



UMEÅ UNIVERSITY

WORLDBUILDING IN ROLEPLAYING GAMES

**How do secondary narratives
make user experiences more
immersive?**

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Abstract

Digitala rollspel har idag allt större och mer inlevelserika spelvärldar, vilket bidrar till hög inlevelse hos användarna. Följaktligen ser genren såväl stora framgångar inom spelindustrin som ett större forskningsintresse inom akademien. För att öka inlevelseförmågan i spel ägnar sig spelutvecklare åt världsbyggande, en process som flitigt tillämpas inom den spekulativa genren. Den här studien behandlar en underkategori av världsbyggande benämnd "sekundärt berättande": berättelser inom berättelser som i spel ofta kallas "sidouppdrag" eller "side quests". Dessa avser alla typer av berättelser i spel som inte är en del av den primära berättelsen och därmed inte är obligatoriska för spelets slutförande. Denna studie framställer tesen att sekundära berättelser gör användarupplevelser mer inlevelserika, både på narratologiska och ludiska sätt. För att utforska tesen samlade studien in insikter från tre spelutvecklare och 63 rollspelare för att se hur de olika grupperna värderade sekundära narrativ. Studieresultaten stödjer observationen att väl designade och väl integrerade sekundära berättelser bidrar till förhöjd spelinlevelse.

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Table of Contents

Abbreviations and definitions	1
1. Introduction.....	2
1.1 Purpose	3
1.1.1 Secondary questions	3
1.2 Limitations	3
2. Related research	4
2.1 User experience and Immersion	4
2.2 Narratology and Ludology	8
2.3 Worldbuilding	12
3. Methods	15
3.1 Data collection	15
3.1.1 Interview.....	15
3.1.2 Survey.....	17
3.2 Method of analysis	21
3.2.1 Interview analysis	22
3.2.2 Survey analysis	23
3.3 Ethical considerations	24
4. Results and analysis.....	26
4.1 Interview data	26
4.1.1 Collated data.....	26
4.1.2 Non-collated data.....	33
4.2 Survey data	36
4.2.1 Survey figures from semi-quantitative data.....	36
4.2.2 Survey figures from qualitative data.....	47
5. Discussion	53
5.1 Future research	56
6. Conclusion	57
7. References.....	59
8. Appendices	62
Appendix 1. Interview questions.....	62
Appendix 2. Survey format and questions	63
Appendix 3. Survey auto-generated graphs	68

Abbreviations and definitions

Specific terms within game lingo are used throughout the study. Recurring abbreviations and terms are listed below in alphabetical order:

Loot: items in the game, such as weapons, armour pieces, ingredients, materials and so forth that are in the environment or drop from defeated foes and are collected by the player to add to their inventories.

Lore: surrounding, historical information and background knowledge about a game world, its events and its characters.

MMORPG: massively multiplayer online roleplaying game.

NPC: non-playable characters in the game.

PC: playable character in the game.

Primary World: the real world we live in.

RPG: roleplaying game.

Shooter: first-person games involving shooting.

Secondary World: the imaginary world constructed in fictional settings.

1. Introduction

The proliferation of videogames has attracted the attention of academics within the fields of informatics and enlivened discourse on user experiences. In games, ludology and narratology come together to infuse the experience with interactive stories that can be engaging and emotionally impactful, contributing to a heightened engagement in play known as immersion (Howard, 2008). While the links between storytelling and immersion have been considered at large within ludology, few make distinctions between storytelling holistically and the sublevels of storytelling in non-linear and interactive experiences.

In roleplaying games or RPGs, players take on the role of a specific character and embark on a quest. RPGs typically mix with genres such as action-adventure, strategy, open world and shooters and can be online or single-player experiences. The degree to which their fictional worlds differ from our world depend on how speculative they are. This study is mainly concerned with single-player, open world RPGs, though other genres have also been considered, such as strategy games, massively multiplayer online games (MMORPGs) and shooters. The criterion for the games included was that besides having a primary story or main quest they must also have secondary narratives in the form of side quests, mini quests, objects to be found in the game worlds, or other interactions that were not part of the main quest nor completion of the game.

This study will not concern itself with main storylines in games. Instead, the specific area of study here is found within a branch of narration called worldbuilding, and that specific area is secondary narration. Secondary narration, also called frame stories and micronarratives, are essentially stories within stories (Herman et al., 2010). Just as novels might feature diary entries or dreams as a short story within a greater narrative, games feature side quests and world details that serve several functions. Some of these functions include varying the gameplay, fleshing out the setting to achieve certain atmospheres and styles, and using spatial symbolism to convey thematic meaning (Howard, 2008).

This study takes the stance that secondary narration is integral to immersive user experience. The gaming community is generally appreciative of game companies that take the time to craft interesting side quests and world details that expand on the game world, and games that do this well are often top listed and achieve huge commercial success. Due to lack of research distinguishing between how games holistically or narratively contribute to immersion and what part in that secondary narratives play, it is of interest to explore how influential these secondary narratives are from a game development perspective and a game consumer perspective. This aims to answer the research question, *worldbuilding in roleplaying games: how do secondary narratives make user experiences more immersive?*

This study will take us into the theoretical fields of user experience, narratology and ludology in interactive media, as part of human-computer-interaction in informatics. The data collection methods and analysis will touch upon hermeneutics and research ethics. Key contributors to the research fields are Mekler and Hornbæk's (2016) studies on hedonic and eudaimonic experiences, Salen and Zimmerman (2003) with their studies on ludology, David Herman (2013) and Marie-Laure Ryan's (2001) studies on narratology, Espen Aarseth's (1997) *Cybertext* and studies on immersion by Ermi and Mäyrä (2005).

1.1 Purpose

The purpose of this study is to explore the game industry's views on secondary narration as an immersion-building tool in roleplaying games. My thesis is that roleplaying games with well-constructed and well-implemented stories make for high-ranking best-sellers, and secondary narratives bolster these story experiences. Due to the interactive and non-linear nature of games, stories become reliant on secondary narration to fill the game worlds with interactions and build on their environment in a process called worldbuilding. Despite this, many game companies fail to make their games immersive by constructing superficial secondary content or not providing enough secondary narratives in the first place. Many game companies do not have clearly defined narrative design roles, or compromise on story quality to produce mediocre game products and unengaging user experiences, causing them to flop commercially.

This study hopes to contribute with valuable insights from game developers and game consumers, as well as extensive research by academics in the fields of user experience, game theory, immersion and narratives, to ultimately explore the significance of secondary narratives in immersive user experiences. The data collection aims to elucidate what immersion means for developers and players, how important they find secondary narratives to be for immersion and in which ways they contribute to immersion. The study will therefore attempt to answer the research question: *worldbuilding in roleplaying games: how do secondary narratives make user experiences more immersive?* The results will reveal potential discrepancies between how developers and consumers of games value secondary narration, ultimately taking a user-centric view that games should be designed with immersive user experience in mind. The results, in turn, may motivate game companies to dedicate more time and resources to the development of strategic secondary narratives that bolster immersive user experiences.

1.1.1 Secondary questions

- a) User experience and immersion: what is immersion and how is it achieved? Why is immersion integral to user experience in games? Why is immersivity in games important?
- b) Worldbuilding and secondary narratives: what is the function of secondary narratives in game worlds? Are there different types of secondary narratives? Do secondary narratives help shape the way in which people play and are immersed?

1.2 Limitations

Limiting factors in this study include firstly the scope of game genres considered. The study is mainly considered with single-player roleplaying games that are non-linear, affording free roaming and exploration. The study was also limited by small data samples as three interviews and 63 online surveys were conducted out of a convenience sample. This is far too little to extrapolate from and draw any empirical correlations or conclusions from. Moreover, the study is not particularly technical in nature, i.e., it is not considering the technical aspects of how immersion is achieved. This includes considerations of the technical medium of screens, consoles, and controllers. Additionally, the study is not deeply psychological in nature. There are no instruments or psychological models involved in measuring immersivity. Lastly, the

study is not heavily ludic in nature. Ludology and narratology are considered, but the study does not concern itself with intricate game system theory and rules. Due to the wording of the research question and selection of game genre there is potential for narrative bias in the discussion, especially in its relation to ludology.

2. Related research

This chapter will delve into extensive research on three key fields pertaining to the main and secondary questions of the study: user experience and immersion, narratology and ludology (particularly their contentious relationship), and lastly worldbuilding as a central narrative device in games of speculative genres, wherein game worlds differ largely from our own. Due to the interrelated nature of these topics, some cross-references are made when necessary.

2.1 User experience and Immersion

Games have often been associated with fun and enjoyable experiences, deep involvement, and the ability to partake in a dynamic and real-seeming world. Thanks to modern graphics, game worlds have become so detailed and aesthetic that they closely resemble our own, with varying weather, daytimes, landscapes and more, making game experiences more immersive than ever. The game experience can thus be described as hedonic, as games ‘contribute to people’s well-being by affording pleasure and positive affect’ (Mekler & Hornbæk, 2016, p. 4510). However, as with all forms of art, games reflect and simultaneously influence our society. In a study conducted at New York University it became apparent how fiction can help us comprehend our real world better. In the study, science fiction worldbuilding supported students in scientific explanation, aiding both in reasoning, articulation, questioning and imagination (Matuk et al., 2019). This process of mutual influence overlapping between the real sphere and the imagined bring to fore the eudaimonic besides the hedonic, in ‘doing what is worth doing’ (Mekler & Hornbæk, 2016, p. 4509). Eudaimonic experiences may arguably have more long-lasting effects as they teach us something, be that new skills or information, that help us grow as individuals. Eudaimonia has in psychology been equated with self-determination, personal expressiveness, motivations, meaning, and aligning actions with values (Mekler & Hornbæk, 2016). As Hassenzahl et al. (2013) point out, user experiences should strive to be both pleasurable and meaningful, showing us that the value in game experiences lay in how they can be pleasurable, meaningful and valuable at the same time. Building on this, one can speculate that some players who play mainly for escape and entertainment can be considered ‘hedonic’ players, while those that play in pursuit of realistic portrayals, thematic value and skill accumulation, and ultimately personal growth, are ‘eudaimonic’ players. Arguably, the hedonic player is still indirectly and subconsciously playing for eudaimonic purposes, at least to some degree, as the game exposes them to new worlds and new characters. Character progression often is achieved in some way, at least in the roleplaying genre, which is suggestive of skill accumulation and growth.

Hassenzahl et al. (2013) elaborate that meaning-making is related to affectivity, in other words, if an experience is negative or positive, which is essentially an emotional response. Games’ ability to make meaning then becomes an inherent part of their experience and their

ability to affect their players in negative or positive ways. The study of meaning takes us briefly into the field of semantics, and in games, semantics can be understood as ‘information conveying the meaning of “an object in” a virtual world’ (Tutenel et al., 2008, p. 2). While this study does not concern itself with virtual realism, it concerns itself with the space of game worlds and how these can be representative and communicative. Worldbuilding is a concept that often comes up in games with comprehensive worlds, and it is important that the symbols and systems within these worlds are consistent and believable (Kessing et al., 2012), again pulling from our understanding of the real world and how games achieve an effect of internally logical realism, contributing to experiences of immersion. That games are an interactive medium further problematises the concept of cohesive worlds that need to be responsive and spatially immersive (ibid.).

Meaningful play is something that has been widely discussed by Salen and Zimmerman (2003) and is ultimately what decides whether play is enjoyable or not. They second the need for internal realism, that the system upholds its rules and ensures that the player is never pulled out of the ‘magic circle’ (ibid., p. 96). Moreover, they discuss ‘context of play’ (ibid., p. 366): how the context the play occurs within affects the player’s perception of the system. Moreover, they propose a ‘pleasure schema’ (ibid., p. 329) to play which can be physical, emotional, psychological or ideological sensations that can arise out of game narratives as players empathise with characters and their situations, or out of gameplay, as combat challenges evoke stress and adrenaline responses. Indeed, they propose types of pleasure such as sensation, fantasy, narrative, challenge, discovery and expression (ibid.). Games allow players to step into and express themselves in fantastical worlds and to some degree do the impossible, be that flying, weaving magic spells, fighting through hordes of enemies or simply experiencing a world that is different from our own. Players within the speculative genre can do more than just imagine words on a page; they can partake, roleplaying as their playable character and pretending that they are inside the world, something that is in part enabled by their ‘willing suspension of disbelief’ (Wolf, 2013, p. 24), a practice as old as fiction itself, first conceptualised by Coleridge. Tolkien (2008) countered this concept early on with the idea that it is not a matter of suspending disbelief, but rather of believing in the Secondary World. What the writer ‘relates is “true”: it accords with the laws of that world. You therefore believe it while you are, as it were, inside. The moment disbelief arises, the spell is broken’ (Tolkien, 2008, p. 52).

According to some game theorists, it is the concept of suspended disbelief, of experiencing the game as real, that allows players to become immersed (Laramée, 2002). However, Salen and Zimmerman (2003, p. 450) counter that this ‘immersive fallacy’ fails to take into account the game medium itself, that engagement occurs ‘*through play itself*’ (ibid., p. 451), proposing instead that ‘play is a process of metacommunication, a double-consciousness in which the player is well aware of the artificiality of the play situation’ (ibid., p. 451). In other words, immersion is not contingent on players forgetting their sense of self, their environs nor the awareness of engaging with an art or technology, but rather, as Gorfinkel argues, and Zimmerman and Salen (2003, p. 452) summarise, “immersion” is not tied to a sensory replication of reality’, it is not ‘the intrinsic qualities of a media object’ but instead it is about

the ‘effects that object produces’. These effects are tied into the relationship between the game and the player, and ultimately, the user experience of games.

The GameFlow model has been commonly used to evaluate game engagement, positing that certain criteria must be fulfilled for a game to be engaging, such as being responsive, challenging, and requiring concentration (Sweetser & Wyeth, 2005, p. 4). The model defines immersion as ‘deep but effortless involvement in the game’ with the set of criteria below:

Immersion Players should experience deep but effortless involvement in the game	<ul style="list-style-type: none"> - players should become less aware of their surroundings - players should become less self-aware and less worried about everyday life or self - players should experience an altered sense of time - players should feel emotionally involved in the game - players should feel viscerally involved in the game
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Figure 1. Source: (Sweetser & Wyeth, 2005, p. 6)

The concept of immersion was also worded differently in another instance to mean that players ‘lose awareness of everyday life’ and ‘concern for themselves’ (ibid., p. 4). Going by the previously discussed notion of realism as an important aspect of games, in that they entail a relationship between our real world and the one imagined, as well as the causal relationship of games being affected by our real world and vice versa, concerns arise over this proposed model which will be presently addressed.

Preceding that discussion however is Brown and Cairn’s (2004) study on game immersion as a level-tier system. According to them, immersion is the apex of game absorption, following ‘engagement’ and ‘engrossment’ (ibid., p. 1298). Similarly to the GameFlow model, the first level of engagement concerns accessibility and responsiveness of the game, investment causing players to ‘lose track of time’ (ibid., p. 1298), efforts and rewards, and attention or concentration (ibid., p. 1299). The next level of engrossment sees emotional attachment and how player’s emotions are affected, i.e., affectivity, hinging on elements such as visuals, interesting quests and narrative (ibid., p. 1299), with the game generally being considered well-constructed and respectable. Here, the concept of suspended disbelief is mentioned as a factor for making players ‘involved with more than just the physical aspects of the game’ (ibid., p. 1299), thereby enabling the next stage of ‘total’ immersion (ibid., p. 1299). At this stage the notion of ‘being cut off from reality’ emerges, with participants in the study feeling ‘detachment to such an extent that the game was all that mattered’ (ibid., p. 1299). Brown and Cairns (ibid., p. 1299) point out how ‘the game is the only thing that impacts the gamer’s thoughts and feelings’, summarising this as ‘presence’. This idea of presence is borrowed from a study on virtual environments and is defined as the ‘extent to which a person’s cognitive and perceptual systems are tricked into believing they are somewhere other than their physical location’ (Patrick et al., 2000, p. 479). While Patrick et al. (2000) claim that such presence cannot be offered by games, Brown and Cairns (2004, p. 1298) counter that it is possible to ‘*feel* presence’. Presence is a problematic term, felt or not, since it is not actual and does not specify whether that presence is spatial, sensational, emotional or all three. They elaborate that ‘empathy’ and ‘atmosphere’ are the ‘barrier to presence’, empathy being defined as ‘growth of attachment’ and atmosphere as ‘development of game construction’ (ibid., p. 1299). The consequent notion

of ‘transfer of consciousness’ (ibid., p. 1299) for empathy seems sufficiently descriptive and is especially prevalent in roleplaying games, however, later in this paper the term *projection* will instead be proposed. Atmosphere, in contrast with construction, regards ‘relevance’; in other words, ‘game features must be relevant to the actions and location of the game characters’ (ibid., p. 1299), referring back to the internal consistency discussed by Kessing et al (2012). In studies on empathy in games, Jerrett and Howell (2022, p. 14) discuss how player emotions can mirror their playable character’s (PC) and how that contributes to immersion and ‘perspective-taking’ through ‘player identification’ with the PC. In another study, Jerrett et al. (2021, pp. 639–640) explore the complexity of empathy and its many different forms or levels in an ‘empathy spectrum’. This spectrum ranges from its lowest level of pity, through stages of empathy (cognitive, reactive, parallel) to compassion. In compassion, they suggest that the player is ‘not simply attuned to another’s emotional state, but actively does something to assist them’ (ibid., p. 639), formally defining it as ‘prosocial actions done as a result of empathising with another’ (ibid., p. 639).

Leroy’s (2021) discussion on immersion and flow make an important distinction between the two concepts. He points out that ‘the player can be immersed but still aware of its surroundings at the same time’ (2021, p. 2) drawing upon previous research on flow (Cziksentmihalyi, 1991, p. 636). This aligns with the idea of appreciating games for what they are: an interactive medium, while simultaneously feeling involved in the experience of playing them, rather than feeling involved in the game itself. He adds that ‘a game can provide a highly immersive experience without meeting all criteria for attaining flow’ (ibid., p. 2). Here, the levels of immersivity by Brown and Cairns (2004) could be applicable, since the query is how immersive an experience can be without meeting the criteria for attaining flow; however, the significant takeaway is that immersion and flow are not necessarily synonymous. That position is strengthened by Jennett et al. (2008), and Weibel and Wissmath (2011), who both distinguish between flow and presence. While presence denoted the ‘sense of being in the game world’, flow is ‘the feeling of being the actor of the actions in the game (a feeling of agency)’ (Leroy, 2021, p. 2). That said, Leroy (ibid., p. 2) appears to agree with Brown and Cairns (2004) on which factors contribute to presence, mentioning atmosphere, attention, empathy, vividness and interactivity. What becomes apparent is that immersion is a complex notion encompassing several simultaneous processes, and several of these processes will be addressed in the study.

Ermi and Mäyrä (2005) contribute with additional dimensions to immersion. They accentuate the player’s ‘sensations, thoughts, feelings, actions and meaning-making’ (ibid., p. 2) in gameplay, and how players ‘bring their desires, anticipations and previous experiences with them, and interpret and reflect the experience in that light’ (ibid., p. 2), drawing parallels to Salen and Zimmerman’s (2003) contexts of play. Additionally, Ermi and Mäyrä (2005) point out that games aren’t always fun—they can also be stressful and frustrating, and yet those qualities do not deter from the immersivity of the experience; instead, they can heighten them, giving further credence to the eudaimonic quality of games. They listed four types of experience as follows: entertainment, educational, aesthetic and escapist (ibid.). Thus, they propose different types of immersion: sensory, challenge-based and imaginative, stressing their interwoven natures (ibid.). While the scope of this study is too limited for the implementation

of their immersivity model, the study takes a similar approach that ‘types’ of immersion contribute to a cohesive whole of immersivity, and this is where the secondary narratives come into play.

2.2 Narratology and Ludology

In *Homo Deus*, Harari (2016) explored the power of stories, how they are shaped by and simultaneously shape our reality. He offers a historical recounting of how writing ‘facilitated the appearance of powerful fictional entities’ that ‘reshaped the reality’ while facilitating belief in the existence of those fictional entities, since it ‘habituated people to experiencing reality through the meditation of abstract symbols’ (Harari, 2016, p. 150). Ultimately, stories ‘dominate objective reality’ and ‘serve as the foundation and pillars of human societies’ (ibid., p. 164). Since all narratives carry within them that duality, and since many roleplaying games feature stories that resonate with their players, games as an interactive medium have a similar power of affectivity.

Herman (2013, p. 73) explains how stories ‘furnish an optimal environment for making sense of what goes on by allowing circumstances and events to be dovetailed with the intentions, desires, and experiences of persons’. The stories provide ‘intentions, goals, feelings and actions’ (ibid., p. 74) that help to make sense of our world. Narratives can thereby incite interpreters to engage with a storyworld, ‘encompassing the situations, events, and entities indexed by world-evoking expressions or cues’ (ibid., p. 104). Herman (2013) discusses framed stories, stories within stories, or as he calls them, multimodal stories, as a way to introduce several reference points into a world, exposing how characters’ perspectives can affect one another, summarising this as the ‘world-shaping functions of perspective’ (ibid., p. 161). He describes how ‘narratives can encode in their structure, and also foreground as a theme, the interplay among a multiplicity of vantage points on the storyworld, which takes its basic character, in turn, from that same interaction of perspectives’ (ibid., p. 181). In other words, the storyworld becomes the sum of its individual character stories. Another point he makes is that ‘the contrast between persons and nonpersons is anchored in humans’ embodied experience but is also shaped by more or less widely circulating models of what a person is, and of how persons relate to the world at large’ (ibid., pp. 193-194). To simplify, what makes a person a person is experience, and these experiences come from peoples’ relationship to their locality. In a game, this would mean that anchoring NPCs to their cultural communities and the game world at large makes them seem more real. Herman (2013, p. 194) points out that ‘issues of character lie at the meeting point between worlding the story and storying the world, making sense of narratives and using narratives to make sense of experience’. This truly elucidates the dynamic and co-dependent nature of character, narrative and worldbuilding, showcasing how narrative ultimately is the vehicle for expressing experience.

Marie-Laure Ryan (2001) explores narrative branching in her studies on immersion and interactivity. She describes how the network structure of a story can ‘provide detailed descriptions or background information about the characters and settings of a linear narrative’ (2001, p. 250), something that in games is often summarised as lore. This structure gives the player the option of exploring these diverting paths or speeding through them if preferred. In her discussion on braided plots she posits that ‘every character in the cast lives these events

from a different perspective and has a different story to tell' (ibid., p. 254). In other words, secondary narratives allow other perspectives to come to the fore without actually shifting perspective; they are filtered through the PC and the player's roleplay as the PC. Moreover, she suggests how such structures allow for the story experience to be more decentralised, where 'dramatic plotting' can take place on the 'micro level' (ibid., p. 255). This would make the story experience less fixed, shifting the dramatic causality to the 'micronarratives' (ibid., p. 255). As Ryan (2001, p. 256) words it, the "little stories" steal the show from the plot of the macro level'. What motivates the player to explore those deviating paths are responses from the system in the form of rewards, as it 'coaxes the reader into exploring links by hiding a little treasure, an exciting discovery, a delicious morsel, along every side road' (ibid., p. 258). Ryan (2001, p. 259) argues that this plurality and diversification of worlds contributes to immersion by making them innately incompatible, meaning that they feature 'mistaken beliefs, conflict among the systems of belief of various characters, conflict between desires and reality, conflict between sincere and projected beliefs, consideration by characters of various lines of action' and so forth. Ryan's (2001, p. 260) mistake lies in thinking that this complexity compromises the narrative trajectory, arguing that the multiple ends that emerge out of multiple paths 'convey the message "There are lots of possible endings," and each of them is lost in the crowd'. As a counterpoint, Wolf (2013, p. 200) contends that multiple narrative threads add complexity and coherency to the gameworld in what is called 'narrative fabric', which provide multiple points of view and contributes to the world's 'illusion of completeness' (ibid., p. 201) and thereby also player immersion. This study takes Wolf's (2013) stance, that it is exactly this complexity and cohesion that correlates to our experience of reality. The point is not only replayability, though it is relevant for many players to replay to explore other endings, but the insinuation that the path you took based on your decisions is entirely your own, entirely unique and not replicable.

