

Worlds At Play: Criticality Between Players And Game Designers

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ABSTRACT

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This thesis builds upon the existing fields of speculative and critical design to consider how games can foster critical reflection. It takes a bi-directional approach, exploring manifestations of criticality for players and their retellings (when a player tells others a narrative or anecdote about their experiences of play), as well as criticality in a research-creation project called *MENU NEW GAME+* (*MNG+*)—a game that tasks players with exploring main menus for games that do not, and will not, exist. First, the process of developing *MNG+* is explained, and ‘menuization’ (the creation of game menus) is posited as a method for bringing the findings of speculative and critical design practices into the realm of game design (speculative play); second, the idea of a critical game retelling is explicated, and such retellings are argued to be an underutilized resource for game designers and academics to explore both game design and player experiences. From both sides (player and designer), concrete manifestations of criticality are explored and explained through the lens of creating *breakdown* situations that do not abandon the notion of usability.

Keywords: critical design, speculative design, speculative play, game retellings, critical retellings

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The two subsequent chapters of this thesis have appeared in publication elsewhere. Chapter one is a design rundown of MNG+ and appeared as a volume in *Texts of Discomfort: Interactive Storytelling Art* (edited by María Cecilia Reyes and James Pope, and published Carnegie Mellon University Press). Chapter two defines, then explores the import of, the critical retelling; it originally appeared in the conference proceedings of ICIDS 2020, where it was awarded the best short paper award.

Table Of Contents

List of Figures	vi
Chapter 1: Introduction	1
Preamble to Chapter One: Menu New Game+, A UI Research-Creation Project as a Spur to Player Criticality	2
Preamble To Chapter 2: The Retelling As A Concrete Exemplar Of Player Criticality And Resource For Scholarly Critique	3
Building Up the Breakdown	4
A Return to Heidegger's Hammer	5
Retelling the Breakdown (Critically)	6
From Critical Fictions to Designing Gentle Frictions	8
The Gentle Friction Of MNG+'s Horizontal Navigation	10
Standing to Attention (A Tentative Conclusion)	11
Chapter 2: Let's not Play: Main Menu Creation as Method for Speculative Game Design	12
The Ontology of the Speculative between Game Design & Speculative Play	12
MENU NEW GAME PLUS: Project Description	13
Menuization as Speculative Method	13
Menuization As Method: Case 1 Jitterbug	14
Questions Arising From Prototype One	15
UI as Ideational Reservoir: Prototype Two <i>8 Tons of Oxygen</i>	16
Player as Editor: The Divisibility of the Level	17
UI Before Game, or Game Before UI?	19
World Generation: Prototype 3 <i>Empires Of Idleness</i>	20
Twice the World Over: Games and World Building	21
An Infinite Speculation: An Ai-Assisted Dwarf Fortress	21
Discussion	23
a. Main menus can act as an effective vehicle of ideation	23
b. Menuization as a mode of expressing a game may be overly attached to games expressible through UI elements	23
c. Menuization allows for speculative inspiration to arise from an unexpected source (UIs)	23
d. The doubling of fictional worlding in objects of speculative play is a site of necessary future inquiry in further developing speculative play	23
Conclusion	24
Chapter 3: When the Fourth Layer meets the Fourth Wall: The Case for Critical Game Retellings	25
Introduction	25
An Account of Critical Retellings, With Two Examples From RimWorld	26
An Alternative Reading of These RimWorld Anecdotes: Ryan's Computational Art Brut	28
Conclusion: A Friction-Filled Partnership	30
References	31

List of Figures

Fig. 1 – Jitterbug, 'Enter Menu' screen.	16
Fig. 2 – Jitterbug, 'Input Hex' screen.	17
Fig. 4 – 8 Tons of Oxygen, 'Game Options' screen.	19
Fig. 3 – 8 Tons of Oxygen, 'Level Select' screen.	20
Fig. 5 – Empires of Idleness, 'World Generation' screen.	22
Fig. 6 – Peon Caravan, 'Patchnote Generation' screen.	24

Chapter 1: Introduction

“Even in quite popular genres such as drama we demand irony; we demand that events, people—in short, the entire game of life—really be taken as a game and represented as such (Schlegel, “Dialogue on Poesy” 189).

The market for the digital games industry continues to grow at a staggering rate. This growth is due, in part, to the fact that the digital games industry is targeting demographics composed of individuals who would not self-describe as being ‘gamers’ (e.g. casual or mobile games). Games are also infiltrating many aspects of our lives by being used for a plethora of purposes beyond entertainment. Often placed under the umbrella heading of “serious games”—a term popularized by Yale professor Ben Sawyer in the early 2000s (Hubal, 2012)—these games are being used in many contexts such as education, job training, activism, exercise, and politics. This increasing prevalence of games, as well as the increase in the number of serious games, demands that they be taken seriously in turn.

Despite this increasing importance of games, they are still derided by some parties, often on the basis of their inherent violence, sexism, or juvenile nature (Jorgensen, 2018). Until relatively recently, well-respected critics and thinkers continued to proclaim the inferior status of games relative to other creative mediums (Ebert, 2010; Bogost, 2011). Surely part of the reason for this is that games remain, today, in a state of relative infancy—a futural medium, a form whose character and limits are the topic of many ongoing and fractured conversations.

Yet, the nature of these conversations, as well as the development of games themselves, depends entirely on the capacity for players and designers to critically reflect on ludic objects. This means that on the horizon of game design and player experience awaits a series of difficult questions: what *could* games be, if freed from existing genre tropes and from the factual conditions of our world today? What could games be, if they were ‘deprived’ of the need for target audience specificity and marketability? And how might we measure our ability to answer such questions as either players or designers of games?

Synthesizing these questions, we ask: what is our collective *critical capacity* towards the medium—and how might this capacity be explored and expanded? It is this critical capacity of both players and designers that this thesis explores. It proceeds in two parts. The first chapter approaches the theme of criticality *from the perspective of the designer*; it presents a detailed breakdown of the research-creation project, *MENU NEW GAME+*, a game that critically explores a marginal corner of video games (the menu) as a way of re-envisioning the medium itself; the chapter connects this re-envisioning with the field of speculative design, arguing that the creation of menus can act as a generalizable method, specifically for translating the findings of speculative/critical design into the field of games.

The second chapter approaches the theme of criticality from the perspective of *players themselves*, taking up the critical game retelling. This chapter argues that the existence of critical retellings stands as a testament to the prevailing critical capacity already in circulation among communities of play; moreover, this chapter argues that such retellings present an unrecognized resource for both scholarly and designerly activities, as they are one very concrete way that players ‘talk back’ to scholars and game developers from within in the untamed wilds of online communities. Before proceeding to each individual chapter, we now present a brief overview of each, followed by an exploration of a central unifying thread: the critical potential of the moment of breakdown.

Preamble to Chapter One: Menu New Game+, A UI Research-Creation Project as a Spur to Player Criticality

The first chapter of this thesis presents an in-depth exploration of a research-creation project, one that aims to amplify the game's futural possibilities into a concrete form: *MENU NEW GAME PLUS* (MNG+ hereafter) presents a series of menus for video games that do not (and will not) exist. In MNG+, main menus are transformed into an idiom through which non-real games find expression.

Given the focus on the menu, a primary goal of this chapter is to explore some of the expressive possibilities of specific UI elements and menus in general. In what ways can specific UI elements allow for an unreal game to be described? I.e., beyond its use value, what ludic or narrative aspects can a UI element be used to gesture towards? Here an example is most illustrative. We can think (for instance) of the 'control' mapping screen of a game as a mere convenience, a way for the player to be able to modify and personalize a control scheme to their specifications; yet a control options screen, taken as a whole, is also something much more, namely an orderly list of all the interactive possibilities that can be performed by the player. This is but one example of what I call the 'expressive' capacity of UI elements—the capacity for UI elements to create meaning beyond their use.

But this project is not merely a foray into UI design and the untapped possibilities of the periludic realm (Gardner & Tanenbaum, 2021). Because the operative claim of MNG+ is that menu items can be so expressive that the game itself does not *need* to exist, I situate this project alongside first the broad heading of design fiction (Bleeker, 2009).

On first glance the above claim may seem ridiculous—how can a menu, with its limited interactivity, stand in for an object that would be far richer in terms of its interactive potential (the game itself)? In response to this question we may point to the fact that, in 2022, many individuals 'interact' with games in an unintuitive way: they choose to watch a game being played rather than play it themselves, either on a streaming service such as Twitch or on YouTube. This means that the outward appearance of the game, as well as its social manifestation, comes to stand in for the game itself. In fact, a game's menu is perhaps the most 'outward' aspect of a game's appearance, and the working hypothesis of MNG+ is that this aspect can be so expressive that the game itself does not need to exist for it to do the sort of critical work that games are capable of. Accordingly, the project is centrally connected to inheritors of design fiction: speculative design and speculative play.

Much like Dunn and Raby describe speculative design in their seminal text *Speculative Everything* (2013), every unreal game in MNG+ is one that could plausibly exist, whether or not it could exist in our world and at the present time. This is to say that, while a given game may not be at all feasible for it to actually exist in the present due to market forces, a designer's time commitments, total lack of an audience, the barriers of existing technology, the currently limited ways in which games fit in our lives, or the difficulty of a given mechanic or game loop to be either *fun* or *fun for enough time*, or any other number of reasons—each game menu adumbrates a game that *could* be made and *could* exist in some possible world; the games of MNG+ are familiarly unfamiliar (and vice versa), and ask that their users bridge the imaginative gulf between the two worlds (Suvin, 2010). This particular kind of concreteness means that each menu is a real object to think *with*, as players are tasked with reflecting not only on the object but on the concrete conditions of its creation and reception and the gap between the two (de O. Martins, 2014). It is in this way that speculative design is a worldbuilding exercise, both for designers (who create fictions) and their audiences (who grapple with the fictive gap between posited and prevailing world).

Thus, chapter one presents MNG+ as a speculative and futural exercise that drums against the limits of the concept of the game, such as it is. Being freed from the need to create a game that is fun or playable or marketable in a traditional sense, MNG+ becomes a way for the designer to map different possibilities and ultimately push the player's idea of what a game can be, and to spur similar thinking in their audience. We adopt therefore the designer's perspective, taking the game itself as the concrete manifestation of the designer's critical capacity and menu creation (menuization) as a method for speculative and critical design.

Preamble To Chapter 2: The Retelling As A Concrete Exemplar Of Player Criticality And Resource For Scholarly Critique

In my discussion of speculative design above, I stated that a goal for MNG+ was that interacting with fictitious menu objects would allow players to view the medium of gaming anew. In other words, the goal with MNG+ is that of *expanding* the critical capacities of the gaming publics—both players and designers.

Nevertheless, it is important to note in the case of both MNG+ and other projects of speculative design, there is often assumed to be a very clear direction to such 'expansions,' one that posits a hierarchy between designer and audience: the designer is the *creator* of futural images, the one who uses their training and education and 'superior' imaginings to expand those of their receptive audience. Implicitly, the designer-author knows best. It should come as no surprise, therefore, that speculative design has in recent years been accused of both political naivety and elitism (de O. Martins, 2015; de O. Martins, 2017; Kiem, 2014; Oliveira, 2015; Schultz, 2018). Grappling with such critiques means we must pause and look elsewhere for inspiration. Here, I turn to my previous work from my dissertation (Sych, 2016).

The 19th century writer Novalis created a collection of fragments dubbed "Pollen", designed to act as the seed for future thinking. Accordingly, he commences and closes his text by touching on this theme, framing his work with the following two statements:

...[t]he art of writing books is still to be discovered. But it is on the verge of being discovered. Fragments of this kind are like a literary sowing of the fields. Of course, there may be many sterile seeds in them. Nevertheless, if only a few of them blossom!
(Novalis, as cited in Gelley, 1991)

Similar to the speculative and critical designer, the goal of "Pollen" was not for the author to proselytize—the artist (designer) creating concrete images for dissemination—but to set the conditions for the reader's own imaginings. The text's fragments are writerly texts, i.e., challenging objects around which the imaginative activity of a reader can coalesce and leap in novel directions.

Yet, in contrast to the speculative designers, Novalis de-emphasizes the creative/imaginative supremacy of the individual designer to (re)imagine the future alone. Among other things, part of the distinction between Novalis's texts and the projects of speculative designers like Dunne and Raby is that the fragments *themselves* were often a collective and social creation (Sych, 2016)—they were the direct result of the discursive communities of the Prussian salons and hence the output of a dialogical process that was itself social in nature.

What would it mean for speculative design to adopt such a social stance? In part it would mean to consider the existing critical capacities of audiences, exploring the concrete manifestations of players' own critical and reflective powers, and subsequently to take seriously the ways these manifestations could affect designers and their own work. Part two of this thesis therefore adopts the perspective of the player, making the case that such social/critical interactions are

already at work in communities of play. In other words, the central goal of the second chapter is precisely to demonstrate the capacity of players themselves—in their own communities and everyday lives—for critical reflection, i.e. the examination of games and their underlying systems, as well as the fictive gap between the various ‘worlds’ at play. This chapter posits the notion of the *critical game retelling* as concrete evidence of such a capacity, while arguing for ways that its recognition can help to spur the critical reflections of designers and academics.

