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The Ethics of Multiplayer Game Design and Community Management

Industry Perspectives and Challenges

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Game industry professionals are frequently implementing new methods of addressing ethical issues related to in-game toxicity and disruptive player behaviours associated with online multiplayer games. However, academic work on these behaviours tends to focus on the perspectives of players rather than the industry. To fully understand the ethics of multiplayer games and promote ethical design, we must examine the challenges facing those designing multiplayer games through an ethical lens. To this end, this paper presents a reflexive thematic analysis of 21 in-depth interviews with games industry professionals on their ethical views and experiences in game design and community management. We identify a number of tensions involved in making ethics-related design decisions for divided player communities alongside current game design practices that are concerned with functionality, revenue and entertainment. We then put forward a set of design considerations for integrating ethics into multiplayer game design.

CCS CONCEPTS •Applied computing~Computers in other domains~Personal computers and PC applications~Computer games

Additional Keywords and Phrases: Ethics, Multiplayer Games, Toxicity, Game Design, Community Management

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1 INTRODUCTION

'Toxic' gaming communities marked by high levels of abusive chat, targeted harassment, scamming, and cheating are widely acknowledged as a familiar part of many multiplayer gaming experiences [2, 29, 49]. Despite the multitude of efforts on the part of game companies to combat such behaviours, players continue to express a sense that developers are ultimately helpless in curbing the inevitable tides of toxicity [79]. Such behaviours

are sometimes understood to be the direct result of "antagonistic" game design [51], and there are a growing number of high profile criticisms of game companies for failing to address in-game behaviours appropriately [23] or for implementing dubious mechanics [5]. Accusations of 'ethics washing', the "self-interested adoption of appearances of ethical behavior" in the wider tech industry [7], have been levelled at the games industry as well [14].

These critiques of game development practices are necessary and important. Toxic player behaviour can upset players [20], impede team performance [58], and drive away new players [75]. Many such behaviours are harmful and can be considered unethical [31, 44, 53, 66, 92]. However, there are also numerous ethical grey areas—players sometimes regard certain disruptive player behaviours as a valuable part of a game [25, 26, 59]. Furthermore, managing toxic player behaviours in multiplayer games is no easy task. Digital game design is itself a relatively new and still-growing industry, one that must not only rapidly adapt to the whims of technology and the tastes of player bases, but also respond to a broader internet and gaming culture that itself intersects with wider societal movements and concerns.

In this paper, we aim to shed further light on these complexities—referring to them broadly as the "ethics of multiplayer games"—by turning our focus to the perspectives and experiences of games industry professionals. Despite their pivotal role in addressing, shaping and defining the ethics of these spaces, such professionals are frequently absent from studies on the ethics of multiplayer games. If we are interested in furthering our understanding of these ethics, and if we are interested in designing games that promote more 'ethical' play [76], this gap must be addressed. Through an exploratory qualitative analysis of interview data with 21 game industry professionals, we thus address the following research question: How do game industry professionals understand and approach ethical considerations in the design and management of multiplayer games, and what are the challenges they face in doing so?

A study of the ethics of multiplayer games from an industry perspective is timely and warranted. In HCI, there is a growing recognition of the importance of taking ethical values into account in design [43]. Yet there is a notable lack of research into the "everyday ethics" of UX designers [39] and the practices of game industry professionals more generally [48, 60]. Furthermore, ethical discussions are often absent in game design education and many popular game design text books. This has left much room for a more intimate designer-oriented exploration of industry perspectives on developing multiplayer games with ethics in mind, one that specifically does not leave the "creators in the shadows" [48].

There are thus two main contributions of this work. Firstly, we identify five key themes that reflect the ethics-related understandings and challenges involved in designing and managing multiplayer games from a more intimate industry perspective. These themes demonstrate the following views: 1) Ethics compete with functionality in the design process; 2) Notions of 'right' and 'wrong' player behaviour are sometimes unclear; 3) Ethical design decisions come with risks to reputation, revenue, safety and wellbeing; 4) Industry professionals can be unprepared and unsupported in making governing decisions; and 5) The goal of completely eradicating toxicity is unfeasible and unreasonable. Secondly, we reflect on these themes to present a set of five design considerations that aim to structure and inspire discussions surrounding ethical multiplayer game design.

2 BACKGROUND

Research into ethics and play has expanded alongside a greater recognition of games as "ethical objects" that are engaged with by "ethical agents" [76]. In terms of multiplayer games, a multitude of disciplinary approaches

explore what it means to behave (un)ethically in a digital game, the meanings players attach to these behaviours, and how these issues should be dealt with. In the following sections, we chart out some of the different understandings of ethical issues in multiplayer games, followed by a closer examination of the bodies of work dedicated to understanding ethical design in digital play spaces.

2.1 Ethical Issues in Multiplayer games: Harm, Toxicity, Moral Disengagement, and Context

Multiplayer games share many ethical issues associated with single-player games, including concerns about violent and sexist content [62, 64, 74]. However, the fact that they present a multi-user play environment brings about some unique concerns surrounding player interaction. It has long been argued in philosophical work that multiplayer games present the very real opportunity to harm other human players and thus require serious ethical scrutiny [31, 44, 53, 66, 92].

Literature across psychology, sociology, media and games studies have carefully demonstrated the multitude of ways that players can behave in problematic ways and damage games and communities [2, 29, 49]. 'Toxic' or hostile player-community behaviours encompass a wide range of disruptive and unsporting activities [85], some of which are increasingly associated with misogyny [28] and other discriminatory and gatekeeping attitudes identified in parts of gamer culture [65]. These behaviours commonly take the form of abusive chat and verbal harassment, but may also incorporate in-game 'griefing' behaviours that serve to cause other players 'grief' by disrupting their gameplay, usually for the griefer's "personal enjoyment or gain" [1]. Griefing may include acts such as scamming other players, taking another players' rightfully-earned rewards ('ninja-looting') or kills ('kill-stealing'), and repeatedly killing players who are new or at a disadvantage [1]. Unwanted, digitally-enacted sexual interactions between players have also long raised concerns in multiplayer spaces [32], and have more recently led to discussions of the legality of 'virtual sexual assault' and harassment [31, 80, 83]. Cheating and hacking, which are "actively discouraged by the industry and frowned upon by gamers themselves" [8, see also 26], have more recently begun to be pursued in legal terms by game companies [see e.g. 4, 15].