Howard (2008) takes a similar approach to Herman (2013), explaining how quests 1) allow us to interact in narratives, 2) denote a search for meaning or purpose to acquire or achieve something, an end that is essential eudaimonic, and 3) how they bridge the ludic and narrative spheres. Howard (2008) argues that games that do this successfully engage their players more rather than less. He suggests that:

Quests are meaningful because they immerse players in dramas of initiation, defined as a gradual movement up through formalized "levels" of achievement into a progressively greater understanding of the rules and narrative in a simulated world. Initiation also entails insight into how this world comments imaginatively upon "real" events, circumstances, and ideas (ibid., p. 26).

In other words, quests pursue goals of progression in games in the same way that they do in our real lives, which introduces Roine's (2016) interplay between the real and imagined which will be discussed later. Howard (2008, p. 21) further presents the 'replay value' of meaningful interactivity as players 'contemplate nuances of thematic implication through their active effort rather than through passive spectatorship', showcasing the power of games compared to novels. Howard (2008) bridges the distinctions that Aarseth (1997, p. 64) makes about 'interpretive' and 'configurative' functions in games, as well as Salen and Zimmerman's (2003) distinctions between 'interpretative interactivity' and 'explicit interactivity', where they associate the first with novels and the second with games (Howard, 2008, p. 21). Howard's

(2008) counterpoint is that it is in the intersection of narrative and interactivity that meaningful gameplay emerges. This confronts Aarseth's (2004) position that narrative games are limiting; Aarseth (2004, p. 367) goes as far as to describe their results as 'poor to non-existent characterization, extremely derivative action plots, and, wisely, no attempts at metaphysical themes'. Howard (2008, p. 21) argues instead for the characterisation and for the 'courageous engagement with metaphysical themes that is all the more compelling because the player is immersed in these ideas rather than a passive spectator of them'. In other words, agency in narratives is a major contributor to immersion and a staple of the roleplaying genre. Similarly to McKernan (2017), he suggests that players can be 'be immersed in a fantastic, supernatural environment while at the same time thinking about what it means to play a game' (Howard, 2008, p. 55), again lifting the value of games as art constructs. He goes on to list several ways in which quests can be meaningful, such as through 'the impact of the player's accomplishments on and within a simulated world', including level progression, affecting the landscape, 'altering the political and moral balance of the game world', and engaging in relationships with NPCs (Howard, 2008, p. 25). Secondly, meaningful quests provide 'a narrative backstory that conveys emotional urgency by revealing why the player-avatar is performing an action and what effects this action will have', and thirdly, meaning can be 'expressive, semantic, and thematic meaning: ideas symbolically encoded within the landscape, objects, and challenges of the quest and enacted through it' (ibid., p. 25).

Howard (2008) identifies the following quest archetypes: fetch and delivery quests, which imply objects being moved; combat/kill quests which according to him should imply choice as to 'when and where to act violently', as well as implied consequences (ibid., p. 102). Moreover, the violence should be contextualised to accrue more meaning, a core of narrative being conflict. Additionally, there are escort quests which require the moving of NPCs, and dungeon crawls, which entail entering a specific maze-like area or instance where the player explores in order to find objects and fight bosses. An overarching quest is the lore quest, which serves as motivation to 'uncover the mythologies and political intrigues that constitute the backstory of the game's simulated world' (ibid., p. 19). Howard (2018, p. 26) also mentions how sides quest can elicit 'emotional investment through character development', and NPCs 'add to a sense of realism by having mundane conversations with the player' (ibid., p. 67). NPCs are usually also the vehicle behind organic quest delivery as the player explores the world. The fact that quests are delivered through characters themselves is testament to how salient narrative is, and many secondary narratives are in one way or another connected to NPCs. The stronger NPC narratives are, the more pervasive their relation is to the storyworld and the protagonist. This study takes a similar stance to Howard (2008), that narrative and games are intertwined and ought to be seen as one. As per eudaimonia, the more the players' ideas, preconceived notions and status quo is challenged, the more surprised, enlightened and engaged they become. Players engage with the art for what it is, appreciate it for what it does, and understand its power as an educative medium and a way to better understand their own reality. This shows that our experience of creative media, and secondary narratives in particular, is far from trivial, and rather constitutes a way for us to navigate our complex worlds and issues. In other words, it is entirely possible for players to be seeing games as a work of art while being immersed in

their fantastical environments, while experiencing that environment as real, and while identifying with the parts of it that connect to our experiences in real life.

Juul (2005), uses the terms ‘emergence’ and ‘progression’ as modes of gameplay, where progression can be described as the main quest, with its structured set of objectives, while emergent play occurs more randomly, such as the way side quests pop up as the player explores the world and interacts with NPCs. Juul (2005) stresses that a combination of both are necessary, since too much progression can be experienced as ‘railroaded’, and too much emergence may lack direction and purpose, providing players with too many choices and no means to prioritise between them narratively (Juul, 2005). In other words, games provide freedom of choice; in ludic terms, those choices are restricted and given purchase by the rules enforced by the game system, and in narrative terms, those choices are given weight and motivations through the stories. Fullerton (2019, p. 355) adds that choices necessitate consequences, so far as to ‘alter the course of the game’. This entails that choices necessitate positive and negative outcomes, where positive outcomes ‘might advance the player one step closer to victory’, while negative outcomes prohibit that aim (ibid., p. 355). Fullerton (ibid., p. 355) points out how this concept of ‘risk versus reward’ is ‘something we face every day in our own lives, not just in games’, affording them further saliency. These sorts of choices elevate the sense of ‘drama and suspense’ (ibid., p. 355) in the narrative game experience, especially if the narrative sets up characters that the players care about and empathise with. Then, it is not only the player’s progression and success that is potentially compromised, but the lives of NPCs as well, or the game world at large, a recurring theme in the hero-centric stories that many games are based on.

The concept of moral choices is investigated in a study by Formosa et al. (2022, p. 91), who present games’ potential to ‘add a semantic layer (narrative element) that can help the player to engage with the morality of in-game choices’. They distinguish the ‘reactive’ player, who ‘interacts with a game as a system to be optimised and engaged with instrumentally’ from the ‘reflective’ player, ‘who interacts with a gameworld as a semantic system and directly engages with the moral content of choices’ (ibid., p. 91). Extrapolating from this, secondary narratives will more likely be interesting to the reflective player than the reactive one. In a study by Vickery et al. (2018, p. 495), narrative interactions or ‘directing narrative activities’ in games were categorised as passive interaction, active interaction and dialogue choices. Passive interactions are embedded narratives such as cutscenes and cinematics, active interactions entail progressing through the game through emergent narratives or quests, and dialogue choices are timed sequences that have ‘lasting impact’, i.e., consequences on the story (ibid., p. 497). Aarseth (2004, p. 370) also makes contributions to the categorical exercise, noting how voluntary quests ‘are a kind of holiday; they are mystery tours you can take when you need a change from the daily business of pursuing [the primary objective]’; in other words, they are functional distractions that allow the player to relax and take a break from the immediacy of the main story. In summary, there are many different ways to categorise quests, but none seem to adequately distinguish between the natures of main quests and side quests, and how they potentially contribute to immersion in different ways. In the method chapter, an attempt will be made to categorise secondary narratives in a more descriptive way.

2.3 Worldbuilding

A crucial aspect of narration is worldbuilding, and arguably worldbuilding is all that is not primary; it builds the world around the setting that the main story takes place in (Wolf, 2013, p. 29). Worldbuilding aims to expand the space the story takes place in and lens that the story is viewed through. Fullerton (2019, p. 117) defines worldbuilding as the ‘deep and intricate design of a fictional world, often beginning with maps and histories, but potentially including complete cultural studies of inhabitants, languages, mythologies, governments, politics, economies’. Arguably, then, worldbuilding is an umbrella term for all the myriad of shapes that secondary narratives take. As expressed by Goerge R. R. Martin (2019), a ‘gardener’ or ‘architect’ approach can be taken in worldbuilding, usually dependent on genre. Speculative genres with secondary worlds very different from our own, such as fantasy and sci-fi worlds, usually require more worldbuilding to show how they are different. In games, the approach is determined by genre but also by scale. The bigger the world, the more interactions need to fill it, and the more contextualisation in the form of narratives is needed to justify why those interactions should take place. In other words, games require more of an architect approach than a gardener approach. Studies show how worldbuilding is key to designing RPGs, as it entails a ‘process of defining the physical, historical, and social aspects of the game’s world’ (Matuk, Hurwich & Amato, 2019, p. 193), thereby providing evidence-based explanations for why a world is the way it is, anchoring it in our perceptions of reality. Matuk et al. (ibid., p. 194) further evidence the ‘explanatory value of narrative’ and how explanations are used to ‘justify design decisions, or to elaborate upon details of the game’s characters, setting, and narrative outcomes’. In other words, worldbuilding reflects our perceptions of reality, while simultaneously aiding our understanding of reality.

McKernan’s (2007) studies on architectural worldbuilding contribute with extensive research on the importance of games as spaces. One of the first points she posits is that game worlds are ‘parallels to the same spatial logics that define physical space’ (McKernan, 2017, p. 46). She points out that this spatial design is ‘holistic’ (ibid., p. 47), more akin to architectural modelling than theatrical sets. Gamespaces are ‘active props for the production of rich narratives and meaningful experiences’ due to their ‘active and configurable’ natures (ibid., p. 48), recalling to us Leroy’s (2021) viewpoints on agency. McKernan’s (2017, p. 52) stance suggests that game worlds can influence outwardly, since they ‘teach us about our connections to our architectural surroundings and to the world as a whole’. She thus defines worldbuilding as ‘the practice of shaping meaningful spatial narratives’ (ibid., p. 53), arguing that ‘spatial cues are used to encourage exploration, to tell stories’ (ibid., p. 65). McKernan exemplifies this with the *Bioshock* series (2007-2013), which use ‘spatial narrative’ and ‘architectural motifs’ to ‘reinforce its vision’ of ‘objectivist utopia gone awry’ (ibid., p. 66). Indeed, *Bioshock Infinite* (Irrational Games, 2013) ‘uses the environment to present topics of racism and American exceptionalism’ (McKernan, 2017, p. 66), ultimately problematising human historical events by designing social commentaries into the narratives of the game. McKernan (ibid., p. 67) further explains how worldbuilding gives games a ‘clear voice’ and ‘genuine messages’, something that grants them a specific style and resonates with audiences playing for eudaimonic purposes.

Tracing the history of the worldbuilding practice takes McKernan (2017, p. 71) back to the roleplaying game *Dungeons and Dragons*, where uncertainty and chance provide an additional layer of realism, as roleplayers' lose some of their agency and succumb to the dice rolls of fate. Chance is arguably an important factor in exploratory narratives, since it does not guarantee result in the discovery of lore items or rewards. Chance demands of the player a more active role in the consumption of narrative, since they must seek out secondary narratives themselves, furthering their sense of freedom in the game. Even more interesting is when the AI in a game generates timed mini quests, such as goose chases in *Witcher 3* (CD Projekt RED, 2015). As an extended example of chance, *Witcher 3* features an entire game-within-a-game in the form of the playable card game *Gwent*. *Gwent* is an entirely skippable part of the game, though it is interwoven into many quests and character interactions. *Gwent* is an example of a highly successful form of secondary game experience, as its potential for transmedial development later took shape in standalone *Gwent* games.

James Ryan (2018, p. 86) takes a similar world-centric approach to McKernan, where the 'world precedes plot', allowing for the existence of characters that 'extend beyond the context of a given narrative premise'. The world then becomes a 'backdrop for potential emergent stories' (ibid., p. 86), and storyworlds with emergent narratives thus 'feel more complete and more consistent', and also 'more like nonfiction' (ibid., p. 87). To paraphrase, events that we experience uniquely, that only happened because we caused them to happen through action, are essential in emergent narratives. Embedded narratives *tell* the player, while emergent narratives are told *through* the player. Since all experiences are subjective, that feeling of uniqueness gives it a feeling of nonfiction, i.e., that it actually happened. Ryan (ibid., p. 78) elaborates:

the primary source of intrigue for this emergent sequence is something else: I personally experienced it. Because I was an active participant in this story, for me it does not merely work like nonfiction, but moreover like lived experience. Thus, my account of this emergent experience, as it has appeared on these pages, is a story of lived experience.

This can ultimately explain why players feel that their game experiences become real. Ryan (ibid., p. 93) further argues that emergent narratives are 'bolstered by the aesthetics of a larger context: a special intrigue is attached to stories that transpire against the backdrop of a larger storyworld', calling forth the theme of cohesion or completeness discussed by Wolf (2013) and McKernan (2017). Exploring the game world, for example, will allow the player to uncover the 'unnoticed', a sense of discovery that yields both pleasure and reward (J. Ryan, 2018, pp. 95–96). Ryan (ibid., p. 98) moreover accentuates the 'ephemeral quality' of emergent narratives, how they exist only for the individual player in a unique experience. Lastly, he summarises that emergent narratives imbue storyworlds with 'depth and breadth' (ibid., p. 98); in other words, it is the emergent aspects of narratives that provide this depth.

Roine (2016, p. 18) articulates the following conundrum: 'the most intriguing paradox of fictional worlds: they *both* exist *and* do not exist at the same time'. She recalls Marie-Laure Ryan's (2001) stance that 'we need to makebelieve or pretend that the fictional world is real for the duration of our engagement with a work of fiction, and once we recognise that the world is artificial, made-up, we cannot immerse ourselves into it any longer' (Roine, 2016, p. 18). This

also echoes previous notions of suspension of disbelief as expressed by Laramée (2002) and Brown and Cairns (2004). The findings in Roine's (2016, p. 5) dissertation point to how 'worldbuilding is among the most fundamental rhetorical and communicative practices of speculative fiction'. This study takes the stance that all fictional narratives in fantasy and sci-fi are in some way speculative; they speculate how our lives would be lived in radically different environs, either in the future or the past. While the main stories of games go a long way in communicating this, the secondary narratives problematise the status quo of the main characters, bring in new challenging perspectives, or say something with their settings. Digital roleplay, Roine (ibid., p. 24) describes, 'brings together achievement and goal oriented gameplay and the more imaginatively (and, to some extent, narratively) motivated player activities in a unique way', drawing parallels to Ermi and Mäyrä's (2005) model on immersion. Roine's (2016, p. 45) proposition is that 'the foreign world is imagined both as a possibly existing realm and recognised as an artificial structure built for imagining alternatives, for prospecting into the future', demonstrating the tangibility of speculative worlds. She elaborates that a similar parallel occurs between the primary and secondary worlds: 'the double exposure is achieved both in terms of a parallel between our understanding of what is and engaging us with the representations of what is not' (ibid., p. 46). Roine's (2016) findings on this interplay between real and imagined ultimately problematise previous understandings of immersion as necessitating that players 'should become less self-aware and less worried about everyday life or self' (Sweetser & Wyeth, 2005, p. 6) or that they leave their primary worlds behind when entering the secondary. Roine (2016, p. 46) illustrates this problem with the following statement, ultimately taking a more user-centric stance:

While the models focusing on the referentiality of fiction have been mostly interested in discussing the way a fictional world "replaces" our actual world during the engagement with fiction, the scholars and writers of science fiction have strongly emphasised the question of how imagined worlds can be brought into relation with the experience and knowledge of readers.

Despain (2013, p. 174) articulates a similar point, that players bring psychological filters into the game that 'skew "what really happened" into "what I felt happened"'.

If the experience of real is heightened by the duality of experiencing the game world as real and as an art construct of social commentary, then immersion is dependent on the parallel of real and imagined. This would suggest that games rely on their audience understanding the social issues they are problematising. A young person unversed in colonialist critique might not understand the layers of meaning conveyed in *Bioshock Infinite* (Irrational Games, 2013), but perhaps the game can aid them in understanding them to some extent, all the same. It is also our understanding of the game as an artistic construct that allows us to engage with it as a fantasy or thought experiment and explore our options. In VR games, climbing a high cliff or hurtling through space might not be as enjoyable as it seems, as those activities invite real fears and physical annoyances such as dizziness and nausea. But in regular games, that separation of real and construct allow those actions to be undertaken. Players pretend and roleplay them as real, in the context of the game and with the illusioned contract of being the playable character, but awareness of that distance between self and character is still maintained. In other words, sensory immersion is not the only aspect nor necessarily the most important

aspect of game immersion. The distance or duality is arguably also what allows us to play the game with different playstyles. If the interplay did not exist, gameplay could only be experienced devoid of our own experience, and it wouldn't be able to affect us outside of the play moment itself. But since context of play is dependent on our experiences, and since games can affect us, the evidence of interplay becomes blatantly manifest.

3. Methods

For triangulation of data, both interviews and questionnaires were conducted. This chapter documents the data collection process and justifies the inclusion of multiple perspectives in determining whether values on secondary narratives align between the two data groups.

3.1 Data collection

The study collected qualitative data from game developers and semi-qualitative data from players of roleplaying games. This was to compare the insights of producers and consumers and see whether their values and opinions aligned. The comparison would provide some answers as to whether game companies meet consumer demands for immersive secondary interactions, and how companies intentionally design secondary narratives to be immersive.

To study the perspectives of both game developers and players, qualitative interviews were conducted with three individuals involved with storytelling in different game companies with 3+ years of experience. These roles included a content designer (respondent A/company A), a game designer (respondent B/company B), and a studio director/concept writer (respondent C/company C).

With these interviews the study investigated:

- how game companies value secondary narratives
- who is responsible for the development of secondary narratives
- if, how and why they are strategically incorporated into the game world
- if respondents had experience with data collection from players on secondary narrative interaction and what the data suggests.

Additionally, the semi-qualitative and quantitative method was used in the form of online surveys that collected 63 players' input on:

- whether they interact with secondary narratives
- if they feel secondary narratives contribute to the game experience
- if some of their favourite games have especially memorable secondary narratives
- what specific types of secondary narratives are most appreciated.

3.1.1 Interview

The respondents for the interview were conveniently sampled (Yin, 2016, p. 95), as they were contacted through acquaintances via mail or LinkedIn. The interview questions were conducted onsite or online and took approximately one hour each. The first two interviews took place before the commencement of the survey and data collection, and the third interview took place after. The digital interview with respondent A was conducted digitally with cameras on, allowing for facial expression and physical environs (ibid.), while the digital interview with respondent C was textual. What followed was lack of behavioural cues or other contextual

indicators that framed the answers, with some potential for loss of meaning (ibid.). The text-based interview allowed for less insight into the respondent's thoughts and reflections, even though they were quite colloquial, experience-based and intuitive. The onsite interview with respondent B was conducted in a quiet conference room at company B, allowing for a moderately relaxed setting (ibid.). Due to the limited scope of the study no observational studies were made.

Respon- dent	Role	Previous experience	Interview Format	Development phase	Game Genre
A	Content Designer	Game Designer	Digital with camera	Launched	Strategy
B	Game Designer	Marketing, Game Economy	Onsite	In Alpha	Action RPG
C	Studio Director/ Concept Writer	Content Designer	Textual	In Development (unspecified)	Adventure RPG

Table 2: Interview respondents and interview format.

The qualitative method was intended to capture the respondents' individual experiences and perspectives as professionals in the industry (Yin, 2016), to inspire thoughtful and reflective answers, and hopefully to extract formulations construed on the spot, especially if the respondents had not considered some of the questions in a certain light or from a specific perspective. This was done to problematise the game industry's stances and views and garner in-depth responses on the potential of secondary narratives and how they contribute to immersion in different ways.

Since the data collected is potentially sensitive or confidential, the respondents and the companies they worked for were kept anonymous. This allowed the respondents to relax and be more open and forthcoming in their answers (Yin, 2016). However, the method used and the small sample size entail that no generalisations can be extrapolated from the gathered data (ibid.). Some of the questions had to be skipped due to confidentiality reasons as respondents could not disclose company procedures with regard to strategies and data collection. Some of the questions were not relevant as two of the companies interviewed were still in the development phase of the game. Some of the questions were skipped since the respondents could not reveal information about previous companies they had worked at, and some questions were skipped due to the respondents not having access to the information in question, such as data collection from players.

The interview questions were semi-structured and formulated to be open-ended, aiming to collect information in a what, how, when, who, why format (Yin, 2016, p. 142). If respondents struggled to answer, the questions were complemented with further follow-up questions or examples to aid the respondents' answers. The interview questions can be viewed in appendix

1 under appendices. Some examples of additional questions are illustrated as bullet points under each question.

3.1.2 Survey

There were 10 questions in the online survey, 3 qualitative and 7 semi-quantitative, and an additional two questions about age group and whether the respondent consented to participation in the study. See appendix 2 in the appendices for the full survey. Since the survey was text-based, layers of meaning were lost as contextual, behavioural and tonal factors were missing (Yin, 2016). Respondents wrote what they believe was the right answer, taking a more intuitive than factual approach. However, the survey format took efforts to look visually appealing and relaxed, allowing for unfiltered and relaxed answers. The questions were formulated as simply as possible, with bold and italicised fonts to help accentuate the important parts of the question, such as if it was a 'how' or 'what' question. The qualitative questions were formulated as open-ended and personal, posing the question to the participant directly to inspire more personal opinions in response (Yin, 2016, p. 142).

The survey utilised convenience sampling, being sent out through the researcher's own personal social media channels (LinkedIn, Facebook, Discord) and distributed to people that they know (Yin, 2016, p. 95). An effort to randomise the data was done by posting the survey to three Reddit channels related to gaming, however, many of the subreddits were not accepting data collections, which is why the convenience sampling was necessitated. The snowball sampling method was also utilised as people distributed the survey to others they know ((Yin, 2016, p. 95). The requirements for participation in the study were that participants had experience with playing roleplaying games of different genres, be they adventure games, strategy games or shooters, and that they were 18+, since many games in that genre are 18+ and feature adult themes. Since the study is not considering the social aspects of games, the survey introduction specified that single player games were in focus, however, several respondents made references to online games such as *World of Warcraft*. While the majority of references made did not concern social aspects in those games, it could still be considered a contributing factor to the immersive experience (Sweetser & Wyeth, 2005, p. 10).

The qualitative questions were open-ended and formulated in a way that would allow the respondents to freely express their opinions on the subjects. They were interspersed with the nonqualitative questions to allow for an organic line of questioning, beginning with the widest question. This question would allow for comparisons to be made between what immersion holistically meant to the respondents and immersion specifically derived from secondary narratives, and which secondary narrative most contributed to immersion and why. The qualitative questions were as follows:

1. What does being "immersed" in a game mean to you?
2. How do secondary narratives contribute to immersion, in your opinion?
3. Could you briefly describe one specific and especially memorable secondary narrative from one of your favourite games, and how it contributed to an immersive game experience?

