistance (Perks et al., 2019, pp.20-22). This work can often be hard to define and due to its position outside of the notable 'creative' roles and as a result is often relatively invisible to the broader audience (p.25). Despite this, cultural intermediaries play a crucial role in most of what is thought of as community activity within the indie space and can be seen as central to the functioning of a variety of indie communities (Perks et al., 2019). From a perspective of an individual developer, cultural intermediaries end up taking on a lot of the work that has historically been done by the people in the role of the producer as well as doing a lot of relational labour (Whitson et al., 2021, pp.614-618). This means that cultural intermediaries can often help developers through promotion, fund acquisition, event organisation, and the upkeep of community spaces. They can also help developers by connecting them to publishers, audiences, and other developers. Many developers then end up benefiting directly from the work done by cultural intermediaries within the community. This is in addition to the additional help they get from the broader community, which cultural intermediaries usually help keep functional.

Looking at how indie developers benefit from the surrounding community, the most prominent of these benefits is the previously mentioned sharing of knowledge. In contrast to the historically secretive Triple-A game industry (O'Donnell, 2014, p.43),

indie developers are generally happy to share knowledge and know-how with each other (Keogh, 2021b). This is not only limited to game design or technical knowledge, but can also be advice on work opportunities, marketing, or project management (Keogh, 2021a; Parker & Jenson, 2017, p.874). This knowledge can be invaluable to a developer just starting out in game development as, due to the previously mentioned history of secrecy, a lot of the knowledge regarding game development has been difficult to come by (O'Donnell, 2014, pp.78-80). Indie communities can help alleviate this lack of available knowledge both by helping developers connect with each other and by staging various events, festivals, and seminars, which enable the sharing of knowledge throughout the community (Parker et al., 2018). Indie communities therefore do important work in the regard of distributing knowledge regarding game production, which can help indie developers with the making of their game.

Indie communities can also help developers to promote their games. This help can take the form of dedicated promotional spaces (Parker et al., 2018) or simply getting the word out about another developers' game (Browne, 2015, pp.84-85). This help with promotion and visibility can be crucial for indie developers, due to the increasingly crowded market that indie games face (Lipkin, 2020). While part of this promotion is organised through things like the Indie MEGABOOTH (Parker et al., 2018), a lot of it is also seemingly spontaneous with developers often promoting other indie games based on happenstance and opportunity (Browne, 2015, pp.84-85). This need for promotional assistance highlights how broad visibility can often be at a premium for indie developers and how the general indie game market is increasingly crowded. This of course further highlights the need for cultural intermediaries and an interconnected network of indie communities, as they can maximise the developers' chances of reaching a broader audience as well as their ability to draw the attention of publishers and other industry actors.

Indie game production is then ultimately reliant on the community of indie developers that surround it. Game developers outside of the game industry's mainstream have generally been observed to have a communal attitude and to be happy to help each other. These developer communities are generally complemented by cultural intermediaries who, in addition to doing a lot of community upkeep, also assist individual developers with a variety of task outside of direct game development. These communities have been researched to some extent previously, though a notable amount

of this research has been on a locational basis often focusing on a community within a particular game development "hubs" (Browne & Whitson, 2020). This thesis aims to complement this research by looking at a non-locality-based community which is formed more around a shared genre rather than a shared locality.

2.2 Game production and genre

Game production's relation to genre is a topic with relatively little previous research. While there is an occasional connection made between the mechanics and aesthetics of a game and its production, the focus is often on how it relates to the broader industry. For example, it has been noted that the developers of experimental games can struggle to find their audience, face hostility, and even be removed from distribution platforms (Keogh, 2019, pp.27-30). However, the article mostly discusses this in context of the game industry's heavy formalisation, and ultimately highlights the failure of the industry and the traditional gaming audience to accept game made outside of the traditional culture hegemony. The discussion then tends to almost exclusively focus on industry, rather than cultural positioning. Based on previous academic literature, developers themselves also seem to occasionally struggle at understanding how their games form and content are likely to impact their abilities to position themselves in a cultural context. An illustrative case is presented by Perks et al. (2019), where developers ended up failing to highlight their games cultural connection to theatre when presenting their game to an arts council, due to mostly thinking about their game in strictly industry rather than cultural terms (p.24). There is therefore a need for a more complex understanding of video game development, which accounts for the increasingly broad cultural contexts in which games are made.

This is not to say that the broadness of games being produced hasn't been addressed in academic writings. For example, there is writing on queer games around the Twine engine and the community surrounding them (Harveys, 2014). Among other things, the article discusses how the queer perspective of the games and their style of production are necessarily interconnected (pp.102-104). There also locality-based research to cultural contexts, such as the game makers in communist Czechoslovakia (Švelch, 2023). However, there is less research on how cultural positioning within the game medium, or the cultural ecosystem in general, might impact the production of games.

There is some allusion to this cultural content and style in writings on *boutique indie*³ publishers such as Annapurna (Parker, 2020) and Devolver Digital (Vanderhoef, 2020), but such writings tend to focus more on branding and the publishers themselves and rarely look at the practicalities of game production.

One reason for this relative absence is likely to be the difficulty of defining the concept of genre within video games (Apperley, 2006). The many varying approaches within the field of game studies can easily lead to differing genre classifications, since the multiple layers of interactivity present within video games can all be relevant when looking at the genre classification of a given game (pp.9-11). This means that when viewing video game genres critically it is potentially possible to think of "each individual game as belonging to several genres at once (Apperley, 2006, p.19)". Thanks to the variety of elements present within video games and the multiplicity of way in which people interact with them, a single game can be interpreted as belonging to many different genres which are seen as mutually exclusive in the typical industry categorisation. It can be hard to define video game genres "neatly" as Apperley puts it (p.19), which ought to lead us to think more critically about video game genres both in terms of their constitution and purpose.

This thesis will ultimately be leaning on Mark J.P. Wolf's (2001) expansion on Thomas Schatz's (1981) idea that genre movies (or games in this instance) are formed through "cooperation between artists and audience" (Wolf, 2001, p.113). Movies and games are very different forms of media, it has been noted for example, that the role of interactivity in video games makes a reading of genre simply relying on narrative elements as Schatz does insufficient (Apperley, 2006). However, as the goal of delineating what exactly constitutes a video game genre lies slightly outside the scope of this thesis, looking at the precise taxonomy of video game genres is not needed. Rather, this thesis will be using Schatz's observation regarding the cooperative nature of genre art to highlight the relevance of various communities in the creation of video games. More specifically, it will be used to help with the understanding of how the cooperative nature of genre results in the formation of expectations and tropes. This understanding will then be used to examine how these expectations and tropes end up impacting the production of individual games within the genre.

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³ Boutique indie is a term used by Felan Parker(2020) to describe a developer or a publisher with a strong brand image and a reputation for making a specific style or type of game.

Another idea that will be borrowed from Schatz (1981) is genre media as a "privileged" form (p.16). To quote: "only a limited number of film stories have been refined into formulas because of their unique social and/or aesthetic qualities." While it has been suggested that technical and industry context might impact the development of game genres in addition to aesthetic and social ones (Myers, 2003, p.97), only a few select types of games have been refined enough to constitute a genre in the understanding of the public. A good example of the formation of this understanding exists in language. Due to the historically limited vocabulary around games, there has long been a tradition of describing games through comparison to previous games (O'Donnell, 2014, p.43). As such, many forms of video games which we might today consider genres have historically been called clones of a particular game. As a particularly relevant example, the term 'Doom-clone' used to be more commonly used as opposed to the modern term of 'First-Person Shooter' (Arsenault, 2009, p.165). This change in terminology highlights how the genre of First-Person Shooter was created and moved from simply being 'games like Doom' into being their own genre with their own changing formulas and tropes.

It should be noted that these genre formulas aren't simply static, but rather change dynamically over time (Apperley, 2006, p.9). Factors such as technology (Myers, 2003, p.97), increasing consciousness of genre tropes (Schatz, 1981, p.36) and the changing tastes of the audience (Apperley, 2006, p.9) are often cited as reasons for these changes. However, it has also been observed that a single popular piece of media has the capacity to impact the whole genre (Schatz, 1981, p.19). This can make it nearly impossible to predict the exact way that the genre will mutate, as artist can experiment in combining genres and tropes (Arsenault, 2009, pp.159-160). It can also be difficult to say whether these changes are merely cosmetic or a deeper change in the structure of the genre (Schatz, 1981, p.20). Nevertheless, there is a need for variety within a genre as a genre which becomes too predictable is likely to end up being rejected by audiences. Even a genre that has lost is popularity can still resurface later on or impact future games through inspiration and influence (Arsenault, 2009, p.161). This means that the boundaries of a given genre are constantly being explored and that the public understanding of a given genre is liable to change over time.

While there is little research directly addressing the impact of genre on game production, some ideas can be appropriated from other media. For this thesis the most relevant is likely to be the idea of genre as putting special pressures on production:

We have already noted that genre filmmakers are in a rather curious bind: they must continually vary and reinvent the generic formula. At the same time, they must exploit those qualities that made the genre popular in the first place. (Schatz, 1981, p.36)

While there is doubtless a myriad of differences between film and game production, it is still likely that developers are in a somewhat similar situation in terms of innovation within a genre. Of course, in the video game medium "qualities that made the genre popular" are likely to be broader and can include kinaesthetic aspects in addition to visual and narrative ones (Newman, 2002), though this does not change the core challenge of innovating while remaining within the boundaries of the genre. However, to compensate for this added challenge developers working within a preestablished genre are likely to be able to use its convention to their advantage. This means that a portion of the games communicative work can be offloaded to genre tropes and presuppositions of the audience (Arsenault, 2009. p.171). Working within an established genre of games can therefore bring both additional challenges and opportunities for game makers and can be an important factor to consider when looking at game production.

2.3 Game fandom and modding

Over the last two decades, there has been a lot of research into various fan communities. This has included the fan communities surrounding video games (Sotamaa 2009; Wirman, 2009). Within this research an increasing point of interest has been the impact that fans have on the media they consume. Modern-day fans can have considerable impact on a piece of media through various means (Jenkins, 2006). This sort of *participatory culture* (Jenkins, 2006, p.03) is also visible in video games, even beyond the interactive nature of the medium. Video game fan communities constitute a broad range of groups. From e-sports and speedrunning to fan fiction and cosplay, the fan activity around video games covers a broad range of activities. This section will go over some of the research around video game fandom and its relation to production. It will then detail some of the research regarding modding communities, which are the most relevant communities regarding retro style FPS.

Productivity is notable aspect of video game fandoms. Many practises within the video game fandom such as machinima (Sotamaa, 2007) and modding (Sotamaa, 2010) not only consume games, but actively create new artworks from existing game material. In addition, many games such as *Second Life* (Linden Research Inc, 2003) are inherently reliant on user created content. As Sihvonen (2011) notes, "games have always been treated as launchpads for their players' creative appropriation and self-expression." (p.57) This productivity has both *instrumental* and *expressive* forms, meaning that players' reasons for this creativity can be focused on the game itself, self-expression or both. (Wirman, 2009, pp.10-19). The results of this sort of productive video game fandom are broad, ranging from guides to fan-made patches (p.19). Game fandom then can be viewed as quite productive. When looking at game fandoms, one is likely to find some types of game-related works and productive practises.

These productive practices exist in a complicated negotiated relationship with the game industry. Game industry actors generally view fan activity favourably and generally try to promote fan engagement (Siuda & Troszynski, 2017, p.556). They are also generally more comfortable with the productive aspects of fandom than representatives of older media (p.559). However, industry actors are in a tricky situation where they wish to cultivate players' production, while simultaneously policing their behaviour and limiting the players ability to engage in undesired practises e.g., piracy or walkthroughs (Kerr, 2006, p.150). Ultimately then fan productivity within the video game medium constitutes a wide variety of practises which exist in a complicated negotiated relationship with the game industry (Sotamaa, 2009, p.101)

From the perspective of retro inspired FPS, the most notable of these video game fan practises is modding. Modding is the practise of modifying or altering pre-existing games. It has been present as a part of video game culture ever since its beginning (Sotamaa, 2022). It could even be argued that one of the very first games, *Spacewar!* (Russell et al., 1962), was something close to a mod as it was based on clever use of existing code and hacked controls (Sotamaa, 2022). However, the modern modding community is often said to have started around the release of the original *Doom* (Id Software 1993) (Sotamaa, 2022; Voorhees, 2014, p. 254), as it was one of the first games to popularise mods. This increase in popularity of modding was in large part due to the game being created with replaceable content in mind (Sotamaa, 2022). This resulted both in the creation of a community of modders as the players started to

actively share the alterations made to the original game, with the encouragement of the developers. (Sotamaa, 2022). Modding then has a long history within video games in general and the FPS genre in specific.

Today modding as a practise is defined in large part by the communities surrounding the practise. While a fraction of mods are likely kept private, a large majority of mods are distributed and shared in some way (Sihvonen. p.117). Many mods are also community efforts in some way. These projects range from simply building on top of the work of other modders to actively organized projects with more clearly defined roles of expertise (Sotamaa, 2010, pp.247-249). The modding communities surrounding various games also share personal preferences and ideas (Sihvonen. p.118) and facilitate the sharing of technical knowledge and expertise (Nielsen, 2019, p.21-23). Modding communities also do a lot of work to try and ensure that mods for the same game are compatible with each other (Sotamaa, 2010, p.248). This can, however, lead to disagreements and debates as all modders are unlikely to agree on best practises or which mods future work should rely on (p.249). This, along with other factors such as language, can lead to multiple smaller cliques or sub-communities forming around the same game (p.249). Modding then can be considered a practise centred around a notably knowledgeable and well organised though occasionally internally conflicted community (Sotamaa, 2010, p.248).

