Understanding the Art Practice of Critical Gameplay Designs

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Abstract
The paper explores the recent growth in critical gameplay, an application of critical design to the production of computer games. This paper outlines play pedagogy and game rhetoric, relating critical design practices to the creation of computer games. It attempts to explain the art practice of critical game design, providing a brief digital game history and identifying prominent creative works in this relatively new space.

Keywords
Critical gameplay, critical design, art and games

Introduction
In the maturation of a field, nothing is more telling than the creation of its discontents. Critical Gameplay games are the logical next step in the extension of games into a mature expressive medium. Critical games are political, social, expressive and even philosophical in their address.

These games reflect an art practice that is both intellectual and visceral. It serves as an experiment, eliciting player response and seeking to understand why these alternative ways to play had not been demonstrated previously. Each of the games pursues a single hypothesis with resolved specificity. The games

ask questions about player values, gameplay heuristics and how we find entertainment. It recognizes the democracy of play, understanding that people not only like to play differently, but that playing differently expands the potential of games as expressive entertainment.

In design practices, there is a simple dichotomy that can be used to fundamentally describe the difference between affirmative design and critical gameplay design. This dichotomy divides designs by depth and breadth. Design depth is the continued exploration of familiar experiences. Design depth is the improvement of continued experiences, either incremental or dramatic. Design breadth is the exploration of unfamiliar experiences. First designs of any product or experience tend to offer breath, as they lightly explore a number of potentials. Later generation designs, seek deeper exploration of the same basic design concepts.

The trajectory of modern digital game design is largely rooted in deeper explorations of existing game verbs and mechanics (Fullerton, 2008). Under this model, comparatives evolve into superlatives. What was good gets a few models of better, and in time bests are created. Players do more shooting, or more jumping. If they are simulation games, designers may seek more realistic experiences in the pursuit of authenticity. A baseball game may incorporate a weather algorithm, or a car racing simulation may employ more complex physics. The central focus of this type of design is the continued affirmation of previous design decisions in an effort to make a better experience. This is the pattern of affirmative design (Dunne 2001).

The affirmative design model develops much like a plant grows. First an original experience sprouts into a full fledged game. Then subsequent designers employ algorithmic enhancements to that central concept, perhaps bifurcating one key notion or refactoring key elements like a fractal. The mechanics of moving through space move from 2D in Super Mario Brothers (Nintendo Creative 1985), to 3D in Super Mario 64 (Nintendo EAD 1996), and even add a 4th dimension (Blow 2008). It is often not until some element of a previous experience falls from these branches that a new and novel game rhizome evolves.

Consider the number of unexplored designs dismissed by employing this affirmative design model. The decision tree for design begins with an assumption that what existed previously is worth continuing. Each car racing game, places the player in control of a car instead of the many other possibilities. Is it not equally possible to create an engaging play experience centered on maintaining the cars for another driver? Is it not possible to make an exciting experience where the player does not swing a bat or pitch a ball, but instead manipulates the weather algorithm to support their team?

Critical gameplay, analyzes, reflects and responds to affirmative design by demonstrating the possibility of play and interaction ignored by convention. It fills gaps, reminds players of other perspectives and engages imagination through a different practice in creativity.

If affirmative design is trajectory driven, Critical Gameplay is without trajectory. Critical gameplay is a practice in which players are asked to play differently.

The goal of which is to expose players to experiences that highlight the relative absences in our daily gaming experiences.

Pedagogy and Rhetoric of Entertainment

To understand critical gameplay, one must understand how it intersects with pedagogy, entertainment and design practice.

Psychologists frequently identifying the value of play in delivering a safe space to practice skills and experiment (Millar 1968). In this framing, games are merely structured play spaces designed to meet specific goals. Where traditional games like Chess may analogize the battle field, playground games like tag may offer an opportunity to play both hunter and hunted (Crawford 1984). Digital play offers similar experiences. Digital games can simulate the experience of handling the soft suspension of a 1970's sedan or leading a squad of soldiers through a battlefield. The fundamental question for critical game research is what lessons are missing from the canon of gameplay experiences.

If games are inherently pedagogic, then there are several ways to investigate the lessons being taught. The first is to analyze common games, catalog the experience, and assess the lessons. This is the somewhat common practice of investigation into game content. It is well housed under the areas of game studies. Researchers seeking to understand violence in games, for example, have been actively involved in this type of cataloging research (Anderson 2004). The fundamental problem with this research is that it is highly content driven. It is inherently problematized by the act of mining content. Imagine the challenge of analyzing a literary canon by identifying the acts of violence in The Lord of The Rings (Tolkien 2004), The Complete Works of Shakespeare (Shakespeare 1996) and Crime and Punishment (Dostoyevsky and Gibian 1989).

Cataloging what exists does a better job of describing what is, than describing what is absent. If a person wants to add an addition to their house, it is nice to catalog the rooms they currently have, but it does nothing to speak toward the potential of the construction project. Cataloging is a retrospective activity, indicating what has been and is. If an addition is to be built, a person who understands the structures of homes and imagines the unrealized is hired. Building something new is not about cataloging; it is about knowing the catalog and realizing the new.