The quantitative questions in the survey are more nonqualitative in nature, since they are concerned more with choices between qualitative answers rather than numerical data (Yin, 2016, p. 298). Some of these questions provided fixed but elaborated answers that the

respondents could choose between, based on which statement they felt they aligned with the most, while some allowed multiple answers by ticking boxes. The quantitative questions that were numerical in nature were the following:

1. How much do you interact with secondary narratives in single player RPGs?

This was presented in a multiple-choice format instead of a scale, with five choices provided ranging in percentages of 0%, ~25%, ~50%, ~75% and ~100%, since each point needed some further explanation and approximate numbers, seeing as quantifying how much one interacts with secondary narratives can be difficult for the player, especially if the game does not provide such data in a visible format or even suggests how many secondary narratives exist in the game in the first place. The questions and formats can be viewed as they were presented to the respondents in the appendices chapter.

In the following question the scale was utilised, since each of the points did not need to be as descriptive. Instead, 1 represented the phrase “not at all” and 5 was described as “absolutely”. Absolutely was used to suggest a definitive answer, taking precedence over descriptions such as “very much”, or “extremely much”:

2. On a scale of 1 to 5, how much do you feel that secondary narratives contribute to immersion?

The following question was simplified since the scope of the study could not allow for proper data comparisons between levels of gameplay and story necessary to achieve immersivity in the player. Instead, this scale was presented more as a balancing scale, which in a simplified way investigated which aspect weighed more heavily on the player, or whether they viewed both challenging gameplay and compelling story as equally important. The motivation behind the inclusion of this question was to further understand what components of immersion secondary narratives provide that main stories don't. Seeing as gameplay is integral to the main story, it could be that players believe that secondary narratives primarily strengthen narrative aspects of the experience. The responses would illuminate to some extent whether that presumption is true or not. The midpoints on each side of the scale would show differences in whether the player definitively believed that one of the two contributed to immersion, thereby excluding the other, or whether the opposing point also contributed to immersion to an extent. The wording “challenging” gameplay and “compelling” story was to make the question more descriptive, seeing as the terms gameplay and story and what they actually mean are still contentious in academia.

3. On a scale of 1 to 5, where 1 is challenging gameplay and 5 is compelling story, which contributes the most to immersion? If you find them equally important, choose the middle.

One of the questions was divisive, as it intended to explore an observed divide in game research, namely the views on immersion and how players relate to their realities while being immersed, and whether that divide was applicable in a sample of the roleplaying game community as well. A potentially problematic point is the exclusion of the “other” option where respondents could formulate their own thoughts on the question, however, the scope of the study was considered too limited for such a detailed data point. The question on the divide was instead intended to confirm or not whether such a divide even existed. More on this will be elaborated in the discussion chapter.

The multiple-choice questions where respondents could provide more than one answer specified this in their questions. These intended to provide as many options for the respondents as possible, with some instances of grouping where the terms were deemed related. Here, the respondents could tick any relevant answers, whereby the data would show which of the types would be most popular.

The question on types of secondary narratives was based on types of interactions identified in the related research, such as Howard's (2008) quest archetypes, as well as types of secondary narratives identified by the interviewees, with certain additions and groupings of quest types made intuitively by the researcher, viewable in figure 3. The main separation of these quests was based on observations that some quests are more story-focused while others lean more towards gameplay. The groupings were firstly based on sensory format, such as whether they were able to be seen or heard (Ermi & Mäyrä, 2005), or narrative formats, such as whether they were texts, static images, moving images or auditory (ibid.). Further categorisation was based on the level of cognitive effort required in the undertaking of the quest, such as whether only non-complex movement was necessary, or complex movement in the form of combat challenges, or challenges of a more mental nature (ibid.). A separate category was provided for exploration, as it is undertaken to find things to do or enjoy the aesthetics of the environment. An additional category was provided for elements that are genre-breaking, such as easter eggs, meta references and fourth wall breaks. Lastly, a separate category was provided for quests that centre mainly on the acquisition of items equippable by the PC. The main categories were: textual, static visual, dynamic visual (interrupt play), auditory, non-complex movement, item accumulation, movement challenge, mental challenge, genre breaks.

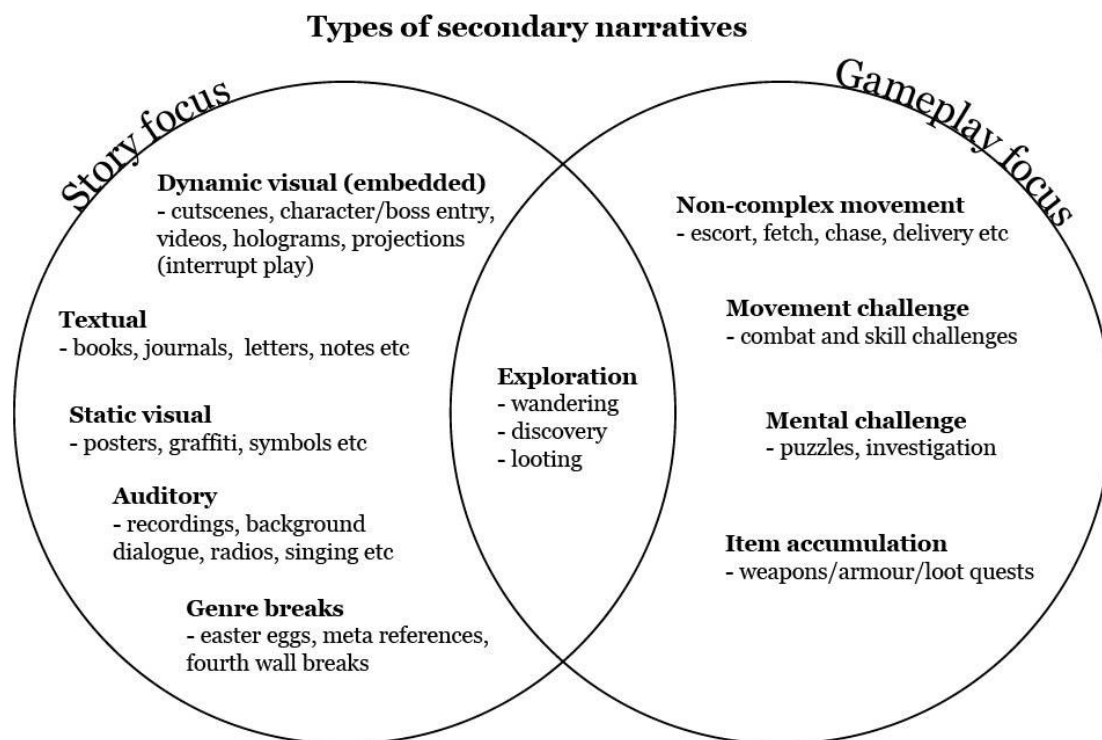


Figure 3: Categorisation of types of secondary narratives according to story or gameplay focus.

The categorisation of the multiple-choice options in the question on what secondary narratives provide was based on the themes that emerged in the research: agency, exploration, rewards, discovery, not being railroaded, new perspectives, themes, complexity, longevity, replayability, depth, realism, character, unique experience, choices, spatial symbolism, freedom, distractions, suspense, environmental storytelling, chance, empathy, background information, coherency, cohesion, relaxation and identification from own experiences aligning with happenings in the game. Moreover, the categorisation of the themes was affected by the interviews, even though the survey refrained from keeping those categories restrictive where more details and description was needed. Furthermore, some of the terms were more loosely used in a descriptive manner in categories that they did not formally belong to according to the data analysis of the interviews. Some of the categories are more explanatory and others more broad. Many are closely related but arguably could exist without the other. For example, choices and consequences usually entail thematic or ethical complexity, however, in many games a choice can entail a choice between two paths leading to the same place, consequence or instance. Another problematisation is that the ability to choose paths invariably makes the experience unique, however, the player may experience that the choices provided are too limiting, fixed or stereotypical, not truly reflecting their own unique input. Another more ludic instance is that many of the upgrades or rewards to grow the PC are locked behind skill challenges, however, these are also not necessarily always interwoven. For example, an item that grows the PC can be looted from the environment, while some skill challenges, such as the fist fights in *Witcher 3* (CD Projekt RED, 2015) only yield money from won wagers. The options provided are as follows, with their theme categories bracketed (these categories are explained in table 5 in section 3.2.1):

- Choice options and consequences (Agency)
- Complexity of topics and moral themes (Realism)
- A unique experience (Agency)
- Creative freedom and self-direction (Agency)
- New perspectives, insight into NPCs' lives and opinions (Realism)
- Unpredictability, lack of control over outcome (Realism)
- Incentives and rewards for exploration and discovery (World)
- Lore, history, backstory, information (Narrative)
- A break from the main story, distractions (Agency)
- Complements to the main story, builds suspense (Narrative)
- Cohesiveness, depth, a sense that everything fits together (Realism)
- Variety of quests and gameplay (Agency)
- Replayability and longevity (Medium)
- Chances to upgrade / grow the playable character (Medium)
- Challenges, opportunities to hone skills (Medium)
- Other (specify)

Missing from this list are themes in the *focus* and *emotion* categories. This was due to the list becoming too comprehensive for more options to be included, and these seemed the most “obvious” categories for players to choose, building on the data from the interviews. As such, the less obvious options were included instead and the “other” option was deemed adequate for the respondents to provide their own answers where relevant.

The question on playstyle emerged from the interviews, where respondents identified playstyle as an important aspect of roleplay. In the survey, the question was intended to explore the different forms that roleplay can take, regardless of the genre of roleplaying games, to problematise firstly the innate nuance associated with roleplaying in games. The five options provided were more intuitive, building on the conducted research by Brown and Cairns (2004) and Jerrett et al. (2021) on empathy in immersion, though they were altered to better accommodate the roleplaying genre and the restrictions of this study (which is not concerned with extensive psychological considerations). They were also colloquialised with game lingo to better resonate with the respondents. Therefore, the options could be seen as a loose level system for empathy instead defined as ‘playstyle’, where the lowest level is lack of empathy due to lack of identification with the PC and lack of projection into the game situation, and the highest level is roleplaying as the PC, taking on their role and playing in accordance with their personality and situation. The argument here is that there are differences in empathic play that do not entirely line up with the empathy spectrum proposed by Jerrett et al. (2021). To elaborate, this study suggests that the lowest level is not necessarily pity, but rather playing with little or no identification or projection, while at the next level, the player can identify with the PC without necessarily aligning their actions. At the third level, the proposed playstyle is idealist, where players make decisions that are morally good or bad, the argument being that regardless of the PC’s or the player’s own personality and behaviours, they roleplay according to values (Jerrett & Howell, 2022, p. 3), which can pertain empathy for the game world at large, including all its inhabitants and its fate, rather than feelings of empathy only for the PC. At the next level is self-projection into the PC, where players replace the PC with themselves and act as if their real selves are in the game. At this stage, the player can empathise with the game world and situation based on their own experiences, which differentiates the playstyle from the next level, where players put their shoes in the situation of another being, exploring their personality and acting in accordance with it, which at least in a traditional understanding is what empathy entails. However, these playstyles are highly dependent on the games in question, their genre, how many PCs players can pick between, how contextualised their situations are in the world and how characterised they are. Ultimately, the responses cannot be extrapolated in a way to definitively suggest which playstyles are associated with the highest levels of immersion, as the study is too limited for that; however, it is an interesting point to problematise in game immersion research for future study efforts in that field. This sort of empathy tier system in games ought to be strengthened by psychology research in following studies.

3.2 Method of analysis

This chapter addresses the method of analysis undertaken for each data group and proposes new terminology for a categorical analytical approach.

3.2.1 Interview analysis

The data collected from the interviews was analysed in accordance with Yin's (2016) five-phased cycle: compiling, disassembling, reassembling, interpreting, and concluding. This non-linear process spanned over a period of a month to give the researcher time to properly analyse the data without imposing biases or failing to afford all the data equal attention (ibid.). As per Yin's (2016) instructions, measures were taken to ensure that the analysis was as thorough as possible through, constant comparisons, negative instances, rival explanations, through posing and reposing questions and reconsidering data from different perspectives.

The interviews that were conducted orally were listened through twice: once for contextual interpretation and once for transcription. The transcribing process took up to eight hours per recording to capture nuances and underlying meanings in the dialogue. In instances where language lacked clarity, the contextual interpretation became useful to fill in the gaps as accurately as possible. Underlying meanings seldom contradicted what was being said orally, however, they often provided additional emphasis or suggestions that something was indirectly understood, such as certain practices in the industry being common. A particular instance where tonality became important was when the respondent was discussing a trend in the game industry that they seemed embarrassed to admit; this communicated to the researcher that while the respondent held a certain view, the general game community might not necessarily agree with it.

Two of the interviews were conducted in Swedish, which necessitated translation. This was done with the aid of translation devices, though all the translated material was considered carefully for better formulation and more accurate contextual paraphrasing. Certain terms in Swedish needed different and more appropriate terms in English, especially when those terms were codes.

Compilation of the data began with the first interview. All recordings were transferred to local storage and divided into separate, labelled collections. To allow for as much data retention as possible, the filing system was compiled progressively, with first documents for each interview containing notes written during and immediately after the interview, when the information and ideas were fresh. The second document containing the contextual interpretation preceded the detailed transcription. In the disassembling phase, a copy of the transcriptions was made for further highlighting of key points, coding and note-taking. In a separate document, all the codes were collected with all accompanying notes of interpretations. The codes were reviewed, further interpreted, organised, and collected into groups until themes began to emerge. In the reassembling phase, the themes were copied into a new document where they could be refined, organised and reworded if necessary. In an additional document, categories were extracted out of the groups of themes. At this point, tables and graphs were utilised to visualise the grouping of the data.



Figure 4: Analytical process of qualitative data.

Once the last interview was completed, a separate collection was made for comparative purposes. Initially a document included surface-level comparisons as soon as the last interview was made, to record initial impressions of their main similarities and differences. The first three phases were repeated up until this point. In the interpretative phase followed the structured and detailed comparative analysis of the interviews. This entailed cross-referencing codes, themes and categories, identifying similarities, differences, and ways for the researcher to visualise this data. All models and figures were constructed based on that data, with first revisions kept aside from final revisions. In the concluding phase, the final revision was made of the figures and tables before narratives could begin to emerge with patterns of different focal points on secondary narratives and immersion. These figures and tables are presented in chapter 4.

Themes were collated into seven main categories as their relationships became apparent from the interviews' relation to the findings in the related research. This relationship will be analysed and discussed beneath each data presentation in chapter 4. The seven categories are: agency, realism, medium, narrative, world, emotion, and focus. Many of the themes are co-dependent and interwoven and therefore difficult to distinguish. The motivations for the categorisation were as follows:

Category	Working Definition
<i>Agency</i>	power to the player, affectivity, self-determination, carving your own path
<i>Realism</i>	experiencing the game as real, aspects of reality overlaid in game, identification with the game based on own experiences
<i>World</i>	scale, depth, a sense that the world is living independently, references to worldbuilding
<i>Emotion</i>	generating emotional, almost physical sensations, caring about characters or topics, relationships, connection
<i>Narrative</i>	character stories, suspense, mystery
<i>Focus</i>	engaged in experience, not distracted, ignoring real self/reality, forgets time, flow
<i>Medium</i>	games as a medium, interactivity, system consistency, genre

Table 5: Working definitions of theme categories.

3.2.2 Survey analysis

Qualitative answers were extracted from the survey to be analysed in a similar fashion to the interviews, utilising Yin's (2016) five-phased cycle. Since the surveys were not as personal and complex as the interviews, the analytical process was simplified. However, the data collection from the three qualitative questions in the survey were each assembled in separate collections, coded, thematised, and categorised in patterns that resembled the interviews. There is potential that the analytical process in the interviews affected the interpretation of the data in the surveys, however, utmost care was taken to isolate the databases from one another and

build themes out of the interpretation of sentences formulated in the survey responses rather than just the codes, to ensure that personal interpretation did not have room to interfere to the same extent. In instances where the researcher needed a second opinion on the interpreting phase, support was offered by the research supervisor.

Several of the themes are intuitive, as some of the key phrases coded, such as ‘I feel like I’m inside the world’ were interpreted as the player feeling like they are projected into the game world, i.e., the theme *projection* (a term for ‘presence’, as discussed in the related research). Many of the themes were similar to the interviews, and the categories extracted from them were identical. A point that is potentially problematic is that some of the themes, such as *narrative*, *world* and *agency* became categories as well.

The nonqualitative answers were autogenerated into graphs and figures and were analysed according to which categories were most common. Comparative analysis of the individual responses on each question were not considered due to the limited scope of the study. For example, the analysis did not take into consideration the relationship between how the individual respondents replied to the three different qualitative questions, in conjunction with the nonqualitative ones. Instead, the data generated is more general and is discussed and problematised in the results chapter.

3.3 Ethical considerations

The data collection and analytical methods are compliant with ethical research methods as outlined by the Swedish Research Council (Vetenskapsrådet, 2002). The ethical principles provide norms for the relationship between researcher and participants and ensure that ethical academic practice is maintained throughout the data collection and research process. Vetenskapsrådet (2002, p. 5) necessitates that prior to the undertaking of the research study, the researcher must ‘weigh the value of the expected acquisition of new knowledge against the potential risk for negative consequences for the research participants and respondents and any third parties involved’, be they short-term or long-term. These risks are clearly communicated to the respondents to ensure that participants and others that may be affected by the study are made aware of the risks and rights involved. The four main ethical requirements in the humanities and social sciences field are the information requirement, the consent requirement, the confidentiality requirement, and the utilisation requirement (Vetenskapsrådet, 2002).

The information requirement entails that the research must inform the parties affected of the study’s purpose (Vetenskapsrådet, 2002). The researcher must inform the participants of their role in the project and what terms apply in their participation. They must be informed that their participation is voluntary and that they have the right to withdraw their consent and contributions to the study at any point in time. This expectation was fulfilled by clearly communicating the topic and research question of the study to possible participants, ensuring them that participation is completely anonymous, that no references to their personal information would be made in any part of the study, and in the case of the interviews, that any sensitive questions that compromise their positions within their companies can be skipped. Prior to their responses being recorded or collected, all participants were informed of our EU Data Protection Regulation (GDPR) compliance, with what personal information would be

gathered, handled and stored, and the termination date of the study, whereupon all data gathered would be completely erased. This was communicated through a consent form with the University, Department and contact information included, to ensure that the study was legitimate and serious and that all ethical, legal and academic issues had been properly considered.

The consent requirement states that the researcher must ensure that the participants fully consent to participation in the study and the processing of their personal details (Vetenskapsrådet, 2002). The participants must also be allowed to independently decide if, how long and on what terms they will participate. Participants must be able to withdraw their consent without any negative repercussions. All participants in the study were 18+, which fulfilled the requirement of the participants being consenting adults. All participants were required to review the consent form and actively consent to participation before their data was collected. In the interviews, the researcher verbally informed the participants of their rights and reviewed the consent form together, as an extra measure after having already provided the consent form document and purpose of the study, before receiving their recorded verbal consent. In the online surveys, the last required question reiterated what personal information would be collected from the participants (only age group), again linking to the consent form, before their replies could be sent. In the consent form, participants were informed of how long their data would be processed, that their consent could be withdrawn without repercussions at any point in time, and whom to contact to do so.

The confidentiality principle requires that all data and personal information belonging to participants be handled with the highest possible confidentiality (Vetenskapsrådet, 2002). The data and personal information must be stored safely, so that any unauthorised party cannot access it. Since no ethically sensitive questions were included in the study, and since all participants in the study were anonymous, no non-disclosure agreements needed to be signed. Any identifiable information about the interviewees or the companies they work for will be excluded (*ibid.*). The online surveys were completely anonymous and included no trackable information. The age groups collected were broad, spanning a decade for each group, and are therefore not enough to be identifiable. All the data gathered from the interviews and surveys were locally stored on a computer, as was all analysis and data collation of material. Once the study was concluded, all data was completely erased. The measures taken ensure that it is practically impossible for any outside party to get access to the data or personal information.

The utilisation rule restricts the use of the data collection and personal information and prohibits its use outside of the study (Vetenskapsrådet, 2002). Therefore, it is not to be utilised for commercial ends nor any non-scientific purposes. Furthermore, the rules decree that personal information collected from the respondents may not be used in any decisions or actions that affect them (*ibid.*). Prior to the interviews, the participants were informed that their responses would only be used for academic purposes and would not be extrapolated for commercial or non-academic use. Moreover, they were informed that the only party besides the researcher with access to their information is the research supervisor, though their names, locations and age were not disclosed.

The consent form was created by the legal department at Umeå University in compliance with Vetenskapsrådet (2002) and the EU Data Protection Regulation (GDPR). The digital

spaces provided by Umeå University for the conduction of interviews and storage of collected data were utilised when local storage did not suffice. No personal information about the participants was recorded in any form online.

4. Results and analysis

This chapter merges results tables and figures that emerged from the data analysis with empirical analysis and discussion. The validity of each data result is also considered, as some results prove to be more reliable than others.

4.1 Interview data

Section 4.1 has been split into two. Section 4.1.1 includes the collated data with figures and tables while section 4.1.2 features a discussion on central points lifted by the interviewees.

4.1.1 Collated data

In the following figures and tables, the most relevant data from the interviews has been assimilated and compared. The interview respondents brought up several corresponding themes that were similarly categorised. However, the respondents' preferences and priorities differed, mainly because they were speaking from the position of their companies, the type of game they were developing, and the player base of that game.

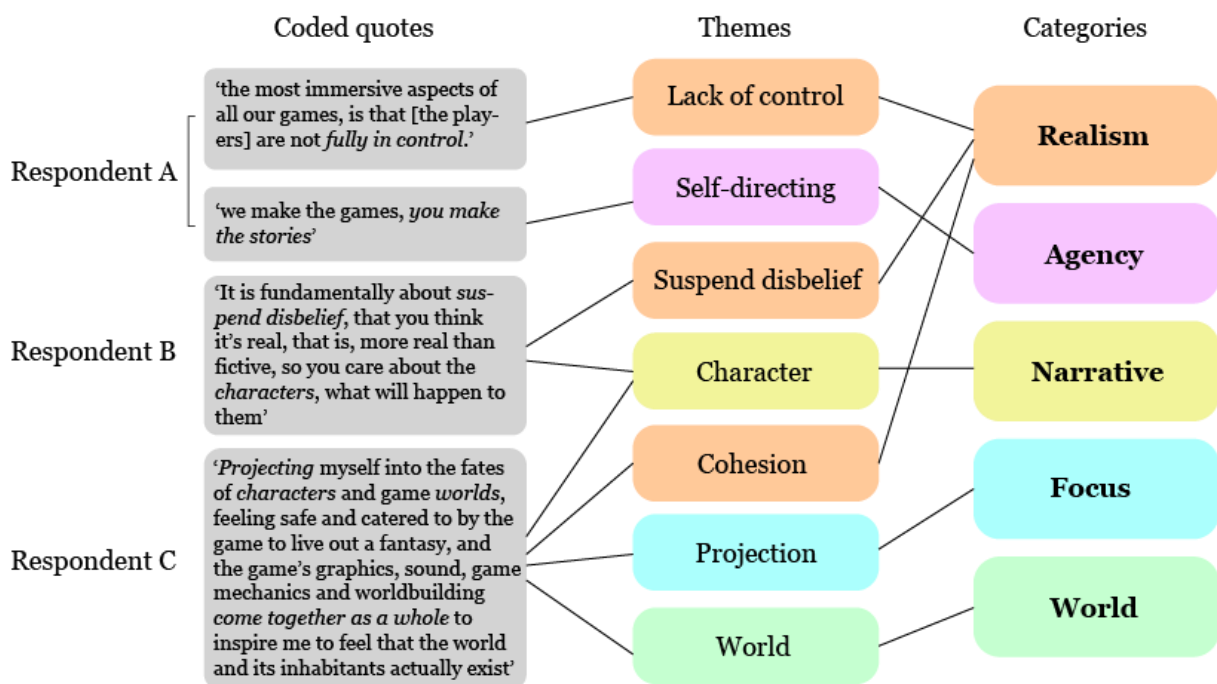


Figure 6: How the interviews were coded, thematised and categorised in the question on holistic game immersion.