These kinds of player behaviours are often examined through the framework of 'moral disengagement', in which players of both single-player games [47, 54] and multiplayer games [30, 35, 79] are understood to morally distance themselves from their in-game behaviours with the claim that 'it's just a game'. However, scholars have also begun to explore the ways in which players can derive value from behaviours that are sometimes understood to be unfair or unethical, exploring their potential to offer players a way to transgress or subvert norms [3, 6, 57], experiment and play with in-game freedoms [25, 26], and derive particular kinds of value and enjoyment [16, 18].

These perspectives have thus emerged alongside more recent 'contextualist' analyses of multiplayer gameplay, in which the morality of in-game acts such as trash-talking [59] and player-killing [70] must be negotiated based on the particular context in which they occur, including the type of game being played and the consent of players involved [27, 34]. At the same time, players themselves often disagree on the ethical status of in-game behaviours [19, 37, 80, 84] and value different sorts of play [17, 81].

These considerations shed light on the complicated context surrounding ethics and multiplayer game design. Bearing this context in mind, we look more closely at ethics-related game design approaches in the next section.

2.2 Integrating Ethics Into the Design of Multiplayer Games

There are at least four key ways of understanding ethics and games [94]: 1) the ethical value of a game as a cultural artifact; 2) the 'business ethics' involved in the creation and distribution of games; 3) the ethics of play; and 4) the ethics suggested by a game's ideological framework. Much work on ethics and game design arises from within the fourth category, focusing on how games (particularly single-player role-playing games) can be designed to prompt moral reflection through dilemmas, narrative, and other in-game mechanics [9, 21, 42, 73, 94]. The rise in interest surrounding the design of 'serious games' for moral training or development [82] are also part of this trend: take, for instance, the examination of massively multiplayer game design for fostering work-based ethics [78].

When it comes to questions of how ethical considerations are or can be integrated into multiplayer game design more generally, academic literature begins to thin. While there is a growing interest in ethical design from within HCI more generally [39, 43], "the ethics of game design are rarely studied" [50]. Turning to the games industry, much discussion in this area at the Games Developer's Conference (GDC) is focused on combatting cheating [41, 87] and toxic behaviour [52, 67], with recent notable talks from the Fair Play Alliance [86, 89]. In combination with content ratings and parental controls, these approaches are largely punitive and restrictive in nature, though some efforts have attempted to positively reinforce 'good' in-game behaviour as well. For instance, *Blizzard's* endorsement system in the team-based shooter *Overwatch* encourages players to endorse others for sportsmanship, being a good teammate, or shot-calling [61].

Despite the importance of these industry discussions in raising awareness of these issues in game design circles, they can be somewhat cursory and often only "hold true for a particular game project on a particular platform and in a particular slice of time" [48]. Furthermore, given the competitive nature of the games industry, these discussions can also be somewhat opaque, and the successes (or failures) of these approaches can be difficult to determine. Some industry reports suggest that certain approaches do help to reduce toxicity—Blizzard researchers, for instance, are said to have reported that the endorsement system in *Overwatch* "cut disruptive behaviour by 40 per cent" [24]. At the same time, efforts to tackle toxicity and influence player behaviours can also prove to be inefficient, ineffective, or raise ethical issues of their own. For instance, *Riot's* Tribunal system in *League of Legends*—in which players could vote on the outcome of in-game reports against other players—was eventually removed as it was "slow and inefficient" and "sometimes wildly inaccurate" [33]. The multiplayer sandbox game *Eve Echoes* introduced a "seven day ban system" that was exploited by players who used it "to ban [others] indiscriminately" [55]. And *Riot*'s anti-cheat software *Vanguard*, which prevents the use of cheat software while playing the team-based shooter *Valorant*, has raised concerns over the "intrusive" way it operates [91].

Given these limitations, there have been calls from within the industry for "more conversation and commitment to ethical standards", particularly given a tendency toward "reactive" rather than proactive approaches to ethical issues in games [90]. To that end, some industry members have begun to expand discussion around community management and what it really means to maintain "healthy, positive communities" [36, 56]. A draft code of ethics for the game industry is currently under development, and includes a section on

¹ Video games are assigned age and content ratings by organisations such as the Entertainment Software Rating Board (ESRB) in the US, which includes 'interactive elements' as features of "interest or concern"— see https://www.esrb.org/ratings-guide. These ratings have a great influence on the design, distribution and consumption of video games [69]. Many game systems such as the *Playstation 4* also come with parental controls that assist in enforcing these ratings [40].

'player safety in online multiplayer games' that emphasises clear and actionable codes of conduct and the prevention of "unwanted disruptive behaviours as much as possible".² Nevertheless, more nuanced discussions of the practicalities and difficulties inherent in designing multiplayer games and managing communities with diverse values are still little discussed.

In sum, there is a growing recognition across disciplines and within the industry of the need to appropriately manage and deal with ethical issues that arise in multiplayer gaming spaces. However, the expansive and everchanging nature of in-game behaviours that fall in the realm of ethics—whether they are framed as unethical, problematic, disruptive, toxic, transgressive or otherwise—and the variety of ways they are perceived by players across games and genres makes this a difficult task in practice. While efforts on the part of game development companies to tackle ethical issues related to multiplayer games are evident and ongoing, further research is needed to understand these efforts and the kinds of challenges that arise alongside them.

3 METHOD

Through a series of 21 interviews with game industry professionals with varying roles and backgrounds, this study aims to contribute to an understanding of the ethics of multiplayer game design from the perspectives of people working in the industry. Rather than analysing a game as a produced and distributed artefact, this study sits in the growing field of 'design research' that places creators and their knowledge at the forefront of the analysis [48, 60].

3.1 Participants

We recruited 21 participants in total, each of whom work in the game industry in various capacities (see Table 1). Once ethics approval was obtained from the Engineering Human Ethics Advisory Group at the University of Melbourne (ethics ID: 1853304.2), potential participants were invited to participate through direct messages on LinkedIn, contact forms on their respective company websites, or word of mouth. Those interested in the study were initially asked to fill out a short screening questionnaire that collected demographic and occupational information, including gender, age, nationality, occupation, years working in the industry, titles of games they had worked with, and whether they had worked with multiplayer games, single-player games, or both. Eligible participants were then contacted individually by the first author via email.

