Situational
Game
Design

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Introduction

G AMES ARE INTERACTIVE. THERE'S a give-and-take to playing a game that isn't present when we read a novel or watch a movie or listen to a piece of music. We make a move, and our opponent (or the game itself) responds, and that response affects which moves we make in the future. The outcome of a novel is predetermined; we can't change how it ends. But the outcome of a game remains in question right up until the final move, and the moves we make along the way determine what that outcome will be.

Because interactivity is so central to games, it's not surprising that a great deal of game design theory is focused on how to design good interactions. How do you structure your mechanics to create a feeling of agency? How do you write rules that offer challenging choices? How do you provide meaningful feedback? How do you create a satisfying sense of progression and accomplishment? These are all important design questions, and they're all grounded in the notion that it is primarily the quality of a game's interactions that determines its worth as a play experience.

However, while interaction may be fundamental to games, games are more than just interaction. We know this because many games feel playful even when we aren't interacting with them. The most obvious example is chess. In a game of chess, there are often long intervals between moves. And yet, even though our interactions are sporadic, our feeling of play is continuous. Playing chess doesn't consist of long stretches of boredom punctuated by occasional flurries of playfulness. Rather, a sustained feeling of playfulness spans the intervals between our interactions. Making moves is an essential part of the experience of playing chess, but if we want to understand how it feels to play chess, we also need to understand

how play unfolds when we're not moving. We need to understand non-interactive play.

Non-interactive play is easy to observe in turn-based games, but it shows up in other types of games as well. For example, in a puzzle game like *The Witness*, we may spend several minutes holding still and thinking. When we finally do interact with the game, it's merely to test our solution to see if it's correct. The play value of the puzzles in *The Witness* lies not just in the interactions they afford, but also in the opportunities for rumination they present.

A stealth game like *Metal Gear Solid* (*MGS*) offers similar opportunities for non-interactive play. Sometimes, the best tactic in *MGS* is to watch and wait—watch to learn the patterns of the guards, wait for the right moment to run or attack. These intervals of watching and waiting aren't boring—they're often the most intense and rewarding parts of the game. Combat, when it does occur, is less a game in its own right, and more a way of validating our choices during the non-interactive stealth game that preceded it.

Horror games offer many of the same non-interactive design challenges as stealth games. The play of a horror game exists largely in our imaginations. What makes a game scary is less a matter of what it does to us, and more a matter of our anticipation of what it might do. The interactivity of the horror game *P.T.* is limited to opening doors, walking, and looking. We have control over the pace and order that events unfold, but we're unable to change the overall flow or outcome of the experience. Indeed, it is the very inevitability of our doom that makes the game effective. We know that awful things lie ahead in *P.T.*'s claustrophobic hallways, but, horrifyingly, we lack the agency to avoid them.

Even games that seem action-packed often contain fleeting bursts of non-interactive play. We hesitate for a moment in the corridor of a first-person shooter, considering which enemies might lie around the next corner. We use a long section of straight track in a racing game to prepare for the hairpin turn we can see approaching. We linger at a safe spot in a platform, estimating the timing and risk of our next series of jumps. The fun of these games comes not just from the moments when we act, but from the moments of stillness that proceed them.

We can draw an analogy between interactivity in games and the cut in cinema. Cuts allow a cinematographer to do things that a theatrical director can't. Images can be juxtaposed in meaningful ways; the narrative can leap backward or forward in time, allowing the audience to imagine what

must have happened during the missing interval. The cut is a powerful aesthetic tool and a fundamental, defining characteristic of film as an art form.

But, films are more than just sequences of cuts. The cut is a thing that a film *can* do, but it's not a thing that a film *must* do. A film doesn't cease being a film during a long continuous shot. The quality of a film isn't determined by how many cuts it contains. The cuts in a film are strategically deployed to produce particular effects; they're not sprinkled around at random just to keep the film from feeling like a stage play.

So it is with interactivity in games. Interactivity is a thing that a game *can* do, but it's not a thing that a game *must* do. A game doesn't cease being a game if it contains long stretches where the player doesn't interact. The amount of interactivity in a game doesn't determine how good it is. Interactivity is a powerful tool that can be strategically deployed within a game to produce particular aesthetic effects, but it's not the entirety of the play experience. Sometimes, the most playful thing a game can do is hold still.