Another approach to investigating the lessons inherent in gameplay models is much more common among art and design. Instead of cataloging the experience and attempting to apply a scientific schema, artists and developers often create a collection of demonstrations. For critical games, these are functional experiences that not only highlight difference through contrast, they demonstrate other potentials. As literary authors or filmmakers, have previously exposed audiences to worlds they had forgotten how to imagine, game makers have the ability to re-imagine the way players play.

Secondly, while catalog approaches may provide exhaustive lists and somewhat compelling data, they often fail to offer solutions. Evidence merely reveals what exists, it does not provide resolutions. If we understand that games of violence are engaging, and we endeavor to inspire non-violent game play, isn't it

our responsibility to demonstrate how those non-violent games can work? More interestingly, if game design wants wider audiences, isn't it essential that wider play experiences be explored? Critical games are inherently pedagogic. They endeavor to teach by way of example.

For this reason, critical gameplay games are often not only pedagogic, they are also rhetorical. Critical gameplay games make an argument about what is engaging entertainment. They are often responsorial, calling upon a convention and then either exploiting the convention's own assumptions, or inverting them. At their best, they demonstrate the magic of creativity, turning a simple cardboard box into a spaceship. They do so, by converting what can seem like a stale set of experiences into something for which there is no precedent. Or, they can remind designers and players of the discarded potential they dismissed. Bugs are turned into play, like a tin can substitutes for a soccer ball. A pile of rubble becomes a play space again.

The lessons in critical gameplay may not necessarily be desirable, just as varied audiences find offense in conventional play. Yet, critical gameplay is by definition critical. It is self-aware. As an explorer generally knows which way they plan to head, critical designers are directed by something other than the current trajectory. Affirmative design follows the line of logic laid before it. Critical design, sets an uncharted target. Both design approaches may not always land where they expect, but they have distinct paths.

The Design Practice

Like many revolutions, the impetus of critical design is born from gaming discontent and relative outsiders. If game design is understood as travel down a straight road, critical gameplay design is the scenic route. The designers of critical gamepaly are not seeking to continue the trajectory; they are offering another way to get somewhere else.

These game designers are providing new paths and new vehicles for travel. If the fundamental unit of game design is the game verb, then these designers are most commonly investigating new verbs. Many independent game developers have offered alternative verbs, but what distinguished critical gameplay is that these game verbs critique game standards themselves. Instead of merely offering the ability to do something players have not done before, critical gameplay games reference existing game verbs as critique. They provide notable play moments, that are most novel to games players and least notable to people who don't play games. Just as an 8 sided die is novel to some, and a table top RPG standard to others, the experience of critical gameplay discerns the familiar and the unfamiliar.

In some cases, the most efficacious player of a critical gameplay game is one that has not been trained in conventional play. It is this situation, the benefit of unfamiliarity that highlights the pedagogic content of games and the potential power of critical gameplay. Where a good gamer is typically understood as one who knows all the conventions of games, this inversion of power is a central pivot in critical gameplay. Critical gameplay games may be games that are easier to play for non-gamers than gamers. There can be little better evidence of the pedagogy of games.

Like a good experiment, most critical gameplay games are very specific in their address. They do not attempt

to change everything about the way players play, but instead, they seek one or two points of investigation. Instead they may begin by questioning everything, but they end with one specific question.

Early Critical Gameplay Games

Like many historical first, defining the earliest critical gameplay games is problematic. It could be argued that Monolopy (Hasbro 1990) is an early significant critical gameplay. As a rhetorical game design, it is inherently designed to teach the travesty of landlordship (Orbanes 2006). However, this example fails to appropriately reconceptualize conventional play. All lesson-oriented games are not critical gameplay. it is important to understand that true critical gameplay is not only different, it is pedagogic and self reflective.

The space of contemporary digital games is perhaps an easier place to begin to identify appropriate critical gameplay. It is easier because it rests on an established canon of traditional and digital play. It is also easier because of documented exploration. These designers explicitly identify their designs as critical, providing the ever essential artistic intention. Much the way the writers of the theater of the absurd appropriately contextualized their work with both intention and a contemporary lens (Esslin 2009).

Digital games were moved toward critical gameplay when the work of groups like Molle Industria and Faber Ludens started their success as early as 2004. Molle Industria creates games that are socio-political. Games such as Faith Fighter (Molle Industria, Faith Fighter 2010), which re-contextualizes religious conflict into a classic fighting game, laid the foundation for critical game design. Interestingly the game is an inversion of critical game design. Instead of seeking to critique play, the game serves as a critique of the social-political patterns which in Molle Industria's terms, are game like (Molle Industria). The group continues to create a variety of games that fuel wonderful tensions between digital play experience and socio-political issues. The Molle Industria games are essentially social-critical experiences, not play-critical experiences.

The Brazilian group at Faber Ludens has also been engaged in design work that is both political and playful. Unlike Molle Industria, which often produces playful tensions, Faber Ludens creates somewhat discomforting interactions. The group investigates concept designs like the Lead Years, a student project which was envisioned as an opportunity to provide interactive contextualization of historical torture in Brazil (Faber Ludens 2009).