Table 1: Table of participants

No.	Pseudonym	Main Professional Area*	Gender	Years Working With Games	Current Company Size**
1	Leo	Community Management	M	4-6	Indie / Mid-Size
2	Olivia	Community Management	F	4-6	Major
3	Tara	Community Management	F	10+	Mid-size / Major
4	Cole	Engineering	M	10+	Indie / Mid-Size
5	Angela	Game Design	F	10+	Indie
6	Steven	Game Design	M	10+	Mid-Size / Major
7	Jerry	Game Design	M	10+	N/A (Currently an educator)
8	Ralph	Game Design	M	10+	Major
9	Sam	Game Development	M	4-6	Indie / Mid-Size

² http://ethicalgames.org/

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No.	Pseudonym	Main Professional Area*	Gender	Years Working With Games	Current Company Size**
10	Jason	Game Development	M	4-6	Major
11	George	Game Development	M	7-9	Indie
12	Larry	Game Development	M	N/A	Major
13	Celeste	Marketing	F	7-9	Major
14	Terry	Production	M	7-9	Indie
15	Rupert	Production	M	1-3	N/A (Junior / Aspiring)
16	Kevin	Production	M	10+	Indie / Mid-Size
17	Maria	Production	F	4-6	Indie
18	Finn	Production	NB	1-3	Indie
19	Wilson	Production	M	1	Mid-Size
20	Beau	Public Relations	NB	1-3	Indie
21	Mitchell	Public Relations	M	7-9	Mid-Size / Major

^{*} Many participants had worked in multiple positions in the industry. Here we list their current occupational area that was self-reported in the screening questionnaire.

3.1.1 Inclusion Criteria and Sampling

To be included in the study, participants must firstly have been working in or around the digital games industry in a role in which ethics-related decisions are made. This excluded technical and artistic roles such as sound designers and graphic artists, but included other roles in design, development, production, marketing, community management and education. Secondly, they must have worked directly with multiplayer games or engaged with player communities. Among those participants who met the inclusion criteria, we initially utilised maximum variation sampling to choose which participants to interview. This involved attempting to recruit as wide a range of industry professionals as possible, covering individuals with experience in different roles, working on different genres of digital games, for different sized companies, and at different points in their career. We also used snowball sampling, which involved following up on recommendations made by interviewees regarding potential colleagues who may be interested in the study.

3.1.2 Sample size

Drawing from advice in [63] regarding sample size in purposeful, qualitative research, a minimum sample size was set before recruitment begun—in this case, at 20 participants. There are documented difficulties with recruiting games industry professionals as research participants due to "the highly restrictive legal agreements and sense of secrecy that dominate the videogame network" [48; see also 60]. Indeed, many potential candidates expressed privacy concerns despite being assured of anonymity, and were uncomfortable discussing potentially controversial ethical topics in relation to their work and company. This difficulty was also exacerbated by the disruptions and travel/social gathering restrictions brought about by the COVID-19 pandemic, which prevented the researchers from attending and networking at face-to-face industry events. As such, the minimum sample size was set at 20 participants in an effort to balance these difficulties with the need to produce meaningful qualitative data from a varied sample of participants.

^{**} Many participants had worked across a range of studios of different sizes. Here we estimate the size of their current workplace based on public records, published titles and company statements. Note that according to our classifications, major publishers tend to produce big-budget "Triple-A" (AAA) games; mid-size publishers can produce games ranging across indie, "Triple-I" (III) and AAA; while indie publishers produce indie or III games.

3.2 Data Collection

All interviews were audio-recorded for transcription purposes, conducted through video chat over Zoom by the first author, and lasted approximately one hour. Before the interview, all participants were provided with a plain language statement detailing the study and a consent form. Verbal (recorded) consent was obtained before commencing the interviews, and all participants were offered an AU\$20 gift card upon completion of the interview.

The interviews were in-depth and semi-structured. Each participant was initially asked broader, open-ended questions related to ethics and their professional life, such as "How do ethics play a role in the work you do?" and "Have you ever encountered an ethical issue that stood out to you as being especially problematic in a game you've worked on?" Participants were also asked to reflect on a set of statements derived from an earlier related study on the ethical views of players [80, 81], including statements like "Players and developers are largely helpless in stopping people from behaving badly in online games" and "Some actions in games are unacceptable no matter what".

Although key questions were presented to all participants, the interview structure was flexible. This meant that participants were given space to share their unique experiences and perspectives freely, and their individual concerns were reflected on and explored by the researcher throughout the interviews.

3.3 Analysis

Interview transcripts are the main form of data in this study, alongside the written notes taken during and after the interviews. The audio-recorded interviews were transcribed using the transcription service *Rev*. Each transcript was then reviewed and corrected where necessary by the first author, who also continued to make substantial notes during this verification process. Completed transcripts were then entered into the qualitative analysis software *NVivo* 12 (QSR International).

The interview data were analysed using reflexive thematic analysis [10, 11, 12], a fully qualitative approach by which the researcher plays an active role in interpreting the data and producing or generating key themes [12]. This involved a six-step process as follows: 1) Familiarisation with the data through actively and repeatedly listening to, reading, correcting, and making notes on the interview transcripts; 2) Generating initial codes related to the research question, using phrases and sentences in the transcripts as basic codes; 3) Constructing broader themes to arrange these codes under; 4) Revising and rearranging the themes; 5) Defining and naming the themes by identifying their core 'essence'; and 6) Producing this written report. Codes were generated inductively rather than deductively (i.e. they were generated directly from the data rather than through the application of pre-existing frames), and coding took place at both the semantic and latent levels (i.e. both explicit meanings provided by participants as well as underlying or conceptual meanings were identified in the data). The first author generated the codes and themes, which were then refined through subsequent discussions with the second and third author.

By maintaining consistency in this approach to the collection, coding and interpretation, we aim to establish 'trustworthiness' in the data. In line with this kind of qualitative approach, we also aim to achieve validity by capturing and aligning with interviewees' views and experiences, empowering their voices through highlighting the challenges they face, and ultimately improving understanding of the ethics of multiplayer game design and community management [see 88].