THE PROBLEM WITH WINNING

There's another way that games differ from other forms of entertainment: games are winnable. The rules of a game specify an arbitrary goal that we're supposed to try to reach, and, as the game unfolds, our moves are made with that goal in mind. Good moves carry us closer to victory, and bad moves carry us further away.

This is true whether the game is competitive, cooperative, or a solo experience. Sometimes, we may work together to try to accomplish a single, shared goal, and other times we may have different goals and work in opposition to each other. But regardless of whether we are competing or collaborating, our moves are always directed toward satisfying the arbitrary win condition set out in the rules.

Books and movies and music aren't like that. There's no way to win a novel. When we watch a movie, we're not trying to work toward some specific ending. When we listen to a piece of music, we're not thinking about how to defeat our fellow audience members. Partially, this is because these mediums aren't interactive. Even if we decide that we want a movie to end in a particular way, there's no way for us to make that happen.

But, while winning and interactivity are related to each other, they're not inseparable. It's possible to have one without the other. A toy like a ball is very interactive—there are lots of different ways to play with it—but

it doesn't have a built-in win condition. There's nothing inherent in a ball that makes bouncing it a "good move" and throwing it a "bad move." If we want to build a game around a ball, we need to create other rules that impose a win condition on its free-form interactivity.

Furthermore, some books *are* winnable. Murder mysteries are books, but they're also puzzles. You win a murder mystery by solving the crime before the detective does. The novel isn't interactive—you can't change how it ends. But it does present you with a goal and the opportunity to work toward it. The pieces you move when you read a murder mystery aren't pieces on a board, they're pieces in your mind—suspects and suppositions and hypotheses. You're trying to figure out an arrangement for these mental pieces that fits within the evidence of text. A murder mystery is winnable without being interactive.

Just as with interactivity, giving the player a way to win is a thing that a game *can* do, but it's not a thing that a game *must* do. A game doesn't cease being a game if it's unwinnable. How difficult it is to win a game doesn't determine how good it is. Winning is a tool that can be deployed within a game to produce particular aesthetic effects, but it's not essential for a game to feel playful.

The most obvious example of this are tabletop role-playing games like *Dungeons and Dragons (D&D)*. The rules of *D&D* contain a number of explicit goals. Players are expected to stay alive, to accumulate treasure, to level up their characters—and these goals structure how much of the gameplay unfolds. Players try to make moves that maximize their success within this framework—they try to employ the most powerful attacks, discover the biggest caches of loot, seek out the most challenging monsters. Good moves are moves that carry them closer to these win conditions, and bad moves are moves that carry them further away.

But, sometimes, players deliberately choose losing moves. A player may charge into near-certain doom because they're playing a Lawful Good paladin who has sworn to protect the weak. A player may throw away a rare spell book because they're playing an illiterate barbarian who doesn't know how valuable it is. In addition to the explicit goals expressed in the game's rules, players possess a set of intrinsic motivations derived from their sense of narrative, character, and situation. And these intrinsic motivations also shape their trajectory through the play space.

So, play is more than just winning. Sometimes, play is performance—it's trying on different identities or creatively expressing your own personality.

Sometimes, play is exploration—it's poking around in odd nooks and crannies and experiencing the thrill of the unexpected. Sometimes, play is destruction—it's deliberately smashing things just to watch them fly to pieces. Sometimes, play is camaraderie—it's experiencing a sense of belonging with a team or a community.

All of these intrinsic motivations are present in every game, although often they can be suppressed if the game has strong enough win conditions. Just as anticipatory and interpretive play demand a degree of stillness, so performative and exploratory play demand a degree of aimlessness. If the player constantly feels pressure to move toward victory—if there's always a new enemy to defeat or a new challenge to overcome—then there's no room left for the elaborated imaginative riffs that characterize a good session of make-believe.

WHAT IS SITUATIONAL GAME DESIGN?

Situational game design is a design methodology that takes into account how play unfolds when the player either isn't interacting or isn't trying to win. It sees interactivity and winning not as foundational to play, but merely as two useful strategies for the construction of playful situations.