What is a game retelling? Game retellings are when a player tells of the significant moments arising from their experiences of play. It has been suggested that retellings are a marker of a game’s success, insofar as they are evidence that the game has produced something *worth* telling to others. Our second chapter of this text argues that a subset of retellings are not laudatory in this sense, but rather take a critical stance towards their ‘own’ game, surfacing failures and breakdowns while playfully rendering them the objects of shared public scrutiny. We call these self-reflexively *critical retellings* since they explicitly reference and reflect upon the mechanics of the game system itself; they are also social, in the sense that they arise from gaming communities and return to that milieu, speaking directly (and wryly) to a knowing audience that would understand these same game systems/mechanics and their importance within the broader game. Ultimately, this chapter argues that these critical retellings present an underutilized tool for scholars and game designers, since they present a means for real and invested players to speak back to those other parties.

Building Up the Breakdown

In both chapters of this thesis, therefore, we explore concrete performances and manifestations of criticality for those making, as well as those playing, games. Importantly, we work in two directions, avoiding the prioritization of either designer or player while taking seriously the complex, dialectical and social interactions each party may have both in their communities and with one another. Such a multivalent approach is crucial not only to avoid the charge of speculative design’s elitism, but also to develop an effective method of approach for the designers themselves.

But on the level of method, just what does the outcome of our two chapters imply? Since any process of design is necessarily contextual, what general methodological insights can be envisioned here? For those working within the realm of speculative design, how indeed do we *make* to further an existing critical capacity (both ourselves and our audiences) *and* allow ourselves to be affected by the existing critical capacities in circulation, rather than merely unleashing a designed object as the concrete manifestation of a one-sided critical process that has already occurred?

While MNG+ posits a possible method for game designers exploring speculative design (the creation of menus or menuization), and critical retellings present both evidence of an existing criticality among players as well as crucial feedback for game designers, we may also point to the fact both MNG+ and critical retellings deal with a shared insight: both MNG+’s and the critical retelling are centrally concerned with the *breakdown* as a key moment for critical consciousness. For critical retellings, it is the breakdown of a story system that solicits the reteller’s playful, social criticality; for MNG+, picking up on the importance of the breakdown in relation to player criticality, we aim to *institute* a moment of breakdown (and the resultant criticality) through the arresting results of the ‘select new game’ navigation mechanic.

Before we dive into this discussion, we must define what we mean by ‘breakdown.’ To explore this idea and its importance, we must first ask after the phenomenology of the action, that is, the various (un)conscious experiences involved in project oriented, everyday life; only in doing so

can we understand what 'a moment of breakdown' implies and where such moments may lead. With this in mind, we now turn to the theorist of breakdowns and an example from the history of philosophy, namely Martin Heidegger.

A Return to Heidegger's Hammer

Famously, Heidegger argues that objects of use have a particular mode of being. Rather than relating to (say) tools as though they were substantial *things*, our primary mode of encountering such designed/usable objects is that of (what he calls) the ready-to-hand: a hammer is not first and foremost a physical thing, but rather encountered and experienced in the form of a verb. In short, while our language hypostasizes 'the hammer,' our experiences of it show it to be a *to-hammer*—not fundamentally an object with certain predicates afforded by our cognition, but rather a nodal moment entirely embedded in the practices, concerns, and projects of everyday life.

Attached to this vision of designed objects, we have a radical image of humanity's way of relating to said objects (Christensen, 1997)¹. Heidegger views our primary mode of being as one of meaningful action, one engaged bodily with others and aiming to pursue projects; in our everyday dealings with the world, we are in a state of immersion or what game studies would call *flow* (Hagström, 2017).

Heidegger equates flow with the everyday habits and mode of looking at the world as a meaningful whole. For Heidegger, the ready-to-hand object comes to be understood on the basis of a network of significant connections between objects, persons, and projects—in this state, the world itself is seen as a holistic totality. Our engagement in the world and with the things that surround us disclose this network of significant systems and relationships that is constitutive of the world itself. His example is that of a simple hammer (Heidegger, 2019/1927, para. 16). This hammer is implicated in a network of relationships with other tools: the materials that it is composed of, other possible hammer users, my own projects and what they mean for my life, and so on. This is only possible on the basis of our intersubjective relationship with others, others who precede us and who interpret the network of things and human projects that make up the context in which I can undertake my projects—in this case (say) building a coffee table.

In our everyday dealings with the world, such networks of socially constructed meaning are in the background if not entirely obscured. For the hammer—as an involved piece of equipment—it would be ludicrous to try to piece together everything the hammer *refers to* and *is involved in* one by one. That means that, phenomenologically speaking, such meaningful connections are on the margins, despite holding ontological precedence. Nevertheless, one does come to glimpse both some specific references as well as to reflect on the very existence of such significant references *in general* in one particular moment: *when things cease to function as they should*, i.e., when the flow of everydayness breaks down.

In paragraph 16 of *Being & Time*, Heidegger (2019/1927) analyses breakdown cases of our normal way of being. In such instances, he claims, the ready-to-hand loses its readiness-to-

¹ Here Heidegger is pushing back against a historical model of human consciousness: for philosophers pre-19th century, consciousness was detached from the world; this is the Cartesian consciousness that acts like a "snail in its shell" (Heidegger, 2009/1985)—unconcerned from worldly practical concerns or projects, and instead focused on cogitation and the play of ideas.

Heidegger's work was a forerunner of those more familiar within design, such as Schön or Dreyfus. See Christensen, 1997.

hand. For example, I go to hammer something, but the handle falls off when I pick it up. Why does Heidegger care about broken hammers? As stated before, the hammer has the type of being that is characterized by involvement (in our meaningful projects). Normally, we encounter the ready-to-hand on the basis of the totality of such involvements (i.e., holistic whole in which our projects circulate) and do so in the context of our existing habits. However, when a breakdown case occurs, these habits are arrested, and the ready-to-hand is surfaced as what it is.

In Heidegger's words, a 'towards-this' or an 'in-order-to' has been disturbed, and itself becomes the target of our concern, meaning that we can take sight of some aspect of the totality which was formerly obscured by the very phenomenology of subjective action. Crucial for our purposes is that it is through a breakdown moment that we are able to get a glimpse of the structures of meaning and systems of involvements that was always there, but hidden in the background; it is in this breakdown moment that I come to glimpse the network of significance that Heidegger calls 'world,' accessing a kind of reflection which was hitherto neither possible nor called for by the situation.

Retelling the Breakdown (Critically)

Heidegger's writing on breakdown moments provides a phenomenological account for understanding their important roles in both critical retellings and MNG+. We now deal with both in turn, beginning with the critical retelling.

To illustrate what the breakdown implies in the context of the critical retelling, let us take up an example of a retelling of the game *Dwarf Fortress* (Adams, 2006). *Dwarf Fortress* is a game where players are tasked with founding and managing a colony of dwarves. Well known for the depth of its game systems and its daunting complexity, dwarf fortress has long been a favorite for players, player-retellers, and readers looking to experience novel and compelling emergent narratives.²What do we mean by emergent narrative? Those who play video games are likely to find the notion of emergent narratives immediate and familiar: instead of being directly authored by a writer, emergent narratives arise through the interactions of various interlocking systems and a player; these interactions give rise to narrative objects that can be interesting, memorable, and tellable to others (Ryan, 2018)³. For example, a hunger system, a food spoilage system, and a smell system helped to create the oft-cited narrative retelling of the *Sims*, Alice and Kev (Burkinshaw, 2009; Kreminski, Samuel, et al., 2019).

Of course, not every emergent narrative comes to be retold—shared with others—and even fewer of such retellings are appropriately dubbed 'critical.' As stated earlier in this introduction, critical retellings take a critical stance towards 'their own' game, i.e., the game out of which they

² In comparison to almost every other game, the world(s) of *Dwarf Fortress* are simulated in incredible depth: 1. you receive visitors to your fort who might be family members, bards, traders, enemy agents, thieves, werewolves, or vampires; injuries to all dwarves and animals are tracked in detail (incl. Internal organs and psychological stress); 2. each world that gets created is unique and enormous, with thousands of years of history, wars, leaders, villains, and gods randomly created; and 3. you can even just 'play' by generating worlds and exploring their procedurally created histories ('Legends' mode).

³ There is debate about whether emergent narratives are endemic to games, or even endemic to computational media (Ryan, 2018). Regardless, from a bundle of game systems, the emergence of actual narrative objects—let alone satisfying or 'good' narratives—does not seem to be a given. Accordingly, emergent narratives are themselves emerging an important area of concern for scholars and designers. They raise important technical and literary questions: what is a good narrative, in emergent terms? And how can computational systems be designed so that they may best create and then surface interesting emergent narratives?

arise; this means that critical retellings both arise from breakdowns in a player's experience of a narrative or ludic system, and subsequently work to render these breakdowns the objects of shared public scrutiny. To understand what this means, let us now take up a concrete example of a critical retelling: *The Story of Idenzatthud* (taran, 2013).

As with almost every Dwarf Fortress retelling (Kreminski & Wardrip-Fruin, 2019), *Idenzatthud* recounts the rise and fall of a dwarven settlement. It begins with the colonization of a dangerous land, and gameplay starts with the subsequent and titular colony of Idenzatthud; it goes on to recount its architectural, personal, militaristic, and industrial developments. Ultimately Idenzatthud—like almost all dwarven fortresses whose histories come to be recounted—meets a grisly downfall, here at the hands of goblin invasion.

Here, however, the invasion itself is not quite the end of the retelling, and in fact we get the sense that it is the invasion's aftermath which forms the basis of the author's motivation to retell: after the colony has been all but decimated, a single dwarf remains. Due to a prior order that was given—and due to the way that dwarves in Dwarf Fortress will stolidly attempt to orient themselves around player commands even in contexts where they seem arbitrary or ridiculous—the last remaining dwarf takes time after the bloodshed to recommence the dull task of decoratively engraving the walls of the fortress (DF2014:Engraving, n.d.).

Surely this is an odd thing for the last survivor of a massacre to do, but the reteller is both hopeful as well as creative, showing a clear ability to reformulate such a bizarre moment into something not only coherent but meaningful for the story of Idenzatthud: that is, given the gravity of the dwarf's situation, the reteller states their expectation that the engraving would reference the recently transpired events, i.e., they hope that the engravings record some of the history of the now-doomed fort so that it may be preserved before the final survivor perishes. If the engraver were to do so, it would allow the author to understand the act of engraving as something more than a misalignment of narrative and interactive systems, but no such luck. The reteller writes,

“The first thing I find he engraved was a circle, with no decorations or anything. I viewed his other engravings and found two more circles, two engravings of reeds (which didn't exist in the biome my fort was in) and two engravings of giant Axolotls (which have never existed or been relevant to my fortresses history.)

How incredibly anticlimactic.” (taran, 2013)

What's going on in this retelling? On the one hand, the author has shared an amusing anecdote with the community of Dwarf Fortress players (and DF retellers, and DF retelling *readers*—none of which entirely overlap), wherein the last dwarf left alive essentially chooses to *doodle* for his final action; on the other hand, the player has taken the breakdown of a narrative/ludic system—the immersion breaking and narratively bizarre choice to doodle, with its implied misalignment between story and player interaction—and elevated it to an ironic, shareable anecdote that is itself wryly critical of the systems of the game out of which it arose.

How incredibly anticlimactic: the player's retelling both performs and explicitly states their disappointment at the lack of a satisfying conclusion, lamenting the fact that the last surviving dwarf chooses to scratch out meaningless geometry as opposed to recording the history of the soon-to-be-defunct fortress. Yet this result—a breakdown of flow, immersion, and narrative expectation—has thrown into relief the mechanics of the game itself *as well as* their very limits.

Thus, the critical retelling demonstrates the phenomenological (and methodological) importance of moments of breakdown insofar as the latter have ability to solicit critical reflection and creativity from players. Indeed, the critical retelling would not be possible without the revelatory potential of the breakdown itself, a fact that we can come to understand on the basis of

Heidegger: there is a reflective power to the interruption of flow, regardless of whether or not such breakdowns were part of a designer's intention (and in the case of critical retellings, the breakdowns likely are not intentional); the friction of the breakdown moment pulls the user out of their usual habits and quotidian flow state (what Heidegger would call 'everydayness' or 'inauthenticity'; 2019/1927).

Put succinctly then, the breakdown in the context of critical retellings is foundational for the momentary, critical glimpse of the wider context, within which reflection finds its space; it is the breakdown which allows players to grasp the (mal)functioning of a game's story systems, even to gain insight into how those systems are constructed and how they themselves ordinarily relate to them.

From Critical Fictions to Designing Gentle Frictions

In contrast to the existing literature on retellings which claims that they are the result of *successful* outputs of a story system, the notion of a critical retelling draws attention to the productive powers of jank (Marshall, 2021). In doing so, the critical retelling foregrounds the uncanny, bizarre, or immersion breaking outputs of a story system, and how they can act as the occasion for players to critically reflect upon game systems, mechanics, and story outputs—as well as how this can itself be done in a playful way.⁴ Nevertheless, what can we as designers do with the insight that breakdowns can—at least in some cases—be productive, allowing insight into the broader operations of designed objects and their underlying systems? On the one hand the answer to this question is simply to look for critical retellings and take them seriously in their criticality—to closely observe retellings in their various forms (Sezin & Sezin, 2022) and recognize that the bare existence of a retelling does not imply a story system's success.