The interviews began with the open question on what immersion meant holistically to the respondents. This generated an overview on how respondents considered game immersion

holistically and what aspects were most important, as visible in figure 6. As becomes apparent in the results, several themes and categories correlated to understandings of immersion in the GameFlow model by Sweetser and Wyeth (2005) and Brown and Cairns (2004), such as *projection*, *cohesion* and *suspension of disbelief*. Since the respondents are professionals in the industry, it follows that they know game theory terms such as suspension of disbelief. As Brown and Cairns (2004) articulated, immersion is partially dependent on players' respect for the game as a well-crafted whole, which is what cohesion refers to. In projection, we see how *focus* is achieved, or as Brown and Cairns (2004) argue, all of the player's attention being fixed on the game. On the other hand, we see some points deviate from definitions on immersion, such as *lack of control*, which will be discussed later in this chapter.

Category	Mentions
<i>Realism</i>	3
<i>Narrative</i>	2
<i>Agency</i>	1
<i>Focus</i>	1
<i>World</i>	1

Table 7: Pervasiveness of the categories in the data gathered on holistic game immersion.

Table 7 shows which of the themes and categories received the most mentions and were therefore the most pervasive in the data. The main category associated with holistic immersion is therefore *realism*, as it was identified by all three respondents. What the respondents meant by realism differed however, as respondent A suggested *lack of control*, respondent B *suspension of disbelief*, and respondent C *cohesion*. These contribute to immersion in different ways; *lack of control* by overlaying our experience of reality onto the imagined game environment, *cohesion* by suggesting internal logic in the game world, and *suspension of disbelief* by making the player think that it is real. These results line up with the findings on interplay by Roine (2016) and Howard (2008) and cohesion by Wolf (2013). In *narrative*, games are immersive by making players care about character, and in the case of respondent C, about the game world as well. What is interesting is that respondent A also mentioned that *self-direction* is necessary to immersion, as story-making is in the player's hands. Respondent C expressed projection as part of *focus* in immersion, confirming the definitions set by Brown and Cairns on 'presence' (2004).

Respondent	Preference
A	Narrative / Gameplay
B	Gameplay
C	Narrative

Table 8: Respondents' preference for narrative or gameplay in immersion.

Table 8 shows the main field of preference (narrative or gameplay) of the respondents in immersion. The preference is based on the overall impression the researcher got of the interviewees' preference in secondary narratives, if it was geared more toward gameplay elements or narrative ones. As is visible in the table, respondent A showed an equal preference for narrative and gameplay, speaking from the position of a game with two main audiences: roleplayers and gamers, where both groups need to be accommodated in different ways. Respondent B displayed a preference for gameplay, especially from the perspective of the action RPG that game company B is developing, and its intended audience: gamers who enjoy fast-paced progression and few elements of story. Respondent C showed preference for narrative, speaking of gameplay in a limited way in that it mainly offers an order in which tasks are undertaken and the way in which one fights, while their answers on the narrative elements were more nuanced, showcasing how it invites aspects of behavioural choices, lifting character and morality as essential points therein: 'in games like *Stardew Valley* it is important that I can choose which other characters I want to give gifts to and become best friends with or get married to'. The results in table 8 indicate that the respondents' preferences may have shaped how they discussed the way in which secondary narratives contribute to immersion.

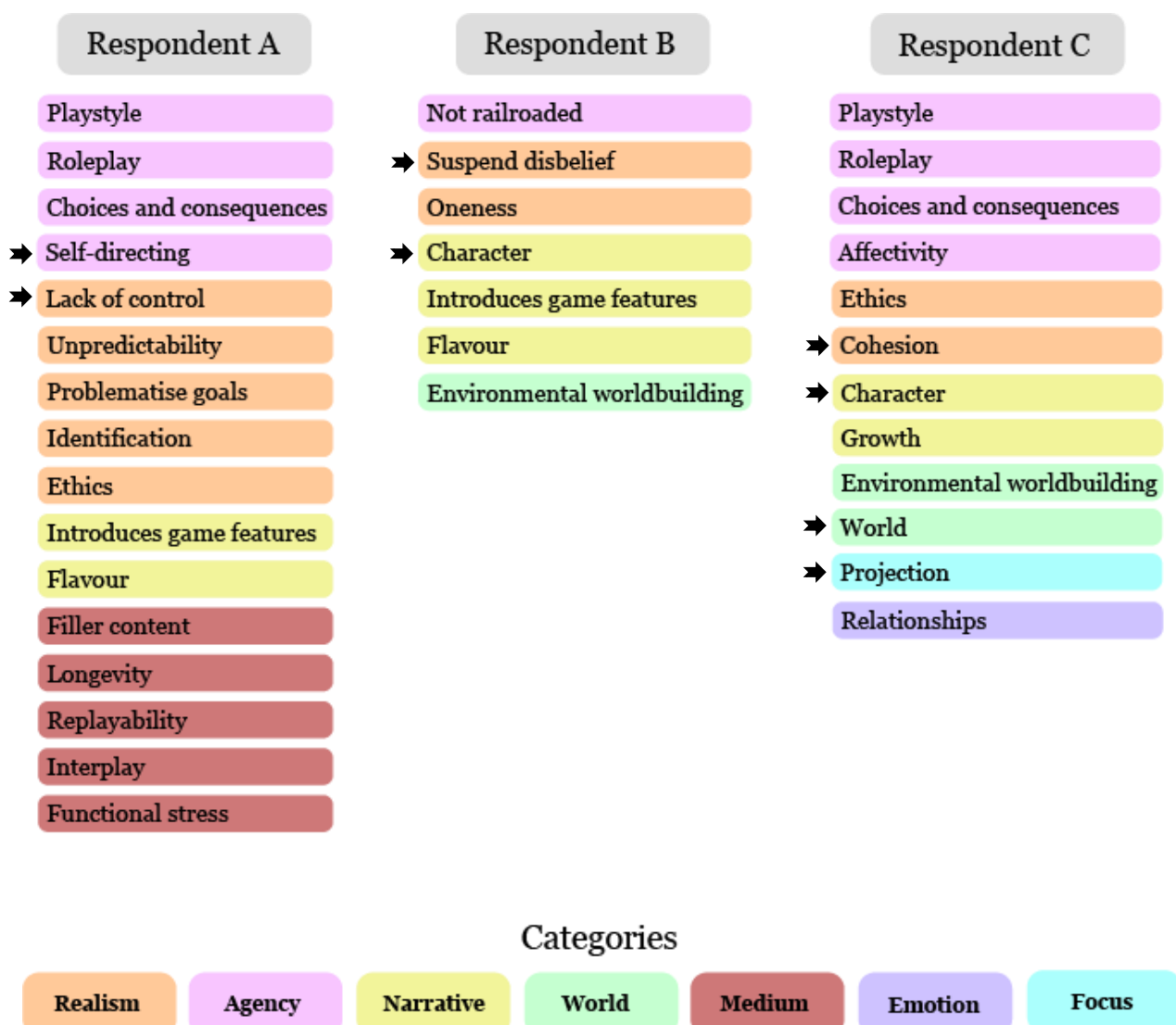


Figure 9: Main themes and categories emergent in how secondary narratives contribute to immersion.

Figure 9 presents all themes that emerged when respondents were asked how secondary narratives contribute to immersion. Interview questions 2, 3, 4 and 6 generated similar answers and have therefore been assimilated together, showing the main themes that emerged from the codes and the way they were categorised. These main categories were extracted from the data as a whole, as per the discussion in the method of analysis, and the main themes were selected based on the amount of time, emphasis and depth that the respondents went into when discussing them. In other words, not all of the emergent themes are presented, though all of the seven categories are featured. Ultimately, the selection is intuitive and based on the researcher's understandings of the patterns in relation to the whole.

As becomes apparent in figure 9, the themes identified in holistic immersion are present as well and are marked with arrows. This shows that secondary narratives meet the requirements of immersion as expressed by the respondents.

Category	Minimum mentions of themes in the categories by all respondents
Realism	2
Narrative	2
Agency	1

Table 10: Most pervasive categories emergent in the question on how secondary narratives contribute to immersion, as identified by the interview respondents.

As can be seen in the results in figure 9, at least 4 of the 7 categories were identified by each respondent. Table 10 emphasises the pervasiveness of *agency*, *narrative* and *realism*, which were present in all three of the respondents' data. The themes within the categories differed, however, with respondents A and C having similar responses: *playstyle*, *roleplay* and *choices with consequences*, while respondent B mentioned *not being railroaded* by the main quest, echoing sentiments expressed by Juul (2005). In narrative, respondent A and B agreed that secondary narratives provide *flavour* or identifiers for game mechanics and features. In realism, they lifted *cohesiveness* or *oneness* as important aspects, suggesting that the secondary narratives should be tied into the main quest in some way. Respondent C focused instead on *character* and *growth* of the PC, and Respondent B also identified character as part of narrative in immersion and how secondary narratives fulfil that aim, stating that: 'if there's only a main narrative it feels more about robots rather than real people'. Respondent B and C's punctuation on *world* comes from their assertion that worldbuilding, especially the suggestive kind, is what allows the players to 'fill in the gaps' of the story. As respondent B argues, it is 'better to say too little than too much', instead 'saying as much as possible with as little as possible about what the game is, like the imagery, capturing everything in one image'. The

points on world are suggestive of how secondary narratives go beyond the scope of the main quest: the world itself becomes central, as well as its characters, and relationships with those characters. In other words, immersion cannot occur without the secondary narratives that bring to the fore character stories. This echoes Herman's (2013) discussions on the importance of character perspectives.

Respondent C's outlier category of emotion, borne out of *relationships*, was considered an integral part to character interactions and moral play. As such, ethics was also included, though it related to realism, i.e., understandings of ethics from our real life overlaying onto the game world. Another outlier identified is respondent A's theme *lack of control*, which was rarely mentioned in the survey data as well. All themes within the category *medium* were excluded from holistic immersion, though their value lies in their connotations of interactivity, i.e., they further instances of interactions, thereby prolonging the playtime of the game (Aarseth, 1997). The themes of *unpredictability* and *functional stress* associated with it are heavily tied to the genre in question, which is strategy. The respondent stated that the reasons why players engage with this genre is to not be 'fully in control', which is where the strategic gameplay is problematised so that unforeseen circumstances may prohibit the player's goals (Aarseth, 1997).

What becomes apparent in figure 9 is that secondary narratives contribute to immersion in many differing ways, thereby adding new dimensions to our understandings of immersion. The figure shows that secondary narratives contribute to holistic game immersion more than one might think and in more complex ways than one might think. In other words, secondary narratives are integral to game immersion, i.e., immersion in roleplaying games is unattainable without secondary narratives. Moreover, the results show that secondary narratives contribute with additional themes not identified in holistic immersion, i.e., they achieve immersion in additional ways that the respondents did not actively think of when discussing holistic game immersion. Ultimately, this problematises the respondents' understandings of immersion and reveals the complexity of immersion and its dependency on secondary narratives. What the results seem to suggest is that worldbuilding, i.e., all that is secondary to main story and completion of the game, is especially important in game experiences with comprehensive worlds. This seems a fairly logical conclusion: worlds in interactive experiences need to be filled with interactions, from a ludic perspective and a narrative perspective.

Respondent	Categorisation of secondary narratives	Theme/Category
A	Game feature names/narratives	Narrative
	Flavourful tooltips and info boxes	<i>Flavour</i> /Narrative
	Moral quandaries	<i>Ethics</i> /Realism
B	Lore	Narrative
	Grinding	Medium
	Game mechanics narratives	Narrative
C	Combat/action	<i>Challenge</i> /Medium
	Character progressive, relationships	<i>Character</i> /Narrative

Table 11: Ways of categorising secondary narratives by interview respondents.

Table 11 shows the way in which the respondents categorised secondary narratives. The ways in which they did this were largely based on the games that they were developing. In strategy games there is no fixed main story; the player directs that story themselves, and most of the narrative context is secondary. Often, those secondary narratives revolve around game features and ways of problematising the player's goals, such as 'moral quandaries' or 'tempting scenarios', posing questions to the player, such as: 'are you willing to do that as part of your journey?' (respondent A). Strategy games often also include info boxes or tooltips, since their gameplay is quite complex, and secondary narratives can be used to make these more interesting by providing 'flavour'. Respondent B held similar views, that secondary narratives often are the names or narratives that 'dress' functions in games, by providing context. Respondent B also introduced the category *lore* and *grinding*, where the first is narrative pieces surrounding the main story, preferably communicated through suggestive worldbuilding, such as environmental design using objects to suggest that something has happened. *Grinding* was considered to be boring superficial quests such as 'killing 10 monsters'. Respondent C identified combat/action quests as deciding the way in which you take action and fight, and quests that relate to characters and relationships. This suggests a separation in how NPCs are categorised either as enemies or friendlies/allies. Several parallels are drawn here to the findings in the related research, such as lore quests that Howard (2008) discussed and moral choices discussed by Fullerton (2019). Overall, it appears that categorisation of quests is understood mainly from a narrative perspective, i.e., from thinking about the motivations behind them (Howard, 2008).

Respondent	Categorisation of players	Descriptions
A	Roleplayers	Secondary narratives facilitate identification
	Gameplayers	Narrative breaks immersion, secondary narratives are ignored unless reward-based
B	Idealistic players	Players who either play morally or anti-morally
	Gameplayers	End-oriented, fast-paced, number-focused
C	Prefer action	How they fight, in which order they tackle challenges
	Prefer narrative	Behavioural choices

Table 12: Categorisations and definitions of players by interview respondents.

Table 12 shows the ways in which the respondents categorised players in the roleplaying genre. The results reveal parallels to the ‘reactive’ and ‘reflective’ players identified by Formosa et al. (2022, p. 91). In such understandings, the gameplayers are reactive, since they ‘interact with a game as a system to be optimised and engaged with instrumentally’, while the reflective player is more narratively motivated by semantics and moral choices (ibid., p. 91). All three respondents made distinctions between players that prefer gameplay or story-driven secondary narratives, with respondent B also making distinctions between players who based their actions on understandings of ethics and those that don’t. Respondent A argued that gameplayers are going to ‘ignore any secondary narrative which doesn’t grant them a particular bonus’, since ‘anything which doesn’t facilitate [numbers to go up] tends to distract them’, while on the other hand, the secondary narratives are about ‘enabling the [roleplayer’s] fantasies’. Roleplayers ‘really latch on to a secondary narrative because they identify with it [...]. [The secondary narratives] have implications for the world we currently live in.’ In other words, players identify with them due to having experienced them in some way. As an example, respondent A mentions global pandemics, which resonates with players’ experiences with covid-19. This echoes the interplay between real and imagined expressed by Roine (2016).

Respondent B emphasised how players of action RPGs such as *Path of Exile* (Grinding Gear Games, 2013) are fast-paced, end-oriented and number-focused, playing for item acquisition such as weapon and armour rarities, PC build optimisation and simply the killing of hordes of enemies in a ‘flow’ state of seamless level progression through dungeon crawlers (Howard, 2008, p. 104). Respondent B stressed the differences between games and books, and that games essentially are ludic in nature, taking a similar approach to Aarseth (1997) and Salen and Zimmerman (2003). When prompted on subjects of themes in games, and how narratives convey them, respondent B problematised that many games, especially action RPGs, centre around ‘killing everything you see, breaking into other creatures’ homes, beating them to death, and stealing their stuff’, revealing the lack of ethical dimensions in games. When

prompted on how games can challenge this theme of violence and acquisition (which echo themes of war, conquest and Colonialism), the respondent replied that any challenges to such traditional gameplay structures run the risk of coming across as political, which can be off-putting to players: ‘The ethical dimension is fundamentally problematic. How do you incorporate it without incorporating the designer’s values? [...] Who can make that ethical dimension objective rather than subjective? What’s right and what’s wrong? Who decides?’ When prompted whether ethical dimensions can instead add layers of moral greyness and ambiguity into games, the respondent replied that such themes may be interesting to certain groups of players, and that the implementation of such dimensions should be done with utmost care to fit the context of the game in an organic way: ‘it should fit into the game world so that it becomes an organic part of it and not something that is put there like a wart, that doesn’t fit in. Everything has to grow out of the same seed in a way, and not just be put there like graffiti on a wall’.

Respondent C made distinctions between players who prefer action and players who prefer narrative, a separation that is based on the respondent’s experiences with data collection on players’ choices and playstyles in secondary narratives. Respondent C points out that:

‘it’s not bad if the game attracts different types of players that play for different reasons, so it can never be interpreted as a failure if only 25% of players hold to a certain feature, instead as a developer you draw conclusions on what the subgroups that like narrative think about a narrative feature.’

Respondent C also mentioned how the necessity of agency depends on the fixedness of the game’s narrative. According to them, in games that provide the fantasy it is important to allow the player to make their own gameplay choices, ‘otherwise it is experienced like watching a movie where the player can’t influence the narrative’. On the other hand, in games where the player partakes in creating the fantasy, exemplified with *World of Warcraft* and *Grand Theft Auto*, the game should besides gameplay choices also provide choices that ‘describe how I behave as a character’ (respondent C).

None of the respondents mentioned completionist players who attempt to do all of the secondary narratives in games. These will be discussed in the results of the survey, where a fifth of the survey respondents aim for 100% completion in games, i.e., engaging with all secondary content besides completing the main quest.

4.1.2 Non-collated data

Other significant similarities and differences emerged in the interviews that further illuminate their stances and the themes and categories presented in the tables. On discussions of RPGs as a game genre, it became apparent that respondent A and C agree that secondary narratives are important for immersive roleplay. This is due to the fact that they believed that secondary narratives enable players to identify with events in the game through their own experiences or because secondary narratives contribute to character narratives that enable the players to form relationships. They also discussed how roleplaying games are supposed to enable the players’ fantasises, and a central aspect of that is providing genre conventional stories that strengthen style and atmosphere, as outlined by McKernan (2017). As an extension to this, building on further findings by McKernan (2017) but also Howard (2008), respondents A and C agree that ordinary and mundane NPC experiences contribute to immersion through realism. This is

because they provide the stories that frame game experiences that otherwise become heavily hero-centric:

‘I like that reflection as well, [...] so many games rely on, like you are the one saviour of the universe, you and the hundreds of thousands of other players in this world are the one saviour. So I always enjoy seeing another character's response to this world and how, so often it's actually in complete ignorance of all the wider problems that are going on. They're just trying to get by day-to-day, and I think that allows a really nice sort of mature reflection on the frankly ridiculous primary storyline we usually get, but weirdly makes the primary storyline better. And yeah, I enjoy that tension.’ (Respondent A)

Seeing the way communities of NPCs live their lives in ignorance of the larger events suggests that the game world exists independently of the PC and will continue to exist after, a point also lifted by the respondents of the survey. Respondent B also mentioned how stories of ‘the chosen one’ are ‘juvenile’, arguing instead for stories where the PC is just another person trying to carve a path in life. Here, they posit that secondary narratives play an essential role in introducing quests and providing the motivations for why they should be undertaken. And those motivations all spring from pursuits of freedom and self-determination, as suggested by Juul (2005) on balancing emergence with progression. Respondent A notes that ‘the act of dismissing [secondary narratives] is in itself part of the player’s story, which you can’t do with the primary narrative’, a way in which games provide both creative freedom and agency. Respondent B expressed it in more philosophical terms: ‘The fundamental archetype that rings true is that you want to be free. And what does it mean to be free? What is living compared to being dead? Is maybe what you are actually exploring in narratives and games. What it means to live.’

Despite this viewpoint, respondent B found that ethics have no place in games, since they run the risk of becoming too political, while the other respondents argued *for* ethics and how it problematises play and choices. This takes us into the topic of playstyle, which respondents A and C agreed were integral to roleplay. When speaking of playstyle, the respondents were primarily referring to moral playstyles, i.e., whether the player wants to be morally good or morally bad/provocative. Respondent C expressed that secondary narratives provide opportunities for moral behaviours: ‘I want to pretend that I am a polite taxi driver in *Grand Theft Auto*’ or ‘I want my two neighbours in *The Sims* to fall in love and start a family’. Respondent A also mentioned how secondary narratives challenge moral stances and egalitarian playstyles by setting up ‘tempting scenarios’: ‘It’s about trying to sort of tease [the players] along those sorts of journeys and potentially disrupt their primary narrative [...] to try and introduce a bit of functional stress’. This fulfils Howard’s (2008, p. 21) wishes for ‘courageous engagement with metaphysical themes’ that he argues play a decisive role in immersion. On the other hand, respondent C mentioned how secondary narratives reduce functional stress by ‘making the game seem less like a stressful chore and more like a relaxed activity’, echoing Aarseth’s (2004) views on secondary narratives as valuable distractions.

On the topic of ethics, the way the players’ empathy is engaged in the game experience plays a central role in immersion, as expressed by Brown and Cairns (2004) and Jerrett and Howell (2022). Empathy is evoked through character, a theme that was underscored by respondents

B and C. Respondent B expressed that ‘character is all there is, everything else is decorative’ and how narratives bring characters to life: ‘real people have quirks, for example, and so must the people in a story so that it’s not the writer’s voice speaking, but rather that they are their own persons [...] they have their own motivations and are not just there to drive the narrative forward.’ Respondent B made a point on how being the ‘bad guy’ in a game can be fun, such as in games like *Grand Theft Auto*, but how that becomes dependent on whether the playstyle is deviating from the norm or conforming to it, arguing that the provocativeness of the playstyle only emerges if it is ‘the odd one out’. This exemplifies the value in having unique, personal experiences as explored by James Ryan (2018). Respondent C discussed the topic of character on a macro-level in terms of narrative and how they viewed ‘main narratives as narrative progression and secondary narratives as character progression’. In other words, the focus on character and relationships with characters is shifted to the secondary narration, where the player can choose to behave and engage with these characters according to their playstyles, whereas the main narrative is more fixed and already sets the terms of character relationships with the PC for the player. In other words, the ‘main narrative is often told/narrated’ while secondary narrative is ‘not told/narrated, but embodied.’ These views appear to align with established game theory on embedded versus emergent narratives identified by Salen and Zimmerman (2003).