4 FINDINGS

Through reflexive thematic analysis of the interview data, we identified five key themes. These themes reflect "patterns of shared meaning underpinned or united by a core concept" [11]. Namely, they represent a set of shared tensions and challenges faced by our participants in the framing and implementation of ethical considerations surrounding game design.

4.1 Theme 1: Ethics compete with functionality in the design process

"What button is it going to be on?"

The process of designing a digital game is complex and requires extensive testing and iteration. The functionality and playability of a game is, understandably, a core goal for developers, who are creating a product that needs to work as intended. However, for many of our participants, this focus on functionality can mean that ethical considerations are pushed to the sidelines.

Sometimes, participants framed this as unavoidable. Disruptive player behaviour often impedes gameplay or harasses other users by making use of core game mechanics, which are more difficult to adjust. Beau recalled an event in which a number of male players sexually harassed a female player in a game through in-game gestures. Although Beau felt that it was "terrible and ... shouldn't be allowed to happen", they also wondered how it would be possible to "restrict what is basic player movement" considering "all they were doing was running and jumping". Tweaking basic mechanics such as these can disrupt the functioning of the game and upset players, and can sometimes raise new problems as players find ways to (mis)use freshly-introduced mechanics or 'fixes'.

At other times, participants reported that dealing with toxic player behaviours tends to involve responding to these behaviours *after* they occur and have already caused damage. In this sense, designing a multiplayer game is very much an ongoing task that continually needs adjustment and management, even after the game has been completed. But there are barriers in attempting to address toxic behaviours earlier in the design process, as Jason described:

"These things that ... would improve the multiplayer experience, or make the experience safer, or anything like that, have to be weighed up against all the other things that were already slated to be done at this milestone. So ... there's like a degree to which you have to state the case for why it's worth somebody's time to be working on. ... Everything bleeds into everything else, and there's always somebody whose day you're ruining by suggesting anything because they just set up their house of cards just right ... yeah, it's a real wonder that anything actually gets made just given how precarious it feels at the moment."

At the same time, some developers—particularly those who are more engaged with the technical aspects of development—felt it was not their place or within the scope of their job description to go beyond typical game design concerns surrounding functionality and fun. As Cole said, "Ultimately I'm trying to make a product for everyone to have a good time. And we don't necessarily want to tell players what that good time should be. We sort of build mechanics."

These issues were further exacerbated by the structure of some game development companies (particularly larger ones), which are made up of professionals in discrete roles who may not come into contact with one

another. Community managers, who are usually on the 'frontlines' of engaging with player communities and thus have more direct knowledge of community concerns and practices, are particularly at risk of feeling excluded and isolated from the rest of the team. Tara shared that, as a community manager, "you're not marketing, and you're not PR, you're not a producer, you're not an artist, you're not a programmer, you are nothing. You're totally different, and you're usually alone. It's usually one of you." According to some participants, this separation—particularly between professionals concerned with functionality and those concerned with community—can have a debilitating and stifling effect on the implementation of ethical considerations throughout the design and management of a multiplayer game.

4.2 Theme 2: Notions of 'right' and 'wrong' player behaviour are sometimes unclear

Designing for a "weird, amorphous blob space"

Participants frequently grappled with designing and managing multiplayer spaces in which notions of 'right' and 'wrong' player behaviour are sometimes unclear. All participants agreed that there is a general 'bottom line' of unacceptable behaviour, usually revolving around cheating, hacking, and strong verbal abuse and harassment, particularly of the threatening and/or discriminatory kind. However, when it came down to the 'nitty gritty' of precisely where these bottom lines should be and how transgressions should be dealt with, things became notably more complicated.

These complexities were largely regarded as arising from the gaming context in which competition and unpredictable player interactions are considered valuable rather than harmful. Furthermore, how these interactions are designed for, intended, and understood often depends on the context of a particular game. For example, George noted that trash talk can be a fun and important part of some competitive multiplayer fighting games, and drew a line between "appropriate trashtalk" based on skill (e.g. "You suck at this character") and personal insults (e.g. "You're fat"). Olivia drew a distinction between "gentle ribbing ... in spirit of the game" and trolling (typically understood to be the act of intentionally provoking or derailing discussions in online communities) to "make life difficult for everyone". As a whole, these distinctions were often regarded as common sense. However, they also relied on judgments of intention and how deeply affected those on the receiving end are, factors that are inevitably difficult to discern in fast-paced online play environments.

Beyond verbal chat, in-game actions represent an even more complicated issue. Kevin drew a line between abuse and griefing, where the latter can be a normal part of the way players interact. Leo highlighted that "there are so many different ways that [trolling and griefing] can be interpreted", and notes that the "tongue-in-cheek" phrase 'creative use of gameplay mechanics' is sometimes used to refer to player behaviour "that's sort of unorthodox and doesn't abide by the vague culture of video games [or] what's sort of assumed to be acceptable". He also pointed out that an important element of games is that players "need to be able to fail or lose or be hurt or damaged [and] have the opportunity for setback", and that it is a unique and interesting part of the multiplayer experience that these elements can come about as a result of player interactions. Navigating this grey area between unacceptable and acceptable forms of griefing was uncomfortable for some—Sam said "protecting certain players, but also allowing other players to still be assholes" is a "weird line" to draw.

These ethical grey areas were further aggravated by what participants acknowledged to be sometimes divisive player bases with strongly differing values about how a game should be played. Terry summed this up well: "the sheer volume of interactions and types of interactions that occur around games is immense ...

[moderation] is fairly intense, and communities come with their own sociopolitical structures that form over time, and schisms, and all kinds of drama." Ralph commented that some players "want more of a safe environment, without all the swearing", while others play games in order to let go and don't want their experiences to be "sullied [by] politeness". Rupert observed that these divisions mean that "developers are stuck between a rock and a hard place ... because if they go in this direction then it affects this player and if it goes in that direction then it affects that player".

Some participants noted this ethical ambiguity is not only a result of the gaming context, but also the digital context and the newness of the gaming industry as a whole. Wilson expressed a sense of awe at how fast technology has developed in this regard:

"Even though yes, it's all virtual, it's all digital, but it's still a very tangible thing to a lot of people. And I guess as a society, we're in that awkward middle phase where we're transitioning still because there's so many things happening technology-wise and it's like our evolution can't keep up. We can't keep up with how fast technology is progressing, which is wild."