But in addition to paying attention to such already available backtalk (Schön 1996), does taking 'the breakdown' seriously mean that designers should aim to create *broken* objects? That is, should critical designers aim to make objects entirely unusable, in this case games that frustrate or fail or confound or disappoint players? Here, we begin with the field of design fiction and ask what it means to properly design for *friction*: if we need to create moments of breakdown that pull players out of their usual worldly habits (à la Heidegger), we also need to do so in such a way that we avoid simply frustrating them, since an object that cannot be used (or that users do not want to use) is no good for anyone at all (save for perhaps the writers of EULAs; Böhme & Köpsell, 2010; Good et al., 2007). Still, the question remains: how can we design around breakdowns and not throw usability out the window?

Heidegger again proves of interest here, for what he means by 'breakdown' is not a moment of pure and detached cognition; instead, Heideggerian breakdowns are always and everywhere bound up with the flow and project-orientations of everyday life. This means that, while some academic designers have claimed that Heidegger places critical, reflective consciousness fully *at odds* with practice in the sense that he seems to imply that usability and reflection are antithetical (Bardzell et al., 2012), Heidegger's own words tell a different story. In B&T he differentiates three modes of breakdown:

1. Conspicuousness: A breakdown case in which we encounter malfunctioning or otherwise unusable equipment. The entity's presence announces itself, but in a way that is still bound up with the ready-to-hand. Here Heidegger means to imply that we begin to think about the item's properties, but only insofar as we seek to fix it or perhaps throw it away. (E.g. I go to hammer something, but the handle falls off when I pick it up.)

4

2. **Obtrusiveness:** A breakdown case in which our accessible items that are ready-to-hand 'refer' to an entity that is missing or inaccessible. Heidegger implies that, in this instance, the accessible ready-to-hand entities become 'just' present-at-hand. Missing a piece of the equipmental totality, the entities we do have cannot become involved. (E.g. I go to hammer two boards together, but I'm missing the nails to do so.)
3. **Obstinacy:** A breakdown case in which our circumspective dealing is confronted with obstacles in the form of specific ready-to-hand items. (E.g. I'm looking for my hammer in the tool chest, but I find that it's full of forks and spatulas. I have to put the spatulas away first.)

In all of these cases, the tools (and the equipmental totality) become the object of explicit, cognitive reflection to varying degrees. However, in none of the above cases do we find the claim that usability and reflection are fully at odds, in the sense that a hammer is forgotten or discarded, or that the projects underlying use are abandoned for the sake of pure ponderation. While all of these breakdown-cases involve a certain kind of friction in the face of flow, the result is not a total arresting of flow, but rather the reframing of its direction around a different kind of use and usability: the worker hoping 'to-hammer' now comes to be tasked with a kind of improvisation and responsiveness to the changing state of affairs and a widening of context. In short, the worker experiences a breakdown of the nonreflective act of hammering, but the response is not to *theorize* about the issue; they must rather improvise, troubleshoot, and come work through the problem at hand with the possibilities at hand (cf. Schön and Levi Strauss in Yanow & Tsoukas, 2009).

Such actions are in fact quite similar to what we find in the critical retelling. We have come to understand that it was the breakdown itself that solicited and fostered a moment of Heideggerian reflection and, in doing so, acted as the occasion for player criticality. *Idenzatthud* as a retelling brings to light failures of the game's systems—the stubborn persistence of the player's prior commands in the face of a radically changed context, as well as the inability of the engraving system to meaningfully consider recent local events. But more than merely expressing disappointment at the anticlimax, the reteller has taken the perspective of a detached, ironic, and amused spectator—they have widened their playful perspective beyond the immediacy of the game and, in doing so, attained a critical consciousness *about the game* that is not clearly opposed to playfulness.

In short, it is not usability that is antithetical to reflection, but utter *seamlessness* (Ratto, 2007) that is antithetical to reflection (Norman, 2013; Krug, 2005). Instead of designing for unusability, we take the goal of our speculative and critical design practices to be create objects that generate enough friction to (as it were) reveal their seams without abandoning usability entirely—to design objects that allow for the contextual reframings outlined in the three Heideggerian cases above (as well as critical retellings), and that encourage the broadening of the perspective of users.

The Gentle Friction Of MNG+'s Horizontal Navigation

We can take MNG+ as our case study in a game that attempts to reveal its seams. In particular, let us take up and explore the design of MNG+'s mode of navigation. As stated earlier in this introduction, in MNG+ players are tasked with exploring a series of main menus for irreal games. In the design process there was the desire to avoid a 'master' menu, a main menu that would transparently place itself as the meta-menu for the rest; this would have been an unfortunate necessity, both because it would break the contrivance (a master menu for a panoply of speculative menus implies the games *implied by* the latter do not exist), and because it would allow players to fall back on specific, everyday habits of usability (attempting to rush past the menu and into the game).

Thus the decision was made to ask players to navigate MNG+'s menus in a less usable and more labyrinthine way: players move between menus by clicking the 'new game' button of a given/particular menu—an option which would normally take the player to the game 'itself'. To elaborate: when faced with a new game, most experienced players are likely to enter the main menu and then immediately click 'New game' or 'Start game' rather than lingering with the menu itself; understandably, those experienced with games choose to rely on existing knowledge and familiarity as a first course of action (and unless proven otherwise inadequate). Yet here in MNG+, following through with this habit does lead the player to enter 'the game'; instead, MNG+ simply takes this 'new game'-request quite literally and presents the player with a whole *new* game (menu). *This*, MNG+ gently says, *is* the game.

This 'new game loop'⁵-way of navigating between menus is a direct application of the breakdown principle spoken of above: similar to what Heidegger means by 'obtrusiveness,' the non-hierarchical chain of menus is a playful way of co-opting the players existing habit of skipping past the main menu to get to the *real* game, while interrupting flow long enough to gently bring them on board with the strange object before them. MNG+'s navigation is a moment designed to arrest the user, and aims at pushing back against the unthinking habits of players while bringing them on board with the playful object at hand; importantly, it also aims to do so without taking them fully out of a playful state. Players are not asked to *stop playing* and reflect, but rather to both reflect and meaningfully respond to a newly revealed and widened context *while* playing.

In MNG+, we design not for 'unusability' but 'seamfulness.' Nevertheless, there is a risk here that the goal of creating a breakdown will still create frustration and result in a game with unpleasant UX; likewise, the player may feel that they themselves are the butt of a joke (and with it, the charge of SCD's elitism would return). These are legitimate worries, but I point out that the navigation in MNG+ aims at being far more playful than punitive: there is no penalty for immediately clicking 'new game,' and the player will eventually return to the first/skipped menu regardless (since the form of the game is that of a loop). As opposed to a too-clever joke on the audience, the mode of navigation of MNG+ aims at creating *just enough* friction to spur a moment of Heideggerian breakdown and to do so with the humour of an 'ahh-ha moment' (both in the sense of 'I see what you did there' as well as 'I see what *I* did there'). In the end, the goal of this mode of navigation is to direct the player both to the type of object the game itself is, and to surface the very unconscious habits that players of games tend to exhibit (to skip immediately over the menu). *This is* the game, it says, *this* is how you tend to obviate this ludic moment, and *this* is the new, widened context with which you must reckon.

⁵ It is also from here that the 'plus' in 'New Game Plus' comes. ("New Game Plus", 2018).

Standing to Attention (A Tentative Conclusion)

The 'horizontal' navigation mechanic of MNG+ is a direct application of the breakdown insight arising from the study of critical game retellings, and theorized by Heidegger. We have come full circle, having explored menu-creation as a mode of speculative design (and its ability to foster criticality), taken up critical player activities (retellings) and their ability to further inform critical design practices, and unpacked the breakdown moment at the heart of the critical reflection for both players and designers.

The stakes here are far from trivial. In 2022, we interact daily with digital objects. Yet our interactions seem more and more to follow the pathways dictated by financial interests and predatory design practices. Lacking attentiveness, or rather, having our mindful capacities stripped from us in the name of an extractive economy of attention, we fall into habits that are destructive both individually and societally: the infinite scroll of self-comparison, the streaming service autoplay binge, the gender normative 'sexy' clickbait, the addictive video game with tropes appropriated directly from the casino of yore—when approached thoughtlessly, our interactions with computational objects act to reinforce corporate power and amplify a host of societal (and individual) problems.

And while the fields of speculative and critical design provide key insights and the means for design's intervention at the site of quotidian—and dangerously political—inattention, it has also raised many unanswered questions and undertheorized positions, in particular when applied to game design and the burgeoning field of speculative play. This thesis argues: for the creation of irreal game menus as a generalizable method for bringing critical design practices into dialogue with game design, for the existence of the critical retelling and its use as a way of designers to attend to backtalk 'in the wild' (as well as to avoid academic narrowness and elitism), and the importance of rigorously thinking through the breakdown moments at the heart of critical reflection for both players and designers. In the end, the hope is that it opens up novel pathways for meaningfully reapproaching the role of the digital in our everyday lives.

Chapter 2:

Let's not Play: Main Menu Creation as Method for Speculative Game Design

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The Ontology of the Speculative between Game Design & Speculative Play

Speculative design as proposed by Anthony Dunne and Fiona Raby (2014) points to the important role of design as mode of interrogation of the socio-political imagination. Their *Foragers* series exemplifies this (Dunne & Raby, 2009). Through a series of designed objects, photographs, and texts, *Foragers* sketches an imaginative future where prosthetic devices act as external and at times transhumanist digestive systems. The objects themselves range between the mechanical and synthetic-biological, but each responds to an all-too-likely scenario involving overpopulation and nutritional precarity, and each do so by imagining a *grassroots* solution to the problem in more than one sense of the phrase.

Such speculative and Critical Design practices (SCD) have been a driving force in academic design research for over a decade (Bardzell et al., 2012; see also Bleecker, 2009). During this period, Raby and Dunne's picture of the designer as a social practitioner has traversed the lifecycle of academic ideas, having been adopted by many, widely critiqued (de O. Martins, 2014; see also Kiem, 2014), digested by industry and reduced to corporate truism (Salmon, 2018), reinvigorated within art and academia, and critiqued again (de O. Martins 2017); along the way it has been deployed in a variety of design contexts (DiSalvo, 2021) and resulted in a huge number of objects with the peculiar real-unreal status of the speculative. Objects produced by speculative design are objects of imagination as opposed to function, and indeed are quite often freed from function entirely (*Foragers* is a case in point), yet they still stake a claim on our world. Hereafter I use the term 'irreal' to denote this real-unreal status.

Despite this broad interest, the uptake of SCD has not been evenly distributed amongst the subfields of design. In particular, speculative design has not found a broad application within the field of *game* design. There are notable exceptions to this, both within the academic design world as well as those game designers deploying speculative and imaginative methods (broadly construed) as a means of ideation (Barr, 2018).

Yet games are first and foremost playfully interactive objects. It follows that the field-specific application of SCD to game design is one in which the playful interactions *themselves* act as grist for the mill of speculative imaginings, as opposed to (say) the SciFi world in which a game narrative takes place, or the aesthetic and worldbuilding which give rise to said world.

Speculative play, a term coined by Rilla Khaled and Pippin Barr (2017), describes an approach to speculative design utilizing the particular, playful idiom of games. The term denotes works of speculative design where the driver of speculative worlding and ideation rests primarily upon playful interactivity itself. This is the difference between Pippin Barr's *It is as if you are doing work* (2018), which uses the untapped *interactive* potential of jQuery user interface (UI hereafter) elements to expose a dystopian future, and the yearly Famicase competition (2022), which asks designers around the world to create evocative but non-interactive cartridge art for games. The latter is akin to concept art, in that its speculative designs are not themselves interactive.

Speculative play, in contrast to speculative design broadly, attempts to capture the unique potential of game mechanics and interactivity to operate on the imagination. Despite the existence of the term, this playful nexus between SCD and game design has yet to be fully prospected. As to the reasons for this we may also speculate: perhaps it is that the initial presentations of speculative design—embedded as they were in a set of particular objects and seeking to avoid a ‘theory first’ approach—came to be marked by the material and disciplinary backgrounds of Raby, Dunne, and other non-game designers; perhaps the more grandiose pronouncements of Raby, Dunne, and their inheritors (the idea of transforming our relationship to reality as such) were difficult to meaningfully absorb and apply for those making ‘non serious’ games; perhaps the departmental variety within which academic game developers and designers find themselves led to less cross pollination between their own discursive situations and that of design at large.

Beyond these possibilities, I would add to the list of reasons for the general lack of engagement of game designers with SCD. The reason I have in mind here is that the very ludic requirement of playful interaction may itself conflict with the peculiar, unreal ontological status of speculatively designed objects (Auger, 2013); that is, there is a clear tension between the speculative (hence not-of-this-world, not fully functional or fully operative) status of objects arising from SCD and their ability to be concretely interactive. While designers working in other fields can avail themselves of renders or mockups, one-of-a-kind instantiations of designed objects, performative video prototypes, etc., the very status of games *as interactive* implies a different and perhaps difficult to imagine relationship between the real and the speculative. To be interactive, it might be assumed that a game *must simply exist* as the interactive object that it is; and yet to perform the work of SCD, a game must not *simply* exist.

The broader point here is that speculative play finds itself needing to answer each time over the question of ‘how much’ reality and interactivity is needed for a project to operate on the imagination, and that the answer to this question is far from trivial: caught between the particular requirements of concrete interactivity on the one hand and the exigency of irreality on the other, we’re left with the question of just how, and by what means or method, to think SCD into game design practices. One way to frame this issue is by way of quantity: if reality, interactivity, and completeness can be opposed to irreality, imaginativeness, and incompleteness, we might then ask as speculative game designers, what is a *just interactive enough* object?