Discussions on the strategic integration of secondary narratives touched on how, often, secondary narratives deliver game mechanics or features to the player in a more interesting way, as expressed by respondents A and B. Respondent A mentioned how players are directed to secondary narratives outside of the game experience, through patch notes on game updates. They added that they ‘hook’ the secondary narratives not only onto the features but the ‘closest thing they get to primary storylines’ as well, illuminating the interwoven nature of secondary and primary content, as will be thematised in the survey responses. This brings us to aspects of cohesion or oneness, i.e., that the primary storyline and secondary narratives need to be related in a way that adheres to the main thematic messages of the game. This involves both story-focused and gameplay-focused elements and all three respondents stated that these need to fit together to form a cohesive whole, as was also stressed by McKernan (2017). As respondent C expressed, immersion is achieved when ‘the game’s graphics, sound, game mechanics and worldbuilding come together as a whole to inspire me to feel that the world and its inhabitants actually exist’. As another strategy, respondent A mentioned that the game tries to ‘anticipate the players’ actions, and then increasing the odds that certain things will appear’, intentionally designing narratives around playstyles. Respondent B elaborated on how secondary narratives should be placed in the periphery of the game levels and that pointers could be used to make the players aware of them, thereby hinting at the presence of content but not forcing it onto the player, so that the choice to explore that option stays with the player. They also noted that keeping the game’s narrative identity or core storyline less fixed allows more creative freedom in the release of future content or expansions: ‘the stronger the main narrative is, the less creative freedom you have’. Respondent C described that they have a system approach to secondary narratives, to quickly ‘convey and uphold promises to the players that their choices affect their character and world’.

On the discussion on which role is responsible for the creation and implementation of secondary narratives, respondents A and C agreed that it is the content designers that both write these narratives and the mechanics associated with them and incorporate them into the game. In other words, the role is not purely narratological but also ludic and requires knowledge of game design and scripting. Respondents B and C stressed that content designers come in later in the design process, when the world, main narratives and other creative elements have already been cemented by the roles responsible for the overarching game experience, be they creative directors or game writers or both. This is so that secondary narratives can be constructed without the content designers being obstructed by decisions that have not yet been made. Respondent B emphasised that the primary aspects of the game should not involve too many creators, to stave off 'entropy' in the design process. That said, the respondent added that diversity in narrative roles can aid in the creation of unique character storylines. On a concluding note, respondent A pointed out that the role of the content designer and whether it should be more narrative-focused or ludic remains contentious.

What these points illustrate is that secondary narratives are not highly prioritised in game development and are added on when the 'core' or main quest has already been created, i.e., the main quest is not designed with these secondary narratives in mind. As respondent A expressed, secondary narratives are secondary and kept separate. This fact becomes problematic as all three respondents stressed the need for coherency, and implementing secondary content after the core has been established could entail a risk for coherency or at least risks of inconsistencies as problematised by Kessing, Tutenel and Bidarra (2012). In other words, not considering how secondary narratives fit together with the main quest from the very beginning is what may be causing superficial quests such as 'kill this thing' or 'find this thing' to emerge as filler content instead of interesting eudaimonic interactions worth pursuing.

4.2 Survey data

The survey results have been separated into two sections, one featuring the semi-quantitative data generated by the fixed survey questions, and one section featuring the results and discussions from the thematic analysis on the qualitative questions.

4.2.1 Survey figures from semi-quantitative data

In this section, all the auto-generated figures from the survey have been included, as well as some reconstructed figures to better display the results. Each figure will be analysed and problematised directly beneath it.

Which age group do you belong to?

63 responses

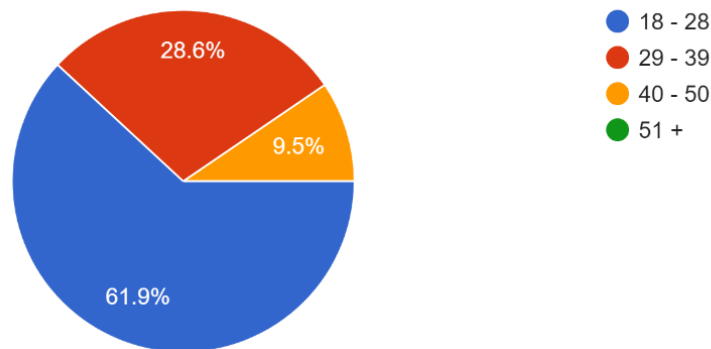


Figure 13: Age groups of respondents.

As shown in figure 13, the data collection targeted no specific age group, nor considers any patterns or correlations between the age groups and data that was collected. However, it is included for illumination on what age groups the respondents belonged to. A clear majority included adult and young adults, a third were in their thirties, and a tenth were between 40-50. A contributing factor for the majority of respondents in the 18-28 age is the age of the author also belonging to that age group. None of the respondents were 51+. Age could potentially account for some of the differences in the responses, but no correlations or conclusions were extrapolated from this.

How much do you interact with secondary narratives in single player RPGs?

63 responses

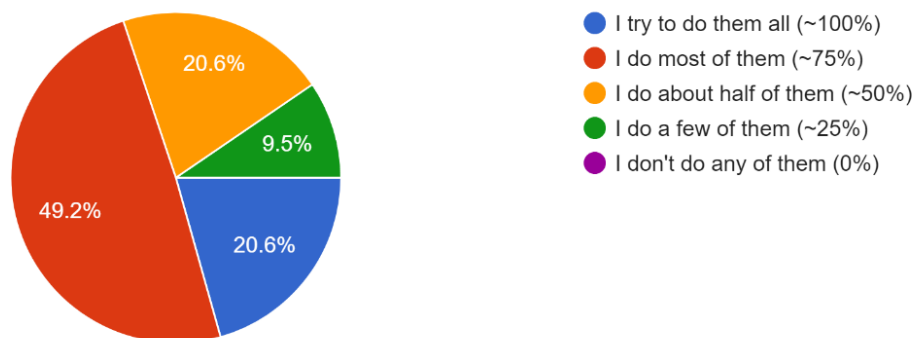


Figure 14: Percentual interaction with secondary narratives.

As shown in the pie chart in figure 14, nearly half of the respondents complete approximately 75% of secondary narratives in roleplaying games, a fifth of them interact with at least half of the secondary narratives, and another fifth attempt to do them all, interacting approximately with all the game's content. Only 10% of the respondents answered that they interact with a few of the secondary narratives, while none answered that they don't do any of them. The

results show that roughly 90% of the respondents, a clear majority, engage with at least half of the secondary narratives in games, corroborating to an extent that secondary narratives are popular in roleplaying games, which serves as motivation for their inclusion. Furthermore, the fact that a fifth of the respondents attempt 100% completion of games can also be considered enough justification for the inclusion of high amounts of secondary content. Worth noting is that the act of prioritising certain types of quests or organically discovering quests based on the exploratory path the player takes in their journey is another contender for the inclusion of lots of content of varying natures (Juul, 2005). However, the respondents' replies are dependent on the scale of the game and its world, with the implication that it is easier to attain high percentual completion of secondary narratives in shorter games with smaller worlds. In other words, significant generalisations cannot be extrapolated from this data; however, it is interesting nonetheless to consider percentual completion in games, especially as game companies benefit from players achieving high percentual completion, since the content they took time and resources to develop were actually engaged with by the consumers.

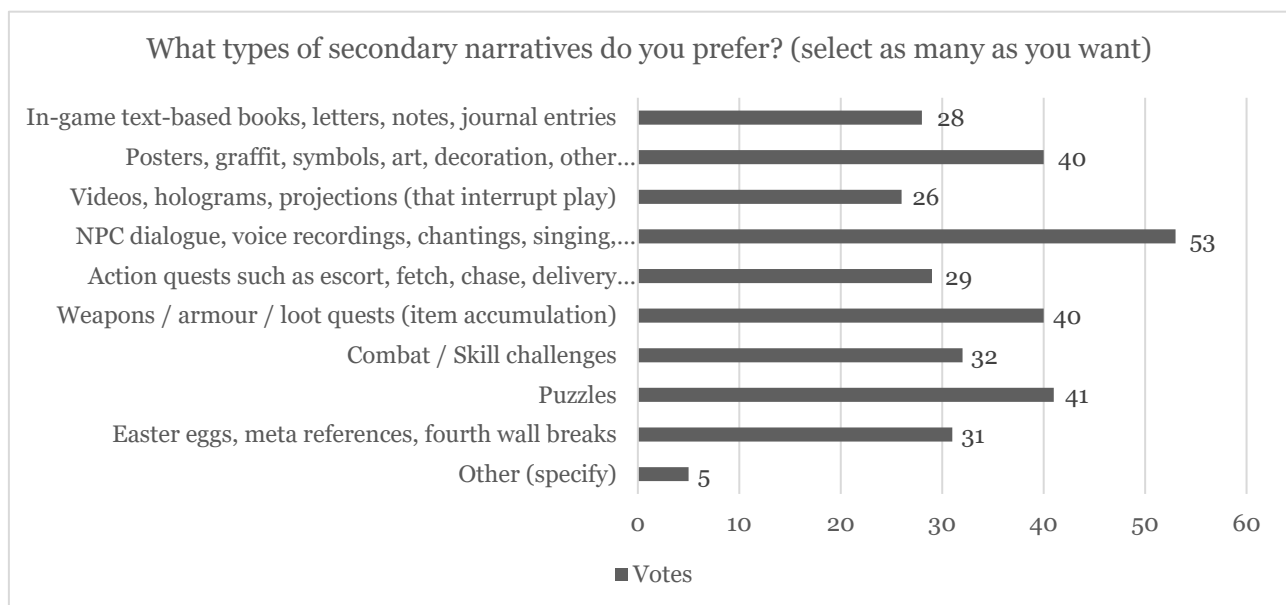


Figure 15: Respondents' votes on types of secondary narratives.

As can be seen in figure 15, most respondents preferred auditory secondary narratives. A major explanation for this could be the inclusion of NPC dialogue in this category, since many of the respondents identified character as a major contributor to immersion in secondary narratives, wanting to explore the characters' personalities, place in the world, pasts, plights, and relationships with other NPCs and the PC themselves. Another explanation for the popularity was provided by interview respondent B, who lifted character as the most essential contributor to immersion and secondary narrative immersion.

Second to auditory narratives were the puzzles, item quests and environmental visuals, each receiving similar amounts of votes (40 or 41). The popularity of puzzles in roleplaying games comes as a surprise since it was not identified as an outlying signifier in the related research nor the interview data. This suggests that puzzles or mental challenges were more appreciated

than skill challenges, a surprising result. However, this result is problematised by the separation of skill quests and item quests, seeing as many skill quests provide rewards in the form of equippable items. In other words, a more suitable interpretation is that players prefer combat quests that yield worthwhile rewards that grow the PC, and don't enjoy the challenges purely for the cognitive effort they provide. Another problematisation is that the puzzles category was not similarly separated into quests that are purely for cognitive effort, and ones that also yield reward. However, puzzle quests often also yield rewards in the form of equippable items. Regardless, the comparison is not entirely grounded and requires further study. The last point on static visuals in the environment is a component of worldbuilding that many respondents identified as important in bringing the environment to life. Potentially problematic is that the survey does not specify whether these visuals are interacted with or not. Some are merely viewable by the observant player while some provide interaction such as clicking the item to bring it to the attention of the PC and player, connoting the reward of discovery (J. Ryan, 2018, pp. 95–96).

The remaining categories received similar votes (ranging from 26 to 32), with the 32 votes afforded to the combat and skill challenges. The least popular category with 26 votes were the dynamic visuals that interrupt play. This result was somewhat expected as Aarseth (1997) and others in the related research, as well as interview respondent B, stress how embedded narratives that take away agency from the player disrupt immersion. This is especially problematic in action RPGs, where interviewee B affirms fast progression and end-focus are primary interests for 'reactive' players. A problematisation of this point is the bracketed note that these visuals interrupt play, as that carries negative connotations. If that piece of information had been excluded, perhaps the answers would have been different. However, while the nature of many embedded narratives entail that play is interrupted, some formats of dynamic visuals, such as holograms or projections, might still allow the player to move as they watch.

5 of the respondents selected "other" and specified:

1. "Secrets over all. That you "happen" to stumble upon even though its obviously meant to be"
2. "Voice logs and such world-building additions are great... as long as they do not interrupt play! The perfect voice log plays over gameplay, and is strategically placed to fill the void when the player is forced to backtrack for a minute or two."
3. "Romance"
4. "Action quests that aren't surface-level fetch tasks, an escort quest with a story is different from 'donate 5 potions for 20 xp' or 'get my spear from over there, thanks here's some gold'."
5. "Environmental storytelling! The easiest example is how the ruins of Hyrule in Breath of the Wild and the placement of the destroyed and damaged Guardian robots tells the story of the war 100 years prior. You can really feel the hopelessness of that last stand, amid the crumbling walls and rusted Guardians, frozen in time as they broke over the crenelations."

These respondents had their own ideas of categorisation that entail further complexity in the subject. For example, one category was secrets, which could have connotations for the

discovery aspect of Salen and Zimmerman's (2003, p. 334) pleasure schema, as well as suspense-building in the narrative. Another respondent found it necessary to point out that auditory and other worldbuilding additions should not interrupt play, implying that there are types of secondary narratives besides dynamic visuals that 'embed' narrative and disrupt the gameplay flow. One respondent specified the inclusion of quests that pursue romantic relationships, which they elaborated on in the question on favourite secondary narratives, how they could provide 'thrilling' romances and sex scenes, ultimately suggesting themes of emotion and relationships. One respondent proposed narrative action quests as a category, implying that action quests without narrative are superficial. The last respondent accentuated environmental storytelling as its own category, providing examples from games that problematise the lore and backstory category. Here, spatial themes emerge as an important category, which were included within the themes category of the multiple-choice question on what secondary narratives provide. Evidently the topic of secondary narrative categorisation remains a complex one, and the way that players categorise secondary narratives are worth pursuing in further studies.

On a scale of 1 to 5, how much do you feel that secondary narratives contribute to immersion?

63 responses

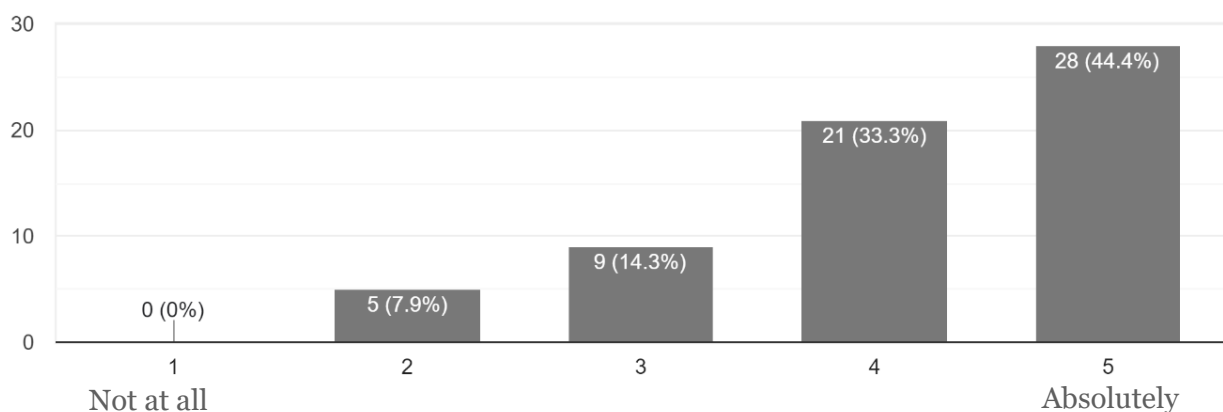


Figure 16: How much secondary narratives contribute to immersion according to the respondents.

According to figure 16, nearly half of the players (44%) found that secondary narratives absolutely contributed to immersion. With a third of respondents selecting level 4 on the scale, it could be said that a majority (80%) found that secondary narratives contributed to immersion rather than detracting from it. None of the respondents replied that secondary narratives do not at all contribute to immersion, while the 22% that placed themselves on the second and third level believed that they only did so to a smaller extent. This data could be problematised due to its lack of description, since it is unclear what the middle point entails: whether respondents believed that secondary narratives provided half of the immersivity, while main story provided the other half. On the other hand, quantifying immersion in such a way could be counterproductive. It could be more appropriate to assume that the respondents

on level 3 believed that the main narrative and secondary narratives equally contribute to immersion. However, such an assumption presumes that respondents understood level 3 in its relation to the other levels, i.e., that level 2 constituted “a little” and level 4 constituted “a lot/very much”. In further studies, these points could benefit from clearer descriptions as was provided in the question on how much players interact with secondary narratives.

On a scale of 1 to 5, where 1 is challenging gameplay and 5 is compelling story, which contributes the most to immersion? If you find them equally important, choose the middle.

63 responses

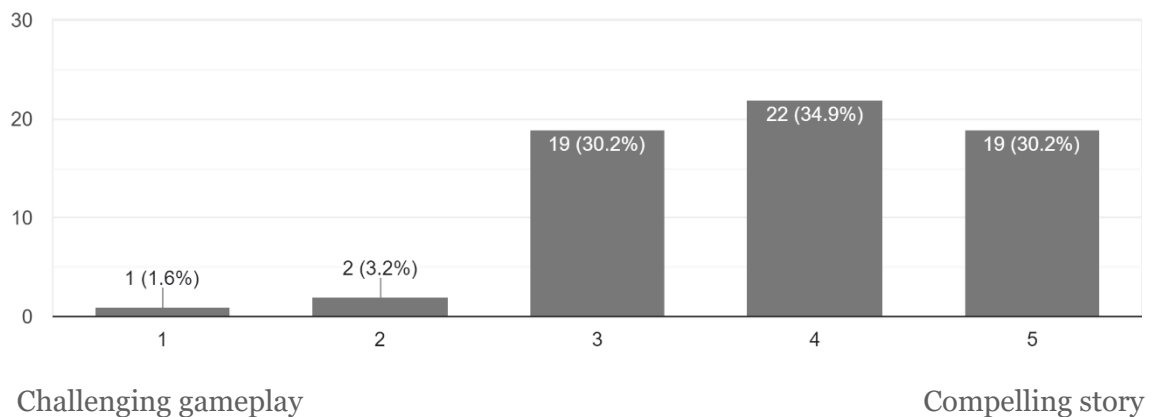


Figure 17: Whether challenging gameplay or compelling story contributes the most to immersion, according to the respondents.

As expressed in the methods’ chapter, the question in figure 17 aimed to investigate whether secondary narratives primarily provide narrative aspects to the game experience and immersion, since gameplay is integral to main story completion. The results are somewhat unexpected. Generally, it might be expected that at least in roleplaying games, both challenging gameplay and compelling story contribute equally to immersion and are not mutually exclusive, with potential for some preference for either story or gameplay. However, in the results it becomes evident that respondents more heavily leaned toward compelling story. Most respondents (35%) placed themselves on point 4, showing this preference for story. 30% of respondents placed themselves on point 3, corroborating the dual contribution by gameplay and story to immersion that Howard (2008, p. xi) argues attains meaningful play. Surprisingly, 30% of respondents selected point 5, showcasing strong preference for compelling story with the implied disregard for challenging gameplay. Naturally, this point is not conclusive. The terms “challenging gameplay” carry within them connotations of difficulty and frustration, which is what the respondents in point 5 might be rejecting, especially if those challenges lack narrative motivations. Moreover, there is room for misunderstandings in this question, seeing as it fused two questions into one and compromised the consistent usage of the scale function in the survey. This means that participants that selected point 5 might have understood it as strongly preferring stories that are compelling rather than gameplay that is challenging. To conclude, this question and its format proved too limiting and potentially contradictory to draw any generalisations from. However, it to some extent illustrates that compelling story

certainly is important for immersion, whether that also entails less preference for challenging gameplay or not. It may also suggest that, while gameplay is integral to main quests in games, secondary narratives strengthen the emergence of narrative, as main quest narratives may otherwise be experienced as too railroaded, as expressed by Juul (2005). Finally, the results are to an extent shaped by the fact that most participants in the study likely already were interested in narratives in games, making the results biased. Players who prefer challenging gameplay may not even consider narratives closely enough to reflect on them, nor care to partake in such a study. This became evident in the question on favourite secondary narratives, where some participants responded that they couldn't think of one or didn't have one. In future studies, this question should be split into two for comparisons on the data, as well as room for qualitative answers where respondents can elaborate on whether their preference for either challenging gameplay or compelling story necessitates the disregard for the other, or whether their opinions on the opposing point are more neutral—as in it fulfils its functions of gameplay challenge without taking precedence over story.

According to game research there appears to be a divide between the below statements. Which of them do you most associate with immersion?

63 responses

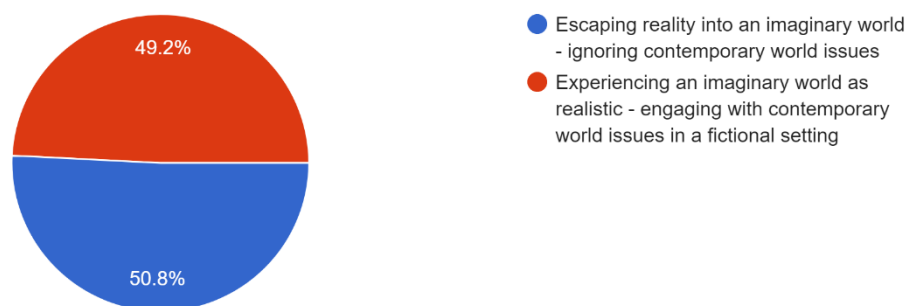


Figure 18: Game immersion as escape from reality or interplay with reality.

The divisive question investigating a perceived divide in research has cause to be problematic. In the methods' chapter, it was explained how this question was included more to confirm or oppose a perception that emerged out of the research; namely, that besides just opposing views on the importance of ludology and narratology in games, researchers also dispute over whether immersion constitutes presence in the game to the point that reality, self and problems do not matter as much (Sweetser & Wyeth, 2005, p. 6), or if player projection into the world and identification with it is entirely dependent on how the imaginary world of the game coexists in a mutually affecting relationship with our real world (Roine, 2016, p. 45). In figure 18, we see that the divide prevails. The exclusion of an "other" option was already identified as problematic, since players were forced to adhere to the divide and were not offered an opportunity to formulate their own responses and problematise the question by providing new perspectives on it, but the motivation behind the exclusion was lack of time and scope in the study.

In future studies, this question certainly should be expanded upon and invite players to partake in discussions of the relationship between imaginary and reality and the role it plays in immersion. Moreover, possible misunderstandings of the question are also inherent due to the philosophical nature of the question and the ambiguity of the terms. There is an additional layer of problematisation to be made on the second answer, ‘experiencing the imaginary world as realistic’, as respondents may interpret ‘realistic’ to mean that the game system and its rules are internally realistic, rather than they are overlaid by understandings of reality, though these often go hand in hand, since internal logic aims to emulate the logic of reality. Another limiting term in the question was ‘contemporary’, since many respondents may interpret these as daily problems of the present, which might not be relevant either for the past or the future or any speculative worlds of fantasy or sci-fi. In future research, a better term could be proposed, as well as a better way to formulate the sentences so that respondents better understand their differences. As a final point, due to the extensive research on interplay between real and imagined and the researcher’s stance that interplay is present in immersion, and that discussions disputing this fundamentally build on misconceptions, it is worth pointing out that this question risks confirming biases by assuming that participants that responded that they ‘ignore reality’ did so out of similar misconceptions of how immersion works, and how reality cannot be ignored in game experiences, regardless of players attempting to pursue that end. In other words, no generalisations can be extrapolated from this question, however, it provides further evidence of the complexity of this topic and incitements for further study.

