

Game Design Essentials and the Art of Understanding Your Players

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of the theorize/hypothesize/experiment/evaluate process and still have not achieved their goals, the game has failed.

▶ **NOTE** Of course, all things are almost never equal. One difference may be in gender. Education research has suggested that an exploratory tutorial style is more effective with males than a cognitive apprenticeship (show-me) style. Females show the opposite preference. This seems to dovetail with the fact that casual social games often have a very hand-holding tutorial methodology while being more inviting to females. As a man, it very well may be that my views on effective game teaching are colored by my physiology.

### Criteria for Goals

I observed a playtest of a NASCAR game many years ago. I watched from afar as a middleaged man sat in front of a television with a controller in his hand. The countdown on the screen went 3-2-1-Go, and yet the car did not accelerate. The man looked at the controller with its 20 buttons, wiggled the joystick a bit, pressed some of the D-pad buttons, and shrugged. He could not get the car to move. After a few seconds, a graphic appeared on the screen: "Press R2 to Accelerate!" Either the man did not read the graphic or did not know the location of the R2 button. He gently placed the controller down, got up, and left.

Now we can sit and laugh at this man's overwhelming lack of skill, or we can try to understand what happened. The man sat down for a NASCAR playtest, so obviously he came to it with some preconceived notions of what happens in a racing video game. When the game actually started, he hypothesized that wiggling the sticks would cause the car to move forward. It did not work. In fact, it gave no feedback at all besides rotating the camera slightly. When he hypothesized that the D-pad had an up button and up meant forward, he experimented with that. He pressed it, and it changed the view of the heads-up display. At that point, it's likely that he was fed up with the game. He did not want to make any more experimentation loops. By the time the "Press R2 to Accelerate!" popup appeared, he was bored. He had not achieved anything. The game did not offer him a way to meet his goals, and so he quit.

I am certainly not insinuating that every mouth-breathing playtester has to be satiated by what the game has to offer. It is likely that the aforementioned man would never play a NASCAR game on his own anyway. But what it does show is that people set their own expectations of how systems work, and although they have some resiliency when those expectations are not met, there is a limit to how forgiving they will be.

<sup>1</sup> Ray, S. G. (2004). Gender Inclusive Game Design. Newton Centre, MA: Charles River Media.

This is the lesson of the story:

- Players must be able to figure out their own goals.
- Players must be able to understand what they can do to reach those goals without overwhelming burden.

Breaking down this lesson further, let me restate with emphasis—players must be able to figure out *their own goals*. Designers can set goals in the game for players, but nothing forces players to accept those goals as their own. If players do not like the goals that the designer sets, they try to play with their own goals instead or, more likely, they quit. *Desert Bus* from *Penn & Teller's Smoke & Mirrors* is a great example here. The game is an exercise in masochism. In it, players are driving a bus through the desert. There are no obstacles or other players, but the bus has a misaligned axle so it veers a little to the right. If the player can stay on the road for eight hours, he earns a single point and starts the drive back. The designers specifically made a boring, frustrating game that the players enjoy *not playing*. Players so loved the novelty of how masochistic it was to play the game that they have set up yearly charity events where players play marathon sessions of *Desert Bus* streamed online. The designers set one purported goal and the players subverted that to their own ends.

Some players eschew the stated goals of games and set goals for themselves solely to annoy and confound other users. This occurs across many genres, such as in massively multiplayer online role-playing games (MMORPGs). If a game does not offer goals worth achieving, these players create their own, to the rest of the community's chagrin. These game changers have a name: *griefers*.

The second part of this lesson is that players need a way to achieve their goals and they must be able to understand how to do so without feeling an overwhelming burden. You may notice that this rule is highly subjective and depends entirely on the individual player. Indeed, that is the lesson: Every player has a different tolerance for how much experimentation she will endure prior to reaching her goals before she quits.

Jesse Schell, in his book *Art of Game Design*, gives three criteria for goals: They must be concrete, achievable, and rewarding.<sup>2</sup>

- *Concrete* means a goal must be specific. But how specific? That's up to the player.
- *Achievable* means the goal must be able to be accomplished. But how difficult should it be? Again, that's up to the player.

<sup>2</sup> Schell, J. (2008). The Art of Game Design: A Book of Lenses. Amsterdam: Elsevier/Morgan Kaufmann.

• And that goal must be rewarding, which is the loosest of all the criteria and is certainly up to the individual player.

A great rule of thumb is that a player should always be able to cite what his goal is and be able to act upon it. If he doesn't know what his goal is, he will act aimlessly. If he knows what the goal is but cannot act upon it, then any interaction the player does have will not be in service of the goal. What goals the player sets can be influenced by the designer, but ultimately the goals used and the effectiveness of those goals are up to each individual player; it is largely this that separates a game from being "good" or "bad" on a personal basis. The designer needs to be aware of what goals the players set for themselves and then craft decision-making opportunities that allow different paths to reach these personal goals. Satisfying this objective for the wide variety of people who may play her game is one of the designer's most difficult jobs.