MENU NEW GAME PLUS: Project Description

In response to this question, this chapter takes up MENU NEW GAME PLUS (MNG+ hereafter), a game presenting main menus for a series of video games which do not exist. The hypothesis of MNG+ is that the menu is such a ‘just interactive enough’-object: a speculative menu is a real menu and therefore truly and playfully interactive; at the same time, a speculative menu is only a sketch of a projected whole—it bears only the promise of its game as opposed to requiring the game itself to exist in complete form.

Menus are the first thing a player sees upon starting a game, and the menus of MNG+ on first glance look no different; the speculative menu is therefore a ‘normal’ menu (consisting of recognizable buttons, sliders, toggles, and so on) that allow players to enter the game or to use other features within the project (changing options etc.); yet speculative menus are also expressive of the entire game through these very same potential inputs, and aim to gracefully truncate the interaction rather than allow the menu to act as a mere passing point on the road to ‘the game itself’.

Menuization as Speculative Method

The speculative menu is accordingly an object that allows for concrete interactivity to coexist alongside the pregnant irreality of the speculative. With the menu comes a world, but it is not the static world of the architectural maquette, or of illustrated concept art; rather, since all of the UI elements are ‘real’ and interactable, and since they already exist publicly as a sub-idiom of games themselves, the speculative menu both presents a game and bears the possibility for an audience’s unique ludic experience. By critically making menus, new game possibilities can thus be concretely imagined and explored. MNG+ presents therefore a method—call it *menuization*—for approaching speculative design within the field of game design. Menuization, making the menu for a non-existent game, allows designers a way of creating an intermediary object that captures the benefits of SCD for both designer and player while putting the interactive idiom of games in service of this very end.

With this idea of menuization as a method for the ideation, prototyping and dissemination of speculatively playful objects, two questions emerged: the first was simply *what* game was to be imagined; the second was the more thorny topic of *how* a main menu—a real main menu, following or at least citing the inherited conventions thereof—could best be used to express a game.

It quickly became obvious that, given its reliance on the expressive potentiality of menus themselves, MNG+ would necessitate the critical examination of specific menu tropes and UI elements. Hence the project’s trajectory doubled: not only would MNG+ act as a test case for a novel speculative method within the field of game design, it would also necessarily act as a critical look at user interfaces, employing the latter as a creative constraint as well as reservoir of inspiration. Straddling these two positions led to each menu of MNG+ focusing on a specific UI element as much as a specific, imagined game. In what follows, I share the results and generalized findings of the four existing speculative menu prototypes.

Menuization As Method: Case 1 Jitterbug

The first speculative menu prototype was made for a game called *Jitterbug*. The imagined game puts players in the role of a chameleon-like, color-shifting insect, with the graphics adopting an ASCII style; while a kind of ‘retro’ aesthetic may initially seem an odd choice for a project that is self-avowedly future-oriented, the decision to use this was not a capricious one. Working with a limited palette of UI elements and sounds, music, and ‘background’ images, my thinking was that it would be useful to drive the experience through familiarity (hence to utilize the knowledge and expectations that players bring to games) before providing a degree of estrangement (Nodelman, 1981; see also Gaver et al. 2013).

Jitterbug is imagined to play out as follows: as time passes, you (insect) move slowly up a leaf; at intervals you are faced with predators such as birds or mammals who arrive on the scene; upon such an encounter, you are asked to change colors to match the ambient background in an act of computational camouflage. In more than a single sense, the colour-change interaction demanded of the player is *manual*: the player must type in hex codes that match their background in order to evade their hunter, and they must do so while referring to the accompanying paper manual.

The menuistic expression of *Jitterbug* relies on a ‘How to play’-screen. Since games already have an element of self-explanation built in, usually in the form of a tutorial, this was an obvious place to start in exploring how a humble menu could express the totality of its unreal interaction. While a tutorial takes place within the game, the UI analogue of the tutorial—the ‘How to play’-

screen—has instead a reliance on telling over showing. In contrast to games of recent years which attempt to render their tutorials all but painless through diegetic context or playfulness, the ‘How to play’-screen allows for only minimal interaction; it aims not for immersiveness or painlessness but rather bare efficiency, ie, to provide a quick orientation for the in-game UI or heads up display, as well as the broad goals of gameplay. It is commonly found in mobile apps. This tutorial-made-menu is surely not a favorite of players, but nevertheless seemed a clear place to begin exploring the ability of menus to express entire gameworlds.

Questions Arising From Prototype One

Jitterbug’s speculative menu thus presents clearly, albeit in a rather didactic ‘showing over telling’ manner, the mechanics of an imagined game; likewise, through the styling of the experience itself, the speculative menu posits a clear mood for the game and even an art style. Yet *Jitterbug*’s menu raised a number of design-related questions as well.

First was the aforementioned question of extensiveness, ie, how much of a main menu should be made in order to maximally explore and express an unreal game. Surely not all menu components allow for the expression of a game in equal measure and in all situations; this means that creating, say, a ‘Graphical options’-screen in addition to a ‘How to play’-screen—while surely working in some sense to further define our ideations—also generates a degree of potentially disruptive noise for the player. Walking a line was then necessary between following through with the menu *enough* to allow for a suspension of disbelief, but not creating so much that the more fundamentally expressive UI elements come to be lost in the mix.

The second question raised by *Jitterbug* concerned the rather didactic nature of this ‘How to play’-screen itself, which essentially operates as a series of PowerPoint slides. While this does the work of expressing the mood, mechanics, and experience of the unreal game, it was not clear that such a minimally interactive approach truly enacted the concept of MNG+ as a method for speculative *play*; that is, rather than using the playful interactivity afforded by main menus to express the game, *Jitterbug*’s menu snatches outright the one UI trope that *tells* users how to approach an interactive object.

The third was how to present a main menu for a game that by definition does not and will not exist without simply trolling one’s audience. A menu is, after all, a highly ignorable, often completely skipped part of the game’s experience; menus are normally sought out only in moments of breakdown where the mechanics are opaque, or where some error has been encountered, etc. This insight was borne out in reality, as playtesting showed that most people’s inclination, even the inclination of those who had some of the context for the project, was simply to click the “Start new game” button and immediately test their luck on the game. If they attempted to do so, or likewise when they attempted to change the resolution or toggle other inoperative inputs, *Jitterbug*’s menu would tell them that they needed to restart their computers for their choices to take effect.



Fig. 1 – Jitterbug, 'Enter Menu' screen.

We may call this the “Start new game” reflex: the inclination of players to skip past the menu is surely something to be grappled with for a project whose precise goal is to draw attention to and traction from the marginal corner of the game world that is the menu; and yet to declare such reflexes incorrect, to render such inputs null with a slap on the wrist, led to an unsatisfying, frustrating, and confusing experience—even with the additional diegetic text explaining this frustration in terms of the game world and DOS-era computation.

How can this reflex be dealt with, presuming that menuization is thought as a vehicle of communication as much as speculative ideation? The solution to this problem arose upon beginning work on a second menu. MNG+ would take the player’s inclination to ‘Start [a] new game’ seriously, but also literally: clicking on this option would take the player to a menu for a new—or rather another—game, which in this case means sending them to another speculative menu. The whole experience would then loop in a manner that allowed the first (hence likeliest to be skipped) menu to be returned to painlessly. The reference to the new game plus mode in the title arose from the recursive, self-amplifying nature of the ‘Start new game’-button interaction (TV Tropes, 2015).

UI as Ideational Reservoir: Prototype Two *8 Tons of Oxygen*

The second prototype proceeded with similar goals and starting questions: what unreal game, and what menu trope to deploy for the maximal expression of this game? This time work proceeded with the further insight that *Jitterbug*’s menu was wrought with the same tension between interactivity and speculation as described in the introduction to this chapter: it was more inert than interactive, more speculative design than speculative play. It would not be enough therefore to ask after menu tropes in general; rather, in order to enact the playfulness of the speculative play, it was necessary to begin asking after what menu tropes might allow for more fulsome and satisfying modes of interactivity.



Fig. 2 – Jitterbug, 'Input Hex' screen.

Furthermore, while *Jitterbug* was imagined with a very simple and singular mechanic, I hoped to test the menu method's ability to express a narrative-based game. The most salient menu trope capable of approaching plot progression and playful interactivity was the level selection screen, and the irreal game to be expressed became a narrative piece called *8 Tons of Oxygen*. A late-nineties styled Metroidvania, the game takes on the story of three (playable) characters in the far future working to terraform a distant planet. The plot unfolds as follows: as the three human characters (each controlled in turn by the player) work to tame and terraform the alien planet, they encounter greater and greater environmental dangers; meanwhile, one of the indigenous life forms, an aeroplankton covering most of the surface and forming a semi-sentient neural network, pleads to and struggles with the player for its existence in what is becoming an increasingly inhospitable environment for it, chemically speaking; indeed, when a certain crucial threshold of atmospheric oxygenation is reached (the eponymous 8 tons), every individual aeroplankton will perish.

Here, similar questions arose to those mentioned for the first prototype. How fulsome a main menu was to be created? Would having an options screen (for instance) reveal crucial information about the irreal game as well as providing more potential for interesting interactions, or would it simply add to the noise and confusion? This time I decided on quite a detailed menu; because I was aiming to show and not tell in a greater degree to that of *Jitterbug*, these details would work to reveal such things as the basic elements and mechanics of the game (shooting, lives, etc.).

The focus remained on the level select screen. Yet while the level select screen surely is capable of showing something like the broad arc of such a narrative, it too felt less than interactive; it suffered from the same kind of inertness as the 'How to play'-screen. At best, it seemed like a kind of wordless, abstract graphic novel. This problem was amplified by the fact that I had actually written the plot beats for this story, replete with twists and perspectival shifts; having the story as the horizon of my work drove home the dim opacity of the level select screen

itself. How would it be possible to allow players to circumnavigate this plotline without abandoning the 'level select' pretense?

Player as Editor: The Divisibility of the Level

In order to add a deeper mode of interactivity that would at the same time allow the player to fully explore the narrative, a novel mechanic was introduced: while the plot was conceived to be more or less linear, the 'line' constituting said plot would be divisible by the player in multiple ways and on the basis of their own chosen criteria; this interaction would be built-in to the level select screen itself, since a level is nothing more than a meaningfully divided chunk of a plot or experience. *8 Tons'* speculative menu therefore puts the player in the position of being a kind of book editor.

To elaborate: in normal games a level is similar to a book chapter in that is conceived to be something like a meaningful, yet relatively bounded and self-contained, piece of a plot (for plot driven games); for other games that focus more on exploration, what constitutes a level might be conceived more in spatial terms, ie, a relatively bounded environment; for some games these two become mixed; in still other games it is simply a matter of the length of probable playtime. Yet in broader terms this appeared to me a question that few had asked in the abstract: what constitutes a level? On what terms does one divide a presumably continuous plot or experience into pieces?

We can imagine, for instance, a game being divided arbitrarily into 'days' that all have the same length; we can imagine a game's levels being bounded by place, or by environment (tileset etc.); we can even imagine a plot-driven game being divided *thematically* and aiming towards didactic ends, like some versions of the Christian Bible, or the 'Art of War' training campaign in Age of Empires II (Age of Empires Wiki, 2019). All of these and more are possible interpretations of what a level *is*. Furthermore, each of these possibilities of division implies a particular emphasis, indeed a particular hermeneutical approach, towards the whole: division and organization creates meaning.

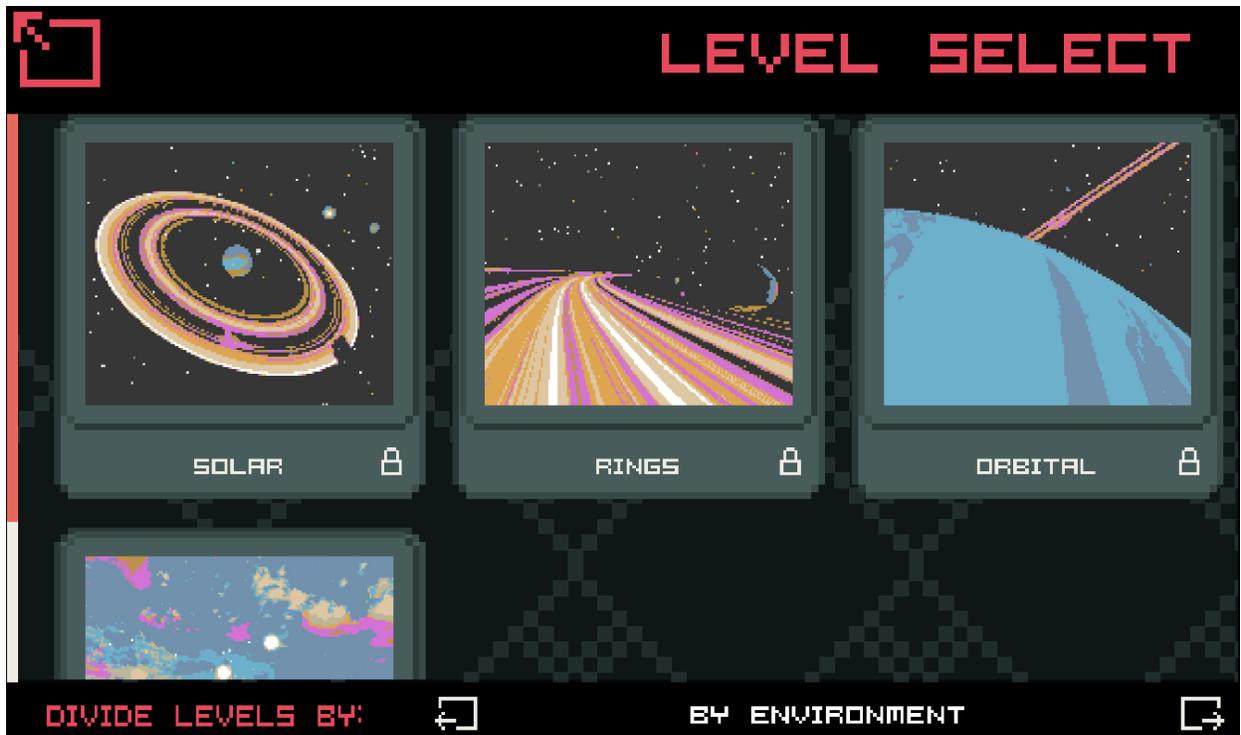


Fig. 3 – 8 Tons of Oxygen, 'Level Select' screen.

