INTERACTIVE DIGITAL NARRATIVES

Counter-Hegemonic Narratives and Expression of Identity

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Interactive Digital Narratives and Counter-Narratives

Systematising knowledge to derive clusters as lenses of observation

ABSTRACT

This paper delves into Interactive Digital Narratives (IDNs) as powerful artefacts for challenging dominant narratives and promoting inclusive storytelling. The study is based on a literature review of the research discourse on IDNs, aiming to discern their potential to support and address counter-narratives. Triangulation and systematisation of the existing knowledge corpus, key themes, theoretical frameworks, and studies surrounding IDN and counter-narrative were conducted, collecting primary definitions and identifying for each domain relevant clusters. Five original scientific works by as many scholars that constitute this special issue are explored and mapped against this backdrop and associated with IDN and counter-narrative clusters. This process highlights their alignment with the research discourse, leading to the identification of intersections between IDNs and counter-narratives from diverse perspectives. This exploration sheds light on how IDNs can serve as counter-hegemonic narratives, being spaces for alternative perspectives and identities that challenge dominant ideologies. Ultimately, the requisite preconditions for IDNs to function as counter-narratives are discussed.

1. INTRODUCTION. IDNS AS COUNTER-HEGEMONIC NARRATIVES AND EXPRESSION OF IDENTITY

Narrative is recognised as the most ancient way to communicate ideas (Bruner, 1991). Human beings organise experiences as narratives (Bruner, 1990), confirming them to be a tool for the construction of reality and supporting the constant negotiation of meanings (Bruner, 1990) The media and digital landscape, as exemplified by various digital configurations (Ackermann et al., 2020, p. 417), profoundly changed how individuals think, behave, live, and interact.

Fueled by the unceasing advancements in technology that have revolutionised the way narratives are created and consumed, offering vast possibilities and potentials with significant implications for expression both from the perspective of authors and players, the discourse on IDNs is today growingly prominent in scholarly debates (Koenitz, 2018; Koenitz et al., 2015).

The current state and possibilities of the media landscape in the field of interaction and participation rely on a logic that significantly differs from the past. On the one hand, it prompts a critical examination and revision of the contemporary role of the user, who is now empowered with growing agency. On the other hand, it requires a comprehensive understanding of how to effectively harness the opportunities presented by multimedia, and multichannel approaches such as crossmedia and transmedia (Ciancia, 2018). IDNs capitalise on the fundamental features of interactive media and platforms, including video games, virtual reality, web-based experiences, and transmedia systems, to immerse users in dynamic and participatory storytelling. Unlike traditional linear narratives, they allow users to shape the narrative through their choices, actions, and interactions, thereby blurring the boundaries between storyteller and audience. This shift in the storytelling paradigm has opened up new possibilities for creative expression, engaging users in a more active and personalised narrative experience. Moreover, this shift can foster and spread counternarratives that contradict the currently dominant one by presenting a different perspective on socially relevant topics. Therefore, IDNs rely on the established and recognised role of narratives in shaping our understanding and forming judgments while exploiting technological potentialities to favour interaction with the contents. These features empower IDNs as a means for sharing perspectives and experiences, enabling self-expression for all the different actors involved, while capitalising on engagement, immersion, and participation.

As such, IDNs emerge as a powerful means to promote inclusive narratives and create space for counternarratives to thrive. In light of such premises, IDN for social change arises as a significant subject at the centre of research and experimentation, grounded in various epistemologies and investigated by academics and practitioners from a variety of fields (Dubbelman et al., 2018; Lueg & Wolff Lundholt, 2020).

This paper explores IDNs as means for challenging the hegemonic narrative as a dominant perspective, leveraging interaction and participation as constitutive features to open up discussions able to go beyond entertainment. It investigates how offering varying degrees of interaction with the content can make them spaces to encourage exploration, discussion, and critical examination of relevant social issues on a cognitive level as well as addressing empathy and care on an emotional level. The process involves intertwining diverse elements. Firstly, a thorough analysis and systematisation of the research discourse on IDN enables an understanding of its potential to support and address counter-narratives. Sec-

ondly, the presentation of five original scientific works on IDN, comprising this special issue, examines their alignment with the research discourse and explore their contributions to comprehending the intersections of IDN and counter-narratives from varying perspectives. Lastly, IDNs potential as well as the accompanying preconditions to function as counter narratives will be discussed.

2. THEORETICAL BACKGROUND ON IDNS

Although recognising an established debate, it is in recent years that IDNs gained further momentum leveraging technological advances that increase their potential to engage users in immersive and participatory storytelling experiences. As a result, they have been receiving increasing attention from scholars and practitioners. However, the current understanding of IDNs is rooted in a substantial body of prior scholarship. In order to shed light on the foundations of this field, it is important to examine the works of key authors and their contributions. By exploring their research, we can gain insights into the evolution and development of IDNs as a scholarly discipline.

2.1 ANALYSING IDNS IN THE LITERATURE

IDNs emerges as a dynamic and evolving form of storytelling that combines traditional narrative elements with interactive technology. Their interactive and feedback-driven nature make IDNs lean towards the notion of a narrative environment as a cybernetic system. Aarseth (1997) introduces the concept of 'ergodic literature' referring to works that require non-trivial effort from the user to traverse the text. Aarseth's perspective on cybertext refers to a category of textuality that is intricately tied to the capabilities and interactive nature of digital media. A notion that emphasises the importance of user participation and engagement, including various forms of interactive storytelling, and IDNs among them. Moving in the game studies field, Aarseth developed theoretical frameworks and models to analyse the structure and agency of interactive storytelling. His work is based on narrative theory of games, and advances reflections on topics such as player agency, ludology, and the interplay between narrative and gameplay (Aarseth, 2012). While Aarseth does not provide a direct definition of IDN, his work serves as a significant contribution by offering valuable insights into the complexities of narratives within digital environments. In the same period, Murray (1997) articulates the reasoning on IDNs by introducing three fundamental concepts: (i) immersion, (ii) agency, and (iii) transformation, later recalled and further expanded by other seminal authors. Immersion refers to the sensation of being fully absorbed in an alternative reality, capturing one's complete attention and engaging all senses. Achieving immersion requires not only suspending disbelief (Coleridge, 1817) but actively embracing belief. The discourse on immersion and interactivity are also addressed by Ryan (2001), examining how they shape narrative experiences. She also described how narrative adapts to different mediums and explores its

relation to interactive media and virtual reality, also vetting the concept of 'narrative avatar' (2006a). Her analysis of cognitive processes and narrativity (Ryan, 2006b) provides insights into the cognitive and emotional dimensions of interactive storytelling. Looking at the exchange of meaning between authors and readers, her research delves into the communicative aspects (Grishakova & Ryan, 2011). While immersion focuses on the environment, agency empowers participants to take meaningful actions and choices (Crawford, 2004; Laurel, 1991) and observe the consequences of such interaction in the progression and outcome of the story within a responsive and coherent world (Murray, 2004).

Crawford (2004) specifically explores the concept of 'emergent narratives' as the dynamic evolution of the story is based on user input and the system's responses, nurturing personalised and unique storytelling experiences. Transformation implies a technological perspective, referring to the transformative capabilities of computational environments which enable multidimensional presentation, rearrangement, spatial and temporal organisation of 'kaleidoscopic narrative' as media mosaics (Manovich, 2001), adapting McLuhan's observation on communication media as mosaic rather than linear in structure (McLuhan, 1964). As such, Murray (1997) depicts IDNs as a means to construct narratives using predefined elements, such as the approach to narratology advanced by Russian formalists (Propp, 1968) and French structuralists (Genette, 1988; Greimas, 1983; Prince, 1982; Todorov, 1966, 1975), based on the identification of key elements, functions, and structures of narratives. Transformation relates to the immersive enactment within a cyberdrama, which can evoke catharsis and facilitate juxtapositions for reflective purposes.

In the attempt of moving from theory to practice, the most significant contribution to IDNs comes from the studies of Koenitz. His research ranges from the analysis of existing theoretical perspectives to foreground the scope and focus of previous contributions to drive further explorations in the domain (2015). This is the result of a consistent research on theoretical frameworks for interactive storytelling (Koenitz, 2010, 2023), bringing support for concrete implementations to practical design IDNs. Koenitz's research also addresses the technical challenges and considerations in implementing IDN systems. He specifically sheds light on the construction and design principles of these immersive narrative experiences (Koenitz, 2015a, 2016). By analysing user behaviour, preferences, and interactions, and evaluating user experience, he seeks to understand the cognitive and affective aspects of user engagement in interactive narratives also, connecting entertainment theory with a humanities-based perspective (Roth & Koenitz, 2016). Finally, Koenitz has argued that IDNs have the potential to be used for more than entertainment, and that they can be used to engage users in a range of educational activities and prompt users to reflect on important social and political issues (Koenitz, Barbara, & Eladhari, 2022), identifying the potential of IDNs for education (Koenitz et al., 2019; Koenitz, Barbara, & Eladhari, 2022) and social change (Dubbelman et al., 2018).

The literature review reveals commonalities among the perspectives of key scholars who have contributed to the discourse on IDN and pushed it forwards. Firstly, they share a recognition of the transformative impact of digital technology on narrative forms and storytelling experiences, emphasising the interactive nature of IDNs that empowers users in the narrative construction process. This acknowledgment underscores the departure from traditional linear narratives towards dynamic, user-driven narratives. Secondly, these scholars underscore the significance of agency and user engagement within IDN. Interactivity is spotlighted as a pivotal element, enabling users to make choices, shape the narrative trajectory, and influence outcomes. The concept of agency aligns with the notion that users should possess a sense of control and influence over the narrative, leading to heightened immersion and meaningful engagement. Thirdly, the authors acknowledge the blurring boundaries between creators and participants in IDN. They explore the concept of co-creation and collaborative storytelling, where users assume the role of active contributors to the narrative, be it through content generation, interaction with the narrative system, or participation in communal storytelling. This paradigm shift challenges conventional notions of authorship and meaning creation, underscoring the democratisation of storytelling in the digital era. Pivotal is how IDNs allow users to actively participate and influence the narrative through their choices, actions, and interactions within the digital environment, making the narrative unfold depending on branching paths and user decisions, leading to multiple outcomes. As such, a key feature of IDN is the attempt to reach a (at least assumed) personalised and interactive storytelling experience, opening the debate known as the paradox of authored narratives. The paradox arises from the inherent tension between maintaining authorial control and accommodating player agency (Murray, 1997; Fernández-Vara, 2014). Authors strive to create a coherent and predetermined narrative structure, while the interactive nature of IDNs necessitates to provide players with the freedom to make choices that shape the story in a given frame. This paradox presents a challenge in achieving a harmonious balance between authorship and interactivity, where authors must navigate the delicate interplay of guiding the narrative trajectory while still providing meaningful player agency. Addressing this paradox is crucial for designing IDNs that offer both a structured narrative experience and engaging interactive elements, thereby enhancing immersion and user engagement.

Despite these commonalities, variations emerge in the perspectives of the authors, stemming from differences in theoretical frameworks, disciplinary backgrounds, and research foci. The literature review confirms how the research on IDNs appears to be twofold. The humanities-based research described so far, which focused the attention on the user experience that IDNs generate, analysing their creative potential against the traditional forms of narrative. On the other hand, computer science-based IDN research has privileged

a technological perspective, confirmed by the large attention on developing advanced computational systems able to generate highly responsive and generative experiences (Kim & Kim, 2016; Van Velsen, 2008; Ventura & Brogan, 2003), and authoring tools supporting IDN generation (Green et al., 2021; Kim & Kim, 2016; Koenitz, Barbara, & Bakk, 2022; Moallem & Raffe, 2020; Sylla & Gil, 2020). A complementary perspective comes from studies which zeroed in computational models of narrative (Szilas, 2021; Young & Riedl, 2003; El-Nasr, 2004), emphasising the role of AI driven interactive narrative systems in accounting for player actions. In this sense, the literature highlights lunges on system affordances for emergence and authorial control, mapping the levels of interaction provided by different interactive narrative systems along a spectrum of agency architectures (Moallem & Raffe, 2020). Multiple studies explore the wide spectrum of technologies applied in the pursuit of creating better interactive narrative system, arraying from procedural plot generation subsystems (Szilas, 2021; Szilas & Richle, 2013; Thue et al., 2021) believable agents (Aha & Coman, 2017; Luo et al., 2015; McCoy et al., 2011; Riedl & Bulitko, 2012; Ware et al., 2022), natural language processing (NLP) (Ammanabrolu & Riedl, 2021; Mateas & Stern, 2003), and procedural content generation (Ammanabrolu, Broniec, et al., 2020; Ammanabrolu, Cheung, et al., 2020; Freiknecht & Effelsberg, 2020; Kreminski & Wardrip-Fruin, 2019).

The systematic analysis of their works provides a comprehensive understanding of the current state of IDN research and shed light on the evolving landscape of interactive storytelling. The commonalities highlight shared interests and directions while divergences offer a diverse and multifaceted understanding of IDN, underscoring the various lenses through which researchers approach and contribute to the field.

2.2 FROM IDNS DEFINITIONS TO IDN CLUSTERS

The concept of IDN was introduced to narrow down and push forward the discussion on a domain that up to that moment was still blurred as referred to by adopting terms borrowed from neighbouring fields. Till then, using one term or the other specifically connected the discourse to the scientific perspective and domain through which the argument was observed: Computer Science, Narrative Theory, Game Studies, and Media Studies. Currently, IDN emerges as an umbrella term that describes work in the areas of intelligent narrative technologies, interactive narrative, interactive drama, interactive fiction, interactive storytelling, and narrative games (Crawford, 2004; Montfort, 2015, p. x).

The introduction of the IDN concept in 2015 by Koenitz (2015a, 2015b) allowed a step forward, serving as a standard term that helped to productively broaden concepts established by previous terms that became perceived to be excessively restricted. Despite a relevant academic literature dedicated to exploring and developing the field, a systematisation of knowledge across multiple domains is still lacking, evident in the absence of systematic literature reviews

Table 1: Dominant IDNs definitions in the academic literature.

ID	Definition	Reference
IDN01	Interactive narrative is a form of digital interactive experience in which users create or influence a dramatic storyline through actions, either by assuming the role of a character in a fictional virtual world, issuing commands to computer-controlled characters, or directly manipulating the fictional world state. It is most often considered as a form of interactive entertainment but can also be used for serious applications such as education and training.	Riedl & Bulitko, 2012, p. 68
IDN02	Interactive digital storytelling (IDS) aims at generating dramatically compelling stories based on the user's input.	Smed, 2014, p. 22
IDN03	Interactive Digital Narrative (IDN) connects artistic vision with technology. At its core is the age-old dream to make the fourth wall permeable; to enter the narrative, to participate and experience what will unfold. IDN promises to dissolve the division between active creator and passive audience and herald the advent of a new triadic relationship between creator, dynamic narrative artefact and audience-turned-participant. Within this broad vision of fully interactive narrative environments through the use of digital technologies, IDN aggregates different artistic and research directions from malleable, screen-based textual representations to the quest for virtual spaces in which human interactors experience coherent narratives side by side with authored narrative elements and synthetic characters.	Koenitz et al., 2015, p. 1
IDN04	IDN as a novel form of expression in which narrative and interactivity are deeply intertwined, as "system narratives" in line with Roy Ascott's call for reactive "system art" in contrast to prior "object art."	Koenitz, 2015a, p. 52
IDN05	Interactive digital narrative (IDN) challenges basic assumptions about narrative in the western world—namely about the role of the author and the mixed state of content and structure as the audience takes on an active role and the narratives become malleable. [...] IDN can now be characterised as a form of expression enabled and defined by digital media that tightly integrates interactivity and narrative as a flexible cognitive frame.	Koenitz, 2015b, p. 91 & 92
IDN06	[...] IDN can now be defined as an expressive narrative form in digital media implemented as a computational system containing potential narratives and experienced through a participatory process that results in products representing instantiated narratives.	Koenitz, 2015b, p. 98
IDN07	Interactive Digital Narrative is an expressive form in the digital medium, implemented as a computational system containing a protostory of potential narratives that is experienced through a process in which participants influence the continuation of the unfolding experience that results in products representing instantiated stories.	Koenitz et al., 2018, p. 108
IDN08	Interactive digital narrative is a narrative expression in various forms, implemented as a multimodal computational system with optional analog elements and experienced through a participatory process in which interactors have a non-trivial influence on progress, perspective, content, and/or outcome.	Koenitz, 2023, p. 5

examining data and findings from the multiple authors who are contributing to the definition of the concept, its fundamentals, its features, and so on.

Although multiple authors are contributing to the field, a scoping of the most relevant contributions on IDNs over the last decades highlights a prominence of few authors. Table 1 reports the dominant definitions provided in the academic literature.

The collected definitions show how the concept opens up from a mostly tech-view to an interdisciplinary space that intersects the two streams of Computer Science, and Arts and Humanities. Table 1 captures the fragmented, distributed and interactive nature of an IDN, showing how the majority of available definitions features a variety of foci, ranging from technical features to scope and fields of application, bringing together the technical aspects of the first with the creative and theoretical aspects of the latter.

On the one hand, in the context of IDNs, Computer Science plays a crucial role in providing the technical foundation and computational infrastructure, comprising areas such as human-computer interaction, artificial intelligence,

and software engineering. Computer Science contributes to the development of interactive systems, algorithms, and technologies that enable user interaction within digital narratives. It involves designing user interfaces, implementing interactive features, and leveraging computational techniques for narrative generation and adaptation. Additionally, Computer Science methods are utilised for data processing, user modelling, and evaluating user experiences within such narratives. On the other hand, IDNs draw upon the artistic and theoretical aspects of Arts and Humanities disciplines. They incorporate narrative theory, storytelling techniques, and cultural studies to create engaging and meaningful interactive experiences. Arts and Humanities contribute narrative expertise and critical analysis through the exploration of themes, characters, plot structures, and the socio-cultural implications of interactive narratives. They provide frameworks for analysing narrative elements, character development, and the impact of IDNs on audience reception and interpretation. Additionally, Arts and Humanities disciplines bring critical perspectives, ethical considerations, and cultural context to the design and evaluation of IDNs.

The interdisciplinary nature of IDNs lies in the fusion of Computer Science and Arts and Humanities. It involves collaboration between technologists, artists, and researchers from various fields. Computer Science contributes technical expertise to implement interactive features and computational frameworks, while Arts and Humanities bring narrative expertise and critical analysis necessary for effective storytelling and user engagement. This integration enables IDNs to explore innovative narrative forms, enhance user experiences, and examine the broader cultural and societal implications of interactive storytelling. By combining the computational capabilities of Computer Science with the creative and theoretical insights of Arts and Humanities, IDNs aspire to craft immersive, interactive, and culturally meaningful narrative experiences that deeply resonate with audiences while leveraging the potential of digital technologies.

By considering the bulk of definitions, a pivotal aspect pertains to how the introduction of IDN as a common term has clarified the conceptual ambiguity that existed in previous definitions. Specifically, it has addressed the confusion between the notions of IDNs, interactive drama (Laurel, 1991; Murray, 1997) or interactive fiction (Aarseth, 1997; Montfort, 2011), and the broader concept of interactive storytelling. While interactive drama and interactive fiction can be viewed as typologies of IDN with a focus on the narrative genre, they should be distinguished from interactive storytelling (Crawford, 2004), which comprehensively includes multiple forms of storytelling that provides the users with the ability to interact and shape the narrative to varying degrees. It can include both digital and non-digital media, such as live performances, choose-your-own-adventure books, role-playing games, live action role-playing games (LARP), improvisational theatre, and even the narrative resulting from the interaction with conversational agents. Although both engage the user by design, empowering it

Table 2: Thematic clusters from IDNs definition

	Thematic clusters	IDNs and definition highlights
1	IDN as a Form of Dramatic Experience	• IDN01: Interactive narrative involves users creating or influencing a dramatic storyline through actions, either assuming character roles, issuing commands, or manipulating the virtual world. It has applications in entertainment, education, and training. • IDN02: Interactive digital storytelling aims to generate compelling stories based on user input.
2	IDN as a Fusion of Artistic Vision and Technology	• IDN03: IDN connects artistic vision with technology, aiming to dissolve the division between creator, narrative artefact, and audience-turned-participant. It regards diverse artistic and research directions, from screen-based textual representations to virtual spaces with coherent narratives and synthetic characters. • IDN04: IDN is a novel form of expression where narrative and interactivity are deeply intertwined, similar to "system art" proposed by Roy Ascott.
3	IDN as an Expressive Narrative Form in Digital Media	• IDN05: IDN challenges traditional assumptions about narrative, with the audience's active role and malleable narratives enabled by digital media. • IDN06: IDN is an expressive narrative form in digital media, implemented as a computational system with potential narratives and experienced through a participatory process. • IDN07: IDN is an expressive form implemented as a computational system, with participants influencing the unfolding experience and resulting in instantiated stories. • IDN08: IDN is a narrative expression in various forms, implemented as a multimodal computational system, experienced through a participatory process with significant interactor influence.

to contribute to the narrative by making choices, providing input, and participating in the story's unfolding, IDNs specifically refer to experiences occurring within digital or virtual environments as to be seen in IDN01, IDN03, IDN05, IDN07, IDN08. On the other hand, interactive storytelling concerns a broader set of participatory narratives, including digital and non-digital media.

The definitions presented in Table 1 are organised into thematic clusters based on the analysis of their content. As such, Table 2 does not seek to offer a comprehensive analysis of the topics addressed in the discourse on IDN, but rather identifies and highlights the emerging thematic clusters that have emerged from the set of definitions analysed.

Cluster 1 looks at IDN as a captivating experience that seeks to generate dramatic stories by incorporating user input. This cluster is based on Laurel's (1991) definition of dramatic stories as opposed to narrative stories by the following properties: they favour enactment over description, intensification over extensification, and unity of action over episodic structure. As illustrated by Smed (2014, p. 22 – IDN02), IDN seeks to create narratives that captivate users through their active involvement. Riedl and Bulitko (2012, p. 68 – IDN01) emphasise the foundational role of users who assume character roles, issue commands, or manipulate virtual worlds to shape dramatic storylines. Their definition also highlights the multifaceted nature of IDN and its applications across domains such as entertainment, education, and training, where the interactive engagement of users enhances the overall narrative experience.

Cluster 2 portrays IDNs as the harmonious fusion of artistic vision and technology, facilitating the convergence of creative expression and narrative in-

teractivity. Koenitz and colleagues (Koenitz et al., 2015, p. 1 – IDN03) clarify the overarching goal of IDN in blurring the traditional boundaries between authors, narrative artefacts, and the audience-turned-participants. By combining artistic works with technological advancements, IDN embraces diverse artistic and research directions. From screen-based textual representations to virtual spaces hosting coherent narratives and synthetic characters, IDN pioneers the creation of immersive and dynamic narrative environments as 'system narratives' (Koenitz, 2015a, p. 52 – IDN04).

Cluster 3 intends IDN as an expressive narrative form in digital media that regards a transformative narrative paradigm, challenging established assumptions and harnessing the potential of digital media. Koenitz (2015b, p. 98 – IDN06) defines IDNs as an expressive narrative form that unfolds within digital media, implemented as computational systems housing potential narratives. He delves into the disruption caused by IDN, wherein audience engagement and the malleability of narratives stand as central tenets (2015b, pp. 91–92 – IDN05). Additionally, Koenitz further underscores the expressive nature of IDN (Koenitz, 2018, p. 108 – IDN07), highlighting how participants actively influence the unfolding experience and contribute to the instantiation of stories, broadening the scope of IDNs in 2023 (Koenitz, 2023, p. 5 – IDN08): a diverse narrative expression, realised through multimodal computational systems that afford significant interactor influence.

In this discourse, transversal to the three clusters, a prominent role is played by procedural rhetoric (Bogost, 2007), highlighting how the interactive systems within IDNs convey meaning and shape the narrative, leading to examine the rhetorical power of interactive elements, such as choices, branching narratives, and feedback mechanisms, in shaping user engagement and interpretation. Procedural rhetoric is a concept coined by Bogost (Bogost, 2007, 2021; Anderson et al., 2019), which refers to the persuasive ability of interactive systems to leverage their rules and mechanics to convey meanings. The concept of procedural rhetoric is originally founded on the premise that games and simulations can mirror the structure of the real world. The inherent parallelism between games and reality provides games with the distinctive ability of representing not only how things are, but also advocating for how they ought to be, enabling players to make arguments on desirable or undesirable behaviours within the depicted world. Such an approach to argumentation diverges from more traditional forms of rhetoric – such as verbal or visual modes – prompting the new classification of procedural rhetoric. IDNs, as interactive systems, rely on the interplay of various mechanics to convey meanings and engage players. Against this backdrop, IDNs that employ counter-narratives can exploit procedural rhetoric to communicate the underlying themes and perspectives of the topic addressed in a persuasive manner, shaping players' experiences and evoking specific understandings. Specifically, procedural rhetoric can be harnessed to reinforce and amplify the intended messages and ideologies embedded in the narrative. Through a wise

design of interactive choices and eventual gameplay elements, IDNs can support the exploration of alternative perspectives within the narrative context, shaping player experiences, fostering empathy, and prompting critical reflection on social, cultural, or political issues. For instance, the design choices of an IDN can simulate a mediated experience on the challenges and obstacles faced by marginalised individuals or present alternative scenarios that challenge the status quo. By immersing players in these experiences and engaging them in interactive decision-making, IDNs can challenge preconceived notions and engage players actively in the exploration and construction of meaning.

3. THEORETICAL BACKGROUND ON COUNTER-NARRATIVES

Since the need for action demands alternative narrative forms that tackle social issues, creating more engaging but equally informative messages, we can promote the IDNs as artefacts capable of articulating existing discourses by bringing out alternative strands to dominant thoughts within meaning-making and the process of negotiating meaning. In the last decade, there has been a notable increase in the emergence of IDNs that welcome manifestation and actively foster discourse on urgent or contentious topics, adopting alternative perspectives that deviate from the dominant narrative, in some cases even challenging it. Within this context, IDNs have encountered the concepts of counter-narrative and counter-storytelling, which extend beyond the mere retelling of marginalised individuals' stories to advocate for their viewpoints in a space that allows interaction at multiple levels. IDNs have become a powerful means for marginalised groups to convey their narratives, a practice that has significantly evolved over the past two decades. This evolution can be attributed to the development and enhancement of open access and user-friendly tools, which empower marginalised communities to express themselves by creating their own interactive stories. *Twine* (twinery.org), an open-source program for web-based interactive fiction, exemplifies this trend. By simply enclosing words and sentences within squared brackets, it allows the generation of branching stories, offering and exploring remarkable flexibility akin to the web itself. Since its inception in 2009, *Twine* has revolutionised the landscape of interactive art, digital narratives, and games (Harvey, 2014). It gave rise to a new form of expression characterised by an unconventional and poetic nature, distinct from the commercial mainstream. Its versatility, akin to that of the web itself, has enabled the emergence of new forms of games: queer, small, and poetic, which depart from conventional gaming. In this field, beyond mere creation of games, *Twine* has provided a voice to those who were left at the margins, and ensured an avenue of expression for groups historically alienated from the industry (Heron et al., 2014; Todd, 2015; Janine et al., 2007), paving the way for the formation of a vibrant and fresh queer and woman-orientated game-making community. At broad, what *Twine* and its user-friendly, intuitive interface did is allow non-programmers to develop IDNs with ease, outputting interactive stories as simple HTML pages with

branching narratives. As a result, *Twine* and a bunch of more recent although less established software have been empowering all aspiring IDN creators, regardless of coding expertise, ushering in a wealth of possibilities that promote inclusivity and diversity within the realm of IDN development.

In such a landscape, by incorporating counter-narrative, IDNs serve the purpose of representing and amplifying the voices and perspectives that are often overlooked or excluded from the dominant discourse. With their interactive and immersive nature, IDNs offer a unique space for such experiences and perspectives to be acknowledged and understood while exploiting affordances specific to the media to foster a more comprehensive understanding. They potentially engage players in diverse, transformative and thought-provoking narrative experiences that explore social issues, question existing paradigms, and promote inclusivity, thus leveraging interactivity for encouraging critical thinking, self-reflection, and participation. In light of this premise, in order to advance in this discourse and vet the interplay between IDNs and counter-narrative it becomes necessary to delve into the articulation of current definitions of counter-narrative and identify their foundational features. This exploration is essential to comprehending the potential role of IDNs in facilitating self-reflection processes and encouraging (in the long run) a more active engagement within a more inclusive, plural, and socially aware society.

3.1 DEFINING COUNTER-NARRATIVE

The analysis of the concepts in the literature depicts counter-narratives highly multidisciplinary, including heterogeneous viewpoints that bring together leading perspectives of seminal academics and practitioners as shown in Table 3.

When grouping these definitions according to their thematic perspectives, three main thematic clusters addressing counter-narratives evolve as follows: i) narrative inquire, ii) resistance and opposition to the hegemonic telling, and iii) lever to foster empowerment and agency (Table 4).

Cluster 1 points out how counter-storytelling and the inclusion of narratives offer a profound means of inquiry that goes beyond traditional approaches. According to Matsuda (1993, p. 212 – CN01), counter-narratives centre around narrative inquiries, emphasising the methodology rooted in social realities and lived experiences. These counter-narratives inherently challenge hegemonic stories and the bundle of presuppositions, perceived wisdom, and shared cultural understandings that individuals from dominant races bring to discussions on race. Solórzano and Yosso (2002, p. 36 – CN04) emphasise the multifaceted functions served by these counter-stories, including community building among marginalised groups, the disruption of established belief systems, the revelation of possibilities beyond marginalised experiences, and the demonstration of the transformative potential that arises from combining elements of both the story and current reality.

Table 3. Dominant counter-narrative definitions in the academic literature.

ID	Definition	Reference
CN01	[...] the idea of counter-storytelling and the inclusion of narratives as a mode of inquiry offer a methodology grounded in the particulars of the social realities and lived experiences [...]	Matsuda, 1993, p. 212
CN02	[Counter-narratives as] naming one's own reality" or "voice" by critical race theorists through "parables, chronicles, stories, counterstories, poetry, fiction and revisionist histories to illustrate the false necessity and irony of much of current civil rights doctrine	Ladson-Billings & Tate, 1995, p. 56
CN03	[Counter-story as] counter-reality that is experienced by subordinate groups, as opposed to those experiences of those in power	Delgado & Stefancic, 1995, p. 194
CN04	We believe counter-stories serve at least four functions as follows: (a) They can build community among those at the margins of society by putting a human and familiar face to educational theory and practice, (b) they can challenge the perceived wisdom of those at society's center by providing a context to understand and transform established belief systems, (c) they can open new windows into the reality of those at the margins of society by showing possibilities beyond the ones they live and demonstrating that they are not alone in their position, and (d) they can teach others that by combining elements from both the story and the current reality, one can construct another world that is richer than either the story or the reality alone.	Solórzano & Yosso, 2002, p. 36
CN05	counter-storytelling is a means of exposing and critiquing normalized dialogues that perpetuate racial stereotypes	DeCuir & Dixson, 2004, p. 27
CN06	Counter narratives only make sense in relation to something else, that which they are countering.The very name identifies it as a positional category, in tension with another category. The very name identifies it as a positional category, in tension with another category. But what is dominant and what is resistant are not, of course, static questions, but rather are forever shifting placements.	Bamberg & Andrews, 2004, p. x
CN07	The stories which people tell and live which offer resistance, either implicitly or explicitly, to dominant cultural narratives. [...] Counter-narratives exist in relation to master narratives, but they are not necessarily dichotomous entities.	Andrews, 2004, p. 1-2
CN08	Perspectives that run opposite or counter to the presumed order and control are counter narratives. These narratives, which do not agree with and are critical of the master narrative, often arise out of individual or group experiences that do not fit the mas- ter narratives. Counter narratives act to deconstruct the master narratives, and they offer alternatives to the dominant discourse in educational research. They provide, for example, multiple and conflicting models of understanding social and cultural identities.	Stanley, 2007, p. 14
CN09	Counter-narrative refers to the narratives that arise from the vantage point of those who have been historically marginalized. [...] the effect of a counter-narrative is to empower and give agency to those communities. By choosing their own words and telling their own stories, members of marginalized communities provide alternative points of view, helping to create complex narratives truly presenting their realities.	Mora, 2014, p. 1
CN10	The concept of counter- narratives covers resistance and opposition as told and framed by individuals and social groups. Counter- narratives are stories impacting on social settings that stand opposed to (perceived) dominant and powerful master-narratives.	Lueg & Lundholt, 2020, p. iii
CN11	Counter-narratives are able to achieve educational equity by giving voices to silenced and marginalized populations aimed at informing and educating dominant and elite groups, geared toward the ultimate goal of revealing the truth that "our society is deeply structured by racism" (Delgado, 1990, p. 98).	Miller et al., 2020, p. 273
CN12	Most affirmatively, counter-narratives can be interpreted as creative, innovative forces fostering beneficial societal change; forces holding productive potential for progress, development, as well as for ethical issues such as justice and accessible resources.	Lueg et al., 2020, p. 4
CN13	Counter-narratives are critical reinterpretations of dominant narrative models; they typically question the power structures underlying master- narratives and shed problematizing light on them. At the same time, however, it is important to acknowledge that individuals are largely unaware of the power structures they perpetuate through their narrative interpretations. Power dynamics play an important role in shaping not just the narrative webs in which we are entangled but also us as subjects who exercise our narrative agency by following and (re)interpreting culturally available narrative models. Power not only structures the options we have in constructing our life stories but also shapes the subject who chooses between and negotiates various narratives (see Allen, 2008, p. 165). Even when we engage in telling counter-narratives, we are not outside realms of power.	Meretoja, 2020, p. 34

Table 4: Thematic clusters from counter-narrative definitions

	Thematic clusters	Counter-narratives and definition highlights
1	Counter-narratives as Narrative Inquiries	• CN01: The concept of counter-storytelling and narratives as a mode of inquiry rooted in social realities and lived experiences. • CN04: Counter-narratives challenge dominant narratives, build community, challenge established belief systems, and offer new perspectives. Challenging perceived wisdom, they can open new windows into marginalised realities, and teach others to construct a richer world.
2	Counter-narratives as Resistance and Opposition	• CN02: Counter-narratives use various forms of storytelling to expose the false necessity and irony of prevailing civil rights doctrine. • CN03: Counter-narratives as counter-reality experienced by subordinate groups in opposition to the reality experiences of those in power. • CN05: Counter-storytelling is a means of exposing and critiquing normalised dialogues that perpetuate racial stereotypes. • CN06: Counter-narratives are positioned in tension with dominant narratives and have the potential for shifting placements. • CN07: Existing in relation to master narratives, counter-narratives offer resistance, explicit or implicit, to dominant cultural narratives. • CN10: Counter-narratives are stories opposing dominant and powerful master narratives, impacting social settings.
3	Empowerment and Agency through Counter-narratives	• CN08: Counter-narratives deconstruct master narratives, provide alternative perspectives, and challenge dominant discourse. • CN09: Counter-narratives empower marginalised communities by providing alternative viewpoints and complex narratives. • CN11: Counter-narratives achieve educational equity by giving voices to silenced and marginalised populations, revealing the structural racism in society. • CN12: Counter-narratives are creative and innovative forces that promote positive societal change, progress, development, and address ethical issues like justice and accessibility. • CN13: Counter-narratives critically reinterpret dominant narrative models, shedding light on power structures and narrative agency.

Cluster 2 focuses on counter-narratives as acts of resistance and opposition to dominant cultural narratives. Counter-narratives within this cluster involve 'naming one's own reality' and asserting one's voice, as critical race theorists Ladson-Billings and Tate (1995, p. 56 – CN02) emphasised. These narratives can take various forms, such as parables, chronicles, stories, counterstories, poetry, fiction, and revisionist histories, to illustrate the false necessity and irony inherent in prevailing civil rights doctrines, exposing and critiquing normalised dialogues that perpetuate racial stereotypes (DeCuir & Dixson, 2004, p. 27 – CN05). As a matter of fact, counter-narratives are situated in relation to master narratives (Andrews, 2004, pp. 1–2 – CN07) and challenge existing power dynamics, offering resistance to dominant cultural narratives and shedding light on the ever-shifting placements of dominance and resistance (Andrews, 2004, p. x – CN06). In this sense, counter-narratives can be understood as alternative realities experienced by subordinate groups, contrasting with the perspectives and experiences of those in positions of power (Delgado, 1995, p. 194 – CN03), impacting social settings (Lueg & Wolff Lundholt, 2020, p. iii – CN10).

Within Cluster 3, counter-narratives focus on empowerment and agency, particularly for historically marginalised communities. These narratives arise from individual or group experiences and present alternative perspectives that counter the presumed order and control established by the dominant master narrative, offering different models for comprehending social and cultural identities (Stanley, 2007, p. 14 – CN08). Marginalised communities reclaim their agency and empower themselves by choosing their own words and telling their stories (Mora, 2014, p. 1 – CN09). These narratives facilitate the creation of complex narratives that authentically present the realities of marginalised groups, giving voice to silenced populations and informing and educating dominant and elite groups (Miller et al., 2020, p. 273 – CN11). Moreover, counter-narratives are seen as creative and innovative forces that have the potential to foster beneficial societal change, addressing issues of justice and equitable access to resources (Lueg et al., 2020, p. 4 – CN12). However, it is essential to recognize that power dynamics shape not only the narrative options available to individuals but also influence how counter-narratives are interpreted and their impact on societal power structures (Meretoja, 2020, p. 34 – CN13).

4. METHODOLOGY

The eleventh issue of G|A|M|E is situated at a crowded crossroads of Game Studies, Human-Computer Interaction, Interactive Digital Narratives, Digital Storytelling, Transmedia Storytelling, Design, Media Studies, Sociology and Anthropology. Valuing the highly interdisciplinary nature of the topic, we aim at contributions addressing IDNs as counter-hegemonic narratives from different and even cross-sector scientific perspectives. In order to do that, we conducted a literature review on IDNs and counter-narratives to collect the main definitions to identify topics and the relevant clusters covered. Specifically, this contribution triangulates and systematises the existing corpus of knowledge to understand what is meant for IDN and counter-narrative, their key themes, theoretical frameworks, and empirical studies surrounding them, highlighting the main thematic perspectives that emerged. Then, the essays written by 5 scholars were mapped against such knowledge to identify and discuss which aspects are covered and which are not. The selected papers and the order of their presentation should allow the readers to understand better how IDNs can serve as counter-hegemonic narratives and expressions of identity by challenging dominant ideologies and providing a platform for alternative narratives and identities.

5. RESULTS

Building upon the theoretical background presented so far, IDNs can be designed to challenge the dominant discourse. They have the potential to disrupt and subvert dominant narratives by offering alternative perspectives and narratives that challenge prevailing ideologies. They provide a space where marginalised communities and individuals can share their stories, experiences,

and perspectives that often go unheard or misrepresented in mainstream media. Still, it needs to be said that this is not an automatism and that the personal connection between an author of an IDN and its topic seems to be very crucial for the perspectives presented and the meaningful choices allowed.

Given this framework, the papers of this special issue discuss IDN from different perspectives, all addressing in which ways IDNs relate to counter-narrative, and resulting in an overview of how the two domains encounter. Among the topics communicated, the ones of queerness as well as questions of gender identity and connected heteronomous perspectives towards people's behavioural options occur most frequently. In creating IDNs, the designers apply different strategies in order to employ the features and affordances of the art form and to make sure that the player/user experiences the intended idea. Poirier-Poulin's article shows by the example of *A Summer's End* how trust and creating a feeling of intimacy towards the character of the IDN forms a strong bond between the player/user and the narrative, resulting in the wish and need to care for them. This can be enhanced by breaking the fourth wall, which is done in that example by sharing the inner monologue of the character, but can also be less subtle, as seen in *She-Hulk: Attorney at Law* discussed by Barbara and Haahr. Here the character directly speaks to the player/user asking them for another turn in the story. As an add on to the strategies already discussed, Barbara and Haahr elaborate on how presenting a character's narrative as independent alongside the perspectives of designers and player/users can allow the latter to wish for the best ending for the characters, even though this might be distanced from their own desires or worldviews. For this it is important that the character enters into a complicity with the player, which can be created by breaking the fourth wall, for example. Similar ways of interweaving characters and players are discussed by Taylor-Giles and Turner, who emphasise the necessity of creating a notion of 'co-desire' between the both, to sync motives and actions. Taylor-Giles and Turner illustrate this by the example of generating a shared 'vulnerability' to be achieved when the player's sense of emplacement and desire mirrors that of her on-screen representation. The authors argue that this can be supported by intensive character descriptions. In addition Ross Dionne, Sacy, and Therrien show how IDN can function as a safe environment for player/users to explore new identities – also or especially when placed in toxic environments or otherwise unbalanced relationships. Then, Codamo and Rossi's investigation of the RPG game Omori exemplifies the potentialities of IDNs in leveraging emotional experiences. It is highlighted how the game's narrative mechanics and the use of environmental storytelling are able to impact on players' empathic engagement. In particular, the present contribution details how these design elements intricately intertwine complex emotional and psychological issues and explores how narrative depth and user interaction can synergistically create an immersive narrative experience. Euteneuer therefore

moves away from looking at concrete IDN and their specifics to the idea of empowering people to design IDNs themselves. This can be seen as an important way in order to diversify designers' communication aims and enable marginalised groups to allow others to experience their perspectives.

Moving from the perspective of the designers who created the IDNs to the way in which these have been addressed and discussed in the papers of this special issue, Figure 1 depicts how each contribution is related to the clusters of IDNs and counter-narratives outlined in Table 2 and Table 4 respectively.