While modding communities are generally seen as adding value to the games they are centred around, the relationship between modders and game companies can often end up strained (Nielsen, 2019, 25-28). Since the support of the developers is not always necessary for a modding community to exist, the activity of corporate actors is often felt as limiting by the modding community at large (pp.24-28). In addition, the presence of corporate actors, and the financial incentives that are likely to come with them, are likely to disrupt the current modding communities which have mostly been built from grassroots efforts (pp.22-24). Modding communities have also been noted as having a legacy of "hacker ethics", which further complicates this interaction between modders and corporate actors (Sotamaa, 2022). Ultimately then, while modders' work is no doubt valuable the ability of companies or the modders themselves to capitalise on it is quite limited, due to the attitudes and structures present in most modern modding communities.

This however does not mean that modders are entirely uninterested in capitalising on their skills, and it is not uncommon for modders to express interest in monetising their work (Nielsen, 2019, p.24; Sotamaa, 2010, p.251). Some modders have moved to commercial development after a time and others treat their mods as a part of their portfolio (Sotamaa, 2010, p.251). While the transition from a hobbyist to full on game developer isn't without its hurdles, the technical skills modders develop in their practise are no doubt useful in game development (Jørgensen et al., 2017, p.472-473). In addition, the relationships and reputation that a modder is likely to build as an active member of the community have also occasionally proved useful in getting into commercial game development (p.472). The relationships built within the mod community, then, not only facilitate learning and exchange of knowledge, but also can work as an additional and less formal avenue for job opportunities. The transition from modding to commercial development is therefore not uncommon and while modding itself is rarely monetised, modders can use the skills and relationships gained through modding to transition into commercial work.

From the perspective of retro style FPS, the modding community is likely to form at least a part of the basis for the scene. This brings with it its own complications and values, as modding communities are likely to have their own histories and ways of doing things, which might potentially conflict with other actors within the space. Modding does however form a strong basis for both the learning of game making and the building of a community. The retro style FPS community is therefore likely to express some of the aforementioned tendencies, like an increased willingness to share work or a complicated relationship with the broader industry. Some developers are also likely to have a modding background and the retro style FPS scene can therefore be seen as existing in an interesting continuity with various historical modding scenes around retro FPS.

3 METHODS & DATA

This chapter will go through the methodology and the methods of this thesis. It will start with a short overview of the qualitative methodology and how it relates to my chosen topic. This will be followed by two sections on the methods used. These sections will go through the motivation for using the chosen methods and how the methods were applied. They will also go detail what data was gathered and how this data was analysed.

Qualitative methods were chosen due to their ability to capture nuanced and complex information. As game production, genre, and fan communities are all notably complex topics, game production within a genre surrounded by a fan community can be presumed to be a topic with many complexities. Qualitative research excels at unpacking these kinds of topics, as well as in generating sets of rich and nuanced data (Graebner et al., 2012, pp. 278-279). This complexity and nuance within the data is of particular value when working within a rapidly evolving field such as retro style FPS, which has experienced a rapid growth in the number of games being released over the last few years.

3.1 Semi-structured interviews

The data gathering for this thesis was done through semi-structured interviews with developers of various retro style FPS. The main reason for choosing semi-structured interviews over surveys was the affordance provided by interviews for both covering the areas of previous research and allowing for the discovery of previously uncovered topics (Galletta & Cross, 2013, p.1). This means that while the interviews had predefined topics within their structure, developers could still bring up aspects of game production not original anticipated. In these cases, interviews also allowed for easy follow-up questions, which made them superior to surveys for the purposes of this thesis. While a more ethnographic approach was considered, due to the relatively spread-out nature of the retro FPS community this was likely to be unrealistic. In addition, while an online ethnography might have given better understanding of the community itself, it would be unlikely to show how the community ultimately impacts game production.

Ultimately, the main factor informing the choice of method in data gathering was the need for direct information from the developers. Since there is little media explicitly about the impact that communities and genre have on game production, getting information directly from the developers was necessary. In addition, while the developers of retro FPS are relatively active in terms of publicising their development, most of their public facing content is focused on technical details and promotion and as such less useful for this research. For these reasons, it was decided to best, to look for information from the developers, specifically about the topic at hand.

Interviews then are a flexible, if somewhat work-intensive, way of data gathering best suited for this type of research. However, using interviews brings a set of considerations which need to be accounted for. It is important to remember that interviews are always interactions, and that the interviewer can impact the responses by for example prompting the interviewee (Ruusuvuori & Tiittula 2017). While this is not necessarily an issue as qualitative research doesn't demand objective positioning from the researcher, it does highlight the importance of reflexivity in regard to researcher's position within the research. Interviews also bring a non-trivial amount of additional work in the form of transcriptions and thereby limit the number of answers and the scale of the study. However, as this research is exploratory research into a relatively recent and rapidly evolving phenomena, the limited scope does not provide an issue in regard to gaining valuable insight.

The questions for the semi-structured interviews were crafted based on a literature review of previous research on game production. This structure had four themes of learning, networking, audience, and content. These themes were chosen beforehand to focus the topics covered in the interviews on those that were present in previous literature. However, follow-up questions were frequently asked in order to explore topics raised by the developers not noted in previous research.

The interviewed developers were found through forum and Discord communities, by looking for games on Steam based on their tags, and through social media platform messages such as Twitter, (rebranded as X during the making of this thesis). Some snowballing was done as new developers were found by looking through public comments and discussions of other developers previously noted as possible interview candidates. Ultimately, only developers with a publicly playable version of their game available were contacted, though this did include demos and early access games. This

decided was made to exclude games that were very early in development, where community aspects of production might not have become evident yet. While these selection conditions were quite broad, there was an additional attempt to select for a range of experiences through prioritising developers with underrepresented backgrounds, non-standard creative or publishing practises, or varying relationships to the retro FPS community. This scrutiny got higher as the data gathering went on, with the last few interviews and interviews specifically aimed at ensuring broad coverage. The developers were contacted through both email and social media, the latter being done in cases where developers didn't have an easily discoverable e-mail address available.

Ultimately, eight interviews were conducted. Four of the interviewees were from the United States and four from Europe. All of the developers were between the ages of 25-40, with the majority of developers being between the ages of 30-35. This seems to be in line with the overall constitution of the community, despite missing representation from outside Europe or the United States, as well as older and younger members of the community.

The interview structure consisted of a warmup question, followed by a few background questions on the developer's previous experience and motivation. This was followed by questions regarding their relationships to the retro style FPS community and other communities close to it, then by questions on the main themes of learning, networking, audience and game content. These questions often resulted in follow-ups, with some follow-up questions and prompts pre-planned in case the interviewee was having a hard time answering or answering with very few words. In addition, if a developer had answered a main question during an earlier part of the interview, that question was skipped and the line of discussion was continued with follow-up questions. At the end of the interview, the developers were asked if they felt an important aspect of their experience was missed. This was done to find aspects that were missing from the structure leading to the addition of question regarding safety and inclusiveness, which was brought up by the developers. This question took many forms as it was something which was added during the interview process. For a full overview of the interview structure, see appendix [1].

The interviews were conducted online through Zoom and Discord. Five of the interviews were done through audio calls with three also having video. While most of

the interviews were conducted in English, Finnish was also used. In the case of Finnish language interviews the transcription and analysis were also done in Finnish and translation was only done as needed for the purposes of quoting. The interviews were conducted between late March and early June. Overall, the data gathering process went well with the rate of response from the developers being higher than expected.

3.2 Thematic analysis

The gathered data was analysed through thematic analysis. Throughout the process the guidelines and advice set out in *Applied Thematic Analysis* (Guest et al., 2012) were followed, while making some adjustments to better fit the topic of research. This meant that an analysis plan was developed relatively early on. Due to the relatively new subject of study, a decision was made to analyse the data during collection to see if adjustments were needed in the interview process. This didn't end up being necessary, with the only change being the aforementioned addition of the question regarding safety. During the analysis a set of codes and a codebook were developed through a repeated set of readings of the interview transcripts. These codes were then categorized within the main themes establish based on previous research, with one code potentially being in multiple main themes. After that the codes within each main theme were further categorized into sub-themes which then formed the core of the findings. In short, thematic analysis was mostly done as outlined by Guest et al. (2012) with the additional step of fitting codes within a set of main themes established by previous literature.

The reasoning for dividing codes into the main themes beforehand was to ensure that most of the ways in which the modern retro FPS genre and its surrounding community were likely to impact the production were covered. This also means that in an instance where one of these aspects wasn't prominently present, the absence of impact would have also been noted. It also meant that comparison to a range of previous studies was easier, which helped with putting the findings in a broader context. The downside of this approach is that it limits the possibility of discovery within the data, especially when it comes to areas of game production in which previous research is limited. However, this seemed like an acceptable trade as it allowed for a more grounded analysis.

After an interview was conducted, the recording was transcribed within two days. To save time, Microsoft Word's automatic transcription feature was used for the initial

transcription, which was then corrected by hand. The data was deidentified during the transcription process to avoid possible backlash aimed at the developers. This also meant that any references pertaining to specific developers, producers and occasionally aspects of the game were removed to avoid re-identification. This is especially relevant as the retro FPS-community is relatively small and re-identification through the description of games and experiences is easier than with a larger community.

Atlas.ti was used to better keep track of notes and codes and data analysis. A first round of coding was done after the first two interviews. This coding was preliminary and was mostly focused on data familiarisation. It was also done to ensure that the data gathered was adequate and to assess if changes in the interview process were needed. Codes were not yet categorized during this round. The second round of coding was done after six interviews. During this round the first two interviews were recoded. The codes were categorised at this point into main themes drawn from previous research. Preliminary sub themes were also established. After the final two interviews were conducted a round of coding was done for just these interviews. This was followed by a round of analysis in which the sub-themes were re-analysed. During this round of analysis, special attention was paid to possible additional perspectives rising from the last two interviews, as well as any complicating factors within the old sub-themes based on the new data. A final round of recoding was done to all transcripts considering the new data, followed by a final round of analysis based on the final codes. The changes during this final round were minimal and mostly consisted of finding additional perspectives to the previously established sub-themes.

The last thing to address regarding the analysis the position of the researcher. As noted by Braun & Clarke (2022) in *Thematic analysis: a practical guide* "Acknowledging your assumptions is essential for taking a step back from them and reflecting on how they shape and inform your research (p.44)." This means that for the purposes of the study it is important for me to acknowledge my relationship to the retro style FPS genre and game production more broadly. While I did play a number of FPS games growing up, and I am interested both games in general and the typical "genre" video games in specific, I don't have a particularly strong relationship to the genre of retro style FPS. However, as someone who possesses a long history with the video game medium and fits the usual target audience of white, male and roughly middle class, I am demographically close to a large part of the retro style FPS community. This means that

while I don't quite qualify as an insider within the retro FPS community, I have the prerequisite background to understand most of the cultural reference points within the community.

My disposition towards game production is also broadly optimistic. While I am aware of the myriad of problems within the current game industry, including within the indie sphere, I still strongly believe in the ability of game makers to express themselves artistically despite the difficult conditions they often work under. I also have a positive view towards pulp- and genre media and have an appreciation for it both as entertainment and as a form of artistic expression. This personal positioning is something that I kept in mind while doing analysis, as it was naturally going to impact the way in which I view my data and results.

4 FINDINGS

This chapter documents the findings of the research based on the analysed interview transcripts. The four main sections of this chapters represent the main themes crafted based on previous research and the sub-sections within them the sub-themes found within the analysed interviews. The first theme of networking is somewhat longer than the other as it both describes the relationships within the community and explains how those relationships shape game production within it. The second and third sections on audience and learning look into the impact of this community on production from their respective perspectives. The aim of these sections is to catalogue some of the tendencies within retro style FPS production and how these tendencies are shaped by the surrounding community and genre. The final section on content focuses on how the community and genre impact the ultimate shape of the games. Its aim is to examine the creative pressures and possibilities that working within a genre with a fan community can create, and how these pressures and possibilities ultimately manifest in the games themselves.

4.1 Networking and relationships within the retro style FPS community.

This section looks into both the general construction of the retro style FPS community, how relationships within this community are formed, and how these relationships shape the production of games within the community. It goes into how the online community around retro style FPS can at time substitute for parts of a local hub community. It will then look at promotion and cultural intermediaries, examining the roles that they serve in both the construction of the scene and the production of the games within it. During this, attention is paid to the way that commercial and non-commercial motives mix within the community. The section finishes with a discussion of the sense of shared experience around which the scene is formed, which both problematize this idea and explain its benefits. In the end there will be a short overview.

4.1.1 A substitute for a local hub community

An interesting aspect of the developers' experience was the relative lack of a connection to a local scene. While some developers said they had a few local game development connections, most emphasised either the lack of a local game development scene or a scene that they felt wasn't helpful to them. Often this was seen as being the result of living in a rural area or an area without a strong game development scene. Some developers did note a local scene, but usually added that they felt the scene couldn't provide them with the type of support they would have benefited from, or that the scene was inactive. One developer said of their local scene:

IGDA is generally very good for networking and for meeting potential employers. -- But if you are an indie dev then it can be a very different thing, then you might not get as much benefit from networking there. (Developer 3)

Overall, the developers noted a very low level of support from their local community in terms of game production. This was a surprising result when considering the usual community centric nature of indie game production.

It is interesting to contrast this lack of local support to the support received from the online retro style FPS community, as many of the developers noted that they had received support from the online community. Most often this was through promotion, but the sharing of knowledge and opportunities was also common. The developers also noted the importance of socializing and highlighted how simply discussing maters with fans or peers was one of the main benefits of the community. Cultural intermediaries were also a clear benefit of the community as they were able to connect and support developers. The online community ultimately bore some interesting resemblance to the local hubs previously noted in game research (Browne & Whitson, 2020). While the provided support wasn't necessarily always equivalent and being online naturally imposed limits on the community, for some of the developers it seemed to be able to provide at least a partial substitute for the absent local support. This was especially relevant to the developers living outside of game development hotspots.

