## Lecture 9: Play Balance and Online Games

## Advantages of Online Games:

Online game opponents are a little more exciting because you're dealing with other people and not computer AI. Online games force you to understand what play balance is (or is not) rather quickly. With online games, sometimes you enjoy the game for a little while, and then a "bully" comes online and blows the game for everyone because $\mathrm{s} / \mathrm{he}$ 's being unfair. It's an unwritten social rule that you need to play well with others online, and when you think about it, you realize that such rules are there to maintain a sense of overall balance. Most players will accept varying degrees of difficulty if the manifestation of the difficulty is vaguely perceived as fair. When unfairness is injected or perceived, however, the quality of the overall experience goes down rapidly. Balance is intended to prevent those kinds of deep troughs.

Game "difficulty" is an interesting concept. Lots of players instinctively blame themselves when things aren't going right in the game. The professor noticed in beta testing of games that players consistently blame themselves first, go back a couple of times, and then in the absence of anything tangible on the gamer's end, finally realize that it's the game. For good balance, the game creators need to keep a perfect tension between, "the game is messed up" or "maybe it's me." Making a balanced game is tough because you can't quantify what makes a good balanced game from the outset. And to add to the mix, the complexity of games can get large really fast, making balance all that more difficult.

In a well balanced game, you get the feeling that your input dramatically affects the outcome. The better you are, the deeper the play. This idea is key to having a good, balanced game. Unfortunately, play balance is still a black art that you have to tweak to get right. You won't get it right the first time around, and tweaking is the primary methodological approach and it's been that way for years. Computer programs can quantify but not balance-that requires human intervention. This is totally understandable. Computers are good for many things but invoking emotion is not (yet) one of them.

Take for example the game, Command and Conquer. There's a tendency to try different tactics to win. There are tensions in each game, but the mechanics are somewhat "tool set" oriented. How many tanks, how many helicopters, how many plasma cannons, applied where, how soon, etc. One of the nice parts of the tensions in the game, is that you can use the tool set differently. At a certain point, you discover something that works well, and you're already planning out how to make an improvement the next time you play even if during this current turn you die. RPG's aren't fun for casual gamers because they have a different goal. You have to experiment and fail often in order to determine the best way(s) to eventually win. This takes a great deal of time and emotional investment. RPG's are a communal exploration of an unfolding story. The people who end up being very good at RPG's have played such games for a long time. While these
games are very story intensive, you also have to remember what worked where, with whom, and in what order. RPG's are the most mature of existing genres and skew to older players.

If you wanted to make a truly terrible game, you would let the game continue along its merry way and not take into account any of your choices or movements. Not only would the player feel disenfranchised as soon as this became clear, but the game would become boring and unplayable as soon as the player figured out that they did not matter in the equation. Players need to feel their inputs mean something. They need to feel in control of their synthetic destiny. The real world is a difficult place and there are no user manuals to ensure we win. Games satisfy our inner Walter Mitty. They are but one more way that we fight back against what Yeats called the "brute blood of the air".

Games that are intentionally asymmetric are unfair, but if interesting, people keep playing. Design has many different kinds of endpoints. When we talk about design, role playing design by nature is very different from a railer. Humans like challenge. They just don't like easy defeat.

Let's go backwards. Chris Crawford has a matrix that makes sense in terms of thoughtful husbands giving birthday flowers. You have a situation where the primary variables are: wife's birthday ( wb ) and get flowers (gf). While there are some more subtle ways to play the game, the dominant strategy is clearly to get flowers all the time. That way, there's no way you'll miss the wife's birthday. Expensive, yes-but an effective strategy. Chris' point has to do with the tradeoff of time and trying to create optimized strategies at every juncture. While it can certainly be done, is it the most effective strategy in order to achieve the ends most efficiently? Think about that and let's discuss it later.

Another gaming strategy became evident for the game, Gridiron-the football game Bethesda created many years ago. Certain players realized they could get down the field easily if they ran out of bounds. Some people complained and wanted us to prevent that behavior. What do you say to those people? Well, if you want to break the rules, go ahead. As long as you don't care how you win, players can do whatever they wantincluding breaking the rules. It is not up to the designer or programmer to force you to be a good sport. The company has sold you the game. It is yours to use. Your own moral compass must guide you in how you choose to play or use it. There's a Greek play somewhere in that...