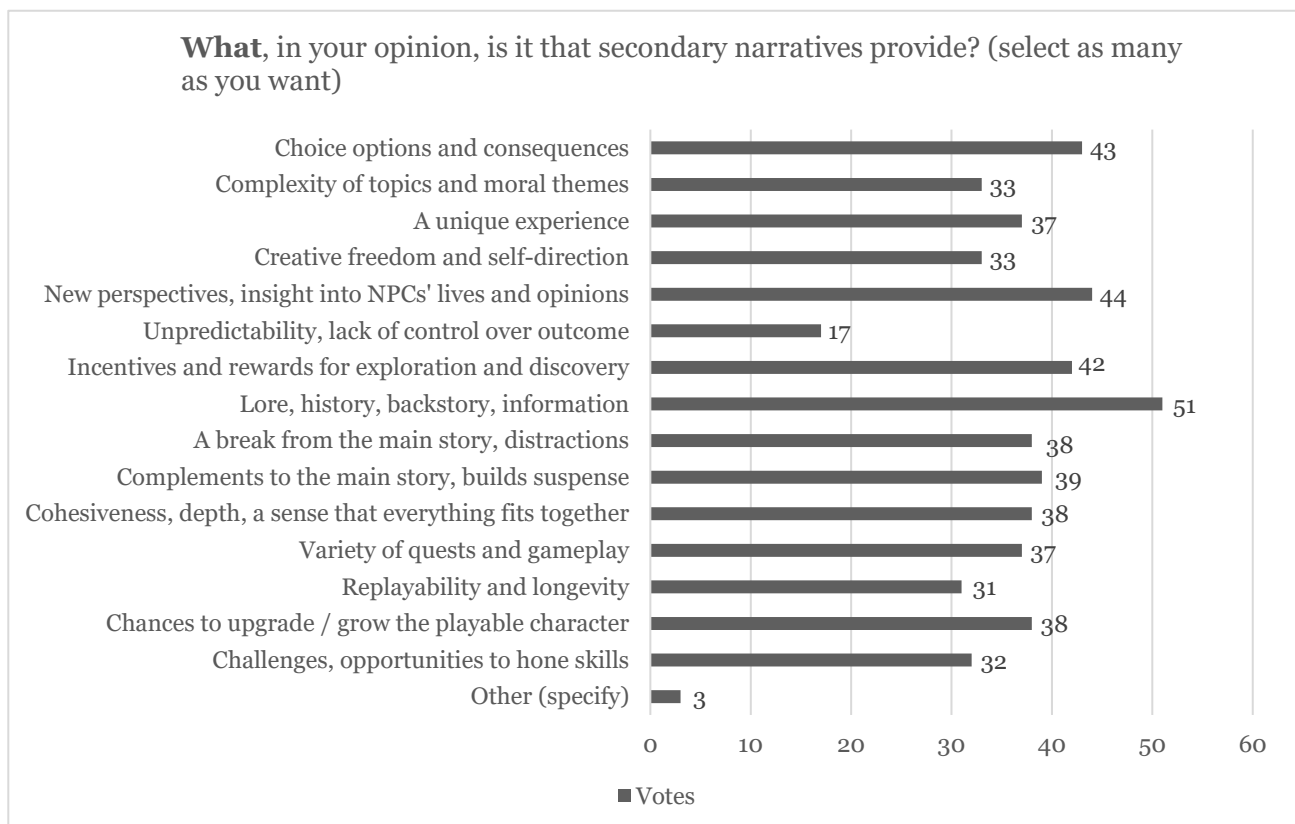


Figure 19: What secondary narratives provide in games, according to the respondents.

In figure 19, respondents voted on what they believed that secondary narratives provide. To better anchor the question in immersivity studies, the question could be formulated better to include 'for immersion' at the end. Nevertheless, in the context of the study and the information provided about it, it can be presumed that the respondents all understood the question and its relation to immersion. The votes suggest at least indirectly which of the themes respondents most associated with immersion. What players' think secondary narratives most provide are as follows:

1. Lore, history, backstory, information.

With 51 votes, this category proved most popular, which is not entirely surprising, since 'lore' is a game lingo term that denotes all surrounding content regarding stories, world and characters that revolve around the primary quest and storyline. Lore is especially popular in roleplaying games with comprehensive worlds, as these worlds need to be filled with different geographical areas, peoples and events. Lore was identified as an important element in worldbuilding by several of the authors in the related research chapter, such as Howard (2008) and Wolf (2013), so it is not entirely surprising that the respondents echoed this sentiment.

2. New perspectives, insight into NPCs' lives and opinions.

This category was the only one making a reference to character, which was identified as an important theme in the related research and interview analysis. For that reason, some of the answers could be from respondents seeking options involving characters or NPCs, and selecting this for that reason rather than the perspectives and insights that it encompassed. Regardless, interacting with NPCs in games usually entail new perspectives and insights to at least a small degree as they provide narratives for who they are and what they want. The popularity of this option then suggests firstly that NPCs are important in secondary narratives, and secondly that their perspectives and lives matter to an extent.

3. Choice options and consequences.

A close third to the previous option, choices and consequences entail agency, which is integral to games as expressed by Aarseth (1997) and Salen and Zimmerman (2003) as advocates for ludology, but by the more narratology-inclined researchers as well, such as Howard (2008) and Vickery et al. (2018). This point is more ludic than the preceding two options of lore and perspectives, which suggests that many of the players who identified as more interested in compelling story still voted for this. Choice options and consequences are especially relevant in narrative, as it is the narrative that provides context for how those choices are presented and why the consequences matter. In other words, this point is equally important for the 'reactive' gameplayer and the 'reflective' storyplayer. To generalise, it can be suggested that choice options and consequences bridge ludology and narratology to achieve meaningful play, as Howard (2008) strongly argued for.

4. Incentives and rewards for exploration and discovery.

Voted similarly to the preceding two categories were also 'incentives and rewards for exploration and discovery'. This captures both the narrative context and potential for reward that initiates quests, and the rewards that are usually associated with completing quests. From this data we can draw several conclusions that are interdependent: that players believe that secondary narratives largely give them reasons to explore the game world, that there are things in that world worth discovering, and that discovering them will yield the reward of the

discovery itself, or associated rewards with the discovery. The interconnectivity of those results suggest that they may not be equally true when separated, which is a point that can be expanded in further study. Worth noting is that the incentives and rewards could be both narrative and ludic in nature, since that is not specified. That could be problematised, since it would have been interesting to see whether the incentives and rewards for ability or XP growth are as desired as incentives and rewards regarding lore.

Further categories with votes ranging from 31-39 are not considered in detail due to the scope of the study and their closeness in terms of popularity. Least voted on was unpredictable secondary narratives that take away the player's control over the outcome. Seeing as side quests are optional, it follows that players don't experience that they take away their control in the game. Many side quests are marked out on the game map or in the quest itinerary, therefore it follows that they are not experienced as unpredictable or add to the overall unpredictability of the game experience. Another explanation is that the types of secondary narratives that add to unpredictability are often well hidden in the game world and time-sensitive. With that said, finding hidden pieces of lore may not add to an experience of unpredictability, but rather one of intended and expected exploration by the developers, and fulfilling that expectation by the player. Time-sensitive side quests, such as a side quest triggering immediately upon discovery, where the player must react quickly to chase, save, or kill NPCs, can be re-enacted if the player reloads their save. Instances where the game takes away the control from the player would then seem to be generally few, at least outside of embedded narratives such as cut-scenes and freezing the player movement while a forced event unfolds, such as a boss entering the scene, or a video/hologram/projection playing. There is also potential that the respondents misunderstood the category as it could be received as vague.

In the methods' chapter, the options provided for the question on what secondary narratives provide was motivated and problematised due to the exclusion of the *emotion* and *focus* categories with the expectation that players would utilise the "other" option to provide answers regarding the categories were relevant. However, only 3 respondents selected "other" and specified:

1. 'Sometimes I just wanna play for 20min with my morning coffee while listening to a podcast. Lower-stakes content allows me to approach the game differently and play at different hours of the day.'

Here the player identifies an additional category of less impactful secondary narratives that can be pursued when the player cannot afford the game their full attention. An attempt to include 'lower-stakes content' was made in the category that provides a 'break from the main story, distractions', however, this could potentially be interpreted in a different light to mean that the secondary narratives purposefully relate to the main story by providing this break or distraction, while the respondent is instead referring to a break from their real life.

2. 'A more believable setting -- which is going to be the foundation upon which players' "immersion," to whatever degree they are capable of, will be dependent.'

With this comment the respondent categorises more broadly, since what makes a setting "believable" have been provided as more detailed examples. However, the respondent may be suggesting that these details were unnecessary to include as individual points, since some serve the same aim: that of believable setting.

3. 'Secondary narratives can provide all of these'

This respondent is right to suggest this, and indeed some of the respondents ticked all of the boxes, but it is interesting that the respondent chose to word this themselves, since it suggests that all of these aspects are provided, only to a lesser or greater extent, depending on the player and the reasons for why they are playing. In future studies, scales could be provided to allow the players to suggest to which extent they believe each point applies.

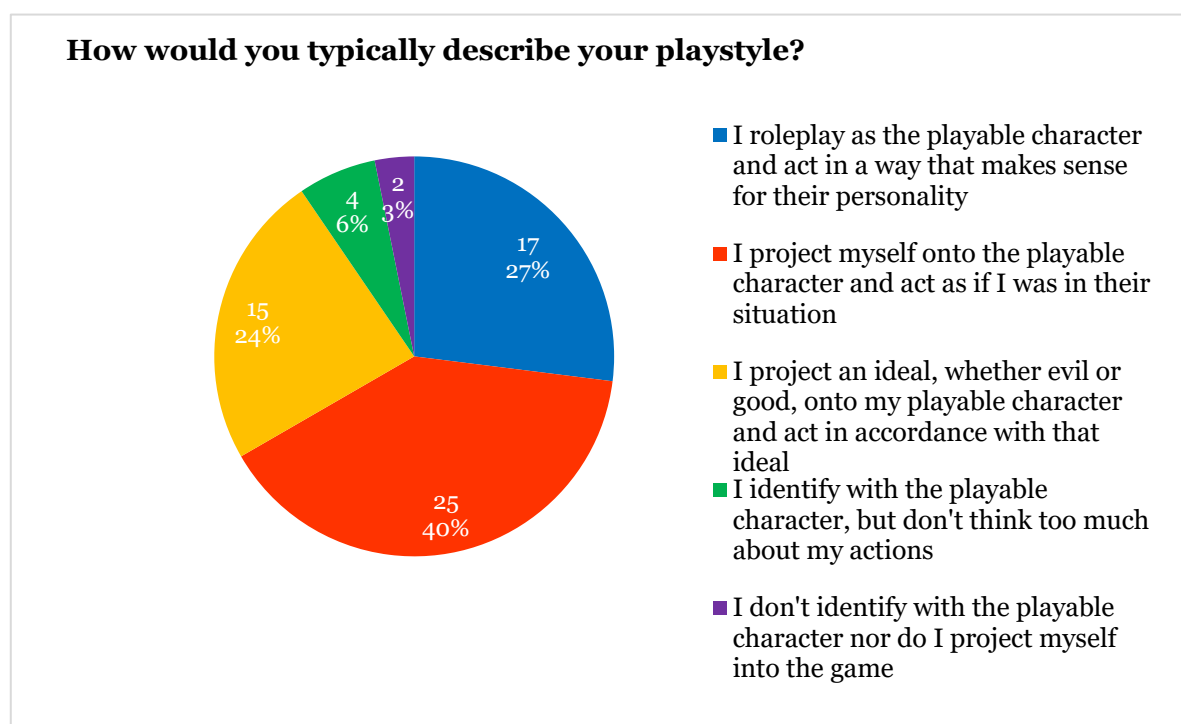


Figure 20: Playstyles that respondents assume in roleplaying games.

The playstyles explored in figure 20 were discussed in the methods' chapter to provide motivations for the way they were worded and potential problematisations with regards to empathy tiers or levels as expressed by Jerrett et al. (2021, pp. 639–640). To preface the analysis of the results, there is no definitive data extracted from the answers that suggest levels of empathy based on playstyle. Instead, the data suggests that players play roleplaying games in different ways, and those ways could be contributing to how they are immersed. The ways in which each of these playstyles contribute to immersion and how that relates to empathy could be explored in further studies.

In figure 20 we see that most respondents to some extent identify with or empathise with the PC's situation, either by pretending that they are the PC, or by projecting themselves in their situation to explore it as if they were there, or by projecting ideals that serve to guide moral decisions that benefit the characters and world, or by sabotaging it, if the characters of the world are evil or simply because the player wants to play provocatively (a point that makes the category problematic). Most players (40%) project their own selves into the PC and act as if they were in their situation and reacting to events in that world. The second most common

group were the roleplayers who acted in a way that made sense for the PC, with a close third being the moral/anti-moral players. Less than 10% of the respondents did not act in the game in some way that was affected by empathy or identification, and out of that 10%, 6% identified with the PC but did not align their actions to that identification, and 3% did not identify with the PC nor project themselves into the game. While some of the wordings in those sentences may be problematic, what can be extrapolated from the data is that the majority of the respondents felt emotional attachment to the game, driven to some extent by feelings of empathy.

4.2.2 Survey figures from qualitative data

The themes that emerged out of the survey data were categorised similarly to the interviews and are visualised in the figures below. There will be three similar presentations as the same figure formats have been used, with the first (figure 21) showing the big picture on how the respondents explained game immersion holistically. The second figure (figure 23) dives into the respondents' opinions on immersion achieved through secondary narratives, while the last figure (figure 25) shows on a micro-level the specific aspects that contributed to immersion in the respondents' favourite secondary narratives. Many of the themes were relevant for the categories of all three questions, however, the themes that differed are listed in the discussion beneath the second and third figure.

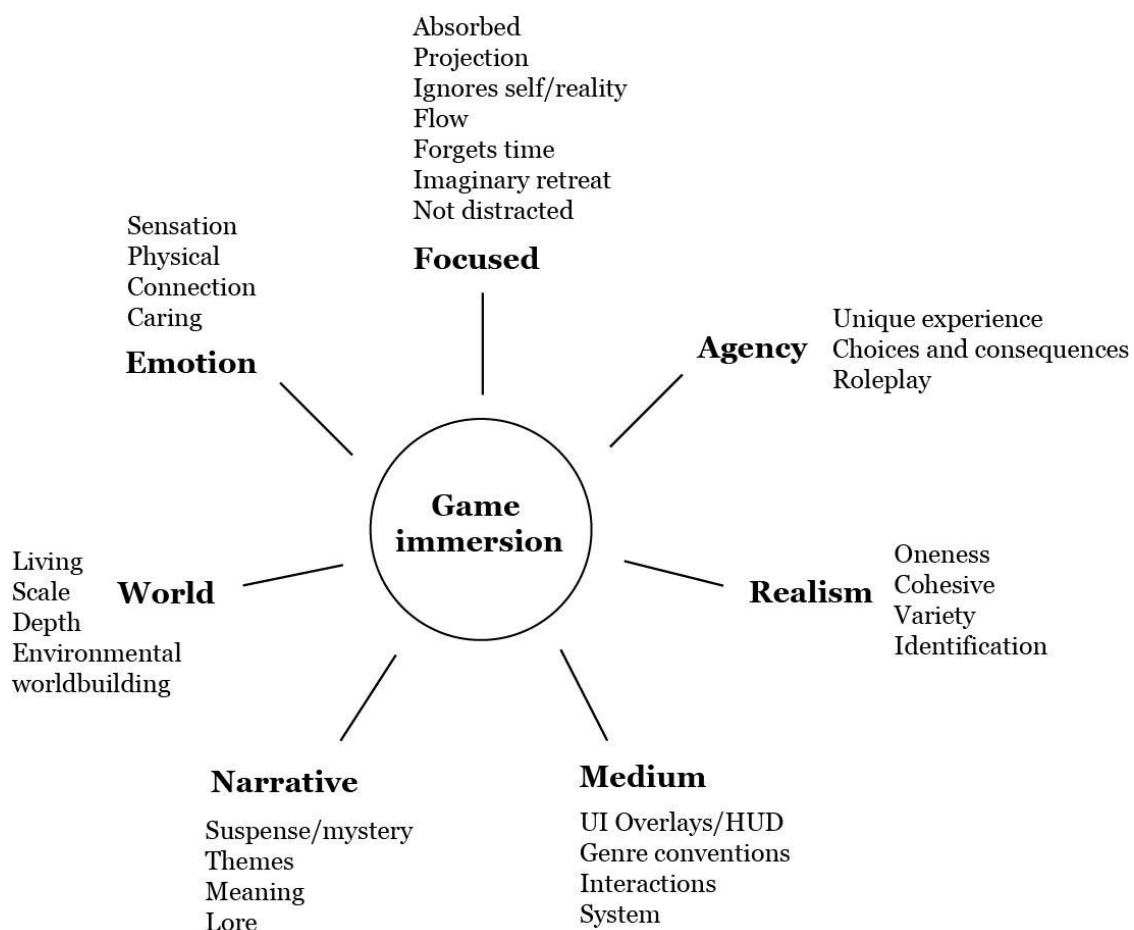


Figure 21: Categories and corresponding themes of holistic game immersion.

In figure 21 we see the many different ways in which the respondents interpreted game immersion. Many of the themes echo what was identified in the related research and the interviews. What is problematic is that some players responded in a way that indicated that they were expressing their beliefs about what immersion meant to them, while others explained what they thought immersion meant in general. In other words, some of the respondents attempted to construct a universal definition while others, prompted by the personal pronoun in the question, provided their own opinions regardless of whether they were correct or biased. Moreover, potentially problematic is the way in which the themes have been worded, i.e., they suggest the topic but not how that topic achieves immersion. For example, the theme of UI overlays/HUD was suggested by one respondent to detract from immersion: ‘Immersion means that UI takes stays out of the way. It means not pulling up the map every few seconds, it means no quest logs, and minimal HUD’, however, by another respondent it was used to suggest how they contribute to immersion, i.e., the respondent expressed that game immersion for them was when they ‘forget that you can’t use game mechanics in real life. Being out walking and for a split second you wonder “where is my mini-map?”’.

The most popular themes (in order of importance) based on amount of mentions were as follows:

<i>Theme (category)</i>	<i>Mentions</i>
World	26
<i>Projection (focus)</i>	24
<i>Ignores self/reality (focus)</i>	17
Narrative	17
Realism	11
<i>Forgets time (focus)</i>	9

Table 22: Emergent themes on holistic game immersion and amount of mentions in codes.

In other words, the physical spatial worlds of games were identified as the driving vehicle for immersion. Mentions of world were often done in conjunction with expressions such as ‘being inside it’, suggesting projection, or perceiving the game world as real, suggesting realism, that the world feels ‘alive’ and well-contextualised and cohesive, and that the player’s existence in that world has affectivity. In other words, all categories of themes become intrinsically co-dependent in how they promote immersion. The results furthermore correlate with Brown and Cairns’ (2004) findings on *feeling* presence in the game, or transferring consciousness into it. In general, *focus* on the game was identified three times in the list, suggesting the pervasiveness of that category and to an extent aligning with the GameFlow’s model of how immersion makes the players less aware of their own realities while playing (Sweetser & Wyeth, 2005). That said, this point will be problematised in the following results.

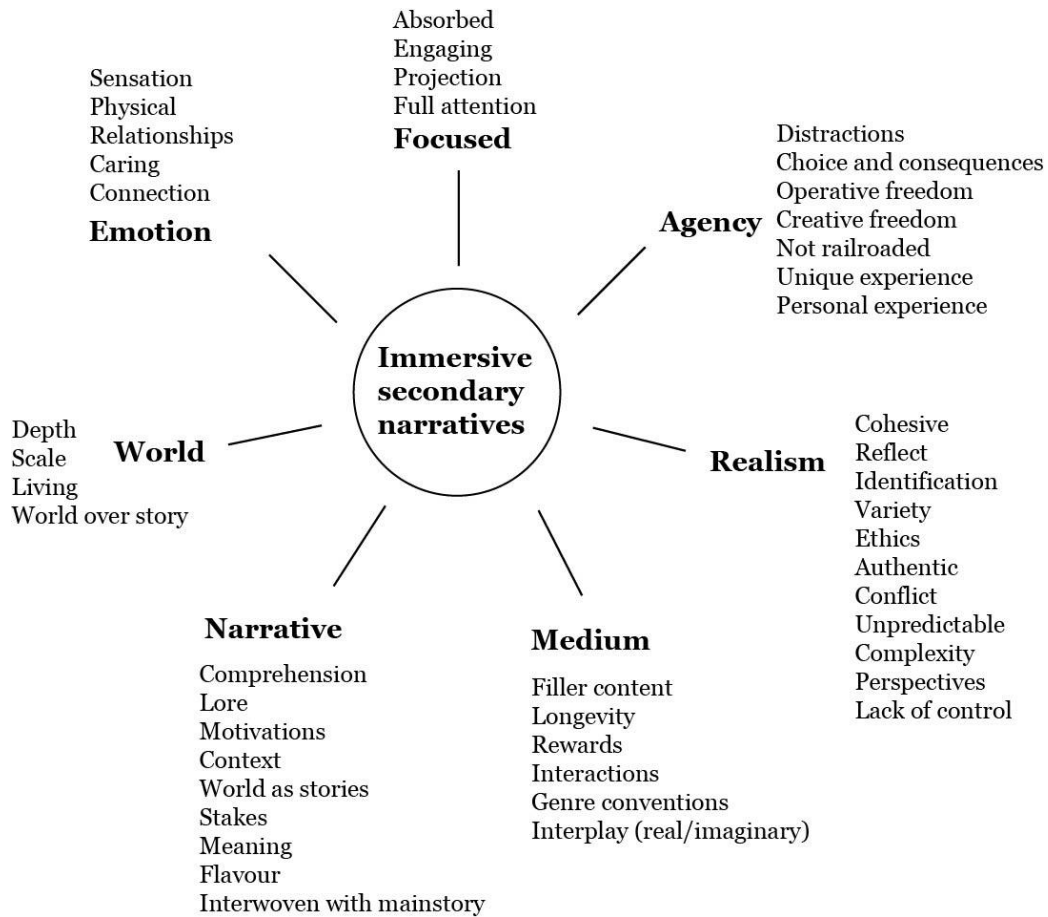


Figure 23: Categories and corresponding themes of immersive secondary narratives.

In figure 23 we see how respondents believe that secondary narratives contribute to immersion. Many of the themes that emerged were similar to the previous question on game immersion, however, the following themes deviated: *flavour*, *rewards*, *interwoven*, *lack of control* and *interplay*. As visible in figure 23, flavour was added to the narrative category, since flavour was identified as a way to deliver information boxes or tooltips in a more interesting way, both by respondents and by interviewees. Rewards was added to medium since it is ultimately a ludic feature; interwoven was added to narrative since it denoted how secondary narratives are interwoven into the main story in terms of affectivity and consequence, while lack of control was added to realism, seeing as the respondent was referring to a world that ‘exists before and after the player’, with too ‘many stories to comprehend’, ultimately suggesting that the player is not in control in the game world, in the same way that they are not in real life. Interplay was added to medium, which is potentially problematic as it relates to how realism is overlaid in the imaginary; however, as a theme it denotes how a respondent specifically stated how games allow that to happen, which is why it was placed in the *medium* category.

The most popular themes (in order of importance) based on amount of mentions were as follows:

Theme (category)	Mentions
World	38
<i>Depth</i> (world)	17
<i>Living</i> (world)	16
Realism	12
<i>Scale</i> (world)	10
<i>Not railroaded</i> (agency)	10

Table 24: Emergent themes on immersion caused by secondary narratives and amount of mentions in codes.