Regarding the actual support provided, the most cited form was general peer support. Despite being mostly online based, the retro style FPS scene appeared to provide a considerable avenue for socialization and mutual support among developers. The developers highlighted the importance of this support and pointed out how talking to other developers and other people invested in the scene helped them stay motivated when making their game. This was especially true with developers living outside of localised development hubs, especially if they were making the game alone. As an example, Developer 4 noted how: "In terms of momentum, like [to] just keeping pushing forward, having support from all these other developers and from the

community has been a big help." Considering some developers specifically noted that they lived outside of game development hotspots and that their ability to receive social support in terms of game development was often generally limited, the social aspect of the scene is clearly one of the community's important benefits. The online community then seemed to provide an important avenue for valuable social support to the developers without a local community.

Another way the online community seemed to make up for the lack of a local community was in terms of weak ties. While most developers were only actively in contact with a few other developers, many also noted several other members of the community they had talked with in passing or whom they knew by reputation. These soft ties were also occasionally a source of advice or opportunities, with some developers noting how folks they distantly knew promoted their game or gave them advice. In general, the information flow between developers seems to be very open and the barrier for entry into the community relatively low. This low barrier for communication, as well as the general tendency among developers to be public with their work, contributed to a notable amount of "spillover" (Browne & Whitson, 2020, pp.80-81) within the scene. In other words, within the retro style FPS scene the resources and knowledge are distributed surprisingly broadly for an online community, where central individuals typically have a much more notable role. Retro style FPS community then is surprisingly adept at fostering weak ties and allowing an important avenue for networking for developers outside of development hubs.

In certain aspects the retro style FPS community, despite existing mostly online, ends up partially alleviating the lack of a local hub. This means that the community provided a valuable alternative avenue for socialising and networking for the developers who lived outside of game development hubs. This is not to say that the online community around retro style FPS was able to replace all the functionalities of a hub, as it has relatively little outside recognition and essentially no access to any kind of institutional funding. However, for developers working outside of major hubs the retro style FPS community could function in a similar role, as a facilitator of information flow and as a way to garner valuable connections and visibility.

4.1.2 Promotion as a connecting factor

When it came to connecting individual developers to the broader community, promotion played a big role. One developer described their experiences with the community as follows:

As I was posting about [my game], I was slowly meeting more and more people that were really into this retro shooter scene, and then it kind of just went from there" (Developer 4)

This posting or promotion mostly consisted of social media posts about the developer's game, recommendations regarding other games, discussions on their aims for their game and general work-in-progress material. For the developers without previous relationships or connection to the scene, their first contact with the community was often through this promotional material. This could either be through seeing the promotional material of other games or through getting a response to one's own promotion. This would often lead to discovering other developers as well as various cultural intermediaries and becoming more familiar with the broader community. Promotional material then helped developers find each other, in addition to its more standard marketing purpose. Promotion then served a dual purpose as both a way to garner publicity and as a sort of gateway to the community for developers without previous connections to the scene.

This central role of promotion, however, also had a variety of side effects on the broader workings of the retro style FPS community and the way that the community impacted the making of the developers' games. The main one of these was the tendency of developers to discover the community as they went public with their game development. As Developer 8 noted, "We, I think, started the game and then found the community for it, rather than the other way around." Other developers noted similarly that they discovered the community when looking for avenues of promotion, or became aware of it after having their game promoted by a member of the community. This means that for many developers the community only became a relevant factor after they had already started developing their game. However, one developer did cite the promotional material of others as an inspiration noting:

Just then [when starting a new project] the first Realms Deep came out. —I had never even known what a Boomer Shooter was back then. I saw it and all the stars were kind of aligned at that moment. So, I started a new game. I'm making a Boomer Shooter, because I liked *Quake* and *Duke Nukem* a lot

as a kid, and I wanted to make a game where I will never burn out. (Developer 7)

Developers then were sometimes aware of the community, at least to some extent, when starting their game. However, promotion was present in these experiences as well, and seemed to serve the main avenue through which the community was discovered.

Another impact of this central role of promotions was that for a part of the developers their engagement with the community never went beyond promotion. As an example, when asked whether or not they promoted through the scene, a developer noted:

I maybe didn't really know that there would be any indie FPS scene, like any kind of big group or something like that. The only thing that comes to mind is *E1M1 Magazine* on Twitter – I am very aware of what games are coming to market or came out in the retro FPS genre when we were making [our game], but I didn't really find any community, except maybe Doomworld. (Developer 3)

For some developers their relationship with the community ended up being very limited. This was most often the case in multi-person teams where the promotion, and therefore the contact with the community, was the responsibility of another team member. For example, when asked if they had a relationship with developers from the retro style FPS community Developer 6 noted "I personally don't, I know [team member] does." Engaging with promotion wasn't necessarily a guarantee of deeper engagement, and the centrality of promotion seemed to have caused some developers to only see the scene in the terms of promotion.

The developers also seemed to find promotion time-consuming and at times mentally draining. While the developers felt that promotion on social media platforms and community events were a good way to get noticed or to find other developers, anxieties and frustrations regarding promotion were common. When asked about how they promoted their game, Developer 2 noted "you want to have a very big social media presence, but you got to balance that out because social media can be draining." The developers' experiences regarding promotion then weren't entirely positive, and some developers noted that they had delegated the official promotional responsibilities to their publishers. However, this didn't necessarily mean that said developers stopped promoting, as many still kept posting work-in-progress material on their personal social media accounts.

At times then it can be quite difficult to distinguish between purely promotional material and other material e.g., work-in-progress material posted as advice or as a joke. Due to the developers often being quite open with their development and often engaging with and promoting each other, it can at times be difficult to distinguish where promotion ends and interpersonal interactions start. While no developer explicitly noted a worry about this, the centrality of promotion led to situations where developers needed to do at least some form of promotional activity to be in a position to receive the full extent of the social and informational benefits of the community.

The role of promotional material within the retro style FPS scene is therefore multifaceted. Promotion not only helps the developers be visible, but connects developers to one another and aids the development of the community. However, the centrality of promotion has implications regarding the nature of the community, and can impact who ends up connecting with the community and how those connections are perceived. Promotion was also a source of pressure for the developers, which was seemingly amplified by its centrality in the community. Further, due to its centrality, a developer is likely to struggle if they wish to abstain from promoting but still want to receive all the benefits of the community. Promotion's central role also arguably gives quite a bit of additional power to publishers and other cultural intermediaries, who often facilitate the spaces and events meant for this promotion.

4.1.3 Spokespersons and publishers as cultural intermediaries

Much like in locality-based community hubs, individuals who fit the role of cultural intermediaries are responsible for a lot of the community activity within the retro style FPS community. The developers repeatedly named several people as facilitators of community connections and as playing an important part in the working of the community. In a general sense, then, there are several individuals within the retro style FPS community who could be seen to be working as cultural intermediaries. However, the developers described some notable differences in how cultural intermediaries were present in the retro style FPS scene, when compared to how they have generally been seen to work within locality-based communities (Browne & Schram, 2021).

Perhaps the clearest difference in the role of cultural intermediaries within the retro style FPS scene is their notable public presence. While the work of cultural intermediaries has generally been noted as being invisible to the broader public, most of the cultural intermediaries frequently cited by the developers within the retro style FPS scene had a clearly visible public persona. While this wasn't always the case, and the developers did bring up individuals whose were less visible, or credited forums like *doomworld.com* or publications like *Reload Magazine* in a general organizational sense, the most credited individuals were those with notable public personas. As an example, when talking about discovery of developers and games, a developer highlighted the role of these central figures and organizations:

"There are a few people that are like the head honchos in the FPS community, if [they] tweets something out, everyone will see it. -- There is also *Reload Magazine*, which is a First-Person Shooter-centric magazine. They cover a lot of stuff as well and they've got Discord. "(Developer 1)

Other developers described a similar situation, with one specifically using the word "spokesperson". These types of cultural intermediaries, whose visibility and willingness to promote games within the scene was seen as greatly beneficial by the developers, were clearly a notable part of the retro style FPS community for them. While it could be argued whether or not the term cultural intermediary is fully applicable for this role, their role as being in between the community and the broader public does make the term broadly applicable. Ultimately, then, these spokespersons do constitute a notable group from a production perspective, as individuals who have the ability to promote games from within the scene and who can as it were "cut through the noise". (Perks et al., 2019, p. 24)

Another often-highlighted group was publishers. The developers often noted that they had talked with publishers either through the community or after being noticed by a person working for a publishing company. Publishers were often seen as a good source of information regarding practicalities of game production and as helpful when navigating online platforms and promotional opportunities. Their inherent presence in the community and the role they play in production, were described by a developer as follows:

"Since May I've been signed with [a publisher]. -- I was approached by them because their marketing manager was somebody who's in the *Doom* community. [They] saw my game and just asked me about it. They've done a lot of the nuts and bolts of marketing work, like submitting it for promotions on Steam, running some content blog articles, sending out press releases, you know, the basic stuff." (Developer 5)

Publishers were also noted as helping with testing as well as facilitating contacts within the scene. A notably less discussed element of publishers' role was funding. The developers working with smaller publishers also sometimes noted other sources of income in addition to working on their game. This suggest that while publishers did help with contacts and the navigation of the indie game ecosystem, their role in terms of funding the development was at times less substantial. This also suggests that publishers within the retro style FPS scene, while still at times in a more traditional funding and publishing role, in some cases were less a source of funding and resources and more a source of information, support, and contacts.

This difference in the role of the publisher is at least partially explained by the variance in the size and operating practices of the publishers, which operate within the retro style FPS scene. The publishers range from larger indie publishers and subsidiaries of corporations to smaller publishers and developer collaboratives with individuals dedicated to publishing work. The developers working with smaller publishers and collaboratives were more likely to note additional sources of income in addition to their game, which would suggest that a decreased level of funding from these sources. However, even in these cases developers generally seemed happy with their chosen publishing method. Additionally, there were some publishers who appeared to be particularly invested in the scene, with multiple developers noting having been approached by them, or having received help from them even when not directly working with them. There are therefore publishers within the retro style FPS space whose work can be seen partially from the perspective of cultural intermediaries, this was however mostly the case publishers and collaboratives more invested in the scene.

The role of publishers within the retro style FPS scene is then by no means uncomplicated and the developers' relationships with them aren't always easy. As one developer said about working with a publisher:

[Publisher] came to get me multiple times. I even told them multiple times that I wouldn't make any sort of deal because I don't really understand those but, eventually I decided to go with them. I was like, "what is there to lose?" (Developer 7)

Other developers also noted that they had turned down publishers. The reasons for this included wanting to maintain full control over the game, an ideological desire for independence, and not wanting to end up in a bad publishing agreement. The relationships were not straightforward, and some developers were clearly somewhat

wary of working with publishers. In addition, while the developers were in general positive regarding their activity within the scene, their centrality did seem at times to create differing levels of access within the scene. As an example, when discussing opportunities and events Developer 8 noted: "The Boomer Shooter community is fairly open, but there is still a level of access that not every person has." The role of publishers within the retro style FPS scene is quite complicated. While the developers generally seemed to feel that majority of the publishers' activity was broadly beneficial, they still seemed at times somewhat wary of fully working with publishers and were aware, at least to some degree, of the inequalities that the publishers' centrality in the scene sometimes resulted in.

The final thing to note regarding spokespersons and publishers is how these roles can at times be intertwined. While most individuals brought up by the developers could clearly be considered as either publishers or spokespersons, this wasn't always the case. This is especially complicated since publishers occasionally do promote games within the scene even when they aren't publishing them, especially on their personal accounts. This can make it possible for a publisher to work as a spokesperson for and within the broader scene in addition to the support and information they might provide within their role as a publisher. The two roles shouldn't be considered as fully separate and they are used here to highlight, how there are a broad variety of individuals within the retro style FPS scene who could be considered to fit the role of a cultural intermediaries.

Cultural intermediaries within the retro style FPS scene are a complicated matter. While the developers highlighted how both publishers and spokesperson were helpful in the production of the game, their central position within the scene and the complicated nature of developer-publisher relationships were clearly a source of some concern for the developers. The online nature of the scene also affects the function of cultural intermediaries and seems to highlight the importance of publicity, contacts and information over the more tangible factions like funding and material support. However, none of these factors ultimately negates the role of these individuals in the facilitation of the production of retro style FPS. Rather, it highlights how the production of retro style FPS is very much affected by the community and individuals surrounding them.

4.1.4 A sense of shared experience and points of tension

Within the retro style FPS community there seems to exist a relatively strong sense of camaraderie. Even from a quick glance of the developers' public profiles one can see frequent discussions with other developers, a willingness be public about the development of one's own game, and desire to encourage others. While this is in line with previous indie communities (Guevara-Villalobos, 2011), there is also a tendency to prioritise other retro style FPS developers when it comes to mutual promotion and discussion. This was confirmed within the interviews with the developers often stating other developers of retro style FPS games as their main contacts regarding game development. While the reasons for this were partially practical, with developers feeling that others working on retro style FPS were in a best position to help them with knowledge and promotion, the developers also at times spoke of a sense of community which went beyond the immediate practicality. This was often expressed as a sense of shared values and interconnectedness. In practise this meant that some retro FPS developers felt that they had something in common with others in working in the genre, beyond what they have with other indie developers. As Developer 7 noted: "All the folks, who are making these kinds of games, we are very much similar people, so we want to help each other."

This sort of imagined similarity is however not necessarily simple or even fully true. To start with, when discussing their relationships to the community most developers would bring up one or two other developers with whom they had a particularly strong relationship, often adding that their connection to the broader community was somewhat more tenuous. This means that while the developers felt that they could ask almost anyone for feedback or advice, and were willing to provide help to anyone when they could, in practise the developers tended to consult community members they already knew. There were also several subcommunities present within the broader scene, such as the community around the GZDoom engine. These sub-communities often had their roots in older communities and though their members usually had points of connection with the broader community, they often spoke of closer relationships with others within their own sub-community. The retro style FPS community then is less a homogenous group and more a complex network of interwoven relationships.

