Rules, Play and Culture:
Towards an Aesthetic of Games

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GAMES AS GAMES

Chess and Doom. The Olympics and The American Gladiators. Pong, Pac Man, and Super Mario 64. Proliferating and mutating, appropriating and diversifying, games continually take on radically new and unexpected forms. The most hyped vectors of the computer age — virtual spaces, multiple identities, online communities, interactive narratives, artificial intelligence — find their most robust manifestations in the culture of games.

Yet serious efforts to develop a general understanding of games are surprisingly rare, even among the communities of people who create them. Among academics, games belong to many domains and to none. For anthropologists, games are artifacts enmeshed in the fabric of a particular culture. For psychologists, games are enabling devices in the narrative of personal development. Among math theorists, games surface as evidence of the intricate strategies and thorny dilemmas of game-theory, while scientists use game-like models to approximate real-world systems. And it hardly needs saying that the language of games supplies many post-modern metaphors of choice: “language-games” “just gaming,” “rhizomatic games,” etc.

The complex pleasures and experiences of games demand their own rigorous investigation. Unlike architecture, graphic design, and other design disciplines, game design lacks a critical discourse which identifies and explores games as designed and constructed cultural objects. This essay is one approach to understanding what games are and how they function. Because even the most innovative computer game is grounded in centuries of human play, we will resist the dazzling surfaces and vertiginous speeds of computer gaming to identify what digital and non-digital games have in common - a play-centric aesthetics of the game.

GAMES IN THREE PARTS

Games as Systems

A game is a system. General systems theorist S.W. Littlejohn defines a system as "a set of objects or entities that interrelate with one another to form a whole." The kings, queens, pawns, and other pieces on a chessboard are objects with definable relationships. Understanding and applying these relationships is the act of playing the game of chess. It is by playing the system of chess, enacting the interrelationships of the parts, that the whole emerges out of the parts.

But the game of chess is much more than the set of instructions needed to move the pieces on the board: the players' intellectual and emotional interaction during a game is also the system of chess. The media hubbub surrounding Kasparov's loss to Deep Blue: that is chess. The southwest corner of Washington Square Park where New York City players wager, talk trash, and square off across stone tables: that is chess too.

Games are abstract, mathematical systems. They are aesthetic and material systems. They are social, linguistic, and semiotic systems. And they are part of larger systems of history, politics, and culture. In order to address all of the diverse phenomena that make up our experience of games, we propose a 3-tiered model of understanding games as systems: 1) games as sets of rules; 2) games as play; and 3) games as culture. These categories are not absolute or distinct, but are theoretical modules that interrelate in a dynamic architecture of effects, in which boundaries between elements are often necessarily blurred.

Rules Create Structure

Rules are the formal structure of a game, the fixed set of abstract guidelines that defines the functioning of the game-system. The game of tic-tac-toe, for example, has a simple set of rules that regulates its play:

1) Play occurs on a 3 by 3 grid of 9 empty squares
2) Two players alternate marking empty squares, the first player marking Xs and the second player marking Os
3) If one player places three of the same marks in a row, that player wins
4) If the spaces are all filled and there is no winner, the game ends in a draw

Astonishingly, these simple rules have generated millions and millions of hours of play. Armed with these rules, any two players of tic-tac-toe can be assured that when they begin play, they will both be playing the exact same game. Whether played in front of a computer terminal or scratched in lines across a sandy beach, every game of tic-tac-toe shares a basic formal identity. In this sense, rules are the deep structure of a game from which are derived all of the instances of that game that are actually played in the real world.

The rules of a game are the laws that determine what can and cannot happen in the game. The rules are a deterministic system, absolutely closed and unambiguous. To play a game, players voluntarily submit their behaviors to the limits of the game rules. Once play begins, players are enclosed within the artificial context of a game - its "magic circle" - and must adhere to the rules in order to participate.

If you're playing Candyland, who cares which plastic piece reaches the final space first? The other players do, of course. They are the ones who, like yourself, have stepped into the game's magic circle, a shared space of play created by the rules.