For Wilson and other like-minded participants, the industry is thus still trying to find its 'ethical footing' as both society and laws struggle to catch up to the digital realm.

4.3 Theme 3: Ethical design decisions come with risks to reputation, revenue, safety and wellbeing

"Ethics can be awesome when you don't have to feed people"

A core concern for many participants, particularly those from smaller indie companies, was that ethical decision-making often came with significant risks to the revenue and reputation of a studio, as well as the safety and wellbeing of its employees. This is, in part, due to the divisive nature of player bases discussed in the previous section: making a decision to address or "call out" a particular form of toxic player behaviour, for instance, can be cause furor among certain segments of a player community and have significant (and highly stressful) repercussions.

Larry observed that being more transparent with player bases and having ethical discussions with them means that "you're going to have a deeper connection with your players, but you're also going to set yourself up for a lot of vulnerabilities", revealing a studio's weaknesses and potentially damaging its reputation and alienating some groups of players. Revenue-wise, toxic players were sometimes perceived to be the ones investing the most money into a game (i.e. the "whales"), and so are considered more valuable and even untouchable. Mitchell shared this sense of being 'held ransom' by such players,

"I think it becomes difficult when ... you're working in an environment where there's a desire to allow [toxic] behaviour to continue if it's generating revenue. That was much harder for me. I think it's pretty easy to shut down toxic behaviour in kind of a one to one situation. It's harder when you have the head of a studio saying, 'That person's responsible for this amount of revenue. You have to let them do whatever they want,' because then you really have no way to mitigate that at all. You're just going to have to let them do it, and that's pretty hard."

Wilson empathised with studios that take the "safer approach" and allow toxic behaviours to continue out of revenue concerns, "because not every studio operates in the black and sometimes you're just getting by, right?" In turn, many studios find themselves even further entrenched in that space "between a rock and a hard place" that Rupert identified (Section 4.2). When it comes to public relations, then, many studios tend to take a more vague approach that attempts to cater to two different player audiences (those who enjoy certain toxic behaviours, and those who think they're unacceptable). As Beau noted,

"It's really rare that you'd see someone come out and be like, 'If you're like this, don't play our game.' Normally I think they'd say something more along the lines of, 'We condemn these notions and this particular person, but we're not saying [to] all people who are like this, 'Please don't even touch our game."

Some participants also felt that a concern with revenue and catering to audiences is also what drives many multiplayer games to be more competitive rather than cooperative, which in turn encourages more antagonistic player interactions that lend themselves to toxic environments. Sam noted that cooperative games are harder to market and tend to have less longevity, while George noted that "If your game's combative, like if it's a 'versus' game of some sort, then there's going to be hostility".

Besides risks to revenue and reputation, there are also significant safety and wellbeing risks attached to ethical decision-making in multiplayer design. While Angela advocated stepping outside of a certain 'domination' mentality and designing differently to promote more cooperative and positive interactions, she also acknowledged the risks to the safety of those who choose to do so: "[If] you go against that, then ... the difficulty will increase for you. You will have negative, violent repercussions. And this is what keeps people complicit ... the death threats, the rape threats, all that sort of stuff."

Indeed, many of the participants interviewed reported receiving death and/or rape threats. One participant reported having colleagues whose lives were "ruined" by sustained harassment from players, and another participant was 'doxxed' (their personal details were publicly revealed) by an irate player who did not like certain changes being made to the game. Tara described the persistent abusive comments she has received as hurtful, incredibly violent, and often depicted what "someone was going to do to me"—but she is now so used to them that her eyes just "glaze over" at death threats. One participant compared the level of abuse and threats he has received in gaming compared to previous jobs:

"[As a community manager], I've had people just be like, 'I'm going to find you and I'm going to kill you.' And I used to work for energy companies, where their power had been disconnected and I was dealing with a complaint. And I think that I got more death threats in [gaming], which is like ... they're just so invested, you know?"

While a number of participants almost apologetically attributed this level of abuse from certain players to their "passion" for gaming, it is clear that there is at times a damaging and abusive relationship between players and industry professionals that poses risks to the latter's safety and wellbeing, particularly if they are in community-facing roles.

4.4 Theme 4: Industry professionals can be unprepared and unsupported in making governing decisions

"It's all fun and games until someone gets stabbed in the eye"

Many participants expressed a desire to work in the games industry out of a love of games and a desire to create and share meaningful experiences. However, many also spoke of coming to learn that making fun games is not all fun and games, so to speak: rather, it is more like an exercise in governance. There were tensions between making entertaining experiences and needing to 'police', discipline, and otherwise morally educate players in the name of reducing toxicity and promoting more positive, ethical player interactions. In particular, participants expressed a perceived difficulty of balancing restrictions and punishments with the need to create a game space in which players can play freely, experience new things, push boundaries, be creative, and relax. This made it even more difficult to wade through the ethical ambiguity discussed in Section 4.2—for instance, how can one fairly determine if a player is merely experimenting with the game mechanics in a way that is 'part of the game', or if they are behaving unethically and require censorship or punishment?

Participants sometimes ascribed the increased need for this kind of 'governance' in multiplayer games to a growing desire among player bases and consumers more generally to see brands and companies 'stand for something', particularly among younger demographics. Celeste described "an increased sense amongst Gen Z-ers and below for brands to do the right thing, and make a statement when political issues arise", which Maria noted has also arisen alongside a greater sensitivity towards (un)ethical behaviour in the wider gaming community as well.

While many participants also considered this growing emphasis on ethical business practices and accountability to be important and necessary, they also expressed that they simply did not know how to 'govern' and that making decisions on ethical behaviour went far beyond the scope of their training and education. Maria amusingly summed up the unfamiliarity and unpreparedness of many game industry professionals in this regard:

"Most of us were weird and didn't have a lot of friends and didn't deal with a lot of these interactions when we were younger. So we've like banded together as a bunch of misfits. We were like, 'Oh, we'll just make games.' And now there's all this pressure on us to be like, 'Why are you causing violence?' And I'm like, 'Oh my gosh... I've never even talked to anyone. I just sat in my room for 40 years.' ... Now we're putting them in these positions where they're having to monitor [and] guide thousands of people, hundreds of thousands of people. It's just like mind boggling. We're the wrong people. Stop asking us to be the face of anything."

