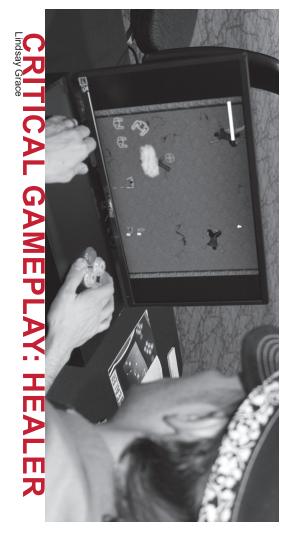# CRITICAL GAMEPLAY: HEALER

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Introduction

Healer is a game designed around one of the oldest digital game mechanics – shooting. The goal of the project was to critique the assumptions around the shooting mechanic of historical games. While games as early as *Space War* offered shooting, it wasn't until such shooting was historicized that it really adopted a strong link to historical narratives. Games such as 1942 played to the then popular romanticization of World War II war actions and the destruction they caused as often portrayed in films (Pollard, 2002). It is one of several games in the Critical Gameplay game series.

The Critical Gameplay project (Grace, 2012) has always endeavored to critique the conventions of digital play as a counterpoint to the narratives of popular games. It aims not only to remind players of other ways to play, but also to the ways in which the meaning and meaningfulness of such play changes through the alternative design of what we practice and explore in games. The work draws heavily from the body of literature in psychology that evaluates the purpose and benefit of play (Brown, 2009). It also draws from the industrial design practice of critical design (Dunne and Raby, 2001).

Biologists, anthropologists, and psychologists have all asked the fundamental question – why do we play? The question is not merely a philosophical one, but it is a practical one. The research indicates that play is innate not only to humanity, but to much of the animal kingdom as well. This innate need to play, implies that play serves more purpose than society may credit it. It is not merely about the frivolous expense of energy or the need to escape. It is, from the research, a very functional need (Smith, 1982) which sometimes applies to video games as well (Bardzell & Bardzell, 2013).

Play offers the human animal several things. First, it serves as an opportunity to practice. Play fighting and role play are common play activities witnessed across many cultures with obvious benefit in the real world. Former U.S. National Institute of Mental Health program director Stuart Brown emphasizes the nature of such play through an anecdote. He describes a scene in which two predators meet and through the universal signs of play, engage in play (Brown, 2008). This anecdote is often his jumping off point for describing how universal play is. His perspective is informed by a lifetime of play research, heading the National Institutes of Play (Brown, 2009) and shared by game researchers like Brian Sutton-Smith (2009).

The universality of play is often ascribed to play's practice. Learning to hunt begins with learning to play hunt. Learning to protect one's self, is similarly learned through the play of play fighting. In the human world, the myriad of roleplay activities that children engage in, from playing doctor, tea party or dress up all serve a purpose. They are an opportunity to practice an element of the adult world. Such play offers the opportunity to understand through practicing social norms, or routines,

or in the case of playing doctor, getting comfortable with the sometimes uncomfortable realities of living (e.g. preparing for an upcoming doctor's appointment involving an inoculation). Playing kitchen and cooking imaginary meals is role play for a very basic adult responsibility and eventuality, feeding oneself. Role play helps its players learn about social expectations, interactions and operations (Rogers and Evans, 2008).

But play is not solely about practice. Play is also about experimenting, the often acknowledged second benefit to the human animal. In role play in particular, the improvisational nature of the play allows the player to explore unscripted scenarios. It allows the player to explore in ways that the mind would do less effectively if it just thought about those scenarios

Ultimately, the difference between play and its real-world equivalents is safety. Just as sports have rules and borders to demarcate the start and end of play, so too does all play. Generally, play ends when it ceases to be safe. One does not play with knives typically because it is not a safe toy. The end of a session of jokes is sometimes concluded when the jokes reach into the unsafe space of something too personal, too real or too discomforting outside the real world.