From a demographic perspective, the retro style FPS scene is at first glance quite homogeneous with the majority of developers clearly being white, straight and male.

However, when this came up it was generally seen as either neutral or a negative aspect, with some developers feeling uneasy with the homogeneity of the genre's historical main demographic. Some expressed a sense of trepidation, such as a developer who said:

"Shooter game developers can be a little bit regressive in terms of their politics and that can also be a challenge to manage -- like being interested in talking with somebody about video games and then also being unsure when they are going to start getting weird at you." (Developer 8)

Some developers were also keen to highlight the presence of the LGBT+ community within the retro style FPS community. Developer 5 noted "I think generally that GZDoom community, this might not be the best way to put this, but it's always been very friendly and open to non-binary folks in particular." There was then a clear element of tension, where some developers were both aware of the genre's historical baggage and at times consciously trying to fight against it.

The developers were clearly aware of the historical dominance of the male perspective, both in the video game medium in general and the FPS genre in particular. The developer's relationship to this fact seemed to be a point of some tension within the community. Within the developers interviewed there were clear differences in their willingness to discuss negative experiences and inclusiveness in the community. Some were explicit when it came to the need for additional inclusiveness, safety, and community management. Others were much more hesitant to discuss matters and preferred to try to avoid "drama" within the community. While no developer expressed negative feelings regarding safety and inclusiveness, some developers referred to experiences which made it clear that this wasn't a non-existent view within the community. Inclusiveness therefore seems to be a point of tension within the retro style FPS community. This positions the community as a contested site in terms of inclusiveness within the broader game culture. It also highlights how rather than being a unified factor, the life experiences and world views within the community are heavily fragmented.

The sense of unity then, rather than being the result of a singular community or shared world views, seems to heavily draw from the genre's origins in fandom. To quote a developer regarding the community:

We've been the face for the ire of a lot of, if I may be brutally honest, a lot of like censor happiness in the world. -- In the US, whenever we've had a mass shooting comes along, we have these horrible people trying to take advantage of it and hurt us in the process. -- We've been through the darkest times in terms of us being the scapegoat for things. So, we know what it's like to and we are more willing to have each other's backs, because most of us are good people. (Developer 2)

These allusions to "censor happiness", while not entirely out of line with the broader video game medium, puts the community in a direct lineage with the original retro FPS fan fandom, which was one of the targets of the moral panic that followed the Columbine massacre (Pasanen, 2014, p.9). The sense of unity within the community was then linked, at least in the minds of some developers, to its fandom origins. The community then was able to draw from these origins, to create a sense of shared experience, even when the developers didn't ultimately have a lot in common.

While this feeling of shared experience wasn't universal, and the similarity of retro style FPS developers were clearly imagined to a degree, the sense of community among developers is nevertheless a notable factor in the facilitation of retro style FPS community. The developers stated that they often help other retro FPS developers with feedback or advice, with this help sometimes explicitly being framed around the idea of a community. As an example, when talking about helping other developers, Developer 8 said how "Part of being a good community member is making sure that other people have information if they ask for it." While this feeling of obligation wasn't necessarily universal, it is illustrative of the developers' general willingness to help each other out, as well as a good example of how a shared sense of community can facilitate the production of retro style FPS.

Ultimately then there exists some a sense of camaraderie amongst the developer of retro style FPS, which does play a notable part in the facilitating the production of retro style FPS. While it is in many ways like the indie communities that have been noted previously (Guevara-Villalobos, 2011), it did at times seem to go beyond it, with some developers feeling a particular sense of shared experience with other makers of retro style FPS. The scene also benefited from a sense of unity thanks to its historical fandom relations. The retro style FPS community was therefore able to draw both from the "indie ethos" (Guevara-Villalobos, 2011) and from its history of fandom in facilitating a feeling of community. This feeling of community didn't necessarily entail a large amount of interaction amongst the developers, with many noting relatively little contact

with the broader community. However, it did generally seem to facilitate both a feeling of obligation towards the others and a broad sense that one can talk to or ask help from anyone within the community.

4.1.5 Overview

At first glance the networks within retro style FPS appear quite commercially focused with both promotion and publishers playing a notable role. However, when discussing with the developers they often tended to articulate non-commercial motives for engagement, as well as emphasising the non-commercial benefits of the scene. The general ethos of the scene also leaned more toward mutual support and camaraderie over competition. This meant that while at times it was hard to distinguish between clearly commercial promotional material and the elements of the game the developers simply wanted to share with their peers, the developers' relationships to the broader community were mostly characterised by non-commercial motives and mutual support. The developers also tended to highlight the importance of non-commercial benefits even when they were gained from primarily commercial activities, such as the relationships formed through shared promotional events.

The networks within the scene rely on the visibility and active self-promotion of the developers, which can make them at times tricky to engage with for developers less comfortable with promotion. However, behind these surface level promotional networks there also exists a more non-commercial community, which draws a lot from the genres fandom origins and benefits the developers through peer support and social engagement. These networks are further enhanced by cultural intermediaries, who both enhance this visibility further and use it to find more developers for their own networks. Ultimately then the networks within retro style FPS scene are a clear mixture of commercial and non-commercial aspects and they provide the developers with a variety of benefits which impact the production of their game in a wide variety of ways.

4.2 Audience

This section addresses the varied potential audience for the retro style FPS games and how this audience was conceptualised and considered by the developers. It first goes through the core audience of enthusiasts and how their activity and presence within the community affected the developers' ability to gain visibility for their games. It then

examines the developers' tendency to seek a broader audience, their difficulties in reaching it, and why the often try to regardless. Finally, the section looks at how the developers' view of their audience's interest, or potential interest, regarding game development influenced the way that developers use their game making process as marketing.

4.2.1 Benefits of a highly interested core audience

One element which clearly stood out as meaningful in the developers' experiences was the highly motivated core audience of retro style FPS enthusiasts. The enthusiasts within the retro style FPS scene were clearly seen as highly invested in the genre and motivated to discover, play, and share games within it. From the developers' perspective, this group seemed to form both a highly reliable core audience and a fanbase interested not only in playing the games, but also in talking about and promoting them. They therefore formed a notable group of likely players whom the developers could rely on in terms of word-of-mouth promotion and active feedback.

From the viewpoint of the developers, the most notable thing about the core audience of retro style FPS enthusiasts was their efficiency in terms of word-of-mouth promotion. Many developers had experienced enthusiast evangelising on behalf of their game and trying to draw attention to it. One of the developers put it as follows:

There are a lot of people that will play a huge number of these games, and unlike in other genres, there are then people who are trying to get as many of them visible as possible. This is hard to explain exactly, but there is a lot more infrastructure around making sure indie devs get noticed in the Boomer Shooter genre than in the other places that I have seen. (Developer 8)

This ability for the developers to get noticed within the scene was an aspect which came up several times over the course of the research and the activity of the genre's enthusiasts seemed to play a central part in it.

This help wasn't limited to games which were already prominent. Since the enthusiasts within the genre were seen as actively playing a lot of games within it, they were also often noted to actively work on discovering more unknown titles within the genre. This meant that in some instances the developer themselves needed to do relatively little promotion in order to be found by the genre's enthusiasts. One of the developers commented on their activity from the time they were working on their game:

Few years ago, if you were making a game which looked interesting, people would pick up on it, because that was the community. It's a very small tight-knit community, but they do look out for new interesting games for sure. (Developer 1)

The developers therefore felt that they had done very little in terms of attracting the retro style FPS enthusiast. Many instead noted a sense of being discovered by the community after putting out elements of their game on social media. The core audience of retro FPS fans then were active not only in promoting games but also in discovering them.

While the impact of the enthusiasts was clearly visible on the promotion side, with the developers highlighting the effect that the enthusiast community had in making their game visible, the developers didn't say that this resulted in many sales. While the developers that had finished their games seemed happy with their sales and the attention they received, they often weren't sure what to attribute this and simply expressed a general sense of having "gotten lucky." Enthusiasts then are generally seen as effective in terms of discovering games within the genre and making them visible within their communities, but their effect in terms of the broader public is still unclear. It also isn't clear to what degree the enthusiast market alone could potentially sustain game development separated from the broader audience. The developers then weren't sure how much of an impact the enthusiasts ultimately had in terms of sustainability of game production, even if they were keen to promote games within the genre.

To move on from promotion, the developers also often cited feedback as a way that the enthusiasts impacted their game production. The developers noted how, whether or not they explicitly asked for it, they would often receive a lot of feedback from enthusiasts within the community. This influx wasn't without its complications, as the developers noted that going through it could be time consuming. In addition, the practical usefulness of this feedback was mixed, which will further be discussed in the content section. Overall, the developers seemed positive about the amount of feedback they received and seemed to take it as a positive indication of audience interest, even if its actual use was often complicated. One of the developers explained their feelings about this influx of feedback as follows:

It was fascinating seeing people that absolutely loved the game despite the fact that it was rough – and there's so much feedback. I was actually getting overwhelmed quite a bit, because I had never gotten this much actual proper feedback from anyone before. (Developer 2)

Feedback then was a complicated influence caused by the high investment that the retro style FPS enthusiasts had for games within the genre. While it wasn't always strictly applicable and the developers did at times express a complicated relationship to it, its overall presence was generally seen as positive sign by the developers.

The activity of the genre's enthusiasts then was a notable factor in the production of retro style FPS. Their tendency to seek out and evangelize on behalf of games within the genre was seen by the developers as helpful. In addition, the tendency of enthusiasts to seek out and promote the lesser-known titles allowed for even the smaller titles within the genre to get noticed. Finally, the tendency of enthusiast to be liberal with feedback was often seen as encouraging by the developers, even if the feedback itself wasn't always useful. To finish, here is a quote from a developer aptly summarising how the effect of the enthusiasts tends make itself apparent for the developers:

"All I did was I showed off this project to a friend of mine and he showed it to a friend of his and then after that I was getting way, way, way more feedback than I ever, ever had." (Developer 2)

4.2.2 Targeting both enthusiasts and a broader audience

Despite the previously noted benefits of the active retro style FPS enthusiasts, the developers highlighted that the enthusiasts were not the whole of their intended audience. Rather, most of the developers seemed to feel that their game had a potential for a broader appeal beyond the genre's core fandom. This didn't mean that these developers were exclusively aiming for the broader public, rather most of the developers described viewing their game as both appealing to the core fans and having a broadened appeal beyond them. This was occasionally framed as the genre itself not yet having reached its full audience potential. The developers then often ended up aiming for a sort of duality of appeal by looking to attract both enthusiasts and the broader public.

When it comes to the enthusiast audience, the developers were quite clear on the best avenues to promote and what was important in terms of appeal. Most noted that they had joined Discord channels which were dedicated to retro style FPS or related communities and that they had used community events and shared promotional threads to reach the enthusiast audience. In terms of the games content, factors such as level and gun design were often raised up as important. Overall however, the developers seemed to feel that attracting the core enthusiast audience was relatively easy when compared to

the broader public. This is not to say that developers didn't do anything to capture the attention of enthusiasts, rather there was a sense that due to their activity noted in the previous section, getting noticed by enthusiasts wasn't too difficult. As an example, when talking about promoting to the enthusiasts, a developer noted:

I kind of had a bit of a Retro FPS community following, just because of things like Realms Deep, *Reload Magazine* and other things. So, I was on their radar. I didn't have to go too far to find those people. (Developer 1)

Developers then didn't necessarily need to struggle to attract a core audience of enthusiasts and could instead look more towards the broader public to expand their audience.

When compared to the enthusiast however, attracting the broader public appeared to be a much more difficult task. While some developers did highlight specific websites and local events through which they hoped to draw broader attention, the developers seemed notably less confident in their ability to draw attention when it came to the broader public. While this was sometimes attributed to the genre, with some developers feeling that the FPS genre was somewhat niche, often it was simply seen as an aspect of the increasingly crowded broader indie scene. Developers who worked with publishers seemed to especially rely on them when it came to this broader public. Some developers said having entered events like Steam Next or having attempted to get in online magazines like *IGN*. However, they often added that these avenues were much more crowded. Some developers also noted that in terms of the broader public, indie developers were much more vulnerable to being overshadowed by bigger releases. Overall, when looking to appeal to the broader public the developers seemed much less confident and often articulated more difficulty in terms of capturing audience attention.

Despite this difficulty, developers still wanted to ensure that their game was able to appeal to a broader audience as well. Often this was framed in terms of accessibility, with developers wanting to ensure that even players without any previous FPS experience would be able to enjoy their game. However, the reasons for this weren't always commercial. While some developers did say that they felt that the enthusiast market was too small to be financially viable, others expressed an artistic desire to have their game seen in a context beyond that of the retro style FPS genre. Even when talking about promotion and marketing the developers seemed keen to frame their game not just as a good retro style FPS game, but as a good game in general. While this wasn't always

the case and some developers were more comfortable framing their games in terms of the genre, many clearly wanted to reach beyond that context. As an example, one developer described not wanting to be seen as product of the FPS focused GZDoom engine:

I want the game to sort of rise above the expectations of a GZDoom game. In that I want people to set their expectations the way they would any game and not sort of think of it as a GZDoom game (Developer 5)

In these cases, then, the desire for a broader audience seemed to have less to do with potential sales and more to do with having the game be appraised within a broader context.