As becomes evident in the results in table 24, respondents believed that the main way that secondary narratives contribute to immersion is by ‘building’ or constructing the world, i.e., worldbuilding. Respondents mentioned how it ‘fleshes out’ or ‘adds feel’ to the world, making it feel ‘living’, in ‘motion’, that it is ‘broadened’ and ‘enriched’. Many respondents used the theme in conjunction with realism, suggesting the internal logic of the world or that it feels realistic. Lore and context as well as themes within agency, such as not being railroaded and having choices that imply consequences were mentioned as vehicles for how that realism is attained. Notably missing are references to *projection*, *ignoring reality* or self and *forgetting time*. None of the themes found in the focus category are present in the table, which firstly suggests that focus is an end-state rather than the process towards that state; in other words, the themes in the world category are the best means to achieve focus states. To that end, studies on secondary narratives may particularly aid understandings of how focus states in immersivity are achieved. Moreover, it poses further questions on what it is in the world that makes it living, provides depth, and expands it in the theme of scale. As discussed in the research, worlds both provide stories and are shaped by stories, yet narrative as a theme is not included in the list. This problematises the placement of *depth* and *living* in the world category and suggests that further research should look more deeply into what the respondents’ mean in their responses, since many mentioned *depth* without explaining where depth comes from. However, what can be extrapolated from this data is that secondary narratives contribute to immersion through their worlds, i.e., the sum of activities, interactions, characters and events that populate those worlds.

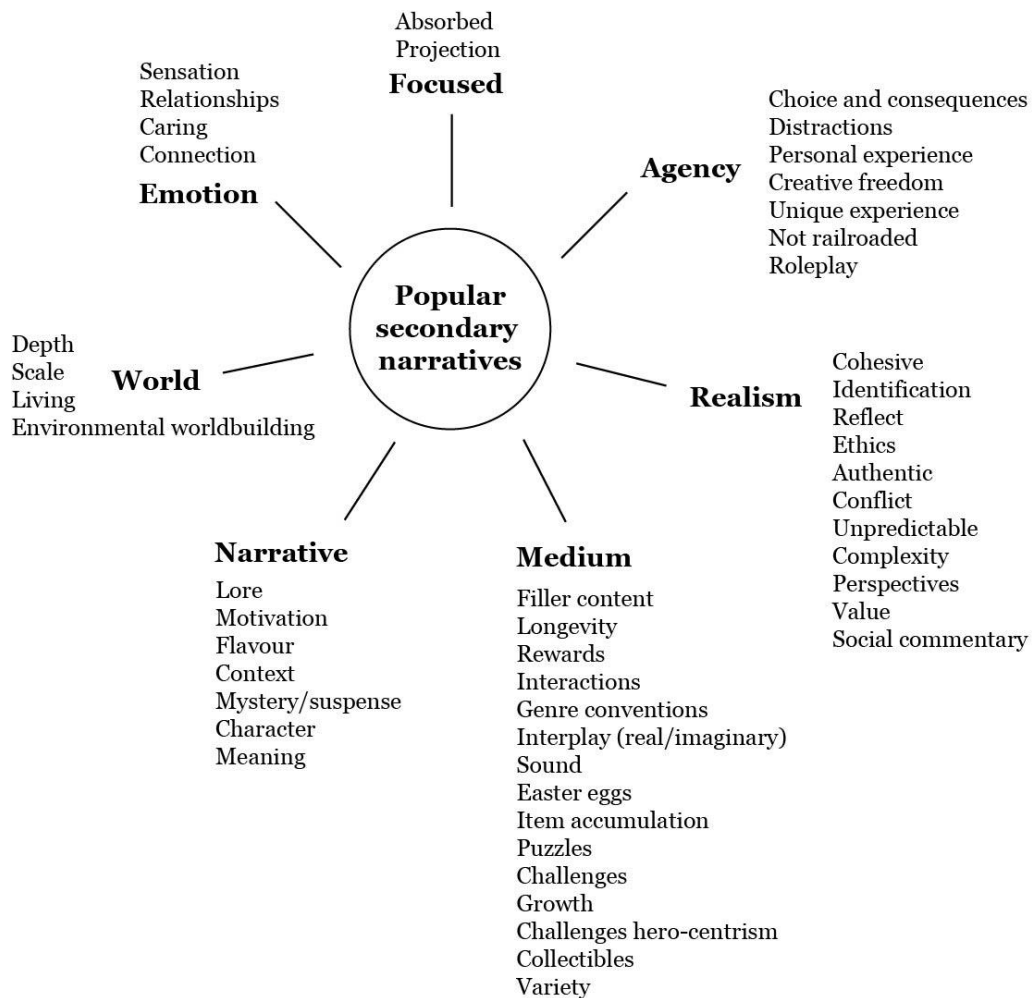


Figure 25: Categories and corresponding themes of popular secondary narratives.

In figure 25 we see which themes emerged out of the respondents' favourite secondary narratives. These did not necessarily correlate to the previous question on how secondary narratives contribute to immersion, since on a micro-level the respondents were able to go into more detail and explore specifically which themes most resonate with them in immersion. In this question, many more ludic qualities were specified and categorised under the medium category, such as item accumulation, puzzles, challenges, growth, collectibles and variety. Themes that were mentioned in the other questions but not this one included: interwoven, understanding/comprehension, freedom, filler content/longevity, focus, authentic, conflict, world as stories, world over story, not railroaded, stakes and lack of control.

The most popular themes (in order of importance) based on amount of mentions were as follows:

Theme (category)	Mentions
<i>Character</i> (narrative)	21
<i>Choices and consequences</i> (agency)	17
Emotion	13
<i>Cohesive</i> (realism)	11
<i>Ethics</i> (realism)	9

Table 26: Emergent themes in popular secondary narratives and amount of mentions in codes.

The results in table 26 suggest a discrepancy in how secondary narratives contribute to immersion (through *world*), and how favourite secondary narratives contribute to immersion. In this instance, it was not the world that was favoured by respondents, but rather the characters of the world that are brought to life through narrative. Respondents expressed how caring about NPCs and their plights, forming relationships with them and ultimately making choices that affect that relationship or the lives of NPCs is what most contributes to immersion. This illuminates the ways in which worlds contribute to immersion, and what makes worlds living and gives them depth. As can be seen in table 26, it is firstly character narratives that provide these aspects, but also making choices in regard to those characters' fates or the world's fate as a whole, in other words, having agency on narratives. This brings to fore themes of social behaviour and respondents' strive for connection with other beings, partially borne out of empathy. The data from the three qualitative questions recalls to us McKernan's (2017, p. 88) studies on space and how we 'build our lives in the social and spatial conditions within which we find ourselves; we are, essentially, constantly in the process of worldbuilding'. In other words, social connections shape our understandings of the world. As the themes in the list suggest, choices are intrinsic to players engagement with NPCs, and themes of realism come into play in complexity and ethics.

The top game that the respondents reported their secondary narratives were found within was *Witcher 3*, which received 12 votes while the rest of the games received 2 votes each at most. This result may be partly explained by the fact that it was featured in an image on the survey, along with the games *Skyrim* and *Red Dead Redemption 2*, which both received two votes each. The image was included to make the survey feel more gamey, less formal, and suggest which sorts of games the study was considering. The games are also considered top-charting in the open-world RPG genre (Game Developers Choice Awards, 2022; IGN Staff, 2022; Valentine, 2023). Indeed, most mentioned games were in the open-world genre, however, the MMORPG *World of Warcraft* was mentioned, the shooter *Borderlands 2* as well as more linear narrative games. Some of the games were also included as ways to explain how secondary narratives contribute to immersion in the second question, with references to *Witcher 3*, *Dragon Age*, *Mass Effect* and *Skyrim*. The study by Vickery et al. (2018) on interactive narrative in *Witcher 3* explains some of the reasons behind the popularity of the game and how it achieves immersion through passive interaction, such as cutscenes, active interaction, such as progressing through the narrative through quests, and dialogue choices, which contributed to character development. Another reason for the popularity of the game is that it is based on an existing series of fantasy novels, which means that the developers had an existing story as foundation for the game. This lends further credence to the importance of well-written narratives in games, for achieving the cohesiveness and motivations for why the players should care about the game world and its inhabitants (Howard, 2008, p. 26). Another contributing point is that fans of the game may have read the novels prior to playing, suggesting that they may have already been emotionally invested in the story.

5. Discussion

As we can see from the results presented in chapter four, many of the themes and categories identified in the research chapter aligned with the themes and categories that emerged out of both the interview and survey data. Some of these themes included: agency, exploration, not being railroaded, new perspectives, thematic complexity, longevity of experience, depth, realism, character perspectives, unique experience, identification from own experiences aligning with happenings in the game, and so forth. This suggests that the views and values of the interviewees and survey respondents echo sentiments expressed by several of the researchers and the findings explored in the related research chapter. Moreover, the codes and themes of the survey were closely related to the interviews, generating identical categories. This suggests that developers and players have similar views on immersion and the role secondary narratives play in it. However, it may also suggest that the data gathered from the interviews indirectly affected how the data in the surveys was interpreted.

Main categories in interviews	Main categories in surveys
Realism	World
Narrative	Realism
Agency	Agency

Table 27: Main three categories in order of priority based on interview and survey data.

In table 27, the top three categories of the interview and survey results have been listed in order of priority, i.e., which ones were most mentioned. As we can see, the main difference is *narrative*, identified by the interviewees, and *world*, identified as the most important aspect by survey respondents. Interviewees argued that it is narrative that gives context and motivations to your actions in the world, as well as presenting characters that the PC can form relationships with, which are two points identified as essential to immersion by Herman (2013) and Howard (2008). On the other hand, survey respondents argued that immersion is achieved by absorbing the player into a comprehensive world abundant with detail, interactions and things to do, in what they summarised with the themes *depth*, *living* and *scale*. These worlds as spaces become significant since they firstly mimic our understandings of three-dimensional spaces and largely adhere to the laws of physics we abide by in real life, as expressed by McKernan (2017). This could be considered an aspect of realism as noted by the interviewees, which suggests that the two categories are intrinsically related. Moreover, game worlds allow narratives and agency to take root; they are realms that enclose the interactive experience and allow for the interactions to be visible and feel responsive and tangible. As our real worlds exist independently of our existence, so does the game world, with its inhabitants and events seeming to play out even when the PC is not physically present in those exact locations at a moment in time.

A similarity worth discussing is the placement of agency in third place in both lists. In the interviewees' discussions, agency was formulated out of themes of *choice and consequences*,

playstyle and *not being railroaded*, i.e., experiencing a sense of freedom in how they shape their game experience, being able to play in the style they want, and that the system responds to the choices made by the player. *Not being railroaded* surfaced as a central theme by the survey respondents as well, reinforcing the non-linearity of the experience and that they were not hemmed in by the main quest. *Choices and consequences* was also lifted as an important theme in that respect; that the game should be responsive and affected by your choices, with the consequences becoming tangible in the game world.

Despite this list, the survey respondents proposed *narrative* as the most important aspect in their favourite secondary narratives, prioritising it over *world* for the very same reasons that the interviewees did. Survey respondents' favourite secondary narratives seemed to include understanding characters, forming relationships with them, and being able to affect the story and world. When asked what their favourite secondary narratives were, the interviewees gave identical responses, which was not unexpected; all three favoured quests that revolved around character, with some minor differences: respondent A enjoyed seeing the ordinary lives of the smallfolk, respondent B enjoyed engaging with NPCs, especially when those engagements yielded rewards, and respondent C enjoyed forming relationships with characters.

Ultimately, the results give credence to the idea that narrative and game mechanics are intrinsically related, that meaningful gameplay emerges out of their relationship, and that secondary narratives exemplify the height of that relationship, generating immersive experiences. Moreover, it can be extrapolated that the worlds of games are important, especially to players: the more enriched and detailed the storyworld is, the stronger the belief in its 'magic circle' (Salen & Zimmerman, 2003). Games saturated with lore material offer a complexity and micro-level to narration that makes the game feel populated and lived-in by other characters that each have their own lives and agendas. Players know that these are AI-scripted, but their stories give the illusion that they are real and that beyond the scope of the player's knowing, NPCs are engaged in their own stories. More often than not, these secondary narratives also introduce different perspectives on the game world at large or the specific issues that the player is engaged in. These could be conflicting with or reinforcing the themes that the games explore, thereby problematising issues of ethics or contemporary issues we experience in our world to a greater or lesser degree.

The findings on the relationship between gameplay and narrative align more with the complex immersivity model proposed by Ermi and Mäyrä (2005), which captures the nuance of interplay between challenge, imagination, and sensory experience, rather than with the models proposed by Sweetser and Wyeth (2005) or Brown and Cairns (2004). Furthermore, the data illustrates that games certainly are eudaimonic besides hedonic, and that secondary narratives contribute to that experience by drawing parallels between the real and imagined (Roine, 2016). Respondent A mentioned how speculative roleplaying games imbue fantastical worlds with realistic experiences that resonate with players, such as world-scale pandemics and how strategy games essentially are political sandboxes, problematising ethics as players pursue their goals. They do this by providing moral quandaries or dilemmas that force players to reflect on what concessions they are willing to do, morally to be efficient, or efficiency-wise to be moral. Respondent B mentioned how game experiences essentially explore topics of existentialism, as player agency affords a sense of freedom in making your own choices.

Although respondent B did not take the stance that games should prompt philosophical reflection, they inadvertently suggest that they do so through themes of exploration and self-determinism. Moreover, respondent B touched on stories' powers to shape our reality, as addressed by Harari (2016), and how our sensemaking of the world is ultimately done through our experiences and sharing of experiences with other people, as explored by Herman (2013) and McKernan (2017). What follows is that character becomes an essential aspect of that experience as replicated in games. NPCs and even communities of peoples tied to different geographical locations and historical events provide their own perspectives on the game world, ultimately problematising the position of the PC as their actions shape that world. Respondent C similarly stressed that choosing how to behave in roleplaying games, besides just choosing in which order to do things or how to fight, is integral to immersion. These behaviours are shaped by the relationships that the PC forms with NPCs and how that instigates moral play, as the player's empathy becomes engaged. In other words, our understandings of ethics in real life become superimposed in the imaginary life of the game, since many of the ethical situations posed in them are ones that we wouldn't be faced with in our more ordinary lives. On the other hand, many of those ethical situations in games feature similar ordinary moments, such as whether to give a gift to a friend or whether to drive aggressively or non-aggressively in *Grand Theft Auto*, as exemplified by respondent C.

Ultimately, these points bring to the fore themes of empathy and existentialism that channel our understandings of reality. As such, games become powerful artistic and interactive mediums to communicate those understandings, and appreciating games as art constructs allows embodied, suggestive or actively explored social commentaries to crystallise and resonate with our understandings of society and history, allowing for a causal relationship between game experiences and reality and the implied powers of affectivity both ways. For example, one respondent in the survey mentioned how historical strategy games provide insights into how military leaders strategized warfare and acquisition, as the games meanwhile provided historical information that taught them something about our history. In other words, roleplaying as a military strategist invited them into the many difficult situations that military strategists must have faced throughout history, aiding understandings for the complexity of the topic. In that way, the game is both affected and simultaneously affects outward.

Many companies in the game industry, especially smaller ones, do not clearly define which professional role is responsible for story creation, let alone secondary narrative creation. Responsible for secondary narratives are often content designers who besides writing the quests also manage their implementation in the game system. The results in the survey may serve as an incentive to game companies to restructure their resources so that secondary narratives can be properly constructed and integrated for immersion. With the fast developments of AI writing and ChatGPT, where AI is employed to write quests with regurgitated content, this study can be a countermovement pressing instead the need for meaningful, thematic and reflective quests that add layers of complexity, alternating perspectives and unexpected twists that problematise the player's assumptions about the game world and real world. It is a way for game companies to provide social commentaries while also indirectly encouraging players to question their own stances and perceptions. In a way, it is a means to be transparent about the indirectly value-enforcing nature of art, since it cannot be

entirely objective, and taking control and accountability for creative decisions, instead of relying on AI that pulls information from unknown sources with unknown motivations. This, in turn, might encourage companies to be more careful with how these quests are written and integrated, to ensure that harmful messages and design are not built into game products, and ensure that they are creating, and the players are engaging in, something worthwhile besides entertaining.

Moreover, the results of the study may also have relevant implications for game companies operating in different genres, such as free-to-play games that rely on the sale of custom content, which could be heightened with the integration of secondary narratives. Another game genre that could be impacted is the online multiplayer roleplaying game, where collaborative player contributions of secondary narratives are a potential way for game companies to allow their players greater agency and ownership in the design process and user experience. To conclude, the findings of this study may have implications for many game genres and not just ones found within RPGs.

5.1 Future research

Throughout the analysis in chapter four, several suggestions have been made on how future studies could further the ends of this study and delve into new areas to resolve further complexities and issues. To the author's knowledge, there existed no previous studies that categorised side quests from a combined narrative and ludic perspective rather than just a ludic one, nor studies that clearly differentiated between main narratives and secondary narratives in games and how they function differently and contribute to immersion in different ways. This required of the researcher to delve into somewhat uncharted territory and decide on a suitable approach to the way in which the data collection methods were presented to the respondents and how that material later was collected, visualised, analysed and compared. This entailed certain complications in how words and categories were termed and separated, with potential complications for how reliable the data was and what patterns, correlations or conclusions could be drawn from it. Many of these reflections feature through the analysis and discussion on the results. As other game theorists have pointed out, a common way for defining and distinguishing between topics, themes and fields in games' research needs to be established. As has also been addressed in the related research chapter, this is a particularly difficult thing to achieve, since many academics are in contention on the relationship between narratology and ludology and even ways of and models of understanding player immersion in games. User experience approaches to stories also differ from game design approaches, as a story to the latter may entail fixed and told narratives, whilst stories to the former can be emergent in design experience on both macro-levels and micro-levels.

The qualitative methods used in the research and the small samples were due to the scope and limitations of the study. The hermeneutical problem of the qualitative method further invites the interpretative room that is dependent on the researcher's experiences, regardless of the careful attempts that have been made in the method of analysis to analyse the data in an as fair, unbiased and organised way as possible. As such, coding, thematising and categorising the qualitative answers entailed broad room for interpretation. Many of the codes deciphered from respondents' answers were repetitive or were relevant for several themes of the same

category, skewing the data. As such, none of the findings in this study are conclusive. However, the study provides a first approach to understanding how secondary narratives contribute to immersion. In future studies, a more rigid structure for categorising codes should be formulated to account for unclarities, repetitions, and synonyms that may be denoting the same theme or different ones.

Future studies could consider the hedonic/eudaimonic approach in evaluating the level of immersivity in user experience, to better understand what it is players play in pursuit of. They could utilise empathy levels as per the empathy model proposed by Jerrett et al. (2021) and the immersion model proposed by Ermi and Mäyrä (2005). Immersion models such as the GameFlow model proposed by Sweetser and Wyeth (2005) and Ermi and Mäyrä (2005) could be further complemented with nuances on the interplay between real and imaginary as proposed by Roine (2016) and the dual affectivity of games as proposed by Matuk, Hurwich and Amato (2019). Moreover, in future studies the complex and interwoven relationships between the themes should be further investigated. Such research could look into which of the ties between them are stronger than others, if some of those ties are co-dependent to the extent that they should be fused into one theme or category, whether clearer distinctions should be made between ludic aspects and narratological aspects, or whether those distinctions should cease to be expressed and instead considered as subparts of a whole. To provide for more empirical saturation the study samples should be larger and supplemented with more observational and experimental studies, even psychological approaches to grant more understandings into how we are psychologically affected by and engaged with game experiences. Moreover, the quantitative method could be used to corroborate the qualitative findings and provide statistical insights and patterns or correlations. Ultimately, the study could also be expanded to include other genres of games that are not related to the RPG genre, especially ones that are more ludic in nature, and whether there truly are instances where narratology plays no role, such as some theorists exemplify is the case with games like *Tetris*.

6. Conclusion

Poorly designed and integrated secondary narratives in games can be boring, repetitive, and feel meaningless. By some players they are considered filler content or means to grind for objects or levelling up the character. Moreover, the experience itself of deviating from the main quests to do tasks that are menial or by some described as ‘silly’ can cause immersion to break, since you are disrupting the flow, suspense and organic progression of the game, causing feelings of stress associated with them to subside. On the other hand, well-written and strategically integrated secondary narratives do the exact opposite, contributing to immersion. They provide a means for players to stay in the fictive world longer, to prolong the experience, to feel the progression of time, and to wander and do quests as they emerge organically through exploration. On one level, it is a way of providing more agency to the player and affording them breaks from the immediacy and stress of the main quest, thereby creating a more relaxed experience.

This study explored the role of secondary narratives in game immersion with data collected from both developers and players in the game industry. This was done to extract insights from

the developers in the design process of secondary narratives, and player patterns in the usage of secondary narratives, and see whether these views aligned. As became evident in the data, both groups found secondary narratives to contribute to game immersion by 1) populating the game world, 2) making the game cohesive and therefore realistic, 3) through character relationships, and 4) by offering the players agency to affect the game world.

Several factors affected the data collected from the developers and players. The developers' answers differed due to the game genre and consumer base they were designing toward, as well as their own preferences for narrative or gameplay. In a similar fashion, different types of players, based on the reasons for their play, have different ways of describing immersion and thereby also secondary narrative immersion. In the data results it became apparent that players are more inclined to enjoy games for the narratives that they portray, and a contributing factor to the narrative experience is secondary narratives. On the other hand, ludic players were less interested in the narrative aspects of secondary interactions, more inclined to engage with activities that progressed toward item accumulation and skill growth. Ultimately, the nature of secondary narratives and their place in immersion remains a complex topic that requires further study. However, this study provided a starting point in viewing secondary narratives separately from the holistic immersive experiences in games and narratives, and how these narratives can potentially be categorised and prioritised by game companies. This, in conclusion, aims to provide an initial overview of how secondary narratives make user experiences more immersive, and how that can serve both producers and consumers of games.