Play and Complexity

A game is a system of rules. But once the rules are activated, once humans enter the system, play begins - and play is something altogether different than rules.

Play is the experience of a rule-system set into motion by the players' choices and actions. Within the strictly demarcated confines of the rules, play emerges and ripples outwards, bubbling up through the fixed and rigid rule-structure in unexpected patterns. A curious feature of games is that they embody a double-movement, at once fixed, rigid, absolutely closed Rule and its opposite: open, creative, improvisational Play.

During play, relationships between parts becomes a complex system, capable of producing intricate patterns. But perhaps the most important attribute of these complex patterns is their unpredictability. Uncertainty, produced by randomness or by a rich palette of strategic choice, is a necessary ingredient of successful gameplay. Just try to

imagine a game without the pleasurable suspense of an uncertain ending.

The rules that enable the complexity of play can be themselves quite simple. In the ancient African family of Mancala games, for example, play takes place in two rows of six bowls that contain the pieces of the game, traditionally stones or dried beans. Extremely simple rules determine what a player can do each turn: choose one of the bowls, scoop up the stones in it, and then redistribute them by dropping them one by one in adjacent bowls. The numeric and spatial relationships of the resulting distribution determine whether or not any stones are captured. Every turn, the board shuffles itself with surprising and unexpected possibilities. The bafflingly complex play of Mancala arises from the operation of extraordinarily simple rules.

The two classical games of Chess and Go provide further examples. Both are turn-based two-player strategy boardgames in which pieces are manipulated on a grid. The rules of Chess, however, are much more complex than Go: there are six different pieces, each with structured ways of moving about the board; there are numerous “special” rules, such as a pawn’s opening move, castling, and queening a pawn. By contrast, Go has only one kind of piece, and once placed on the board, a piece does not move.

Despite Go’s simplicity, however, it is mathematically a much more complex game. IBM’s Deep Blue proved that computers are now exceeding human mastery of chess. But despite a long history of Go software research, a Go program has yet to be written that can challenge an advanced player. Part of the complexity of Go has to do with the size of the grid, which is larger than a chess board. But the real complexity arises out of the linked interrelationships of the pieces. Each Go piece relates to the others through localized rules that are simpler than the rules of Chess; but when these rules are multiplied across the field of play, they produce a higher order of complexity.

Play as Experience

While part of play is the formal complexity that results from the interaction of rules, there is in fact much more to the phenomenon of play than mere mathematical strategy. Play includes the complete experience of the game that the

rules engender. This experience encompasses not only the strategic complexities of a game, but also aesthetic, psychological, social, and material experience: everything that happens to the minds and the bodies of the players when they submit to the system of rules.

For example, take the party game Twister, popularized in the United States in the early 1960s. The incredible richness of Twister's play does not arise primarily from any formal property of the rules. Instead, Twister's play emerges from the total experience of the game: the ritual of removing shoes, the acrobatic skill and spatial strategies required to succeed, the ambiguously sexual proximity of the players. Their bodies occupy at once a formal, physical, and social space, a space charged with strategic and sensual intimacy — in other words, an utterly dynamic space of play.

Games as Culture

However fascinating its manifestations, play does not occur in a vacuum. In order to understand the whole game, it is necessary to look beyond rules and beyond play, to consider how the game fits into larger cultural contexts. What kind of people play the game and why? What does the game mean to the people that play it and to those that don't? And what kind of symbolic and representational relationships does the game have to the rest of the world? These are the kinds of questions that are raised when we consider games as cultural artifacts.

Monopoly, for example, is a representation of 1930s Atlantic City, a Depression-era real estate fantasy, a miniature meditation on capitalism . From the facsimile property deeds and tiny plastic buildings to the drastic winning conditions demanding total market domination, to play Monopoly is to participate in its representation. A complete view of Monopoly would consider these cultural contours alongside the game's formal structures and play experience.

GAMES IN THE INFORMATION AGE

The Future of Games

So what about digital games? As increasingly sophisticated "screen culture," videogames resemble a form of mutant cinema. Yet, this surface similarity has obscured the

radical differences between the two media. This was a lesson hard-learned by companies caught in the “Siliwood” craze of the early and mid-90s, when mistaken attempts to apply the skills and methods of Hollywood to the world of electronic gaming resulted in CD-ROMs bloated with full-motion video sequences and lacking meaningful gameplay.