Another reason for appealing to the broader public, which was somewhat surprising, was a sort of evangelizing on behalf of the genre. This was usually articulated in terms of wanting the game to potentially be a player's "first FPS" and in terms of strongly believing in the genres broader appeal. To quote a developer on trying to reach a broader appeal:

You could possibly open the door for other people who may have an interest in it, but they feel like: "Lot of FPS's they're not my cup of tea." If I can make this accessible for people like them this, well this may be the first FPS they've ever seen or ever had any interest in. You never know. (Developer 2)

While the developers generally weren't as explicit as the aforementioned quote, other comments suggest that some developers wanted their game to similarly appeal to the broader public in order to show them the potential within the genre. Some developers also noted wanting to do this type of evangelizing in other ways such as by making games in another genre or other artistic works, partially in hopes of drawing people attention on to their retro style FPS game. While this sort of genre promotion was only directly expressed by a single developer it was an interesting and unexpected reason for the developers to aim for a broad audience with their game.

The way that retro style FPS developers conceptualise their audience ultimately contains interesting tensions. While the developers were keenly aware of the enthusiast market as their most likely audience, they often wanted to reach beyond it into the broader indie sphere. However, this didn't mean abandoning the elements of the genre that they felt enthusiasts appreciated. Rather it was often framed in terms of making the game, and by extension sometimes the genre, more accessible to the broader public. The

developers were, then, at times trying to frame their game in a broader context, while simultaneously aware of the reality of working in a relatively strictly defined genre.

4.2.3 Audience interest in the process of development

The final interesting audience related aspect was the view amongst the developers that a part of their audience is invested not only in the game, but also the game development process. This view was often reflected in their public social media posts, which often contained work-in-progress material or new assets in the game. The developers were in general quite open regarding their games development process and trusted their audience to not react to it negatively. This sort of open development was generally brought up in conjunction with marketing but was also sometimes seen as a way to educate their preexisting audience on the game development process itself.

While this open development isn't a new concept (Thominet, 2021), it seems prominent among retro style FPS developers. The developers seemed quite comfortable displaying even their very early work and didn't seem worried that showing work-in-progress material would negatively impact people's perception of the game. Early access was also not unusual, and most of the interviewed developers also released demos of their game in an early stage of development. The developers showed little hesitancy regarding the release of work-in-progress material. This suggests a level of trust in the audience to understand the game development process and not to judge work-in-progress material overly harshly. Public development was overall quite common within the scene and the developers mostly saw it as positive.

Among the developers the main benefit of this type of open development was seen to be an increase in audience investment. Sometimes this meant attracting the people already interested in game development and thereby increasing the amount of people paying attention to the game. At other times it was seen as a way to further draw in people already interested, as a developer explained when talking about promotion:

What has worked mostly for us was just showing off what we're doing. – Like, "Hey, this is what we're doing" and then they [people interested in the game] come and weigh in. People like that kind of transparency. (Developer 2)

It should be noted that having people weigh in on work on progress stuff elicited somewhat mixed opinions from the developers. Some were generally positive towards

it, while others clearly preferred for the audience not to weigh in. However, regardless of whether they wanted opinions on it or not, showing off the things they were working on and discussing game development matters publicly was seen by many of the developers as a positive habit when it came to audience investment.

Other reasons given for this sort of public development were to draw in an audience interested in game development and to educate those interested in the game. As it was put by one of the developers:

I really tried to focus my marketing on just kind of showing part of that game development side, you don't always see. -- It's fun to be able to share that side, because then you get the people who are just interested in your game or interested in retro shooters in general that are engaging with your tweet, but you also get people who are interested in game development. (Developer 4)

Many developers also said that they had publicly answered questions regarding their game's development, and some even noted having a specific section of their games Discord server dedicated to general game development discussion. The developers seemed keen to share their knowledge regarding game-making and felt that sharing that knowledge was a valuable goal in and of itself. While this wasn't always altruistic, since some developers did use this kind of knowledge sharing to also draw the attention of people interested in game development, that didn't seem to take away from the developers stated desire to inform people and to show the reality of game development. Among some developers then there was a clear interest in educating their audience about game development as well as discussing the practicalities of actually making a game publicly⁴.

4.2.4 Overview

There clearly exists a heavily invested core audience of enthusiasts within the retro style FPS scene, which has benefited the interviewed developers. This audience is invested in the genre and has both seeks out and evangelises on behalf of games within it. This audience is supplemented by, and occasionally overlaps with people invested in the game development as a process itself. The combination of these two audiences results in the developers being very open with their development practises and feeling confident in their ability to attract at least the core enthusiasts within the scene. This core is

This interest might also explain the developers' surprisingly high willingness to be interviewed for this thesis.⁴

somewhat limited in size, however, and many developers seek to have reach beyond it, if not for commercial reasons, then for the sake of having their game be seen as more than just a game within the retro style shooter genre. Some developers also hoped that their game could serve as an introduction to the genre. However, developers also often noted some aspects of the game that they felt would appeal to retro style FPS enthusiasts and therefore clearly considered them to at least some degree when making their game.

The developers' view on their audience was quite varied. While some were happy to focus mostly on enthusiasts, others were looking for a broader appeal. Some developers wanted their game to potentially serve as an introduction to the genre, while others aimed to make their work public to educate people on game development. It is also likely that additional interviews could have uncovered additional audience aspects not found in this research. However, the effect of enthusiasts in terms of discoverability and some general aim beyond simple marketability were relatively common throughlines within the making of retro style FPS.

4.3 Learning

This section looks at learning facilitated by the retro style FPS community. It starts by looking into the differing sources of knowledge and how the developers had at times different levels of interest regarding different aspects of game production. It then looks at the ways that developers learn genre tropes, how this is relevant for production, and how it is closely related to the community surrounding the genre. Both of these sections include discussion of the difficulty of transferring knowledge into learning within the game production context. There is also some discussion on learning itself as a motivating factor for making a game.

4.3.1 Many different sources of relevant knowledge

Many developers noted that they actively shared game making related knowledge with other people within the retro style FPS scene. While the sharing of knowledge wasn't limited to others involved in the making of retro style FPS developers, for many developers the majority of their knowledge sharing happened with other genre-related actors. The knowledge shared covered a broad spectrum of game development and production related information. Developers were mostly cited as relevant for anything

directly game related, with publishers highlighted in terms of marketing and publishing. The developers therefore had multiple sources of knowledge within the scene depending on the exact topic.

Most of this knowledge was centred around coding and design. Many of the developers interviewed noted that they had discussed these matters with other retro style FPS developers to some degree. The knowledge shared was often related to technical matters as well as the particularities of game engines. The latter topic was often seen as necessary when dealing with what the developers considered badly documented aspects of a variety of game engines. To quote one of the developers:

In terms of learning the programming stuff, I'd say about 90% of that was. GZDooms' internal programming language Zscript, it's very similar to C#. That language is not well documented. – The bulk of it was just looking through other people's code and seeing like how it works. The other part of it is... the GZDoom community is supportive. You can hop on the GZDoom Discord, and you see. -- I've probably asked 20 or 30 questions. (Developer 5)

This knowledge sharing took place mostly online with public forums, private chat conversations, and web calls being noted. The differences in media were mostly dependent on the developer, with some preferring open forums and others leaning towards private conversations. Overall, most developers seemed keen on both sharing what they know of game development and learning what they can from others within the scene.

Most of the developers emphasised, that while this type of knowledge sharing was useful, it still had its limitations. Due to the large variance in implementation, most developers noted that any advice given needed to be implemented on a case-by-case basis. In practise, developers often asked for broad advice rather than specific details. This is illustrated by the following quote regarding quick saving:

Getting other developers' insight in the quick save thing wasn't "What's the code you used to quick save" but more, "How did you approach it? Do you reload the scene? Do you keep the scene active and just reset everything? What do you store?" (Developer 4)

There seemed to be an element of difficulty regarding sharing technical knowledge. This could sometimes be attributed to the desire of developers to learn things for themselves, but mostly seemed to be the result of big differences in the overall technical functioning of the games, despite them being within the same broad genre. There was a

desire amongst the developers to get beyond this challenge for example by sharing their developmental material openly or by doing a comprehensive public overview regarding the codebase of their game. Despite this need to implement the knowledge received in a unique way for their game, the knowledge gotten from other developers was still seen as valuable by the developers. While some did express a broad hope towards more directly applicable knowledge, others conversely stated that in the long term, learning by doing was the best way.

In many of the developers' opinion, the only real way to learn to make games was to make games. The developers often noted that while they did receive help or information from their peers, they ultimately learned by doing, not by receiving the information. This was further highlighted by the developers who cited learning as one of their main motivations for making their game, sometimes despite having relevant education background or industry experience. When this seeming necessity of constant learning is combined with the technically unique nature of most games, the difficulty of learning game making comes into stark view. For many developers then no previous relevant experience or knowledge shared by peers was a substitute to actual practice when it came to making a game. This meant that, though the developers were often able describe the issues they faced with the genre's vocabulary, and though they often could consult others who had faced similar issues, genre similarity ultimately couldn't make up for the complexity of game development. The developers, then, couldn't directly learn how to make an aspect of their game from another developer. The shared genre did however mean, that they could count on some degree of advice from another developer who had dealt with a similar issue.

In addition to the developers, another often-touted source of knowledge were publishers and other experts. This group was most often cited in matters regarding marketing, sales, publishing, and other matters outside of game making itself. The most common topics brought up in this context were promotion and the practicalities of selling a game. This latter topic often meant navigating the bureaucracy related to platforms such as Steam, but also refers to matters such as porting and sales. The main source of this knowledge was generally the publisher, often the one the developer was currently working with. However, many noted having received advice even without an official working relationship, since some publishers invested in the scene were happy to share what they knew regardless to whether or not they were officially working with specific

developer. Some developers also noted having talked to consultants outside of the scene. Developers also looked beyond the scene when it came to matters outside of the immediate making of the game. While some learning was attributed to in-scene sources, such as publishers within the scene, a lot was also done outside of it, with some developers working with publishers less invested in the scene or asking advice from general indie game or marketing experts. These non-development matters then were overall broader than development related ones and often varied greatly in source and topic.

This sort of knowledge was also brought up less often than knowledge relating directly to development. It was also in brought up in lighter tones with some developers noting it as interesting but not immediately important. There were exceptions to this, with some developers noting how learning how to navigate Steam in terms of sales and bundles had been a great help. Overall, however, there was a sense that knowledge not directly related to development was of secondary usefulness when compared to the practical knowledge of making a game. While many developers were clearly personally invested in their games and were specific in the ways that they wanted it to be, they were generally more willing to let their publisher or others they were working with take the lead in matters not directly related to their game. As such, the developers were generally happy to let the publisher handle marketing and publishing while personally focusing on development. This means that the publishers seemed to do the majority of this work when present, with the developers having a reduced need to learn about the practicalities of publishing and marketing. In cases where a publisher wasn't present, the developers likewise seemed less interested in publishing matters than game development. Often this was expressed as frustration in terms of time that marketing took away from development or as annoyance in having to deal with various platforms. Perhaps not surprisingly, the developers were more interested in making their game than they were in marketing and selling it.

The developers within the retro style FPS scene clearly had different sources of knowledge for different aspects of production. Most of the game-making-related knowledge was gathered from other developers and happened for the most part with others invested in the genre. While this knowledge needed to be implemented on a case-by-case basis, it was still seen as valuable in giving the developers a sense of how to approach a given problem. On the other hand, the knowledge relating to publishing

came from a broader variety of sources. While publishers were the main vector for this information, a variety of other experts were also cited. These sources also had a varying relationship to the retro style FPS community with some being active members, others having a more tangential relation and some simply working within the broader field of video games or another relevant field. This knowledge was also sometimes seen as less important than development, as a portion of the developers were happy to leave non-development related work for the publisher. The knowledge shared within the retro style FPS scene seems to be complicated in its utility, since developers found it generally useful, though rarely directly applicable and often situational.

4.3.2 Learning the tropes of the genre

An interesting additional aspect of learning which wasn't as prominently featured in previous research was the way that developers working in a genre learned tropes related to that genre. This was a factor that a surprisingly number of developers brought up as important when they discussed the ways the community and the scene helped them in terms of their game. Many developers noted both audience feedback and the ease of discovering games within the genre as facilitating factors in terms of learning the tropes of retro style FPS genre. This didn't necessarily mean that the developers said they were looking to adapt their game to those tropes, but rather that they generally felt that understanding the tropes was useful and necessary when making a game within the genre.

While the dynamic between subverting and adapting to audience expectations is naturally a complicated one, such a dynamic necessitates a shared baseline of tropes which that the developer and audience both are aware of. It is therefore worth noting that the knowledge relating to those tropes isn't intrinsic to the developers. Rather it something that the developers must learn at some point. Genre tropes therefore are worth looking at as an aspect of learning, as they can easily shape the way that the developers make their games. This ultimately means that the process of learning genre tropes is a part of retro style FPS production worth examining.

The main way that the developers said they learned these tropes was through other games within the genre. To quote one of the developers on this matter:

I think one of the best things that happened to me in getting exposed to that community during production was that it got me to play a lot of those smaller games. That introduced me to a lot of different ways to approach the same general mechanics in the retro shooter scene. (Developer 8)

Sometimes this was through play and sometimes simply through observing the material that the games developers put out about it. Due to the considerable number of retro style FPS games which exist, and the community's previously noted tendency to promote them, many developers said they have seen and sometimes played many games within the genre. While the developers overall had a complicated relationship with these other games, with some actively avoiding them for artistic or motivational reasons, some developers specifically noted that playing other games within the genre was informative.

Another avenue through which the developers learned about the tropes of the genre was the enthusiasts within the scene. While the developers' overall relationship to this knowledge was also complicated, some developers specifically highlighted the community's overall strong grasp on the tropes of the genre. This meant that the developers could gain knowledge regarding the tropes of the genre, not only from directly playing the games, but also through a broad range of second-hand information from the genre's enthusiasts. One of the developers highlighted this fact in the following:

Certain tenets of level design or how people expect saving and loading, or weapon selection to work, all these little things are kind of ingrained in the retro shooter community from all these years of playing all these different games. I would say I probably learned more from the community, the actual players themselves, than I did from other developers or other games in that sphere. (Developer 4)

The developers had no shortage of avenues for learning the genre tropes with both firstand second-hand experiences of similar games being highlighted. The activities of the community helped direct the developers to both of these experiences and the enthusiasts of the genre are definitely a noteworthy factor when it comes to the proliferation of knowledge regarding the genre's tropes.