Most approaches to game design are *transactional*. They treat games as self-contained systems that stand apart from the player who is playing them. Playfulness exists at the interface between player and game. It emerges from the moves the game allows the player to make toward winning, and from the countermoves the game makes in response (Figure 1.1). If the player doesn't interact with the game, or if they're not trying to win, they're not playing.

Seen from this perspective, game design is about creating self-contained systems that offer clear goals, interesting moves, and useful feedback. Transactional design is *game-centric*. The player is abstracted away and the game is considered in isolation. With the player out of the picture, the game's quality is determined entirely by its formal system. Different players may play the game well or poorly, but the game itself is always the
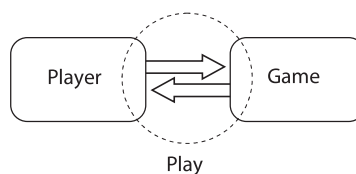

FIGURE 1.1   Transactional design.

same. It always offers the same challenges and the same opportunities for action regardless of who is playing it.

Situational design is different. It's a *player-centric* approach to design rather than a game-centric one. Instead of focusing on the *actions* the player can perform, it focuses on the *situations* the player can encounter. Some of these situations may invite interaction, but just as often they may invite anticipation, or interpretation, or introspection, and all of these ways to play contribute in their own way to the overall texture of the experience. Instead of assuming that all of the player's actions are directed toward winning, it recognizes the existence of a range of other motivations and provides a framework for analyzing how the game's mechanics support these other goals.

In situational design, the nexus of play lies not in the interface between the player and the game, but inside the player's mind (Figure 1.2). Some of the moves the player makes will affect the external state of the game, but others will affect their internal understanding of the game, or even their understanding of themselves and the world at large. The game's system has been expanded so that it is no longer coterminous with the game's formal rules. It also includes the attitudes, personal history, and intrinsic motivations that the player contributes to the experience. What this means is that even if different players are presented with exactly the same rules, they will nevertheless wind up playing different games. This is not because the game adapts itself to its players, but because the play space that each player occupies is determined by their individual knowledge and intent.

In situational design, play is *embodied*. Games are not playful in and of themselves. They only become playful when they intersect with a receptive player. Furthermore, there are no universal players. Each game has its own *assumed player* who completes it and makes it playful. Different games can be completed in different ways, and consequentially have different assumed players. If we want to understand how a game plays, it's not enough to study its rules in isolation. We need to take
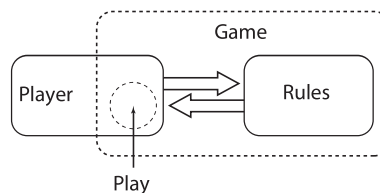

FIGURE 1.2   Situational design.

into account how its assumed player completes its system, and how the distance between the game's actual players and its assumed player can cause that system to break down.

By focusing on the player's experience and not the game's structure, situational design gives us a way to analyze how play unfolds during moments of both stillness and aimlessness. If play is something that happens inside the player's head, then we don't need to design systems that keep the player constantly busy. We can deliberately craft intervals where the game holds still, giving the player room to mull over the implications and ramifications of their situation. Or we can deliberately create play spaces that don't have any explicit goals, secure in the knowledge that the player's own intrinsic motivations will carry them forward.

MAKING MEANING WITH GAMES

The biggest advantage of situational game design, however, is that it provides an explanation for how games make meaning. We know that games can make meaning because some games change us when we play them. A trace of the experience lingers after the game is over—a new idea, a new emotion, a new way of understanding the world, a new way of understanding ourselves. We're different people than we were before we encountered them. So the question isn't whether games can be meaningful. The question is how this meaning-making occurs, and how we should go about designing games to make it likely to occur. And situational design gives us a way to answer both these questions.

The standard way to understand meaning-making is semiotics. Semiotics is grounded in a transmission model of communication. The speaker encodes the concept or feeling they want to convey (the signified) with an arbitrary symbol (the signifier). The signifier is then transmitted to the listener who decodes it to recover the intended meaning. There are, of course, many complications and elaborations to this basic model, but the foundational structure remains the same: Meaning is produced by the flow of signifiers from speaker to listener, and if we want to make an experience feel meaningful then we need to pay close attention to which signifiers we're transmitting.