What is a game level, and how has this concept been thought and rethought historically? No fulsome study of this topic has ever been done. For the speculative menu for *8 Tons of Oxygen*, players are put in the role of answering just this question; the level select screen is not the inert 'press and proceed to play' of most level select screens, but rather an archive of a world in need of the editor-player. This means that the player has the ability to toggle *what a level is*, ie, how the plot/game arc is segmented and on the basis of what principle of division: environment; place; time; perspective; non-interactive cutscenes, and even endings. Circulating around the plot—the *same* plot—the player sees it therefore from a variety of perspectives of possible interpretations. Call it a divide your own adventure novel.

Yet, while the goal is to provide a glance at the whole through the reflection upon a different cutting instrument (as it were), the very level select screen format also implies that the plot can be leapt into at any of these moments. This provides a huge variety of hooks and imaginative platforms from which the player's imaginings may leap.

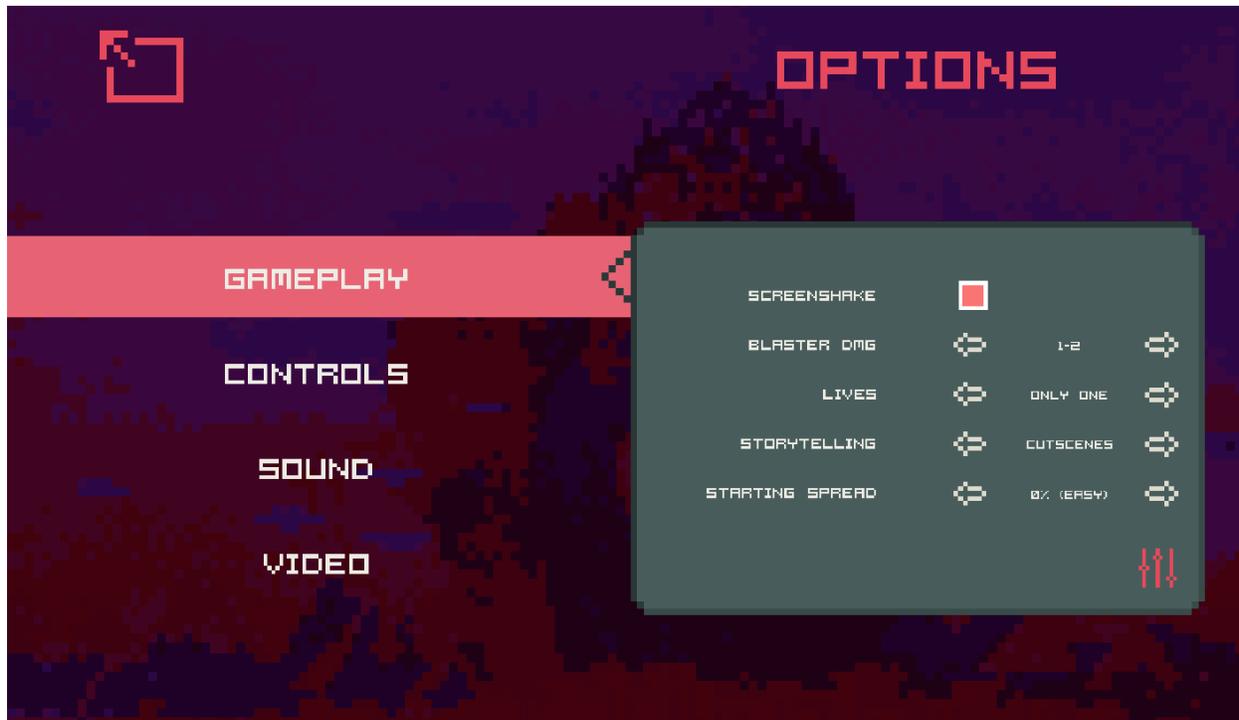


Fig. 4 – 8 Tons of Oxygen, ‘Game Options’ screen.

UI Before Game, or Game Before UI?

With *8 Tons*, both the power and limitations of MNG+ had begun to coalesce, and it became clear that the two questions stated above for both prototypes—what unreal game to express, and what menu element(s) to use that would best do so—could not be separated so neatly. A third question arose only thereafter, and had to do with the primacy given to the answer of the first and second questions: do we begin with a game idea, or do we begin with a menu trope?

By this point it had become clear that, as much as being a speculative exploration of games and gameworlds, MNG+ is equally an exploration of the expressive potential of UIs; accordingly, beginning with *just any game idea* was, while perhaps possible, not ideal to see through the concept fully. MNG+ would need therefore in each case to consider the game and UI of choice as co-implicative.

Indeed, this co-implication of menu and speculation may prove to be a limit to the idea of menuization as a broadly applicable method; that is, this co-implication may imply that the speculative ideations of the designer are not allowed to roam in a truly free-form way, constrained as it is to pass through UI tropes. Nevertheless, while menuization as enacted by MNG+ may not set the conditions for completely free-roaming of the imagination, what it surely does provide is a proof of the imaginative power to be found even in the most marginal aspect of games—their menus. *8 Tons*’ menu places the player in the position of biblical-editor, and it does so by utilizing an otherwise ignored part of the ludic experience. Through MNG+’s acute attention to the menu, a reservoir of untapped possibility is discovered. In turn, this allows for the creation of meta-awareness and criticality towards games and menus for both players and developers. There is power to be found through attention towards the margins.

World Generation: Prototype 3 *Empires Of Idleness*

Following work on *8 Tons*, it became absolutely clear that the most evocative and interactive instances of menuization would be where the menu-concept and the game-concept are most intertwined and co-implicative; such an object would be a prime example of speculative play's hypothesis that playful interactions themselves can do the work of worlding sought by SCD.

Thereafter, study for a third menu began. Bearing in mind the need to think menu and game together, this time I took up the world generation screen, seen in so-called '4X' games such as *Civilization* or deep simulations such as *Dwarf Fortress*. The idea here was that giving the ability to actually set the meta-parameters of the world would be an excellent way to explore the playful possibilities within an unreal management game; at the same time, the intuition was that the creation of this world was itself a satisfying interaction (as anyone who has spent too much time looking for a starting position in *Dwarf Fortress*, or anyone who drew imaginative maps as a child, may attest).

The idea of *world creation* acted as a conceptual through-line, and with this I proceeded to a third prototype. In addition to the exploration of the possibilities and limits of the world creation screen, my broader goal here was to aim for a more focused menu. While *Jitterbug* and *8 Tons* both attempted to use the ambient menus (graphics and control options etc.) to further create a sense of reality and context, I wanted here a minimal test case that would not allow the player's attention to stray. The formal desire for minimalism, as well as the growing desire to differentiate each game from all the others in this tiny but growing Borgesian library, led to the adoption of an equally 'minimalist' aesthetic: the flat-shaded/mobile aesthetic of the mid 2010 indie game (think *Kentucky Route Zero* or the *Monument Valley* series).

The mood of these indie games is anathema to the 4X genre, the latter pushing the player towards the imperialist mindset eXploring, eXpanding, eXploiting, and eXterminating. Combining this aesthetic with the 4X genre, the speculative menu for *Empires of Idleness* was born. *Empires* is a playful re-imagining of a 4X game where the goal is to be as idle, hence as inactive and unproductive, as possible; the choices in the world-generation screen reflect this play space, allowing the user to change the 'geographical' parameters of a bed scene (roughness being the number of pillows, water coverage being the number of cups on the nightstand), the number and type of the starting factions (Romantic imaginer, spiritualist meditator, or someone paralysed by the anxiety of precarious labour), and so on.

Twice the World Over: Games and World Building

Empires is a 4X game, but a 4X whose mechanics imply the polar opposite of the capitalist and colonialist impulses of the genre; what matters in the gameworld, and hence the world generation screen, of *Empires* must shift in an equally drastic manner. In broader terms, the whole notion of *world creation* led my thinking in another direction; specifically, I began to realize that, if the goal of speculative design/play is to set the conditions for a glimpse of a world that is not ours and the increased malleability of the critical imagination that should result, then speculative games do this twice over. First we have the world in which the unreal game is real, and then we have the diegetic world of the game.

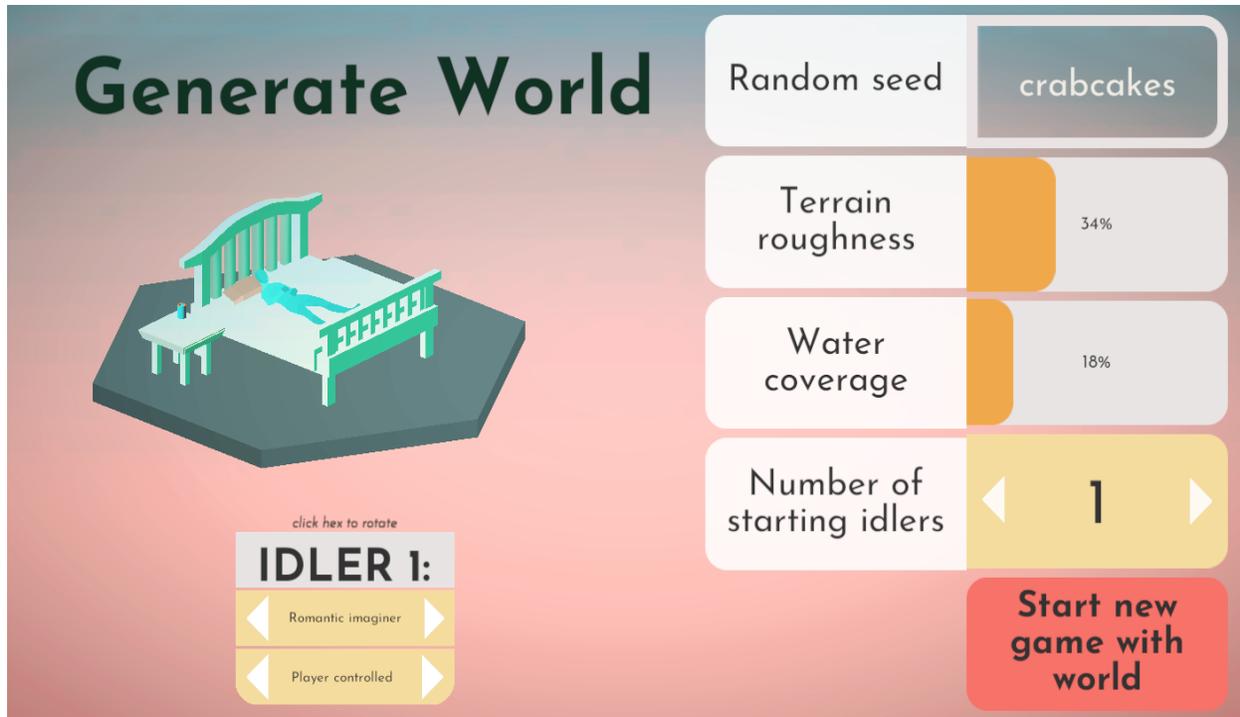


Fig. 5 – Empires of Idleness, ‘World Generation’ screen.

The diegetic world of the game is not unreal in the same sense as speculative objects. Yet it is possible that this already-speculative status of games presents another reason why SCD has not been applied broadly to game design, as it may appear on the surface that such work is always already being done. Here, it is important to point out that we must not confound these two levels of worldbuilding: to do so would be to confuse purely fictional worldbuilding for the peculiar real-unreal status of the speculative object; while the former presents a fictionalized elsewhere, the latter presents a concrete object to rethink reality with (Coulton et al., 2016).

Yet the realization persists that games promise a world, and that speculative games (hence speculatively playful menus) promise a world in more sense than one: if speculative design gains its traction in part by positing a world in which the designed object can be contextualized and understood, speculative play posits a double elsewhere, a possible world wherein the game exists (as marketable, sellable, historical, fun, etc.), as well as the fictional world of the game itself. How do these two levels of ‘world’ flow into one another? How can they best support, or productively undermine, one another? And how can game designers working speculatively best capitalize on this apparent peculiarity of speculative play? Such questions arose directly from the creation of *Empires*, but they present a fruitful site of intervention for future investigations into speculative play.