This knowledge regarding genre tropes didn't mean that the developers were looking to mimic other games. Rather, the knowledge of genre's tropes allowed the developers to better position their game within the cultural context of retro style FPS games. Sometimes this meant adaption to the genres expectations and sometimes it meant actively subverting them. Or as it was put by one of the developers.

"By talking to other developers and playing their games, I got an idea of how to make mine feel a bit different to what was already out there." (Developer 1)

While this complicated role of genre tropes in production will be discussed in more detail in the content section of this thesis, it is worth noting that the developers' highlighting of their learning of genre tropes did not mean that those tropes were used uncritically. Rather, the learning of tropes allowed the developers to better understand the audience expectations regarding their game and to helped them to better situate their game within its cultural context.

To sum up, due to both the number of retro style FPS being made and the tendency of their surrounding community to discuss these games, the developers of retro style FPS have an unusual number of avenues through which they can learn the tropes of the genre. The tropes made the audience expectations regarding the games within the genre explicit, which in turn ensured that the developers were aware of them. This in turn allowed the developers to consciously adapt to audience expectations or subvert them. In addition, the frequency of games within the genre allowed for a broader range of influences and gave the developers multiple potential points of comparison and contras for their game, rather than having to rely on a few well-known games.

4.3.3 Overview

In general, the knowledge sharing within the retro style FPS scene is considerable. The developers noted having received information regarding development matters, broader publishing related matters, and the tropes of the genre. The sources of this information were broad with other developers, publishers, experts, other games in the genre and even the genre's enthusiasts being noted as sources. However, for most of this information there was often a complicating factor such as the uniqueness of a given game's functionality or the critical way in which the developers often looked at the genre's tropes. This meant that while the knowledge shared within the scene was often considered useful, many developers felt that ultimately, they could only truly learn through the process of applying this knowledge, or in other words through making their game.

The community and genre of retro style FPS undeniably played their parts in facilitating the sharing of knowledge. The developers often consulted their peers from within the community in matters relating to development or technical knowledge. Many also specifically cited asking questions related to aspects typical to retro style FPS such as quick saving or enemy and level design. In terms of publishing matters, the community impact seemed smaller. While some elements such as sales numbers were related to the genre, developers also seemed happy to ask for advice from outside of the community when it came to matters like promoting, platforms, and publishing. Finally, the learning of genre tropes and audience expectations were naturally aspects closely related to genre, as the tropes themselves exist within the context of the genre and the audience expectations are likewise shaped by it. The learning of these tropes is also closely related to the genre and scene, with other games and the genre's enthusiasts being the main avenues for this information. Community and genre clearly had an impact on both how the developers learned and, perhaps more interestingly, what they learned in terms of game production.

4.4 Content

The final aspect addressed here is how the developers felt working within the genre had impacted their games content. Content here is used as a broad term to encompass mechanics, aesthetics, or any other elements of the game which make up its whole. This section is mostly focused on the factors which dictate this content and how those factors are related to working within community and genre. This means that it will not be going into much detail on the game design or other aspects, but rather will be focusing on how the developers thought the genre and community they worked within impacted the shape of their game.

While the primacy of the developers' personal tastes was a clear throughline in the content of the game. Many noted that they had considered and were aware of factors such as genre tropes and audience feedback. This means while factors outside of the developers were impactful, the developers were the final judge when it came to the content of the game. Possibly for this reason, the developers generally felt quite free working in the genre. While many noted limitations in terms of technology, time and money, no developer felt that they were forced to include or remove elements due to the audience expectations regarding the genre. The genre and community, while in many ways impactful regarding the games content, were always secondary to the developers themselves.

4.4.1 Critical eye regarding genre tropes

When asked about the content of their games, many developers highlighted the importance of personal preference. Within the genre context this often manifested as a critical approach to genre tropes. While most developers were keenly aware of the tendencies within the genre and how things are done, they generally approached these critically. This was often framed as a mixture of wanting to avoid cliches and as a personal dislike towards certain genre tropes. However, as almost all the developers explicitly said that they liked the genre, they were rarely interested in departing entirely from it. This meant that most developers did end up consciously using some genre tropes, though they did so critically and were often looking to ways to alter elements according to their personal tastes.

The main way that the developers' critical approach to genre tropes was evident was in their desire to avoid cliches. Many developers explicitly stated this, sometimes adding that they felt that aspects of the genre had started to feel stale because of them. To quote one developer on their relationship on the genre:

I guess it's avoiding cliches. People have certain expectations regarding Boomer Shooters. They expect that they always have demons or cultists as enemies and for you to always have the same loadout. — I try to invent something newer, but of course I want to stick to the classics in good taste. Like the super shotgun, it has to be there. (Developer 7)

These cliches ranged from aesthetic choices and typical enemies to level design elements and gameplay mechanics. Even the use of heavy metal music was noted by a developer as having "been done." Overall, there were very few aspects of retro style FPS which weren't seen as containing some kind of cliche. Usually, the critical approach of the developers led them to avoid these cliches. However, in some instances developers preferred to subvert or parody them instead. As an example, a developer making a game with an overall comedic tone noted that they purposefully added a sewer section to their game as a joke because "they're overdone." Almost all of the developers had a clear idea of the elements they considered overdone within the retro style FPS genre, and they were often looking to avoid or subvert these elements in accordance with their personal tastes.

The developers also often decided to alter many tropes of the genre due to personal preference even in cases where they didn't necessarily think them cliche. As an example, while talking about their game in relation to its genre a developer said:

I know I thought about some of our things in context as related to retro shooter. We made a very conscious decision to only have [fewer] weapons available to the player at a time. Because the ten-weapon system is something that I don't really like about retro shooters (Developer 8)

This mixture of genre tropes and personal preference was quite common in the developers' descriptions of their games content. This is somewhat in line with general indie development, which tends to place a premium on the developers' personal tastes (Garda & Grabarczyk, 2016). However, it also shows how even when working based on personal tastes the final content of the game is impacted by genre tropes and expectations. The widespread tropes of the retro style FPS genre then led to an interesting situation where developers were consciously trying to experiment within genre limits.

The developers ultimately are in an interestingly similar position to the genre movie makers described by Schatz (1981, p.36). While they seem overall less concerned about audience expectations and are guided more by personal preference, many developers still seem to be trying to reinvent elements of the genre while simultaneously keeping its core appeal intact. While this isn't a situation exclusive to retro style FPS, it does show how the presence of a variety of genre tropes can ultimately end up shaping the content of a game.

There were also occasional allusions to developers trying to subvert not only individual tropes, but some of the underlying values of the genre. One developer described their relation to other game in the genre as follows:

A lot of retro shooters in general, at least at the time that I was working on [my game] we're very much focused on kind of that *Doom Eternal* type of game, where it's what I call a zoomy shooter. -- It's [focused] very much around moving as quickly as you can and mastering a certain amount of movement tech or gameplay gimmicks. It's very much more like you're performing than you are playing at that point. That's not really my cup of tea. (Developer 4)

This quote is particularly interesting as it articulates awareness of and dissatisfaction with not only a given trope of the genre, but also arguably with a deeper value within the genre. (In this case, the value placed on the player's ability to master the movement

mechanics of a game.) While this sort of deeper criticality towards the genre was rarer than criticality towards individual tropes, it was still clearly a factor in some of the developers' visions for their game. The developers were aware and critical of not only the genre's tropes but also the underlying values behind those tropes.

The developers' critical eye for genre tropes and convention was clearly visible in how they talked about their games content. Developers avoided, subverted and parodied cliches and looked for ways to have their game stand out. Even in instances where no developers felt that a trope of the genre wasn't overdone, some still preferred to alter it due to personal dislike or simply wanting to try something new. The developers also critically examined the values behind the genres and looked for a way to make the genre feel fresh. However, the genre tropes did impact the shape of the developers' games even through this critical perspective and most developers seemed to find it necessary to consider genre tropes in the process of making the game. This means that making games in a notably established genre like retro style FPS does clearly alter how developers look at their game, which further is likely to impact how they ultimately make it.

4.4.2 Feedback from players

Like genre tropes, audience feedback was also often cited as an important factor by the developers when it came to their games content. Feedback was often seen as helpful when it related to bugs or quality assurance. In terms of design decisions, however, feedback was seen as much less impactful. This meant that while most developers said that they do actively look through feedback, they seemed to mainly consider it in cases where it didn't conflict with their personal vision for the game. Among the developers interviewed, feedback was seen mostly as informational, with its influence on design notably more limited.

Feedback was often framed around the idea of playtesting. The developers talked about both gaining additional perspectives and having people look through their game for bugs or missing features. For some developers, playtesting was formally organised, sometimes with the help of a publisher. For others it was a much more informal process, with people interested in the game asked to play early versions while streaming for the developer. The main thing the developers seemed to gain from this feedback was a mixture of bug reports and information on things they had overlooked. In terms of bug reports most developers saw them as relatively run of the mill, tough one developer did

note having learned good bug reporting practises from other developers giving feedback. In term of overlooked aspects, the impact was much more varied. As an example, developer discussed additions to their game:

I would say the biggest thing would be accessibility features, just stuff that I would have never thought about myself. -- There would be one person on Twitter who would be "hey, the camera motion makes me really nauseous in [your game], but I really want to play it." It's like, "OK, well, maybe I can add an option to tone that down." Since I've never brought a game to market, I'd hardly ever made an options menu before at all. (Developer 4)

While at times developers felt that this sort of feedback was about something they simply hadn't gotten to yet, many found it helpful in drawing attention to things they hadn't known to consider beforehand. Feedback appeared to have a clear effect in terms of quality-of-life aspects, with many developers clearly appreciating, and sometimes actively sought out.

In terms of explicit design decisions, however, the developers' relation to feedback seemed much more contentious. This was illustrated by Developer 1 who stated: "It was a careful balance of listening to feedback, but also remaining true to what I felt the game should be." While most developers did note that they looked at that type of feedback as well, many added that they felt such feedback was often less valuable and much more difficult to weigh. As many developers ultimately wanted to be either personally or as a team responsible for all the design-related decisions, there was some clear hesitancy to alter the game purely based on audience feedback. As an example, a developers described testing one of their games weapons as follows:

You would get into this cycle [with the gun] where you would always reload in between killing an enemy and the rhythm would be really awful. I was always like "no shoot like this NO." We thought about it for a long time. – Finally, we designed for it to have more shots and forgot about the rhythm thing and that really only made it more fun. At that point you kind of see the light and realise that "yeah this is better." So there really wasn't anything that would say is like "I would never want this here, but we just need to put it in". (Developer 3)

In general, personal preference was also a key element in developers taking on feedback, and no developer noted having added or removed elements against their personal preference due to feedback. Feedback's influence on design aspects was then much more complicated, with developers sometimes expressing frustration at feedback that they felt missed their point for the game. As perhaps the brusquest comment

Developer 7 noted "If the feedback is of the quality of 'I don't like this monster's design', then I will be honest and say that it [the feedback] goes to the trash." The developers clearly had at times a contentious relationship with feedback, especially that related to design.

Amongst the developers, feedback's relation to the game's final content was ultimately dependent on which aspect it related to. Within quality-of-life aspects the influence seemed quite notable. The developers were able to use the enthusiasts within the community as voluntary play testers at times, and in general found feedback relating to this matter quite helpful. Within design matters however the developers seemed quite keen to ultimately keep the final word to themselves and were overall unlikely to change aspects of their game simply due to feedback or testing.

4.4.3 Genre only limiting through reputation

The last thing to address in terms of content is the possible direct limitations of the genre. As both the audience and genre can create strong expectations regarding the aesthetic, values, and mechanics of a game it's worth looking into whether developers felt that some design choices were of the table within the genre. In this instance, this meant limitations beyond the obvious requirements of being a game within the genre such as first-person perspective, shooting mechanics, and retro influence.

For the developers interviewed these limitations seemed minimal overall. No developer noted feeling pressure to remove or add elements due to working within the genre. for example, when asked about whether the genre felt limiting, one developer responded:

Not really, because it was a genre I wanted to work in. It was a genre that I liked, and that was rooted in playing *Doom* and *Jedi Knight* and *Alien: Resurrection* and things like that. I never really felt it constrained me too much. I can't really think of anything that I felt I couldn't put in. I guess I was worried about the length of the game. (Developer 1)

This didn't mean that developers were able to include everything they wanted, as time, money, and technology were all noted as limiting factors. However, since many developers noted that they were working in the genre due to personally liking it and since they were making the game based on personal preferences, they didn't find the genre itself limiting in any practical way. A few developers did note that the perception of being mostly targeted at the retro style FPS demographic was something they found

slightly frustrating. While this was not seen as limiting what they could put into their game, it was the one notable thing cited in terms of the genre's limitations.

A few developers also noted that they felt somewhat worried that the genre's reputation would turn away people who could potentially enjoy their game. This wasn't necessarily a limitation of the games content, as most developers felt they didn't need to appeal strictly to this perceived core demographic. However, some developers actively noted the opposite and stated that they had tried to make their game more inclusive. This meant both making the game more accessible and trying to appeal to demographics not typically targeted by the genre such as women and LGBT+ individuals. While the genre's reputation did seemingly shape the games content at times, it wasn't as a limiting factor but rather as something to push against.

Ultimately, it seemed that for most developers the genre was something that they were happy to work within and a context in which they felt relatively free to innovate and express themselves. The developers also seemed to feel relatively free to alter elements or tropes of the genre. While this was at times a conscious attempt to break from the genre's reputation, it was usually framed as a creative choice and not as something particularly transgressive in terms of genre. This lack of genre limitation while not unexpected in indie context is still somewhat noteworthy. It shows that despite consciously working within a genre context, the developers do not feel beholden to its expectations. This further highlights the primacy of personal preference, even within the genre context, and how developers did not feel pressured to appeal to the genre's presumed core demographic, even when they find them useful in terms of word of mouth or feedback.