Tara echoed this sentiment, pointing to community management in particular as a role that is important but for which many are unprepared for: "It's like running for office, really. It's amazing it's not like a voted-in position." Participants also reported an incredible amount of pressure on those in community management. Olivia described it as "performative and emotional labour" that "takes its toll". Yet there is often very little support for people in such roles that helps them discern how to appropriately govern a player community. Mitchell attributed this to the newness of the game industry and the undervaluing of the community manager role in particular, saying, "There's very little clear guidance. Each company has its own best practices, but there's no shared best practices out in the world."

4.5 Theme 5: The goal of completely eradicating toxicity is unfeasible and unreasonable

"It's not our job to save the world"

Many participants were distinctly aware of limitations to their ability to completely stamp out toxic player behaviour. Some of these limitations were practical and arose from having only so much time, money and means. Other limitations were more conceptual—participants spoke often of a limit to their responsibility as game industry professionals to completely 'fix' player behaviour.

Participants from smaller, indie companies described being particularly vulnerable to the issues of limited resources that make ethical management difficult. With only small teams and limited budgets, it can be impossible to moderate in-game chat, manage player communities, and actualise adequate responses to ingame issues while continually fixing bugs and otherwise balancing the game. At the same time, as a game's popularity grows, new practical limitations to managing player behaviour arise, particularly due to the immense size of player communities. As Terry remarked, with technically only "eight-hour work days", it can be a daunting task to address millions of players across global communities who have different values and can be playing a game at any hour of the day.

Furthermore, given the speed and volume of communication in digital spaces, it can become incredibly difficult to sort through player feedback and discern community ethical concerns. Sam stated, "There's so much information coming in. Trying to decipher the constructive stuff just gets harder, and harder, and harder." The constant development of new gaming platforms can also make this difficult, as different platforms come with different requirements: "New platforms come out, those platforms come with new features and new norms of online play and whatnot. Everything is always in motion, and that makes it difficult to ... you've kind of got to keep your head on a swivel," Jason shared.

Even with access to plentiful resources, participants also expressed that it is impossible to completely prevent toxic behaviours because motivated players will always find ways to disrupt the game and harm others. A common example provided was the sarcastic use of positive 'canned' expressions (such as 'Well Played' or 'Wow') by players in the online digital collectible card game *Hearthstone* to troll or put down other players. At times, this understanding was attached to a rather bleak view of humanity that ran across the interviews, reflected in comments such as:

"You can only really blame humans at the end of the day."

"[People] are unreasonable. We can't be trusted. Sorry."

"We wouldn't have that problem if humans were better, I guess."

"You can't solve for human nature completely."

It should be noted that these views were being expressed at a highly distressing and controversial time for many people across the globe, in months marked by heavy social restrictions associated with the COVID-19 pandemic as well as growing political tensions and conflicts associated with the Black Lives Matter (BLM) movement. At the same time, these views were in part fueled by the view that players relentlessly bring toxicity to a game and, as outlined in Section 4.3, sometimes channel their frustrations into abuse towards game industry professionals.

This led to a great deal of questioning about how much responsibility industry professionals actually have to ethically manage multiplayer games. For many participants, there is only so much that they can do—while multiplayer games can play a huge role in players' daily lives, they are also not the only space in which 'ethical management' needs to occur. Ethical responsibility was thus seen as shared among a number of parties, including industry professionals, players and the general public. Maria shared a story of a social media manager at her company who was struggling to decide between simply deleting a player's harmful online comment or standing up to them and telling them why what they said was unacceptable. Maria believed that the latter was not her colleague's responsibility, as "there are a lot more important people in that person's life that should be telling them that that comment is not appropriate." Celeste expanded on this sentiment, identifying ethical responsibility in the individual and the need for ethical education more broadly:

"It's unbelievable how quickly and with little consequence people shed responsibilities online. It's like being behind a screen, I guess, and the anonymity just gives them this bravery, and just this dickishness that they might not even possess in real life. Then that responsibility is on the individual to not do those things also. How does that education then happen on that level? I have no idea. It's 'raise better kids'."

5 DISCUSSION

Across all the themes in the data, participants largely expressed a resounding view that ethical considerations are incredibly important in the design of multiplayer games, that these considerations are not talked about enough in industry circles, and that much more ethical discussion and design is needed. At the same time, however, participants voiced significant obstacles in explicitly attempting to design for and address (un)ethical in-game behaviours in multiplayer games. These obstacles partly overlap with those that [39] identified as facing UX practitioners, pointing to an "ethical design complexity" by which participants grappled with balancing the sometimes opposing forces of their own practices, their organisation's practices, and their applied ethical knowledge.

While our findings lend further support to this framework of ethical design complexity, the tensions we identify are also distinctly related to game design and the games industry in particular. In our findings, ethics-related design decisions were often framed as being at odds with game design practices that are strongly rooted in functionality, revenue and entertainment, and sit haphazardly in a rapidly growing industry that is still establishing ethics-related best practices. Furthermore, the rapidly shifting, divisive and emotionally-loaded ethical discourses surrounding internet gaming cultures leave many games industry professionals 'damned if they do and damned if they don't'. Developers' ethical responsibilities were seen as inevitably limited and tenuous. Some participants framed these issues as "interesting" problems to solve and exhibited a certain optimism that ethical multiplayer design practices will naturally progress over time. More often, however, the problems associated with these practices were framed as difficult, perplexing, and never-ending.

From this perspective, the question of how to integrate ethics into multiplayer game design can be understood as a "wicked problem". In an early application of the term, wicked problems are described as a "class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing" [22]. This concept is often applied in relation to design [13], and has also been used in

the context of ethics and games: [77] suggests that wicked problems in design are analogous ethical problems, and argues that presenting players with wicked (ethical) problems in a game "can create ethical gameplay" by encouraging them to draw from their values and engage in ethical reflection [see also 9].

However, when it comes to multiplayer game design and management as a task in and of itself, both the design process and the ethical problems that arise alongside it combine to create a thoroughly wicked problem for game industry professionals. Importantly, the wicked problem of multiplayer game design hearkens back to the early use of the concept in relation to social policy formation [68]—increasingly, game design is an exercise in social policy, governance, and planning as much as it is a design task with associated ethical conundrums. How can and should a multiplayer game—a 'virtual world'—be designed and managed given a "nebulous" industry [45] and a simultaneously "Protean" and constraining ludic digital environment [93] in which players themselves are constantly engaging in "boundary-work" [19] regarding their values in relation to play and technology? As this study demonstrates, attempts to do so are difficult, wrought with complications, and are sometimes brought about at great cost—worryingly, this cost is not only monetary but also includes damage to wellbeing, particularly of those directly involved in dealing with the community.