An Infinite Speculation: An Ai-Assisted Dwarf Fortress

Following the first three menu prototypes, work began on a fourth that would strive to combine some of the most relevant insights of the prior: the most effective use of menus as a communicative tool would be one where a *specific* speculative world is maximally expressible from within a *specific* UI trope; furthermore, this trope would allow for a playful form of interactivity and would not fall to the level of concept art. Attempting to combine these insights, a

fourth menu prototype was born: *Peon Caravan* is a kind of base-building game along the lines of *Dwarf Fortress* or *RimWorld*.

This genre of game aims to give the player a unique, emergent narrative (Eladhari, 2018). It does so partly on the basis of its extensivity, that is, by creating things that are notoriously huge, complicated, and (quite often) opaque. James Ryan's dissertation (2018) presents arguably the most fulsome study of the topic to date. Ryan connects the emergent narrative to non-fiction, claiming that—much like the work of a historian—the emergent narrative only comes into being when raw materials are *curated* by a person. The player is, in other words, put in the position of historian of the idiosyncratic, procedural gameworld. While looking to explore this genre critically, I also hoped to capture at least some sense of this 'scholarly' enjoyment—the enjoyment of discovery.

Which menu trope might allow for the exploration of this genre? The obvious place to begin was with the patch log, the place where—in a real game—the developers update the playerbase on the most recent changes to the game. *Dwarf Fortress*'s bizarre patch notes already have a kind of cult following, even amongst those who have not played the game itself (Livingston, 2016); indeed, they continually reveal some of the incredible complexity of the procedural interactions that can take place therein. But while simply writing patch notes would be an option, it would have meant that the sense of *extensivity* and the emergent quality would be lost; no longer would the player be able to 'find' some interesting and idiosyncratic detail about the world, since it would be purely scripted and already curated by the author (myself).

Seeking such extensivity and this parallel between the genre and the menu, I turned to Artificial Intelligence. A neural network called GPT-2 (OpenAI, 2019) was trained on a collection of patchlogs from existing games. The dataset consisted of *Dwarf Fortress* and *RimWorld* patchlogs, as well as patchnotes from other base building games: *Oxygen not Included*, *Kenshi*, *Crusader Kings*, and *Gnomoria*. Ultimately the dataset comprised roughly 8,000 separate patchnotes, tweaked using few strategic find-and-replace commands to give *Peon Caravan* a sense of unity. Finally, in order to flag the AI-backbone of *Peon Caravan*, a contrivance was developed: players are told that *Peon Caravan* is a game created by an AI that was trained on a *Dwarf Fortress* 'Let's play' from 2011. The game is patched continuously by this AI, and so players are tasked with calling up continuous patch notes from a seemingly infinite reservoir, thereby putting them in the position of historian-detective.

In many ways the menu for *Peon Caravan* is the most accomplished of the four prototypes. It deploys a specific UI-trope that deftly expresses its gameworld; from this, it derives a new playful mechanic that analogizes the games it explores and parodies (the exploration of procedural extensivity through exploring patches); finally, it raises critical questions about design and about genre, such as the continual references to slavery, the imperialist overtones derived from the dataset of patches and—perhaps most importantly—the very question of *where* players find joy in such emergent discoveries.

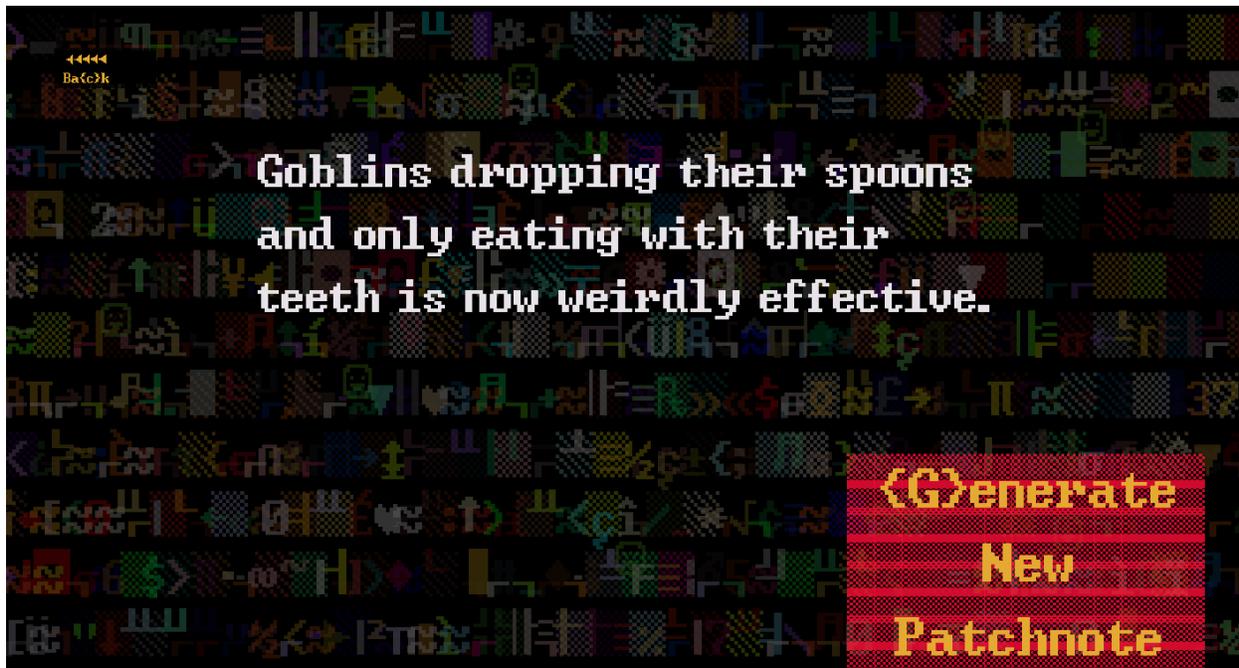


Fig. 6 – Peon Caravan, ‘Patchnote Generation’ screen.

Discussion

Over the course of four prototypes, MNG+ developed menuization as a method for game designers wanting to explore their work speculatively. Each prototype allowed the development of a clearer understanding of both the potential and limits of menuization. To speak in general terms of some of the insights of the above project and chapter:

a. Main menus can act as an effective vehicle of ideation

Like most works of SCD, MNG+ aims to create a more pliable future for games through the effects of tangible creations. Yet this also means the creation of a series of design prospecti for a number of games which could (in principle) exist, and which could (in principle) be played and even be fun. In this sense menuization is a method not only of approaching speculative play, but also a tool for ideation in general: one makes a menu as the game’s manifesto; this can subsequently either be shared as it is and act as a pivot for thoughts and conversations or, if it is developed into a whole and ‘actual’ game, then it can act as a design document—a far more interactive and open-to-conversation object than the design document as ordinarily construed. This implies also that the creation of main menus for non-existent games could find use beyond academic and speculative design work; for instance, it could present an interesting assignment for a game design course, a contrivance for a game jam, an exercise for a company, etc.

b. Menuization as a mode of expressing a game may be overly attached to games expressible through UI elements

MNG+ is a test case for its own concept, and therefore acts in three directions at once: it explores imagined games, it critically explores UI elements and menu tropes, and it explores the

latter's ability to express the former. These three directions together implied co-implicative status of the choice of UI element with the imagined game, and often this meant beginning with a specific UI trope rather than a free roaming of one's imagining. In other words, menuization here implied that creative speculation passed through UIs as the medium. This may indeed prove to be a limit to menuization as a method.

c. Menuization allows for speculative inspiration to arise from an unexpected source (UIs)

The flipside of the menuization's grounding in (or shackling by) UI elements is the reminder of the importance of creative constraints. Even the main menu—arguably the most formalized and routine, as well as the most boring and skippable, aspect of games—acted as a reservoir for the development of both game ideas and ludic criticality. Here we can point to the creation of the player-as-editor role for the divisible level select screen of *8 Tons*, or the purely practical patch note updates from *Peon Caravan*.

d. The doubling of fictional worlding in objects of speculative play is a site of necessary future inquiry in further developing speculative play

Games promise a world, and speculative games enact worlding on two levels. Though the interconnections between these variegated modalities of 'worlding' are too complex to delve into for the scope of this chapter, disentangling these levels and their interconnections will be crucial for further investigations into the methods and applications of speculative play.

Conclusion

MNG+ presents four speculative menu prototypes, each acting as a kind of test case for menuization; menuization is a method of ideation and prototyping to be used by speculative game designers looking to deploy the unique tools of games (playful interactivity). This chapter has explored the development of MNG+'s four current prototypes; in reflecting on the development of each, this chapter has set into relief five insights about menuization: as a method for enacting speculatively playful interactions, as a tool for ideation, its potential overattachment to UIs, as a way of using UI tropes as inspiration, and as a starting point in the investigation of the complexities of 'double worlding' found in speculative games.

Chapter 3: When the Fourth Layer meets the Fourth Wall: The Case for Critical Game Retellings

This chapter originally appeared in the conference proceedings of ICIDS 2020, where it was awarded the best short paper award.

Introduction

Game retellings are when a player crafts a narrative or anecdote about their experiences of playing a video game. Such retellings can take a variety of shapes: from describing a moment from a game in a passing conversation, to sharing a humorous anecdote on Reddit (thecrazyfrog, n.d.; Xerkie, n.d.) to inventing details of quotidian life within your galactic empire (Kreminski, Samuel, et al., 2019); players might even create news-style reports on a game's events (EVE News 24, 2020), or end up crafting a narrative so compelling that it solicits critical commentary on the retelling itself (Berkinshaw, 2009; Elhadari, 2018).

It's clear that, for both designers and academics, retellings present a unique opportunity. Retellings offer a glimpse into the experiences of the audience of games. Moreover, retellings provide this opportunity "in the wild," (Kreminski, Samuel, et al., 2019) thereby allowing theorists to approach what makes a good narrative or anecdotal without pre-emptively importing theory and non-native assumptions about the phenomenon.

Increasingly, the importance of retellings is being recognised by scholars. Eladhari (2018) describes the retelling as a fourth textual layer, bringing it into the framework of story construction itself. In a different vein but with a similar result, James Ryan's (2018) curatorial approach implies that anything that *truly* qualifies as emergent narrative is also a kind of retelling since it is a result of an interactor's (or a system's own) act of curation; for Ryan, all emergent narratives have therefore been 'retold' even if only on the level of a digital event log or to the authors themselves.⁶ Given their similar stance towards the importance of retellings, we shouldn't be surprised to see that the same claim is made by both Ryan and Eladhari regarding the relationship between retellings and the interactive narrative system's⁷ *quality*: the very existence of retellings implies that a game "has provided an experience that is significant or meaningful enough that it is worth telling someone else about" (Eladhari, 2018; Ryan, 2018). The system provides a meaningful experience, and the evidence of this is in the telling.

Eladhari goes further than Ryan on this point, arguing that—since retellings track narrative system quality—they could be useful as instruments of critique. By 'critique' here Eladhari means that retellings present a tool for assessing the depth, artistic merit, and originality of a narrative

⁶ James Ryan's identifies a failing of previous accounts of emergent narrative: previous thinking about the form assumed that the raw outputs of systems were themselves already narratives, with curation being relegated to an incidental term or ignored entirely. For Ryan, emergent narratives do not arise from systems alone, but rather in the meeting between systems and curators—be they AI or human, player or non-participating. For this reason, it seems fair to say that a retelling is a subset of what he means by curatorist emergent narrative: retelling is curation with an additional, public-facing narrative layer.

⁷ Here I borrow Eladhari's (2018) term (interactive narrative system). My main concern and body of evidence will nevertheless focus on games in particular.

system. ‘Critique’ here implies analysis as well as assessment, and Eladhari calls for both a “blunt” (Eladhari, 2018) quantitative approach to retellings (‘more retellings’ being equated with ‘better narrative system’), as well as a closer, detail-oriented analysis; while she does not expand much on what she means with the latter, similar work has since been started by Kreminski, and Samuel, et al. (2019).

I agree with Eladhari that retellings are a valuable resource for critique, but here—and as a way of following through with her call for a more in-depth analysis—I want to drive a wedge between narrative system *success* and the bare existence of retellings. In this paper, I make the case that a significant subset of retellings are themselves *already critical* of the narrative system out of which they arise. These critical retellings focus on bizarre and uncanny outcomes of a narrative system; they mock, satirise, and ironically approach the machinations of their ‘own’ system. Sometimes, critical retellings lay bare the manifest *failures* of their narrative system, taking its more bizarre outcomes as the object for satire and lifting these up for public display and shared scrutiny. My argument here will proceed stepwise through two sections:

1. In the first section, I present an account of critical retellings, describing them as anecdote-style game retellings that both refer to their own narrative systems reflexively and do so with a critical, ironic edge. Using two anecdotes from the game RimWorld, I argue that these examples work to ironically satirise and critique the results and mechanics of the game itself.

2. In the second section, I present (via James Ryan) a plausible alternative reading to my notion of critical retellings. Namely, I present the idea that the raw, uncanny, *art brut*-like qualities of the outcomes of narrative systems are simply part of what it means for them to be ‘well-made,’ and that we cannot describe the retellings of these outcomes as critical. Against this idea, I argue that such retellings arise from the contribution of *reteller reflexivity*, which is all but anathema to the aesthetics of art brut.

In the end, I describe the critical retelling as a kind of immanent critique that is both compelling as a retelling and (simultaneously) self-reflexive analysis of a computational narrative system. These texts show how the less-than-desirable outcomes of a narrative system can be meaningfully and pleasurably redeemed through retellings themselves. I suggest further that scholars seeking to use retellings as an instrument of critique would do well to attend to the self-reflexive critiques and assessments already made public through retellings themselves, rather than taking those retellings to be merely a product of narrative systems.