## **Solving Goal Problems**

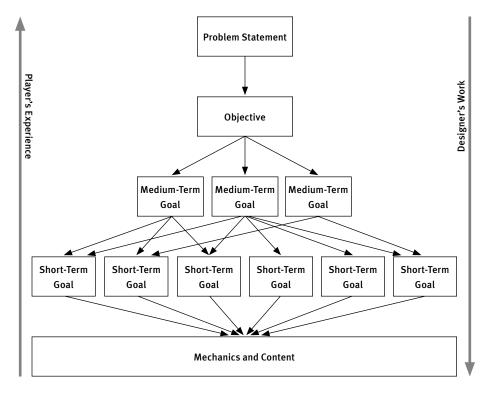
Players do not necessarily approach your game with the same goals in mind that you have. They read the elements of the game and set their own goals. Take the example of griefers in MMORPGs. These players specifically eschew the goals of the designer in order to satisfy their own goals of causing havoc to other players in the game world. In most games, the problem you set out to address is different than the goal that the player sets for herself.

To best attend to all possibilities, you must anticipate what goals your players will set. The player's goals are fluid and change when the elements in the game change. Often, the goals have various levels based on complexity and timescale. Let's take a look at three types of goals.

- **SHORT-TERM GOALS** are ones that players set for themselves for the immediate future. These are the objectives that the player is looking to complete next. These are things such as "defeat an enemy" or "summon a creature," and are usually simple elements that require only one or a few of the game mechanics.
- MEDIUM-TERM GOALS are more complex and usually require the player to complete multiple short-term goals to satisfy the medium-term goal's conditions. These are higher-level goals that may focus on a longer time frame, such as "collect all the sword fragments" or "return the flag to the base." Do not let the medium-term

- nomenclature trick you. These can have a long time frame. However, these are shorter in scope than the object of the game.
- The **OBJECT OF THE GAME** is the longest-term goal. Why is the player working toward the short- and medium-term goals? What is she looking to ultimately accomplish? This is the object of the game.

By figuring out these goals, the designer can then decide what structures need to be created to support these goals (**FIGURE 12.3**).



**FIGURE 12.3**Nesting of goal structures.

Players experience the game by starting with the mechanics and content, and working their way up to the object of the game. Designers, however, start at the top with the problem statement. They use the problem statement to create an objective for the game. That objective leads to medium-term goals, which leads to short-term goals, which suggest the mechanics and content.

This is not to say that all designers use this process. Some come up with a "fun" mechanic first and then, by experimenting, stumble upon an objective. It's possible to design this way, but it's more effective to use a more structured method to ensure that you have a unique, solvable problem that leads to a unique, interesting game in which the goals are in tune with the heart of the game. Check out the three games in the sidebars and how their designers structured the goals in each.

Also remember Schell's three important qualities of goals: Each goal needs to be concrete, achievable, and rewarding.

#### PROJECT GOTHAM RACING (2001)

PROBLEM STATEMENT: What if a racing game was determined by style instead of just speed?

#### SHORT-TERM GOALS:

- Get through the chicane.
- Drift through a turn.
- Finish the kudos streak without hitting the wall.

#### MEDIUM-TERM GOALS:

- Get first place in the circuit.
- · Beat the bonus kudos score.
- Unlock better cars.

**OBJECT OF THE GAME:** Complete all the objectives with a gold medal.

#### HEAVY RAIN (2010)

**PROBLEM STATEMENT:** What would it be like to "play" a movie?

#### SHORT-TERM GOALS:

- Find Ethan.
- Avoid getting shocked at the power station.
- Scan for footprints at the crime scene.
- Complete the quick time sequence.

#### MEDIUM-TERM GOALS:

- Collect all the clues by completing the trials.
- Reconcile the stories of the different characters.

OBJECT OF THE GAME: Solve the riddle of the Origami Killer.

#### **BRAID** (2008)

**PROBLEM STATEMENT:** What puzzles can be created if you can manipulate time?

#### SHORT-TERM GOALS:

- Move player atop ledges.
- Collect the puzzle pieces.
- Cross gaps.
- · Unlock doors.

#### MEDIUM-TERM GOALS:

- Assemble the jigsaw puzzles.
- Complete chapters.

**OBJECT OF THE GAME:** Complete all levels and rescue the princess.

One mistake that novice designers often make is confusing strategies with goals. For instance, you might say that "Use light to your advantage" is a short-term goal for *Alan Wake*. Although the player certainly does use light to his advantage to succeed, this is not his goal. The player's goal is to reach the end of the level (medium-term). In the short-term, a goal may be "Evade the monster by hiding in the light beam." This is a concrete goal that lists the evaluating conditions.

Likewise, many novice designers also make the mistake of listing goals that are vague. For instance, you may say that a short-term goal for *Guitar Hero* is to "Learn the basics." Although it's certainly true that you must learn the basics to advance, what exactly does this mean? How does the game evaluate that you have learned the basics? What is a concrete way the game can do that? Remember that the designer is not there to help the game make its decisions. Everything must be in code or rules.

## **Summary**

- Players often determine goals through experimentation loops.
- If players don't like the goals the designers have provided, they may create their own that are contrary to the desired play aesthetics.
- Every player has a different tolerance for how much experimentation she'll endure prior to reaching her goals before she simply quits.
- Players should always be able to cite their goal and be able to act upon it in some way.
- Goals should be as explicit and concrete as possible in order for the game to better evaluate whether the goal was achieved.