## UNIVERSITY OF WITWATERSRAND

STUDENT NAME: Michaela Bussey

STUDENT NO.: 2090536

CLASS NAME: Game Design IIIA-2021-SM1

COURSE CODE: WSOA3003A

TASK: Assignment 3, MDA Analysis and Level Design

CHOSEN GAME: Spore (Maxis, 2008)

DUE DATE: 12 April 2021

WORD COUNT:

## PLAGIARISM DECLARATION

- 1. I know that plagiarism is wrong. Plagiarism is to use another's work to pretend that i is one's own.
- 2. I have used author date convention for citation and referencing. Each significant contribution to and quotation in this essay from the work or works of other people has been acknowledged through citation and reference.
- 3. This essay is my own.
- 4. I have not allowed and will not allow anyone to copy my work with the intention of passing it off as his or her own.
- 5. I have done the word processing and formatting of this assignment myself, I understand that the correct formatting is part of the mark for this assignment and that it is therefore wrong for another person to do it for me.

Signature:

Date: 04/04/2021

Unsigned submissions will not be marked.

The designing of a game consists of many parts, and the aspect of controlling how the player learns systems, providing fun and challenging the player is all a part of the game's level design. Further analysis of macro and micro level design will be applied to *Spore* (Maxis, 2008) using the Mechanics, Dynamics and Aesthetics framework (Hunicke, LeBlanc & Zubek, 2004). *Spore* (Maxis, 2008) follows the evolution of the player's creature through five different stages. In this essay the first stage, cell stage will be analysed, as this is where the game introduces most of the core mechanics which develop and change throughout the different stages.

The core mechanic in the game's cell stage is eating. The player is prompted to "choose your diet" between herbivore and carnivore, and when launched into the ocean from an asteroid as a cell, the game clearly states, "As a cell, your mission is to eat, grow and evolve.". The cell is initially surrounded by pieces of meat and plants, and through movement controls the player can swim to collect their chosen food type. The player is only given one option as to not overwhelm them. After this, the scene expands and introduces other cells — specifically herbivores first. This micro level design intends to deepen the player's understanding of the eating mechanic further by slowly introducing other cells and what can be eaten or can eat the player's cell. Carnivores easily understand through dialogue prompts that they can attack other cells, and the micro level design enables this learning process in a safe environment first. As a herbivore, they are initially introduced to other herbivore cells too, and can see that they will not attack the player.

The second core mechanic is growth, and as the cell eats more, they will gain DNA points indicated by a progression bar. Growth is an underlying passive mechanic to eating and is a great example of conceptual level design, as eating becomes more nuanced, and growth challenges the player's understanding of eating. After certain amounts of food, the player will be introduced to additional mechanics and enemies — making use of good micro level design as after another mechanic is introduced, the player is challenged to use both skills at once. Killing other cells, breaking meteor parts or seeing a giant cell kill a small cell will occasionally spawn a badge which unlocks a new cell part. After the first occurrence of this, the game shows the player how to mate with a same-species cell, and evolution is introduced.

The player can spend their DNA on a range of parts and can shape how they wish to overcome enemies. One can choose to evolve to an omnivore or convert to the opposing diet, add spikes, and poison as defence, or increase speed to avoid enemies. The eating mechanic has now been optimized through adding parts that better combat the enemies as the cell grows, but the DNA points prevent the player from adding everything at once to easily overcome the challenge. After reaching the end of the progression bar, the cell develops a brain, and the level is completed and it transitions to the creature stage.

Macro level design is seen through how the introduction of mechanics are spread out, carefully paced and ordered to allow the player to grasp each mechanic alone, then subsequently all together to keep the player engaged. The ability to edit the cell is only unlocked once the player has grasped the movement, eating and growth mechanics, as well as after they have encountered both herbivores, carnivores, and giant cells. This macro level design choice shows how the developers have provided the player ample space to grasp these mechanics before adding complexity and increasing difficulty.

In terms of the game's dynamics and level design, the player's choices when evolving, grant them autonomy through the freedom of what parts to purchase and where to place them. Strategic purchasing of parts enables a tactical element, and with the progression markers spread out across the progression bar, they unlock new mechanics for the player to explore at their own pace. Overcoming the difficulty increase is done through the lack of consequence from dying, allowing the player to dynamically test which play style they prefer, whether that be offensive, defensive or a little of both.

The aesthetics of the cell stage's level design is intentionally made to make the player feel intrigued while not being overwhelmed due to the well-paced progression. Since cell stage is the very first stage, the developers intended for the player to not encounter too many difficult choices or complex mechanics. With only three main mechanics, the player can feel at ease for the most part, while experiencing a sense of fun through the other cell interactions and gameplay progression.

Spore (Maxis, 2008) demonstrates an intentional and well-designed sense of good level design, with the player feeling engaged and sufficiently challenged through the integration and introduction of core mechanics. Although the cell stage's mechanics are not very complex, this is to make sure that they fully understand and master these skills before progressing onto the four other stages.

## References

Hunicke, R., LeBlanc, M., Zubek, R. (2004). MDA: A Formal Approach to Game Design and Game

*Research.* In Proceedings of the AAAI Workshop on Challenges in Game AI. Available from: <a href="https://users.cs.northwestern.edu/hunicke/MDA.pdf">https://users.cs.northwestern.edu/hunicke/MDA.pdf</a>

Maxis, (2008). *Spore* [Video game]. Microsoft Windows, Macintosh operating systems, Classic Mac OS.