Meanwhile, the astounding growth of the Internet has created a renaissance in multiplayer gaming. In commercial terms, a robust multiplayer component is currently one of the most important factors in a game’s success. This fact is a good indicator of the close family relationship between digital and non-digital games: no matter how sophisticated their representational features, games live and die according to their qualities as social interactive systems. Like their non-digital counterparts, computer and video games can also be understood as rules, play, and culture.

A Case Study: Quake

Released in 1995 by Id Software, Quake is a highly successful computer game which has become an industry standard for realtime 3D gameplay and graphics. The game immerses the player in a first-person perspective, battling his or her way through a series of claustrophobic, monster-infested levels or competing head-to-head with others in networked multiplayer mode.

QuakeRules

The rules of Quake, as with any other digital game, are embodied by the actual computer code of the program. The code defines the exact parameters of the game-system, creates the world, sets up its laws, and determines the possible actions of a player. In Quake, the game rules literally create a space of possibility: the game's 3D rendering of a detailed, simulated space is Quake's central feature.

QuakePlay

But what makes the space of Quake meaningful are the actions of the players within it. The world of Quake is defined by formal structures of combat simulacra: lines of sight and ballistic fire, complex economies of health points, armor ratings, and ammunition counts. For all its naturalistically-rendered architecture, Quake space is not "realistic." Rather, it is made "real" only when it is traversed by the players and marked by their actions. In

single player mode, and especially in multiplayer "deathmatch" mode, Quake's blend of lightspeed tactics and hand-eye coordination has more in common with the cerebral athletics of tennis than the spectacular violence of Rambo. Quake and games like it have succeeded in creating meaningful spaces for play where the extravagant promises of virtual reality have failed. They have focused design on what participants are actually doing from moment to moment in the game, rather than on just the visual and kinetic sensations of moving through an immersive space.

QuakeCulture

Quake is an undeniably elaborate and ritualized spectacle of violence. But what is the best way to frame this violence? As culture, Quake is serious hardcore pulp, a self-consciously adolescent blood and gore frenzy. But should we consider Quake as the ultimate embodiment of male computerdom's phallocentric obsessions? Or as the refusal of the mess and
blood of the body to be excluded from the clean and infinite
perspectives of cyberspace? As the ironic product of a generation of young men with no war to fight?

For some, a Quake deathmatch is a communal and heroic Kurosawa-style samurai battle. For others, it is sick fantasy that anaesthetizes players to the horrors of real-world violence. Meanwhile, what should we make of Quake's "open" approach to source code, which has encouraged a thriving folk-culture of player-designers who build add-ons, levels, and full-scale customizations, blurring the author/audience divide?

As a cultural object, Quake cannot be easily reduced to any simple signifier. The point is that, as with all games, understanding Quake means acknowledging its formal structure, considering the experience of the players, and putting it into the context of its relationship to the world at large.

Serious Fun

For better or worse, the computer has introduced "interactivity" as a fundamental concept of human thought and action. In the global digital networks whose decentralized threads sketch out the ambiguous contours of the next century, every encounter - political,

recreational, economic, aesthetic, sexual - becomes a form of interactivity.

Games are among the most ancient and sophisticated forms of designed interaction. And as reality increasingly dovetails with the virtual, games have a tremendous amount to teach us about building inhabitable and meaningful social spaces.
The game designer becomes a model for the architect, educator, scientist, artist, scholar, and others who invent and investigate the world.

Above all, exploring the experiences of games means taking fun seriously. The system we have sketched out has a certain kind of pleasure at its core. The multivalent satisfaction of playing a well-designed game is a sensation that can only be experienced through actual play and engagement. The pleasure of games is not a simple pleasure, but one that operates simultaneously in the rules, play, and culture of any game experience.

How far can we take this pleasure in games? In what new and strange forms can it appear? And how can this pleasure be made richer, deeper, and more complex?

What is the future of serious fun?