Both groups apply the medium as an opportunity to critique societal characteristics, which lays a foundation for players to understand the notion that critical gameplay critiques game characteristics. While many of these games are critical, they too are not critical of the way our society chooses to play. They are more commonly critical of socio-political practices and their likeness to games, than the practices of play as political rhetoric.

Digital Games in Critical Gameplay

The earliest intended critical games were created by the author of this paper in an ongoing project called the Critical Gameplay project and by Mary Flanagan. Flanagan published a book entitled Critical Play (Flanagan 2009), in which she takes a game studies oriented approach to cataloging critical play

experiences. One of Flanagan's most notable contributions to the design of critical gameplay is a Giant Joystick (Flanagan, Giant Joystick 2006). In this work Flanagan offers a new play experience by a simple manipulation of input. She creates an Atari Joystick so large that one player cannot control it by themselves. Instead, multiple players must cooperate and communicate to accomplish the general goals of common, existing games. This is critical game design more in hardware, than game design. Giant Joystick does an essential job of reminding players, theorists, and designers of untapped potential.

The Critical Gameplay project has visited Asia, Europe, and locations in North and South America. The current collection of eight games is well documented through varied conference proceedings and book chapters (Grace 2010). These games are at the heart of critical gameplay practice. A few of the games include:

- Wait: a game that rewards players for balancing seeing with acting

- Bang!: a game that allows the player to kill other players , but by killing them the player must endure a long interruptive experience which forces the player to review the fictive history of their victim.

- Black/White: A game that thwarts the common proactive of stereotyping non-player characters by making threats and non-threats look the same, but act differently.

Recently a new breed of developers have begun incorporating critical gamepaly practices into their designs. One Chance is a game by Awkward Silence (Awkward Silence Games 2010) that highlights and responds to the gameplay standard of multiple endings. The player has the opportunity to play this adventure game through the last few days of earth, but once players complete the game all options for other choices are eliminated. As the title suggests, there is but one chance to determine the game's resolution. It is this omission of second chances that is a direct critique of gameplay standards. If game design had taken a different trajectory, there would be nothing novel about committing players to a single resolution. Yet, it is this concept of only one chance that makes the game noteworthy.

Complimenting this experience is Zack Gage's Lose/Lose. As a self-declared art game, it endeavors to couple a play experience with real world consequence. When the player shoots an alien in the game, the game deletes a single, random file off of the host computer. If the player dies, the game deletes itself. It is this second property that strongly propels Lose/Lose (Gage 2009) into the critical game space. Most games have a pay to stay or learn to play algorithm. If player fails to learn and successfully employ the game verbs they are either subject to game end or required to deposit more money. Yet, Lose/Lose inverts this relationship by eliminating itself. Failing to play the game well, saves the player from harm.

Once Chance and Lose/Lose are obvious in their pursuit and not very subtle in their execution. They are big in their presentation, but small in continued potential.

Other critical games offer more potential for scale and provide a deeper experience.

A House in California (Elliot 2010) is a nostalgic game. It is a game that is personal in its origin, but universal in its experience. Designed as a kind of homage to Roberta and Ken Williams' Mystery House (On-Line Systems 1980) the game becomes critical at its game verbs. If one evaluates the dominant verbs of typical text and point-click adventures, the verbs are highly physical. The players are asked to act upon the world by taking, leaving, attacking, and others. Elliot provides new verbs, in a standard list of look, remember, forget, play, learn and catch. Remember and forget are much like a cerebral take and leave. Learn is a deeper verb, offering something beyond remembering. These three verbs, remember, forget and learn are at the heart of this critical gameplay experience. Consider how few games have ever afforded the player these actions. Then consider the rarity of a verb which conceptually, but not ordinally builds on the other. It is common to ask a player to punch then kick, but to punch through kicking (which is not the same as punching and kicking simultaneously) is rare. So the player is left with an important ambiguity. If I can remember and forget, what does it mean to learn? An even more important question also arises – why haven't other games employed these verbs?

The opportunity for critical play to make rhetorical claims has not gone unnoticed. Arizona Justice is a game designed (Social Activist Games 2010) as political rhetoric. The game is a fairly standard, small serious game about a political controversy in the United States. The game employs an aesthetic and similar mechanics of Nintendo Wii's Mii Match (Nintendo EAD 2006). However, it is designed to critique the expected nature of an Arizona state law allowing authorities to question people who look like they may be illegal immigrants. The player must determine which players are illegal immigrants as they parade down the screen. The game's primary game verb is ostensibly point and click to identify illegal immigrants. Yet, more careful analysis reveals that the games verb is stereotype and discriminate. While immigrants in the game can be any color, immigrants in the game are disproportionately non-white. The player is encouraged toward clicking on non-white non-player characters, driving the player toward the patterns that the game critiques in opposition.

Critical gameplay design continues, although it is clearly in its infancy. It is the authors hope that game designers embrace its ability to expand the experiences of play and potential to impart new rhetoric.

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