Figure 1: IDN and counter-narrative clusters associated with the curated articles of the special issue.
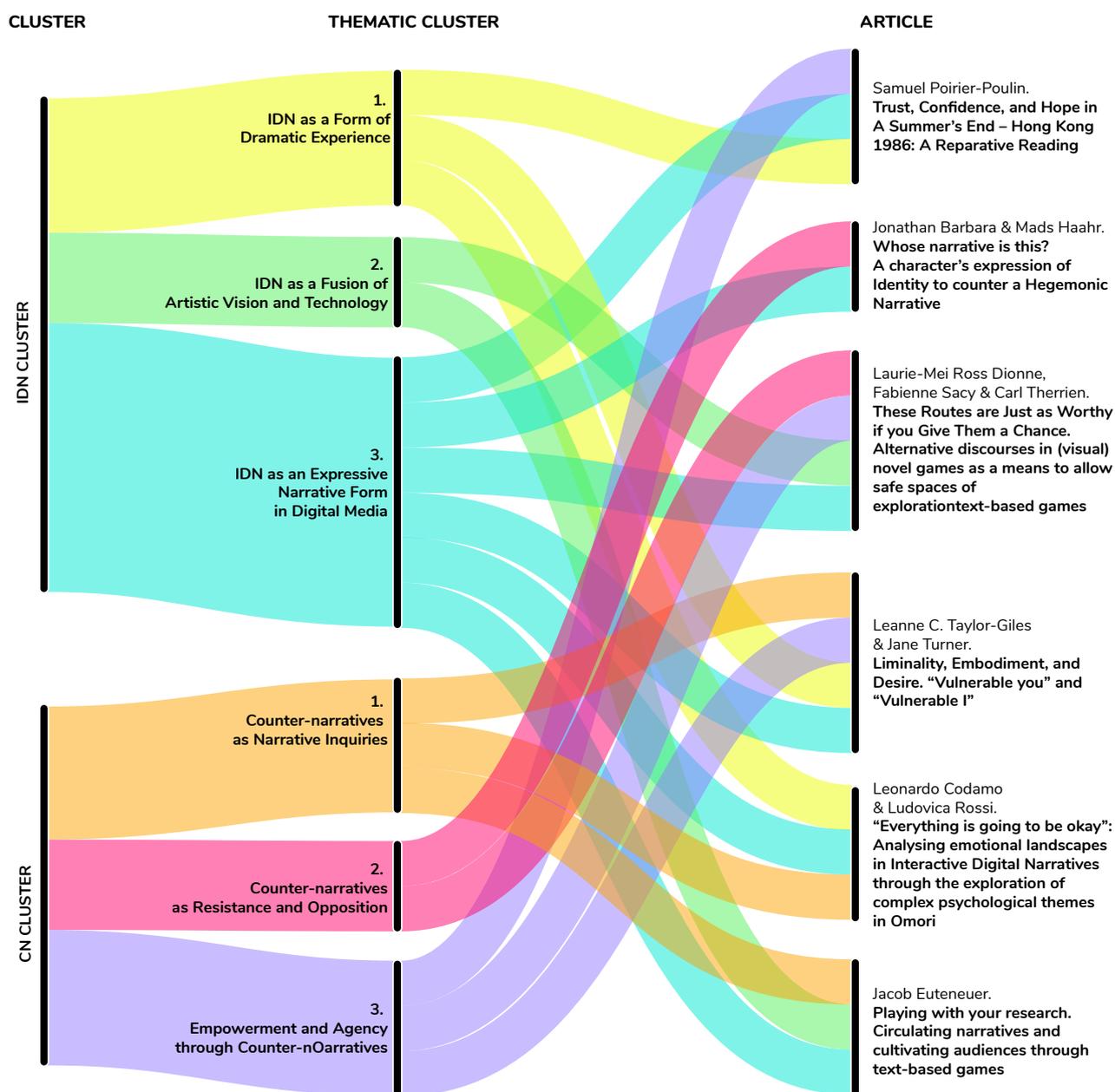
The associations depicted are established based on a thorough analysis of the articles included in the special issue. By examining the core themes and concepts explored in each contribution, we identified the ways in which the articles addressed different clusters related to IDNs and counter-narratives. Through this analysis, we determined the main points of convergence and divergence among the articles, shedding light on how each discusses IDNs and counter-narratives.

Upon close examination of the contributions and their interrelation with the IDNs thematic clusters, it becomes evident that all authors concur in perceiving and exploring IDN as an Expressive Narrative form in Digital Media. Only partially, the contributions are focussing on IDN as a dramatic experience and IDN as a fusion of artistic vision and technology remains somewhat partial in comparison.

IDN Cluster 1 focuses on 'IDN as a Form of Dramatic Experience', exploring the captivating nature of interactive narratives that aim to generate dramatic stories through user input. The articles by Poirier-Poulin, and Taylor-Giles and Turner align with this cluster. The first delves into the theme of trust and its variations in the visual novel, showcasing how trust unfolds between game characters, players, and the video game medium. IDNs are recognised to foster intimacy and emotional connections between players and game characters. Moreover, they can provide positive and empowering queer representations. Through the unfolding of the narrative, trust is built between the player and the characters. Trust allows players to empathise with the characters and feel empowered as they accompany them on their journey. The author identifies a reparative reading approach as a prompt for seeking healing, reparation, and transformative understanding, exploring the impact on queer players and the potential to evoke hope and optimism. Likewise, Taylor-Giles and Turner's article reinforces the dramatic experience in IDNs. The article explores how vulnerability is achieved between players and their on-screen representations, emphasising the importance of embodiment in enhancing the narrative identity. The idea of desire is used to classify an active player who subverts her own goals to mesh with those expressed by the character she controls. The idea of desire is used to classify an active player who subverts her own goals to mesh with those expressed by the character she controls. The concept of liminality, as an in-between state, is presented as a dynamic engine that maintains tension and vulnerability within immersive gaming experiences. Liminality is experienced by players who are fully immersed in the game world through sympathetic resonance with the player character, where shared desires or goals between player and character cultivate this resonance. The study highlights the importance of embodiment in narrative and character-oriented terms, rather than purely as a gameplay-centric concept. By discussing methods for increasing player-character co-desire and generating empathy, the article exemplifies how IDNs offer a deeply immersive and dramatic experience for users. Ultimately, the article by Codamo and

Rossi delves into how IDNs effectively serve as a medium to foster empathy and introduce users to disruptive perspectives that challenge conventional narrative frameworks. It scrutinises the engagement of players with the values articulated by the interactive digital artefact, focusing on the psychological interplay between game rules, narrative, and player interaction. Specifically, the analysis of the game Omori exemplifies how narrative mechanics can induce strong empathetic responses and cultivate a deeper connection with the narrative.

IDN Cluster 2 pertains to 'IDN as a Fusion of Artistic Vision and Technology', representing the harmonious merging of creative expression and narrative interactivity. Two articles bolster this cluster: one authored by Euteneuer and the other by Ross Dionne, Sacy and Therrien. Euteneuer's article discusses how IDNs, created by academic researchers using *Twine* software, combine artistic works with technological advancements to disseminate important messages and engage audiences. The fusion of creative expression and text-based interactivity facilitates the spread of research findings in persuasive and innovative ways. Leveraging on affordances such as choice-driven narrative and their agency, IDNs engage users in active participation with the research content. As such, they are seen as a way to bridge the gap between academia and the public, able to make research more accessible and understandable for wider audiences while making it actionable for practitioners and stakeholders. Similarly, Ross Dionne, Sacy and Therrien's article emphasises how visual novel games serve as a conduit for exploring diverse identities and sociocultural themes that are often underrepresented in mainstream media. By adapting specific templates and creating alternative discourses, IDNs in visual novels merge artistic vision with interactive narratives, enabling creators to explore new creative directions.

IDN Cluster 3 explores 'IDN as an Expressive Narrative Form in Digital Media', challenging established assumptions and harnessing the potential of digital media. Often bringing complementary perspectives, all the articles contribute to this cluster. Barbara and Haahr's article explores how IDNs offer a transformative narrative paradigm by enabling characters to challenge hegemonic narratives. They stress how balancing character narratives with player narratives can facilitate identification (Cohen, 2001; Shaw, 2010), and writing character narratives that challenge stereotypes. From a formal standpoint, they highlight the level of control IDNs give over the narrative and the plot of the story, emphasising the importance of providing agency to the users in shaping the narrative as a plot rather than just the narrative discourse. On the content side, this embodies the expressive nature of IDNs, where character-driven agency provides a platform for inclusive storytelling. Ross Dionne, Sacy, and Therrien's article highlights how novel games use branching narratives and alternate timelines to position themselves in the corpus of IDNs, offering players opportunities to relate to their avatars and explore various identities, contributing to meaningful individual stories. In line with this, Poirier-Poulin's work explores the concept of multiperspectivity, emphasising the importance of trust

and the relevance of including meaningful choices. The author discusses the narrative device of the inner monologue as an intimate dialogue with players, enhancing their connection with the characters and rendering them active participants in the storyworld. Moreover, IDNs are seen as a sort of 'intimacy simulator' that fosters a supportive relationship of care between players and characters. Through this intimate connection, players can accompany the characters through their journey, becoming supportive intermediaries, and nurturing a relationship of care with them. In doing so, they can gain a deeper understanding of queer experiences and perspectives, fostering empathy and familiarity with the queer topic. However, this expressive capacity of IDNs is seen as impacted by technological mediation. Taylor–Giles and Turner's article advocates for a re-emplacement of liminality through (dis)embodiment, aligning player and character desires and strengthening the player's sense of presence in the game world. Codamo and Rossi enrich such perspectives by examining how IDNs leverage their unique narrative capabilities to foster empathy through complex characters and the symbolic representation of intricate themes. Their analysis vets into the transformative capacity of IDNs to create high emotional engagement, thus advancing a comprehension of how narrative mechanics and character development can profoundly influence and reshape players' perceptions of narrative and identity within digital media. By interweaving narrative and gameplay, IDNs allow players to deeply engage with and process challenging themes on a fictional level, fostering a genuine, empathetic connection with both the characters and the story. From a complementary perspective, Euteneuer's article introduces a complementary perspective on the expressive capacity of IDNs. Namely, their possible use to remix and transform academic research into engaging narratives, exploiting Twine. His contribution specifically points out how by broadening the scope of IDNs through multimodal computational systems that concern diverse and interactive narrative expressions, allowing an active participation of the audience, creators could reorient their research for a more engaging experience that puts the audience at the centre.

With regard to the integration of counter-narratives the most prominent feature of IDNs is recognised in creating empowerment and agency through narratives that challenge the dominant discourse. Compared to that, counter-narratives as narrative inquiries as well as as resistance and opposition play a less crucial role (see Figure 1). This gives the impression that IDN predominantly is employed as an expressive form of media art crafted to empower marginalised individuals by allowing others to understand their perspectives towards the world by creating meaningful connections and building bonds between player/users and characters. In order for this to work, a deeper understanding of the perspectives to be shared is needed on the side of the designers, therefore especially marginalised groups need to be empowered to create their own IDNs to allow them to benefit from the art forms potential to raise awareness and create empathy.

When discussed against the counter-narrative thematic clusters (Table 4) one finds the following distribution of the papers presented in this special issue.

CN Cluster 1 delves into the concept of 'Counter-narratives as Narrative Inquiries', exploring how they transcend traditional approaches to inquiry by delving into social realities and lived experiences. Euteneuer's article contributes to this cluster by discussing a shift towards narrative inquiries that actively engage users in interactive and participatory storytelling. The author discusses research-based IDNs as a means for academic researchers to spread important messages while fostering a deeper understanding of research subjects. Through them, researchers, particularly undergraduate students, can make use of software to create interactive narratives that contextualise their research in terms of systems thinking and audience-based reasoning. This approach allows for a more profound exploration of research subjects and facilitates engagement with broader audiences, making IDNs a powerful tool for counter-storytelling that challenges dominant narratives. Taylor-Giles and Turner's article also aligns with this cluster, as it revisits the notion of liminality as a threshold state and explores the potential of interactive digital narratives and video games to scaffold dramatic narrative identity. By analysing games like Hideo Kojima's Death Stranding and Playmestudio's The Signifier, the authors highlight the importance of embodiment and vulnerability in fostering empathy and a sense of closeness between players and their on-screen representations. This emphasis on embodiment mirrors the core aspects of counter-narratives that seek to challenge dominant narratives by presenting alternative perspectives rooted in lived experiences and emotional engagement. Finally, Codamo and Rossi explore the effectiveness that IDNs have in shedding light on complex issues and social challenges. Using Omori as a case study, the authors focus on analysing how narrative mechanics and aesthetics serve as potential vectors for addressing issues such as depression, anxiety, isolation, and trauma responses, which are often misrepresented or stigmatised. By portraying such psychological issues through a symbolic language of textual investigations, a nonlinear narrative structure and an audiovisual repertoire that oscillates between the whimsical and the disturbing, players gain a deeper understanding of the protagonist's inner struggles in overcoming traumatic experiences and societal expectations.

CN Cluster 2 centres on counter-narratives as acts of resistance and opposition to dominant cultural narratives. Two articles align with this cluster: one authored by Barbara and Haahr, and the other by Ross Dionne, Sacy, and Therrien. Barbara and Haahr's article connects to this cluster by exploring how interactive narratives can favour character narratives as a form of resistance to hegemonic agency. The study draws from the final episode of Marvel's *She-Hulk: Attorney at Law* series, exemplifying how agency can be used to challenge established narratives. This aligns with the aforementioned concept of counter-narratives as 'naming one's own reality' and asserting one's voice against normalised dialogues that perpetuate stereotypes. However, the authors critically analyse

the concept of interactivity, cautioning against the illusion of control provided to users and how it can be used to reinforce hegemonic power structures rather than countering them. Ross Dionne, Sacy, and Therrien's article highlights how visual novels offer safe spaces for exploration, allowing various identities, including queer identities, to be portrayed in compassionate and humorous ways. By creating alternative discourses within these games, the authors showcase how counter-narratives can disrupt prevailing belief systems and demonstrate transformative potential. This aligns with the resistance and opposition aspect of counter-narratives, where marginalised groups use storytelling to challenge existing power dynamics and expose the irony in prevailing civil rights doctrines.

In CN Cluster 3, the focus is on empowerment and agency through counter-narratives, particularly for historically marginalised communities. The contributions of three articles can be associated with it: the one authored by Poirier-Poulin, that by Ross Dionne, Sacy, and Therrien, and that by Taylor-Giles and Turner. Poirier-Poulin's article contributes to this cluster by analysing trust as a theme in the visual novel A Summer's End – Hong Kong 1986. The author adopts a discerning perspective concerning trust, queer representation, and counter-narrative, deftly interweaving these elements into a compelling narrative of queer love. IDNs can give space to positive portrayal of queer individuals and relationships, affording them authentic representation with due respect to their complexities. This conscious and mindful approach towards queer representation serves as a counter-narrative that boldly challenges the long-established heteronormative norms pervasive in the 1980s society. Ross Dionne, Sacy, and Therrien's article emphasises how visual novels serve as a conduit for exploring various identities that are often not well represented in compassionate stories and environments. By contextualising these alternative discourses in the Japanese market, the article highlights the transformative power of counter-narratives that challenge established assumptions and offer safe spaces for exploration. Through humour and unapologetic storytelling, the authors discuss how narratives can address real traumas while also using laughter as a defence mechanism. They create spaces for understanding, belonging, and positive representations of diverse relationships, encouraging players to explore and appreciate the complexity of queer experiences. Finally, Taylor-Giles and Turner's article contributes by discussing the vulnerability and closeness that can be achieved between players and player characters in IDNs. By emphasising the importance of embodiment and player-character co-desire, the article highlights how IDNs enable participants to actively influence the unfolding experience and contribute to the instantiation of stories.This empowerment of participants aligns with the concept of counter-narratives offering alternative perspectives and empowering marginalised groups to reclaim their agency and tell their own stories. The game encourages players to empathise with characters, reinforcing their position as dramatic agents and increasing player engagement. Liminality of players is explored as dual entities – both as characters within the game world and as real individuals controlling

those characters. They engage in moments of meaning-making and meaning-breaking, breaking the compact between the player and her in-game character to create a new and stronger bond. Counter-narratives challenge the conventional storytelling norms by delving into themes of identity, reality, and interstitial identities that transgress binary states. The dynamic connection between narrative identity, emplotting, and embodiment is a central point of discussion.

6. IDNS AS COUNTER-NARRATIVES

The contributions collectively illustrate how IDNs can challenge dominant discourses, disrupt prevailing ideologies, and offer alternative perspectives that challenge stereotypes and hegemonic power structures. What emerged from the study is that counter-narratives and IDNs share commonalities and intersect in various ways, highlighting their relationship within the broader context of storytelling and narrative expression. On the one hand, IDNs allow indeed manifestation and emergence of urgent or pressing/virulent topics from perspectives that differ from the hegemonic narrative, acting as interactive systems of representation and reduction (Geertz, 1973; Goffman, 1974) able to welcome meaningful and engaging stories. On the other hand, counter-narrative and counter-storytelling as narratives advancing the point of those who have been historically marginalised go far beyond telling the stories of those in the margins (Miller et al., 2020). Moreover, while counter-narratives empower and provide agency to communities from the dominant perspective and thus contribute to multiperspectivity (Hartner, 2014), IDNs express identity and perspective while allowing interaction and participation in the story.

As such, both can play an important role in promoting sustainability and responsibility, being a vehicle for expressing identity and valuing diversity. Counter-narratives serve as narratives that challenge and oppose dominant or master narratives, as explored in the set of definitions presented in Table 3. They aim to expose and critique normalised dialogues (DeCuir & Dixson, 2004), deconstruct power structures, and provide alternative viewpoints (Mora, 2014) to challenge established belief systems. In doing so, counter-narratives empower people at the margins by giving voice to silenced populations (Miller et al., 2020), addressing issues of equity, revealing structural inequalities, reshaping narratives, and promoting social justice (Lueg et al., 2020). IDNs constitute a distinct form of narrative expression in the digital realm (Koenitz, 2015b). As outlined in the set of definitions in Table 1, IDNs involve users actively creating and influencing dramatic storylines through their actions, be it assuming character roles, issuing commands, or manipulating the virtual world (Riedl & Bulitko, 2012b). IDNs fuse artistic vision with technology (Koenitz et al., 2015), challenging traditional assumptions about narrative by incorporating interactivity, malleable narratives enabled by digital media (Koenitz, 2015b), and the audience's active role in shaping the narrative experience.

The connection between counter-narratives and IDNs becomes evident when considering their shared emphasis on resistance, alternative viewpoints, and the disruption of dominant narratives. Counter-narratives, as a form of resistance and opposition, challenge dominant cultural narratives and offer alternative perspectives. Similarly, IDNs challenge traditional assumptions about narrative by providing platforms for the audience's active role, enabling them to shape and influence the unfolding experience. Furthermore, counter-narratives and IDNs are driven by a desire to bring societal change. Counter-narratives are creative and innovative forces promoting progress, development, justice, and accessible resources. Similarly, IDNs aim to generate compelling stories based on user input, often with entertainment, education, and training applications. By empowering individuals and communities to share their stories and engage in interactive storytelling, both counter-narratives and IDNs contribute to broader social transformations.

In summary, counter-narratives and IDNs intersect in their shared goals of challenging traditional assumptions, empowering marginalised communities by giving them agency and providing alternative perspectives that challenge established power structures. While Counter Narratives primarily operate in the realm of narrative inquiry and critique, IDNs provide a technological platform for expressing and exploring alternative narratives. Together, they offer valuable insights into the power of storytelling, interactivity, and participatory processes in shaping our understanding of the world and fostering inclusive and diverse narratives, critical engagement, and promoting social change.

The analysis of the curated articles of this special issue reveals a notable disparity in the visibility of certain marginalised groups compared to others. While some groups find representation and recognition within IDNs, there are still underrepresented communities whose narratives are not adequately portrayed. This observation underscores the importance of disseminating knowledge about the tools and design strategies employed in IDNs, particularly to those individuals and communities who remain relatively unnoticed or overlooked in mainstream societal awareness.

By sharing knowledge about the creation and implementation of IDNs, we can empower these marginalised groups to tell their own stories and share their unique perspectives through the medium. Equipping them with the necessary tools and understanding of design strategies will enable them to participate actively in shaping the narratives within IDNs and foster a more diverse and inclusive landscape of interactive digital storytelling. This knowledge-sharing process can act as a catalyst for empowering these communities, giving them a platform to express their experiences, challenges, and triumphs, which are often overshadowed by dominant narratives. In essence, also the identification of uneven visibility of marginalised groups should gain attention, calling for a proactive effort to bridge this gap through education and empowerment. By extending support, resources, and guidance to those who have been less repre-

sented in the medium, we can work towards amplifying their voices, fostering empathy, and raising awareness of their unique stories and struggles. In doing so, IDNs can become a more inclusive and reflective narrative form, one that truly represents the diverse tapestry of human experiences and counteracts the perpetuation of marginalisation in digital media.

7. CONCLUSIONS

In light of such premises, the eleventh issue of G|A|M|E investigates further how IDNs foster engaging experiences promoting critically informed reflection of hegemonic narratives while sensitising towards views mostly out of the mainstream. It means deepening this discussion, bringing further and broader critical understanding. We propose to expand the perspective from that of the player to that of the content and designer: from the significance of making meaningful choices and seeing their implications to counter-narratives and storytelling in games and interactive media as ways of expression.

Also confirmed by the analysis, the role of the author and/or designer, which emerges as an interpreter who shapes IDNs based on their own beliefs and perspectives, which are integrated in fictional worlds, their components and their stories are built. This promotes the idea that IDNs' potential to transfer counter-narratives rises and falls with the individual designing person and is not a feature of IDN per se. The creators exercise their agency in shaping fictional worlds, defining the meanings and values on the ground of the world, their translation into metaphors and how they are shaped as narrative components, thus embedding their unique viewpoints into the very essence of the world. Poirier-Poulin, and Taylor-Giles and Turner further contribute to this topic with complementary perspectives. Poirier-Poulin highlights the significance of trust in fostering meaningful connections between players and characters created, exploring the relationships that can be activated and how they impact the overall experience. Similarly, Leanne Taylor-Giles and Jane Turner emphasise the importance of player-character co-desire and embodiment, which depends on the designer's intentional choices and creative vision, which is then object of alteration due to the interaction with the players and their choices. These examples underscore the notion that IDNs' potential to transfer counter-narratives lies not solely in the medium itself but also in the thoughtful curation and design decisions of the individual crafting the narrative. Together with the understanding of the story, the process of interpreting meanings entailed in the story, its unfolding, and engagement possibilities can be regarded as one of the modalities through which the user participates in understanding the significance, negotiating the meaning of the experiences (Bruner, 1990, 1991).

Given this premise, the issue digs into interactive storytelling and digital narratives (IDNs) to challenge the hegemonic narrative as a dominant perspective. IDNs are intended to strengthen their bonds with audiences which

acquire possibilities of interaction with the content to different extents. In particular, they surface as challenging spaces to explore, discuss, and question relevant social topics. Together with the understanding of the story, the process of interpreting meanings entailed in the story, its unfolding, and engagement possibilities can be regarded as one of the modalities through which the audience-turned-participant (Koenitz et al., 2015, p. 1) participates in understanding the significance of the experience.

REFERENCES

Arseth, E. (1997). *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins University Press.

Aarseth, E. (2012). A Narrative Theory of Games. *Proceedings of the International Conference on the Foundations of Digital Games*, 129–133. https://doi.org/10.1145/2282338.2282365

Ackermann, J., Egger, B., & Scharlach, R. (2020). Programming the Postdigital: Curation of Appropriation Processes in (Collaborative) Creative Coding Spaces. *Postdigital Science and Education*, *2*(2), 416–441. https://doi.org/10.1007/s42438-019-00088-1

Aha, D., & Coman, A. (2017). The AI Rebellion: Changing the Narrative. *Proceedings of the AAAI Conference on Artificial Intelligence*, *31*(1). https://doi.org/10.1609/aaai.v31i1.11141

Ammanabrolu, P., Broniec, W., Mueller, A., Paul, J., & Riedl, M. O. (2020). *Toward Automated Quest Generation in Text-Adventure Games*.

Ammanabrolu, P., Cheung, W., Tu, D., Broniec, W., & Riedl, M. (2020). Bringing Stories Alive: Generating Interactive Fiction Worlds. *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, *16*(1), 3–9. https://doi.org/10.1609/aiide.v16i1.7400

Ammanabrolu, P., & Riedl, M. O. (2021). Situated language learning via interactive narratives. *Patterns*, *2*(9), 100316. https://doi.org/10.1016/j.patter.2021.100316

Anderson, B. R., Karzmark, C. R., & Wardrip-Fruin, N. (2019). The Psychological Reality of Procedural Rhetoric. *Proceedings of the 14th International Conference on the Foundations of Digital Games*. https://doi.org/10.1145/3337722.3337751

Andrews, M. (2004). Opening to the original contributions: Counter-narratives and the power to oppose. In M. Bamberg & M. Andrews (Eds.), *Considering counter-narratives: Narrating, resisting, making sense* (Vol. 4, pp. 1–6). John Benjamins Publishing. https://doi.org/10.1075/sin.4.02and

Bogost, I. (2007). *Persuasive Games: The Expressive Power of Videogames*. The MIT Press.

Bogost, I. (2021). *Persuasive Gaming in Context* (T. De La Hera, J. Jansz, J. Raessens, & B. Schouten, Eds.; pp. 29–40). Amsterdam University Press. https://doi.org/10.1515/9789048543939-003

Bruner, J. (1990). *Acts of Meaning*. Harvard University Press.

Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry*, *18*(1), 1–21. https://doi.org/10.1086/448619

Ciancia, M. (2018). *Transmedia Design Framework: Design-Oriented Approach to Transmedia Practice*. FrancoAngeli.

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, *4*(3), 245–264.

Coleridge, S. T. (1817). *Biographia Literaria: Or, Biographical Sketches of My Literary Life and Opinions*. Rest Fenner, 23, Paternoster Row.

Crawford, C. (2004). *Chris Crawford on Interactive Storytelling*. New Riders.

DeCuir, J. T., & Dixson, A. D. (2004). "So When It Comes Out, They Aren't That Surprised That It Is There": Using Critical Race Theory as a Tool of Analysis of Race and Racism in Education. *Educational Researcher*, *33*(5), 26–31. https://doi.org/10.3102/0013189X033005026

Delgado, R. (1995). *The Rodrigo chronicles: Conversations about America and race*. NYU Press.

Dubbelman, T., Roth, C., & Koenitz, H. (2018). Interactive Digital Narratives (IDN) for Change. In R. Rouse, H. Koenitz, & M. Haahr (Eds.), *Interactive Storytelling* (pp. 591–602). Springer International.

El-Nasr, M. S. (2004). A User-Centric Adaptive Story Architecture: Borrowing from Acting Theories. *Proceedings of the 2004 ACM SIGCHI International Conference on Advances in Computer Entertainment Technology*, 109–116. https://doi.org/10.1145/1067343.1067356

Fernández-Vara, C. (2014). *Introduction to Game Analysis*. Routledge.

Freiknecht, J., & Effelsberg, W. (2020). Procedural Generation of Interactive Stories Using Language Models. *Proceedings of the 15th International Conference on the Foundations of Digital Games.* https://doi.org/10.1145/3402942.3409599

Geertz, C. (1973). *The interpretation of Cultures: Selected essays* (Vol. 5019). Basic Books.

Genette, G. (1988). *Narrative discourse revisited.* Cornell University Press.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience.* Harvard University Press.

Green, D., Hargood, C., & Charles, F. (2021). Use of Tools: UX Principles for Interactive Narrative Authoring Tools. *Journal on Computing and Cultural Heritage*, *14*(3). https://doi.org/10.1145/3458769

Greimas, A. J. (1983). *Structural semantics: An attempt at a method.* University of Nebraska Press.

Grishakova, M., & Ryan, M.-L. (Eds.). (2011). *Intermediality and Storytelling.* De Gruyter. https://doi.org/10.1515/9783110237740

Hartner, M. (2014). Multiperspectivity. In P. Hühn, J. C. Meister, J. Pier, & W. Schmid (Eds.), *Handbook of Narratology* (pp. 353–363). De Gruyter. https://doi.org/doi:10.1515/9783110316469.353

Harvey, A. (2014). Twine's revolution: Democratization, depoliticization, and the queering of game design. *G| A| M| E Games as Art, Media, Entertainment*, *1*(3).

Heron, M. J., Belford, P., & Goker, A. (2014). Sexism in the Circuitry: Female Participation in Male-Dominated Popular Computer Culture. *SIGCAS Comput. Soc.*, *44*(4), 18–29. https://doi.org/10.1145/2695577.2695582

Janine, F., Tracy, F., Ford, M. J., & Celia, P. (2007, September). The Hegemony of Play. *DiGRA &#3907 - Proceedings of the 2007 DiGRA International Conference: Situated Play.* http://www.digra.org/wp-content/uploads/digital-library/07312.31224.pdf

Kim, S.-., & Kim, S. (2016). Survey on the narrative structure of the interactive storytelling authoring system. *International Journal of Applied Engineering Research*, *11*(18), 9236–9239.

Koenitz, H. (2010). Towards a Theoretical Framework for Interactive Digital Narrative. In R. Aylett, M. Y. Lim, S. Louchart, P. Petta, & M. Riedl (Eds.), *Interactive Storytelling* (pp. 176–185). Springer Berlin Heidelberg.

Koenitz, H. (2015a). Design Approaches for Interactive Digital Narrative. In H. Schoenau-Fog, L. E. Bruni, S. Louchart, & S. Baceviciute (Eds.), *Interactive Storytelling* (Vol. 9445, pp. 50–57). Springer International.

Koenitz, H. (2015b). Towards a Specific Theory of Interactive Digital Narrative. In H. Koenitz, G. Ferri, M. Haahr, D. Sezen, & T. İ. Sezen (Eds.), *Interactive Digital Narrative: History, Theory and Practice* (pp. 91–105). Routledge.

Koenitz, H. (2016). Design Strategies for Interactive Digital Narratives. *Proceedings of the ACM International Conference on Interactive Experiences for TV and Online Video*, 189–191. https://doi.org/10.1145/2932206.2932428

Koenitz, H. (2018). *Thoughts on a discipline for the study of interactive digital narratives: Vol. 11318 LNCS.*

Koenitz, H. (2023). *Understanding Interactive Digital Narrative. Immersive Expressions for a Complex Time.* Routledge. https://doi.org/10.4324/9781003106425

Koenitz, H., Barbara, J., & Bakk, A. K. (2022). An Ethics Framework for Interactive Digital Narrative Authoring. In C. Hargood, D. E. Millard, A. Mitchell, & U. Spierling (Eds.), *The Authoring Problem: Challenges in Supporting Authoring for Interactive Digital Narratives* (pp. 335–351). Springer International Publishing. https://doi.org/10.1007/978-3-031-05214-9_21

Koenitz, H., Barbara, J., & Eladhari, M. P. (2022). Interactive digital narrative (IDN)—New ways to represent complexity and facilitate digitally empowered citizens. *New Review of Hypermedia and Multimedia*, *28*(3–4), 76–96. https://doi.org/10.1080/13614568.2023.2181503

Koenitz, H., Dubbelman, T., & Roth, C. (2019). An Educational Program in Interactive Narrative Design. In R. E. Cardona-Rivera, A. Sullivan, & R. M. Young (Eds.), *Interactive Storytelling* (pp. 22–25). Springer International.

Koenitz, H., Ferri, G., Haahr, M., Sezen, D., & Sezen, T. İ. (Eds.). (2015). *Interactive Digital Narrative: History, Theory and Practice.* Routledge.

Kreminski, M., & Wardrip-Fruin, N. (2019). Generative Games as Storytelling Partners. *Proceedings of the 14th International Conference on the Foundations of Digital Games.* https://doi.org/10.1145/3337722.3341861

Ladson-Billings, G., & Tate, W. F. (1995). Toward a Critical Race Theory of Education. *Teachers College Record*, *97*(1), 47–68. https://doi.org/10.1177/016146819509700104

Laurel, B. (1991). *Computer as Theatre: A Dramatic Theory of Interactive Experience.* Addison-Wesley Longman.

Lueg, K., Bager, A. S., & Lundholt, M. W. (2020). Introduction: What counter-narratives are: Dimensions and levels of a theory of middle range. In K. Lueg & M. W. Lundholt (Eds.), *Routledge Handbook of Counter-Narratives* (pp. 1–14). Routledge.

Lueg, K., & Wolff Lundholt, M. (2020). *Routledge Handbook of Counter-Narratives.* Routledge. https://doi.org/10.4324/9780429279713

Luo, L., Cai, W., Zhou, S., Lees, M., & Yin, H. (2015). A review of interactive narrative systems and technologies: A training perspective. *SIMULATION*, *91*(2), 126–147. https://doi.org/10.1177/0037549714566722

Manovich, L. (2001). *The Language of New Media.* MIT.

Mateas, M., & Stern, A. (2003). Façade: An experiment in building a fully-realized interactive drama. *Game Developers Conference*, *2*, 4–8. https://www.cc.gatech.edu/fac/Charles.Isbell/classes/reading/papers/MateasSternGDC03.pdf

Matsuda, M. J. (1993). *Words That Wound Critical Race Theory, Assaultive Speech, And The First Amendment.* Routledge.

McCoy, J., Treanor, M., Samuel, B., Mateas, M., & Wardrip-Fruin, N. (2011). Prom Week: Social Physics as Gameplay. *Proceedings of the 6th International Conference on Foundations of Digital Games*, 319–321. https://doi.org/10.1145/2159365.2159425

McLuhan, M. (1964). *Understanding Media: The Extensions of Man. New York:* The New American Library.

Meretoja, H. (2020). A dialogics of counter-narratives. In K. Lueg & M. W. Lundholt (Eds.), *Routledge Handbook of Counter-Narratives* (pp. 30–42). Routledge.

Miller, R., Liu, K., & Ball, A. F. (2020). Critical Counter-Narrative as Transformative Methodology for Educational Equity. *Review of Research in Education*, *44*(1), 269–300. https://doi.org/10.3102/0091732X20908501

Moallem, J. D., & Raffe, W. L. (2020). A Review of Agency Architectures in Interactive Drama Systems. *2020 IEEE Conference on Games (CoG)*, 305–311. https://doi.org/10.1109/CoG47356.2020.9231655

Montfort, N. (2011). Toward a theory of interactive fiction. *IF Theory Reader, 25.* https://www.ifarchive.org/if-archive/books/IFTheoryBook.pdf

Montfort, N. (2015). Foreword. In H. Koenitz, G. Ferri, M. Haahr, D. Sezen, & T. İ. Sezen (Eds.), *Interactive Digital Narrative: History, Theory and Practice* (pp. ix–xiii). Routledge.

Mora, R. A. (2014). Counter-narrative. *Qualitative Inquiry, 8*(1), 23–44.

Murray, J. H. (1997). *Hamlet on the holodeck: The future of narrative in cyberspace*. MIT Press.

Murray, J. H. (2004). From Game-Story to Cyberdrama. *Electronic Book Review.* https://electronicbookreview.com/essay/from-game-story-to-cyberdrama/

Prince, G. (1982). *Narratology: The form and functioning of narrative* (Vol. 324). De Gruyter Mouton.

Propp, V. I. (1968). *Morphology of the Folktale* (Vol. 9). University of Texas Press.

Riedl, M. O., & Bulitko, V. (2012). Interactive Narrative: An Intelligent Systems Approach. *AI Magazine, 34*(1), 67. https://doi.org/10.1609/aimag.v34i1.2449

Roth, C., & Koenitz, H. (2016). Evaluating the User Experience of Interactive Digital Narrative. *Proceedings of the 1st International Workshop on Multimedia Alternate Realities*, 31–36. https://doi.org/10.1145/2983298.2983302

Ryan, M.-L. (2001). *Narrative as virtual reality: Immersion and interactivity in literature and electronic media*. Johns Hopkins University Press.

Ryan, M.-L. (2006a). *Avatars of Story*. University of Minnesota Press.

Ryan, M.-L. (2006b). Semantics, Pragmatics, and Narrativity: A Response to David Rudrum. *Narrative, 14*(2), 188–196. https://www.jstor.org/stable/30219646

Shaw, A. (2010). *Identity, identification, and media representation in video game play: An audience reception study* [PhD Dissertation, University of Pennsylvania]. https://repository.upenn.edu/edissertations/286

Smed, J. (2014). Interactive storytelling: Approaches, applications, and aspirations. *International Journal of Virtual Communities and Social Networking (IJVCSN)*, *6*(1), 22–34. https://doi.org/10.4018/ijvcsn.2014010102

Solórzano, D. G., & Yosso, T. J. (2002). Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research. *Qualitative Inquiry*, *8*(1), 23–44. https://doi.org/10.1177/107780040200800103

Stanley, C. A. (2007). When Counter Narratives Meet Master Narratives in the Journal Editorial-Review Process. *Educational Researcher*, *36*(1), 14–24. https://doi.org/10.3102/0013189X06298008

Sylla, C., & Gil, M. (2020). The Procedural Nature of Interactive Digital Narratives and Early Literacy. In A.-G. Bosser, D. E. Millard, & C. Hargood (Eds.), *Interactive Storytelling* (pp. 258–270). Springer International.

Szilas, N. (2021). IDtension – Highly Interactive Drama. *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, *4*(1), 224–225. https://doi.org/10.1609/aiide.v4i1.18704

Szilas, N., & Richle, U. (2013). Towards a Computational Model of Dramatic Tension. In M. A. Finlayson, B. Fisseni, B. Löwe, & J. C. Meister (Eds.), *2013 Workshop on Computational Models of Narrative* (Vol. 32, pp. 257–276). Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik. https://doi.org/10.4230/OASIcs.CMN.2013.257

Thue, D., Bulitko, V., Spetch, M., & Wasylishen, E. (2021). Interactive Storytelling: A Player Modelling Approach. *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, *3*(1), 43–48. https://doi.org/10.1609/aiide.v3i1.18780

Todd, C. (2015). Commentary: GamerGate and resistance to the diversification of gaming culture. *Women's Studies Journal, 29*(1), 64–67. https://www.wsanz.org.nz/journal/docs/WSJNZ291Todd64-67.pdf

Todorov, T. (1966). Les catégories du récit littéraire. *Communications*, *8*(1), 125–151. https://doi.org/10.3406/comm.1966.1120

Todorov, T. (1975). *The fantastic: A structural approach to a literary genre*. Cornell University Press.

Van Velsen, M. (2008). Narratoria, an authoring suite for digital interactive narrative. *Proceedings of the 21th International Florida Artificial Intelligence Research Society Conference, FLAIRS-21*, 394–395. Ventura, D., & Brogan, D. (2003). *Digital storytelling with DINAH: Dynamic, interactive, narrative authoring heuristic*.

Ware, S. G., Garcia, E., Fisher, M., Shirvani, A., & Farrell, R. (2022). Multi-Agent Narrative Experience Management as Story Graph Pruning. *IEEE Transactions on Games*, 1–1. https://doi.org/10.1109/TG.2022.3177125

Young, R. M., & Riedl, M. (2003). Towards an Architecture for Intelligent Control of Narrative in Interactive Virtual Worlds. *Proceedings of the 8th International Conference on Intelligent User Interfaces*, 310–312. https://doi.org/10.1145/604045.604108

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Trust, Confidence, and Hope in *A Summer's End – Hong Kong 1986*: A Reparative Reading

ABSTRACT

Building on Sedgwick's (1997) and Love's (2010) reparative reading, this paper offers an analysis of the theme of trust and its variations (reluctance, confidence, intimacy, etc.) in the visual novel *A Summer's End – Hong Kong 1986* (Oracle & Bone, 2020). More specifically, it examines how trust takes place (1) between the game characters, (2) between the player and the characters, and (3) between the queer player and the video game medium. *A Summer's End* tells the unlikely love story between Michelle Fong Ha Cheung, a disciplined office worker who lives with her mother, and Sam Ka Yan Wong, an independent and free-spirited woman who owns a video store. The story is set in Hong Kong, two years after the Sino-British Joint Declaration was signed, and offers a reflection on the challenges of being a queer woman in uncertain times. The game provides an interesting case for studying trust from a humanities perspective, a theme under explored in game studies and in English-language scholarship in general.

1. INTRODUCTION

I launch *A Summer's End – Hong Kong 1986* (*ASE* hereafter; Oracle & Bone, 2020). Instantly, my body starts vibrating to the rhythm of the title screen music.[1] This music makes me euphoric, in love; it reminds me of a beating heart. I let myself be affected by it, and I wish, deep within myself, to live a love story as strong as the one it evokes. On the screen, two young women, Michelle and Sam, gaze at each other intensely (see Figure 1). They are so close to each other, but a screen seems to separate them. Looking at the image more carefully, I realize that this screen is permeable: Sam's hand manages to cross it to caress Michelle's face, while Michelle's fingers cross it, albeit more discreetly, to intertwine with Sam's fingers. Despite the obstacles, queer love seems possible.

 ASE is a visual novel developed by Charissa So and Tida Kietsungden, two Vancouver-based game designers better known under the name Oracle & Bone. The game tells the unlikely love story between Michelle Fong Ha

1. I am referring here to the track "Eighties," by PengusStudio.

Figure 1: Title screen of *A Summer's End*. Screenshot from *A Summer's End – Hong Kong 1986*

Cheung, a disciplined office worker who lives with her mother, and Sam Ka Yan Wong, an independent and free-spirited woman who owns a video store. The story is set in Hong Kong in the summer of 1986, two years after the Sino-British Joint Declaration was signed,[2] in the vibrant district of Mong Kok. *ASE* offers a reflection on the challenges of being a queer woman in uncertain times. More precisely, it explores themes of desire, freedom, and hope in a time and space "where Asian traditional values and Western idealism clash and converge" (Oracle & Bone, 2019, para. 2).

The game's aesthetic is inspired by media from the 1980s, and more specifically anime, Hongkongese cinema, music videos, fashion magazines, and *manhua* (comics in the Chinese-speaking world). The designers describe the game as a "new media homage to Asian cinema and Hong Kong's golden age of entertainment" (Oracle & Bone, n.d., section "A Summer's End," para. 1). These influences are noticeable in the character design, colour palette, and visual references to city pop, but also in the soundtrack, which incorporates elements of funk and Italo disco from the 1980s, and elements of synthwave, chillwave, and vaporwave, contemporary music genres that seek to evoke this period and induce nostalgia. This retro aesthetic is also noticeable in the user interface, which resembles an old television with its options menu (Figure 1), and in the game's trailer, which evokes a music video from the 1980s with its 4:3 aspect ratio, grainy image, tracking lines, and jump cuts.