This is where the primary opportunity for critical gameplay arises. Critical gameplay adopts the fundamental design and research assumptions about play and incorporates the discomfort that bridges play into the real. This has previously been described as discomfort design (Grace, 2014). Discomfort design aims to seize upon the moment in which the play abruptly asserts its relationship to the real world. When the play itself ceases to

be safe, less in terms of physical harm and more toward the moment that players realize that the play has more meaning than they had previously recognized. It is not safe for their previously held assumptions, aiming to instead make them uncomfortable with it. It is much like a metaphor that reveals itself in story, unfolding to become more apt than the reader expected.

This is also where the experiential design of games overlaps with the narrative experience of a game. As previously published (Grace, 2019), games are experienced by players as a kind of narrative. Players interrupt the events of their play as sequence. But unlike third person or omniscient

ity, encoded in the convention of printed (or digital organized) pages. The narrative is encapsulated in the pages of a book, and viewing the book is like viewing its reported story's past, present, and future. A game on the other hand has a much more varied narrative. It may give the scaffold of other narratives, with a clear, middle, and end. But the variability each player adds to it changes the surety of that experienced narrative.

Of course context matters. Reading a book in two different decades can be a very different experience, as can the difference between reading it on a train and reading in a library. But what's novel about games is that they too have this variability

they made to get there. The equivalent would be for the reader to perceive the narrative as the effort they made in reading each sentence as well as the sentence's meaning.

These unique properties of play provide a unique opportunity to provide experiences that are not only personally meaningful, but affective in ways that exploit play's natural ability to serve as a platform for practice and exploration. Players are not only experiencing the narrative of the game, they are practicing and exploring it. Coupled with the epiphany moments possible through discomfort design, the goal of critical gameplay is to turn such experiences into social impact experiences that change the way players perceive not only the games they play, but the world around them.

pen if players were made uncomfortable with that assumption? What would happen if players were practicing healing from the scars of war, instead of recreating them?

Like many Critical Gameplay games these questions served as the foundation for design. The fundamental question is ultimately how to change the player's relationship to war while still allowing them to recognize the historical narratives. If play is practice, how can the player be encouraged to practice something other than war reenactment? Are there game verbs that are relatively unexplored that not only meet these objectives, but do so in a way that is equally satisfying?

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narratives, digital game players in particular, often read the play experience as a first-person narrative. A player does not read the events of their play, nor do they watch them, they do them. Even in the case of 3rd person or other play perspectives, the player's direct relationship to the action in-game frames the experience as their doing. The player is less witness and more participant. So much so, that unlike some other narrative forms, the player's inaction means the narrative's inaction.

From a futurist perspective, a written book is a narrative that has at all times its future, past, and present. It is somewhat a representation of simultane-

and the variability of self-report. A reader rarely self reports the experience of a book to include the turning of the pages, the weight of the paper, the skipping of white space, the resting between chapters and so forth. A watcher of film does not choose to include the moment they fast forwarded past the credits or all the other things they may do as part of a movie theater experience. However, the player does.

In a platformer for example, a player articulates and recalls each step. While the core narrative of a digital game might be about the boss at the end of a level, the player's narrative includes the jumps