7. References

- Aarseth, E. J. (1997). *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins University Press.
- Aarseth, E. J. (2004). Quest Games as Post-Narrative Discourse. In M.-L. Ryan (Ed.), *Narrative across Media: The Languages of Storytelling* (pp. 361–376). Lincoln: University of Nebraska Press.
- Brown, E., & Cairns, P. (2004). A grounded investigation of game immersion. *CHI '04 Extended Abstracts on Human Factors in Computing Systems*, 1297–1300. <https://doi.org/10.1145/985921.986048>
- CD Projekt RED. (2015). *The Witcher 3: Wild Hunt* (Standard). Warsaw: CD Projekt.
- Cziksentmihalyi, M. (1991). Flow: The Psychology of Optimal Experience [Review of *Flow: The Psychology of Optimal Experience*, by P. H. Mirvis]. *The Academy of Management Review*, 16(3), 636–640. <https://doi.org/10.2307/258925>
- Despain, W. (Ed.). (2013). *100 principles of game design*. Berkeley, CA: New Riders.
- Ermi, L., & Mäyrä, F. (2005). Fundamental Components of the Gameplay Experience: Analysing Immersion. In *Proceedings of Digra 2005: Changing Views – Worlds in Play*. https://www.researchgate.net/publication/291412244_Fundamental_components_of_the_gameplay_experience
- Formosa, P., Ryan, M., Howarth, S., Messer, J., & McEwan, M. (2022). Morality Meters and Their Impacts on Moral Choices in Videogames: A Qualitative Study. *Games and Culture*, 17(1), 89–121. <https://doi.org/10.1177/15554120211017040>
- Fullerton, T. (2019). *Game Design Workshop: A Playcentric Approach to Creating Innovative Games* (Fourth edition). Boca Raton: Taylor & Francis.
- Game Developers Choice Awards. (2022). Game of the Year Archive. GDCA. <https://gamechoiceawards.com/archive/bestgame>
- Grinding Gear Games. (2013). *Path of Exile* (Standard version). Auckland: Grinding Gear Games.
- Harari, Y. N. (2016). *Homo deus: A brief history of tomorrow*. Toronto: Signal.
- Hassenzahl, M., Eckoldt, K., Diefenbach, S., Laschke, M., Lenz, E., & Kim, J. (2013). Designing Moments of Meaning and Pleasure. Experience Design and Happiness. *International Journal of Design*, 7(3), 21–31. <https://www.researchgate.net/publication/259187489>
- Herman, D. (2013). *Storytelling and the sciences of mind*. Cambridge, MA: The MIT Press.
- Herman, D., Jahn, M., & Ryan, M.-L. (Eds.). (2010). *Routledge encyclopedia of narrative theory* (Repr). London: Routledge.
- Howard, J. (2008). *Quests: Design, Theory, and History in Games and Narratives*. Wellesley: A K Peters.
- IGN Staff. (2022, December 21). The 10 Best Open-World Games of All Time. IGN. <https://www.ign.com/articles/the-10-best-open-world-games>
- Irrational Games. (2013). *Bioshock Infinite* (Standard). Novato: 2K.
- Jennett, C., Cox, A. L., Cairns, P., Dhoparee, S., Epps, A., Tijs, T., & Walton, A. (2008). Measuring and defining the experience of immersion in games. *International Journal*

- of *Human-Computer Studies*, 66(9), 641–661.
<https://doi.org/10.1016/j.ijhcs.2008.04.004>
- Jerrett, A., Howell, P., & Dansey, N. (2021). Developing an Empathy Spectrum for Games. *Games and Culture*, 16(6), 635–659. <https://doi.org/10.1177/1555412020954019>
- Jerrett, A., & Howell, P. M. (2022). Values throughout the Game Space. *Proceedings of the ACM on Human-Computer Interaction*, 6(CHI PLAY), 1–27.
<https://doi.org/10.1145/3549520>
- Juul, J. (2005). *Half-Real: Video Games between Real Rules and Fictional Worlds* (Epub). London: The MIT Press.
- Kessing, J., Tutenel, T., & Bidarra, R. (2012). Designing Semantic Game Worlds. *Proceedings of the The Third Workshop on Procedural Content Generation in Games*, 1–9.
<https://doi.org/10.1145/2538528.2538530>
- Laramée, F. D. (Ed.). (2002). *Game Design Perspectives*. Hingham: Charles River Media.
- Leroy, R. (2021). Immersion, Flow and Usability in video games. *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*, 1–7.
<https://doi.org/10.1145/3411763.3451514>
- Martin, G. R. R. (2019, April 11). The Architect and the Gardener: George R. R. Martin on Writing Game of Thrones. *Museum of Pop Culture*.
<https://www.youtube.com/watch?v=EBOafgYJABA>
- Matuk, C., Hurwich, T., & Amato, A. (2019). How Science Fiction Worldbuilding Supports Students' Scientific Explanation. *Proceedings of FabLearn 2019*, 193–196.
<https://doi.org/10.1145/3311890.3311925>
- McKernan, C. M. (2017). *Worldbuilding: A survey of games and architecture at play* [Thesis, The University of New Mexico]. Albuquerque: The University of New Mexico.
https://digitalrepository.unm.edu/arch_etds/36
- Mekler, E. D., & Hornbæk, K. (2016). Momentary Pleasure or Lasting Meaning?: Distinguishing Eudaimonic and Hedonic User Experiences. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 4509–4520.
<https://doi.org/10.1145/2858036.2858225>
- Patrick, E., Cosgrove, D., Slavkovic, A., Rode, J. A., Verratti, T., & Chiselko, G. (2000). Using a large projection screen as an alternative to head-mounted displays for virtual environments. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 478–485. <https://doi.org/10.1145/332040.332479>
- Roine, H.-R. (2016). *Imaginative, Immersive and Interactive Engagements: The rhetoric of worldbuilding in contemporary speculative fiction* [Thesis, University of Tampere]. Tampere: University of Tampere.
- Ryan, J. (2018). *Curating Simulated Storyworlds* [Dissertation, University of California]. Santa Cruz: University of California. <https://escholarship.org/uc/item/1340j5h2>
- Ryan, M.-L. (2001). *Narrative as virtual reality: Immersion and interactivity in literature and electronic media*. Baltimore: Johns Hopkins University Press.
- Salen, K., & Zimmerman, E. (2003). *Rules of play: Game design fundamentals*. Cambridge, MA: The MIT Press.

- Sweetser, P., & Wyeth, P. (2005). GameFlow: A model for evaluating player enjoyment in games. *Computers in Entertainment*, 3(3), 1–24. <https://doi.org/10.1145/1077246.1077253>
- Tolkien, J. R. R. (2008). *On Fairy-Stories* (V. Flieger & D. A. Anderson, Eds.; Expanded edition). London: Harper Collins.
- Tutenel, T., Bidarra, R., Smelik, R. M., & Kraker, K. J. D. (2008). The role of semantics in games and simulations. *Computers in Entertainment*, 6(4), 1–35. <https://doi.org/10.1145/1461999.1462009>
- Valentine, R. (2023, March 16). The best open world games. *PC Gamer*. <https://www.pcgamer.com/best-open-world-games/>
- Vetenskapsrådet. (2002). *Forskningsetiska principer inom humanistisk-samhällsvetenskaplig forskning*. Stockholm: Elanders Gotab. <https://www.vr.se/analys/rapporter/vara-rapporter/2002-01-08-forskningsetiska-principer-inom-humanistisk-samhällsvetenskaplig-forskning.html>
- Vickery, N., Tancred, N., Wyeth, P., & Johnson, D. (2018). Directing narrative in gameplay: Player interaction in shaping narrative in the witcher 3. *Proceedings of the 30th Australian Conference on Computer-Human Interaction*, 495–500. <https://doi.org/10.1145/3292147.3292201>
- Weibel, D., & Wissmath, B. (2011). Immersion in Computer Games: The Role of Spatial Presence and Flow. *International Journal of Computer Games Technology*, 2011, 1–14. <https://doi.org/10.1155/2011/282345>
- Wolf, M. J. P. (2013). *Building imaginary worlds: The theory and history of subcreation*. New York: Routledge.
- Yin, R. K. (2016). *Qualitative research from start to finish* (Second edition). New York: The Guilford Press.

8. Appendices

The below appendices feature the interview questions posed to the game developers, the survey presented to the players, and the graphs that were auto-generated by the survey.

Appendix 1. Interview questions

1. *What* does immersion mean to you?
2. *How* important do you think secondary narratives are for immersion?
3. *Why* do you include secondary narratives?
4. What do you think it is that secondary narratives contribute to immersion, that the main narrative *doesn't*?
5. *How* do you distinguish between main narratives and secondary narratives? How do you *categorise* them?
6. *To what ends* do you include secondary narratives?
 - Are they used to vary the gameplay?
 - Are they used to introduce other perspectives?
 - Are they used to flesh out the game world in terms of atmosphere, mood or style?
 - Are they used to convey spatial symbolism or themes?
7. *What types* of secondary narratives do you use?
8. *What percentage* of the gaming experience comes from secondary narratives?
9. How do you *strategically* weave in secondary narratives to ensure highest level of percentual player interactivity/discovery?
 - Do you have any strategic methods for the incorporation of secondary narratives?
 - Why do use that specific strategy?
 - Are there multiple strategies for different kinds of secondary narratives?
10. How much *time and resources* do you allocate to the development of secondary narratives?
 - Who is responsible for secondary narratives?
 - Do you wish you had a more clearly defined secondary narrative role?
11. Do you collect *data* from players on their interaction with secondary narration?
 - How many players interact with secondary narratives?
 - Which types of secondary narratives are preferred?
12. What are your personally favourite types of secondary narratives, and why?

Appendix 2. Survey format and questions



Secondary Narratives and Immersion in RPGs

Welcome! Please read the below information about the study before answering the questions:

For my Bachelor thesis I am researching *secondary narratives* and how they contribute to *immersive game experiences* in single player role-playing games.

Secondary narratives are side quests and lore elements such as books, sound recordings etc that are **not** part of the main story and **not** obligatory to complete the game.

This questionnaire includes 10 questions on what **you**, the gamers, think of secondary narratives in terms of immersion.

Participation is anonymous - only your age group is collected. For more information about the study and the processing of personal information please read [here](#). Participants must be 18+.

Thank you for participating in the study!

What does being "immersed" in a game mean to you? *

Your answer

How much do you interact with secondary narratives in single player RPGs? *

- ☐ I try to do them all (~100%)
- ☐ I do most of them (~75%)
- ☐ I do about half of them (~50%)
- ☐ I do a few of them (~25%)
- ☐ I don't do any of them (0%)

What types of secondary narratives do you prefer? (select as many as you want) *

- ☐ In-game text-based books, letters, notes, journal entries
- ☐ Posters, graffiti, symbols, art, decoration and other environmental details
- ☐ Videos, holograms, projections (that interrupt play)
- ☐ NPC dialogue, voice recordings, chantings, singing, melodies, radios
- ☐ Action quests such as escort, fetch, chase, delivery quests etc.
- ☐ Weapons / armour / loot quests (item accumulation)
- ☐ Combat / Skill challenges
- ☐ Puzzles
- ☐ Easter eggs, meta references, fourth wall breaks
- ☐ Other: _____

On a scale of 1 to 5, how much do you feel that secondary narratives contribute to immersion? *

1 2 3 4 5
Not at all ☐ ☐ ☐ ☐ ☐ Absolutely

How do secondary narratives contribute to immersion, in your opinion? *

Your answer _____

On a scale of 1 to 5, where 1 is challenging gameplay and 5 is compelling story, which contributes the most to immersion? If you find them equally important, choose the middle. *

1 2 3 4 5
Challenging Gameplay ☐ ☐ ☐ ☐ ☐ Compelling Story

According to game research there appears to be a divide between the below statements. Which of them do you most associate with immersion? *

- ☐ Escaping reality into an imaginary world - ignoring contemporary world issues
- ☐ Experiencing an imaginary world as realistic - engaging with contemporary world issues in a fictional setting

What, in your opinion, is it that secondary narratives provide? *
(select as many as you want)

- ☐ Choice options and consequences
- ☐ Complexity of topics and moral themes
- ☐ A unique experience
- ☐ Creative freedom and self-direction
- ☐ New perspectives, insight into NPCs' lives and opinions
- ☐ Unpredictability, lack of control over outcome
- ☐ Incentives and rewards for exploration and discovery
- ☐ Lore, history, backstory, information
- ☐ A break from the main story, distractions
- ☐ Complements to the main story, builds suspense
- ☐ Cohesiveness, depth, a sense that everything fits together
- ☐ Variety of quests and gameplay
- ☐ Replayability and longevity
- ☐ Chances to upgrade / grow the playable character
- ☐ Challenges, opportunities to hone skills
- ☐ Other: _____

How would you typically describe your playstyle? *

- ☐ I roleplay as the playable character and act in a way that makes sense for their personality
- ☐ I project myself onto the playable character and act as if I was in their situation
- ☐ I project an ideal, whether evil or good, onto my playable character and act in accordance with that ideal
- ☐ I identify with the playable character, but don't think too much about my actions
- ☐ I don't identify with the playable character nor do I project myself into the game

Could you briefly describe **one** specific and especially memorable **secondary** narrative from one of your favourite games, and **how** it contributed to an **immersive game experience**? *

Your answer

Which age group do you belong to? *

- ☐ 18 - 28
- ☐ 29 - 39
- ☐ 40 - 50
- ☐ 51 +

Do you consent to participating anonymously in this study? The * only personal information that is collected is the **age group** you belong to. Read more about your personal information [here](#).

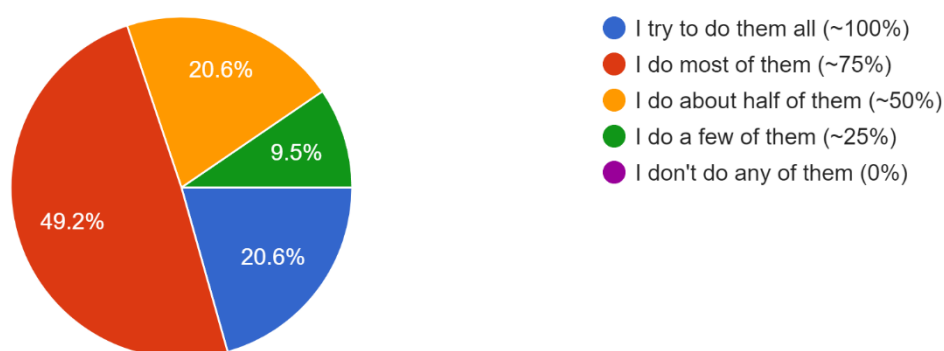
☐ Yes

Submit Clear form

Appendix 3. Survey auto-generated graphs

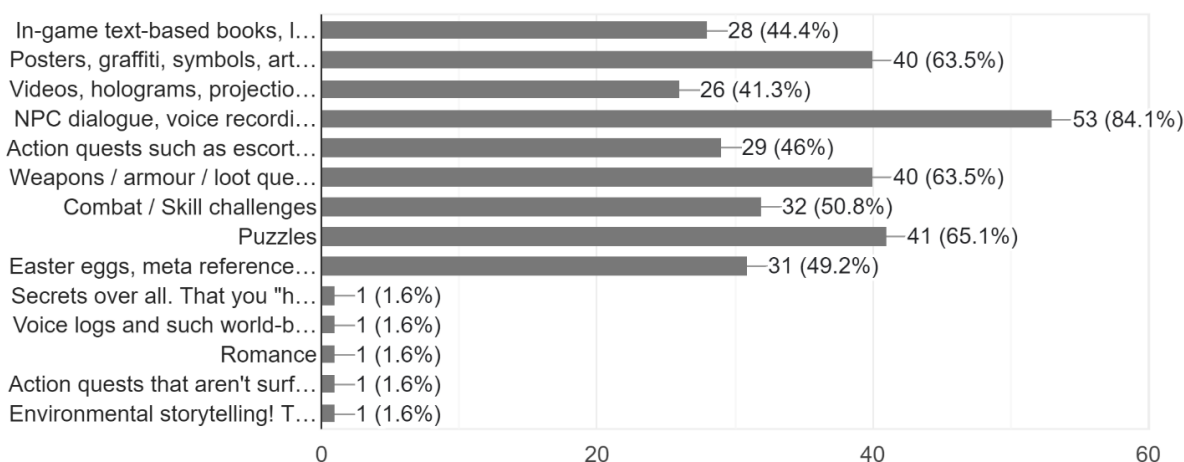
How much do you interact with secondary narratives in single player RPGs?

63 responses



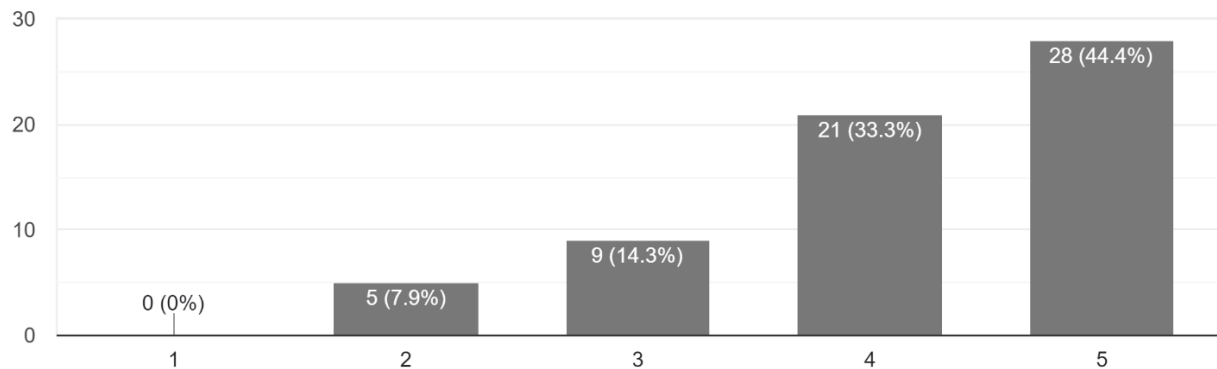
What types of secondary narratives do you prefer? (select as many as you want)

63 responses



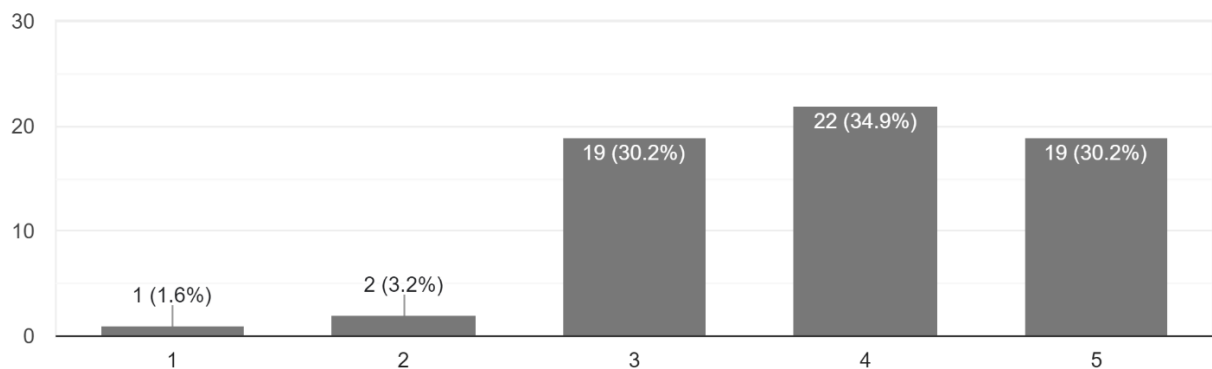
On a scale of 1 to 5, how much do you feel that secondary narratives contribute to immersion?

63 responses



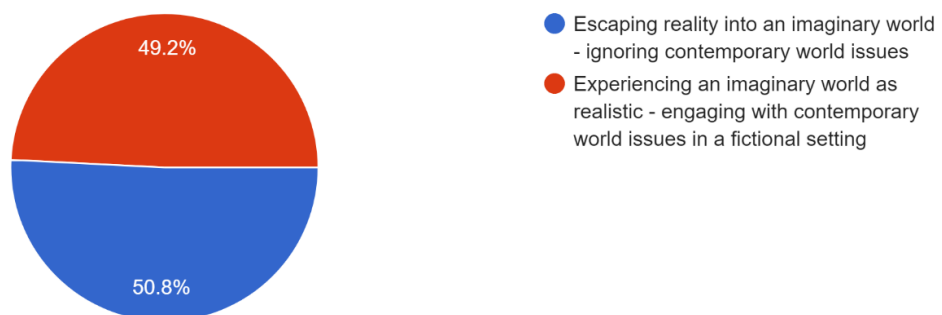
On a scale of 1 to 5, where 1 is challenging gameplay and 5 is compelling story, which contributes the most to immersion? If you find them equally important, choose the middle.

63 responses



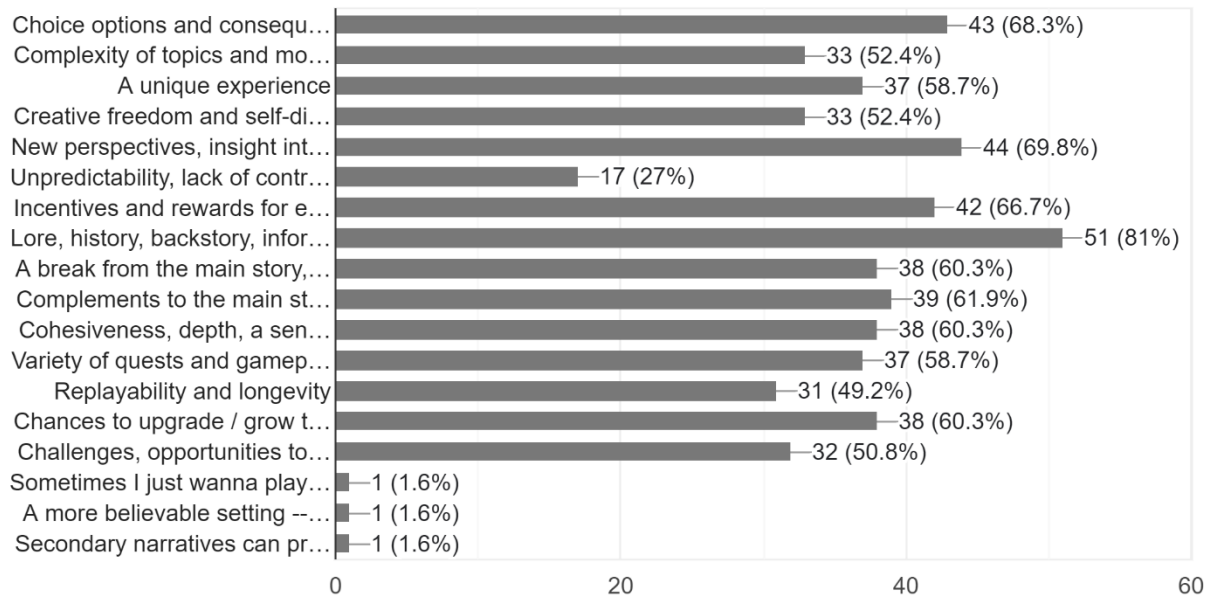
According to game research there appears to be a divide between the below statements. Which of them do you most associate with immersion?

63 responses



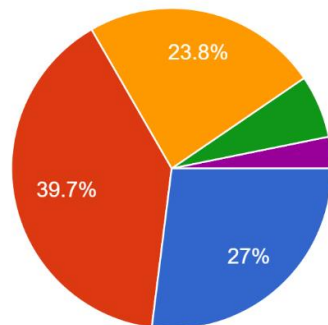
What, in your opinion, is it that secondary narratives provide? (select as many as you want)

63 responses



How would you typically describe your playstyle?

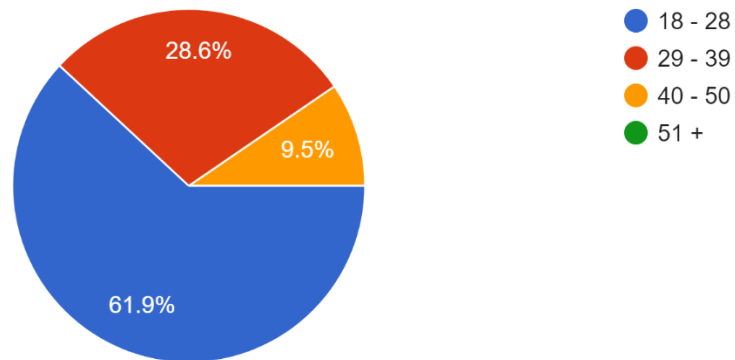
63 responses



- I roleplay as the playable character and act in a way that makes sense for their situation
- I project myself onto the playable character and act as if I was in their situation
- I project an ideal, whether evil or good, onto my playable character and act in a way that makes sense for their situation
- I identify with the playable character, but don't think too much about my actions
- I don't identify with the playable character nor do I project myself into their situation

Which age group do you belong to?

63 responses



Do you consent to participating anonymously in this study? The only personal information that is collected is the age group you belong to. Read more about your personal information here.

63 responses