## Classic Games

Let's take a quick look at some of the classics:
Pong (1972) considered by many to be the quintessential beginning of videogamesexcept it wasn't for a couple of reasons. First of all, Ralph Baer was the first to actually create a computer game in 1951. But as for Pong, anyone who wants to explore this further can look up Willy Higinbotham at Brookhaven National Labs. His 1958 demonstration of what he called, "Tennis for Two" was the origin of Pong. Nolan Bushnell saw the game at the Labs' annual public demo, used the
money he made from "Computer Space" (the previous year) and the rest, as they say, is "history".
Space Invaders (1978) This was one of the first arcade games to capture the imagination of the general public. It became a huge success and had cheesy but great sound effects to keep the adrenaline pumping as time ran out.

Asteroids (1979) Asteroids, like Lunar Lander, used Newtonian physics in space, was easy to pick up, had many levels of difficulty and became a huge commercial success.

Pac Man (1980s)-this was the first cross gender game. Here is a little "inside baseball" story-the game was created by Toru Iwatani from Namco and was originally "Puck-Man" in Japan. But when Bally brought it to this country in late 1980, they changed the name to "Pac-Man" because they didn't want problems with what they feared would be defacement of the name.

Another interesting point about Pac-Man is that there was a time more women were playing it than men. This is noteworthy because it demonstrated that women enjoyed computer games, too. It was that, at the time, most games were not created with any consideration for what interested women. For more on this subject, read additional material by Brenda Laurel, or you can read something by Brenda Braithwaite as she is a good source as well.

Tetris (1986) Alexei Pazhitnov (Алексей Пажитнов) (also spelled Patjinov) was a Russian engineer who developed Tetris while working for the Soviet Academy of Sciences. He created Tetris with the help of two other Russian scientists-Dmitry Pavlovsky and Vadim Gerasimov in 1985 but it was released in Europe and the US a year later. Tetris was a true puzzle phenomenon and became a bona fide cross-gender, cross-cultural craze.

We could talk about many of the other classics but they all share certain qualities. Ask yourself why are these classics still fun to play? All of these games were very simple and they could be learned quickly. They each ramp up in terms of difficulty and when you reach your maximum level, you would watch others and practice breaking through to the next level. You can get into these games quickly and get out quickly - just the thing for a short mental break. The other types of games we've spoken about, such as adventure and RPG's, require a lot of time. Despite their differences, you can distill every game to a sine wave. Good games provide intermittent times between high points and relaxation. Periodicity changes as well - you can not keep adrenaline going $100 \%$ of the time. If you do, people won't be able to play for long. Variability is a desirable trait in every game. Do something, get scared or excited, achieve something, catch your breath a moment, and back into the cycle you go.

One more thing while I am on the subject, a superior character can't overwhelm other characters of the game. The odds should never be so uneven as to not have a prayer of
winning no matter what you do. There must always be a way to out think or otherwise overcome the other guy. Hope is always an ineffable but important component. Balance is crucial and separates the mediocre from the great. This is also a good segue into online games.

## Online Games

Most of the major things are

- Social interaction
- Human intelligence vs. AI
- Each person starts off equal (in theory).
- Networked play
- Thousands of potential players (this is both good and bad)

What are the disadvantages of online play?
Transmission delay (latency) is frustrating. The really good games appear to have no delay. Everything, of course, has the same delay, it is just that the perception of no or less delay is usually an elegant programming technique involving caching. I think the most annoying thing about online games is the misbehavior of others.

Certain players don't want to enter a game that has been on the market for a while. One of the reasons is that the non-player believes that $\mathrm{s} / \mathrm{he}$ will be smashed when trying to start by more experienced players. A solution would be to create a "bunny hill" of sorts. There's definitely a need for this practice area because online play can be very unfair.

## Design Considerations

What's a player's lounge? It's sort of equivalent to a bunny hill. When designing games, you have to look at time intervals. It's unfair for players to get to come in and skip the first round. There are rules in games. If you match member capabilities, it's disheartening for both sides of the curve when there is a large differential in player capability.

## Interactions

Interactions among the human players is what really makes online games fun for people. These include:

- Chatting, studying, organizing
- Moderated chat
- Active blocking of abusive players
- Teams
- Secret agreements (collusion)
$\circ \square$ Hard to control
The professor ended the class with an emphatic statement:
GRAPHICS AND SOUND DON'T MAKE GOOD GAMES. THEY JUST SUPPLY
EYE CANDY. EXCEPT FOR SHOOT 'EM UPS, A UNIVERSAL THEME IS THAT
GREAT GAMES HAVE GREAT STORIES-and user imagination is the key ingredient in every great game.