This transmission model works well enough for deterministic media like books and movies. The sequential words in a novel can be analyzed as a stream of signifiers, each one transmitting a little bit of meaning from the author to the reader. The meaning that lingers after the reader has finished arises from a "piling up" of all the individual signifiers that were

transmitted during the course of the reading. We can thus identify particular images or symbols in the text and link them to particular thoughts or feeling that the reader experiences.

But the standard semiotic model breaks down when we to get at the heart of how meaning-making operates in games. Much of the meaning that we take away from a game is not a function of the signifiers that it transmits to us, but rather of the things it allows us to do. Games don't tell us things; they allow us to perform things. And that performance is where much of the meaning of a game lies.

If we analyze a game, we can sometimes identify images or symbols that function as signifiers in the standard semiotic sense—a stop sign in a game means much the same thing as a stop sign in a movie. But if we try to pin down the particular signifier that transmits the feeling of companionship that we experience when we play *Journey*, for example, we discover we can't, even though that feeling of companionship lies at the heart of what *Journey* means. *Journey*'s meaning-making is not explainable through the standard semiotic model because most of its meaning doesn't arise from a transmission of signifiers.

By situating play in the mind of the player, situational design provides a new formalism for understanding how meaning emerges from an aesthetic experience. Rather than meaning being seen as something that's transmitted, it's seen as something that's constructed. Some of a player's moves change the external state of the game, but other moves change their internal understanding of the game, and the effects of these internally directed moves can linger after the external game ends.

A game doesn't transmit its meaning to a player in a stream of encoded signifiers. Rather, the game's rules intersect with the player's understanding to structure a sequence of situations, and how the player responds to these situations in turn alters the player's understanding. This shift in understanding in response to the contingencies of playful situations is where the meaning-making power of a game resides.

So, the meaning of a game emerges from an accumulation of strategies. These strategies are a response to the structure of the game, not a recapitulation of it. *Journey* doesn't contain "companionship" anywhere within itself. It doesn't transmit "companionship" to the player through a coded signifier. Rather, it structures a space in which a move toward companionship is an effective strategy, and so after the game ends a lingering trace of that tendency toward companionship remains behind in the mind of the player.

The notion that players invent strategies in response to the challenges presented by games is nothing new, of course. But since most games are designed along transactional lines, these strategies tend to be limited to effective ways to win. If you treat a game as a self-contained system, then the strategies you develop in response to it will tend to be meaningful only within that system. Getting good at *League of Legends* may have some spillover into your day-to-day life, but most of the strategies you learn from playing it will only be meaningful in the context of it or similar games.

The power of situational design (from the perspective of making games meaningful) is that it encourages the designer to treat the player's pre-existing attitudes and feelings as part of the game system. As a result, a game can be structured around situations where the "best move" is not necessarily one that advances the player toward an arbitrary win state, but rather one that shifts the player's attitudes or feelings in satisfying ways. Such moves are more likely to have a lingering effect on the player, to be more personally significant than simply learning how to operate effectively within the walled garden of the transactional game.

In other words, if we design game systems to make use of a player's existing attitudes toward the world, then the strategies they adopt as they play the game will affect those attitudes. The game changes the player, not because it tells the player something new, but because it gives the player a space to inhabit in which a new way of being is an effective strategy.

SUMMARY

Situational design is a player-centric approach to game design and analysis. It takes into account not just the rules of the game, but the attitude of the player toward the game and the context of how the game is played. As a result, it's able to address design questions that transactional design normally overlooks.

Specifically, situational design is good for analyzing non-interactive play—the moments during a game when the player is engaged in either anticipation or interpretation instead of interaction. It's also good for analyzing non-goal-directed play—the moments during a game when the player stops trying to win and instead pursues some other objective such as performance or identity construction.

But, situational design is also good for analyzing how games make meaning. It's a tool for getting at how the moves we make during a game translate into the significance that we ascribe to the experience of playing. It provides an alternative to traditional semiotics—rather than seeing meaning as something that is transmitted from work to audience, situational design treats it as something that is constructed by the audience in response to the demands of the work.