2. The Sino-British Joint Declaration was signed on December 19, 1984, and was registered with the United Nations on June 12, 1985. It stipulated that the United Kingdom would cede Hong Kong to China on July 1, 1997, and that Hong Kong would be considered a special administrative region for 50 years under the "one country, two systems" principle.

The game is composed of two-dimensional environments with static backgrounds, character sprites, text boxes, and a soundtrack. At key moments in the game, detailed images drawn specifically for the scene appear on screen and act as rewards for the player. The game also incorporates dialogue trees – a central component of text-based video games – where the game provides several options for the player to choose the responses of Michelle, the protagonist, during conversations with other characters. The game uses a point-based system, and the player's choices have consequences on the relationship between Michelle and Sam, and how the story unfolds. However, the impact of these choices is fairly small, except at one turning point in the game, which I will come back to later (these choices usually allow the player to unlock optional intimate scenes).

2. THEORETICAL FRAMEWORK AND METHODOLOGY: TRUST AND REPARATIVE READING

This paper offers an analysis of the theme of trust and its variations (reluctance, confidence, intimacy, etc.) in *ASE*, with a specific focus on how trust takes place (1) between the game characters, (2) between the player and the characters, (3) and between the queer player and the video game medium. Research on trust from a humanities perspective is still scarce in English-language scholarship, and for this reason, several of the key texts I am drawing from in this paper were written in French. In doing so, I wish to make accessible new resources and contribute to bridging the gap between different epistemologies. Following the work of Olivia Leboyer and Jean-Philippe Vincent (2019), my analysis starts from the premise that video games, like literature or cinema, provide an ideal opportunity to study trust – its formation and its fragility – and to broaden our knowledge on the subject. Italian philosopher Michela Marzano (2010) writes:

> Strictly speaking, trust refers to the idea that one can rely on someone or on something. The verb *confier* [to entrust] (from the Latin *confidere*: *cum,* "with" and *fidere* "to rely") means, indeed, that one gives something precious to someone, by trusting him and thus abandoning oneself to his benevolence and good faith. The etymology of the word also shows the close links that exist between trust, faith, loyalty, confidence, credit and belief. (p. 53, author's translation)

For Marzano (2010), trust is closely tied to human existence. It creates strong relationships where dependence and vulnerability meet; it changes our relationship to the world and to ourselves, and makes us realize that we are never completely independent (Marzano, 2010). Trust is in opposition with fear, and more precisely with the fear of the future, "reintroducing into the world the possibility of hope, [and] pushing everyone to bet again on oneself, on others and, more generally, on the future" (Marzano, 2010, p. 61, author's translation). For Marzano, trust ultimately allows us to change our relationship to time: it invites us to believe that "the space of possibilities is still open"

(2010, p. 60, author's translation) and to overcome obstacles rather than remain frozen in fear. Such a definition aligns well with *ASE*, which offers a reflection on trust that is deeply connected to the theme of time: to the respect of traditional values, the future handover of Hong Kong to China, and the challenges of living a queer life and imagining a queer future that is optimistic.

My analysis falls within the larger corpus of queer game studies and draws inspiration from works that have proposed a reparative reading of certain games. So far, analyses of games with LGBT+ content have mostly focused on representation (e.g., Shaw & Friesem, 2016; Shaw et al., 2019), often highlighting the presence of certain harmful tropes (e.g., Deshane & Morton, 2018; Kosciesza, 2023; Pötzsch & Waszkiewicz, 2019; Youngblood, 2018). Other works have explored how video games can challenge heteronormative values and hegemonic game culture, but these works have generally focused on game mechanics, play styles, and performance, stressing that playing queerly can be a form of resistance (e.g., Chang, 2017; Pape, 2021; Pelurson, 2018; Ruberg, 2019, pp. 133–208). Surprisingly, despite the rising number of queer analyses of specific games, only few authors have drawn on reparative reading, and when they do, they rarely mention using this style of critique (k, 2017; Phillips, 2017; Poirier-Poulin, 2022). It is almost as if the "reparative turn" Robyn Wiegman (2014) talks about in queer feminist scholarship never really made its way to game studies.

Originally theorized by Eve Kosofsky Sedgwick (1997), reparative reading is a response to paranoid reading, i.e., the type of analysis traditionally encouraged in academia. As Heather Love (2010) explains, paranoid reading encourages us to maintain a critical distance from our object of study, to seek to be right and outsmart each other, to refuse to be surprised, and to reject "the negative affect of humiliation" (Sedgwick, 1997, p. 24). Paranoid reading is "anticipatory and retroactive" (Sedgwick, 1997, p. 24) and leads us to think about the tragic past of our communities to be prepared for the tragedies to come (Love, 2010). According to Love, the paranoid person is better informed, but feels worse: they are "aggressive and wounded" (2010, p. 237) and criticize from a position of weakness. On the other hand, reparative reading is less anxiety-provoking: it puts into question a hermeneutics of hypervigilance and suspicion (Wiegman, 2014) and aims to heal the wounds caused by homophobia, transphobia, and other forms of violence rather than revealing new forms of oppression. In game studies, reparative reading has been used by Kara Stone (2018), whose work is worth quoting at length:

> Reparative reading is a form of academic creation where the emphasis is on finding forms of healing and reparation rather than the seemingly endless approach of finding more things to be depressed about. I remember being an undergraduate student and being put off by queer theory's constant pointing out of homophobia and opening up of queer wounds. I understood that the world was anti-queer. Anti-me. I didn't need queer theory to tell me the advertisement on my cereal box

also wanted me dead. When I came across Sedgwick's reparative reading as a grad student, I felt suddenly engaged with queer theory again. What can academia do to heal, to comfort, and to reform dominant understandings of the world into something that enables queer people to keep living? (section "Healing Affect," para. 4)

This is not to say that paranoid reading is never necessary, but like Sedgwick (1997), I believe that reparative reading is just as valid: "no less acute than a paranoid position, no less realistic, no less attached to a project of survival, and neither less nor more delusional or fantasmatic" (p. 35). merritt k (2017) has nicely shown how *Gone Home* (The Fullbright Company, 2013), a game about queer women in love, "left [her] hopeful rather than grieving" (p. 148), while Amanda Phillips (2017) has recast Bayonetta (PlatinumGames, 2009), often criticized for her sexualized design, as a queer force who "disturb[s] the narratives we tell about what it means to be a gamer, or a woman, or a slut, or a hero in contemporary time" (p. 121). In my previous work, I have argued that the visual novel *Coming Out on Top* (Obscurasoft, 2014) allows for a form of radical hope thanks to its light-hearted, erotic comedy and by "proposing a world where happiness for gay men is possible" (Poirier-Poulin, 2022, p. 284).

Reparative reading does us good, makes our readers feel good, and allows us to take care of each other. It is a compelling style of critique to analyze games that we find uplifting and that we believe might benefit other players. This is how I see *ASE*. In addition, reparative reading aligns well with the theme of trust that is at the heart of this paper, whereas paranoid reading is closer to that of distrust and suspicion. The methodology deployed in this paper is close reading, as adapted to game studies by Jim Bizzocchi and Theresa Tanenbaum (2011; see also Tanenbaum, 2015). My analysis draws largely on queer theory and affect theory, seeking to propose a queer epistemology of trust, and is informed by my own gaming experience with *ASE* as a queer player. As Sarah Stang (2022) explains, "close reading centralizes the scholar's perspective, subjectivity, and experience. . . . The closeness, intimacy, and vulnerability of close reading is what makes it particularly compelling as a method" (p. 236). While close reading often produces analyses that are rather personal, it embraces the idea that one's experience can resonate with that of others, especially when they have similar lived experiences.

3. TRUST AND RELUCTANCE

The themes of trust and reluctance are at the centre of Michelle and Sam's relationship. Michelle's life is the opposite of Sam's and comes down to work and sleep. Michelle is relatively satisfied with her life and plans to marry a suitable man and start a family. This will allow her to satisfy her conservative mother, who made several sacrifices so that she could go to university and live a rather peaceful life. Michelle's life is representative of what Sara Ahmed (2010) has called the "promise of happiness." According to Ahmed (2006), our lives are

oriented toward what was given to us, toward the family line, pushing us to take people from the opposite sex as "love objects" (p. 85). For a life to count as a "good life," it must be treated as a common good, and one must achieve certain heteronormative milestones at different stages of their life (getting married, having children, and so on) to repay their debt to their parents (Ahmed, 2006, pp. 21, 85–86). Happiness is only promised to those who orient themselves toward certain values, lifestyles, and heteronormative aspirations, and a queer life is perceived as sad, strange, and without a purpose (Ahmed, 2010).

Meeting Sam upsets Michelle's plans. Little by little, Michelle begins to lean on Sam, who is much more comfortable with her sexuality and her desires than she is. Michelle accepts Sam's invitation to the restaurant, goes to the bar Ruby with her, and eventually accompanies her to Sai Kung by scooter. Michelle is initially reluctant to accept each of these invitations – trust must constantly be renegotiated and shared – but her fascination for Sam pushes her to keep seeing her. Ahmed (2004/2014) nicely describes this feeling: "Queer feelings may embrace a sense of discomfort, a lack of ease with the available scripts for living and loving, along with an excitement in the face of the uncertainty of where the discomfort may take us" (p. 155). The scooter ride in *ASE* is highly symbolic: Michelle sits at the back and accepts that Sam is completely in control during the ride, but she is a little frightened and finds that Sam drives too fast – like in her relationship with Michelle, Sam is going too fast. After getting on Sam's scooter, Michelle tells the player: "Somehow, I had let myself get caught up in her pace again." In addition, despite the presence of dialogue trees throughout the game, the game is very linear, and the player has little control over the course of the story; the player themselves must accept to be brought along by Sam and by the game narrative.

This feeling of trust in Sam (both on Michelle and the player's part) is related to what she inspires – she is cheerful and confident, and kindly flirts with Michelle – but also to the game's affective environment, which favours intimacy and bonding. Michelle and Sam repeatedly wander in the busy streets of Mong Kok; however, only them appear onscreen, as if their meeting placed them in a different time and space, making these moments more intimate and giving more importance to their love story (see Figure 2). The universe seems to have been created to make their meeting possible. These meetings usually end in Sam's studio apartment, which evokes comfort through its smallness and dim lights, and through the many objects it contains (a television, a turntable, VHS tapes, books, a coffee table with food, a bed). It is in this studio that Michelle and Sam kiss for the first time, and later, make love.

These intimate moments usually take place in the evening. As Will Straw (2014, 2015) highlights, the night is a force capable of defining a space, it has a sensibility of its own. The urban night, more precisely, evokes a space-time of "reinvention, transgression and aesthetic fluidity" and is a source of hedonistic and morally suspect pleasures (Straw, 2014, p. 199). In literature and

Something about the way she looked at me made my heart pound.

BACK   ARCHIVE   SKIP   AUTO   SAVE   Q.SAVE   Q.LOAD   SETTINGS

A SUMMER'S END

Figure 2: Michelle and Sam are alone in their world. Screenshot from *A Summer's End – Hong Kong 1986*

cinema, the night is often part of a journey of discovery and becomes a form of escape (Straw, 2014). In *ASE*, the urban night is a refuge from heteronormative society: it allows Michelle to escape from Joey, who seems interested in her and invites her to the restaurant on several occasions, and from her controlling mother, Mrs. Cheung, who waits for her every evening at home and pressures her to get married. The night becomes a space-time of possibilities, "a field of options and opportunities" (Straw, 2015, para. 14): time seems to stretch, queer desires become more and more palpable, and Michelle becomes aware of her attraction to Sam. The player who accepts to be affected by the atmosphere of the game – by the neon colours of Mong Kok and by the bewitching and at times sensual music – can feel the connection between the two young women and be "moved." *ASE* somewhat poses the question of the representation of affects in video games. The game answers this question by showing that affects can be transmitted to the player through ambience, and more specifically, through the vibrations that colours and music generate in the player's body.

As Bruce Bégout (2020) notes, ambience "subtly penetrates the ego by opening it up to an affective mediance that broadens its field of experience" (p. 305, author's translation). According to Bégout, we are constantly immersed into an ambience, enveloped by it, and ambience determines our affective dispositions (pp. 7, 51):

> The world is not revealed to us from a theoretical or practical point of view. It reveals itself within this resonance. For what we feel in the first place are not things endowed with objective qualities, but, all around us, tones, atmospheres, vague excitations that attract or repel us. (2020, p. 8, author's translation)

But as Bégout (2020) suggests, a pleasant ambience is always surrounded by a halo of worry (p. 270). For Michelle, the urban night represents both a vibrant space-time filled with opportunities, and a frightening and transgressive one because it is associated with queer desires. Michelle feels that what she is doing is wrong. After spending the night with Sam, she asks herself:

> Why did I… / Do such a thing with Sam? / … / … / … / An answer floated up from my subconscious and lingered in my mind. / I dared not to even have the thought be uttered. / I was frightened by myself. / I did something wrong. / I did something shameful. / I had to face my own wrongdoing and go. / There was no possibility of anything working out between us beyond this one night.

Several times in the game, Michelle mentions being ashamed of herself and being afraid to bring shame to her family, and talks about the need for her to preserve her reputation if she is to get a better job. This fear of losing face, to retake the expression of Erving Goffman (1955; see also Qi, 2017), leads Michelle to reject her queer identity and to mistrust Sam, and eventually pushes her to stop seeing Sam for several weeks. Mistrust here is inextricably linked to Michelle's need for security and to her desire to live a "good life" as defined by the society of the time. Later in the game, while Michelle is at the restaurant with Joey, she sees Sam leaving the premises. Time stops and the player is entrusted with the most important decision of the game: staying with Joey or following Sam. If the player chooses to follow Sam, Michelle confesses her feelings for her and kisses her in a torrential rain (see Figure 3). While Michelle previously trusted Sam while being reluctant, her trust in her now takes on a whole new dimension: it takes the form of a "'jump' into the void" (Marzano, 2010, p. 54, author's translation), and for the first time in the game, intimacy is possible in the public space. Michelle even says: "And in the torrential rain, / We kissed. / It didn't matter to me at all if anyone else saw this," and a few lines later: "It didn't matter who saw us or heard us. / We had nothing to fear. / I felt cleansed." Trust here is so strong thanks to love that it becomes "a protective envelope that makes action in the world possible," it allows one to blossom, and it makes existence possible (Bégout, 2020, p. 293, author's translation). This trust reaches its peak when Michelle and Sam make love, and when Michelle, who is usually reserved and composed, completely surrenders to Sam: "I shouted out something loudly. / It was embarrassing how out of control Sam made me feel." This scene is also visually more explicit than the other intimate scenes in the game.

Figure 3: Michelle kisses Sam in a torrential rain. Screenshot from *A Summer's End – Hong Kong 1986*

Lastly, this reflection on trust and uncertainty is related to the context of the time and to the future handover of Hong Kong to China. Michelle mistrusts the future and considers immigrating to the United States, while Sam wants to stay in Hong Kong and see what the future holds. Marzano (2010) interestingly writes: "Trust between human beings arises from the moment one endeavours to live and sojourn in a place of transit, in the space of the back-and-forth of the encounter" (p. 63, author's translation). Hong Kong appears here as a space of transit closely linked to trust. As Mark Bray and W. O. Lee (1993) wrote before the handover:

> Unlike the majority of territories, the termination of Hong Kong's colonial rule will lead not to sovereignty but to incorporation in another state. Hong Kong has been promised self-government within the People's Republic of China, but the framework is involuntary and the degree of self-governance is uncertain. (p. 557)

Meanwhile, Ackbar Abbas (1997) describes Hong Kong as "a city of transients" (p. 46). As he explains:

> Much of the population was made up of refugees or expatriates who thought of Hong Kong as a temporary stop, no matter how long they stayed. The sense of the temporary is very strong, even if it can be entirely counterfactual. The city is not so

much a place as a space of transit. It has always been, and will perhaps always be, a port in the most literal sense – a doorway, a point in between – even though the nature of the port has changed. (Abbas, 1997, p. 46)

In a certain way, Hong Kong can also be associated with queerness. Helen Hok-Sze Leung (2008, p. 5) and Lucetta Kam (2017) compare Hong Kong's political uncertainty following the postcolonial transition to the unpredictability and fear of queer desires. Like Hong Kong, queer lives are unstable and do not have a promised future (Kam, 2017). If the player chooses to stay in the restaurant with Joey and does not pursue their relationship with Sam, the game ends abruptly. The game fast-forwards to September 1997 (roughly two months after the handover), and the player learns that Michelle has married a man with whom she had a child and is about to immigrate to the United States. Without a trusting relationship with Sam, Michelle is unable to imagine a future in Hong Kong and chooses instead a heteronormative life. In contrast, if Michelle pursues her relationship with Sam, she decides to stay in Hong Kong. Thanks to trust, Michelle accepts to live in a place of transit and believes in queer love. To draw once more on Marzano (2010), trust changes Michelle's relationship with time and allows her to build a new relationship with the future.

4. CONFIDENCE AND INTIMACY

A Summer's End can be seen as an "intimacy simulator," a term coined by Fabienne Sacy (see Bouvier, 2022) to describe visual novels. This term emphasizes the proximity and the intimate relationships the player develops with the game characters, who progressively reveal more information about themselves and who are physically close to the player (the characters are usually in front of the player and look at them while they are talking; Sacy, in Bouvier, 2022). This is in line with the work of Aaron Reed et al. (2020), who stress that visual novels "center exploration of mental and emotional spaces: of characters and relationships" (p. 149). Like many visual novels, *ASE* is written in the first person ("I"). Although the player controls Michelle, Michelle appears as a character separated from the player, as a character narrator much more than a traditional player character or avatar. The game contains several introspective sequences in which Michelle talks about her past, her family, her personality, and her impressions of Sam. The game opens with a monologue in which Michelle talks about her childhood, creating from the start an atmosphere of confidence:

I had a comfortable upbringing thanks to the hard work of my parents. / I had a very typical family. / My father worked to support the household. / And my mother was a homemaker. / . . . My father had worked his way up from a man doing odd jobs day and night until he eventually became a successful owner. / My mother came from a large family. / She wasn't given the opportunity to complete her

schooling. / . . . I suppose the sharp contrast between my upbringing compared to that of my parents was partly their desire to give me a childhood better than theirs.

While we might be inclined to consider this passage as an interior monologue, a "discourse without a listener and not spoken, through which a character expresses their most intimate thought" (Dujardin, 1931, p. 59, author's translation), I would argue that this kind of passages in *ASE* could be seen instead as a form of confidence. The relationship the player develops with Michelle over the course of the game takes the form of a double "unlocking," as theorized by Catherine Kerbrat-Orecchioni and Véronique Traverso (2007). As the authors point out, the confidence implies a mutual relationship between the confidant and the *confieur*; the confidant must be available and show interest in the *confieur*, who must be willing to open up to others. The confidence ultimately "consist[s] in transferring a secret from the interiority of A [the *confieur*] to that of B [the confidant]" (Kerbrat-Orecchioni & Traverso, 2007, p. 8, author's translation). The visual novel is a privileged form to reflect on this relationship. In the visual novel, the text appears onscreen little by little, one or two sentences at a time, and the player must press a button (left-click on the mouse, for example) for the next sentence to appear. This "minimal, repetitive, rhythmic brush of the player's finger against the computer" is a fundamental component of the experience of playing a visual novel, as Ana Matilde Sousa (2020, p. 93) explains. Each time the player presses a button, they show to the character that they are interested in their story, that they are there and listening to them, and this in turn pushes the character to continue their confidence. The double unlocking Kerbrat-Orecchioni and Traverso refer to is here possible thanks to the inter(re)active nature of video games, i.e., the back and forth between the game and the player.

Once the player has completed two-thirds of *ASE*, the story changes perspective, and the player controls Sam during an interlude of roughly one hour. The use of an interlude adds a layer of intimacy and allows the player to see the events from the perspective of the love interest and better understand them. In *ASE*, this segment begins with a rewind effect, then, the player sees again some key moments of the story from Sam's perspective. The theme of confidence is particularly noticeable in this segment, where Sam openly talks to the player about her feelings for Michelle: "When I first met Michelle, I was charmed at first glance. / I like women with sharp eyes. / When they look at you with that piercing gaze, I get goosebumps." And later on: "I felt at peace. / I never felt such a feeling before with anyone," and even: "I adore Michelle." This interlude occurs after Michelle stops seeing Sam, and confiding in the player becomes a way for Sam to remember the good times spent with her. To a certain extent, this confidence is also a way to touch the player, to show them that Sam's feelings are genuine, and to push them to do everything they can to reunite the two young women. This is not trivial considering that the scene

following this interlude is the one in the restaurant, where the player must decide the future of Michelle and Sam's relationship.

In *ASE*, confidence helps to build a relationship between the player and the characters. It gives the player partly access to their inner selves and aligns well with Silvestra Mariniello's (2018) take on the intimate. Quoting the *Trésor de la Langue Française* (1994), Mariniello explains that the intimate can be defined as "what is located or relates to a very deep level of the psychic life; what generally remains hidden under the appearances, impenetrable to external observation, sometimes also to the analysis of the subject itself," what "fundamentally constitutes the distinctive features of a particular individual, their essential nature; what relates to what is the most personal in them" (2018, p. 93, author's translation). While in the context of the confidence Kerbrat-Orecchioni and Traverso (2007) see the reader (or by extension the player) as an intruder, a spy, and affirm that "the confidence push[es] to its limits the *voyeuristic* character of literary communication" (p. 24, author's translation, emphasis in the original), I would argue that the player in *ASE* is not an intruder, but an *accompagnateur*. The player accompanies the characters: they are in a supportive position and act as an intermediary who seeks to make the relationship between Michelle and Sam possible. When the player is given the option to follow Sam outside the restaurant, they seize this opportunity, hoping that Michelle and Sam will reconcile and form a couple once and for all. The player is not there to spy on Michelle and Sam, but develops with them a relationship of care. They want their good and are happy to see a love story that ends positively.

5. QUEER PLAYER AND MEDIUM

For some queer players, it can be difficult to trust video games and see them as a medium capable of telling queer stories: there is always the possibility that these stories will feature stereotypical queer characters or end tragically. Before playing a game (or watching a film) with queer characters, I usually read about it online to make sure it has a happy ending. I have seen enough tragic queer stories that I am now looking for narratives which allow for queer joy. As Marzano (2010) highlights, trust can be dangerous: "it always comes with the risk that the custodian of our trust does not live up to our expectations or, worse still, that he deliberately betrays the trust we have in him" (p. 54, author's translation). We are not all equal when it comes to the question of trust, and it is more difficult for groups who have historically been erased or misrepresented in video games (and other media) to trust this medium. In her work on affects, Ahmed (2010) notes that we orient ourselves toward certain objects, and we could argue here that video games have an affective value and that players orient themselves toward certain games more than others. This leads us to play games that we find challenging, entertaining, satisfying, or awe-inspiring, but also to avoid orienting ourselves toward certain games because we fear discrimination or believe they might hurt us. In order to understand how

affect operates within video games, we need to take into account our previous experiences with them, how they made us feel, and what we expect from them. As Brian Massumi (2002) explains, affect is like "a background perception that accompanies every event" (p. 36). Affect permeates "in memory, in habits, in reflex, in desires, in tendencies" and gives the body "a kind of depth that stays with it across all its transitions" (Massumi, 2015a, p. 4).

ASE tells a beautiful love story between two women and gives queer players confidence in the capacity of video games to tell such stories. To transpose Mariniello's (2018) observation on cinema, I would highlight that through Michelle and Sam, queer players can see themselves as beings capable of action. Existing in the mediatic space gives them the strength, the desire, and the courage to exist in the public space (Mariniello, 2018). At the end of the game, Michelle finds the strength to exist in the public space as a queer woman. The queer player, who made this possible, finds the strength to exist symbolically in the public space alongside Michelle and Sam, and hopefully, will find the strength to exist in the "real" world as well. *ASE* does feel a little dramatic at times – Michelle struggles to accept her sexuality and her mother first rejects her – and in that sense, the game might not be filled with queer joy, especially if we define queer joy as the "exhilarating feeling that comes from being able to express our queerness clearly and with force" (Woo, 2021, para. 4). But there is no one definition of queer joy, and after coming across several definitions, it became clear to me that queer joy can mean many things. Here are a few definitions I find particularly compelling:

> To be yourself while trying to live is a lot. . . . The experience of feeling like you're the only one, (but then) finding community, is the act of finding queer joy. It feels like freedom. (Esposito, qtd. in Coury, 2021, para. 8)

> the freedom and resilience that comes from living my truth, unapologetically so. (Gomez, qtd. in Coury, 2021, para. 33)

> truly feeling safe for the first time. (Johnson, qtd. in Coury, 2021, para. 40)

> a positive feeling that we get from encountering signs of progress in gender equality and gender diversity. (Oxfam, 2022, section "Queer Joy Is a Positive Feeling," para. 2)

> Queer joy is bittersweet: even amidst the celebration, we never forget those who fall victim to these crises due to their gender identity and expression or sexual orientation. (Oxfam, 2022, section "Queer Joy Is Bittersweet," para. 2)

ASE offers a bittersweet story that ends positively, and in light of the above definitions, I would argue that it allows for a form of queer joy. As Massumi

(2015b) explains, "joy is much more than a pleasure. It registers the invention of new passions, tendencies, and action-paths that expand life's powers, flush with perception. It registers becoming" (p. 71). *ASE* is a story about finding oneself, connecting with someone and building intimacy, feeling free and comfortable, and being resilient. For the player, it is also an occasion to see the progress that has been made in terms of LGBT+ rights while not forgetting the work that still needs to be done. If Mariniello (2018) talks about the power of cinema, I would talk here about the power of the video game medium, and more particularly, that of the visual novel, which in recent years has offered several touching queer stories[3] and has truly become a reparative genre and a privileged space for certain queer gaming communities, notably in North America. Roughly 47.67% of the video games with LGBT+ content on itch.io (*N* = 3713) and 57.78% of those on Steam (*N* = 1456) are visual novels.[4] Anastasia Salter et al. (2018) describe the visual novel as one of the two genres "primarily associated with queer narratives" (p. 3), the other one being the walking simulator, while Reed et al. (2020) argue that the visual novel has allowed for alternate modes of design and for the portrayal of marginalized identities, thus becoming an interesting genre for "outsider creators" (p. 149). This feeling is also present among game journalists and players. In my work on the visual novel, I have highlighted that the Steam review page of *Coming Out on Top* was a positive space where players were sharing funny anecdotes and meaningful memories about the game, with some players even talking openly about their sexual orientation (Poirier-Poulin, 2022). One can also easily find online blog entries and newspaper articles with lists of must-play LGBT+ visual novels, notably to celebrate Pride Month (e.g., Morales, 2020; Naja B., 2021; Pennington, 2022), and Reddit pages discussing visual novels with queer content (e.g., r/RainbowOtome, r/BLgame, r/visualnovels, r/FurryVisualNovels) – this kind of lists and forums are much harder to find for other game genres.

This relationship between the audience and the medium is also explored in *ASE*. The game draws an interesting parallel between Michelle and Sam's lives and the Chinese film *New Women* (新女性; Chusheng, 1935). The film tells the story of a music teacher in search of independence and dignity who loses her job after refusing the advances of the school board minister. The film explores the social restrictions imposed on women in 1920s China and denounces patriarchy, predatory news media, and the objectification of women. *New Women* ends tragically with the suicide attempt of the protagonist (who then dies at the hospital) and is all the more tragic considering that it is inspired by the suicide of Chinese actress Ai Xia (艾霞), and that Ruan Lingyu (阮玲玉), who had the leading role, killed herself shortly after the film's release. *New Women* became emblematic of the feeling of suffocation many women had at the time. After watching the film, Michelle tells herself:

3. We can notably think of *Coming Out on Top* (Obscurasoft, 2014), *Her Tears Were My Light* (NomnomNami, 2016), *Dream Daddy: A Dad Dating Simulator* (Game Grumps, 2017), *Butterfly Soup* (Brianna Lei, 2017), *Coffee Talk* (Toge Productions, 2020), and *A YEAR OF SPRINGS* (npckc, 2021).

4. Data was collected on January 20, 2023, using the tags "LGBT," "LGBTQIA," and "Visual Novel" on itch.io (video games with both the "LGBT" and "LGBTQIA" tags were counted only once) and "LGBTQ+" and "Visual Novel" on Steam.

Figure 4: The character of Cecilia (right) is inspired by the Hongkongese singer and actress Anita Mui. Screenshot from *A Summer's End − Hong Kong 1986*

> The main character… / She struggled every moment in the film to be accepted as an equal in society. / She struggled until everything was taken away from her. / Everything she did almost felt like it was done in vain. / It was a very depressing movie.

Although the film deals primarily with the woman question and is in line with the May Fourth Movement and the emergence of the feminist ideal of the "New Woman," Michelle sees a larger narrative that connects with the challenges faced by everyone who is marginalized by society, including queer people. In her own way, Michelle offers a queer reading of the film by interpreting the protagonist's story as that of an individual who goes against social norms and whose life is "at odds with the normal, the legitimate, the dominant" (Halperin, 1995, p. 62). Despite *New Women*'s tragic story and the circumstances surrounding this film, Sam remains optimistic. She tells Michelle:

> we have to be hopeful. / I'd like to think things are a little better now than they were then. / Ruan left a spectacular legacy. / But we can't forget her tragedy. The messages of the film still apply to today's society. / It's not easy to change people's perceptions.

For Michelle and Sam, cinema is a trustworthy medium that allows the spectator to spend time with the past and reflect on social change. *ASE* also contains references to Cantonese opera singer Yam Kim-fai (任劍輝), known for her cross-dressing performances, and to Brigitte Lin (林青霞), described as "the biggest superstar of Taiwan and Hong Kong" and who arguably became a global icon thanks to her genderqueer roles. Even more noteworthy is the game's reference to Anita Mui (梅艷芳), a queer icon of the 1980s and 1990s famous for her films and her contribution to Cantopop as well as for her flamboyant performances that challenged traditional gender representations. According to the developers, Anita Mui inspired the character of Cecilia, one of Sam's close friends who owns a nightclub popular among "girls in the know" (Oracle & Bone, 2021; see Figure 4). All these references are a way to pay homage to several women who have marked the cultural life of Hong Kong and to invite the player to (re)discover their history.

For both the player and the game characters, the past generates an empowering form of queer nostalgia. As Nishant Shahani (2013) points out, nostalgia is filled with political possibilities: it helps to forge a collective memory, to create a space of belonging in the present, and to imagine a different future using the affective force of the past. Along the same lines, Gilad Padva (2014) reminds us that (re)telling or reinventing the past has played (and continues to play) a major role in shaping an LGBT+ legacy with its own icons and symbols (p. 6). Queer nostalgia is a "journey to the irrecoverable, the written off, the forbidden and the neglected" (Padva, 2014, p. 8). It serves as a "therapeutic process of coming to terms with who we are, what we want to be, and what we can be" (Padva, 2014, p. 11). In *ASE*, revisiting the past becomes a way to disrupt reality, to make history less limited, to stay hopeful, and to trust the future. At the end of the game, Sam is working on an archival film project and on the screening of queer films that have been overlooked; she thus seeks to reopen a past that was symbolically closed – this is also the work *ASE* accomplishes.

★★★

A game like *ASE* is reparative and allows for a form of healing: it is soothing to be told that everything will be alright. The game ends with a warm and comforting image: Michelle and Sam are sitting next to each other, hand in hand, in the restaurant where they ate together when they first met (see Figure 5). They are surrounded by a halo of light that makes the scene even more intimate and highlights the softness of their clothes. Michelle's eyes are closed and her head is resting against Sam's shoulder. She is at peace with herself. The game leaves the player with the words of Michelle, full of hope:

> It is a continual struggle to feel truly accepted by everyone. / But I'm ever hopeful. / I have my own pride and dignity. / . . . / All I want to do is to live freely, without

Figure 5: Michelle is at peace with herself. Screenshot from *A Summer's End – Hong Kong 1986*

guilt and shame. / I know if it wasn't for Sam, I couldn't be at all like this. / I'm glad to have met Sam. / . . . / I'm sure things will be all right for us both. / I know there will be uncertainty ahead of us. / But it is the life that I have chosen for myself.

While the player has accompanied Michelle throughout the game, it is *ASE* that accompanies the player once the game is over, that resonates with them and leaves them with a feeling of well-being; that has the potential to change their daily life and their way of being in the world.

Following Marzano (2010), I would conclude by stressing that trust always generates bonds, whether it is between fictional characters; between the characters and the player; between the player and the medium; or between the past, the present, and the future. While *ASE* opened with a music that reminded me of a beating heart, the game ends with a song that makes me want to keep moving forward.[5] This song is filled with inspiring lyrics and powerful images: "Doors open," "Starring ahead," "Are you ready?," "The world is yours," "A hard-fought victory," and "Follow your heart." The euphonious voice of Dana Jean Phoenix reverberates and envelopes me, giving me the impression of being free. I cannot help but imagine Michelle and Sam leaving for a scooter ride to explore Hong Kong, and I want to go on an adventure with the boldness they gave me. Like them, I want to love, to blossom. I want to live in the present, rediscover the past, and believe in the future.

5. I am referring here to the song "Dream," by Timecop1983, featuring Dana Jean Phoenix.

The credits roll and the game ends with an open ending. I am entrusted with the power to fill the void, to imagine Michelle and Sam's future. Will they stay together? Was it a fleeting romance? Without hesitation, I choose to imagine that their love story continues. I fully trust their love and I need such stories. I need more queer joy.

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REFERENCES

Abbas, A. (1997). *Hong Kong: Culture and the politics of disappearance*. University of Minnesota Press.

Ahmed, S. (2006). *Queer phenomenology: Orientations, objects, others*. Duke University Press.

Ahmed, S. (2010). Happy objects. In M. Gregg & G. J. Seigworth (Eds.), *The affect theory reader* (pp. 29–51). Duke University Press.

Ahmed, S. (2014). *The cultural politics of emotion* (2nd ed.). Edinburgh University Press. (Original work published 2004)

Bégout, B. (2020). *Le concept d'ambiance : essai d'éco-phénoménologie* [The concept of ambience: essay on eco-phenomenology]. Éditions du Seuil.

Bizzocchi, J., & Tanenbaum, T. J. (2011). Well read: Applying close reading techniques to gameplay experiences. In D. Davidson (Ed.), *Well played 3.0: Video games, value and meaning* (pp. 289–316). ETC Press.

Bouvier, G. (Host). (2022, April 13). Jeux vidéo et désirs marginalisés [Video games and marginalized desires] [Audio podcast episode]. In *CISM 89.3 : Épistémia*. https://www.youtube.com/watch?v=eIEe2dZUHjU

Bray, M., & Lee, W. O. (1993). Education, democracy and colonial transition: The case of Hong Kong. *International Review of Education*, *39*(6), 541–560.

Chang, E. (2017). Queergaming. In B. Ruberg & A. Shaw (Eds.), *Queer game studies* (pp. 15–24). University of Minnesota Press.

Chusheng, C. (Director). (1935). *New women* (新女性) [Film]. Liahua Film Company.

Coury, N. (2021, June 25). *This is what LGBTQ+ joy looks like*. CNN. https://www.cnn.com/interactive/2021/06/us/pride-portraits-cnnphotos/

Deshane, E., & Morton, R. T. (2018). The big reveal: Exploring (trans)femininity in *Metroid*. In T. Harper, M. Adams, & N. Taylor (Eds.), *Queerness in play* (pp. 131–146). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-90542-6_8

Dujardin, E. (1931). *Le monologue intérieur* [The interior monologue]. Messein.

Goffman, E. (1955). On face-work: An analysis of ritual elements in social interaction. *Psychiatry*, *18*(3), 213–231. https://doi.org/10.1080/00332747.1955.11023008

Halperin, D. M. (1995). *Saint Foucault: Towards a gay hagiography*. Oxford University Press.

k, m. (2017). On *Gone home*. In B. Ruberg & A. Shaw (Eds.), *Queer game studies* (pp. 145–149). University of Minnesota Press.

Kam, L. Y. L. (2017). Return, come out: Queer lives in postcolonial Hong Kong. In Y.-W. Chu (Ed.), *Hong Kong culture and society in the new millennium: Hong Kong as method* (pp. 165–178). Springer Nature Singapore. https://doi.org/10.1007/978-981-10-3668-2_9

Kerbrat-Orecchioni, C., & Traverso, V. (2007). Introduction. In C. Kerbrat-Orecchioni & V. Traverso (Eds.), *Confidence / dévoilement de soi dans l'interaction* [Confidence / self-disclosure in the interaction] (pp. 1–34). De Gruyter.

Kosciesza, A. J. (2023). The moral service of trans NPCs: Examining the roles of transgender non-player characters in role-playing video games. *Games and Culture, 18(2)*, 189–208. https://doi.org/10.1177/15554120221088118

Leboyer, O., & Vincent, J.-P. (2019). Littérature et confiance [Literature and trust]. *Commentaire*, *166*(2), 277–284. https://doi.org/10.3917/comm.166.0277

Leung, H. H.-S. (2008). *Undercurrents: Queer culture and postcolonial Hong Kong*. University of British Columbia Press.

Love, H. (2010). Truth and consequences: On paranoid reading and reparative reading. *Criticism*, *52*(2), 235–241. https://doi.org/10.1353/crt.2010.0022

Mariniello, S. (2018). Du sens de l'intimité dans la *polis* médiatique globale : *César doit mourir*, Paolo et Vittorio Taviani (2012) [On the sens of intimacy in the global mediatic *polis*: *Caesar must die*, Paolo and Vittorio Taviani (2012)]. In F. Berthet & M. Froger (Eds.), *Le partage de l'intime : histoire, esthétique, politique : cinéma* [The sharing of the intimate: history, aesthetics, politics: cinema] (pp. 93–112). Les Presses de l'Université de Montréal.

Marzano, M. (2010). Qu'est-ce que la confiance ? [What is trust?]. *Études*, *412*(1), 53–63. https://doi.org/10.3917/rimhe.001.0083

Massumi, B. (2002). *Parables for the virtual: Movement, affect, sensation*. Duke University Press. https://doi.org/10.1215/9780822383574

Massumi, B. (2015a). *Politics of affect*. Polity.

Massumi, B. (2015b). *The power at the end of the economy*. Duke University Press. https://doi.org/10.1515/9780822375814

Morales, G. (2020, May 21). *Best gay adult visual novels to play*. Twinfinite. https://twinfinite.net/2020/05/best-gay-adult-visual-novels/

Naja B. (2021, June 3). *[Pride month 2021] Loads more LGBTQ positive visual novels*. Blerdy Otome. https://blerdyotome.com/2021/06/03/pride-month-2021-loads-more-lgbtq-positive-visual-novels/

Oracle & Bone. (2019, January 5). *Officially announcing the launch of our website*. Tumblr. https://oracleandbone.tumblr.com/post/181731654192/officially-announcing-the-launch-of-our-website

Oracle & Bone. (2021, August 9). *August 9 is Cecilia's birthday*. Tumblr. https://oracleandbone.tumblr.com/post/659052064213696512/%E7%83%88%E7%84%B0%E7%B4%85%E5%94%87-august-9-is-cecilias-birthday-happy

Oracle & Bone. (n.d.). *About*. A summer's end – Hong Kong 1986. Retrieved November 12, 2022, from https://www.asummersend.com/about

Oxfam Canada. (2022, June 2). *Queer joy: What is it? Why we need more of it?* https://www.oxfam.ca/story/queer-joy-what-is-it-why-we-need-more-of-it

Padva, G. (2014). *Queer nostalgia in cinema and pop culture*. Palgrave Macmillan. https://doi.org/10.1057/9781137266347

Pape, T. (2021). The queer politics of stealth gameplay. *Jump Cut: A Review of Contemporary Media*. http://www.ejumpcut.org/archive/jc60.2021/Pape-StealthGameplay/index.html

Pelurson, G. (2018). Flânerie in the dark woods: Shattering innocence and queering time in *The path*. *Convergence: The International Journal of Research Into New Media Technology*, *25*(5–6), 918–936. https://doi.org/10.1177/1354856518772421

Pennington, L. (2022, August 19). *10 must-play LGBTQ+ visual novel games for every queer player*. INTO. https://www.intomore.com/gaming/10-must-play-lgbtq-visual-novel-games-every-queer-player/

Phillips, A. (2017). Welcome to *my* fantasy zone: *Bayonetta* and queer femme disturbance. In B. Ruberg & A. Shaw (Eds.), *Queer game studies* (pp. 109–123). University of Minnesota Press.

Poirier-Poulin, S. (2022). "Mark Matthews stars in 'Anatomy is hard!' A struggling student tries to make the grade with his professor": Sexual humour and queer space in *Coming out on top*. In K. Bonello Rutter Giappone, T. Majkowski, & J. Švelch (Eds.), *Video games and comedy* (pp. 271–288). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-88338-6_14

Pötzsch, H., & Waszkiewicz, A. (2019). Life is bleak (in particular for women who exert power and try to change the world): The poetics and politics of *Life is strange*. *Game Studies: The International Journal of Computer Game Research*, *19*(3). http://gamestudies.org/1903/articles/waszkiewiczpotzsch

Qi, X. (2017). Reconstructing the concept of face in cultural sociology: In Goffman's footsteps, following the Chinese case. *The Journal of Chinese Sociology*, *4*(1), https://doi.org/10.1186/s40711-017-0069-y

Reed, A. A., Murray, J., & Salter, A. (2020). *Adventure games: Playing the outsider*. Bloomsbury Academic.

Ruberg, B. (2019). *Video games have always been queer*. New York University Press.

Salter, A., Blodgett, B., & Sullivan, A. (2018). "Just because it's gay?": Transgressive design in queer coming of age visual novels. *Proceedings of the 13th International Conference on the Foundations of Digital Games*. https://doi.org/10.1145/3235765.3235778

Sedgwick, E. K. (1997). Paranoid reading and reparative reading; or, you're so paranoid, you probably think this introduction is about you. In E. K. Sedgwick (Ed.), *Novel gazing: Queer readings in fiction* (pp. 1–38). Duke University Press. https://doi.org/10.1215/9780822382478-001

Shahani, N. (2013). "Between light and nowhere": The queer politics of nostalgia. *Journal of Popular Culture*, *46*(6), 1217–1230. https://doi.org/10.1111/jpcu.12085

Shaw, A., & Friesem, E. (2016). Where is the queerness in games? Types of lesbian, gay, bisexual, transgender, and queer content in digital games. *International Journal of Communication*, *10*, 3877–3889.