4.4.4 Overview

Genre and community both then had a clear impact on the content of retro style FPS, and most of the developer did consider them to some degree when making their game. While the effects of genre and community were ultimately filtered through the developers' personal preferences, and as such didn't fundamentally change the nature of indie development, their impact is still worth considering.

The presence of genre tropes was something many developers were aware of, with many specifically noting avoiding cliches. As the presence of these cliches is very much tied to the genre they exist in context of, a developer working outside of a defined genre is naturally less likely to consider them. However, while a developer working on a non-genre title isn't likely to be as worried about genre cliches, they also are likely to have less closely relevant material and fewer points of immediate comparison. Working in a genre then is very much a double-edged sword as it allows the developers to better understand the cultural context they are working within, but also demands increased attention and skill to be able stand as a distinct work within that context. This provides an interesting contrast to the broader indie scene where creativity is generally seen in more experimental and less generic terms (Garda & Grabarczyk, 2016, p.15). The strong presence of the genre highlighted the importance of genre knowledge for the developers and therefore altered the production context of their games.

When it comes to the impact of the community, feedback was clearly the most important factor. The impact of feedback stemmed partially from its quantity, which seemed to be partially attributable to the active enthusiasts within the scene. This impact was most clearly felt on quality-of-life matters as that was the area in which the developers were most receptive to feedback. Its impact on design matters while still at times notable was clearly more muted due to the developers strongly wanting to adhere to their personal vision for their game. The community's impact on content then is somewhat multifaceted. On one hand the increased amount of feedback was clearly helpful in ironing out bugs and allowed the developers an increased amount of QA, which they wouldn't necessarily otherwise have access to. On the other, it also put developers in a position where they were subject to an increased number of outside voices regarding their design decisions, which the developers seemed to have mixed feelings about.

This impact on content is ultimately a reflection of the broader impact that genre and community have on many aspects of video game production. The developers clearly gain a lot from the community and used a broadly shared understanding of genre to their benefit. However, both of these elements also put additional pressures on the developers which they had to navigate in the process of making their game.

5 DISCUSSION

The effects that community and genre have on the production of retro style FPS, while clearly varying between developers, still altered the conditions of indie game production. Some of these effects were direct and immediately obvious, such as the additional visibility provided by enthusiasts. Others, like the impacts of the genre's tropes, were much more subtle and indirect, becoming apparent mostly through the thought process of the developers. These effects overlap quite often, and it can at times be difficult to distinguish whether a developer was being influenced by the expectations of the genre's enthusiast or by the overall historic tropes of the genre.

This discussion chapter draws together some of the separate impacts noted in the findings chapter and looks at some of the more overarching and subtle themes emerging from the interviews. It will first look at the community's fandom-like aspects and how they impact development, then contrast the challenges that the developers within the genre face to those experienced by more experimental indie developers. There will be a look into the presence of corporate interest within community and how they make themselves apparent. Finally, there will be a short speculative section on how differing genre pressures, or the pressures of not working within an established genre, might shape the development of games within the genre differently.

To start off with, it's worth looking at the aspects of retro style FPS community, which put it in line with its fandom origins. The most notable of these is the role that enthusiasts play in the community, as well as their proximity to developers. Many community hotspots such as the *Doomworld.com* forums and the *Reload Magazine* Discord have a notable presence of both developers and genre enthusiasts. While a slight degree of separation is at times created through things like developer exclusive channels, these boundaries seem limited and not very tightly guarded. Many developers also highlighted how they had either talked to their fans directly, or been influenced by them through other ways e.g., feedback. The retro style FPS community then clearly has notable elements of *participatory culture* (Jenkins, 2006) as enthusiasts are interested and able to impact the production of games within the genre. This wasn't always fully desired from games developers however, since many developers seemed to value their artistic independence, and didn't necessarily want to be too influenced by the genre's fans.

This relationship was further complicated in cases where developers noted that they had a modding history or could for other reasons be considered fans of the genre themselves. This arguably makes it possible to interpret some of the games made in the genre through the lens of fan works, as they are games which heavily reference previous works that the developers were a fan of. It also arguably puts the genre close to Jenkins' definition (2006) of *convergence culture* as being "built on borrowings from various media conglomerates." (p.141) In this instance the thing being borrowed is the many, notably uncopyrightable, game design elements which are generally seen to constitute the core of the retro style FPS genre. Finally, the developers' role as fans of the genre muddles the line between developer and enthusiast. This puts it in an interesting context historically, as a part of the ongoing repeated process of people who make fan works finding ways to leverage their skills and connections more professionally (Jørgensen et al., 2017, p.472-473).

Viewing the community from a perspective of a fan community also explains some of the peculiarities in the production practises within the scene. Like the tendency toward open development and the activity of the enthusiasts. As noted by Jenkins (2006, p.145), the sharing of making-of material along with their technical advice has often been strongly connected to various fan works. Indie development of course is also notable for knowledge sharing (Keogh, 2021b); however, the developers sharing of work-in-progress material isn't usually as emphasised, with more weight being given to the sharing of development knowledge. Enthusiasts likewise are an aspect of the community arguably more easily understood through the lens of fandom. Their activity and high level of investment as well as their overall interest in development puts the enthusiast more in line with fan communities than with the broader gaming audience. The retro style FPS community has a lot of aspects similar to fan communities, likely due to its historical origins in modding communities.

It should be noted, however, that despite arguably benefiting from some of these tendencies typical to fandom communities, most developers would likely prefer **not** having their games to be perceived as fan works. Since a majority of the developers clearly aimed for artistic independence and legitimacy, they would likely take being labelled as a fan work as a sign of their game being overly derivative and too influenced by previous works. This once again harkens back to the dilemma of genre media, where a given piece of media needs to innovate enough to be distinct, but not so much as to be

unrecognizable as work of a particular genre. The situation is further complicated in cases where the developers wish for their game to have appeal outside of the genre's core audience. In such cases the developers need to simultaneously innovate, popularise, and still adhere to genre conventions in order to fully achieve their aims. A failure to do so can result in either the loss of audience interest, or the perception of the game as a derivative fan or genre work lacking innovation and artistic legitimacy.

These risks and challenges faced by the developers of retro style FPS games make for an interesting contrast to those faced by the more experimental indie games. While the more experimental games often struggle to be taken seriously as games, they are generally given a degree of artistic legitimacy by both cultural institutions and other developers (Keogh, 2019, p.29; Harvey, 2014, p.100-101). For the developers within the retro style FPS genre the challenge appeared to be the opposite. While they generally had little trouble communicating their game to their audience and while they certainly didn't worry about being seen as "not games", they did at times struggle to have their games viewed as a distinct artistic works, rather than overly derivative genre titles. These sorts of notable differences are interesting as many developers within the retro style FPS scene, much like more experimental developers, did talk about their games in terms of expression and art. Video game developers can then face vastly different challenges in terms of their games production and reception depending on their game's cultural perception.

This perception can't be completely separated from the history of the traditionally highly formalised game industry (Keogh, 2019). It is therefore worth noting that due to the industry history of the FPS genre, indie developers who work within retro style FPS are likely to be closer to what is traditionally seen as the game industry than more experimental indie developers. This is perhaps best signified by the notable presence of publishers within the community. The larger and/or established publishers were often closely related to large corporations within the game industry with the smaller ones also often operating in a similar fashion, as publicly traded companies. These types of publishers can then be seen as the clearest representation of corporate and industrial interests within the community. While the general view towards corporations in the community isn't necessarily positive, there has thus far been relatively little resistance to the corporate elements within the community. A notable number of developers seem to be generally willing to work with even larger publishers and there is very little to no

pushback to corporate presence within community events. Commercial interests then are clearly ingrained in the community to a degree and are arguably more notable within retro style FPS than in other areas of indie development.

This is further complicated by the role that publishers had in facilitating activity within the community. The developers were clearly aware of the benefit of publishers and while most the praise was for smaller and more co-operative publishers, individuals associated with large corporations were also often seen as central to the community. This central position of industry actors within the retro style FPS community naturally increases their ability to exert influence within the scene and arguably makes both individual developers and the community overall more vulnerable to the actions of large corporations. The developers seemed to be aware of this, at least to some extent, and were often clearly wary of publishers, with some deciding to make their game without one. However, the developers were in a somewhat difficult position, as going without a publisher could limit their level of access and increase the time they need to spend on promotional work. The developers often had to decide whether they wanted to take on the additional work of promotion and the difficulty of reduced access, or whether they wanted to work with a publisher and potentially subject themselves to more industry pressures and corporate interests.

The developers' position within the community then seemed to subject them to an amount of fandom and corporate attention that isn't necessarily typical for indie games. While this clearly gave the developers potentially useful resources, those resources came with both a risk to their artistic legitimacy and a spectre of corporate capture. Since developers within the retro style FPS genre were, like most indie developers, still making games primarily based on their personal artistic preferences, the additional pressures created by fandom, genre associations, and corporate presence wasn't something they always welcomed. This presented itself as an occasional feeling of unease towards both the enthusiasts and the publishers in the scene, while simultaneously expressing awareness of and gladness for the benefits that these groups provided. The developers ultimately had to navigate the varying forces within the community if they wanted to gain the full benefits of enthusiast interest and publisher support, while avoiding being labelled simply as a fandom work or losing their creative freedom to business interests.

To move from the community to the genre side of things, it is worth considering how the general shape of the FPS genre could potentially impact production realities. As an example, the emphasis on level design is likely to mean that developers are less able to use procedural generation to make their games, unlike in more simulational genres or games in the Rogue-like genre. In addition, the emphasis on gun and monster design, as well as the historically minimal story, are naturally going to dictate a heavier emphasis on graphical and audio design over a written story. While these differences might seem at first to be surface level, they do also create production pressures in terms of required knowledge and needed resources. Since what expertise is needed is naturally going to dictate the ability of people to make games, it is worth considering what elements, and thereby what expertise, are generally given primacy within a given genre when looking at how games made within it. The developers could of course change these priorities in order to stick out, as some developers did. However, this sort of altering of the formula is once again based on a generally agreed upon pre-existing baseline, which is likely to vary between genres.

It is also worth noting that retro style FPS games are generally designed to be completed. While some of the genre's tropes such as secrets and increasing difficulty levels encourage replayability, players experience with the game is generally presumed to be finite. This is in contrast to many multiplayer or management games, which tend to emphasise player retention and long-term engagement with the game. The expectation of finite content naturally impacts both the games production realities and could potentially even end up shaping how the community around a game or genre is formed. It could therefore be worth considering how the differing design goals typical to a given genre end up reflected in that genre's typical production process and the communities that surround the games in question.

While this thesis is focused on retro style FPS and thereby isn't looking to establish points of comparison with other genres, this could be a potential avenue for further research. Such research would likely require comparison of multiple types of game production so as to see the potentially differing challenges and points of focus in each one. This sort of research could however go a long way in discovering the values associated with a given genre and how those values ultimately impact the production of games within said genre, as well as the final shaping of the games themselves and the culture around them.

6 CONCLUSION

Community and genre clearly have effects on game production. These effects are multifaceted and often end up further impacting one another. For example, the presence of the community has clear effects on the developers' ability to garner an audience for their game and receive feedback. This community presence is closely related to both the history of the genre and the complex result of multiple actors within the community. That history and those actors have their own effects on production, impacting it by creating additional pressures through audience presumption and outside interests. The impacts of genre and community on retro style FPS therefore can not be fully separated, as developers' relationships to the community are often preconditioned by working in the genre, while some of the benefits of the community also relate directly to the genre.

Overall, the developers gained some notable benefits from this mixture of genre and community. They had an enthusiast audience that helped them in terms of discovery and a developer network with relevant experiences which they could consult for technical and design advice. They were also able to better position their games both culturally and in terms of audience expectations thanks to the abundance of tropes present within the genre. However, these benefits came with drawbacks. The genre enthusiasts were sometimes seen as a difficult element of outside input on the game, which the developers didn't always welcome. Corporate interest within the community had to also be negotiated with in order to gain additional access and support while minimizing the risks imposed by financial interest. Finally, the developers had to contend with their game possibly being seen simply as a genre or fandom work, rather than a more broadly accepted form of artistic expression. The production of retro style FPS can therefore be seen as diverging from the general indie game production in some important ways, and as having its own unique elements not present in all indie production.

These additional elements of production gain increased importance when considered within the context of the increasingly broad forms of game production. As games start to be made in an increasingly varied contexts it is worth assessing how those contexts impact the challenges and opportunities that the developers within them are likely to face. This thesis has hopefully shed light on one of these, a notably non-locality-based context, and helped open the way for an increasingly broad understanding of how games are made.

The retro style FPS community is also a good example of how (to quote Sotamaa (2009, p.101)) "game culture originates in many sites, often at the same time defined both by resistance, exploitation and mutually beneficial relations." As the community clearly has elements of fandom, indie development, and industry interests, it represents a tangle of origins and interactions in terms of its own cultural influences. All of these elements also influence how developers are able to make their games and what the final shape of those games ends up being. The FPS community therefore represents the ongoing reshaping of game culture through both the formation of game related communities and through the reshaping of commonly understood game genres.

Looking into the future it is quite possible that some parts of video game production will be increasingly affected by these cultural and non-locality-based contexts. As the indie scene continues to broaden, the developers might find the ability to target their key audiences as well as the ability more precisely to culturally position their game, increasingly appealing. This is already being done to some extent by *boutique indie* publishers which look to target their output to an increasingly specific audience (Parker, 2020). However, to what extent this will happen and what shape those communities might take is difficult to say for now. Hopefully this exploratory look into one of these communities has demonstrated some of the ways that they make themselves apparent as well as suggested some fruitful avenues of future research.