Healer Motivation

Healer continues the general motivation of the Critical Gameplay series. Drawing from the tenets of discomfort design, the primary motivation for the game centers on getting players to become more critical of war reenactment, recreation and re-creation. While the industry of war simulation abounds both in the real world, through historical reenactments (Turner, 1990), and through the myriad of exceedingly popular war games like Call of Duty WWII (Raven, 2017), it is evident that while play serves as practice, it's not always evident that we as players need to practice for war.
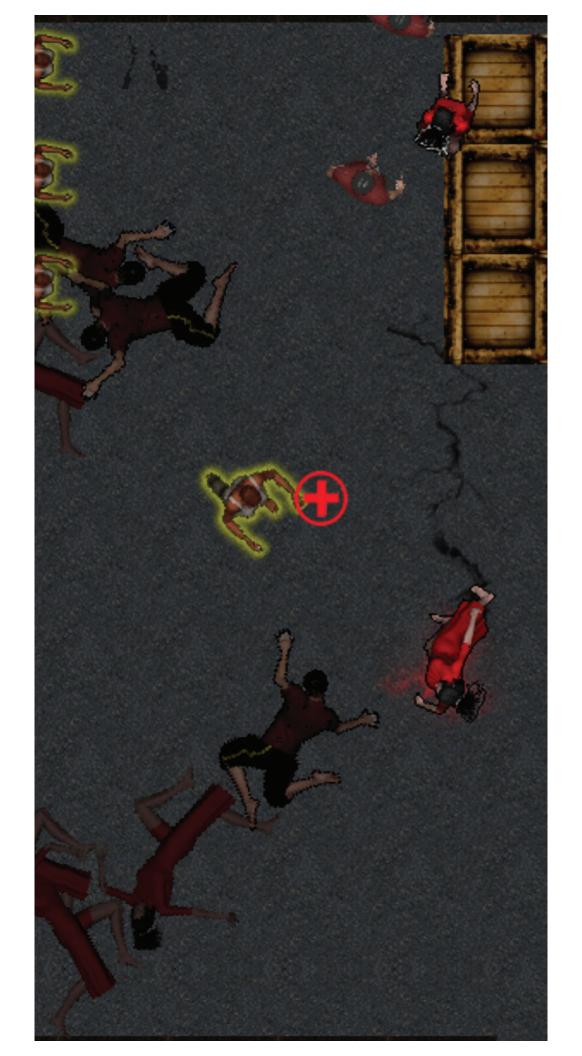
Philosophically, if players are always practicing for war, it implies that waging war is a future valuable experience. Just as children role play to be adults, it could be argued that playing war is a way to get ready for the wars they wage. What would hap-

Of all the many ways digital games represent war, they may help players reenact them, or prevent them, but they really help players undo them. Undoing war means recognizing it's mistake, acknowledging it, and seeking to correct it. It is not erasing, but instead correcting. In doing so, perhaps there is an opportunity for players to recognize both the wake and its effect. To see that war is more than merely reaching objectives and staying alive. That there is collateral damage, that there is dishonor, and that there is so much left behind that it reverberates generations into the future.

As part of the critique in Critical Gameplay, there's a perspective of war simulation as fundamentally naïve. It is sometimes an immature perspective on an exceptionally mature subject. War does not start with the launch of a flying ace from a carrier and end when your plane is downed. It is not anonymous, but instead immensely personal. The games of 1980's championed war and its soldiers, but rarely memorialized them. They failed to recognize that the trajectory of war is not just the

dead, but all the lives that participated (willingly or unwilling) in it. Why hadn't more games aimed to be a memorial to war, a kind of docugame offering the more developed perspective that war has heroes, villains, and a whole lot in-between? Why didn't the experience of these games leave players feeling more like they fixed a wrong, instead of encouraging them to do the same wrongs again?

Healer Subject

When looking at the history of war and atrocity, there are sadly, far too many subjects from which to choose. Both World Wars offer a plethora of unbelievable carnage and assault on humanity. Ancient history abounds and perhaps most upsetting, even with such history, atrocities on scale with some of the largest 2 millennia happen in the 20th and 21st century.

In choosing a subject for the game it seemed evident that World War II was an appropriate era from which to choose. In part because so many digital games titles have chosen it as a subject. In part because it has a history of romanticized narratives and later critique of that romantecisation.

Of all the atrocities from which to choose, the Nanjing massacre offers a subject aligned with the many World War II games while highlighting brutality to non-combatants. The massacre, also know as the rape of Nanjing (or Nanking) occured over 6 weeks begining in December of 1937. The Japanese imperial military had captured the then capital city. The soldiers raped and killed between 50,000 and 300,000 victims, a number which has been contested for several decades. The event itself has been subject to the ebb and flow of denial, making its fact and fiction the center of debate.