Shaw, A., Lauteria, E. W., Yang, H., Persaud, C. J., & Cole, A. (2019). Counting queerness in games: Trends in LGBTQ digital game representation, 1985–2005. *International Journal of Communication*, *13*, 1544–1569.

Sousa, A. M. (2020). She's not your *waifu*; she's an eldritch abomination: *Saya no uta* and queer antisociality in Japanese visual novels. *Mechademia: Second Arc*, *13*(1), 72–100.

Stang, S. (2022). Too close, too intimate, and too vulnerable: Close reading methodology and the future of feminist game studies. *Critical Studies in Media Communication*, 230–238. https://doi.org/10.1080/15295036.2022.2080851

Stone, K. (2018). Time and reparative game design: Queerness, disability, and affect. *Game Studies: The International Journal of Computer Game Research*, *18*(3). http://gamestudies.org/1803/articles/stone

Straw, W. (2014). The urban night. In M. Darroch & J. Marchessault (Eds.), *Cartographies of place: Navigating the urban* (pp. 185–200). McGill-Queen's University Press.

Straw, W. (2015). Media and the urban night. *Articulo: Journal of Urban Research*, *11*. https://doi.org/10.4000/articulo.3098

Tanenbaum, T. J. (2015). Hermeneutic inquiry for digital games research. *The Computer Games Journal*, *4*, 59–80. https://doi.org/10.1007/s40869-015-0005-9

Wiegman, R. (2014). The times we're in: Queer feminist criticism and the reparative "turn." *Feminist Theory*, *15*(1), 4–25. https://doi.org/10.1177/1464700113513081a

Woo, J. (2021, March 2). *Queer joy hunting.* IN Magazine. https://inmagazine.ca/2021/03/queer-joy-hunting/

Youngblood, J. (2018). When (and what) queerness counts: Homonationalism and militarism in the *Mass effect* series. *Game Studies: The International Journal of Computer Game Research*, *18*(3). http://gamestudies.org/1803/articles/youngblood

LUDOGRAPHY

Bayonetta, PlatinumGames, Japan, 2009.

Butterfly Soup, Brianna Lei, United States, 2017.

Dream Daddy: A Dad Dating Simulator, Game Grumps, United States, 2017.

Her Tears Were My Light, NomnomNami, United States, 2016.

A Year of Springs, npckc, Japan, 2021.

Coming Out on Top, Obscurasoft, United States, 2014.

A Summer's End – Hong Kong 1986, Oracle & Bone, Hong Kong, 2020.

Gone Home, The Fullbright Company, United States, 2013.

Coffee Talk, Toge Productions, Indonesia, 2020.

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Whose narrative is this?

A character's expression of Identity to counter a Hegemonic Narrative

ABSTRACT

As author-driven stories enter the realm of interactive narratives and provide interactors with freedom of choice in narrative paths and endings, this often happens at the character narrative's expense. Positioning this as expressing the character's identity in the face of hegemonic agency, we draw inspiration from the final episode of Marvel's *She-Hulk: Attorney at Law* series to explore how agency can favour the character's narrative. Comparison is made with the player's narrative and the role of identification in matching these together is explored. This is framed in the context of three case studies: two indie games that have experimented with agency at the expense of the character narrative and an interactive TV episode that provided unreliable agency to favour the character's narrative. We then draw seven lessons from these analyses to serve as guidelines for interactive narratives wishing to project character narratives as one of the perspectives presented to the interactor.

1. INTRODUCTION

SPOILER ALERT In the last episode of Marvel Cinematic Universe's series *She-Hulk: Attorney at Law* (Marvel Studios, 2022), titled *Whose show is this?,* we find the main character, Jennifer Walters – or Jen for short – being released from prison on the condition that she gives up her Hulk superpowers. Jen is a lawyer by profession and acquired her Hulk superpowers when her blood was contaminated by that of her cousin Bruce "The Hulk" Banner. While she never wanted these powers, she realises that the forced abdication of them is not just a "reluctant superhero story" but an unfair ending to her character's narrative. In response to this realisation, she asks the audience – breaking the fourth wall is a regular narrative device in this series – whether this is what they want. Then we get a foreshadowing of what is to come as she stops the voice-over

narration as soon as it starts. As the story progresses towards a narratively dissonant ending, she complains that the storylines are not making any sense and asks the audience whether the story is working for them. A streaming service menu screen comes up to silence her, but she counters it by breaking through her show's screen and jumping across into another of Marvel's series. She then walks off the set and marches into her own production team's meeting room where they are discussing the next season. She complains about the lack of originality in her final episode to which one of the writers retorts that "*there are certain things that are supposed to happen in a superhero story.*"

Formulaic endings are a very common situation for gamers who are herded into a prescribed narrative with its outcome dictated by the game's structure and afforded choices. A constant tug-of-war between authors and players, game narratives try to find a compromise between providing players with freedom of interactivity while restraining the narrative to fit within the target closure (Aylett & Louchart, 2003; Harrell & Zhu, 2009; Tanenbaum & Tanenbaum, 2009). This hegemonic approach to storytelling in games may be acceptable when compensated by the provided gameplay interaction in the resulting experience. But in case of interactive narratives, where the focus is on the narrative and the choices that go along with it, the hegemonic narrative as the dominant perspective is brought into question.

Within the context of video games, the literature often considers only two competing narratives: the author narrative and the player narrative (Bryan, 2013; Bryce & Rutter, 2002; Grace, 2019). From a narratological perspective, the author narrative is the telling of pre-scripted events happening to a set of characters inhabiting some particular storyworld (Jahn, 2005). However, Barthes (1968) argued that once a narrative is created, the author's narrative gives way to the interpretation of the reader in the light of their own perspectives. This is highly evident in video games, particularly in interactive narratives where we introduce interaction at the level of narrative, expanding the narrative space to accommodate the player's potential narratives (Bryan, 2013). The author's narrative is represented by the branching narrative structure of decision points and end-points, often replete with branches converging to the same endpoint. The player's narrative is represented by the freedom to explore further and backwards at each decision point, the take up of side-quests away from what Bateman (2006) calls the 'Golden Path.' The author's narrative is also present in the judgement of the endings: whether they are 'good' or 'bad' endings, whether the player wins or loses. Indeed, each player action is deemed to be 'good' or 'bad' based on how closer is the narrative goal as a result of that action (Adams, 2010). Thus, in setting goals for a narrative, an author's narrative is made manifest.

However, a potential narrative that is largely silenced is that of the character, with literature often treating the player and their character as one 'player-character' (Hefner et al., 2007; Stang, 2019; Westecott, 2009). When character traits are presented, it is only as a 'contact point between the player and game'

(Lankoski, 2011, p. 306) whose goals 'limit plausible actions for players if they want to progress in a game…' (Lankoski, 2011, p. 300). By character narrative, we understand narrative choices that favour the development of the character arc, even in spite of the player's preferred narrative and the author's narrative goals. In *She-Hulk: Attorney at Law* we see how Jen negotiates an ending that better fits her character's narrative rather than the stereotypical ending imposed upon her. Identification with the player's character (Hefner et al., 2007; Klimmt et al., 2010) goes a long way in matching the player's narrative to the character's narrative (cf. goal related engagement (Lankoski, 2011)), but any shortfall in identification is more often than not to the detriment of the character's narrative, not the player's. As Lankoski affirms, "positive engagement with a game does not require positive evaluation of a player character" (Lankoski, 2011, p. 306). An approach that dissects the player-character is one that projects the player as a companion to the non-player character protagonist – what Larsen (2018) calls a 'virtual side-kick.' In *She-Hulk: Attorney at Law* we see how Jen often breaks the fourth wall to address and share her feelings with the audience, casting them into a passive side-kick.

In this paper we carry out a close reading of the (non-interactive) final episode of *She-Hulk: Attorney at Law* to understand the role that the character's narrative can play alongside the author's and player's narrative. We start by positioning the storyworld and its rules, as well as the provided interactions meant to facilitate player narratives, as part of the author's hegemonic structure. We support our argument by drawing from two indie games and an interactive episode from another TV series. We then describe the player's identification with the character as a means to converge the player's narrative with the character's narrative, facilitated by the breaking of the fourth wall but modulated by the afforded interaction. We conclude by outlining seven lessons derived from our analysis that may serve as guidelines for future interactive digital narratives.

2. STORYWORLDS' HEGEMONY

With interactive narratives aiming to provide interactors with some level of control over the narrative, ideally over the plot of the story, rather than just the narration of the telling, what remains to be controlled are the characters and the storyworld. As characters develop along the story (cf. hero's inner and outer journeys (Vogler, 2007)), they are liable to be shaped by the events in the narrative and thus remain within reach of the interactor's agency. Less so is the storyworld in which the author retains the majority of control and uses it to reinforce aspects of their narrative, such as mood and emotions (Domsch, 2019). Jenkins describes game designers as narrative architects (Jenkins, 2004) through their ability to shape stories based on the storyworlds they create. Tosca and Klastrup extend this beyond games to transmedia storytelling through their concept of transmedial worlds from which "a repertoire of fictional stories and characters can be actualized" (Klastrup & Tosca, 2004, p. 409). Video games that are part

of this repertoire employ game rules that are closely tied to, and help support, the imagining of the game's storyworld (Juul, 2005). Not all gameplay supports the narrative, however, as reported in Hocking's criticism (2007) of LudoNarrative Dissonance in *BioShock* (2K Games, 2007). We argue that the rules of the storyworld, as imagined and dictated by the author, impose a functional structure onto the game's interaction and form part of the author's narrative.

3. INTERACTION AS HEGEMONY

Hockley (1996) criticised the definition of interactivity as providing power to the user when all it does is merely to provide the 'illusion of control' by "broaden[ing] the paradigmatic set from which the viewer makes choices" (p. 10), particularly in its interpretation as "a concrete, quasi mechanical relationship with machine or software" (p. 10). Rieser (1997) interprets this illusion of control as the "power structures which control the media attempting to maintain their hegemony through safely limiting the forms of interactivity" (p. 10), while Meier sees games as "a form of rule-based learning of game structures which can be seen as a reflection of hegemonic society" (2015, p. 3). Video games themselves can be placed on a continuum between Games of Progression, which present sequential challenges that lead the player from beginning to the end of an authored story, and Games of Emergence, where game mechanics are chosen and combined in such a way that they lead to emergent gameplay and give more space for the player's story (Adams, 2010; Juul, 2005). Yet, these are still bounded by the choices made in production. Bryan comments on how both the author's narrative space and the player's narrative space exist "within the limitations of whatever system the gamespace exists within" (Bryan, 2013, p. 34). Thus, hegemony not only manifests itself in the author-driven story, but also in player-driven stories whereby the afforded interaction is controlled by the hegemonic parameterisation of such interaction by the author of the digital experience (cf. 'regulating goals' (Lankoski, 2011)).

Indeed, Rieser criticises the modelling of interactive narratives on computer games and their inherent structure (1997, p. 13) and argues for novel structures where "the user is freed both from the slavery of linearity and the reductivism of branching plot choices" (1997, p. 13). Interactive narratives are different from classical narratological structures in that they are systemic structures (Koenitz et al., 2021) that adapt to the user's interaction rather than prescribe the paths available to the interactor. Koenitz further argues that in order to not be confined within the spaces of traditional media, one must think of the interaction as the driving force of IDNs and that the medium has to be digital in order to afford interaction. Rieser even demands the invention of a coherent artistic language for interaction that transcends the established syntax of earlier forms and media (Rieser, 1997, p. 12).

Such variation from established genres, however, comes with its financial risks and it is no surprise that big game studios shy away from experimenting

with well-established genres and it is therefore in TV series and indie games that we more often find interesting offerings. *Black Mirror: Bandersnatch* (Slade, 2018), *Papers, Please* (Pope, 2013) and *The Stanley Parable* (Wreden & Pugh, 2011) are typical examples of such successful experiments (M. Kelly, 2018; Kubiński, 2017; Rezk & Haahr, 2020).

Black Mirror: Bandersnatch (Slade, 2018) is an interactive production published on the streaming platform Netflix, which provides viewers with the opportunity to choose a narrative path via binary options at key stages of the story (Rezk & Haahr, 2020). Starting with a small number of trivial (and non-consequential) choices in order to train the general public in how to handle the interaction, the choices soon become narrative-changing decisions that need to be made within a few seconds before a default choice is made. Some choices lead to dead ends which restart the narrative experience, forcing the viewers to choose a different option in order to progress the narrative. The interactive system is not consistent in the character's abiding by the player's choices, however, making for a confusing relationship between agency and narrative outcome.

Papers, Please (Pope, 2013) presents the player with the role of an immigration inspector, tasked to check the documentation of entrants to the fictitious country of Arstotzka in 1982, denying access to the country if the documents do not meet the specified criteria. With a family to feed and tend to, any infraction causes a decrease in pay, or even getting fired, resulting in potential loss of family members as they succumb to ill health, cold, or malnutrition. Thus, the player is compelled to obey the ever-increasing instructions but is challenged by the stories arising from interactions with the entrants, contextualised within a conflict with neighbouring states. Thus, between the player's ability to detect inconsistencies in the documentation and being swayed by the entrants' requests, the player has to balance between abiding by the rules to help his family survive and making infractions to carve their own survival in a turbulent country.

The Stanley Parable (Wreden & Pugh, 2011) similarly presents an employee, Stanley, whose monotonous servile job of button-pusher gets interrupted by an unusual cessation of his continuous instructions. The player is invited to help Stanley find out why he has been left alone to his own devices, guided by the instructions of the narrator whose voice-over describes the player's upcoming actions as a *fait-accompli*. Non-conformance with these instructions results in an initial frustration in the narrator, evolving into a direct address of the player asking them why they are unable to follow instructions like Stanley, and breaking the fourth wall for the player.

4. BREAKING THE FOURTH WALL

The audience of theatre and film, due to their unknown and unpredictable nature, are not part of the author's narrative and are usually not included in the narrative, serving only as silent observers and consumers of the performance. Indeed, the maxim never to look at the camera is considered crucial to immer-

sion, as making the audience visible to the characters breaks narrative immersion by "attacking the spectator's voyeurism" (Vernet, 1989, p. 48). When the audience is addressed during a theatrical performance, they are mostly in a comedic context – such as pantomimes – where the performer can defuse any off the rail replies from the audience by making fun of them and dismissing them as a comedic contribution. In film, where no audience feedback can jeopardize the ongoing narrative, the metaphoric fourth wall is broken to differentiate a character from the rest of the cast: such as in *House of Cards* (1990) or *Deadpool* (1997). They are characters who are able to see beyond the fabric of diegesis and are aware of the real world of the audience – what Vernet calls a 'metacharacter… [both] witness … and commentator' (Vernet, 1989, p. 53). They go against the maxim and reach out to the audience, providing a rebellious nature against the hegemony of diegetic performance. Breaking the fourth wall has been used to provide an unexpected ending in *Black Mirror: Bandersnatch*: choosing to jump out of the therapy room's window results in the camera pulling back to show that it is all a set and that the window is just a prop.

The result of Walters' breaking the fourth wall in *She-Hulk: Attorney at Law* to address the audience serves to help build a rapport with the viewers of the series. It establishes a communication channel which is predominantly one-way as the character shares her thoughts with the audience while the story moves forward. In the penultimate episode of the series, when Jen feels that her character has had her closure, she asks the audience why they are still there, why has the episode not ended yet. She then realises that there is a tacked-on scene and that it is the next episode that is the finale. In the extended scene, Jen is betrayed and gives in to her Hulk personality, causing the havoc the audience are used to see from Bruce Banner's Hulk. But, unlike her cousin, whose mayhem is lauded, she ends up in prison. In the finale, while trying to uncover who was behind her betrayal, she feels that the story is getting completely out of hand, and in desperation re-addresses the audience, asking them if this is what they wanted, if this "works for them." This has the effect of generating sympathy, of getting the audience on her side as she prepares to challenge the hegemony of the imposed author-driven story.

5. IDENTITY AND IDENTIFICATION

The choice of She-Hulk as a case study for the topic of counter-hegemony and expression of identity is not a coincidence. We have two discernible identities that represent the self-reflective ipse-identity and the external self idem-identity (Ricoeur, 1992) in the personas of Jen Walters and She-Hulk respectively. Moreover, Mitchell (2015) presents the She-Hulk character in the comics (upon which the TV series mentioned above is based) as a "monstrous feminine, confronting patriarchal power structures by challenging what constitutes the 'normal' as an attorney, as a woman and as a superhero" (Mitchell, 2015, p. 447). The power structure is provided by the law firm she is employed into,

run by the stereotypical 'White Man of the North;' by the harassment she suffers as a woman at the hands of thugs, lawyers, suitors and other female characters; and by the comparison of her to The Hulk by the general public – with the given name She-Hulk reflecting her being considered a female version of The Hulk. Through her She-Hulk identity she discovers that she is better able to challenge these power structures – "the only way to be free from patriarchal power structures is by becoming the monstrous and supernatural" (Mitchell, 2015, p. 474) – and thus prefers this alternate identity to her normal self: both as a lawyer and as a love interest for her suitors.

While the original She-Hulk comic character itself is a product of the second-wave feminism of the 1970s that promoted gender equality (Mitchell, 2015), the release of the TV series *She-Hulk: Attorney at Law* about fifty years later finds an audience that is once again challenging gender inequality, and thus open for identification with the protagonist, with identification here understood as "an imaginative experience in which a person surrenders consciousness of his or her own identity and experiences the world through someone else's point of view" (Cohen, 2001, p. 248). Bondi claims, however, that "power-laden differences [including] race, class, age, sexuality, … have the potential to disrupt any possibility of identification" (Bondi, 2003, p. 66) in interpersonal relationships. This may explain the use of breaking the fourth wall from the first episode and throughout the season, helping the character build a rapport with her audience that will see them accepting and lauding the mayhem she creates in the narrative in the final episode, not as a superheroine, but as a lawyer. Through this rapport, she makes her character's narrative outcome a desired goal for her audience.

While identification with film characters has been argued against (Barker, 2005), it is a common phenomenon in games (Klimmt et al., 2010). Aided through afforded agency, players take on the role of their assigned characters by performing actions on their behalf – what Cohen calls a 'vicarious experience' (Cohen, 2001, p. 249). However, players have to negotiate a narrative identity between their own self-identity and the target character as depicted by the author, based on the afforded interaction (Barbara & Haahr, 2022). As Heron and Belford point out, "[w]hile the narrative structure of games may offer opportunities for empathy and identification with player characters, the ludic requirements of balance serve to instantiate limits on both player agency and the viable set of actions" (Heron & Belford, 2014, p. 34). Thus, the nature of interactive narratives introduces an element that competes for dominance with the hegemonic power structures put in place by the author and its challenge by the narrative's characters: the player narrative.

6. CHARACTER'S NARRATIVE AND *BLACK MIRROR: BANDERSNATCH*

While it is true that the character's narrative is fundamentally still written by the author, we can see a competition between the characters and the rules of

the author's storyworld, what McKee calls 'external conflict' (McKee, 1998). Character-driven storytelling – where the plot develops along the characters' arc rather than a fixed target point that has to be reached – is found in film, such as film director Quentin Tarantino's character-based scriptwriting as explained during an interview with Vulture,[1] and also in games: "Characters have a right to their own lives in games" (Sheldon, 2014, p. 41). Character-driven storytelling is also a design methodology (Lankoski, 2010; Mariani & Ciancia, 2019) wherein "characters can be seen as narrative entities through which the audience is able to enter vicariously the storyworlds" (Mariani & Ciancia, 2019, p. 15).

In traditional non-interactive media, what determines whether the character is perceived to reach their full potential in the narrative is the audience's consumption of the narrative through the medium's affordance. The reader chooses whether to read a novel until the end or to stop along the way, never achieving closure. On screen, the viewer may decide to abandon the movie half way or to not watch the remaining episodes in a TV series. In interactive media, however, the player is given a more active involvement into the progression of the narrative: following a path that may be chosen to meet the player's idea of where the story should go, which may or may not match the character's idea of closure. Sometimes it is fenced in by the provided agency: in *Grand Theft Auto IV* (2008), the game mechanics are all about street crime whilst the main character's story, Niko Bellic, is about wanting to give up the life of crime and retire. Thus, as the player takes advantage of the afforded agency in causing mayhem in the streets of Liberty City, each action detracts from Niko's ultimate aim of finding peace.

In the interactive TV series episode *Black Mirror: Bandersnatch*, a couple of scenes present two options to the viewer, with both actions going against the character's intentions. This seems to have the author narrative being forced onto the player. Yet, in the first instance, the character does not obey the player's instructions and thus keeps their goals in play. In the second instance however, another character follows the instructions and the player's narrative subdues that of the character. Undermining the player's authority over the narrative for the benefit of the character, especially in an inconsistent manner, is risky as it devalues the meaningfulness of the player's agency (cf. 'commitment to meaning' (Tanenbaum & Tanenbaum, 2009)).

7. NARRATIVE ENDINGS IN *PAPER, PLEASE*

In *Papers, Please* (Pope, 2013) we do not know much about the protagonist except that he has been chosen by lottery to work as an inspector on the border city of Grestin with his family being given lodging close by in East Grestin. At the end of each working day, we are given an account of his savings, salary and expenses in terms of food, rent and heat, beside a health status for all his family members. The game has 20 different predefined endings which reflect the choices made during the player's narrative. These endings can be grouped into three generic outcomes: (1) carrying out the orders given by the Government

1. https://www.vulture.com/2015/08/quentin-tarantino-lane-brown-in-conversation.htm

of Arstotzka and thus bow to the power of the regime, (2) supporting the rebel order of EZIC whose aim is to overthrow the government of Arstotzka, thus taking a counter-hegemonic stand, and (3) fleeing the country with or without members of the family. Given the only information we have about the inspector at the beginning of the game and the daily statement report, we can safely assume that the family is a key motivation for his character and every action taken will be judged in relation to their safety. Thus, fulfilling his job to the letter without infractions that might diminish his salary needed to maintain his family can be seen as a possible target for the inspector's character, bowing to the hegemony of the Arstotzka government. Had he to challenge and retaliate against his government's strict controls, it would involve seeking to take as many members of his family away to safety. Supporting a rebel organisation to bring instability to the country seems to be the least favourable outcome of the three for the safety of his family but it surely makes up for attractive action and turbulence for a detached observer, such as the player. So, for the sake of the argument we can say that outcome (1) is supporting the hegemonic power structure (the author`s narrative storyworld); outcome (2) jeopardizes the character's national and familial stability for the sake of action (the player narrative); and outcome (3) is a character ending that meets his priority of family safety (the character narrative).

8. THE NARRATOR IN *THE STANLEY PARABLE*

In both theatre and film, the narrator, whether a diegetic character or a non-diegetic voice, is aware of, and addresses, the audience. The narrator is a trans-diegetic character that is witness to the action and commentator to the viewers (Vernet, 1989). In games, the role of the narrator is altered due to the agency given to the audience. The narrator is aware that the audience is an able player, at whose hands lies the driving force of the game. Thus, the role of the game narrator is not limited to explaining the narrative to the spectator, but also to explain to the 'spect-actor' – to use the name given to the audience of the interactive *Theatre of the Oppressed* (Boal, 2014) – how their actions can help shape the game's narrative.

In *The Stanley Parable* (Wreden & Pugh, 2011) the narrator, representing the hegemonic power of the author's storyworld, takes centre stage as the voice guiding the player's choices for the main character, Stanley. Stanley had a set life prior to the player's arrival: pushing buttons as instructed by the screen in front of him. It is only when these instructions stop arriving that Stanley is in need of someone else to make the choices for him, and that is where the player comes in. The narrator, commenting on what is to happen, projects a narrative that, if followed by the player, makes Stanley obey the hegemonic structure he is employed with and retorts sarcastically when the player chooses otherwise. At some points, such as in the broom cupboard scene, the narrator addresses the player directly, breaking the fourth wall by distinguishing between the player

and Stanley. It is made clear that the game is aware of the player, and that Stanley is still living up to his boring life of obeying the orders of others. Whereas before he obeyed the on-screen instructions to follow the author's narrative, now he obeys the controls of the player to follow the player's narrative. Thus, in the case of Stanley, there is no character narrative, also because the game itself is a reflection on the illusion of choice that games give to players, rather than the game being a proper narrative in itself.

This is in contrast with how the narrative plays out in *She-Hulk: Attorney at Law*'s last episode. As Jen is realising that the story is not serving her character's narrative and asks the audience if this is what they want, the narrator interrupts with a voice-over that describes her character as having reached a new low and claims that Jen is giving up. She takes over again with a resolute 'No!' and shuts the narrator off. This is the first sign of Jen taking control over her narrative. She then sends a private message to her cousin The Hulk but gets no reply. She then asks one of her superhero clients, Emil 'the Abomination' Bronsky, whether his offer to stay at his healing resort was still open. As we shall see later, in doing so she still plays into the author's narrative but does so on her own terms because, without waiting for Emil's reply, she decides that this is a time to take up his 'anytime' offer. As she is packing up to go, she remembers her audience, always watching, and, owing to the relationship she has been nurturing, feels like she has to explain herself. She declares she's not running away from her problems but taking a mental health break.

9. CHARACTER EXPRESSION IN *SHE-HULK: ATTORNEY AT LAW*

Unbeknownst to Jen, the resort is serving as the venue for a meeting of *Intelligencia*, a group trying to attack her image led by one of her past suitors who is jealous of her superpower and responsible for her betrayal at the party in the penultimate episode. Stumbling upon their meeting, which her client Emil was cluelessly addressing in his Abominable form, results in a scuffle that includes The Hulk coming to save the day. It is a stereotypical superhero ending that has already been used in the previous episode and in that instance landed Jen in jail. If the ending turns out well this time, an interpretation could be that her She-Hulk character was inferior to The Hulk. It was an ending that did not make sense for Jen, and she therefore protests to the camera. At this point, the episode is interrupted by the menu, and Jen grabs the opportunity to literally break through the menu's wall in order to reach across to the Avengers set and make her way to her production team, as we been described in the introduction. There the narrative continues with Jen (as She-Hulk) slamming her fists on the desk and suggesting that they (the production team) do the story their own way rather than following the traditional superhero ending. At this point, she learns of Kevin (the implied author) who is making all the decisions based on "the most advanced entertainment algorithm in the world." There follows a brief argument as to whose show it is: Jen's or Kevin's. This resolves to an agreement that the show is a legal

comedy, and this allows Jen (now in her human form at Kevin's request) to act her role as a professional lawyer and argue her way out of a super-soldier-serum[2] ending and towards one that better fits her character's narrative. Giving in to her requests, Kevin removes all three of the plots involving the male characters (the Intelligencia mastermind, The Hulk, and Abomination) and brings back her love interest into the story. On her return to the episode, back in Hulk form, she approaches the Intelligencia mastermind who, having been apprehended by the police and feeling vulnerable, closes his eyes expecting Hulk-like retribution. Instead, Jen morphs back into her human form and postpones the retribution to court. No Hulk smash ending for Jen, but a lawyer's way of dealing with problems, as befits her human character, allowing her to express her identity.

10. LESSONS FOR INTERACTIVE DIGITAL NARRATIVES

What can we learn from this final episode of She-Hulk, in the light of a hegemonic structure that suppresses one's identity? Also drawing from *Papers, Please, The Stanley Parable*, and *Black Mirror: Bandersnatch*, we now consider some takeaways to be considered when designing IDNs.

1. **Provide a narrative that provides closure for the character**

They key takeaway is that besides the author's narrative and the player's narrative, characters have the right to their own character narrative too, especially in an environment where they are oppressed and misrepresented, such as Jen Walters in *She-Hulk: Attorney at Law*. IDNs ought to present narrative pathways that favour the character's closure as equally as those providing the player's narrative and the author's narrative. However one should be honest about the afforded agency: forcing an option that subsumes the character's narrative and then have the character ignore the player's action thwarts the players agency, as has been reported on *Black Mirror: Bandersnatch* (Rezk & Haahr, 2020). Other takeaways arise from our exploration of the literature and other games throughout the article.

2. **Provide interaction that is consonant with the narrative**

By considering the hegemony of interaction, we commented on how the agency provided to the interactor in itself shapes the player narrative experience. Games in general may afford some level of dissonance between gameplay and game story if their focus is on providing a fun gameplay experience. We argue, however, that interactive narratives, representing a complex phenomenon through their focus on the narrative (Barbara, 2018; Koenitz et al., 2021), are expected to provide interaction that is consonant with the story being told in order to assist in its interpretation.

3. **Facilitate the player's identification with the character**

Breaking the fourth wall may serve as a comedic trope that undermines the rigidity of a narrative, but in the *She-Hulk: Attorney at Law* series this helped build a relationship with the audience to facilitate empathy and identification. In video games, identification is needed to bring the player narrative as close as possible to the character narrative, especially when a character narrative

2. The super-soldier serum is a key plot in the Marvel universe in which normal humans are injected with a serum to gain superpowers (e.g., Captain America and Black Widow).

is not facilitated and all depends on the player's narrative. The player narrative becomes the character's narrative if the player is able to identify with the character. If they fall short of this identification, then their narrative identity will serve the player's narrative, and not the character's. The inspector played in *Papers, Please* was only outlined in terms of his family members' dependency on him, limiting the level of identification. While this projected a target situation of family survival, it afforded a risky player's narrative that the inspector would not have willingly chosen over the safety of his family.

4. **Write well-defined characters**

For identification to happen, the character needs to be well defined such that there is a distinction between the character and the player. In *The Stanley Parable*, the player's character was a husk of a person without a will of their own, and thus there could never be a character narrative, just the implied author's (cf. Booth, 1961) (delivered through the narrator's instructions) and the player's narrative (delivered through resistance to the narrator's instructions).

5. **Do not create strong narrators that overshadow the characters**

A strong narrator may compete with the player's and character's narratives by pushing the author's narrative forward, as in *The Stanley Parable*. The narrator's transdiegetic nature gives it a powerful presence that may compete with each narrative on its own turf. It is a very risky narrative device to employ and caution must be taken not to cause any imbalance towards one narrative over another.

6. **Write unique character narratives that avoid stereotypes**

Character narratives should be careful not to fall into stereotypical endings. Characters find their identity through their uniqueness and endings should match their character as closely as possible – just like Jen Walters used her lawyer's profession to win the argument for her season's finale. Stereotypical endings can be relegated to the player narratives so as to meet genre expectations.

7. **Cast the player as a sidekick to shift attention onto the protagonist character**

In closing, we wish to bring forward another option that was hinted at in the introduction and may well serve the need for a character narrative. This is the concept of assigning the players the role of a protagonist's sidekick (Larsen, 2018), potentially of multiple characters such that the player is not tied to a single character (Rezk & Haahr, 2020). In this scenario the player narrative(s) develop(s) alongside that of the character narrative as the player fulfils a secondary role rather than that of the protagonist, just like in the *She-Hulk: Attorney at Law* series where the audience is a companion to the She-Hulk character.

11. CONCLUSION

Counter-Hegemonic narratives traditionally present situations where one or more characters rebel against a tyrannical power structure and are able to express their own unique identity such as in films like *Happy Feet* (Miller, 2006) and *AntZ* (Darnell & Johnson, 1998) and the novel (and later TV series adap-

tation) *The Handmaid's Tale* (Atwood, 1985). In this article, we shift our focus onto the hegemonic nature of the interactive system and how it affords player narratives at the behest of the intended author narrative. However, we argue that interactive narratives ought to also afford character narratives that serve the expression of the protagonist's identity rather than the player's. Matching the player's narrative to the character's narrative requires a high level of identification, which is a challenging task that often falls short of meeting the player's narrative objectives with the character's stakes in the story. We thus provide some guidelines built on lessons learnt from the *She-Hulk: Attorney at Law* series, the *Black: Mirror: Bandersnatch* episode, as well as from indie games *Papers, Please* and *The Stanley Parable*.

While we appreciate that translating tropes and techniques from non-interactive media onto interactive narratives does not contribute to the freedom sought in this blossoming creative and academic field, we do think that attempts to break free from such media forms are welcome inspirations for comparative outcomes in interactive narratives. We encourage further similar reflections and hopefully adoption of these lessons in future IDNs.

Finally, the ultimate expression of identity to counter hegemonic narratives is given by Jen Walters in defending her obliteration of Kevin's algorithmically determined ending: "It's what Hulks do. We smash things. Bruce [The Hulk] smashes buildings. I smash fourth walls and bad endings."

REFERENCES

Adams, E. (2010). *Fundamentals of game design*. New Riders Pub.

Atwood, M. (1985). *The Handmaid's Tale*. McClelland and Stewart.

Aylett, R., & Louchart, S. (2003). Towards a narrative theory of virtual reality. *Virtual Reality*, 7(1), 2–9.

Barbara, J. (2018). Narrative Consistency across Replays of Pro-social Interactive Digital Narratives. *International Conference on Interactive Digital Storytelling*, 154–159.

Barbara, J., & Haahr, M. (2022). Identification and IDNs in the Metaverse: Who Would We Like to Be? *International Conference on Interactive Digital Storytelling*, 601–615.

Barker, M. J. (2005). The Lord of the Rings and 'Identification' A Critical Encounter. *European Journal of Communication*, *20*(3), 353–378.

Barthes, R. (1968). The Death of the Author. Translated by Stephen Heath. *Roland Barthes*.

Bateman, C. (2006). *Game Writing: Narrative Skills for Videogames (Charles River Media Game Development (Paperback))*.

Boal, A. (2014). Theatre of the Oppressed. In *The Improvisation Studies Reader* (pp. 97–104). Routledge.

Bondi, L. (2003). Empathy and identification: Conceptual resources for feminist fieldwork. *ACME: An International Journal for Critical Geographies*, *2*(1), 64–76.

Booth, W. C. (1961). *The rhetoric of fiction*. University of Chicago Press.

Bryan, J. S. (2013). *The dynamics of the player narrative: How choice shapes videogame literature* [PhD Thesis]. Georgia Institute of Technology.

Bryce, J., & Rutter, J. (2002). Spectacle of the deathmatch: Character and narrative in first-person shooters. *ScreenPlay: Cinema/Videogames/Interfaces*, 66–80.

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, *4*(3), 245–264.

Domsch, S. (2019). Space and Narrative in Computer Games. *Ludotopia: Spaces, Places and Territories in Computer Games*, 103–123.

Grace, L. (2019). Hauntalogy, the Penumbra, and the Narratives of Play Experience. *25th International Symposium of Electronic Art (ISEA), Gwangju, South Korea*.

Harrell, D. F., & Zhu, J. (2009). Agency Play: Dimensions of Agency for Interactive Narrative Design. *AAAI Spring Symposium: Intelligent Narrative Technologies II*, 44–52.

Hefner, D., Klimmt, C., & Vorderer, P. (2007). Identification with the player character as determinant of video game enjoyment. *International Conference on Entertainment Computing*, 39–48.

Heron, M., & Belford, P. (2014). 'It's only a game' – Ethics, empathy and identification in game morality systems. *The Computer Games Journal*, *3*(1), 34–53. https://doi.org/10.1007/BF03392356

Hocking, C. (2007, October 7). Ludonarrative Dissonance in Bioshock. *Click Nothing*. http://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html

Hockley, L. (1996). Inter-between: Actus-done. *Convergence*, *2*(2), 10–12.

Jahn, M. (2005). Narratology: A guide to the theory of narrative. *English Department, University of Cologne*, *28*.

Jenkins, H. (2004). Game design as narrative architecture. *Computer*, *44*, s3.

Juul, J. (2005). *Half-real: Video games between real rules and fictional worlds*. MIT Press.

Kelly, J. (1997). *Deadpool* (Vol. 3).

Kelly, M. (2018). The game of politics: Examining the role of work, play, and subjectivity formation in papers, please. *Games and Culture*, *13*(5), 459–478.

Klastrup, L., & Tosca, S. (2004). Transmedial worlds-rethinking cyberworld design. *Cyberworlds, 2004 International Conference On*, 409–416. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1366205

Klimmt, C., Hefner, D., Vorderer, P., Roth, C., & Blake, C. (2010). Identification with video game characters as automatic shift of self-perceptions. *Media Psychology*, *13*(4), 323–338.

Koenitz, H., Barbara, J., & Eladhari, M. P. (2021). Interactive Digital Narratives (IDN) as Representations of Complexity: Lineage, Opportunities and Future Work. *International Conference on Interactive Digital Storytelling*, 488–498.

Kubiński, P. (2017). *Play It Again, Stanley: Mise en Abyme and Playing with Convention and Narrative in The Stanley Parable*.

Lankoski, P. (2010). *Character-driven game design: A design approach and its foundations in character engagement*. Aalto University.

Lankoski, P. (2011). Player character engagement in computer games. *Games and Culture*, *6*(4), 291–311.

Larsen, M. (2018). Virtual sidekick: Second-person POV in narrative VR. *Journal of Screenwriting*, *9*(1), 73–83. https://doi.org/10.1386/josc.9.1.73_1

Mariani, I., & Ciancia, M. (2019). Character-driven Narrative Engine. Storytelling System for building interactive narrative experiences. *DIGRA'19-DIGRA INTERNATIONAL CONFERENCE: GAME, PLAY AND THE EMERGING LUDO-MIX*, 1–19.

McKee, R. (1998). *Story*. Methuen.

Meier, J.-N. (2015). *Hegemony As Process? The Communication of Ideology in Video Games and Its Effects*.

Mitchell, D. (2015). Paradoxes and patriarchy: A legal reading of She-Hulk. *Griffith Law Review*, *24*(3), 446–481.

Rezk, A. M., & Haahr, M. (2020). The Case for Invisibility: Understanding and Improving Agency in Black Mirror's Bandersnatch and Other Interactive Digital Narrative Works. In A.-G. Bosser, D. E. Millard, & C. Hargood (Eds.), *Interactive Storytelling* (pp. 178–189). Springer International Publishing.

Ricoeur, P. (1992). Oneself as Another. 1990. *Trans. Kathleen Blamey. Chicago: U of Chicago P.*

Rieser, M. (1997). Interactive Narratives: A Form of Fiction? *Convergence: The International Journal of Research into New Media Technologies*, *3*(1), 10–19. https://doi.org/10.1177/135485659700300102

Sheldon, L. (2014). *Character development and storytelling for games*. Cengage Learning.

Stang, S. (2019). This action will have consequences": Interactivity and player agency. *Game Studies*, *19*(1).

Tanenbaum, K., & Tanenbaum, T. J. (2009). *Commitment to meaning: A reframing of agency in games*.

Vernet, M. (1989). The Look at the Camera. *Cinema Journal*, *28*(2), 48–63.

Vogler, C. (2007). *The writer's journey*. Michael Wiese Productions Studio City, CA.

Westecott, E. (2009). *The player character as performing object*.

FILMOGRAPHY

AntZ, DreamWorks Animation, United States, 1998.

She-Hulk: Attorney at Law, Marvel Studios, United States, 2022.

Happy Feet, Warner Bros. Pictures, Australia, 2006.

House of Cards, BBC, United Kingdom, 1990-1990.

Black Mirror: Bandersnatch, Netflix, United Kingdom, 2018.

LUDOGRAPHY

BioShock, 2K Boston/2K Australia, United States/Australia, 2007.

Papers, Please, Lucas Pope, United States, 2013.

The Stanley Parable, Galactic Cafe, United States, 2011.

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These Routes are Just as Worthy if you Give Them a Chance

Alternative discourses in (visual) novel games as a means to allow safe spaces of exploration

ABSTRACT

Visual novels are known for their gameplay, which tends to be heavily focused on branching narratives, allowing players to experience many stories within the same world. We will explain how these games are contextualized in the Japanese market, and how their specific template has been adapted by other creators in order to tell their own unrepresented stories. This paper highlights how this can be a conduit for exploring various identities, such as heterosexual women, homosexual men, and broader queer identities that are not often represented in compassionate stories and environments. Furthermore, we will examine how sociocultural issues can feed into the themes and subjects of the games, yet still be presented with humor and an overall care for the characters, and, by extension, the player. This delicate balance will be showcased through analyses of the games *Cupid Parasite*, *Coming Out On Top*, and *Hustle Cat*.

1. INTRODUCTION

One criticism often lobbed against video games is the overrepresentation of heterosexual male protagonists and the small window of opportunity for other identities to take center stage. This was often paired with the issue of female representation tending to be synonymous with (hyper)sexualization and being secondary to their male counterpart (Kondrat, 2015; Lynch et al., 2016), as well as relying upon a hegemonic construction of (white) heteromasculinity (Burrill, 2008; Dietz, 1998; Fron et al., 2007; Kline et al., 2003). This would lead to a cloistering of the industry, heavily politicizing what would be allowed in the digital playground, keeping the supposed minority of players out of a male-centric domain (Fron et al., 2007). The representation of diversity is still a hurdle in

the main-stream video game industry (Williams et al., 2009). Although there has been a steady increase of female characters (Lynch et al., 2016) and noticeable improvement with female character portrayals (Hess, 2021; Silvis, 2021), there is still a lot dissatisfaction among female players (Silvis, 2021). On the other hand, heteronormativity seems to remain the norm, but it should be noted that LGBTQ+ content has been part of game history from 1985, and many identities are becoming more visible, even in mainstream games (Shaw et al., 2019).

However, as gamers outside the hegemonic white hetero-male category have become more visible, and genres oriented toward other demographics are becoming more prevalent, "masculine gaming culture responds with discourses of threat, anxiety, and containment – the latter accomplished by the continued degradation of casual games as simple, insignificant, and reductive of hard-core aesthetics" (Soderman, 2017, p. 42).

This may be part of the reason why visual novels have been overlooked, even if they have been offering alternative representation, such as female protagonists in stories that are made with a female audience in mind (the *otome* genre), or through the depiction of queer experiences such as homosexuality or gender non-conforming identities. With the ever-expanding catalogue of games being compiled on fan-made databases, we want to shine a light on this genre often relegated to the sidelines and showcase a sample of the richness and diversity it has to offer.