5.1 Further Considerations for Ethically-Informed Design

Both the literature review and the interviews revealed a significant lack of—and need for—publicly available recommendations, guidelines, and discussion surrounding ethics and multiplayer game design. In this section, we present a series of five design considerations based on our interview data to start addressing this gap. Given the sheer complexity and variance of multiplayer game genres, requirements and gaming cultures, these considerations act not as broad prescriptions for how multiplayer games *should* be designed, but rather as points of conversation around which designers, academics and the like may formulate and discuss ethics-related design goals suited to their purposes. They are thus more akin to 'sensitizing concepts' that aim to capture a range of "social concepts" that "challenge designers to reflect on how to implement them" [71]. While we also offer some abstractions regarding how these considerations can be (and already are being) implemented in practice, the considerations are largely to be understood as data-driven prompts for ethically-relevant conversations, structured for those interested in 'front-loading' ethics into multiplayer game design. They may also be used to support the development of more concrete guidelines or frameworks in future work.

5.1.1 Foresight and Planning

In line with the design for values approach [43], participants often expressed the need to integrate ethical considerations and plan for toxic player behaviours early in the design process. This consideration arose particularly in relation to the first theme presented in Section 4.1, in which participants expressed difficulties in finding a place for ethics in a design process that often understandably emphasises functionality. While extensive playtesting is a common element of game design, it tends to involve asking players to find loopholes and explore the game's mechanics rather than actively hurt, harm or antagonise other players. Furthermore, by this time it is often too late to change certain core mechanics that may lend themselves to particular problematic behaviours. Jason in particular shared that things might have "been easier" on a recent project if ethical considerations had been factored in from the beginning rather than left as an afterthought, because ethics-related design changes may interfere or disrupt important mechanics in the game. As such, given that toxicity and disruptive player behaviour are largely considered inevitable (Section 4.5), ethical considerations should

also be considered inevitable and addressed at the forefront of the game design process alongside functional concerns.

Actualising foresight and planning may take place in a number of ways, including early discussions amongst the design team about the intended community atmosphere; including third-party moderating teams and those with community management experience early in the design process; playtesting with both functionality and ethics in mind; prioritizing moderation; or, as Angela advocated, designing a game entirely differently from the outset to promote positive interactions rather than antagonistic ones.

Importantly, we also note from the fourth theme in Section 4.4 that many participants also described being underprepared for dealing with ethical decision-making related to gaming communities. Foresight and planning, then, may also be extended to further back beyond the design process: in particular, participants identified a glaring lack of discussion surrounding ethics and community management in game design education, which leaves many graduates underprepared in dealing with ethical decision-making and player toxicity when they enter the workforce. Further work on curriculum design would benefit from exploring how ethics can be meaningfully integrated into game design courses to address this.

5.1.2 Supporting Community Management

Throughout the interviews, it was clear that community management was seen as an incredibly undervalued and unsupported position in the industry. Loneliness, stress, fear and confusion were common elements of descriptions of the community manager role. This was reflected particularly in the third theme (Section 4.3) regarding risks to safety and wellbeing, and community management was also highlighted in the fourth theme (Section 4.4) as being particularly unsupported. For instance, Tara reported feeling like a "super stretch person" who had to act as a kind of mediator between players and the rest of the design team, receiving at times heavy abuse from the former and little support from the latter. This supports previous findings that suggest community managers and the complex, emotional labour they perform are largely "marginalized" in the games industry, despite being "an important element in maintaining capital flows" [46].

At the same time, participants often emphasised the importance of community management, a stance that also coincides with a growing movement in the industry to manage player behaviour by fostering positive communities [36, 56]. This approach moves away from techniques that involve tweaking game mechanics, monitoring chat and punishing 'bad' players through reporting, banning and blocking systems. Rather, it focuses on a more 'nurturing' approach that engages the community respectfully and sets a good example for player interactions. It may also focus on involving community members in moderation and communication, such as by promoting certain players to "pillars of the community" who can convey messages from the development team to the community (and vice versa).

Based on these perspectives, further support is needed for those in increasingly valuable community management roles in terms of safety, mental health, collaboration, and training. It is also important to seek more ways to promote community managers to a more visible position in a given project and build stronger communications between them and the rest of the team (see Section 4.1). At the same time, participants frequently stressed that it is unclear whether or how community-driven 'tone-setting' works to make multiplayer games less toxic—as such, more research is needed to explore how community management can function successfully in this regard. Given that even single-player games can have extensive player communities that

interact in various online forums, streaming sites, social media and so on, community management is an important area for further consideration across the industry and in games research more generally.

5.1.3 Agency Over Interactivity

Limiting interactivity or allowing players agency and choice over their interactions, rather than forcing or encouraging them to interact, was identified throughout the interviews as a growing and important trend in ethical multiplayer game design. Given the ethical grey areas outlined in the second theme (Section 4.2), limiting interactivity and promoting agency was seen as a viable way to avoid making difficult, sweeping ethical decisions about what counts as right or wrong behaviour. To some extent, this approach may also coincide with shifting player tastes—Sam described a shift from players being excited at the prospect of playing games in which they can interact with one another, to seeking out ways to "play multiplayer games in the least multiplayer way possible".

In this sense, limiting interactivity (particularly verbal interactivity) was often seen as a particularly useful approach to take where possible. For instance, many participants saw in-game chats as largely unnecessary, serving only to contribute to verbal abuse and harassment. In-game 'chat wheels' with preset emojis or voice lines relevant to the game were preferable in situations where player communication is important, such as in team-based games. This focus on reducing communicative interactions is also echoed in the draft code of ethics at http://ethicalgames.org, which suggests that "not allowing for voice chat by default can reduce exposure to potential harassment". Although reducing or removing in-game chat does not necessarily eliminate in-game toxicity since players can still engage in various disruptive in-game griefing behaviours (and can still communicate outside the game), it is an increasingly viable option for studios who do not have the time or resources to moderate in-game chat.

