MDA and Data design Analysis

Yu-Gi-Oh: it's t-t-t-t-t time to design!

This analysis will study the trading card game 'Yu-Gi-Oh!'. I will look at this game through the lens of the MDA framework analysing how data design has been used, in conjunction with the mechanics, to effect the dynamics and aesthetics of the game. When looking through the lens of the MDA framework it is important to understand how the framework indicates the way designers approach a game and the way players perceive that game. Taking this into consideration, I will talk about a mechanic of the game, the data design behind it, and the dynamic and aesthetic that players perceive this mechanic to be.

How to play

'Yu-Gi-Oh!' is a two-player turn-based duelling card game. The games core mechanics consist of phases that involve; drawing cards, playing cards down and battling(using cards) as well as deck building. The goal is to reduce your opponents life points to zero. This is done by attacking them or by winning on special win conditions.

'Yu-Gi-Oh!' is a strategy game, and relies on a good understanding of the types of cards and styles of play, there is a large amount of player agency with multiple move options each turn. This contributes to the competition aesthetic felt by players. It can be argued that there is a large component of luck in which card you pick out of your deck. I will discuss below how data design enhances this aspect of competition by adding a complex level of skill into deck building and predicting your next draw using statistics.

The core game aesthetics

The core aesthetics of the game felt by the player is dependant on the player, but there are some consistent aesthetics. Fundamentally when describing 'Yu-Gi-Oh!' it comprises of the following aesthetics;

1. Competition - idea of beating opponent and outplaying them
2. Fantasy - the card trading game and the manga/anime cannot be separated, they are both within the realm of pop culture and nostalgia. The cards allow people to enter the 'Yu-Gi-Oh!' universe.
3. Fellowship – there is a large community that help each other, discuss cards, tactics and a host of other 'Yu-Gi-Oh!' related topics. It is more than a hobby for some. On the other hand, for the casual player, the game aesthetic can be submission, a past time.

Card types

There are a few different card types, I will only be speaking about the standard types and the relevant data that they contain.

Monster cards:

Level: This determines how difficult a monster is to summon. A Level 1 to 4 monster requires no Tribute to summon. A Tribute is where you pick a monster on your field and discard it before summoning your bigger monster. A Level 5 or 6 monster requires one Tribute, and a Level 7 or higher monster requires two Tributes.

Atk**:** The relevant stat when the monster is in attack position.

Def: The relevant stat when the monster is in defence position. You do not take damage from battles involving your Defence Position monsters.

Spell and trap Cards: These cards have various affects indicated on the card.

For the monster cards the Atk and Def points are crucial in determining how powerful your card is. This mechanic of two different playing modes allow you to explore different play styles giving more agency. This increases the competition aesthetic. The level system is used to help balance the game, ensuring that a player does not have too strong a side in a single turn. The decided tribute values came from play testing and using that data to make an informed decision on how the game should be balanced.

Building a deck

In a basic game of 'Yu-Gi-Oh!' without any extra decks, you will play with a main deck of 40 to 60 cards. There is a deck building mechanic where by purchasing cards and arranging them in a manner that works for you, you customize your deck. You are also limited to having up to 3 copies of the same card in your Deck.

Although there is a level of luck in which cards you manage to get hold of, the data design has started already. Card production is not random, there is a rough probability of pulling certain cards in certain pack types. Well versed 'die-hard' fans will know how to maximise their probability of pulling a desired card, while a novice will rely on luck. This idea of rarity and collectability increases the aesthetic of fellowship for those that engage with it.

Within the deck building mechanic there is an option to go into a game with 40 to 60 cards in your deck. Leaving a window of 20 cards(which is either a half or a third of the total cards in your deck) allows a large variation in play style and option making. A higher card number gives you more options, but a lower card number allows you higher odds of pulling a card you want next. This creates a wider play dynamic. It allows for more play styles to be used and gives players more agency. From the players side of the MDA analysis this enhances the competition aesthetic.

In game data

There is a multitude of data sets that players and designers have to manage. With over 9000 unique playable cards, every game of 'Yu-Gi-Oh!' is different. Designers try have some form of control on these unique games by introducing rules and controlling certain data sets. As said above controlling the rarity of certain cards, and making stronger cards harder to come by, the designers are doing a form of game balancing. From the players side, this rarity introduces a desire to collect and search for powerful cards. Designers can also track the types of cards that are made and used, this can be a method used to balance how many very powerful cards people can have.

Understanding the deck you have built is key to a successful game. People have built decks where they have worked out the probability that they will pull out the cards they need to complete certain moves and hold their desired hand. There are even online tools to help count this probability. For the casual player they might not engage at this level, but the ability to remove luck and replace it with skilled deck building enhances the aesthetic of competition and fellowship(free online deck probability calculator as an example of fellowship).

Conclusion

Over the years 'Yu-Gi-Oh!' has grown into a huge game, with a large community filled with avid and knowledgeable fan base. Through these years the game has changed and shifted, with new cards

being introduced and new rules as well. In order for those changes to have been effective the designers relied on data design and collection, to get a better understanding of how the players interact with their game.

The use of data design is clearly seen to enhance the deck building mechanic by introducing the idea of rarity and probabilities of ideal card collections. It is also used to balance the game in an informed manor.