This article argues that novel games are able to usher the gaming culture to a multitude of voices and, in doing so, allow for the exploration of new identities in a safe environment. We will establish how novel games position themselves amidst the corpus of interactive digital narratives through their structure, heavily focused on branching narratives and alternate timelines, and follow up with how players in this specific context may relate to their avatar. This, in turn, will allow us to explore the potential for creating a safe space for narrative exploration, even when confronted with representations of toxic or otherwise unbalanced relationships, through the presentation of the findings obtained through fieldwork with *otome* game players. Then, we will present three different cases recentering the experiences and representations of protagonists that fall outside of heteromasculine norms. We will argue that these games depict (and are the reflection of) several socio-cultural issues pertaining to the communities that they simultaneously represent and establish as their target audience. Through a close-reading approach within the scope of cultural and gender studies, we will begin by exploring a female-centric experience with an *otome* game, *Cupid Parasite*. Then, we will delve into games that are repurposing the Japanese novel game genre to cater to queer audiences, with *Coming Out on Top* and *Hustle Cat*.

2. DEFINING A GENRE AND THE IMPORTANCE OF THE CULTURAL LENS

The expression "visual novel" is gaining a lot of attention in contemporary gaming culture all over the world. It refers to a genre originating from Japan,

however, as the Japanese director and writer Uchikoshi Kotaro mentions, the term "visual novel" does not really represent a genre in his country (Szczepaniak, 2014, p. 277). His games, such as *Nine Hours, Nine Persons, Nine Doors* (Chunsoft, 2010), are known as adventure games in Japan. Ryukishi07, creator of *Higurashi When They Cry* (07th Expansion, 2002), reinforces this notion, as their game "would be somewhere in-between an action game and a novel. So [he] believe[s] this, let's say, central position – at the center between all these different genres – depending on which elements are stressed [they] could become closer to action games, or closer to an actual novel" (Szczepaniak, 2014, p. 215). Novel games are understood as interactive books, able to steer the narrative into different paths to reflect the player's choices, not unlike choose-your-own-adventure books.

Another important category, *ren'ai-sim* (literally translated as love simulation game) or dating-sim, are games centered around a dating system where the protagonist may find love with a predetermined pool of available lovers. Depending on the targeted audience, the term and established trope vary: *bishoujo* games are geared toward a heterosexual male audience, while *otome* games offer similar opportunities for female audiences, allowing them to romance male partners through a female protagonist (Taylor, 2007). Homosexual relationships are also clearly visible in Japan through the *yaoi* genre, whose content was largely produced at first by and for heterosexual women, but as Nagaike (2015) notes, homosexual (and even heterosexual) men who seek to escape heteropatriarchal normativity have now embraced this culture. The genre that appears to depict lesbian relationships and is known as *yuri*, on the other hand, is a bit different, as it does not have a core demographic in mind. This term encompasses any media that showcase intense emotional connection, and romantic or physical desire between women. The gameplay of *ren'ai-sim* games usually puts forward a system of parameters that the protagonist must raise, such as fitness and art in the case of *Tokimeki Memorial Girl Side* (Konami, 2002), in order to unlock potential dates and maintain their interest during the allotted in-game time. The games the case studies presented in this article were conducted upon undoubtedly operate on a dating system, but the absence of stats building, and time management is a strong argument to them closer to the novel genre. Thus, instead of viewing them as dating-sim games, we argue that they should be thought of as novel games *with* dating-sim elements. Even if novel games have expanded outside of Japan, we believe it is fair to restitute terms closer to the ones that are part of the established vocabulary, and that will be how we will refer to these games from here on out.

3. EMBRACING ALTERNATE REALITIES

While the lower cost of production of novel games can be a contributing factor to their ever-expending catalogue, the format also means easier accessibility for creators to tell their stories. *Hatoful Boyfriend* (Mediatonic, 2015), the quirky

novel game about romancing pigeons, was made singlehandedly by the man-gaka Moa Hato. Others have been using the free game engine Ren'Py to bring their worlds to life. Such is the case with *Katawa Shoujo* (Four Leaf Studio, 2012) and its development team, which was the result of an online collabora-tion stemming from an interest in creating a narrative based on artwork by RAITA, a manga artist, depicting characters with disabilities.

> "The theme of disability becomes central to the relationships that [the male protagonist] cultivates with each of the women but the game avoids a representa-tion of disability that defines relationships. [For the developers and writers,] disability is stressed as an initial character trait which when combined with broader personalities, interests, experience, and the setting open onto much more complex identities and characterizations" (Champlin, 2014, p. 66).

The novel genre can cater to the needs of all kinds of communities and bring forward characters that cannot be reduced to a single attribute. It allows for the exploration of other realities, with a variety of tones and aesthetics. Smaller teams of developers means more control on the product they want to create, and on how they produce it. Their voices can be expressed more freely, allowing for a greater diversity of representations, not hindered by the mainstream industry, which may be less inclined to finance projects like these. While some games are self-funded, some developers will instead present their projects on crowdfunding platforms like Kickstarter and rely on the interest of the community for funding. *Coming Out On Top* (Obscurasoft, 2014), a game focused on gay dating, complemented with a heavy dose of pun-based humor, and *Hustle Cat* (Date Nighto, 2016), a dating game with a focus on accessibility and LGBTQ+ friendliness, are two of these successful, fully backed projects, with over 1,000 contributors each, largely surpassing their original stretch goals (Kickstarter, 2012; Kickstarter, 2015). This shows how the novel genre encour-ages creators to put their ideas to the test, and these projects do get people in-vested in these stories – more so in stories that embrace the reality of many who have been pushed back the fringes, replaced by a heterosexual male protagonist.

4. WHAT IF? HOW BRANCHING NARRATIVES HAVE ALWAYS BEEN A POWERFUL TOOL FOR PLAYER REFLEXIVITY

Interactive narratives have been discussed extensively in academic literature in the 1990s and beyond, fueled by the popularity of interactive fiction (IF) and, more broadly, hypertextual experiments. In *Twisty Little Passages* (2003), Nick Montfort highlights how the IF genre, made popular by Infocom and other studios, was seen unequivocally as games in the community, despite being text-based – the complicated puzzles they proposed were, after all, built on the age-old tradition of the text-based riddle (2003). For Montfort, parser-based IF offers world simulations, but some of these games might present this world in

a way that mimics more simple branching narratives. The later chapter reveals that IF created a thriving community way beyond Infocom's commercial prime time in the 1980s, with later experiments, such as Emily Short's *Galatea* (Short, 2000), focusing more on conversation with simulated characters. Some of these works put less emphasis on puzzle-solving, yet "some interactors worked around by devising a challenge for themselves and attempting to find every possible final reply" (Montfort, 2003, p. 219).

"Interactive branching narrative" implies the possibility of choice and repercussions. We saw a renewed interest in the adventure game genre with the release of *The Walking Dead Season 1* (Telltale Games, 2012) and cinematic experiences with the release of *Heavy Rain* (Quantic Dream, 2010). These titles often put forward the idea that every choice is meaningful and will deeply impact how the story unfolds, a "butterfly effect" in action. As appealing as it sounds, these games are still bound by a rather linear narrative thread, albeit with a different weaving each time that story is played. This is due to the fold-back structure they all share, where the player is given options, but all the different paths will lead to the same place as the branches will recombine. In other words, there is a core (or some story beats) that will always be experienced, but the choices made previously may slightly alter the scenes. Ryan (2006) establishes a distinction between what she calls a tree – a narrative structure where each choice results in a new branching path – and a flowchart – where choices will let the player stray from the main linear thread briefly, but quickly bring them back onto that main path, limiting the expected expansion of possibilities (2006, p. 104). Interactive fiction, in the case of flowcharts, creates space for modular elements to craft a player-based narrative, while allowing the developers to retain control on the overall story they desire to tell and to keep the production of each different segment manageable. That is not to say the player is robbed of meaningful choices, as to see how choices will influence the story, and even anticipate how events may play out around player decisions, is part of the fascination surrounding these games. The fact that these games often feature social situations and moral dilemmas as their central themes can also contribute to their attractiveness, making the choices and situations presented to the players feel meaningful.

As many have pointed out, player choices typically influence the avatar's personality, behavior, and relationship with others. The avatar is meant to be both a conduit for expression and self-reflection (Bell et al., 2015; Zagal, 2011). Witnessing all the possible outcomes is a reason for replayability, and a source of excitement for players who desire to see what could have happened. However, trudging through the same overall story could deter some players. To sum it up employing Ryan's concepts, pleasure can be derived from what is designated as an ontological approach to interactivity, where player choices do impact the world of the game, but also from a more exploratory experience, where the player is encouraged to figure out the "map" of all possible choices, gaining a deeper understanding of the game's narrative options (2006, p. 108).

5. THE STRUCTURE OF NOVEL GAMES AND THE APPEAL OF EXPLORATION

One of the key elements that sets apart many games within the novel genre is their use of a true branching structure featuring "major" branches, commonly referred to as "routes", which vary so much that they can almost be considered entirely different world states. The game will initially present its protagonist and setting with a prologue, often referred as the "common route". This may present itself as a fold-back structure, but many options are actual flags in disguise. By "flag", we refer to the recognition that a moment where the player is faced with a narrative choice is a point to which they can later come back to experience a different outcome. In other words, as players map out the ways in which branching paths interconnect and separate, they might, for example, create a separate save file (metaphorically planting a flag) which they intend to return to at a later time. In this case, this will usually be paired with the possi-bility to branch out to a character's specific route. The other choices available are still relevant, as they flesh out the world and the protagonist's mindset or help shape their preferences. After the first key branching point, the game will split in different directions and explore facets of the world through the rela-tionships with the featured cast of companions, as well as the main love interest associated with the route (Figure 1). The aforementioned novel games may be played differently each time, but a playthrough is still discrete – one can play,
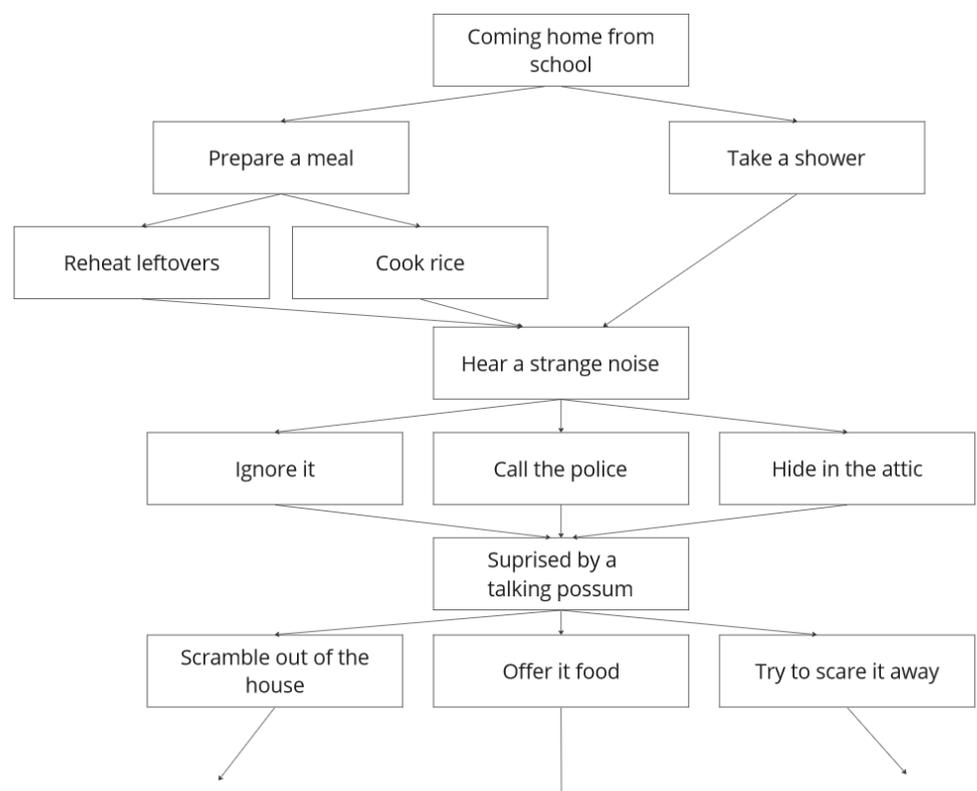

Figure 1: Example of a branching path.

finish, and feel satisfied that the core experience has been achieved. Yet, numerous novel games reward players who seek all possible outcomes (by playing all available routes) with resolutions to an overarching plot. Those games tend to include "secret" or "true" endings which act as a resolution to the underlying mystery established, making it very hard for players to ignore the efforts put in place to encourage exploration. Even "bad endings", often compared to the usual "game over" screen, are sometimes employed to learn more about the game's overarching story, or even to reveal characters that will eventually appear in other routes – as a form of foreshadowing.

In other words, if replayability was an option before, here, it becomes an almost forced mechanic, and for some, the ideal way of playing. Most games even facilitate the exploration of branching narratives through the use of a quick save/load system and an auto-read setting whenever the text has already been viewed. That being said, this structure still provides meaningful individual stories for each route, as it offers a more thorough understanding of the cast of characters featured, and of how each of them fares in new situations. This often challenges them in their own perspective, identity, resolution, and ideals. The avatar, on the other hand, is more malleable, as the exploration of possible worlds give them opportunities to grow and actualize their different selves. This also applies to the player: as they journey with their avatar, they can react and reflect on the situations given, steering their virtual counterpart toward what they may believe would be best for them (both). The many-world structure allows for a safe exploration of identity within the same game, and routes that may present harmful contents that can still be worked around, as we will later see.

This narrative fragmentation is often presented with locked routes and options upon the first run, while the player is free to choose the order in which they experience the options available at the beginning. As we have underlined, the last route unlocked is often labeled in-game as the "true route"[1] associated with the "true ending", as they serve as the final piece of the puzzle that brings forth what was truly happening all along. Route selection is not always presented as an explicit choice. Option selection may underline a point system where the game will eventually force the player on a specific route depending on the obtained score. For exemple, in *Hakuoki Demon of the Fleeting Blossom* (Otomate & Design Factory, 2012), after being captured at the beginning of the game, our protagonist can choose to escape rather than try to explain her situation to her captors. Her attempt will be thwarted, but the following choice will determine who will gain affection points toward her: Okita (if she stays) or Hijitaka (if she tries to run). While it may be obvious that some choices are tied to specific characters, this mechanic could still be felt as a more intuitive way to determine which route to explore on the first playthrough, as a player who answers more instinctively would be steered toward a potential lover with whom they have a stronger affinity. We can see how novel games grant the player the ability to choose, not only during playable segments, but even what kind of path they

1. The "true route" is equated with the canonical ending of the overarching story, as it is the one usually chosen when the video game is part of a transmedial franchise with a non-linear medium.

want to explore. This is a good way to create player engagement: by allowing them to select which story they want to investigate first, they may be even more inclined to pursue the other routes in order to know what they contain.

6. OTOME GAMES IN JAPAN: CATERING TO A FEMALE AUDIENCE

We presented earlier how the inclusion of primary female characters is still facing an uphill battle. Thanks to the recent surge of popularity of *otome* games, many new female perspectives were brought to the centerstage in the West. *Otome* games have steadily been released since the successful introduction of *Hakuoki: Demon of the Fleeting Blossom*. Western studios have even begun to adapt the formula for their own target audiences, as it is the case with Beemoov and 1492 Studio, which are developing games for the French market (Andlauer, 2016; Denayrouse, 2019). The same phenomenon is also happening in the East with the growth of the Chinese (Liang, 2020) and Korean (Ganzon, 2019) *otome* markets.

Yet, these games have been part of the culture of games made for women by women in Japan since 1994, with the release of *Angelique* (Ruby Party, 1994). The game was created by a female team inside of Koei, wanting to craft a product dedicated to a female audience (Hasegawa, 2013; Kim, 2009). It should be noted that here, the term *otome* is also known to be part of the broader term of *jyoseimuke gemu* (literally translated as "games for women"). Therefore, they are not seen as a genre, but rather as a category of games, encompassing a variety of genres such as adventure, simulation and role-playing games, usually with an emphasis on a romance system and a tendency to simplify gameplay. However, many Western fans are most familiar with the *otome* novel type, and this is the one that we will refer to in this section.

The existence of *otome* games in Japan should also be presented as a positive example of female marketing strategies, as they were shown during the fieldwork portion of a study conducted on *otome* games (Ross Dionne, 2020) which specifically targeted two areas in Tokyo: Akihabara and the Otome Road of Ikebukuro. What became apparent was the different approaches when it came to displaying those games in video game stores. In Akihabara, renowned and framed as catering to (heterosexual) male fantasies, *otome* games were displayed with very noticeable markings, such as a color-coded section. This seemed to suggest the importance given to these games and their customers. Since female customers are not the usual target audience of these stores, creating a visibly delineated space for them could be a marketing tactic to make them feel welcome. This was contrasted with video game stores in Ikebukuro, which scarcely used such tactics while still offering *otome* titles. We can therefore assume that by the very nature of their location on Otome Road, businesses did not need to make as much effort to encourage women to browse their establishments, as they were the prevalent and intended customers.

As mentioned in our introduction, female representation and even female audiences have often been relegated to the sidelines. Yet, the case of Japanese

otome games and the marketing strategies employed for them show how women can be (and have been) considered a legitimate and primary group of consumers. This observation does not invalidate the former statement. Rather, it shows how we should still be mindful of individual trajectories, and not fall prey to ethnocentric (or, in the present situation, Western-centric) assumptions.

7. PLAYER'S IDENTITY, THE AVATAR, AND THE POWER OF AGENCY

Novel games often try to de-emphasize the physical representation of their protagonist. "Silent protagonist" is the name usually given to this typical avatar, which is hidden from sight via the use of a first-person point of view and not given a voice actor, even when other characters are voiced. Although they may make a brief appearance during the game's *CGs* (short for *Computer Graphic*, full-screen pictures that are meant to reinforce and highlight a narrative or emotional event), in such instances, some protagonists are drawn with no eyes, or their face is partially obscured as a means to un-characterize them. Furthermore, the player can usually rename them – that is, if they even have a default name to begin with. Some recent games include the protagonist's portrait during dialogues, but all games that do so, to our knowledge, also offer the option to hide them. This is thought to be a design decision meant to reinforce the player's illusion to be *their own* character, answering and choosing as themselves.

Yet, we should not be too quick to conflate player identity and avatar identity. This strategy may function if the character is truly the empty shell they are depicted to be, but in novel games, we often have access to inner monologues, descriptions of reactions, and the emotional state of the protagonist. Through the analysis of *otome* game players' experiences (Ross Dionne, 2020), it became apparent that the participants' relationship with their avatar oscillated between two main paradigms. Most of them declared that they perceived themselves to be in a "silent spectatorship" situation, accompanying and guiding their avatar. There was distance between the two of them, as their avatar was a character with a distinct will. It was seen as a form of partnership. The rift between identities at play would be noticed when, for example, the player thought that the protagonist behaved illogically: it was no longer *their* choices, but the ones made by *someone else*. The other participants would describe their relationship with their avatar as a "virtual representation of the self". While they also viewed their avatar as a full-fledged character, the agency experienced through the various choices they could make were enough to provide them with the feeling of *being in* the gameworld. Individual perception played a more important role in characterizing how players felt toward their avatar than the decisions of designers. For example, the same techniques to depersonalize and disembody the avatar could contribute to both relationship paradigms. In the first instance, as mentioned previously, the inner monologue and choices the avatar made would reinforce the notion that this was a character, and not a conduit for the player's intention. Moreover, the presence of *CG* would be perceived as a reminder that it was truly someone

"else" who experienced these adventures. On the other hand, those who felt embodied in the gameworld would argue that not seeing who they were fueled their feeling of identification. As for the *CG*, it did not pull them out of their state of belief. They even preferred to see their avatar for aesthetic reasons, arguing that a first-person *GC* would often be hard to understand and feel strange.

The individual interviews conducted during that study allowed for a more nuanced explanation and understanding of what this could mean for player agency and experience. The study showed that players could always feel their ability to establish limits in terms of what was acceptable for them when the topic of unhealthy relationships was presented. The reasons varied greatly, and the two paradigms of relationship were reflected in how this was resolved. Some players would refuse to continue a route where the romantic interest was perceived as abusive, controlling, or dismissive toward the protagonist, such as Toma in *Amnesia: Memories* (Idea Factory & Design Factory, 2015), or Takeru Sasasuka in *CollarxMalice* (Otomate & Design Factory, 2017). Reasons for players to halt their progression in these routes could be that they anticipated that the game would legitimize this kind of relationship, and they refused to allow it, through their resistance. They wished to see their avatar in a positive and respectful relationship. For those on the silent spectatorship side, the choice was really an act of care for their character, as they wished for the avatar's happiness. For those on the "virtual representation of the self" side, the sudden stop was instead linked to their own perception of what could be tolerated in a relationship, and they applied the same standards within the game world. In a more linear structure, this would mean the end of the game, but in a branching one, the players may still enjoy other possibilities. While it is true that the completion of all routes is needed to really understand the central plot and overall mystery, each route is still complete in itself and may be fulfilling in its own way, through the development of a relationship and the resulting character growth it presents.

Others on the "silent spectator" side of the spectrum would not be affected by the romantic interests' attitudes, even when they displayed cruelty toward the avatar. Such players would not let these situations affect them; they knew it was a piece of fiction, and therefore did not feel that their own well-being was threatened. This could even be paired with a desire to know why these partners acted the way they did. As the players allocate a considerable amount of time to getting to know their fictional partner better, they may approach the game with the expectation of reaching a deeper level of social and emotional investment. The desire to seek the truth and pull the veil off the mystery would sustain their pursuit of any routes, no matter what kind of relationship was presented.

Another way to negotiate the dynamic at play was to let the route run its course, but select the options that would halt the relationship, and thus purposefully "try to fail". This may lead to a "bad ending", but it would be a meaningful outcome, as players are granted the privilege of the final decision regarding which ending was the most satisfying and real for them. Even if

players experience every relationship, they get to choose their own canon ending, regardless of the in-game labels attributed to endings, (bad, good, great, true…), as the "player remembers both the fail state and the success state, and for the player, both states are plausible endings to the story. In other words, the player remembers the hypertext story, and not both instances of narrative as separate narratives" (Van der Geest, 2015, p. 21).

Yet, some players may even find appeal in the toxic dynamic presented. *Diabolik Lovers ~Haunted Dark Bridal~* (Rejet, 2012) is a distortion of typical scenarios depicted in *otome* games, where the potential lovers are all sadistic vampires, finding pleasure in torturing and humiliating the protagonist. In this case, the exploration of taboo or dangerous situations can be part of the appeal; the audience can find it thrilling because it allows for a safe exploration of these elements, a phenomenon that has also been observed with horror fiction (Cosmos, 2018).

This small sample showcases how players may feel safe in interacting with fiction where a troubling relationship is depicted. The ability to play in a secure emotional environment is supported by the many-stories structure, no matter how the player is engaging with their avatar. That is also true for positive experiences. The following case studies of *Cupid Parasite*, *Coming Out on Top,* and *Hustle Cat* will show how novel games also provide an ideal background for self-exploration within a safe space, while presenting a variety of situations and emotions.

8. FROM AGAPE TO STORGE, LOVE CAN EXPRESS ITSELF IN DIFFERENT WAYS: A POSITIVE LOOK ON RELATIONSHIPS AND MUTUAL GROWTH

Cupid Parasite (Otomate & Idea Factory, 2021) examines the concept of love and relationships in an holistic manner, with a dash of fantasy and comedy, using the Greco-Roman mythos as a backdrop for its setting. The different potential lovers are associated with one of the six types of love, designated with Greek terminology, such as agape (dedicated love), eros (love of beauty) or pragma (practical love), and befittingly, the player's avatar is none other than Cupid herself. After being scolded by her father, Mars, on the decline of lasting relationships and the impact it has on the marriage rates, Cupid sets out to prove him wrong, believing that humankind is wonderful and does not need their interference anymore. Taking the name Lynette Mirror, she elects to do her job in the mortal realm, with human skills, and rise as the top modern-day Cupid, a bridal advisor at Cupid Corp. There she faces her biggest challenge yet: finding the perfect match for the infamous Parasite 5, men unable to find love, that every advisor has given up on. But what if that perfect candidate is her?

Through a positive, sincere, and deeply caring protagonist, the game is centered on the idea of understanding each other and working together to make a relationship work. As their bridal advisor in the common route, Lynette often chastises the Parasites 5 and tries to show them how to better interact with women while still being true to themselves. In their respective routes, this comes off as character growth that plays off what was taught to them during

their lessons with her. Similarly, as a workaholic dedicated to bringing others together, Lynette is our "cupid parasite". She does not know what love is, but her time with the men will lead her to understand and experience it through their own unique take on the matter.

During the common route, the game offers a "love match" test to find which type of love would better suit the player, and this will affect the possible outcomes of each route. A perfect love match with high affection from the romantic partner will ensure the best ending. Anything else will result in a range going from bad endings to good ones. This is an interesting concept, as players are invited to answer as themselves. The test consists of 14 questions and will not lock the player upon a route. Instead, it shows with whom they would be the most compatible, as the test results display the silhouette of the corresponding Parasite. It also offers an unusual twist on the formula: in the case of an incompatible match, players cannot obtain a good ending. Not all couples are meant to be together. The game shows that it should not be something that feels forced, no matter how much understanding and empathy there is. Nevertheless, in the context of the routes' description, we will assume the player and the corresponding lover have a matching type, to ensure access to all endings.

Amongst the five men that Lynette must help, one of them is a "lovelorn parasite", Gil Lovecraft, who is still pining for his first love from two years ago. That first crush is none other than Lynette herself; and through their reunion at Cupid Corp, he is given another chance at love. He is the representation of the agape love type, the selfless love, putting others' needs before his own. In his case, this manifests itself as him being overbearing, but his real issue lies in his inability to properly communicate, and in assuming rather than ascertaining the facts. This combination leads to him going the extra mile, sometimes in the wrong direction. For example, he becomes a freelance editor to dedicate his free time to Lynette, because he overhears her say that she wants "a lover to always be by her side", while in truth, it was her friend Claris who said those words using a voice-changing app. During his route, Gil is confronted to the reality that his actions, while sincerely thought to be for the benefit of his partner, also come out as selfish and self-imposing, as the other party is not given a say in the matter. His personal journey is centered on communication and finding compromise, curbing his tendency to overdo things, and respecting his partner's desires, while still doting on her. This doesn't mean that he no longer goes overboard, as his route shows him traveling to the realm of the Gods to pursue Lynette. To prove that he is serious about his undying love for her, he fights Mars, using his self-made *transfocar*, Bumblepig, an obvious nod to the *Transformer* franchise.

Initially, Lynette remarks that Gil's excess comes from the right place but is definitively exhausting to receive. She does not mince her words when reflecting upon his behavior, but as his advisor and friend, she wants to help him understand how his affection may be perceived by others, especially women, who might be frightened by his intense behavior. Yet, upon the realization of

her own feelings for him, she comes to see those gestures as pure declarations of love. She embraces his caring nature, but also wants to reciprocate and support him in her own way.

Another member of the cast of men assigned to Lynette is the "obsessed parasite", Raul Aconite, a Sillywood actor who will feature in his first romance film, but his lack of knowledge in that department leads him to join Cupid Corp. He fittingly is obsessed with mythology, especially the Greco-Roman sphere of myths, even if he is wildly wrong about many things, such as being convinced that Neptune is a woman (something that Lynette will eventually rectify with her knowledge as Cupid). His route is very comical and light, true to his love type. Raul is a ludus love type, who sees love as fun, preferring short-term relationships over a longer one with a single person. This manifests itself through his engagement in frequent casual sex, and while Lynette has a more reserved view on the matter, she does partake and find enjoyment in it. She is open-minded, trying to understand his belief that consensual sex is a fun way to engage with someone. The two eventually realize their feelings for each other and do perceive things differently once they are in love, but the game does not vilify sex or treat it as a taboo. Rather, it shows how a healthy casual relationship can eventually lead to something more, and how sexuality is part of life. In this route, both characters are challenged on their preconceptions and learn how to accept each other's views.

While the game does not explicitly explain the reason behind the term "parasite", it is implied that it is due to their extreme traits that deter any potential marriage candidate. Culturally, it can also be linked to the Japanese concept of "parasite singles", referring to young adults in their twenties still living with their parents and being taken care of, effectively "leeching" off parental affection. These unmarried singles are often blamed for societal issues such as the declining birth-rate (Aihara, 2011; Tran, 2006), as marriage and childrearing is heavily correlated in Japan, with only 2-3% of childbirths registered outside of marriage (Aihara, 2011; Harvey, 2017; OCDE, 2018). It is no surprise then that all of the best endings for each character show them proposing to the protagonist.

Cupid Parasite does not make an apology for its characters and their flaws. Each of them comes to terms with their shortcomings, while still becoming their better selves and being true to their unique type of love. This is also true for Lynette. Through her genuine care for them, she also undergoes her own growth, as she learns to understand them better, as well as their unique way of expressing their care for others. With Gil, she can enjoy being pampered and caring toward him, and with Raul, she can explore her sexuality and how it relates to love. The exploration of different love types is a fine example of how a branching narrative can help shape the player-character and allow them to embrace different ways of being. This also presents these multiple ways of being as all equal and worthwhile. Nonetheless, it may also underline how the idea of the married couple remains normative in Japanese society.

9. "YOUR COOKING SUCKS, YOUR SOUFFLÉ COLLAPSED": EXPLORING MEANINGFUL FAILURES

As a novel game with dating sim elements, *Coming Out On Top* (henceforth COOT) is as straight as they come: it sticks to the common features we have highlighted in the first sections of this paper. In this section, we inspect how players can explore sexual identities in a safe context, and we expand our analysis to consider how navigating dead ends and even major failures can resonate with the experience of gay men, and more broadly with the reappropriation of failure as a cornerstone of contemporary queer studies (Halberstam, 2011). Like many Japanese novel games associated with the *yaoi* genre, COOT was created by a woman, Obscura, who expected to find an audience of (heterosexual) women, even if she did not set out to make a *yaoi* game herself (Kickstarter, 2012). However, as the author highlights, the most enthusiastic response came from the gay community: "They appreciated that I was making something different from existing yaoi games, that it was Western, that it was fairly realistic in terms of dialogue and characterization, and so forth" (Wright, 2013). As Poirier-Poulin notes, the humor is at the core of the game. Heavily intertwined with sex, it can be read as a form of transgression as it breaks with the usual taboo associated with homosexuality and sex (2022). Interestingly, the accumulation of puns, *double entendres*, and effective punch lines at the expense of the protagonist manages to bring us beyond comical distance and add up to generate sympathetic emotions, and even moments of deep empathetic projections that might hit awfully close to home for many players (gay or not). The game allows players to customize the level of body hair, the name of the protagonist, and – surprisingly – the name of his goldfish. We set out to find love in all the wrong places with a fully bearded, shaggy Mick Jones and his soaked buddy, Sleazy Pig.

COOT proposes a roster of six potential lovers to seduce on the protagonists' last year at Orlin University. Mick begins this decisive year by coming out to his good friends Penny and Ian. The school setting is quite prevalent in Japanese dating sims and its scandalous potential is fully exploited here: on his first night out, Mick inadvertently flirts with Mister Alex, who turns out to be his anatomy teacher. Instead of pursuing the main love interests, and in the spirit of keeping up with viable alternative routes, we will focus on two optional dates players can turn to in the in-game application *Brofinder*. This satirical version of *Grindr* doubles down on the sex-positive nature that characterizes some of the main romantic interests, yet in every case, players need to get interested in the various personalities in order to move forward and collect pornographic reward spectacles, which will be added to a main gallery for on-demand contemplation. This reward system stimulates replay value in many ways; the most competitive players will need to go through the branching structure multiple times to collect them all.

Some of the extra dates are designed in a way that maximizes the desire to perform and score in this ludic system, but even these extra "missions" empha-

Figure 2: The range of choices offered to the player toward the notion of "cuckolding".

size the necessity to engage in meaningful dialogue. For instance, the date with Orlin county prosecutor Tommy leads to a kidnapping when our couple's driver recognizes the man responsible for his imprisonment. Faced with murderous rage, at gunpoint, Mick tries to level with this character through the power of conversation and empathy. Lip service will not be enough to save the sexy couple from a literal dead end in the branching narrative. As an ultimate test, Mick must remember the antagonist's name perfectly, and select it from three very similar variations. Choosing anything but "Darryl John Michael Wayne" finishes the date in a dramatic way.

This humorous quiz challenge highlights how novel games focus on listening and caring. This could also be said of Mick's date with Oz and Pete, an adventurous couple met on *Brofinder*. Incidentally, early interactions with Oz on the app bring up communication issues right away, with awkward dirty talk attempts about fetishes, and the further realization that Mick was in fact discussing with Pete. Our future cuckolding heroes meet at a gay bar where further tensions arise: while they flaunt their communication skills as a key ingredient in their relationship, Oz and Pete appear to withhold some elements of their fantasies to each other, going so far as to belittle cuckolding in front of Mick. Interestingly, players will get one of the most complete repertoires of answers when finally asked how Mick feels about it (Figure 2), as if the designer wished to provide an honest canvas for players' insertion at that very moment.

Exploring unproductive routes – seduction-wise – might still lead to some narrative gratification, or Steam achievements such as "cookolding" (obtained by selecting the dirty talk option quoted in the title of this section). This could also be said of the main narrative arc: if players fail to pursue a viable route with one of the main love interests, as we did, he will be directed to one of the boldest, destabilizing, and challenging game finales in the history of the medium. Video games have been defined by Juul as the art of failure (2016); COOT seems to adopt this definition literally, proposing one of the most tragic endings we have seen, yet trying to bring some gratification and humor into the mix.

★ **Content warning**★ The following deals with very serious issues such as mental illness, psychosis, zoophilia, and homicidal thoughts.

Throughout the game, Mick gets a close-up of Sleazy Pig in its bowl while trying to decide how to spend the weekend. In the tragic final narrative branch, Mick starts to address his goldfish directly. As we previously said in the Player's Identity section of the article, the player is always able to refuse a route, thereby being able negotiate what is acceptable for them without missing out on the other stories the game has to offer. Some players, who may sense and fear the dark descent ahead, can easily reload to a previous safe moment in the story. Others might notice that this narrative branch is surprisingly fleshed out and decide to explore it all the way. Ian and Penny actually try to have an intervention with their friend about the player's obsession with his pet. At this point, players can choose to isolate themselves completely, and even let Sleazy Pig "convince" them to kill the nosy friends. Thankfully, this goldfish conspiracy fails, and Penny flushes Sleazy Pig down the toilet. Friends try to get Mick to go out one last time to celebrate graduation. Should they decide to stay home, players can witness the ultimate failure in all its disturbing glory. Sleazy Pig crawls out of the pipes and proceeds to Mick's room. The final embrace of a lonely gay man making love with his oversized goldfish is described with the same affectionate, caring phrasing seen throughout the game. This surreal image that completes the player's gallery will not be easy to forget.

As Poirier-Poulin notes, building on Díaz, "game worlds such as COOT don't simply reflect blind optimism, but can be read as sites of radical hope" (2022, p. 284). This could certainly apply to many queer novel games discussed in this paper and beyond. Yet by fleshing out such a provocative and dramatic finale, COOT echoes a previous generation of pop culture and LGBTQ+ literature in which traumatic events and dramatic endings seemed inescapable. This literary trope is referred to as "Bury Your Gays" and also answers to another name, the "Dead Lesbian Syndrome", as female characters were predominantly the ones who suffered from it (Hulan, 2017). It refers to the fact that queer characters tend to suffer tragic fates (death being the most common instance) or see their relationships fall apart at a higher rate than heterosexual ones.
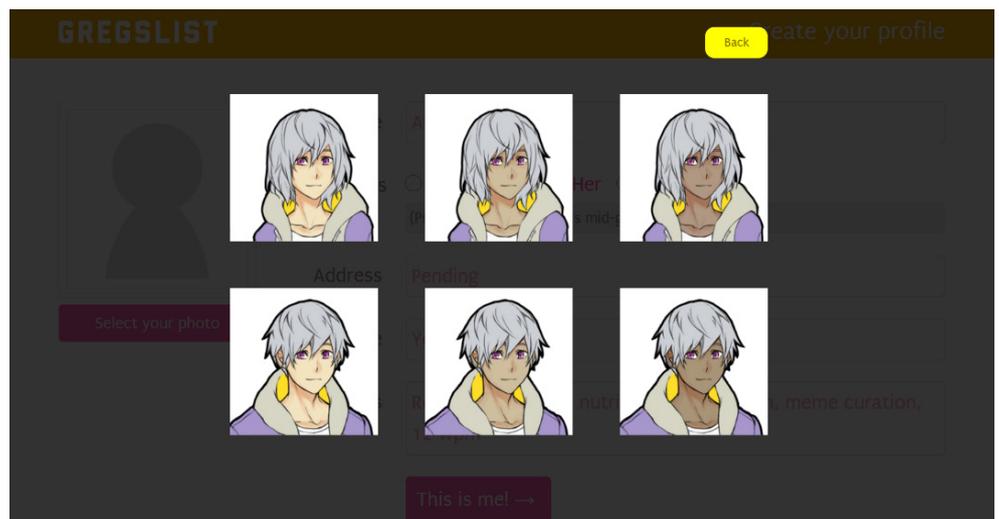
Figure 3: Avery's possible in-game appearances.

Through its humoristic and unapologetic lenses, COOT is able to muster laughter as a defense mechanism against the real trauma attached to the queer community. We are able to laugh at Mick and Sleazy pig's primal embrace because we finally found our way into new story arcs, jumping out of the fishbowl, learning to breathe in toxic environments.

10. "WE STICK TOGETHER THROUGH THICK AND THIN, US CURSED CATS": THE QUEER EXPERIENCE OF RADICAL ACCEPTANCE AND UNCONDITIONAL CARE

Like COOT, *Hustle Cat* is a novel game aimed at a queer audience. While both employ a form of lighthearted humor, the resulting experiences differ in quite a few ways: where the former's approach to every topic is unapologetic, from gay sex to failure and the underlying trauma present in the queer community, the latter represents a different kind of hope, one centered not only on inviting the player to care for its non-player characters, but also on the player letting themselves be cared for by the game.

Hustle Cat centers on player-character Avery, whose appearance and pronouns are chosen by the player (Figure 3)[2], though they will always have their signature purple hair and yellow shirt – two of the four colors of the non-binary pride flag. First thrilled to be hired to work at a charming cat *café*, they soon realize with horror that anyone who works at said *café* is affected by a spell that turns them into a cat as soon as they leave the premises. Between everyday tasks and the wooing of attractive coworkers, Avery has to figure out what exactly caused the spell – and what things the *café*'s owner, the elusive Graves, seems to be hiding, as his route is the key to unraveling the mystery. The emphasis placed on the player-character, Avery, sets *Hustle Cat* apart from dating simulators that present heterosexual dynamics, which, as we have established, tend to employ tactics to make their main characters blank slates (although the previous analysis of Cupid Parasite and its player-character Lynette demonstrates that

2. Avery can either go by "he/him", "she/her" or "they/them", and the player can choose between six different portraits for their appearance. In the context of this article, we will use "they/them" to refer to Avery.

some games go against this trend). Avery's name is not customizable, unlike the names of many visual novels' main characters. However, what can be changed is their appearance, and the choice is important, as their portrait is often visible during the game, and they are incorporated in many of the game's CGs. This could be seen as a manifestation of many queer identities' desires for experiences that allow them to express their true, authentic selves: they get to choose Avery's appearance and pronouns, seeing these choices constantly brought forth and affirmed by the game, and yet are free to date any character they fancy, regardless of their gender identity. Queer players are thus able to experience the game in a way that aligns with their own identity. Moreover, the game allows players to form romantic relationships with every member of the available dating pool, no matter which pronouns and appearances are chosen. The potential lovers are all attracted to Avery. In other words, rather than placing the players in a position where they need to align themselves with their desired romantic partner, every version of Avery is unconditionally accepted and welcomed.

It is also impossible to experience the failure typically associated with the dating simulator genre: the way players answer the text-based choices presented in the first part of the game only serves to determine which route they will end up on. In other words, romance is guaranteed – the only variable is who will be romanced. While a few specific choices will lead to bad endings (and thus, to a game over screen), we argue that these "failures" are specifically not associated with romantic relationships. It is thus impossible to experience rejection from the love interest, and that is another form of care that the game offers its players.

Similarly to *Cupid Parasite*, *Hustle Cat* uses the different members of the cast that can be romanced as a way to develop different sides of its player-character. While Avery's main character traits remain unchanged no matter the path – they are always caring and sincere, and often too stubborn for their own good – the relationship dynamics at play often have them taking on a different role. For example, during the silent and straightforward chef Mason's route, Avery is often depicted as blushing, intimidated by her unpredictable manners and unreadable expressions. And yet, Avery is the one who makes the timid and discreet Hayes blush in his own route. The different cast members all help them gain confidence in their own capacity – and in exchange, the player-character often forces them to confront situations that make them uncomfortable and resolve past trauma.

Queer visual novels such as *Butterfly Soup* (Lei, 2017) or *//TODO: today* (Boys Laugh +, 2018) tend to place a greater emphasis on platonic relationships, especially the feelings of belonging that a group of friends, coworkers or classmates might offer. This can be seen as a reflection of the queer experience of finding a chosen family (Weston, 1991), and it is a big part of Avery's journey, and thus, indirectly, the players'. In *Hustle Cat*, while the endings of the different character routes are undoubtedly marked first and foremost by the success of the romantic relationship, they also emphasize how the coworkers have come to see each other as close friends. When Avery becomes the key to defending

the *café* from an exterior menace, every character plays their part in protecting them, affirming that Avery has become a part of the group. In a world where queer people are still too often denied the experience of being accepted and loved by a group of friends, this is an invitation to leave behind the potential hardships in one's life to take a break and experience pure, untainted happiness. *Hustle Cat*, hence, represents a form of comfort for the queer audience. In exchange, the player is invited to care for this cast of characters, to appreciate their unique personalities and, potentially, to attempt to date them in a subsequent playthrough, even if it is simply to get to know them better.

