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TITLE /TOPIC: MDA ANALYSIS – COMMUNICATION DESIGN

DUE DATE: 05/04/2021

CHOSEN TOPIC: THREES: The Game

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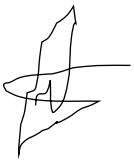
Signature: 

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After playing *THREES*, it is evident that it is a good example of a game that demonstrates communication design. Following the reading of Hunicke, LeBlanc, and Zubek, the *Mechanics, Dynamics, Aesthetics framework* can be used to analyse just how each component of the game works and their effects on overall functionality, specifically looking at its communication design. *THREES* is a 2D top-down video game creation of the small development company Sirvo, having been released on the 6th of February 2014. Firstly, the analysis will deconstruct how the player interacts with *THREES*, determining the controls of the game and how it affects game state and player reaction. It is important to note how the mechanics of *THREES* integrate into the dynamics that it produces. The controls create player behaviour, such as analysing the game state and making calculated decisions on their next move. This is done according to numerical gameplay that this analysis will further provide information and pictorial examples. Using communication design as a basis of analysis, the aesthetics of the game evidently indicate this information through simple UI (user interface). It is critical for a game to have aesthetics as it provides necessary visual information to the player, however this will be expanded thoroughly further into the analysis. The analysis will begin with the Mechanics and controls of *THREES*.

THREES Mechanics will be analysed according to the topic and context of Communication Design. According to Hunicke, LeBlanc and Zubek (2004, p. 1722), the definition of a Mechanic is "the particular components of the game, at the level of data representation and algorithms" (Hunicke, LeBlanc and Zubek 2004). Having this definition in mind, this can be applied to *THREES*. The player is presented with a 4x4 grid with a random beginning state. Movement, bearing in mind that this game was played on a PC at the time of this analysis, is only limited to the UP, DOWN, LEFT and RIGHT arrow keys. A player cannot move their numbers diagonally.

When a player moves, if their movement is valid, the number will merge and present a new number, calculated when two blocks with the same numbers come together. However, there is a catch. Players in the beginning must add 1's and 2's together to create a 3. If for example, the player moves a 2 block onto a 1 block, the new block will be a 3. The goal of the game is to merge as many numbers as possible into values of 3. The higher value of 3, the more points will accumulate when the player eventually runs out of moves. What is important to note is that numbers on the grid that are not coloured (white) need to have matching numbers to be able to be merged.

However, focusing more on communication design, mechanics are easily figured out because of player experimentation. There are only tips that pop up at the bottom of the screen. This can be seen in Figure 1 on page 4. A message also pops up in the text bar text explaining that players can move with their arrow keys. When a player does so, they witness what the consequence of pressing the key is and learn from it. Thus, mechanics are communicated through interaction with the game and the consequences of their movement. This can be learned over time and then manipulated into the player's favour.

Moving onto Dynamics, it is defined as the learned gameplay of the player. What can the player do to manipulate the system in order to win. With *THREES*, the player makes a calculated decision when playing the game. They need to combine 1's and 2's to make threes. Then, to mix the same number with each other. The player needs to not run out of moves or prolong the maximum times they can move in order to beat their previous record and set a new one. This record is what the player tries to beat in future rounds of the game.

The player is playing with the game's algorithm, which in evidence, they are calculating logically how to beat the AI. Within communication design, this information is given via the Aesthetics of the game. This includes the UI (user interface), colours and imagery used. The placement of icons is also a massive component of communication design.
The Aesthetics of the game are all the visual information that it provides. The blocks that have the number 1 on them are light blue, the blocks with number 2 are red. This is done because it communicates to the player which one will spawn next in the grid when they move. There is an outer icon on the top of the grid that tells which card will spawn next. The white blocks 3

are always divisible by 3 and are only merged with other numbers that are the same as it. This is learned when the player experiences the game. However, when the player does learn it, they will not forget it.

On the top left has a pictorial icon for the menu and has text underneath saying “Menu”. The same can be said for the Credits button, but this is on the right of the screen. The UI is simple, and the colours are plain. This is done because the focus of the game is the mechanics. It is not a game that depends on its artistic aesthetic to enhance gameplay, colours are only applied to communicate a specific piece of information to the player. It makes it easier to remember and identify when playing.

To conclude, the game uses communication design in its simple UI and the way the player interacts with the game. The player learns as they go but have small tips at the bottom of the screen to help them. There is a simple mechanic and basic colours are used to communicate basic information.

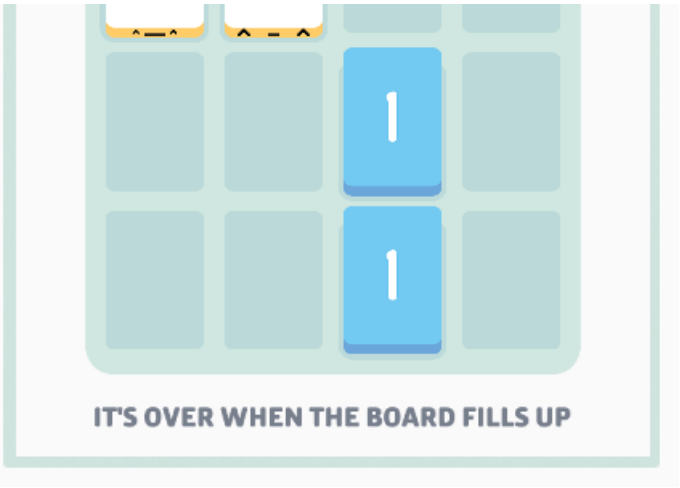

Figure 1: An example of a tip in THREES to help the player.

References

Play.threesgame.com. 2021. [online] Available at: <http://play.threesgame.com/> [Accessed 4 April 2021].

Hunicke, R., LeBlanc, M. and Zubek, R., 2004, July. MDA: A formal approach to game design and game research. In *Proceedings of the AAAI Workshop on Challenges in Game AI* (Vol. 4, No. 1, p. 1722).