This event is important in the context of games for several reasons. First, it was executed by one of the birthing nations of the video game industry, Japan. Second it, unlike many other atrocities, was the subject of much debate. It's fact and fiction have been the subject of tension between China and Japan for years. This border between fact and fiction seemed appropriate for a game, especially within the context of Baudrillard's Simulacra and the desert of the real (1994). Just as game recreations of war seem to blend reality with the fictive stories designers aim to tell, the game must rest between the few remaining documented elements of the massacre's history and the stories of it. The game itself is based on a desert of the real. It's also an historical note that has seen limited media. Lastly, the events of the Nanjing massacre are among the most reprehensible of the World War II events. Of the many precipitates of World War II, the rules of engagement commonly referred to as general as the rules of engagement (ROE) outlined in the Geneva Convention, is perhaps most important to humanity's respect of self. In short, the events of Nanjing stand as one the worst attacks on a non-combatant population.

In short, Healer aimed to be the first game that provided some sort of critical design, memorializing the history of the Nanjing massacre in a kind of pseudo-docugame. It aimed to change the player's relationship to war through both depiction and action.

Healer Implementation

Healer's motivation and historical frame encapsulate a player's relationship to war. To do so the game was designed around an unshooting mechanic. Instead of putting bullets into non-player characters, players would take them out. The first prototype of the game was created in 5 days as part the conventional Critical Gameplay design practice. The goal in doing so was to optimize focus and commitment to an atypical design. The practice applies core design tenets from game jams into the personal creative practice. The original prototype was created by a single designer, developer and artist.

The most interesting element of implementation, the unshooting mechanic proved to highlight a bias in game making software. The original prototype was built with GameMaker, which like many game engines of its day used a target-source model for detecting object collision. In short, many game engines are built on a conceptual model that assumes the player will control an object and that

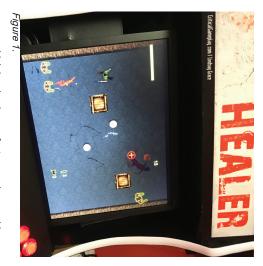object will emit some other object to affect other elements in the game world. These elements have fundamental physics that detect collisions, or overlap between a source object and its destination. This is a completely logical model for shooting games for example, as a shooting game involves moving a character object, allowing other objects to emit from that character, and then detecting when those objects hit other objects. What this model doesn't afford is for an easy implementation of the opposite. That is, a source-target frame.

By analogy, it's similar to a game engine biasing away from supporting passive voice or perspective shift in a narrative. The game engines expect that the player object, the moveable object, is also the object the focal action object. As a result, the engine made it much harder to code, extracting bullets from non-player characters than it did sending them into non-player characters. Philosophically, it could be argued that game engines themselves bias toward specific game mechanics and affirm the conventions of existing gameplay. This is a subject on which I have published previously and framed as the philosophy of software (Grace, 2009). It's also within the domain of captology (Fogg, 1997). To thwart the biases of the engine, the game was implanted by shooting invisible bullets at the target back to the era of computer games it aims to critique. Much like a *1942* cabinet the game is implemented in a stand alone arcade and presented in 4:3 aspect ratio.

The game was converted from prototype to final implementation in 2018. The game was recreated for modern operating systems, with updating resolution (higher resolution graphics), game operating speed, controls and some content. It was also converted from prototype to full release as an arcade

game, which involved manufacture and assembly of two distinct, arcade-style cabinets in which to play the game.

Figure 1.

The two final versions of the game are depicted in Figure 1. (above) and Figure 2. (pages 53-54) These final versions use custom hardware to create an arcade version of the game that harkens back to the era of computer games it aims to critique. Much like a *1942* cabinet the game is implemented in a stand alone arcade and presented in 4:3 aspect ratio.

While the game itself is a small gesture it aims to help both players and designees see the propensities for such play. It, like the other Critical Gameplay games, is designed to plant a seed that inspires a further exploration, research and implementation.

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