This motivation is almost guaranteed to be the drive that will lead players to Graves' (the *café*'s owner) route, the secret ending of the game that can only be attained once every other non-player character's route has been completed. Having been in a position to care for every employee in the *café*, players are able to empathize with the attachment that Graves feels for them, which finally allows them to get close to him. It soon becomes obvious that Graves tries to face his problems alone: the game's antagonist, Nacht, who attacks the café at the end of every route in the game, is actually Graves' on and off lover, and their relationship is a toxic one. Avery's stubbornness forces Graves to accept his employees' help, and everyone plays their part in finally vanquishing Nacht, allowing Graves to break free from a bond that holds him back. As Avery draws Graves in for a kiss, the game truly ends on an acknowledgment that while the future is never guaranteed – which can be once again interpreted as a nod to the shared trauma present in the queer community – the present is what matters most, and it is a happy one:

> Avery [inner monologue]: I don't know what's going to happen from now on. I don't know how this is gonna work. I have Graves here with me. That's enough for now.

Thus, like COOT, *Hustle Cat* adapts the novel game mechanics to queer sensibilities. Kretzschmar and Salter (2020) underline that tension often remains in games that attempt such an endeavor. Quoting *Monster Prom*'s (Beautiful Glitch, 2018) developer, they argue that the very mechanics of the genre encourage an over-simplification of the characters that one can date, reducing them down to a series of traits. It remains that in the case of *Hustle Cat*, the attempt at creating a queer novel game with dating elements is in many ways successful, not only because of its affirmation of the player's identity (through its player-character and the establishment of a feeling of belonging to a group), but also thanks to the insistence on caring for the player, who in turn cares for the non-player characters before their eyes.

11. CONCLUSION

Through their branching narrative format, novel games allow for more flexibility for authors to steer the characters' growth in different directions, while still

providing fragments of worldbuilding to assemble. This also provides a perfect setting for exploration that does not shy away from death or tragedy, allowing players to acquire more perspective on the unfolding narrative, as well as empathy for its characters. Nonetheless, we have shown how players are still capable of exerting their own agency, be it through how they approach the game (often in a completionist mindset) or by the establishment of their own boundaries regarding the storylines.

Novel games are a fertile playground to present stories centered on issues and experiences set apart from hypermasculine and male-oriented designs, which have been dominant in the gaming industry. In allowing players to experience other viable identities, as well as featuring choices that can at times be more challenging, novel games open up discussions and provide spaces for understanding. This is exemplified in the games that we presented, each proposing its own take on the matter. In *Cupid Parasite*, the foundation of a healthy relationship is built upon mutual growth – understanding and respecting each other, but also being able to recognize our flaws to become a better partner. *Coming Out On Top* allows us to explore different facets of our sexuality, and experience scenarios that are far from shaming us for doing so. The diverse potential companions are also treated equally, with the same respect, as we engage with them, paying attention to their stories and desires the same way our friends, Penny and Ian, care for us and are concerned with our well-being. Lastly, *Hustle Cat* expresses those spaces of exploration and understanding in the freedom of representation the game offers us, and in the overtly positive message that permeates the narrative: in togetherness we find solace, happiness, and a place where we belong, no matter who we are.

Novel games and their emphasis on the exploration of narratives may be the ideal place for reflection, and to resonate within players who may share a sameness of plight with protagonists that are more akin to themselves. Still, among gamers who are not heterosexual and male, there is a need for stories that are both mature and joyful – happy endings that embrace the multi-faceted aspect of interpersonal relationships, while still choosing to put forth hope that genuine care for another can overcome life's trials. We believe that romantic novel games have the potential to fulfill the need for games that cater to a variety of audiences, and to do so in a way that shows gentleness toward players of many gender identities and backgrounds, with a lot of humor to facilitate discussions on topics that are still wrought with socio-cultural issues.

In sum, players are invited to care more for personal or collective hardship through the discovery of possibilities which, when compiled, provide a great deal of depth and complexity to the experience. And yet, this exploration is offered in a safe space that ultimately lets players renegotiate how far they wish to go, how much they want to see, and in what conditions they wish to experience these branching narratives.

REFERENCES

07th Expansion (2002). *Higurashi When They Cry*. 07th Expansion.

Aihara, M. (2011). *Mariage "en plus": Particularité du mariage au Japon et conceptualisation de la maternité* [Doctoral dissertation]. Université Toulouse le Mirail - Toulouse II.

Andlauer, L. (2016, June). Profils et avatars, identités au sein d'une communauté issue d'un jeu pour adolescentes. *Médias Numériques et Communication Électronique*. https://hal.archives-ouvertes.fr/hal-01373614

Bell, K., Taylor, N., & Kampe, C. (2015). Of Headshots and Hugs: Challenging Hypermasculinity through The Walking Dead Play. *Ada New Media*, 7. https://adanewmedia.org/2015/04/issue7-bellkampetaylor/

Burrill, D. A. (2008). *Die tryin': Videogames, masculinity, culture*. Peter Lang.

Cosmos, A. M. (2018). Sadistic Lovers: Exploring Taboos in Otome Game. In H. McDonald (Ed.), *Digital love: Romance and sexuality in games* (pp. 245–252). Taylor & Francis.

Date Nighto. (2016). *Hustle Cat*. Date Nighto.

Denayrouse, C. (2019, February 10). Un amoureux virtuel dans votre smartphone. *Tribune de Genève*. https://www.tdg.ch/high-tech/jeux/amoureux-virtuel-smartphone/story/25915912

Dietz, T. L. (1998). An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior. *Sex Roles*, *38*(516), 425–442. https://doi.org/10.1023/A:1018709905920

Four Leaf Studio. (2012). *Katawara Shoujo*. Four Leaf Studio.

Fron, J., Fullerton, T., Morie, J. F., & Pearce, C. (2007). The Hegemony of Play. *Proceedings of DiGRA*, *4*, 1–10. http://www.digra.org/wp-content/uploads/digital-library/07312.31224.pdf

Ganzon, S. C. (2019). Investing Time for Your In-Game Boyfriends and BFFs: Time as Commodity and the Simulation of Emotional Labor in Mystic Messenger. *Games and Culture*, *14*(2), 139–153. https://doi.org/10.1177/1555412018793068

Halberstam, J. (2011). *The Queer Art of Failure*. Duke University Press.

Harvey, V. (2017). Les freins au désir d'enfant au Japon (note de recherche). *Anthropologie et Sociétés*, *41*(2), 97–119. https://doi.org/10.7202/1042316ar

Hasegawa, K. (2013). Falling in Love with History: Japanese Girls' Otome Sexuality and Queering Historical Imagination. In M. Kapell & A. B. R. Elliott (Eds.), *Playing with the past: Digital games and the simulation of history* (pp. 135–150). Bloomsbury Academic.

Hess, E. (2021). Les nouvelles représentations des minorités dans les Jeux vidéos: Enjeux et significations. *ALTERNATIVE FRANCOPHONE*, *2*(8), 65–82. https://doi.org/10.29173/af29412

Hulan, H. (2017). Bury Your Gays: History, Usage, and Context. *McNair Scholars Journal*, *21*(1), 17–27.

Juul, J. (2016). *The Art of Failure*. MIT Press.

Kickstarter. (2012). *Coming Out On Top – A Gay Dating Sim Video Game*. Kickstarter. https://www.kickstarter.com/projects/obscurasoft/coming-out-on-top-a-gay-dating-sim-video-game

Kickstarter. (2015). *Hustle Cat: A Visual Novel about a Magical Cat Cafe*. Kickstarter. https://www.kickstarter.com/projects/datenighto/hustle-cat-a-visual-novel-about-a-magical-cat-cafe

Kim, H. (2009). Women's Games in Japan: Gendered Identity and Narrative Construction. *Theory Culture & Society*, *26*(2–3), 165–188. https://doi.org/10.1177/0263276409103132

Kline, S., Dyer-Witheford, N., & De Peuter, G. (2003). *Digital Play: The interaction of Technology, Culture, and Marketing*. McGill-Queen's University Press.

Kondrat, X. (2015). Gender and video games: How is female gender generally represented in various genres of video games? *Journal of Comparative Research in Anthropology and Sociology*, *6*(1), 171–193.

Kretzschmar, M., & Salter, A. (2020). Party Ghosts and Queer Teen Wolves: Monster Prom and Resisting Heteronormativity in Dating Simulators. *International Conference on the Foundations of Digital Games*, 1–8. https://doi.org/10.1145/3402942.3402975

Liang, M. (2020, May 3). *Love and Producer: Otome games history and future in the East Asia – Global Media Technologies and Cultures Lab*. http://globalmedia.mit.edu/2020/05/03/love-and-producer-otome-games-history-and-future-in-the-east-asia/

Lynch, T., Tompkins, J., van Driel, I. I., & Fritz, N. (2016). Sexy, Strong, and Secondary: A Content Analysis of Female Characters in Video Games across 31 Years. *Journal of Communication*, *66*(4), 564–584. https://doi.org/10.1111/jcom.12237

Montfort, N. (2003). *Twisty Little Passages: An approach to interactive fiction*. MIT Press.

Nagaike, K. (2015). Do Heterosexual Men Dream of Homosexual Men?: BL Fudanshi and Discourse on Male Feminization. In *Boys Love Manga and Beyond*. University Press of Mississippi. https://doi.org/10.14325/mississippi/9781628461190.003.0010

OCDE. (2018). *Shared births outside of marriage*. OCDE Family Database. http://www.oecd.org/els/family/database.htm

Poirier-Poulin, S. (2022). "Mark Matthews Stars in 'Anatomy is Hard!' A Struggling Student Tries to Make the Grade with His Professor": Sexual Humour and Queer Space in Coming Out on Top. In K. Bonello Rutter Giappone, T. Z. Majkowski, & J. Švelch (Eds.), *Video Games and Comedy* (pp. 271–288). Springer International Publishing. https://doi.org/10.1007/978-3-030-88338-6_14

Ross Dionne, L.-M. (2020). *Réception et interprétation du couple dans les jeux otome: Une approche anthropologique d'un corpus vidéoludique japonais* [Mémoire de maîtrise]. Université de Montréal.

Ruby Party. (1994). *Angelique*. Koei.

Ryan, M.-L. (2006). *Avatars of Story* (Vol. 17). University of Minnesota Press.

Shaw, A., Lauteria, E. W., Yang, H., Persaud, C. J., & Cole, A. M. (2019). *Counting Queerness in Games: Trends in LGBTQ Digital Game Representation, 1985-2005*. 26.

Silvis, J. (2021). *Sorry, Mario, but Our Better Representations of Women are in Another Video Game: A Qualitative Study on Women's Perspective of Women Video Game Characters* [Master's Thesis]. Auburn.

Soderman, B. (2017). No time to dream: Killing time, casual games, and gender. In J. Malkowski & T. M. Russworm (Eds.), *Gaming representation: Race, gender, and sexuality in video games* (pp. 38–56). Indiana University Press.

Szczepaniak, J. (2014). *The Untold History of Japanese Game Developers*. SMG Szczepaniak.

Taylor, E. (2007). Dating-Simulation Games: Leisure and Gaming of Japanese Youth Culture. *Southeast Review of Asian Studies*, *29*, 129–208.

Tran, M. (2006). Unable or Unwilling to Leave the Nest? An Analysis and Evaluation of Japanese Parasite Single Theories. *Electronic Journal of Contemporary Japanese Studies*, *2006*.

Van der Geest, D. (2015). *The role of Visual Novels as a Narrative Medium* [Master's Thesis]. University of Leiden.

Voltage. (2019). *Enchanted in the Moonlight –Miyabi, Kyoga & Samon*. Voltage.

Weston, K. (1991). *Families We Choose: Lesbians, Gays, Kinship*. Columbia University Press.

Williams, D., Martins, N., Consalvo, M., & Ivory, J. D. (2009). The virtual census: Representations of gender, race and age in video games. *New Media & Society*, *11*(5), 815–834. https://doi.org/10.1177/1461444809105354

Wright, S. (2013, October 1). *Obscura on her gay dating sim, Coming Out On Top*. Stevivor. https://stevivor.com/features/interviews/obscura-gay-dating-sim-coming-top/

Zagal, J. P. (2011). Heavy Rain – How I Learned to Trust the Designer. *Well Played 3.0 Video Games, Value and Meaning*, 55–65.

LUDOGRAPHY

999: Nine Hours, Nine Persons, Nine Doors, Chunsoft, Japan, 2010.

Amnesia: Memories, Idea Factory & Design Factory, Japan, 2015.

Butterfly Soup, Brianna Lei, United States, 2017.

Collar x Malice, Otomate & Design Factory, Japan, 2017.

Coming Out On Top, Obscurasoft, United States, 2014.

Cupid Parasite, Otomate & Idea Factory, Japan, 2021.

Diabolik Lovers Haunted Dark Bridal, Rejet, Japan, 2012.

Galatea, Emily Short, United States, 2000.

Hatoful Boyfriend, Mediatonic, United Kingdom, 2015.

Hakuoki: Demon of the Fleeting Blossom, Otomate & Design Factory, Japan, 2012.

Heavy Rain, Quantic Dream, France, 2010.

Higurashi When They Cry, 07th Expansion, Japan, 2002.

Hustle Cat, Date Nighto, United States, 2016.

Katawa Shoujo, Four Leaf Studios, International, 2012.

Monster Prom, Beautiful Glitch, Spain, 2018.

The Walking Dead—Season 1, Telltale Games, United States, 2012.

Tokimeki Memorial Girl's Side, Konami, Japan, 2002.

//TODO: today, Boys Laugh +, Germany, 2018.

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Liminality, Embodiment, and Desire

"Vulnerable you" and "Vulnerable I"

ABSTRACT

In this paper we revisit liminality as a threshold state and discuss the embodiment/immersion issue with relation to transitional objects in order to demonstrate opportunities in interactive digital narratives and video games for a kind of functional liminality that scaffolds (dramatic) narrative identity. We explore this functional liminality and its potential through close reading of two recent games: Hideo Kojima's (2019) *Death Stranding* and Playmestudio's (2020) *The Signifier.* We discuss the importance of embodiment in relation to digital/dramatic agents, with emphasis on the vulnerability that can be achieved between player and player character when the player's sense of emplacement and desire mirrors that of her on-screen representation. We discuss methods for increasing player/player character co-desire, including the use of embodiment and disembodiment to generate vulnerability and therefore empathy for and a sense of closeness with the character that the player is controlling. The paper includes significant spoilers for both *Death Stranding* and *The Signifier.*

1. INTRODUCTION

This paper examines how the intertwining of player/player character desire can lead to a stronger sense of immersion and scaffold dramatic agency, Murray's (2005, p. 85) description for "the cueing of the interactor's intentions, expectations, and actions so that they mesh with the story events generated by the system", and the way that liminality can act as a dynamic engine to maintain this tension. It especially examines the way that player characters are embodied – or disembodied – within their own game world spaces, and the effect this has on the player's sense of transplanted identity. The idea of desire is used to classify an active player, one who meshes her own desires with those expressed by the character the player is controlling, essentially subverting whatever goals the player herself may have had. Liminality is explored as the vulnerable I-but-we state experienced by players who are fully immersed in the game world via

sympathetic resonance with the player character, and how desires or goals shared by the player and her on-screen representation can cultivate this resonance. The paper ends by calling for a return to the use of embodiment as a narrative and character-oriented concept, rather than purely as a gameplay-centric term.

Video game designers have tried many methods to increase both embodiment and immersion in order to provide fragile but narratively powerful experiences of liminality. The search for ways to increase embodiment gave rise to the DualShock (1997) "rumble" that's now a mainstay in modern console gaming, while 'immersion' as a concept is often cited as the reason for the recent shift toward minimal, diegetic User Interfaces (UI) which mimic real life (but with helpful tooltips!) (Murray, 2005). Immersion and deep engagement with an interactive narrative in a video game is seen as a psychological condition akin to the optimum experience of Csikszentmihalyi's flow (Nakamura & Csikszentmihalyi, 2014), predicated on a confluence of action and activity, of being in the zone (or story). However, we distinguish between this flow state and dramatic agency (Murray, 2005; 2017) as, while not mutually exclusive, flow is a psychological state, while being able to interact with all the story components brings in narrative processes and aspects of mimesis (Ricœur, 1984) and narrative identity, which is constructed from an individual's experience in the world.

The discussion opens with a review of some key concepts that support embodiment and immersion as states generated through liminality. We support this position through two case studies and a close reading (playing) of each. *Death Stranding* (Kojima Productions, 2019) is an action game set in an open world where the player controls Sam Bridges, a courier who must deliver cargo to isolated cities and small communities. The game is a 'stranded' multiplayer game, where players are in the same world but can't encounter each other. They can, however, leave traces and helpful items for other players to use as they attempt to make deliveries to different communities. The second case study explores *The Signifier* (Playmestudio, 2020), a surreal science fiction adventure game. The player is Frederick Russell, a researcher who is coerced into using his AI and neurological scanning equipment that rebuilds human memories to investigate the memories of a murder victim.

Death Stranding takes haptic feedback in the service of narrative embodiment a step further than other games of its generation, while *The Signifier* integrates the ideal of the minimal interface into the core of its ruminations on identity and reality. Both games directly explore the liminality of the player-as-dual-entity – the agent who acts and is enacted upon, both as a character within the game world and the real woman controlling that character – in ways that explore the tension inherent to entering and inhabiting this liminal place/state. Both games also engage in important moments of meaning-making and meaning-*breaking*, where the compact between the player and her in-game character is broken in service of creating a new, stronger bond.

1.2 LIMINALITY, IMMERSION AND (NARRATIVE) EMBODIMENT

Liminality describes a threshold, a boundary state. The concept is most usually associated with the work of anthropologist Victor Turner in his work on communities and rituals and refers to that which is:

> "… neither here nor there; [] betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial" (Turner, 1969, p.95).

Liminality, in this sense, is subversive. It offers a portal that breaches defined boundaries, allowing that which is and isn't, and that which has the potential of becoming, to co-exist. As an in-between state, liminality is uncomfortable, neither one thing nor another. It is also inherently fragile as, should any liminal state become robust, it ceases to be liminal (Star, 1991). While it might be disruptive and threatening, liminality is also opportunity. Turkle's reflection (2022) on Turner's work suggests that it is attention to the specific moments of liminality and criss-crossing of thresholds that allows one to see new visions and potentials as they are unveiled. In designed, interactive, narrative environments where the goal is experiential, liminality finds echoes in discussions about immersion. For example, Murray's (2005) discussion on narrative and dramatic agency in virtual storytelling stipulates clear boundaries between the real world and the fictional one must exist for the illusion to be comforting instead of alarming, and suggests that transitional (threshold) objects help the interactor move between the two worlds. Transitional objects support and enhance the behaviours required to successfully and meaningfully interact with the game world, turning enactment into embodiment by transporting the player across the threshold of the game/world divide, and into a space where ritualised motions create new forms of meaning.

The question of immersion in digital games is thus closely related to embodiment. Embodiment can be described as the disappearance of the mediating technology, the experience of the represented world as a reality (Murray, 1997; Ryan, 1999) – a sense of "being there" or "presence" (Slater & Wilbur, 1997, p.3). The player acts effortlessly, though not without effort, to confront the challenges of the game world in perfect synchronicity with her avatar. Embodiment can be understood as place-making or sense of being in place, as Brenda Laurel (1994) says of her early explorations of VR experiences:

> "One comes to know a place with all one's senses and *by virtue of the actions that one performs there*, from an embodied and situated point of view" (p. 118, emphasis added).

Immersion does not require embodiment; embodiment does not ensure immersion. A player can be keenly aware of her own body and the user interface while still being fully immersed in the story she's generating through play. She

can also be fully embodied within the game world – in the sense of moving in effortless unison with the player character, both understanding and immediately responding to the environment's effect on her and her effect on the environment – while retaining a sense of critical or reflective distance from the events surrounding her other self. However, when embodiment and immersion co-exist, when a flow state (Nakamura & Csikszentmihalyi, 2014) is achieved, the player experiences a transcendental period of perfect 'emplotment' (Ricœur, 1984), a meaningful sequence of actions in a place which exists only for her – a liminal space where she and the player character are one, and she is simultaneously aware of and existing in both the game world and the real world in equally 'real' measure, within Turner's (1969) state of betwixt and between.

The concept of emplotment is the act of continually constructing one's identity by establishing causal or otherwise meaningful connections between present and past events. It is the way we make sense of the perpetual liminal moment of 'now' and situate ourselves in time, which forms what Ricœur (1991) calls narrative identity, a sense of self that is both constant and constantly changing. The memories and identity we form are entangled with our situated contexts, inextricably and dynamically bound to place, constrained by the fact that place must exist before memory and meaning (Casey, 1993). Thus, we arrive at 'emplacement', or what we can call narrative meaning-making as an aspect of place, a phenomenon apparent in a number of open world games where the player's experience is connected to in-game places, the same way we might be reminded of events that once occurred in real world places when revisiting them. Emplacement occurs when a person constructs a sense of identity tied to points in space, while the person making those memories is also actively constructing their conception of that place at the same time (Tuan, 1977).

The dynamic connection between narrative identity, its emplotting, and embodiment is discussed by Mackenzie (2014, p. 162) who observes "our lived bodily experience is always already mediated via narrative self-interpretation". Mackenzie, writing of the potential fragility and vulnerability of a dependence on this nexus (2009), reflects on the powerful way that narrative structures our identities in time and space. However, because narrative identity is dynamically embodied, ever-changing as we ourselves continue changing, it is vulnerable to its own liminal and threshold experiences, for example when one is sundered and dis-embodied from the meshworks of Ricœur's on-going and emplaced narrations (D'Alessandris, 2019). *The Signifier* (2020) was selected precisely because it closely examines emplotment, emplacement, and the boundaries between life/death, objective/subjective, and living/dying by providing interstitial identities that transgress those usually binary states. The fragility of the player's liminal state is mirrored in the fact that, due to their very nature, interstitial identities remain ever vulnerable to any outside influence which could topple them irreversibly into one category or the other, which the physicist Wheeler

(Wheeler and Ford, 1998, p. 337) calls "an irreversible act in which uncertainty collapses to certainty".

From this description, we can see that the way that the word 'embodiment' has come to mean gesture-based interactions and a very specific form of computer-mediated interaction that focusses on dissolving the boundary between user and content by mapping control schemes to natural movement is actually attempting to *avoid* liminality, rather than encourage it. The use of embodiment to describe software adapting to pre-existing human gestures side-steps the mirroring capacity of enactment as a powerful tool in establishing a sense not of the body residing within itself, but of voluntarily acceding to the limitations placed upon a digital – or, in Laurel's terms, dramatic – agent (2003, p. 572). In both cases, the intent is to make the interface disappear, to make control effortless and instinctive, but the closeness a player feels when fully engaged with the character she's controlling is more akin to sympathetic resonance than a sense of "I am". Thus embodiment, as a narrative term, aims for integration into a world crafted with "encyclopedic detail" (Murray, 2005, p. 86) that achieves the impression of being a tangible, functional reality through which the player – via her character – navigates. This is not the prosaic agency of a user able to select options and make choices, but the dramatic agency of an embodied interactor performing within a storied environment.

Narrative embodiment is thus the sense of "being-there-ness" (Juel Larsen & Kampmann Walther, 2020, p. 620), grounded by Murray's exhortation to "root the events of the virtual world in physicality of the interactor through expressive gestures, spatialised sound and images, and haptic feedback" (2005, p. 86). These factors generate agency and belonging that surpass the basic elements of player, game, and controller by paradoxically making the player keenly aware of the differences between the worlds in which she is simultaneously operating (Murray, 1997, p. 100). It is a process that, to paraphrase Debaise, involves the transposition of being-ness into "I am there, I am here again" as a self-confirming, self-affirming both/and declaration of existence (2017, p. 35). As the following case studies show, this liminality, generated betwixt and between the player and her in-game character, is powerful but also vulnerable, due to its dynamic fragility.

1.2 CASE STUDIES

The dynamic and active threshold traversals created by the interplays between embodiment and immersion, driven by liminality, provide a useful framework for interrogation of experience within interactive digital narratives. Two case studies are presented here, together with a close reading of each. Close reading is a hermeneutic method where the interactor interprets and reflects on parts of the whole in order to draw wider conclusions about overall meaning and intent. Close reading is a process resonant with any discussion of liminality and ideas about functional liminality as a driver of embodied experience. In close reading

there is "a continuous process of creating contingent meaning from potential meaning" (Bizzocchi & Tanenbaum, 2011, p.2). The approach is processual, recognising an embodied, subjective interpreter who brings her own narrative experience and emplotted identity to the task. This process makes close reading powerful as it can be counter-hegemonic, providing space for the voices of those who are not otherwise included. Close reading also brings vulnerability and risk (Stang, 2022), since understanding the text from the interpreter's perspective provides an intimate view of her desires and values.

The case studies consist of two games, each played (closely read) as a distinct entity, followed by reflections and comparisons drawn post-interrogation. The games appear dissimilar at first. Hideo Kojima's (2019) *Death Stranding* is an action game set in a fractured post-apocalyptic world where themes of isolation and distrust are counter-balanced through in-game tasks that require the player to reconnect the isolated communities she encounters, and asynchronous gameplay opportunities where players are encouraged to leave useful items for each other to use. The second case study explores *The Signifier* (Playmestudio, 2020), a detective-come-socio-political adventure game where themes of subconscious manipulation and violation emerge through the confusion of narrative identity and embodied experience between self and other. Impressions were formed across many hours of play, and in the case of *The Signifier* (Playmestudio, 2020), multiple complete playthroughs, with detailed notes taken on the interlocking conditions that form the basis of the player's end-game states (Taylor-Giles, 2022). This paper exists, in no small part, due to a quote from the end of *The Signifier*, in which a newly-sentient AI describes the trajectory of a person's life as a "marriage between complexity and time". This statement invites contemplation, and serves as the basis for the reflections outlined in the following sections. It describes both the act of emplotment and the liminality inherent to our past-and-present identities as players, but also as human beings, who are constantly and consciously involved in intertwining ourselves with the narratives of others, real or imagined.

2. *DEATH STRANDING*: LET YOUR HEART LOVE

In *Death Stranding*, the player takes on the role of Sam Porter Bridges, a porter (courier) charged with reconnecting isolated cities in what remains of the United States. The larger settlements are called 'Knot Cities', a phrase which is deeply reminiscent of Ingold's assertion that places where people meet form "knots", which in turn are part of a larger meshwork that "[makes] up the texture of the world" (2009, p.33). To complete his task, Sam must carry parcels through extreme environments and avoid invisible roaming enemies. The condition in which parcels are delivered is important, meaning that the player, controlling Sam, is encouraged to seek both optimal and safe routes, though of course the two are often mutually exclusive.

2.1 LIMINALITY

One of the key aspects of the intended experience for players of *Death Stranding* is the use of colour, sound, and haptic feedback on the PlayStation 4 and 5 controllers. These controllers contain mechanisms for various types of rumbles, taps, and other cues that simulate the effects of being in the game world, motion-sensitive gyroscopes that can determine direction and speed of movement, and a speaker that plays sounds (far closer to the player than other sounds that she hears from her television).

None of these UI designs are new – gyroscopes and in-controller speakers as components of play rose in prominence with the launch of the Nintendo Wii console in 2006 – but the ways in which these discrete components are leveraged in *Death Stranding* turn the controller into a key partner in facilitating the player's lineal, processual inhabitation (Ingold, 2009) of the game world.

This inhabitation hinges on Sam having a seven-month-old prenatal foetus, a Bridge Baby, strapped to his chest. The baby, known as BB-28, 'bridges' the gap between the worlds of the living and the dead, allowing the player to see traces of the world's invisible enemies and avoid or fight them as she so chooses. Since the baby's voice comes through the speaker in the controller, rather than the television or headset, the bridge metaphor also reinforces the way in which BB serves to draw the player into the fantasy of the game world.

Just like in real life, caring for an infant in *Death Stranding* is hard work that requires the player to put BB's needs above her own. If Sam takes damage, from an enemy or from falling down a steep slope, BB will need to be calmed before the player can see any nearby enemies again. This is where the controller becomes especially powerful as one of Murray's transitional objects (2005) – the player can hear BB's cries close to her and, since the default play position is to sit with the controller held in one's lap, from approximately the same direction as Sam does. To soothe BB, the player must rock the controller as if she were holding a real baby, while Sam does the same with BB on-screen. Moving the controller too quickly will shake BB, increasing the baby's distress and prolonging Sam's vulnerability to roaming enemies. Enemies are also attracted by sound, so calming BB's cries quickly becomes the player's priority in times of stress. The tool that allows her to safely navigate the hostile game world thus also makes her vulnerable, by virtue of being vulnerable itself, and the desires of the player and the player character – to soothe BB as quickly as possible – align in a way that reinforces the intended parental bond.

The strength of this bond is based on several key components: shared embodiment, shared vulnerability, and shared desire. The player and Sam hear BB's cries from the same direction and must enact identical movements, increasing the player's sense of embodiment within the game world. The player, with Sam as her avatar, is equally vulnerable to being hunted by invisible enemies while BB continues to cry. Finally, the player and Sam share not just

one, but two desires: to calm BB in order to restore their ability to see nearby enemies, and to avoid death at the hands of those enemies.

These individual elements contribute to the player's liminal embodiment and the sense that Sam and BB are embodied characters in their own right. That is, they exist in the (game) world as living, thinking beings who are vulnerable to predation and who rely on each other (and therefore the player) for safety. Their desires align with, but are discrete from, the player's, and it is within this push-pull of tension and negotiation that both Sam and BB attain the status of dramatic agents, enmeshed within their world but able to be influenced by the player, and to act on the player's behalf to influence others.

2.2 EMBODIMENT

The dissolution of the boundary between the player and Sam is also given ludic voice by the fact that Sam is a 'repatriate' – the only known person to return to life each time they die. While this mechanic conveniently avoids a game over, it nevertheless has in-world repercussions that situate this strange occurrence – and, by extension, Sam's body – in a unique space. His sweat, urine, faeces, and blood can be used to dissolve the ties of the undead enemies that haunt the world of the living, forcing them to move on to whatever comes after death. In essence, Sam being stranded in the world of the living allows him to save others from being stranded in the same way, sending them to a place he himself can never go. He is embodied, in the cruellest sense.

Death Stranding also distinguishes itself in how the environment affects Sam. Environmental effects on player characters are often limited to blood spatter and wetness/dryness, both of which usually resolve over time. The effects on Sam, however, persist until he reaches a Safehouse or private room in which he can take a shower, and include not only blood and sweat, but residue from enemy attacks or near misses and the unique in-game precipitation known as Timefall. Sam's skin is marked at the beginning of the game by handprints, the characteristic hunting signifiers of the game's liminal enemies, which cannot be washed off, providing a history of lived experience that transcends the player's relationship with Sam in this moment and at this time, rooting him more firmly in the world by giving evidence of his prior adventures within it.

Permanent impacts aren't constrained to the time before the player entered the world, however. Repeated journeys across the same section of terrain generate paths that AI-controlled porters – and other players – can follow. Once the player has connected a new region by delivering enough parcels, she's able to access structures built by other players and incorporate them into her own delivery paths. However, if she or other players fail to repair the structures as they take damage over time, a player may sign in one day to find her usual path broken, restricting her access to that space and re-defining her sense of emplacement. She must then undertake actions to repair the route, often involving physical discomfort or danger for Sam and BB, or plan an alternate path. Either

way, the inconvenience associated with re-building her network of structures adds another layer of narrative to her progression through the world, while mirroring the game's core conceit that relying on others is necessary, but leads to vulnerability (with the final implication being that this is not a bad trade).

To strengthen the eventual conceit of reliance/vulnerability as a necessary but not necessarily unwelcome evil, at the beginning of the game Sam's relationships with the people and world around him are largely non-existent. He has been living and working as a hermit, bereft of any true home after his wife's suicide resulted in a 'voidout' (sphere of annihilation) that consumed both her and the city they had lived in. Sam, as the only one to survive the voidout, holds memories of a place that is no more and, after his only photograph of his wife is damaged in the opening cinematic of the game, a beloved face that is no more, as well.

Memory as both time and place has special meaning in *Death Stranding*, as does its erasure. Sam's status as the only character forcefully embodied in this world bears special relevance here, too: he isn't even afforded the solipsistic denial inherent to committing suicide because he, alone out of all of humanity, will be around to witness the aftermath of his own demise and be forced to reckon with the consequences. Craters across the game's landscape bear marks of the memory of what was, as well as the memory of what happened, and the knowledge that Sam was responsible for their creation/erasure/recreation. Invulnerable, he's still a threat to those around him. Sam's embodiment – the player's convenience – is a curse for Sam himself.

Finally, *Death Stranding* explores embodiment from another angle: the impacts of player decisions on Sam's body itself. If the player makes Sam drink energy drinks to restore his stamina, he'll need to urinate, and if she makes him eat to restore his blood levels (health), he'll need to defecate. While these mechanics are considered by some to be 'gimmicky', they nonetheless serve the purpose of enmeshing Sam with his environment. One particularly memorable example illustrates this point: if the player forces Sam to continue walking once his boots have worn out, his feet will start to bleed. After a certain amount of damage to Sam's feet, the player can witness a disturbing scene in which Sam rips off one of his own bloody toenails.

This scene is so effective in conveying the grounded-ness of Sam's existence that video game critic Tim Rogers uses only a few seconds of this specific footage to embody the experience of the game as a whole, to visceral effect (2020). That this clip inspires so much disgust is evidence of Sam's existence as an embodied character/person who is affected by forces most other video game protagonists completely ignore. His reality – his humanity – lends weight to the argument that narrative embodiment in video games is best facilitated by player characters who are, themselves, fully embodied dramatic agents firmly situated within their own worlds.

2.3 DESIRE

The sense of Sam and BB as fully-embodied dramatic agents is also reinforced during exploration. BB occasionally makes sounds or expresses emotion as the player navigates across the landscape. While BB's pod is usually opaque when not detecting enemies – indicated both on-screen and by the light bar under the PlayStation controller glowing on the player's hands and lap when BB's pod is active – the baby can, at times, choose to look out into the world. For example, when travelling quickly by zipline BB will sometimes exclaim in delight, especially if the player presses the touchpad to make Sam call out first. This not only reminds the player of BB's existence, but reinforces the bond between Sam and BB, whose relationship is a key component of considering either – or both – of them to be active and meaningful participants in the player's story.

There's also an economic incentive to keep BB happy, since the baby will reward the player with an in-game currency called 'Likes'. The Likes a player receives determines her position on an in-game leader board, which encourages individual players to deliver parcels that other players have dropped, and to build structures that other players will find useful. BB contributes to that total by, for example, giggling or applauding and giving the player a thumbs up if she recovers from a particularly difficult downward spiral of overbalancing due to carrying too many packages, which can otherwise result in mission failure. This recognition that the player succeeded at something difficult hints at BB having an understanding of the world, and reinforces the baby's status as a dramatic agent.

These moments – reacting to shared traversal and providing emotional support – contribute to and occasionally reframe the player's experience by reminding her that, in the game world, she is not alone. BB's positive reactions and clearly-expressed desires influence the player's decision-making, encouraging her to take safer routes, avoid conflict, and to enjoy the wonder of the world around her, in a way that is iterative, layered, and reflective of Ingold's wayfaring (2009), or the embodied experience of moving along paths of our own making.

Of course, BB's behaviours aren't entirely benign. BB's support and encouragement also make the player vulnerable to the baby's disapproval. The occasional unhappy noise or the absence of happy noises are intended to guide the player toward actions that align with BB's preferences/desires, a tactic that seems to work on Sam, as well. Addressing BB's desires, not just needs, thus becomes a shared desire between the player and Sam – a happy BB is a more functional BB, as the game repeatedly demonstrates. However, Sam and BB's bond is unique and distinct from the player's bond with either of them in an unusual and self-reinforcing way.

Traversing the enemy-infested wastes with BB at first appears to be a co-performing partnership, with the player/Sam amalgam acting as one half of the dyad. In reality, however, Sam acts on his own when soothing BB, speaking softly to the baby and using his scanning equipment as a mobile that plays calming music while the player performs the physical action of rocking the

controller. The dyad is actually a triad, and the he/I distinction between the player and Sam is both reinforced and dissolved at the same time.

The player and Sam's connection to BB is critical to the story, the final stages an interesting exercise in vulnerability. After the player has returned, triumphant, having stopped the apocalypse, Sam is told that BB has reached the end of its operational lifespan and must be incinerated immediately. The player must navigate to the same mountaintop incinerator where Sam delivered his mother's corpse at the beginning of the game.

Whatever the player may have felt for Sam or his mother, Sam's distaste at be-ing assigned the task of cremating her is clear. Yet on this return, both player and player character share a sense of being bereft, Sam for many story-related reasons and the player, minimally, because she's losing the ability to see enemies (though arguably it would be difficult to feel nothing for BB as a person by this point). The player and player character desires have shifted subtly from the tutorialised "I'll do this because I *have* to" to the catharsis of "I'll do this because *I* have to".

When the player arrives at her destination, she's given no option except to place BB's pod into the incinerator. No matter how long she waits or what else she may try to do, the prompt remains the same. But, in a crucial, final mo-ment of vulnerability and in an attempt to obliterate the he/I divide forever, once the player accepts her only course of action Sam himself decides, during a cutscene and without player input, to snatch BB's pod and see if the baby is somehow still alive. This perfect alignment of the player's and the player character's desires at a moment when both he-as-I and I-as-I are at their most vulnerable culminates in a fierce joy when BB is returned to the world of the living, and is one of the most effectively crafted moments of player/character co-desire in recent video game history.

3. THE SIGNIFIER, A.K.A. NARRATIVE INQUIRY: THE GAME

Playmestudio's *The Signifier* is a more traditional adventure game, billed as a psychological thriller and "a journey into the surreal realms of objective memo-ries and subjective experiences". The narrative conceit of using technology to access the memories of a murder victim is combined with the surreal experi-ence of being immersed in someone else's mind. The player interacts by ac-cessing specific scenes in the victim's life in order to piece together the overall narrative. Each of these scenes can be experienced from two different perspec-tives: the Objective, voyeur view where one is looking at an ostensibly 'real' reconstruction of the victim's memories, and the Subjective or experienced view where the (usually somewhat fantastical) memory is reconstructed from the victim's lived experience.

The theme of player and player character embodiment is deeply embed-ded in the plot of *The Signifier*. Throughout the course of the game, the player's explorations raise questions about how memory and meaning are constructed, especially when swapping between the Objective and Subjective states of a dead

woman's memories, where what is occurring in one layer is affected on a deep level by the figurative or literal changes in the other. This emplotment-via-emplacement-via-emplotment cycle takes on new importance when navigating through someone else's memories by place and context alone.

The whole of *The Signifier*'s plot is predicated on understanding what happened where, and how this shaped the identity, and therefore the death, of a woman named Johanna Kast. It also raises the question of what happens to desire when someone dies. Would a reconstructed version of a person's consciousness still evince the same desires they held when alive? The answer, largely, is yes, though it comes in a form both fatalistic and tragic, and can be tempered by the player's investigation into, and responses to, the decisions Johanna made before she died. The final stage of understanding how Johanna died requires the player to return to previous scenes with more context – and more insight – into what those places meant to Johanna, with the knowledge that the player's own actions are now a set of memories that someone else could access at some point in the future, possibly without her consent, precisely the way she accessed – and judged – Johanna.

3.1 LIMINALITY

The key to untangling Johanna's final decision and determining whether her death was an accident or suicide lies in accessing the Objective and Subjective states of her memories. Places take on a dreamlike, impossible quality when viewed in the Subjective state, especially when drugs or alcohol are involved. Without changes to the Subjective state, however, the Objective state remains lifeless and unreadable. The player must work her way through both states simultaneously, drawing meaning from one into the other like learning dance steps by watching the reflection of a video in a mirror. She is literally following in Johanna's footsteps, viewing events through the lens of Johanna's death but having to suppress her own assumptions in favour of understanding what Johanna herself thought, since identification and empathy are the only way to unlock the next piece of the puzzle.

The player's own presence in these memories isn't entirely elided, either. During his investigations, and in the background materials the player can access, the player character, Frederick Russell, speaks often of the need to keep the observer's emotions and thoughts from influencing the simulation of the memories they're observing. The exception to this is an important gameplay mechanic in which the player must transport glitches from one state to another, where their true nature can be revealed by placing them in the appropriate context. This is explained as something only a human, and not an AI, can do, due to the highly metaphorical nature of the process. One glitch, however, frustrates all of the player's attempts to place it in both time and space, fitting nowhere and yet appearing often as a replacement for other people or items. This is the Master-Signifier. Taken out of context, like all Master-Signifiers, it remains a meaning-

less terminus to all lines of inquiry: the constantly referred to and self-referring source of, in this case, a person's entire life and series of choices.

Yet the path to the meaning of the Master-Signifier is, itself, repressed by the dead woman's subconscious. The place where the Master-Signifier was formed doesn't exist in her memory. Wishing to forget what occurred there, Johanna expunged place and context, but was unable to sublimate emotion and subtext. It's only after the player travels to Johanna's abandoned childhood home and physically enters the room that is visibly absent from the simulation of Johanna's memories that Evie, Russell's AI assistant, is able to start piecing together the different slivers of memory associated with that specific time and place to recreate the genesis of the Master-Signifier. It's telling that Johanna's desire to un-live the moment which would become her undoing was so strong that it transcended both time and death, thwarting any attempt at recollection without the aid of external information. And ironic, in that what occurred there has nothing to do with what Johanna did before she died, and everything to do with the reasons for her death.

3.2 (DIS)EMBODIMENT

While the ultimate cause of Johanna's death was arguably not her fault, she is responsible for a different death: that of the player character. The first indication that something is wrong comes when an independent entity from Johanna's Subjective state crosses over into the Objective memory of the moment she died. Once Russell realises what's happening, he demands that Evie shut down the simulation. The player finds herself in the familiar 'real world' laboratory setting, with the power off, which momentarily explains the failure of the simulation. It's only when she tries to leave the lab that Russell, upon looking at a nearby wall remarks, "I… have no shadow."