REFERENCES

Bibliography

Anderson, B. (2016). *Imagined communities: Reflections on the origin and spread of nationalism* (Revised edition). Verso.

Apperley, T. H. (2006). Genre and game studies: Toward a critical approach to video game genres. *Simulation & Gaming*, *37*(1), 6–23. https://doi.org/10.1177/1046878105282278

Arsenault, D. (2009). Video Game Genre, Evolution and Innovation. *Eludamos: Journal for Computer Game Culture*, *3*(2), 149–176. https://doi.org/10.7557/23.6003

Banks, J., & Keogh, B. (2021). More Than One Flop from Bankruptcy: Rethinking Sustainable Independent Game Development. In O. Sotamaa & J. Švelch (Eds.), *Game Production Studies* (pp. 159–176). Amsterdam University Press. https://doi.org/10.1515/9789048551736-010

Banks, M., Conor, B., & Mayer, V. (Eds.). (2015). The Crunch Heard 'Round the World: The Global Era of Digital Game Labor. In *Production Studies, The Sequel!* (0 ed., pp. 216–230). Routledge. https://doi.org/10.4324/9781315736471-26

Braun, V., & Clarke, V. (2022). Thematic analysis: A practical guide. SAGE.

Browne, P. (2015). *Jumping the Gap: Indie Labour and the Imagined Indie Community* [Master of Arts (Media Studies)]. Concordia University.

Browne, P., & Schram, B. (2021). Intermediating the Everyday: Indie Game Development and the Labour of Co-Working Spaces. In O. Sotamaa & J. Švelch (Eds.), *Game Production Studies* (pp. 83–100). Amsterdam University Press. https://doi.org/10.1515/9789048551736-006

Browne, P., & Whitson, J. R. (2020). Network or die? What social network analysis can tell us about indie game development. In P. Ruffino (Ed.), *Independent Videogames: Cultures, Networks, Techniques and Politics* (pp. 77–94). Routledge.

Farmer, C. (2021). Arrested (game) development: Labour and lifestyles of independent video game creators in Cape Town. *Social Dynamics*, 47(3), 455–471. https://doi.org/10.1080/02533952.2021.1999632

Galletta, A., & Cross, W. E. (2013). *Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication*. New York University Press. http://ebookcentral.proquest.com/lib/tampere/detail.action?docID=1187368

Garda, M. B., & Grabarczyk, P. (2016). Is Every Indie Game Independent? Towards the Concept of Independent Game. *Game Studies*, 16(1), 26.

Graebner, M. E., Martin, J. A., & Roundy, P. T. (2012). Qualitative data: Cooking without a recipe. *Strategic Organization*, *10*(3), 276–284. https://doi.org/10.1177/1476127012452821

Guest, G., M.MacQueen, K., & E.Namey, E. (2012). *Applied Thematic Analysis*. SAGE Publications, Inc. https://doi.org/10.4135/9781483384436

Guevara-Villalobos, O. (2011). Cultures of independent game production: Examining the relationship between community and labour. *Proceedings of DiGRA 2011 Conference: Think Design Play.*, 18.

Harvey, A. (2014). Twine's revolution: Democratization, depoliticization, and the queering of game design. G|A|M|E Games as Art, Media, Entertainment, I(3).

Jenkins, H. (2006). Convergence Culture Where Old and New Media Collide. NYU Press.

Jensen, K. T. (2022, September 14). Knee Deep in the Dead: The History of First-Person Shooters. *PCMag UK*. https://uk.pcmag.com/games/142644/knee-deep-in-the-dead-the-history-of-first-person-shooters

Jørgensen, K., Sandqvist, U., & Sotamaa, O. (2017). From hobbyists to entrepreneurs: On the formation of the Nordic game industry. *Convergence: The International Journal of Research into New Media Technologies*, 23(5), 457–476. https://doi.org/10.1177/1354856515617853

Keogh, B. (2019). From aggressively formalised to intensely in/formalised: Accounting for a wider range of videogame development practices. *Creative Industries Journal*, 12(1), 14–33. https://doi.org/10.1080/17510694.2018.1532760

Keogh, B. (2021a). Hobbyist Game Making Between Self-Exploitation and Self-Emancipation. In O. Sotamaa & J. Švelch (Eds.), *Game Production Studies* (pp. 29–46). Amsterdam University Press. https://doi.org/10.1515/9789048551736-003

Keogh, B. (2021b). The Cultural Field of Video Game Production in Australia. *Games and Culture*, 16(1), 116–135. https://doi.org/10.1177/1555412019873746

Kerr, A. (2006). *The business and culture of digital games: Gamework/gameplay*. SAGE.

Kinnun, M. (2022, April 14). *Kick-Ass and Chew Bubblegum! The Rise of the Boomer Shooter*. Couch Soup. https://couchsoup.com/kick-ass-and-chew-bubblegum-the-rise-of-the-boomer-shooter/

Lipkin, N. (2020). Political-economy, independent games, and the precarity of development in crowded commercial markets. In P. Ruffino (Ed.), *Independent Videogames* (pp. 175–189). Routledge.

Macgregor, J. (2022, August 13). What should boomer shooters be called? *PC Gamer*. https://www.pcgamer.com/what-should-boomer-shooters-be-called/

Myers, D. (2003). The Nature of Computer Games: Play As. Peter Lang Publishing.

Nielsen, D. (2019). Modders in the Digital Game Industry: A study on modders' perceptions on corporate commodification of free labor [Master's Thesis]. Malmö universitet

O'Donnell, C. (2014). *Developer's dilemma: The secret world of videogame creators*. The MIT Press.

Pasanen, T. (2014). Murhasimulaattoreista poliittiseen korrektiuteen: väkivalta pelikohujen arkkityyppinä. In J. Suominen, R. Koskimaa, F. Mäyrä, P. Saarikoski, & O. Sotamaa (Eds.), *Pelitutkimuksen vuosikirja 2014* (pp. 8-23). Tampereen yliopisto. Pelitutkimuksen vuosikirja, 2014. http://www.pelitutkimus.fi/vuosikirja2014/ptvk2014-02.pdf

Parker, F. (2020). Boutique indie: Annapurna interactive and contemporary independent game development. In P. Ruffino (Ed.), *Independent Videogames*. Routledge.

Parker, F., & Jenson, J. (2017). Canadian Indie Games Between the Global and the Local. *Canadian Journal of Communication*, 42(5), 867–891. https://doi.org/10.22230/cjc.2017v42n5a3229

Parker, F., Whitson, J. R., & Simon, B. (2018). Megabooth: The cultural intermediation of indie games. *New Media & Society*, 20(5), 1953–1972. https://doi.org/10.1177/1461444817711403

Perks, M. E., Parker, F., Whitson, J. R., Simon, B., Lavenir, G., Yolgörmez, C., Browne, P., & Schram, B. (2019). Autonomy, Integration, and the Work of Cultural Intermediation in Indie Games. *Media Industries Journal*, *6*(2). https://doi.org/10.3998/mij.15031809.0006.202

Ruusuvuori, J., & Tiittula, L. M. (2017). Tutkimushaastattelu ja vuorovaikutus. In *Tutkimushaastattelun käsikirja* (pp. 46–83). Vastapaino.

Schatz, T. (1981). *Hollywood genres: Formulas, filmmaking, and the studio system* (1st ed). Random House.

Sihvonen, T. (2011). *Players unleashed! Modding the Sims and the culture of gaming*. Amsterdam University Press.

Siuda, P., & Troszynski, M. (2017). Natives and tourists of prosumer capitalism: On the varied pro-prosumer activities of producers exemplified in the Polish pop culture industry. *International Journal of Cultural Studies*, 20(5), 545–563. https://doi.org/10.1177/1367877916666117

Sotamaa, O. (2007). Let Me Take You to The Movies: Productive Players, Commodification and Transformative Play. *Convergence: The International Journal of Research into New Media Technologies*, *13*(4), 383–401. https://doi.org/10.1177/1354856507081961

Sotamaa, O. (2009). The player's game: Towards understanding player production among computer game cultures [PhD Thesis]. University of Tampere.

Sotamaa, O. (2010). When the Game Is Not Enough: Motivations and Practices Among

Computer Game Modding Culture. *Games and Culture*, *5*(3), 239–255. https://doi.org/10.1177/1555412009359765

Sotamaa, O. (2021). Studying Game Development Cultures. *Games and Culture*, *16*(7), 835–854. https://doi.org/10.1177/15554120211005242

Sotamaa, O. (2022). Modding. Encyclopedia of Ludic Terms.

Sotamaa, O., & Švelch, J. (Eds.). (2021). Introduction: Why Game Production Matters? In *Game Production Studies* (pp. 7–7). Amsterdam University Press. https://doi.org/10.1515/9789048551736-001

Stebbins, R. (2001). *Exploratory Research in the Social Sciences*. SAGE Publications, Inc. https://doi.org/10.4135/9781412984249

Švelch, J. (2023). *GAMING THE IRON CURTAIN: How teenagers and amateurs in communist czechoslovakia claimed... the medium of computer games.* MIT PRESS.

Thominet, L. (2021). Open Video Game Development and Participatory Design. *Technical Communication Quarterly*, *30*(4), 359–374. https://doi.org/10.1080/10572252.2020.1866679

Vanderhoef, J. (2020). Brews, burgers, and indie Bombast: The antiestablishment neoliberalism of devolver digital. In C. Wang & M. J. Clarke (Eds.), *Indie games in the digital age* (pp. 17–34). Bloomsbury Publishing USA.

Voorhees, G. (2014). Shooting. In M. J. P. Wolf & B. Perron (Eds.), *The Routledge Companion to Video Game Studies* (pp. 251–258). Routledge.

Whitson, J. (2013). The 'Console Ship is Sinking' and What this Means for Indies. *Loading...*, 7(11), Article 11. https://journals.sfu.ca/loading/index.php/loading/article/view/125

Whitson, J. R., Simon, B., & Parker, F. (2021). The Missing Producer: Rethinking indie cultural production in terms of entrepreneurship, relational labour, and sustainability. *European Journal of Cultural Studies*, *24*(2), 606–627. https://doi.org/10.1177/1367549418810082

Wirman, H. (2009). On productivity and game fandom. *Transformative Works and Cultures*, 3. https://doi.org/10.3983/twc.2009.0145

Wolf, M. J. (2001). 6. Genre and the Video Game. In *The medium of the video game* (pp.113–134). University of Texas Press.

Yumol, P. (2023, October 03). Chasing certain Doom: How New Blood Interactive brought boomer shooters back from hell. *Gameinformer*, 360(33), 28-33.

Ludography

8AH (upcoming). Fish Person Shooter [Microsoft Windows] published by 8AH.

Big Z studio Inc. (2023) *Slayers X: Terminal Aftermath: Vengance of the Slayer*, Big Z Studios Inc. [Microsoft Windows] Published by No More Robots Ltd.

Buckshot Software. (2018). *Project Warlock* [Microsoft Windows] published by Crunching Koala, Gaming company & Retrovibe.

Byte Barrel. (2021). *Forgive Me Father* [Microsoft Windows] published by Fulqrum Publishing.

Dennaton Games. (2012). *Hotline Miami* [Microsoft Windows] published by Devolver Digital, Inc.

Flying Wild Hog. (2013). *Shadow Warrior* [Microsoft Windows] published by Devolver Digital.

Id Software. (1993). *Doom* [MS-DOS] published by Id Software.

Id Software. (1993). Quake [MS-DOS] published by GT Interactive Software Corp.

Id Software. (2016). *Doom* [Microsoft Windows] published by Bethesda Softworks.

Indefatigable. (2019). Amid Evil [Microsoft Windows] published by New Blood Interactive

Linden Research Inc. (2003). Second Life [Microsoft Windows] published by Linden Research Inc

Monolith Productions. (1997). Blood [MS-DOS] published by Id Software.

Russel, S., Graetz, M., Wiitanen, W., Saunders, B., Piner, S. & et al. (1962). *Spacewar!* [PDP-1] Public domain

Syzmanski, D. (2018). *Dusk* [Microsoft Windows] published by New Blood Interactive.

Team Meat LLC. (2010). *Super Meat Boy* [Microsoft Windows] published by Team Meat LLC.

APPENDIX

- 1. Please introduce yourself
- 2. How long have you been making games?
 - How about modding?
 - Has this been independent or within a company?
 - Have these games been FPS games or some other genre?
- 3. What motivated you to make a retro style FPS game?
- 4. What is your history within the retro FPS community?
 - Have you played of made mods for old FPS games?
 - Were you active on forums related to old FPS games?
- 5. What is your relationship with the modern retro FPS community?
- 6. How has the retro FPS community influenced the making of your game?
 - A) Have people in the scene helped you with parts of your game?B) Have you asked other members of the scene for advice?
 - Did you receive feedback that impacted the development?
 - Have people told you about events or other opportunities?
 - Have people helped you promote your game?
- 7. How have you promoted your game?
 - What avenue did you use for this promotion?
- 8. Have you aimed your promotion within the retro FPS community or more broadly?
- 9. How has working within the retro FPS genre impacted the content of your game?
 - Did you model it to fit expectations or to stand out?

- 10. Did you add something you personally disliked or remove something you personally liked?
- 11. Do you feel like you have learned something from your interactions within the community?
 - Game development skills?
 - Promotional skills?
 - Project management skills?
- 12. Have you helped other retro FPS developers?
 - By providing feedback?
 - By sharing knowledge or resources?
- 13. A) How do you feel about safety in the Retro FPS community.
 - B) How do you feel about moderation within the Retro FPS community.
 - C) Have you had any bad experiences within the community.
- 14. Have you built any relationships with the retro FPS community through the game making of the game?
- 15.Do you have anything to add on the topic of making retro FPS games?
- [1] A list of questions for the semi-structures, marked bellow questions are some of the prepared prompts.