An Account of Critical Retellings, With Two Examples From RimWorld

Eladhari (2018) claims that retellings can act as an “instrument of critique” for narrative systems. By this, she means both that the existence and quantity of retellings allow scholars and designers to assess whether a narrative system is ‘well-made’ or ‘good,’ and that retellings provide us with a dataset for more in-depth analyses. While Eladhari admits that there is a great deal of room for nuance here, the general claim is that retellings correlate with narrative system success. Against this, I want to contend here that there exists a subset of retellings that do not directly track the success of a narrative system insofar as they themselves are already engaged in the assessment and analysis of the narrative system out of which they arise. I call these critical retellings because they are both a retelling and a way of rendering a narrative system the object of shared public scrutiny. To explain what I have in mind here, I want to first look at two retellings from the colony building game RimWorld.

The first retelling (thecrazyfrog, n.d.) I have in mind is told from the perspective of a prisoner of the player's colony. With embellished dialogue, the reteller writes about how the prisoner is accosted by the player's "heavily-armored interrogator":

You came into our town. Our peaceful fucking town. You—I had a wife. A wife and a kid. I had to watch them get turned into fucking mince - meat right in front[sic] of my eyes. I had to listen to their screams

Despite these horrible events, it is eventually revealed that the interrogator—who lost their entire family in the raid—is actually trying to recruit this prisoner to join the colony. The tone of the text is humorous, ironic, and in the end, exhibits a degree of bathos. It laconically states, "Another failed recruitment attempt."

The second RimWorld retelling (Xerkie, n.d.) is told from the player's perspective and relates an anecdote involving a couple who visits the player's polar colony. While these guests arrive seeking rest and relaxation, both quickly succumb to hypothermia. A week later, the daughter of the two initial visitors, as well as her husband, arrive ("for some Rest & Relaxation," the reteller clarifies), and their stay results in a similar series of events. The daughter of the initial pair is named Fanya, and the author writes that after her own husband has died of hypothermia,

Fanya was in a similar situation to that of her mother. She was nearly dead from hypothermia and over 10 of her body parts had fallen off due to hypothermia, including her jaw and one ear. When she warmed up, I told her to leave. When she reached the edge of the map, I got a reputation bonus because Fanya exited healthy. '...Healthy'

Again, we have a setup followed by humorous, ironic, and bathos-inflected ending. The title reads, "Honey. For this year's holiday, I want to go to that Ice Sheet colony where mum and dad died of hypothermia last week."

Both stories here are self-reflexively dealing with the mechanics of RimWorld's systems. The first story explicitly points to the prisoner recruitment mechanic in RimWorld, and anyone familiar with the game would know what the story is referring to; the second anecdote is related to RimWorld's system for having visitors and—more broadly—the storyteller system ("AI Storytellers", n.d.) in the game that tries to meaningfully set up events. One of the ways the storyteller operates is to introduce characters who have existing relationships (Wiltshire, 2020). While the planet is large, the world ends up feeling rather intimate: it is full of family members, friends, lovers and enemies. The second retelling's reference to the intimate visitation system, much like the reference to the prisoner recruitment system, would be quite familiar to players of RimWorld.

Both of these retellings, in other words, deal explicitly with the game's systems, and both of them nod to a knowing audience. But they don't stop there: I contend that these retellings actually analyse and assess the outcomes of the narrative system in which they take place. They provide commentary *on* the game and its systems.

What is the content of this commentary? In the first story, players of RimWorld will recognise the ability to recruit prisoners as colonists—even when the prisoners have attacked, raided, and murdered members of the colony quite recently. Dragging incapacitated raiders to prison and ordering colonists to chat endlessly with them is one of the best ways of getting recruits. But this first retelling analyses this recruitment system's blind spots, exploring how it quite often leads to strange and immersion-breaking results—as when a colony or colony member that has been significantly, personally harmed will obediently work to recruit those who harmed them. Similarly, in the second story, we again see a bizarre outcome of the game's systems (visitation and the intimate storyteller). Again, this second retelling analyses how this system can lead to

immersion-breaking results, as when a visitor ignores the grisly personal history of a given locale.

Both retellings lack emotional consistency or verisimilitude, and (crucially) the sardonic humour of the retelling comes to trade on precisely this. These retellings amplify the flaws in these systems for the sake of a pleasurable, *tellable* retelling: they lay out moments where these systems have produced bizarre, emotionally unbelievable, uncanny, and immersion-breaking situations. But instead of merely becoming frustrated with the systems, the players have taken to retelling as a way of publicly critiquing the narrative system through irony and satire, winking at their audience who would have similar experiences with RimWorld: they've become critical retellers.⁸ I read critical retellings as a kind of immanent critique, a way for authors to both present to their communities a compelling retelling and (simultaneously) publicly analyse, scrutinise—and even explicitly criticize the failings of—the narrative system that gave rise to it. Furthermore, at least in their most extreme cases, critical retellings do not track narrative system quality. Instead, the stance of these retellings towards their respective narrative system is critical of that system, and this means that they can be compelling despite—even because of—their less than 'well-made' or 'good' story material.

Two caveats here: first, we are admittedly dealing with *anecdotes* in these examples, and there are likely to be differences between these and story-length, narrative-focused or character-focused retellings. This should come as no surprise since, by their very definition, critical retellings would tend to arise when a game has produced an output that would be difficult to use as the basis of a narrative. Second, I'm assuming that the *readers* of these retellings will have some direct experience with the game RimWorld, since both retellings are taking these familiar game mechanics (recruitment, visitation) explicitly as an object of reference. Within these two limits on the notion of critical retellings, even a glance at the communities around RimWorld and other colony-building games such as Dwarf Fortress (Adams, 2006) will make it clear that such humorous, ironic, and self-reflexive anecdotes are far from rare.⁹ The question is how we read them, and the subsequent importance that is placed upon them.

An Alternative Reading of These RimWorld Anecdotes: Ryan's Computational Art Brut

Having a taciturn colonist obediently work to recruit a prisoner who just murdered their entire family, or having someone arrive for 'holiday' in the same unforgiving biome in which their parents have just died due to environmental conditions—these outcomes are on the verge of incoherence. But instead of simply being disappointed or frustrated with the system, the authors turn a narrative system limitation into an ironic, satirical success at the level of the retelling: the humour of these retellings trades on the bizarreness, the uncanny qualities, and the immersion-breaking character of the content which comes to be retold.

Nevertheless, there is an alternate reading of the above RimWorld anecdotes. More in line with Eladhari and Ryan's point that a retelling shows that a narrative system is well-made or has produced a 'good' outcome, one might argue that the two above anecdotes from RimWorld also

⁸ Part of why I see these retellings as explicitly critical is their use of irony. Irony, according to Linda Hutcheon (2013), always has an 'edge': it's critical of something, and quite often the straight discourse that forms one half of its double-speak. Here the 'straight' discourse just is the narrative system.

⁹ For instance, the story 'One Stands Alone' (2011) involves a character referencing the game's plummeting framerate. Even James Ryan's own example of the retelling Oilfurnace ends with a bizarre, fourth wall breaking moment that references the Dwarf Fortress community mantra—*losing is fun* (Oilfurnace, n.d.)—that Ryan does not comment upon.

fit this bill: one could claim that—as bizarre as these outcomes are—the very oddness might constitute part of what it means for such a narrative system to be successful.

James Ryan (2018) makes a similar point about the aesthetics of emergent narrative. He claims that, due to the computational genesis of emergent narratives, there are similarities between them and *art brut* ('outsider art'). Jean Dubuffet, the 20th-century painter who coined the French term, saw *art brut* as works arising from the raw expression of an artist's subjectivity rather than the undermining adornments of training and convention. He describes it as being,

By [*art brut*] we mean works executed by people free from artistic culture, in which mimicry, unlike what happens with intellectuals, has little or no part, so that these artists get everything (subjects, materials, means of transposition, rhythms, ways of writing, etc.) from their own depths and not from the clichés of classical or fashionable art. (Dubuffet, 1949, translation by Steven Sych)

Similarly, for Ryan, *art brut* computational emergent narratives are those with “a sense of the crude, uncanny, alien, eccentric, deranged, marginalised, pure” (Ryan, 2018), they are works that that would not have been penned by a ‘normal’ human author working within the confines of institutional art and literature (Ryan, 2018). This gives them a bizarre, jarring, uncanny quality. And yet, though the works are strange, this does not indicate the failings of a narrative system so much as it reveals the unique potential for pleasure afforded by the form. The raw and uncanny qualities of computational emergent narratives just *are* part of their appeal.

If Ryan is right about this, we might re-read what I’m calling critical retellings as narrative system successes, and then attempt to understand them along the same lines as we would understand any other retelling. The two RimWorld stories could then be read as the sharing of unique, if bizarre, details of our interactions with a well-made narrative system, a point also made by Eladhari.¹⁰ Indeed, the richer and more complex a narrative system is, the more significant this detail-comparing is likely to become; if the details are not only unique but uniquely bizarre (as in the above RimWorld examples), this might only increase the desire to publicly surface and compare such idiosyncrasies.

This alternative reading is plausible, but I don’t believe it does justice to the RimWorld anecdotes I’ve cited above. First, I think it’s at least reasonable to say that the narrative systems in these two RimWorld retellings have produced less than desirable outcomes. Such outcomes present a degree of incoherence within its world or in relation to some basic laws of our own; through this incoherence, the very seams of the simulation itself are laid bare for all to see. Accordingly, both RimWorld stories present us with instances where, *as a player*, one might reasonably expect to become disappointed or frustrated with the system’s results; likewise, both stories present us with outcomes where, *as a designer*, one can imagine looking at the narrative system’s result as something in need of a fix. We can reasonably imagine a patch for RimWorld stating something like, ‘Visitors will no longer attempt to take restful holidays where their immediate family members have recently died horrific deaths due to environmental conditions.’

Admittedly, this point is in no way conclusive. As I stated earlier, part of the use of retellings is that they allow us to approach computational emergent narratives in a way that does not rely on the importation of theory. I can’t base my argument here on what it is for a narrative system outcome to be ‘good’ (coherent, immersive, representing our world, etc.) since this is to presuppose something that is at stake, i.e., just what it is that retellings are telling *us*.

¹⁰ “Readers of Burkinshaw’s text who have also played The Sims 3 know what Burkinshaw is alluding to when Alice is ‘as exhausted as it is possible to be’, and what it means within the game rules that Alice has a wish. This adds to the degree of enjoyment when comparing and discussing the unique narrative experiences of the same game” (Eladhari, 2018) .

But beyond the outcomes of the narrative system appearing (internally or externally) incoherent, I think we have another reason to read these examples as critical retellings as opposed to just ‘successful’ art brut. It boils down to the character of the retellings themselves, and in particular, the clear *self-reflexivity* performed by the retellers. Given that a primary quality of art brut is its very lack of self-reflexivity—it is the art of prisoners, loners, the mentally ill, and other marginalised peoples, and by its very definition it lacks the self-reflexivity involved in imitation or reference or the palette of a shared history—then it is difficult for me to understand how such intensely self-reflexive RimWorld retellings could themselves be described in these terms. Put succinctly: the unique aesthetic of art brut arises from its somewhat *naïve* relation to the act of creation, which is almost the precise opposite of what’s at work in the examples above.

A close look at the retellings themselves renders clear that these RimWorld anecdotes are profoundly self-reflexive—a quality of retellings that has generally remained under-theorised by scholars working in this area. This is why the concept of art brut or even glitch art (Ryan, 2018) does not do justice to this aspect of these examples. To be fair to Ryan, he’s describing the aesthetics of the narrative system’s output (and perhaps muddying the waters by relying on a *retelling*¹¹ to do so), while I’m following Eladhari and taking retellings as a dataset to approach narrative systems and re-interpret that aesthetic understanding. Perhaps then we can simply say that the ‘art brut’ outputs of a narrative system may—in some cases and if they are ‘brut’ enough—be taken up in a critical, self-reflexive, and ironic manner by retellers.

Conclusion: A Friction-Filled Partnership

Many of the above issues boil down to a question of ontology, and an argument about the interplay of complex elements and forces that come to make a retelling what it is: is a retelling primarily the product of a reteller, or mainly the outcome of a narrative system? It should be clear that this question poses a false dichotomy. The answer in any real instance is very likely ‘both.’ In Kreminski’s words, we have a storytelling partnership (Kreminski & Wardrip-Fruin, 2019). I’ve made the case here that sometimes that partnership can involve conflict—that friction between a system and a reteller is part of what allows these systems to support creativity—and that one manifestation of this friction is the critical retelling. Critical retellings as described above are game retellings that:

- a. Tend to be shorter and more anecdotal than ‘narrative’.*
- b. Explicitly reference and reflect on the mechanics of the narrative system or the nature of the narrative system itself.*
- c. Speak directly to a knowing audience that would understand these same mechanics and their importance within the system.*
- d. Do so with a critical edge that is performed through irony and satire.*

For scholars following Eladhari and looking to use retellings to assess the depth, artistic quality, and originality of a narrative system, the assessments already shared in the form of critical retellings by players in these communities present an excellent starting point. I would implore scholars to attend to these moments of irony, self-reflexivity, and friction between retellers and the systems with which they partner.

¹¹ Ryan’s (2018) lengthy exploration of the aesthetics of emergent narrative as such relies on a specific retelling of the game Dwarf Fortress called *Oilfurnace* (n.d.).