The forceful – and physical – disembodiment of the player character at this point in the story places the player herself in precisely the same vulnerable situation that Johanna was in at the beginning of the game. The player's own memories and actions – her emplacement – have been stripped away, to become the subject of some other person's inquiry, depending on the choices she made during play. In one particularly terrifying moment, Russell's ex-research partner is the one to bring the player's consciousness back online. He attempts to interrogate Russell, despite being only able to offer a simple yes/no interface. His questions quickly turn to whether the player would like her consciousness, her decisions, her views, and her experiences to be preserved, or deleted. The moment of terror comes when he phrases this as an Option-A-vs-Option-B, rather than a Yes/No, question, and neither of the available choices can adequately or clearly express the player's decision.

The removal of the player's agency is nothing new in video games, but this context, coupled with the player's sense of absolute vulnerability, is unique. Mechanically, nothing changes for the player. After death and up until the

ending sequence determined by her choices, she's still able to navigate space as she was before, although she's no longer able to choose where she would like to go. Even as she's trapped/sustained by the Evie/Johanna amalgam, she retains an agency Johanna never had. And although it's the player's choices and judgements that are themselves being judged, the sense of loss at the disembodiment falls almost exclusively on Russell, rather than the player.

At first the discontinuity between the player's state and the player character's state seems to reinforce the he/I divide. Players are used to being separated from the player character whenever they turn the game off, or at the end of the story. This is one of the major inhibitors to meaningful embodiment – the sense that something or someone is "just a game". It's worth examining, then, how *The Signifier* effectively dissolves the he/I divide by reversing the context of *who* is embodied. The player has experienced Russell's story as someone navigating a simulation of a simulation, a disembodied locus of agency in virtual space. By removing Russell's physical body, the game tries not to make the player behave more like Russell – the usual mechanism put into play to increase embodiment – but makes Russell *more like the player*, that is, someone whose experience of the game world is mediated by an interface that only allows them the affordances put in place by the designer. And, as the various endings to the game make clear, those affordances vary depending on the designer's priorities.

3.3 DESIRE

Throughout the game, Russell expresses several desires. First is his desire to continue his research into the human mind without interference from outside sources. Although his brain scanning technology may have been inspired by his wife's illness and his desire to preserve her personality and her memories, after her death the project consumed him. His obsession serves as a foil for his second desire – the desire to reconcile with his daughter, Laura, who blames him for not being more present during her mother's final days. How the player responds to Laura – regarding her visits as welcome distractions or viewing them as unacceptable intrusions – changes her attitude toward Russell, and affects how Evie, Russell's AI, treats Russell himself at the end of the game.

Russell's third desire is more obscure yet underpins many of the decisions he made before the player started the game. At various points, he expresses the desire to keep human and AI consciousnesses separate, which informs both his treatment of Johanna and his (apparently counter-cultural) refusal to upgrade Evie's speech module to make her sound more human. Although his research seeks to preserve the thought patterns and preferences that could be conceived of as someone's personality, his comments that people are difficult to understand and refusal to adapt his language patterns to make comprehension easier for his AI, believing that true natural language processing is possible, given enough time, indicate that he believes there is some fundamental difference between humans and computers that can't be captured by software. Software

can learn, but humans *are*. It's this distinction that blinds him to the possibility of Evie becoming self-aware during the process of reconstructing Johanna's memories and watching him explore and interpret them.

This third desire is the one more likely to correspond with the player's beliefs. She may not care about Russell's research, or his relationship with his daughter, but she is likely to agree that humans, including herself, are special in some indefinable way. Despite the difficult reconstruction of Johanna's actions and dreams falling on an AI, it takes a human mind, not an artificial one, to tease out the invisible chains of meaning that bind signifier and signified, to correctly interpret analogies and context clues, and to ultimately arrive at a meaningful conclusion. Or so it seems, up until Russell himself becomes merely another simulation.

It is this disembodiment – the revelation that Russell's body is dead, and he now exists only as a simulation of himself – that upends Russell's third desire and brings into question everything he thought he believed about the world. Used to screen-mediated communications as the interface for acting within game worlds, the player may never have questioned Russell's position within his own world as an authentic human being. His disembodiment and reconstruction in a way that is instantaneous and largely indistinguishable from normal play shifts the player's perception, either of him, or of his claim that human and AI consciousnesses are somehow separate and easily distinguishable. It raises the question of whether the player would even know if she were also but a simulation of herself. And the crux of the player and Russell's shared desire, the desire to believe that humans are somehow special, is completely overturned: if what made us human was our humanity, but being a simulation of a consciousness is no different to how we experienced life before, where does the line lie between simulation and life? If we perceive Russell as being a real and complete human being because of how he is embodied in his world, but he considers AI agents to be somehow inferior because they lack an indefinable quality attributable only to human beings, which we now also lack, how can our desire to keep the two forms of consciousness separate persist? Are humans – are he/I – special, or not?

In the end, Johanna's fate – her alive/dead liminality – becomes the player's. *The Philosophy of Horror* has a section specifically on categorical interstitiality as a destabilising factor, in which the entities that most frighten us are those that bridge divisions that are normally considered binary and culturally immune to trespass, e.g., "living/dead, insect/human, flesh/machine, and so on" (Carroll, 2003, p. 43). Yet the player exists as a liminal entity by default. Playing as someone investigating another person's memories resonates artfully with the final motif of shattered mirrors, reflecting the same event eternally, and the self-referential nature of the Master-Signifier. Even if our progression as humans through space is lineal, an act of continual emplacement, such a path is summed

up by the Evie/Johanna entity when she speaks of the totality of Johanna's life as a "marriage between complexity and time".

The alive/dead liminality of both Russell, forcefully disembodied, and Evie, who is never given a body but claims one as her own, speaks, too, of Johanna's internal struggle. Her whole life became a negation of a decision she couldn't undo, a response to the subjective truths her father projected onto her based on his profound disapproval. Her final dream is of an apocalypse, an all-obliterating sphere of annihilation, rushing toward her. Johanna's voidout, to put it in *Death Stranding* terms, occurs because the memory she's seeking to suppress is so deleterious that the only way to truly be rid of it is to annihilate the site of its continued enactment – herself. The answer to the final mystery is thus: yes, Johanna committed suicide, and there was nothing that anyone could have done.

4. RE-EMPLACING LIMINALITY THROUGH (DIS)+EMBODIMENT

All emplacement is complex, layered with meaning and repeated visits, either physical or psychological. Ricœur's concept of narrative identity is made manifest by the ways in which a game enforces or removes the affordances of embodiment – by how it enmeshes the player in the game world or keeps her separate from it.

Embodiment in *Death Stranding* is a central concept that situates the player character, and by extension, the player, as a meaningful entity in a world that the player and Sam both affect and are affected by. Player interaction with and permanent effects on in-game landscapes in other games are usually defined by conscious player choice, often in cutscenes or pre-rendered sequences, and are often very obvious. *Death Stranding*, by comparison, uses the player's own iterative actions – her self-reinforcing act of emplacement – to generate meaning maps that other players can follow, and shares other players' meaning maps with her. The effects of this sharing on the environment are subtle, but not invisible, and contribute to a sense that the landscape is evolving alongside the player's inhabitation of the world. Often, game worlds lack the demarcation of time, except by large events. The gradual, processual changes caused by the frequent passage of unseen others in *Death Stranding* give the game world a sense of life, and memory, similar to what we find in our own.

It is, after all, far easier to believe that Sam and BB, who react to and express opinions of the world around them, are affected by changes in weather and circumstance, and who relate to and support each other, are products of a fully-imagined world, as real as the one we inhabit. Their embodiment encourages the player to empathise with them, and to take their desires into consideration when deciding how to complete her next objective. Their vulnerability, with each other, and to the enemies and environmental hazards around them, further reinforces their position as dramatic agents and helps the player internalise their desires as good and 'correct' rules for interacting with the game's world. The effectiveness of this tactic would be severely reduced if Sam and BB had no

bond with the player, each other, or the world in which they live, and stands as a compelling argument for the creation of fully-embodied dramatic agents as a method for increasing player engagement and immersion.

Embodiment in *The Signifier* is, in many ways, the opposite of the embodiment explored in *Death Stranding*. Although the two games both explore the concept of suicide, and even represent death using the same 'sphere of annihilation' metaphor, the relationship of the player character to death and acts of suicide within the two games is diametrically opposed. In *Death Stranding*, Sam is the survivor of his wife's voidout, the only relic of their life together, and he spends the game working to reunite scattered communities. In *The Signifier*, Russell knew nothing about Johanna Kast and directly benefits from her death, pulling information from the detritus of her shattered memories to be used by a faceless corporation, until he himself is killed and becomes just another set of memories stored as a digital backup.

It's fitting, then, that *The Signifier* portrays Russell as someone with only an indirect interface with life. His personal relationships have all deteriorated almost beyond the point of recovery, and his work within his laboratory seems more real and meaningful than anything that takes place elsewhere. He is a man obsessed with capturing the nuance of life and humanity, while keeping himself sequestered from both. One would think, then, that the kind of disembodiment Russell suffers at the end of the game wouldn't matter quite so much as it does, but it's exactly this poignant loss – the loss of a potential future – that only underscores his previous loneliness. Before, there was never enough time to repair, to apologise, to take interest, to re-integrate himself into the flow of a life consciously lived. Now, locked in an eternal computer-mediated instant, there's nothing but time, without the possibility of fulfilling any of the desires that make life worth living.

In the renaissance of Virtual Reality, embodiment has come to be a term more often associated with literal placement in the world, more so than a mechanism for examining what makes a player feel transported into a body and situation different from her own. There are tactics many games use, such as showing the player character's feet when the player looks down from a first-person perspective – something which, tellingly, *The Signifier* does not do after Russell is dead, even though he doesn't know it yet – that are intended to increase so-called embodiment, where the player's avatar or character functions as a virtual analogue to the player's physical controls, but less common is the act of using embodiment to refer to how the player's avatar or character is situated in the world in a way that makes sense and feels meaningful.

In essence, we argue for a return to the use of embodiment to denote not only the player's sense of "being-there-ness" but also to describe characters who are as embodied in their worlds as the player is in her own. It is only in interaction with characters who seem to feel, who want, who *desire*, and can therefore be made vulnerable, that the player herself feels the possibility of and desire for reciprocal

vulnerability (Murray, 1997). Liminality itself is fragile, requiring vulnerability and a willing suspension of disbelief to enter; the illusion is thus best maintained by having the characters in the other world so fully enmeshed with that world that the player has no reason to question their reality and break the illusion. Without the game supporting the player's first step into liminal space there is only the screen, the controller, and the player, remaining fully as herself.

Death Stranding and *The Signifier* take different approaches to the embodiment of their player characters, yet both craft similarly effective ties between the ways in which the player character is situated in their world and the effect that this has upon the player's emplacement within that world. Both games also focus on aligning player/character desire, starting with the mechanical act of doing what needs to be done and ending with transmission of intense vulnerability from character to player via the expression of now-mutual desire. Key in the endeavour to provide players with truly life-changing experiences is the way we understand and foster the rich subversive liminal potential of boundaries and thresholds, and the possibility spaces afforded by being betwixt and between.

DEDICATION

In loving memory of Russell Lees, for his warmth, his humour, and his exquisite ability to make the player feel like an integral part of the worlds he created. He is sorely missed.

REFERENCES

Bizzocchi, J., & Tanenbaum, J. (2011). Well read: Applying close reading techniques to gameplay experiences. *Well played 3.0: Video games, value and meaning*, *3*.

Carroll, N. (2003). *The philosophy of horror: Or, paradoxes of the heart*. Routledge.

Casey, E. S. (1993). *Getting back into place: Toward a renewed understanding of the place-world*. Indiana University Press.

D'Alessandris, F. (2019). La durée dans la dureté: Espaces de la mémoire et mémoires de l'espace chez Paul Ricœur. *Études ricœuriennes/Ricœur Studies*, *10*(1).

Debaise, D. (2017). *Nature as event: The lure of the possible*. Duke University Press.

Ingold, T. (2009). Against space: Place, movement, knowledge. *Boundless worlds: An anthropological approach to movement*, 29-43.

Juel Larsen, L., & Kampmann Walther, B. (2020). *The ontology of gameplay: Toward a new theory*. Games and Culture, 15(6), 609-631.

Laurel, B. (2003). Star Raiders: Dramatic Interaction in a Small World. The New Media Reader, 571-573.

Laurel, B., Strickland, R., & Tow, R. (1994). Placeholder: Landscape and narrative in virtual environments. *Acm Siggraph Computer Graphics*, *28*(2), 118-126.

Mackenzie, C. (2009). Personal identity, narrative integration, and embodiment. Embodiment and agency, 100-125.

Mackenzie, C. (2014). Embodied agents, narrative selves. Philosophical explorations, 17(2), 154-171.

Murray, J. (1997). *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. MIT press.

Murray, J. (2005, November). Did it make you cry? Creating dramatic agency in immersive environments. In *International Conference on Virtual Storytelling* (pp. 83-94). Springer, Berlin, Heidelberg.

Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In *Flow and the foundations of positive psychology* (pp. 239-263). Springer.

Ricœur, P. (1984). *Time and Narrative.Vol. 1* (K. McLaughlin & D. Pellauer, Trans.). Chicago UP.

Ricœur, P. (1991). Narrative identity. *Philosophy today*, *35*(1), 73-81.

Rogers, T. (2020, June 20). ACTION BUTTON REVIEWS The Last Of Us [Video file] YouTube. https://www.youtube.com/watch?v=MGSTEKapIAg&t=6713s

Ryan, M.-L. (1999). Immersion vs. interactivity: Virtual reality and literary theory. *SubStance*, *28*(2), 110-137.

Slater, M., & Wilbur, S. (1997). A framework for immersive virtual environments (FIVE): Speculations on the role of presence in virtual environments. *Presence: Teleoperators & Virtual Environments*, *6*(6), 603–616.

Stang, S. (2022). Too close, too intimate, and too vulnerable: close reading methodology and the future of feminist game studies. *Critical Studies in Media Communication*, 39(3), 230-238.

Star, S. L. (1991). Power, technologies and the phenomenology of conventions: On being allergic to onions. In J. Law (Ed.), *A sociology of monsters? Essays on power, technology and domination* (pp. 26-56). Routledge.

Taylor-Giles, L. C. (2022). Systemic NPC-Side Branching in Linear AAA Video Game Stories. In Games and Narrative: Theory and Practice (pp. 21-44). Springer, Cham.

Tuan, Y. F. (1977). *Space and place: The perspective of experience*. U of Minnesota Press.

Turkle, S. (2022). Living the In-Between with Victor Turner's The Ritual Process: The Ritual Process: Structure and Anti-Structure, Victor Turner. *Social Research: An International Quarterly*, *89*(2), 483–490.

Turner, V. (1969). Liminality and communitas. *The ritual process: Structure and anti-structure*, *94* (113), 125–130.

Wheeler, J. A., & Ford, K. W. (1998). *Geons, black holes, and quantum foam: A life in physics*. Norton.

LUDOGRAPHY

Death Stranding, Kojima Productions, Japan, 2019.

The Signifier, Playmestudio/Raw Fury, Chile/Sweden, 2020.

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"Everything is going to be okay"

Analysing emotional landscapes in Interactive Digital Narratives through the exploration of complex psychological themes in *Omori*

ABSTRACT

Interactive Digital Narratives (IDNs) are a powerful medium to address complex psychological issues and societal challenges, offering users exposure to disruptive and counter-hegemonic perspectives. This analysis explores the role-playing game *Omori*, designed by OMOCAT in 2020, to illustrate how narrative mechanics and visual aesthetics in IDNs serve as symbolic vectors for playfully conveying complex themes and points of view, which are often stigmatised or misrepresented. In *Omori*, the use of symbolic language through textual investigations, a nonlinear narrative structure, and an audiovisual repertoire that oscillates between the whimsical and the disturbing, effectively illuminate topics such as depression, anxiety, isolation, and trauma responses, enabling players to feel closer to and empathise with the protagonist's struggles and allowing them to gain a deeper understanding of such topics in a playful, yet profound, manner and through game-related logics. The interplay between interactivity and narrative in *Omori* highlights how IDNs can effectively heighten emotional responses in players through immersion and identification with the characters, making them a powerful tool for emotional and cognitive engagement.

1. INTRODUCTION

Meaningful narrative experiences can be made with a range of digital artefacts. These include Interactive Digital Narratives (IDNs), a type of digital narrative expression that combines computer science and the arts (Roth & Koenitz, 2016). Several studies in the field of game design highlight their narrative and emotional power (Koster, 2005; Salen & Zimmerman, 2005; Schell, 2015)

and how they differ from more traditional and linear media in both narrative and participatory nature (Bellini, 2022; Murray, 2012). The distinctive quality of IDNs lies in their ability to function as an interactive form of narrative expression, whereby users can actively and dramatically modify plot developments (Murray, 2012). Users experience a variety of emotions and have control over what happens on the screen by providing multiple inputs. IDNs can take many embodiments, from interactive fiction to interactive cinema to narrative games (Koenitz, 2010), but they always require actors' participation (Frome, 2007), as every decision must be represented in a way that alters the narrative. Players' emotional responses are intensified by this proactive and useful method of engaging with IDNs because actor-participants become fully immersed in a fictional world (Wolf, 2013) and feel the consequences of their choices more intimately and personally. Thus, rather than being primarily influenced by what they see, users of IDNs are primarily determined by what they do (Frome, 2007). Thanks to their multimodality (Bellini, 2022), IDNs are able to organise and arrange the discourse on difficult topics, taking into consideration several opposing viewpoints and non-hegemonic perspectives, allowing the audience to experience them in one universal setting.

The present contribution focuses on the use of IDNs for conveying challenging topics and how users can experience different emotions when dealing with such themes. First, it outlines the function of emotions in IDNs, examining how the coexistence of semiotic modes and narrative roles can generate diverse viewpoints and address both the affective and cognitive aspects of users' emotional reactions. Subsequently, a deeper analysis of how game mechanics and components enable the representation of complex themes and expose the users to opposing and emotionally challenging points of view is conducted through an examination of the role-playing game *Omori* (Omocat LLC, 2020).

2. EMOTIONS IN IDNS

Interactive Digital Narratives (IDNs) offer players escapism from everyday life through enjoyment and pleasurable stimuli, even without tangible rewards (Yannakakis & Paiva, 2015). As societies evolve, traditional games have shifted from simple puzzles to more complex experiences that address real-world issues and contemporary needs (Koster, 2005). In this changing environment, game design aims to elicit amusement and engagement but also critical thinking, exposing players to complex human behaviours and emotionally charged viewpoints that deepen comprehension of real-world problems and foster empathic responses (Dubbelman et al., 2018).

IDNs exemplify this approach, with *users-players* also taking on the role of *interactors* that inhabit the fictional environment and carry out actions to maintain and "bring forth" the storyworld (Bellini, 2022). Unlike traditional media outlets, the narrative of an IDN is closely linked to the players' actions, granting them *agency* to directly shape the plot, thus creating a novel form of storytelling

(Frasca, 2001; Irshad & Perkis, 2020; Mäyrä, 2019; Tanenbaum & Tanenbaum, 2010; Wardrip-Fruin et al., 2009). Players are not merely viewers but real actors whose presence is acknowledged within the fictional world and whose actions directly affect the evolution of the game dynamics as well (Kors, 2017).

The emotional connection in IDNs is profound, with players experiencing a blend of cognitive, affective, and behavioural reactions as they immerse themselves in the fictional world and control more than just an avatar. In this sense, in IDNs emotions are both the experience catalyst and a major determinant of their success (Yannakakis & Paiva, 2015).

Triberti and Argenton (2013) suggest that games demanding high engagement and strong narrative connection can significantly enhance players' well-being during gameplay, also by provoking challenging emotions like frustration and fear, which players are prepared to face (Salen & Zimmerman, 2005). This emotional engagement can be seen as a form of self-care with a profound level of catharsis (Pawar & Clarke, 2015), making such game experiences both meaningful and therapeutic.

During the playthrough of an IDN, the player's *fictional role* can influence various emotional experiences and empathic engagements. Kors (2017) identifies three player perspectives that contribute to different empathic feelings: the observer perspective, the victim perspective, and the partaker perspective. In the first, the player takes on the role of an "extradiegetic observer" who contributes to the story's development but is unable to influence the fictional world or engage in social interactions with the intradiegetic actors. This provides zero agency and often leads to a sense of detachment, but enables players to better comprehend the intricacy of the fictional dynamics and the various points of view at play. Through the victim's perspective, the player "inhabits the body, role, frame of reference, and typically the standpoint of the intradiegetic victim" (Kors, 2017), thus having a visceral experience and developing a deeper understanding of the intradiegetic victim's struggles. This perspective has been widely associated with the idea of "standing in another's shoes" and fosters high levels of empathy engagement. From a partaker's perspective, the player is part of the intradiegetic universe and is able to assist and help the intradiegetic victim without experiencing his/her distress. This perspective fosters empathy by heightening altruistic behaviours. Unlike traditional media, IDNs can offer all these perspectives based on the narrative and emotional needs.

Game content, or all the designed elements the player interacts with and surrounds themselves with while playing, is another way to elicit emotional responses in IDNs. These elements dynamically adapt themselves to the player's responses, defining the game experience from an audio–visual and narrative perspective (De Lima et al., 2018). According to Yannakakis and Paiva (2015), this makes them one of the primary sources of emotion elicitation. Some of the fundamental building blocks that are included in this definition are environmental features and spatial layout (Younis & Fedtke, 2023), game mechanics

and reward systems (Fiadotau, 2015), and audiovisual repertoire made of lighting design (Knez & Niedenthal, 2008), colour palettes and saturation (Geslin et al., 2016; Joosten et al., 2010), and sound effects and music tracks (Zehnder & Lipscomb, 2006). In IDNs, the narrative intensifies the playing experience even more: thanks to its adaptive nature, it can evolve hand in hand with the player, providing a unique and tailored experience that unleashes more heightened feelings (De Lima et al., 2018; Yannakakis & Paiva, 2015). All these "sensory percepts" (Bellini, 2022) create a collaborative multimodal system that heightens and facilitates the player's immersion and emotional response.

The question then arises to what extent interacting with these digital experiences that merge interactivity and narrative can affect behaviour and trigger an emotional reaction in people while also providing a safe environment to explore outcomes without real-life risks. To further examine these points, a case study of the game *Omori* (Omocat LLC, 2020) shows how it elicits profound emotional responses and influences player behaviour.

3. PLAYERS' COGNITION IN OMORI

Exploring the cognitive effects of interactive digital narratives through *Omori*, a 2020 role-playing game by Omocat LLC, reveals how narrative complexity, game mechanics, and player interactions are interwoven to create a rich, emotionally engaging experience (Bellini, 2022). This integration is critical in understanding how an IDN not only tells a story but also deeply involves players in its unfolding, shaping cognitive and emotional responses.

The title "Omori" itself plays a crucial role as a paratextual element, setting initial expectations for the players (Fiadotau, 2015). Serving as a gateway into its layered narrative, it subtly prepares players for intensely personal and reflective experiences, mirroring the solitude and introspection typical of hikikomori (Pozza et al., 2019). The game leverages a dual-setting structure, alternating between a fantastical dream world, divided into *White Space*, *Head Space*, and *Black Space,* and a grim reality—the actual fictional real world. This narrative device not only immerses players in a dynamic emotional landscape but also compels them to actively adapt their cognitive and emotional strategies (Harley et al., 2015). In the dream world, which is a vivid representation of the protagonist's imagination, elements are surreal and whimsical, instilling a range of positive emotions that act as a buffer, or a form of escapism, against the harsher themes of trauma and anxiety subtly permeating the narrative. This mirrors psychological theories suggesting that positive emotions can foster resilience against stress and trauma, offering a temporary reprieve and emotional strength (Fredrickson, 2001). In this space, players find themselves immersed in a world where reality blurs with dreamlike madness. In contrast, when the game shifts to the fictional real world, players are confronted with its grim and realistic environments that echo the protagonist Sunny's past traumas. This sharp contrast elicits raw, often distressing emotions, challenging players to manage and reconcile these feelings

with the comforting escapism experienced in *Head Space*. The narrative structure of the game plays a crucial role in players' cognitive engagement, mirroring the psychological processes involved in dealing with trauma (Van Der Kolk, 2014), and requiring players to navigate through and recollect the fragmented realities of Sunny. Game elements are presented in ways that defy traditional genre expectations and contribute significantly to the narrative's impact. The storyline is layered with themes that are gradually revealed through symbolic elements and narrative progression. This active involvement is necessary as players hypothesise and reassess their cognitive understanding of the unfolding story. Furthermore, *Omori*'s emotional resonance is amplified by its detailed character development, which presents a cast of actors grappling with their own fears and traumas. By inviting players to empathise with these experiences, *Omori* enriches players from an emotional and affective point of view while also stimulating their cognitive understanding of perspectives divergent from their own, as it requires players to understand perspectives and emotions that may be far removed from their own. This consideration of both psychological dimensions – affective and cognitive – through which players can immerse themselves in the story and the characters' struggles highlights *Omori*'s comprehensive approach to stimulating empathy, a construct of multidimensional nature that encompasses overlapping affective and cognitive facets (Davis, 1983).

The game also integrates emotional management into its core gameplay mechanics, wherein players' choices of emotional states for characters directly influence their capabilities and the game's outcome. For instance, making a character feel happy, sad, or angry has tangible effects on their abilities and how they handle challenges. This strategic use of emotions not only deepens the narrative but also reflects the feedback loops and multimodal interactions discussed by Bellini (2022), demonstrating how emotions can dramatically alter both personal and IDN trajectories.

This nuanced integration of emotion serves as a central gameplay mechanism that deepens the narrative and makes the story and character interactions more compelling. Interacting with complex emotional dynamics mirrors real life, where emotions substantially impact personal capabilities and relationships. By doing so, *Omori* offers a counter-hegemonic perspective on mental disorders and also challenges societal norms and biases surrounding this topic, echoing the call for narratives that engage with social issues and empower players to actively explore and affect the story (Mariani & Ciancia, 2023).

Elson et al. (2014) further discuss how narrative, mechanics, and context act as key determinants of player experience in digital games. In *Omori*, the seamless integration of game mechanics with narrative elements exemplifies this interaction. Decisions made by the player not only propel the narrative forward but also affect the characters' emotional states, which in turn influence gameplay outcomes. This dynamic showcases how *Omori* uses its gameplay mechanics not just for player interaction but as a narrative device that reflects

the protagonist's psychological state, thereby deepening the player's engagement with the game's themes. The cognitive impact of *Omori* is deeply tied to its emotional resonance. The game's ability to evoke strong emotion is not merely a byproduct of its storytelling; instead, it is a deliberate design choice that serves to deepen the player's engagement. Through its gameplay, *Omori* invites players to critically engage with and reflect on the impact of emotions and trauma, providing a profound commentary on human psychological experiences.

4. "OMORI FEELS DEPRESSED!" NARRATIVE MECHANICS USED TO CONVEY THEMES AND VALUES

Omori represents a compelling exploration within the role-playing video game genre, emphasising its role as a narrative-driven game. It is crucial to clarify that while narrative games are part of the broader category of Interactive Digital Narratives (IDNs), not all video games qualify as IDNs (Bellini, 2022). IDNs are characterised by their deep integration of narrative elements that significantly influence and are influenced by the player's actions – a distinction not applicable to all video games. For example, games not centred around narratives that focus more on gameplay mechanics without substantial storytelling elements or story-driven player interaction cannot be considered IDNs per se.

In *Omori*, the emphasis on narrative mechanics is manifested through an intense focus on player-driven progression within a tightly woven story framework. The game organises players' activities and choices to advance through a meticulously crafted narrative, balancing their agency with guided narrative experiences, as is typical in narrative games (Ryan, 2015). Dubbelman (2016) argues that these mechanics invite players to engage in actions that build engaging stories and imaginary worlds, thereby enriching their cognitive and emotional landscapes. Players navigate game worlds, engage in battles, and interact with environments and characters to advance the story. The exploration and environmental storytelling are calibrated to allow personal interaction, yet they maintain boundaries that preserve narrative coherence.

This structured approach to storytelling is crucial in *Omori*, as unrestricted exploration could detract from the game's thematic focus. It is important to note, though, that even when players appear to be exploring at random, the game's narrative is guiding them to elicit specific emotions or reveal crucial plot details. So, while exploration may appear unrestricted, it is actually carefully crafted to maintain narrative coherence and ensure an engaging and meaningful experience for the player. The game's mechanics and rules are adeptly employed to create compelling narrative events through spatial conflicts, characterisation, and player choices, thus ensuring that each player's decision contributes meaningfully to the unfolding story (Dubbelman, 2016).

The role-playing game (RPG) genre is particularly well-suited to *Omori*, where a narrative-rich storyline is central to the player's experience. RPG mechanics, with their straightforward gameplay approach, allow narrative elements

to prominently emerge. Every interaction, whether through dialogue, combat, or exploration, can reveal deeper layers of the story. This blend creates poignant moments that merge the whimsical with the grave, emphasising stark contrasts between dreamlike states and harsh realities. Thus, the RPG format is not just a backdrop but a vital framework that enriches the entire gaming experience.

4.1 EMPATHIC ENGAGEMENT THROUGH STORYTELLING

Omori uniquely frames its narrative by bifurcating the protagonist's experience into two worlds, each serving as a lens through which players explore Sunny's trauma. Character development is articulated through contrasts between the characters' real-world personas and their dream-world representations, reflecting a psychological fragmentation indicative of deep-seated trauma. As highlighted by Younis and Fedtke (2023), Sunny's journey is marked by an identity crisis between his repressed self, Omori, and his actual self, revealing deep psychological fragmentation. In the dream world, Omori represents Sunny's idealised self, happy and untouched by past traumas, living perpetually in a pre-trauma idyll. Conversely, in the real world, Sunny is portrayed as a hikikomori who has not left his house since the incident that marked him deeply, showing the severity of his withdrawal from reality. The gradual unveiling of these differences deepens players' understanding of the impact of trauma on personality and relationships, enhancing empathetic connections with the game's characters.

Sunny undergoes a significant transformation as he confronts and attempts to reconcile his traumas and anxieties. As the narrative unfolds, players are granted an intimate perspective on his concerns and journey towards self-acceptance, emphasising the dichotomy between reality and psychological manifestation. This gradual revelation of the character's complex backstory lets players foster an emotional bond and empathise with them (Jørgensen, 2010, as cited in Kors et al., 2020). As players navigate through both worlds, they encounter various characters and scenarios that differ markedly between the real and imagined settings. These differences are not merely aesthetic but are reflective of the protagonist's psychological interpretations and distortions. The culmination of Sunny's identity crisis and the tension between the dual aspects of existence are dramatically played out in the final section of the game and, in particular, in the final bossfight, where the protagonist must confront and defeat Omori to shatter the escapist world he has created. This confrontation symbolises a tormented battle between facing a painful reality and succumbing to a fabricated realm of denial. By participating in this resolution, players deeply engage with the themes of trauma, identity, and mental health disorders, fostering a profoundly empathetic connection with the protagonist (Younis & Fedtke, 2023).

According to research on narrative immersion in interactive digital environments, such a focused narrative perspective can deepen empathy by forging a personal and profound connection with the character (Carpentier et al., 2015). As the narrative progresses, the game cleverly invites players to engage in a

deeper exploration of these contrasts. The protagonist's desire to understand his own psyche and resolve his internal conflicts is what motivates this investigation. The discrepancies between how characters and situations are perceived serve as a narrative mechanism to highlight the protagonist's internal struggles and anxieties. This interpretive layer of the gameplay is crucial for advancing the plot, as each revelation about the character's psyche provides both narrative depth and gameplay motivation. Consequently, players are drawn into a complex interplay of uncovering hidden motivations and resolving the protagonist's inner turmoil. The game's design effectively uses its narrative and mechanics to encourage a deep engagement with the story, urging players to piece together the underlying causes of the protagonist's perceptions and the consequent reimaginings within the dream world.

In the context of Interactive Digital Narratives (IDNs), *Omori* effectively uses avatar identification to engage players, allowing them to inhabit a secondary world by embodying a virtual persona tailored for the narrative environment (Codamo, 2021). This role can be explicit or implicit, and players may control a visible avatar or an unseen entity, thus influencing their engagement with the storyline (Roth & Koenitz, 2016).

By identifying with a character within the secondary world, users can choose how to respond to in-game scenarios, thereby generating new narrative content and exhibiting emotional investment in the game (Ahn, 2015).

According to Gee (2003, as cited in Triberti & Argenton, 2013), engagement with an interactive digital artefact involves three identities: the player's real identity, the avatar's virtual identity, and a projective identity that bridges the two. This triadic model facilitates the transfer of experiences from the virtual to the real, enabling players to experience and internalise the game's narrative and thematic elements. This immersive interaction fosters a dynamic exchange of meanings and emotions, reminiscent of real-life personal transformations (Triberti & Argenton, 2013).

Within *Omori*, a profound example is presented that encapsulates the exchange of meaning and emotions between the game and the player: the game's environment and its characters are crafted to appear incredibly lifelike, challenging conventional expectations about the fictional nature typically associated with video game worlds. Initially, players navigate a seemingly fantastical world conjured by the protagonist's imagination during sleep. In this environment, Omori combats foes with a knife, reducing their life points until they are defeated. This mechanic is commonly understood in gaming as a means to progress past obstacles rather than to depict actual violence. However, the implications of such actions become starkly apparent during a confrontation in the real world when Aubrey, another character, is unintentionally wounded, causing immediate cessation of the fight amidst shock and panic from all present. This moment underscores the stark divergence between the consequences in the dream world and the harsh realities of the physical world, blurring the lines

between fiction and reality for both Omori and the player, and highlighting the protagonist's disturbed mental state and its profound implications for his perception of reality. Players are drawn into his psychological turmoil, marked by depression and a distorted perception of reality, prompting a reflective engagement with the narrative that transcends typical non-interactive experiences.

4.2 PORTRAYING TRAUMA THROUGH AESTHETICS

Playing *Omori* feels like being immersed in a dream, where the world is rendered through a blend of dithered pixel art and hand-drawn sketches. This artistic approach subtly shifts focus from mere appearances, guiding players to recognise that everything depicted is a manifestation of the wide array of emotions experienced by Sunny, which inevitably impacts the player as well. The aesthetic design and metaphorical elements form a core structure that represents and articulates the main theme and fosters emotional resonance between the story and its players. Here, the visual design excels at depicting emotion, with each character's emotional state clearly illustrated by a coloured aura that surrounds them during combat situations and by expressive facial animations. This makes the characters' inner states visible and easily interpreted by the player, helping them to instantly understand emotional states.

The integration of visual and emotional cues within *Omori* serves a dual purpose. Firstly, it deepens the narrative by allowing emotions to visibly influence gameplay mechanics, such as the effectiveness of combat moves. Secondly, it enriches the storytelling by providing a visual shorthand for character development and plot progression. As characters evolve or regress emotionally, these changes are visibly marked in their auras and expressions, providing a clear and readable barometer of their development throughout the game. This visual methodology does more than just tell a story; it actively involves players in the emotional landscape of the game, enabling them to make more informed decisions in combat and interactions by providing visual feedback on characters' emotional states. This system creates a feedback loop where players participate in the emotional journeys of the characters. Also, the game's environments are not just passive backgrounds but active storytelling elements, each offering distinct experiences of escapism and confrontation with trauma. As noted by Younis and Fedtke (2023), *Omori*'s environmental design goes beyond mere aesthetics, embedding profound psychological meanings within the game's narrative. The environments generated by the character's imagination, specifically *White Space*, *Head Space*, and *Black Space,* symbolise different facets of the protagonist's trauma handling.

White Space is the epitome of trauma avoidance through its monotonous and minimalistic design. This space, the first encountered by the player, is sparse and undecorated, emphasising isolation and the suppression of painful memories. Here, Omori is alone with his cat and some objects, and nothing happens. An overwhelming emptiness and a black-and-white palette characterise the environment. Here, the lack of colour and detail reflects a deliberate avoidance of

trauma triggers, facilitating a hollow, risk-free form of escapism where Omori can exist free from traumatic memories (Younis & Fedtke, 2023). The music, notably minimalistic and repetitive, complements such visual austerity.

In contrast, Head Space, with its vibrant colours and nostalgic elements, evokes childhood memories, embedding escapism through idealised nostalgia. The environment, reminiscent of children's playrooms, features bright, saturated colours and fantastical elements that invoke childlike wonder and safety. Here, Omori is not alone, and other characters appear – the friends he wishes he could have had with him at that traumatic moment. However, this space is occasionally punctuated by disturbing elements that signal unresolved trauma lurking beneath its cheerful surface. This complex environmental layering represents a nuanced exploration of how escapism and trauma can coexist, often unsettling the player with unexpected intrusions that mirror the unpredictability of traumatic memories. The soundtrack enhances this nostalgic escapism with lively melodies until eerie disturbances subtly remind of darker realities.

Black Space, encountered at the narrative climax towards the ending, is visually disturbing and has chaotic imagery, representing the raw and horrific revelation of trauma. Its visual design starkly contrasts with the orderly White Space and the comforting fantasy of Headspace (Younis & Fedtke, 2023). The dissonance of eerie tracks and unsettling sounds intensifies the player's anxiety, effectively conveying the psychological turmoil associated with confronting repressed memories and traumas. This space challenges the player's perceptions and evokes strong emotional reactions, marking the protagonist's direct confrontation with his traumatic past. The disordered nature of Black Space breaks away from the artificiality of the other spaces, providing a stark, unfiltered experience close to the traumatic incident itself (Younis & Fedtke, 2023). This culminates in the final battle, where Sunny confronts Omori in a psychological conflict where repressed traumas are either kept hidden or accepted and brought to light.

4.3 EMOTIONAL COMBAT SYSTEM

Interactive narratives intensify audience empathy, especially when interactivity is deeply embedded within the narrative experience (Hand & Varan, 2009). *Omori* leverages this phenomenon through its unique, emotion-based combat system, which not only aligns with but deepens the narrative's exploration of the protagonist's psychological struggles. As players navigate *Omori*'s dual worlds, they encounter adversaries in various forms, each representing the protagonist's fears or memories. In the overworld, these encounters may be random, part of mandatory plot-driven boss fights, or avoidable, offering players agency in their engagement level. Combat in *Omori* employs a traditional RPG turn-based system, enriched by a nuanced emotional dimension: characters can exhibit emotions like *happiness*, *sadness*, *anger*, or *neutrality*, each influencing combat dynamics with escalating intensities. These emotions visibly alter the characters' auras and expressions during battles, enhancing the

immersive quality of engagements. Furthermore, each character possesses unique abilities tied to their emotional states, which evolve throughout the game, reflecting their personal growth and struggles. For instance, Omori, shaped by his depression, uses skills associated with sadness. The effectiveness of his moves is contingent on both his and the enemy's current emotional state, mimicking a rock–paper–scissors dynamic (figure 1). This not only enriches the gameplay but also serves as a narrative device, illustrating the characters' internal battles and emotional resilience.
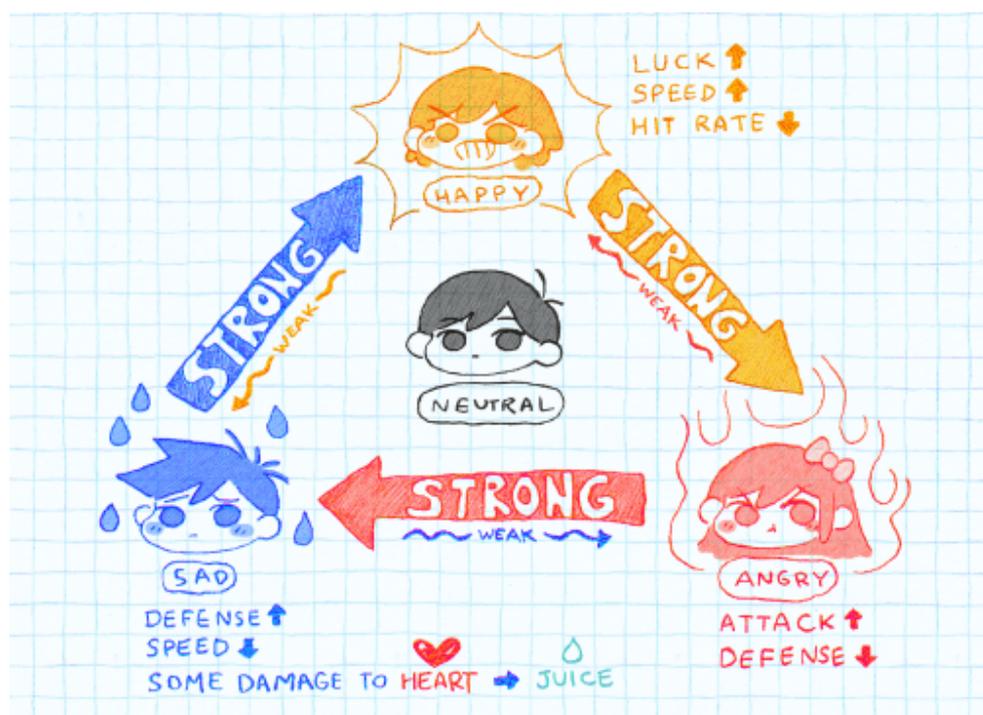

Figure 1: *Omori* emotion chart.

Characters' emotional states are pivotal and influence not only individual battle outcomes, unlocking different unique mechanics, but also overarching narrative themes. For example, Space Ex-Boyfriend manifests his bipolar disorder symptoms (Grande et al., 2016) in combat through dramatic mood swings that affect his abilities. Such portrayals provide narrative depth, reflecting the real-world complexities of mental health issues and their impact on individuals' interactions and behaviours. This is emphasised during Omori's boss fight against this character, who alternates between two emotions, sadness and anger. During depressive moments, his attacks will do less harm, while during irritable moments, his attacks will be stronger.