At the same time, participants noted that designing multiplayer games to offer players more agency over their interactions is another way to support players without needing to make difficult ethical decisions or implement excessive moderation. Giving players more agency in this context means providing players with the means to tailor their gameplay to suit their preferred level of interactivity and playing style. This can involve a number of techniques, many of which are already implemented in multiplayer games: for instance, games may allow players to quickly mute/avoid/block other players, play with or without in-game chat, and choose between servers with different rules about what is acceptable behaviour.

5.1.4 Unpacking Ethical Values

There are a number of ethical values that are often put forward as being important in game design: participants pointed to integrity, inclusivity, diversity, transparency, and accessibility as being particularly significant. And, as noted by participants in the fourth theme presented in Section 4.4, younger generations of players are particularly keen to see gaming companies take an ethical stance [see also 72].

However, it is not always clear how these values are able to address the ethical complexities involved in multiplayer game design when it comes to player interactions. Sometimes the definitions of these terms are unclear, and only serve to further muddy the ethical waters highlighted in Section 4.2. 'Integrity', for instance, refers to adherence to moral principles—but what those moral principles are, and how they function in the complex environment of multiplayer game design and play, are easily left unresolved. Being transparent about how a game is managed and why is often considered an ethical approach to community management, but as

Mitchell noted, with very large, divided, and potentially abusive communities (see Section 4.3), "it becomes very difficult to have kind of an honest conversation with your players in a way that you can be transparent and trust that they will take that transparency the right way."

An over-reliance on these broad values thus reflects concerns surrounding "ethics-washing" in the tech industry [7], where ethical terms can sometimes be used in "performative and instrumentalized" ways that obscure real ethical discussion and growth. It is suggested that ethics-washing can be combatted by focusing on "valuable commitments to moral principle[s] that promote advancements in self-knowledge and understanding" instead [7]. Such advice may similarly apply to game design. On an individual level, for Ralph, self-knowledge and understanding in game design involves deeply scrutinizing one's own ethical position and being able to accept that others may have different views. For Jason, it involves putting aside one's ego, and not being so "purist" about design that a desire for a game to have certain functions gets in the way of tackling toxicity. Open, honest communication between team members is also necessary to support the individual growth of the design team in this respect. Such discussions may also serve to establish and more deeply explore shared understandings of what various ethical values represent in a given multiplayer game while acknowledging the practical realities of the game design space. Involving professionals working in ethics-concerned areas (such as philosophy, politics and communications) may also help inform such discussions.

5.1.5 Adaptability

Finally, we point again to the difficulties of making broad ethical prescriptions about how multiplayer games should be designed. As highlighted in the second theme (Section 4.2), participants often noted that what is considered acceptable behaviour in multiplayer games can depend on context, and different games may have different requirements (see also [27, 34, 59, 70]). Furthermore, despite all the planning in the world, it is extremely likely that players will continue to surprise developers with unexpected in-game behaviours (Section 4.5). This is already a familiar element of game design regardless of the involvement of ethics: "The best-laid plans don't work good", said Cole.

As such, rather than advocating simple 'one-size-fits-all' ethical guidelines for multiplayer game design, participants repeatedly pointed to the importance of adaptability—or what we might call a kind of 'agile ethics'. In this context, adaptability can be understood as a foundational quality that invites industry professionals to continually examine and adjust their ethical understandings and approaches in relation to player interactions, with an awareness of changes in both their own player base as well as wider trends in gaming. Actualising this adaptability is likely to involve the unpacking of ethical values highlighted in Section 5.1.4 on both individual and group levels, which may involve regular ethics-focused discussions among the design team in tandem with community-facing employees.

At the same time, adaptability does not necessarily imply a certain kind of moral relativism that simply involves following along with popular player opinions. Establishing moral 'bottom lines' of unacceptable player behaviour amongst a team are important as well—as is making these codes of conduct clear to players—but discerning where these lines are and how they can be adjusted as technology and player/cultural norms shift is likely to be an ongoing process.

5.2 Limitations and Further Work

While the small sample size in this study lent itself to an in-depth, intimate exploration of the participants' perspectives, it also leaves room for larger comparative analyses that take into account differences across the industry. This study's sample included professionals with experience working across a range of multiplayer racing, mobile, strategy, action, serene, cooperative, and social games; however, it did not include participants with experience working on massively multiplayer online games roleplaying games (MMORPGs), which are likely to bring about unique and rich ethical design concerns that may expand on the themes and considerations detailed in this paper.

This study also does not deeply compare or contrast ethics-related concerns and challenges faced by game companies of different sizes and levels of establishment. Indie companies and amateur or informal game developers may face greater challenges and pushbacks from a "conservative consumer culture of distribution platforms and enthusiast discourse that are used to videogames being a specific, homogenised practice" [45]. This is likely to bring about unique ethical challenges and considerations in the design and management of such games, and as such deserves further exploration.

As touched upon in Section 3.1.2, recruiting suitable participants was difficult, and a number of participants (both potential and actual) were concerned about sharing personal views and information about their own companies. Some participants actively held back from sharing specific details, which likely limited the data. This reticence is also likely to be a problem facing other investigations into ethics and multiplayer games through interviews with industry professionals, particularly when targeting those working in larger companies. We also note that our findings are limited to participants who were able and willing to engage in discussion, and so may reflect the perspectives of game industry professionals who are interested in ethical discussions surrounding game design rather than game industry professionals more generally. Future studies thus need to weigh the pros and cons of interviews with those of other methods of investigating games industry practices, such as attending game jams [48], conducting in-studio fieldwork [60], and analyzing pre-existing ethics-related industry texts or case studies [14, 48].

6 CONCLUSION

This paper explores the perspectives of 21 game industry professionals on the ethics of multiplayer game design. Reflexive thematic analysis of interviews with participants produced five key themes that reflect the challenges and tensions involved in designing games with ethics in mind. We outline five design considerations that reflect on key concepts for future work and discussion in this area, including foresight and planning, supporting community management, agency over interactivity, unpacking ethical values, and adaptability. Our findings suggest the need for a deeper consideration of ethics in multiplayer game design, and we advocate further research in this area that acknowledges the full spectrum of ethical understandings and challenges facing both players and industry professionals in online digital games.

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