References

- Adams, T. (2006). Slaves to Armok: God of Blood Chapter II: Dwarf Fortress. Bay 12 Games. <https://www.bay12games.com/dwarves/>.
- Age of Empires Series Wiki. (2019). *The Art of War (Age of Empires II)*. Retrieved August 28, 2022 from [https://ageofempires.fandom.com/wiki/The_Art_of_War_\(Age_of_Empires_II\)](https://ageofempires.fandom.com/wiki/The_Art_of_War_(Age_of_Empires_II)).
- AI Storytellers. (n.d.). Retrieved August 28, 2022 from https://RimWorldwiki.com/wiki/AI_Storytellers.
- Auger, J. (2013). Speculative design: Crafting the speculation. *Digital Creativity*, 24(1), 11–35. <https://doi.org/10.1080/14626268.2013.767276>.
- Bardzell, S., Bardzell, J., Forlizzi, J., Zimmerman, J., & Antanitis, J. (2012). Critical design and critical theory. *Proceedings of the Designing Interactive Systems Conference - DIS '12* (pp. 288–297). Association for Computing Machinery. <https://doi.org/10.1145/2317956.2318001>.
- Barr, P. (2018). Pippinbarr/itisasifyouweredoingwork. <https://github.com/pippinbarr/itisasifyouweredoingwork/tree/master/press>.
- Basarab, S. (2020, June 21). Breaking: Legacy Coalition/Imperium NIP Ending. *EVE News24*. <http://evenews24.com/2020/06/21/breaking-legacy-coalition-imperium-nip-ending/>.
- Bleecker, J. (2009). *Design Fiction: A Short Essay on Design, Science, Fact and Fiction*. Near Future Laboratory.
- Bogost, I. (2011). *How to Do Things with Videogames*. University of Minnesota Press.
- Böhme, R. & Köpsell, S. (2010). Trained to accept?: a field experiment on consent dialogs. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems – CHI '10* (pp. 2403–2406). <https://doi.org/10.1145/1753326.1753689>.
- Burkinshaw, R. (2009). *Alice and Kev*. <https://aliceandkev.wordpress.com/>.
- Christensen, C. B. (1997). Heidegger's Representationalism. *The Review of Metaphysics*, 51(1), 77–103.
- Coulton, P., Burnett, D., & Gradinar, A. (2016). Games as Speculative Design: Allowing Players to Consider Alternate Presents and Plausible Features. In P. Lloyd & E. Bohemia (Eds.), *DRS2016: Future-Focused Thinking*. <https://doi.org/10.21606/drs.2016.15>.
- DF2014:Engraving. (n.d.) Retrieved August 28, 2022 from <https://dwarf fortress wiki.org/index.php/DF2014:Engraving>.
- DiSalvo, C. (2021). FCJ-142 Spectacles and Tropes: Speculative Design and Contemporary Food Cultures. *Why Food Matters*. <https://doi.org/10.5040/9781350011465.ch-020>.
- Dubuffet, J. (1949). *L'art brut préféré aux arts culturels*. Compagnie de l'art brut, Paris (1949).
- Dunne, A., & Raby, F. (2009). Foragers. <http://dunneandraby.co.uk/content/projects/510/0>.
- Dunne, A., & Raby, F. (2013). *Speculative everything : Design, fiction, and social dreaming*. MIT Press.
- Ebert, R. (2010, April 16). *Video games can never be art*. <https://www.rogerebert.com/rogers-journal/video-games-can-never-be-art>.
- Eladhari, M. P. (2018). Re-Tellings: The Fourth Layer of Narrative as an Instrument for Critique. *Interactive Storytelling*, 65–78. https://doi.org/10.1007/978-3-030-04028-4_5.

- Famicase Exhibition (2018). わたしのファミカセ展. <https://famicase.com>.
- Gaver, W. W., Beaver, J., & Benford, S. (2003). Ambiguity as a resource for design. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems CHI '03* (pp. 233–240). Association for Computing Machinery. <https://doi.org/10.1145/642611.642653>.
- Gardner, D. L. & Tanenbaum, T. J. (2021). At the Edge: Periludic Elements in Game Studies. *The International Journal of Computer Game Research*, 21(4).
- Gelley, A. (1991). Novalis miscellaneous remarks [original version of pollen]. *New Literary History*, 22(2), 383–383. <https://doi.org/10.2307/469045>.
- Good, N., Grossklags, J., Mulligan, D. K., Konstan, J. A. (2007). Noticing notice: a large-scale experiment on the timing of software license agreements. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems – CHI '07* (pp. 607–616). <https://doi.org/10.1145/1240624.1240720>.
- Hagström, A. (2017). *Poetically Man Dwells in Game Space: A Phenomenological Investigation of Video Games as Art* [Bachelors Thesis, Uppsala Universitet].
- Heidegger, M. (2009). *History of the Concept of Time: Prolegomena* (T. Kissel, Trans.). Indiana University Press.
- Heidegger, M. (2019). *Being and Time* (J. Macquarrie & E. Robinson, Trans.). Martino Fine Books. (Original work published 1927).
- Hubal, R., & Pina, J. (2012). Serious Assessments in Serious Games. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 4(3), 49–64. <https://doi.org/10.4018/jgcms.2012070104>.
- Hutcheon, L. (2013). *Irony's Edge: The Theory and Politics of Irony*. Taylor and Francis, Hoboken.
- Jorgensen, K. (2013). *Gameworld interfaces*. MIT Press. (2013).
- Jorgensen, K. (2018). *Transgression in games and play*. MIT Press.
- Khaled, R., Barr, P., Moore, C. (2017). *About*. Speculative Play. <http://www.speculativeplay.com/about/>.
- Kiem, M. (2014, November 28). *Is a decolonial SCD possible?* Medium. <https://medium.com/@mattkiem/is-a-decolonial-scd-possible-30db8675b82a>.
- Kreminski, M. & Wardrip-Fruin, M. (2019). Generative games as storytelling partners. *Proceedings of the 14th International Conference on the Foundations of Digital Games*, pp. 1–8.
- Kreminski, M., Samuel, B., Melcer, E., Wardrip-Fruin, N. (2019). Evaluating AI-Based Games Through Retellings. *Proceedings of the Fifteenth AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE-19)*, 15(1), 45–51. <https://ojs.aaai.org/index.php/AIIDE/article/view/5223>.
- Krug, S. (2005). *Don't Make Me Think: A Common Sense Approach to Web Usability* (2nd ed.). New Riders.
- Larsen, B. A., Bruni, L. E., Schoenau-Fog, H. (2019). The Story We Cannot See: On How a Retelling Relates to Its Afterstory. *Interactive Storytelling Lecture Notes in Computer Science*, pp. 190–203.

- Linehan, C., Kirman, B., Reeves, S., Blythe, M., Tanenbaum, J., Desjardins, A., & Wakkary, R. (2014, April 26 - May 1). *Alternate Endings: Using Fiction to Explore Design Future* [Conference Workshop]. 32nd Annual ACM Conference on Human Factors in Computing Systems – CHI '14, Toronto, ON. <https://doi.org/10.1145/2559206.2560472>.
- Livingston, C. (2016, August 8). *The most ridiculous patch notes from 10 years of Dwarf Fortress*. pcgamer. <https://www.pcgamer.com/the-most-ridiculous-patch-notes-from-10-years-of-dwarf-fortress/>.
- Marshall, C. (2021, July 29). *Janky games may be broken, but they have a special place in my heart: An ode to jank*. Polygon. <https://www.polygon.com/22600466/janky-games-celebration-bethesda-necromunda-elder-scrolls-fan-communities-memes>.
- MENU NEW GAME+* by spelafort. itch.io. (n.d.). <https://spelafort.itch.io/menu-new-game-plus>.
- New Game Plus. (2018, April). In *Wikipedia*. https://en.wikipedia.org/wiki/New_Game_Plus.
- Norman, D. (2013). *The Design of Everyday Things* (Rev. ed.). Basic Books.
- New Game+*. TV Tropes. (n.d.). <https://tvtropes.org/pmwiki/pmwiki.php/Main/NewGamePlus>.
- Nodelman, P. (1981). The Cognitive Estrangement of Darko Suvin. *Children's Literature Association Quarterly*, 5(4), 24–27. <https://doi.org/10.1353/chq.0.1851>.
- Oilfurnace. (n.d.). <https://www.timdenee.com/oilfurnace>.
- Oliveira, P. (2014, September 10). *Cheat Sheet for a Non (or Less) Colonialist Speculative Design*. Medium - A Parede. <https://medium.com/a-parede/cheat-sheet-for-a-non-or-less-colonialist-speculative-design-9a6b4ae3c465>.
- de O. Martins, L. P. (2014, February 4). *Questioning the 'Critical' in Speculative & Critical Design*. Medium - A Parede. <https://medium.com/a-parede/questioning-the-critical-in-speculative-critical-design-5a355cac2ca4>.
- de O. Martins, L. P. (2014). Privilege and Oppression: Towards a Feminist Speculative Design. In Y. Lim, K. Niedderer, J. Redström, E. Stolterman, & A. Valtonen (Eds.), *Design's Big Debates - DRS International Conference 2014* (pp. 980–990). Design Research Society. <https://dl.designresearchsociety.org/drs-conference-papers/drs2014/researchpapers/75>.
- de O. Martins, L. P. & Oliveira, P. (2015, February 27). Futuristic Gizmos, Conservative Ideals. *Modes of Criticism*. <http://modesofcriticism.org/futuristic-gizmos-conservative-ideals>.
- One Stands Alone. (2011, February 8). <https://dfstories.com/one-stands-alone/>.
- OpenAI. (n.d.). *openai/gpt-2*. GitHub. <https://github.com/openai/gpt-2>.
- Ratto, Matt. (2007). Ethics of Seamless infrastructures: Resources and Future Directions. *International Review of Information Ethics*. 8. 12. 10.29173/irie93.
- Ryan, J. (2018). *Curating Simulated Storyworlds*. [PhD thesis, UC Santa Cruz].
- Salmon, F. (2018, May 30). The Creepy Rise of Real Companies Spawning Fictional Design. *Wired*. <https://www.wired.com/story/the-creepy-rise-of-real-companies-spawning-fictional-design/>.
- Sezen, T. I. & Sezen, D. (2022) Longform Video Essays as Critical Retellings of Video Game Narratives. In B. Bostan (Ed.), *Games and Narrative: Theory and Practice. International Series on Computer Entertainment and Media Technology* (pp. 267–279).
- Schön, Donald & Bennett, John. (1996). Reflective conversation with materials. 171-189. 10.1145/229868.230044.

- Schultz, T., Abdulla, D., Ansari, A., Canlı, E., Keshavarz, M., Kiem, M., de O. Martins, L. P., & Oliveira, P. (2018). What Is at Stake with Decolonizing Design? A Roundtable. *Design and Culture*, 10(1), 81–101.
- Sterling, B. (2017, June 28). *Design Fiction: A Field Guide to Ethnographic Experiential Futures*. Wired. <https://www.wired.com/beyond-the-beyond/2017/06/design-fiction-field-guide-ethnographic-experiential-futures/>.
- Suvin, D. (2010). *Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology*. Peter Lang.
- Swink, S. (2009). *Game feel : A game designer's guide to virtual sensation*. Morgan Kaufmann/Elsevier.
- Sych, S. (2015). *The genial education of genius in German idealism and early romanticism* [Doctoral dissertation, McGill University].
- Sych, S. (2021). Let's not play: main menu creation as method for speculative game design. In M. C. Reyes & J. Pope (Eds.), *Texts of Discomfort: Interactive Storytelling Art* (pp. 174–202). Carnegie Mellon University Press.
- Sych, S. (2020). When the Fourth Layer Meets the Fourth Wall: The Case for Critical Game Retellings. *Interactive Storytelling: 13th International Conference on Interactive Digital Storytelling, ICIDS 2020, Bournemouth, UK, November 3–6, 2020, Proceedings* (pp. 203–211). https://doi.org/10.1007/978-3-030-62516-0_18.
- taran. (2013, December 10). The Story of Idenzatthud. <https://dfstories.com/the-story-of-idenzatthud/>.
- thecrazyfrog. (n.d.). “Honey. For this year's holiday, I want to go to that Ice Sheet colony where mum and dad died of hypothermia last week.” [Online forum post]. Reddit - r/TalesfromRimWorld. https://www.reddit.com/r/TalesfromRimWorld/comments/end89i/honey_for_this_years_holiday_i_want_to_go_to_that/.
- TV Tropes. (2015). *New Game+*. <https://tvtropes.org/pmwiki/pmwiki.php/Main/NewGamePlus>.
- Wiltshire, A. (2016, August 12). How RimWorld Generates Great Stories. Rock Paper Shotgun. <https://www.rockpapershotgun.com/2016/08/12/how-RimWorld-generates-great-stories/>.
- Xerkie. (n.d.). A story inspired by a recent raid, from a prisoner's perspective [Online forum post]. Reddit - r/TalesfromRimWorld. https://www.reddit.com/r/TalesfromRimWorld/comments/euoaum/a_story_inspired_by_a_recent_raid_from_a/.
- Yanow, D. & Tsoukas, H. (2009). What is Reflection-In-Action? A Phenomenological Account. *Journal of Management Studies*, 10(1), 1339–1364. <https://doi.org/10.1111/j.1467-6486.2009.00859.x>.