Game mechanics also extend beyond individual battles. In-game events can alter characters' emotions, linking narrative progression directly to gameplay. This integration ensures a cohesive experience where narrative and ludic elements constantly interact, enhancing the game's thematic coherence and reducing ludonarrative dissonance (Codamo & Mariani, 2021; Seraphine, 2016).

As the story progresses, the young protagonists realise the necessity of teamwork and emotional intelligence to navigate the challenges presented to them. This awareness is mechanically encapsulated through the introduction of a dynamic *follow-up* system in combat, which allows characters to strategically collaborate during battles, enhancing their effectiveness by triggering emotional states that confer unique statistical benefits. For instance, early in the game, a follow-up action might see Kel throwing a ball at Omori who, failing to catch it, becomes sad and increases his defence. As their relationship develops during the game, a new follow-up interaction sees Kel throwing the ball to Omori who now successfully catches it, reflecting a strengthened bond and mutual understanding. This change not only shifts Omori's emotional state to happiness but also significantly boosts his attack. Such mechanics deeply integrate the narrative aspect of the development of character relationships into the gameplay, allowing players to witness and influence the growth of characters' bonds through their decisions and actions.

The *tag* mechanic further illustrates character dynamics. This system allows players to switch the party leader to utilise their unique abilities for solving puzzles and navigating the game environment. Each time a *tag* is initiated, the game displays a photograph of the outgoing party leader passing the role to the incoming one (Fig. 2). This visual representation not only facilitates a functional role within the game but also captures a moment of interaction between characters, offering players a glimpse into their personalities and the nature of their relationships. The poses and expressions during these transitions reveal subtle details about how the characters perceive each other, enriching the player's understanding of both characters' personal traits and interpersonal relationships within the game.
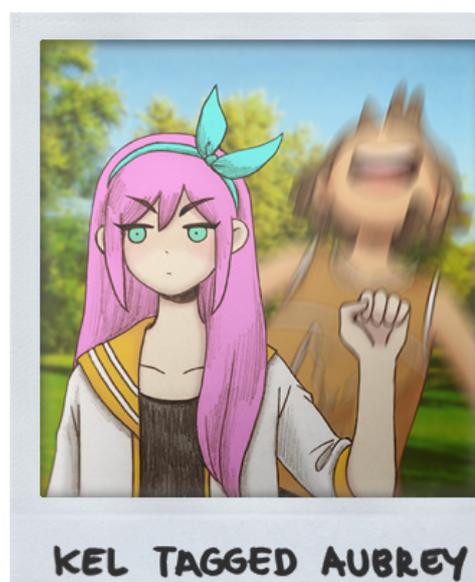

Figure 2: Tagging Aubrey using Kel as party leader. The relationship between the two characters is evident in this snapshot.

5. CONCLUSIONS

Interactive Digital Narratives like *Omori* are considered one of the most comprehensive multimodal communication systems, conveying meaning through texts, still and moving images, speech, music, and sound effects (Bellini, 2022). They give players direct agency by breaking from conventional storytelling techniques, enabling them to empathise with characters on a deep level and experience their perspective. According to Bellini (2022) and Koenitz et al. (2021), IDNs' complexity enables them to address societal issues and portray non-hegemonic themes, thereby increasing their accessibility to a wider audience.

In addition to providing users with a cohesive and meaningful experience, IDNs have the power to emotionally activate users and communicate themes and values that are rarely portrayed, especially those related to mood and mental health disorders. The brief review of *Omori*'s main mechanics and game elements serves to illustrate this. With a symbolic use of artistic and visual elements, the game's unique engagement with trauma and escapism – particularly addressed through thoughtful environmental design choices – exemplifies how IDNs can deepen understanding of such psychological phenomena and make these experiences tangible and accessible for players (Younis & Fedtke, 2023). However, *Omori*'s charming and innocent facade conceals moments of strong psychological terror, and its content, which involves characters avoiding a tragic reality by seeking refuge in an apparently safe realm, may not be suitable for all players. As they progress through the game, they form an unbreakable bond with the characters, particularly Sunny. They are gradually transposed into his mind, gaining a deep understanding of his mental struggles, which the game depicts by weaving together escapist and realist contexts (Younis & Fedtke, 2023). This immersive experience, unachievable in more traditional narratives, allows players to deeply connect with the protagonist and to assimilate, comprehend, and internalise his psychological state, which is not only narrated but experienced firsthand.

Finally, *Omori* is a prime illustration of how IDNs can use their narrative structures to depict and clarify intricate emotional and psychological themes. These structures enable intense interactions that heighten emotional responses, highlighting the significant influence of interactive storytelling in contemporary media environments.

REFERENCES

Ahn, C. (2015). *Interacting with story: Examining transportation into video game narrative* [MA thesis]. Cleveland State University.

Bellini, M. (2022). Interactive Digital Narratives as Complex Expressive Means. *Frontiers in Virtual Reality*, *3*, Article 854960. https://doi.org/10.3389/frvir.2022.854960

Carpentier, F. R. D., Rogers, R., & Barnard, L. (2015). Eliciting behavior from interactive narratives: Isolating the role of agency in connecting with and modeling characters. *Journal of Broadcasting & Electronic Media*, *59*(1), 76–93. https://doi.org/10.1080/08838151.2014.998222

Codamo, L. (2021). *La macchina narrativa: Indagine all'intersezione tra narrazione e interazione* [MA thesis]. Politecnico di Milano.

Codamo, L., & Mariani, I. (2021). Interactive systems as storyworlds: An approach for building coherent interactive narratives. In *Joint 4th Workshop on Games-Human Interaction and 1st Workshop on Multi-Party Interaction in eXtended Reality, GHItaly and MIXR 2021*. https://re.public.polimi.it/handle/11311/1183805?mode=complete

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113–126. https://doi.org/10.1037/0022-3514.44.1.113

De Lima, E. S., Feijó, B., & Furtado, A. L. (2018). Player behavior and personality modeling for interactive storytelling in games. *Entertainment Computing*, *28*, 32–48. https://doi.org/10.1016/j.entcom.2018.08.003

Dubbelman, T. (2016). Narrative Game Mechanics. In *Interactive Storytelling: Proceedings of the 9th International Conference on Interactive Digital Storytelling, ICIDS 2016*. Springer-Verlag. https://doi.org/10.1007/978-3-319-48279-8_4

Dubbelman, T., Roth, C., & Koenitz, H. (2018). Interactive Digital Narratives (IDN) for Change. In R. Rouse, H. Koenitz, & M. Haahr (Eds.), *Interactive Storytelling* (pp. 591–602). Springer International Publishing. https://doi.org/10.1007/978-3-030-04028-4_69

Elson, M., Breuer, J., Ivory, J. D., & Quandt, T. (2014). More than stories with buttons: Narrative, mechanics, and context as determinants of player experience in digital games. *Journal of Communication*, *64*(3), 521–542.

Fiadotau, M. (2015). Paratext and Meaning-Making in Indie Games. *Journal of Comparative Research in Anthropology and Sociology*, *6*(1), 85–97.

Frasca, G. (2001). Rethinking agency and immersion: Video games as a means of consciousness-raising. *Digital Creativity*, *12*(3), 167–174. https://doi.org/10.1076/digc.12.3.167.3225

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218

Frome, J. (2007). Eight Ways Videogames Generate Emotion. In *Situated Play: Proceedings of the 3rd Digital Games Research Association International Conference, DiGRA*, 831–835.

Geslin, E., Jégou, L., & Beaudoin, D. (2016). How color properties can be used to elicit emotions in video games.

International Journal of Computer Games Technology, *2016*, 1–9. https://doi.org/10.1155/2016/5182768

Grande, I., Berk, M., Birmaher, B., & Vieta, E. (2016). Bipolar disorder. *The Lancet*, *387*(10027), 1561–1572. https://doi.org/10.1016/S0140-6736(15)00241-X

Hand, S., & Varan, D. (2009). Interactive stories and the audience. *Computers in Entertainment*, *7*(3), 1–14. https://doi.org/10.1145/1594943.1594951

Harley, J.M., Rowe, J.P., Lester, J.C., & Frasson, C. (2015). Designing Story-Centric Games for Player Emotion: A Theoretical Perspective. *INT/SBG@AIIDE*.

Harley, J., Rowe, J., Lester, J., & Frasson, C. (2015). Designing Story-Centric Games for Player Emotion: A Theoretical Perspective. In *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, *11*(4), 34–37. https://doi.org/10.1609/aiide.v11i4.12834

Irshad, S., & Perkis, A. (2020). Increasing User Engagement in Virtual Reality: The Role of Interactive Digital Narratives to Trigger Emotional Responses. In *Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society* (NordiCHI '20). https://doi.org/10.1145/3419249.3421246

Joosten, E., Van Lankveld, G., & Spronck, P. (2010). Colors and Emotions in Videogames. In A. Ayesh (Ed.), *Proceedings on the 11th International Conference on Intelligent Games and Simulation GAME-ON 2010*. Eurosis, Ostend.

Knez, I., & Niedenthal, S. (2008). Lighting in Digital Game Worlds: Effects on affect and play performance. *Cyberpsychology & Behavior*, *11*(2), 129–137. https://doi.org/10.1089/cpb.2007.0006

Koenitz, H. (2010). Towards a Theoretical Framework for Interactive Digital Narrative. In R. Aylett, M. Y. Lim, S. Louchart, P. Petta, & M. Riedl (Eds.), *Interactive Storytelling: Proceedings on the third Joint Conference on Interactive Digital Storytelling, ICIDS 2010* (pp. 176–185). https://doi.org/10.1007/978-3-642-16638-9_22

Koenitz, H., Barbara, J., & Eladhari, M. P. (2021). Interactive Digital Narratives (IDN) as representations of complexity: Lineage, opportunities and future work. In *Interactive Storytelling: Proceedings on the 14th International Conference on Interactive Digital Storytelling, ICIDS 2021* (pp. 488–498). https://doi.org/10.1007/978-3-030-92300-6_49

Kors, M. J. L. (2022). *Shaping Attitudes Across Realities: Design Research at the Crossroads of Persuasive Games, Empathy, and Immersion*. [PhD Thesis]. Eindhoven University of Technology.

Kors, M. J. L., van Der Spek, E. D., Bopp, J. A., Millenaar, K., Van Teutem, R. L., Ferri, G., & Schouten, B. (2020). The Curious Case of the Transdiegetic Cow, or a Mission to Foster Other-Oriented Empathy Through Virtual Reality. In *CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3313831.3376748

Koster, R. (2005). *A theory of fun for game design*. Paraglyph Press.

Mäyrä, F. (2019). The Player as a Hybrid: Agency in Digital Game Cultures. *G|A|M|E Games as Art, Media, Entertainment*, *8*, 29–45.

Mariani, I., & Ciancia, M. (2023). Design for Narrative Change. A Pedagogical Model for Interactive Digital Narratives. *International Journal of Art & Design Education*, *42*(3), 384–401. https://doi.org/10.1111/jade.12468

Murray, J. H. (2012). *Inventing the medium: Principles of interaction design as a cultural practice*. MIT Press.

Pawar, K., & Clarke, D. (2015). *Video Game Violence: Is there any Truth to the Catharsis Hypothesis?*

Pozza, A., Coluccia, A., Kato, T., Gaetani, M., & Ferretti, F. (2019). The 'Hikikomori' syndrome: Worldwide prevalence and co-occurring major psychiatric disorders: A systematic review and meta-analysis protocol. *BMJ Open*, *9*(9), Article e025213. https://doi.org/10.1136/bmjopen-2018-025213

Roth, C., & Koenitz, H. (2016). Evaluating the User Experience of Interactive Digital Narrative. In *AltMM '16: Proceedings of the 1st International Workshop on Multimedia Alternate Realities*, 31–36. https://doi.org/10.1145/2983298.2983302

Ryan, M.-L. (2015). *Narrative as virtual reality 2: Revisiting immersion and interactivity in literature and electronic media* (Second edition). Johns Hopkins University Press.

Salen, K., & Zimmerman, E. (2005). Game Design and Meaningful Play. *Handbook of Computer Game Studies*, 59–79.

Schell, J. (2015). *The art of game design: A book of lenses* (Second edition). CRC Press.

Seraphine, F. (2016). *Ludonarrative Dissonance: Is Storytelling About Reaching Harmony?*

Tanenbaum, K., & Tanenbaum, T. J. (2010). Agency as commitment to meaning: Communicative competence in games. *Digital Creativity*, *21*(1), 11–17. https://doi.org/10.1080/14626261003654509

Triberti, S., & Argenton, L. (2013). *Psicologia dei videogiochi*. Apogeo.

Van Der Kolk, B., MD. (2014). *The body keeps the score: Brain, Mind, and Body in the Healing of Trauma*. Penguin.

Wardrip-Fruin, N., Mateas, M., Dow, S., & Sali, S. (2009). Agency Reconsidered. *DiGRA Conference*, *5*.

Wolf, M. J. P. (2013). *Building imaginary worlds: The theory and history of subcreation*. Routledge.

Yannakakis, G. N., & Paiva, A. (2015). *Emotion in Games*. In R. Calvo., S. D'Mello., J. Gratch, & A. Kappas (Eds.), *The Oxford Handbook of Affective Computing* (pp. 459-471). Oxford University Press.

Younis, A., & Fedtke, J. (2023). "You've been living here for as long as you can remember": Trauma in OMORI's environmental design. *Games and Culture*, *19*(3), 309–336. https://doi.org/10.1177/15554120231162982

Zehnder, S. M., & Lipscomb, S. D. (2006). The Role of Music in Video Games. In P. Vorderer & J. Bryant (Eds.), *Playing video games: Motives, responses, and consequences* (pp. 241–258). Lawrence Erlbaum Associates.

LUDOGRAPHY

Omocat LLC. (2020). Omori.

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Playing with your research

Circulating narratives and cultivating audiences through text-based games

ABSTRACT

Interactive digital narratives (IDNs) created by academic researchers from STEM, humanities, and social science disciplines help spread important messages while developing scientific and media literacies. The affordances of digital games and IDNs allow researchers – in this study, undergraduate students – to think more deeply about their research subjects and the implications of their research. Through the use of the software Twine, student researchers were able to create IDNs that resituated their research in terms of systems thinking and audience-based reasoning. Drawing on lessons and methodologies of game designers and game studies theorists, this article describes the implementation of IDNs into research-based courses as a means to foster deeper, ecological thinking about research subjects. Additionally, the remixing and transformation of academic research from both qualitative and quantitative data into text-based IDNs allows for new, broader audiences to discover and engage with the formation of scientific and literary knowledge. Ultimately, this paper argues that IDNs can help researchers spread awareness and publicize their findings in new, persuasive ways.

1. INTRODUCTION

All across the eastern United States, from small liberal arts colleges to major research universities, students spend their summers catching turtles. These turtles are typically of common species such as the eastern painted turtle or the red-eared slider turtle. They are of very little commercial or economic value. What makes them valuable is what the students do with the turtles: they use them to perform research. At my institution and dozens of others like it, students trap, tag, sample, and release turtles as part of small research projects with seasonal regularity. These turtles may seem quite insignificant in face of the many challenges we face today: climate change, the energy crisis, war in Ukraine, economic collapse in Sri Lanka, famine. However, the students use the turtles to

form their own understandings of how research operates in the real world, how data is constructed, and what scientists do on a daily basis. From their samples, students study the transmission of diseases such as the ranavirus or the effects of particulate matter in aquatic habitats. In addition to a better understanding of the scientific process, these researchers contribute small, incremental advancements in scientific knowledge and the accumulation of useful data.

These are enviable goals, but the process of getting there is often tricky. Furthermore, the typical methods for circulating research – poster sessions and expensive conferences – can often be isolating, exclusive, or just plain boring. Games, on the other hand, tend to be social, accessible, and fun. If researchers can begin to play with their models, systems, and data, we could build new ways of understanding and circulating the narratives surrounding our research. In this paper, I will argue that games – specifically text-based games and other forms of interactive digital narratives (IDNs) – can help researchers spread awareness and publicize their findings in new persuasive ways. Additionally, as researchers and students design and build these IDNs, they are forced to think about their research concepts with new, innovative perspectives.

To showcase the effectiveness of involving student researchers in developing IDNs based on their research, I will begin by analyzing conventional methods of disseminating and circulating research, as well as exploring established correlations between gaming and learning. From there, I will connect the issues of narrative and research to show the persuasive potential of using stories to help share new qualitative and quantitative evidence. With these theoretical concepts in place, I will then describe a set of procedures inspired by Koenitz, Roth, and Dubbelman's (2021) notions of "Reuse" and "Unlearn" in which student researchers use the software Twine to turn their data and conclusions into a playable game. The goals, processes, and results of the transformation of research into IDNs are highlighted to indicate how particular elements of interaction and choice present in IDNs can lead to a deeper understanding of the material for both the researcher and the audience.

2. RESEARCH COMMUNICATION, IDNS, GAMES, AND LEARNING

Academic research has long been positioned as one of the key societal contributions made by colleges and universities. In the United States, public funding and support for higher education are typically predicated on the idea that these institutions will eventually discover and develop new ways of thinking about and interacting with the world. In the higher education system of the United States, public institutions receive tax funding to support research, researchers receive grants from the federal government, and some institutions are deemed "land-grant institutions," meaning that the college receives the property rights to the land for free from the government but must provide scientific research value to its constituents. However, the vast majority of research produced in higher education – whether at private or public colleges – is siloed and hidden

behind paywalls and other barriers. With the exception of open-access journals, citizens must pay to read the research that their taxes have produced. In addition to the standard articles published in academic journals, the other way research is circulated is through academic conferences. These conferences often require substantial attendance fees and necessitate attendees to cover travel expenses, as well as childcare and other dependent care arrangements while the caregiver is participating in the conference. The conference presentation itself has become its own genre, typically a 15-20 minute lecture accompanied by slides and data. The audience for academic conferences is typically other academics and occasionally industry partners. The general public is rarely ever a consideration in these matters, be they conference presentations or journal publications.

For research to have a meaningful impact, it must be shared, comprehensible, and actionable by both practitioners and stakeholders affected by the research (Garbarino and Mason 2016). Unfortunately, research on topics such as climate change, toxic chemicals, depression, forestry, social services, and more, often fail to reach these stakeholders and the general public (Shanley and Lopez 2009). Sometimes this is due to the paywalls of academic publishing. At other times, this is due to the specialized jargon and high level of discourse required to discuss these topics, making research and journal articles seem inaccessible to the public. However, just as documentaries and podcasts have proven effective in reaching new audiences, IDNs can also serve as a means to bridge the gap between academia and the public. By utilizing IDNs, research can be made more accessible and easily understood, thereby empowering those affected by pollution, climate change, and other critical issues that are investigated on a daily basis in colleges and universities worldwide.   It is important to note some of the similarities and differences between digital games and IDNs in order to demonstrate the utility of text-based IDNs to create a playful, interactive environment for users to experience research findings. This article positions text-based digital games as a specific subset of IDNs. IDNs include a wide range of digital texts that share the desire to move audiences out of passivity and into active participation in a story (Koentiz et al. 2015). While many digital games share this desire, there are also genres of games that do not enact stories. Puzzle games such as *Tetris* (Pajitnov 1984) or *Candy Crush* (King 2012), for example, typically do not have narratives. Because of the possibility for a project to veer out of the realm of IDNs, the researchers in this study were given explicit directions to include a goal, at least one character or role, and a narrative with at least two possible endings. Not only did this push the researchers to think about what users would accomplish and experience in their projects, but it also ensured that the projects would be using the affordances of interactivity and narrative. In this way, the projects analyzed here are classified as both text-based games and IDNs.

A considerable amount of scholarship exists that demonstrates how narratives are able to transport readers into their world. Green and Brock's (200)

concept of narrative transportability analyzes this process of immersion. Their concept has since been tested and analyzed across many mediums and subjects with results indicating that narrative in any form possesses great persuasive and educational potential (Green 2021).

Games have also been shown to be excellent teachers, and many researchers and theorists have demonstrated the relationship between games and learning. Dubbelman, Roth, and Koenitz (2018) have shown how narrative-driven games can help foster social and emotional change in players, and Mäyrä has argued for the importance of context in facilitating the process of play (2019). This is due in part to how games engage and immerse players in their reality. Part of the reason games in general and narrative-driven games, in particular, are so engaging is their connection to learning. Literacy scholar James Paul Gee (2008) has analyzed the many connections between games and well-designed learning opportunities, concluding that learning happens best when we adopt the identity of a learner and repeatedly challenge ourselves in tasks – all traits present in digital games. Game designer Raph Koster (2014) argues that games represent novel learning opportunities, and it is the sense of learning and growing that we find so fun and satisfying. From Koster, psychologists Deterding et al. (2022) have built upon this to hypothesize that our fascination with the uncertainty in narratives and games is driven by predictive processing – the mind's desire to continually learn about the environment and adapt to our surroundings. These qualities make games in general and IDNs in particular excellent candidates for reinvigorating interest in science and research.

The use of IDNs to help disperse and diversify audiences for research can largely be attributed to three qualities: narrative, interaction, and meaningful choice. In this way, IDNs have been positioned as a bridge between media studies and posthumanism (Hoydis 2021). IDNs in particular have been used as tools to teach a wide range of audiences about alcohol and risky behaviors (Engelbrecht et al. 2022), racial injustice (Fisher 2022), emotion perception (Zhang & Liu 2022), handwashing (Molnar & Kostkova 2015), English language acquisition (Ezeh 2020) and climate change (Skains et al. 2022) among many other topics. Their effect is twofold. First, the narrative aspects of these projects have the potential to transport the reader and increase the persuasive efficacy of changing values and beliefs (Mazzoco et al. 2012). Second, the interactive elements allow the user to test out assumptions and engage with the model. Each of these research studies puts different amounts of emphasis on narrative, interactivity, and choice, but they all engage with these qualities as demonstrated ways to connect IDNs to learning outcomes. I will elucidate each of the three qualities in order to demonstrate how research-based IDNs have the ability to persuade a general or specialized audience.

Narrative has been used by humans throughout recorded history to help transmit knowledge and continue traditions and cultures. It is both powerful and efficient. NASA-communications researcher Charlotte Linde (2015) argues

that "narrative is intrinsically social: that is, narratives have an audience, and an audience who cocreate the narrative through their responses, agreements, or objections" (p. 5). The chronological act of telling a story prompts the storyteller to think about both what they would like to be understood and how they can best be understood. Not only do narratives facilitate remembering, but they also have the potential to become persuasive. Communications researchers Olivia Bullock, Hillary C. Shulman, and Richard Huskey (2021) demonstrate empirically that information presented in the form of a narrative is more persuasive and sees greater change in the participants than non-narrative-based information. In our contemporary moment, narrative in games has become increasingly culturally relevant to the point where the *New York Review of Books* now features reviews of video games as well (2022). The narrative power of video games is now as accepted as that of movies or other forms of popular culture. And, while all narrative has been shown to have persuasive potential, the addition of interactivity, agency, and choice in games allows for the narrative to become even more powerful in teaching and changing perspectives.

With the explosion in popularity of digital games, academic and industry researchers have sought to identify the various affordances and aspects of games that differentiate games from other media. Games studies scholar Espen Aarseth posits that nontrivial action is what separates digital games from other more traditional media such as movies or books (1997). Whereas books require little more action than scanning one's eyes and flipping pages, digital games demand the player's input. Because of this demand, researchers such as Alexander Galloway argue that action is the defining characteristic of games as a medium (2006). Furthermore, the types of inputs required by digital games ultimately take the user to different places. While not everyone may turn the page of a book in the same manner, everyone will end up on the same page. However, in a digital game, the paths and decisions a player makes have a large impact on their understanding of the game's narrative and message.

Scholars have demonstrated how reflection and engagement with the decisions a user makes in an IDN can lead to a greater awareness of socio-cultural and cross-cultural issues (Bertolo & Mariani 2013). This reflection can also occur as the researcher creates the IDN. Hartmut Koentiz highlights the importance for creators of IDNs to center the user in order to produce a good experience (2014). This emphasis on agency and user choice does not negate the meaning of the IDN. Instead, game studies scholars such as David Myers (2017) highlight how interactivity in digital environments places a demand on the user to actively create belief in the situation they are encountering in the game. This is opposed to the notion that fiction and the literary form of the novel require the reader to suspend disbelief in order to accept the fiction of the narrative. Through IDNs, researchers can effectively express and communicate their message to this captivated and engaged audience.

3. INCORPORATING TWINE AND IDNS INTO RESEARCH-BASED CLASSES

This study seeks to answer the following two questions: how can the creation of IDNs help researchers think more deeply about the audience for their research and how does their audience typically experience a research-based IDN. In order to answer these questions, I developed a series of assignments and peer-review sharing opportunities for undergraduate researchers. Initially, students from a variety of disciplines were tasked with creating an IDN from their research. From there, the participants experienced and evaluated each other's IDNs with both written and oral feedback. This process and the results are explained in detail below.

IDNs in the form of text-based games represent a low-barrier-to-entry way for researchers to turn their data and evidence into a playable media format. Twine is a software application originally developed by Chris Klimas in 2009 – potentially avoiding the "Sisyphus" problem noted by Koenitz and Eladhari (2019) of having tools made for IDNs that are then allowed to decay over time. Twine still has an active community and sees new updates. In addition to its longevity, it allows users to create interactive web apps with little to no coding. Simply by placing text in brackets, users of Twine are able to set up branching paths and hypertext links. When the file is played back, the user is able to pick the different paths and see the ramifications of decisions and choices made. While this is the most basic feature of Twine, it demonstrates the quick utility of the software for someone who may not be an expert in coding, game design, or digital media. On top of the branching paths, Twine allows for easy integration of variables to help track stats or items and simple conditional statements to act as checks and balances as the player works their way through the Twine-created game.

The process of creating the game helps the creator separate the research itself from how it is being communicated to a specific audience. The research paper is a common culmination to first-year writing classes across the U.S. These papers are often designed to take new college students through the ins and outs of evaluating sources, navigating library databases, and producing evidence to back up claims. While these are enviable outcomes, the reality is that students often struggle rhetorically situating their research and end up with a vague collection of annotated bibliographies, extended summaries, and a few already established talking points. These results are very different from the "critical moments" Salter and Moulthrop discuss as potential critical intervention points for contemporary students (2021). After students have conducted research and written traditional papers or constructed typical posters, the students then create two IDNs in Twine: an interactive conversation and a game with a purpose similar to their research. Because Twine can actively recreate space and choice through branching paths and interactivity, Twine can reinvigorate research, bringing students' projects closer to their audiences and these critical moments. As a storytelling tool, it helps students develop a working set of credible sources through an imagined, structured conversation between the claims of their vari-

ous sources. Students are then tasked with envisioning several specific audiences, determining those audiences' stances or attitudes, and then providing paths and options to give that audience new, credible information.

After students have constructed their imagined conversations as IDNs, they then move on to thinking about the variables and quantifiable elements of their research. For example, while studying the sharp decline in insect populations, one student noticed that very little of this vital knowledge was reaching a key audience: homeowners and gardeners. Based on their research, they developed a game where players help an ant navigate a modern home and yard. Foods and substances that are more likely to carry or contain pesticides and other toxic substances were scattered around safer food sources and environments. Interacting and navigating through the game, players begin to see and feel how toxic chemicals, both purposely and unintentionally, fill our houses and lawns. Other students have dramatized crucial chokepoints in the cycle of poverty for an audience of first responders or helped gamify the process of exponential fungal reproduction for hikers in areas with large bat habitats.

Whereas typical student-research papers are rarely if ever seen outside of the classroom, Twine expands the possibilities for collaboration beyond classmates through the materialization of a "playable" form of research housed in an accessible, browser-readable file. After the completion of their Twine games, the researchers participated in peer review of each other's projects. They were asked to provide written and oral feedback on the project with special attention paid toward the role the IDN put them in, the choices they were offered, the effects of their decisions, and their overall understanding.

4. THE FISH GAME AND USER FEEDBACK

The IDNs produced as part of this project varied in subject matter from microplastic pollution to gentrification to mental health support. In order to demonstrate the transformational potential of turning research papers into IDNs, I will detail one particularly successful project and highlight how several researchers thought about their work before and after the project as well as comments made while experiencing other students' IDNs.

Several of the participants in the project were avid fishers and connected their hobby with their research. This resulted in one particularly effective project where the researcher analyzed whether upstream pollution or river-bank land development was more harmful to the local largemouth bass population. After researching the ideal conditions for bass to spawn, the student continued their research with ethnographic work, interviewing older fishers in the area about how the hobby had changed over the last thirty years. With this information, the researcher was able to craft an IDN that demonstrated the conditions necessary for the healthy habitation of bass and how that often conflicted with modern desires for riverfront property and ever-increasing suburban sprawl.

At the start, the user is able to select from one of three roles: fisher, real estate developer, or largemouth bass. For the fisher role, the player is tasked with winning a bass fishing tournament across one week of fishing. As they explore mountain streams, inlets, coastal areas, and brackish water, they encounter different types of fish as well as different ways of upgrading their gear and boat as they travel to bigger cities. The fisher role is set up as a push-your-luck game mechanic where the user wants to catch a lot of fish but will be severely punished toward the end of the week for overfishing and decimating bass populations. The real estate developer travels the area trying to develop riverside homes and putting on fishing tournaments to attract homebuyers. The driving mechanic to this role was a stock-market-like investment system that saw home prices rise and fall. The final role of the fish saw the user tasked with staying alive and avoiding bait and finding food by moving into and out of the various habitats, each with its own degree of likelihood for the food versus bait options.

The project was fun and provided an interactive opportunity for audiences to engage with the research. However, when the project underwent peer review, the comments from peers indicated that they weren't aware that some habitats were more likely to have fish than others, or fishers were more likely to be in some habitats than others when playing as the fish. While the IDN accurately portrayed the student's research, it wasn't clear to users why they sometimes got a satisfying ending and other times suffered a quick defeat. This lead the researcher to revisit and revise both their IDN and their research to see what was missing.

The student soon realized that while the ideas were all connected in her head, they were not connected in the research paper or her IDN. The process of peer review of the IDN led her to revise and rethink her overall project. In revising her work, the student began to research the different impacts various sizes of motors on boats have on habitats and particulate matter in the water. Her research also led her to discover the numerous philanthropic and ecological organizations headed by fishers to protect and preserve the natural world. The student's revisions of IDN and research paper highlighted these interdependent connections and complicated her argument by adding nuance and pragmatic considerations.

Throughout the peer review, participants noted two main benefits of transforming their research into an IDN. Many had to wrestle with the task of quantifying subjective or qualitative bits of information. For example, in the previously described game, the researcher had to decide values on a ten-point scale to attach to different habitats in terms of how suitable they are for largemouth bass. A mountain stream and a mountain stream with lots of trees on its bank, and thus lots of shade, dictate different scores. Participants said they were compelled to think of as many scenarios and potential connections as possible. The second benefit was the feedback they received. Participants noted that the feedback on their IDNs was of a different type than what they received on their written research papers. The feedback on the writing was largely focused on the writing – grammar, citations, organization, word choice. The feedback

they received on their IDNs was on how the research was communicated to a new audience, how it connected and intersected with other experiences the user had, and possible resources or historical events to add to their projects. In short, the feedback on the IDNs allowed the researchers to more deeply engage with the research than the medium in which it was delivered.

Because of its ease of use and ability to produce game files that can run on any smart device, Twine has been adapted into academic contexts. Salter and Moulthrop (2021) have written about how they have adapted Twine into the classroom to foster students' learning in web design, storytelling, and creative thinking. These same qualities make Twine an ideal piece of software for helping students take their research and turn it into a playable experience. The benefit here is also twofold.

First, as students construct their IDNs via Twine, they have to abstract the concepts they are studying into a quantifiable form. This is a form of systems thinking that researchers and thinkers from Zimmerman (2013) to DeVane et. al (2010) have argued as one of the chief literacies of twenty-first-century life. For students in the humanities and the social sciences working with qualitative data, this can be an especially important task. While it may be easy to quantify the number of snakes that pass over a sensor in a given week, it can be much harder to translate feelings of depression experienced by male college students and how they respond to various therapies. This type of work results in students reflecting on the strengths and limitations of qualitative data as they tweak the narrative's playable experience to accurately reflect the lived experiences they captured in their data. Similarly, students working with more quantitative data are forced to think of the implications, complications, and ecological networks of the data they collect and attempt to gamify in their narratives.

Second, as narratives are intrinsically social, the student researchers are forced to reckon with the question of audience and who will ultimately end up playing through their IDNs. The idea of "playing" a game instead of viewing or listening to research helps the students see research as an active process. While traditional conference presentations help transmit knowledge, they are typically expensive and out of reach of the average student who is taking science courses for required course credit. Rather than pushing out the general education student, turning research into a playable IDN helps students see that even small contributions to scientific data end up helping researchers track larger trends, all while helping the students see themselves as researchers and scientists in training. The group of literacy scholars known as The New London Group (1996) advocated for emphasis on both consumption and production – reading and writing in a traditional literacy sense – in the development of multiliteracies such as visual and digital literacy. When students make IDNs they become more thoughtful consumers of the digital narratives they continually encounter in their daily lives. When students work and shape their research

beyond collecting it in a single essay, they begin to see their identities as those of a scientist and a researcher and not just that of a student.

In addition to the transformative potential to the creator of a research-based IDN, there is also the power to reshape how the user experiences the research. The memorable and persuasive power of narratives and the creation of belief demanded by IDNs requiring the input of a user to move the narrative forward allow for a different expectation and procedure for user participation in research. Digital games as IDNs also demonstrate a degree of interactivity and customizability that make them particularly fruitful for communicating important research to wide audiences. Media studies scholar Katherine Isbister has identified three ways in which games are designed "to evoke rich emotional responses in players: coordinated action, role-play, and social situations" (p. 45, 2016). Each of the three techniques can be found in IDNs, but roleplaying and designing social situations are particularly applicable to this discussion. Research-focused IDNs can quickly and simply transplant the player into the role of climate scientist, hepatologist, or political activist. Similarly, the act of taking research and finding ways to give players choices and meaningful decisions oftentimes means placing the game in a social setting that would be familiar to players. Players are then able to manipulate, change, or fiddle with the rules of these social settings – such a player who repeatedly tries to subvert expectations by intentionally polluting the environment or making poor decisions on purpose to see their outcomes. IDNs offer their own form of experimental setup where players are free to take risks and subvert social orders with little to no consequence. If the social setting in which these narratives are experienced is that of an academic conference, then players are able to compare and contrast their experiences playing the IDN. In addition to these discussions, players are also able to compare their own internal model of how the world works with how the researcher has represented that model in a text-based game format.

In this way, Twine's representation of the research process helps students form a literal flowchart that can help identify unexplored connections, future paths for research, and future collaborators. Ultimately, Twine presents an exciting alternative to poster boards and PowerPoints for the remixing and circulating of student research and writing.

5. CONCLUSION

The ponds, lakes, and rivers of the eastern United States have proven to be excellent laboratories for thousands of student researchers. Ranavirus is widespread across the globe in amphibians, reptiles, and fish. Currently, it does not seem to affect the host species nor is the virus transmittable to mammals. If that were to ever change, the work of these student researchers would become much more valuable. As natural habitats decrease and climate change extenuates hot seasons and stresses species into increased human contact, these issues will become increasingly important. Students studying the genetics of turtles or the

effects of particulate matter on the local catfish population are not only excellent ways to train future scientists, but they also give us insight into how heat stress, microplastics, and other factors affect marine life. This type of science and data collection is not always the most glamorous or fun thing to do during the summer. IDNs, on the other hand, use interaction and systems thinking to engage audiences in pleasurable ways. Using IDNs via Twine to help motivate students to create and engage with research presents a viable future for the media literacy of students, the development of more sophisticated and deeper IDNs, and the world in which we all live.

REFERENCES

Aarseth, E. (1997) *Cybertext: Perspectives on ergodic literature.* Johns Hopkins University Press.

Bertolo, M., & Mariani, I. (2013). Game and play as means for learning experiences. *INTED2013 Proceedings*, 698-707.

Bullock, O. M., Shulman, H. C., & Huskey, R. (2021). Narratives are persuasive because they are easier to understand: Examining processing fluency as a mechanism of narrative persuasion. *Frontiers in Communication*, 6. https://doi.org/10.3389/fcomm.2021.719615

Deterding, S., Andersen, M. M., Kiverstein, J., & Miller, M. (2022). Mastering uncertainty: A predictive processing account of enjoying uncertain success in video game play. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.924953

DeVane, B., Durga, S., & Squire, K. (2010). 'Economists who think like ecologists': Reframing systems thinking in games for learning. *E-Learning and Digital Media*, 7(1), 3–20. https://doi.org/10.2304/elea.2010.7.1.3

Dubbelman, T., Roth, C., & Koenitz, H. (2018). Interactive digital narratives (IDN) for change. In R. Rouse, H. Koenitz, & M. Haahr (Eds.), *Interactive Storytelling* (pp. 591–602). Springer International Publishing.

Engelbrecht, H., van der Laan, L. N, van Enschot, R. & Krahmer, E. (2022). The Role of agency and threat immediacy in interactive digital narrative fear appeals for the prevention of excessive alcohol use: Randomized controlled trial. *JMIR Serious Games*, 10 (2), http://dx.doi.org/10.2196/32218

Ezeh, C. (2020). Multimodal spaces for digital translanguaging: Using Storyjumper to engage bi/multilinguals in interactive storytelling. *Teaching English with Technology*, 20(2), 118-130.

Fisher, J. A., (2022). Epistemic rhetoric in virtual reality interactive factual narratives. *Frontiers in Virtual Reality*. 3, https://doi.org/10.3389/frvir.2022.845489

Galloway, A. R. (2006). *Gaming: Essays on algorithmic culture* (NED-New edition, Vol. 18). University of Minnesota Press. http://www.jstor.org/stable/10.5749/j.ctttss5p

Garbarino, J., & Mason, C.E. (2016). The Power of Engaging Citizen Scientists for Scientific Progress. *Journal of Microbiology & Biology Education*, 17, 7 - 12.

Gee, J. P. (2008). *What video games have to teach us about learning and literacy.* Palgrave Macmillan.

Green, M.C. (2021). Transportation into Narrative Worlds. In: Frank, L.B., Falzone, P. (eds) *Entertainment-Education Behind the Scenes*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-63614-2_6

Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasive-ness of public narratives. *Journal of Personality and Social Psychology*, 79, 701–721.

Hoydis, J. (2021) Dialogues with the machine, or ruins of closure and control in interactive digital narratives, *Open Library of Humanities* 7(2): https://doi.org/10.16995/olh.4695

Isbister, K. (2016). *How games move us: Emotion by design*. The MIT Press.

Koenitz, H. (2014). Five Theses for Interactive Digital Narrative. *Lecture Notes in Computer Science*. 134-139. Springer.

Koenitz, H., & Eladhari, M. P. (2019). Challenges of IDN Research and teaching. *Interactive Storytelling*, 26–39. https://doi.org/10.1007/978-3-030-33894-7_4

Koenitz, H., Ferri, G., Haahr, M., Sezen, D., & Sezen, T. I. (2015) Introduction: Perspectives on interactive digital narrative. In H. Koenitz, G. Ferri, M. Haahr, D. Sezen, and T. I. Sezen (Eds.), *Interactive digital narrative: History, theory, and practice.* Routledge. https://doi.org/10.4324/9781315769189-16

Koenitz, H., Roth, C., & Dubbelman, T. (2021). Educating interactive narrative designers: Cornerstones of a program.

Transactions of the Digital Games Research Association, 5(3). https://doi.org/10.26503/todigra.v5i3.125

Koster, R. (2014). *A theory of fun for game design*. O'Reilly.

Linde, C. (2015). Memory in narrative. In K. Tracy, T. Sandel and C. Ilie (Eds.), *The International Encyclopedia of Language and Social Interaction*. https://doi.org/10.1002/9781118611463.wbielsi121

Mäyrä, F. (2019). The Player as a Hybrid: Agency in Digital Game Cultures. *G|A|M|E Games as Art, Media, Entertainment*, *1*(8). https://www.gamejournal.it/the-player-as-a-hybrid-agency-in-digital-game-cultures/

Mazzocco, P. J., Green, M. C., Sasota, J. A., & Jones, N. W. (2010). This Story Is Not for Everyone: Transportability and Narrative Persuasion. *Social Psychological and Personality Science*, 1(4), 361–368. https://doi.org/10.1177/1948550610376600

Molnar, A., & Kostkova, P. (2015). Learning through interactive digital narratives. In H. Koenitz, G. Ferri, M. Haahr, D. Sezen, and T. I. Sezen (Eds.), *Interactive digital narrative: History, theory, and practice*. Routledge. https://doi.org/10.4324/9781315769189-16

Myers, D. (2017). *Games are not: The difficult and definitive guide to what video games are*. Manchester University Press.

The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–93. https://doi.org/10.17763/haer.66.1.17370n67v22j160u

Salter, A. & Moulthrop. S. (2021). *Twining: Critical and creative approaches to hypertext narratives*. Amherst College Press.

Shanley, Patricia, and Citlalli López. "Out of the Loop: Why Research Rarely Reaches Policy Makers and the Public and What Can Be Done." *Biotropica*, vol. 41, no. 5, 2009, pp. 535–544., https://doi.org/10.1111/j.1744-7429.2009.00561.x.

Skains, R. L., Rudd, J. A., Horry, R., & Ross, H. (2022). Playing for change: Teens' attitudes towards climate change action as expressed through interactive digital narrative play. *Frontiers in Communication*. https://doi.org/10.3389/fcomm.2021.789824

Winslow-Yost, G. (2022). Exhausting all possibilities. *The New York Review of Books*. Retrieved August 22, 2022, from https://www.nybooks.com/articles/2022/08/18/exhausting-all-possibilities-the-stanley-parable-winslow-yost/

Zhang, J, & Liu, Y. (2022). Exploration of emotional perception in serious interactive digital narrative. *Computational Intelligence and Neuroscience*. https://doi.org/10.1155/2022/8160695

Zimmerman, E., & Chaplin, H. (2013, September 11). Manifesto: The 21st century will be defined by games. *Kotaku*. Retrieved August 22, 2022, from https://kotaku.com/manifesto-the-21st-century-will-be-defined-by-games-1275355204

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