## **Hyemin Chung**

## **Revised Project Proposal**

In the beginning of the class, we were asked about the metrics and the attributes of engagement, and many students mentioned unpredictability or uncertainty as one of the important factors of engagement. It seems true that unpredictability is important in engagement, because people could feel bored with predictable things. However, we can find lots of disproof of the theory. For examples, many movies include many predictable factors – we all know who will be falling in love with whom, and who will be killed by murderers and when – and we enjoy them. Thus, I think there is an important role in the relationship between predictability and unpredictability in engagement.

In the previous proposal, I proposed to research about roles of predictability and unpredictability in engagement with stories. I planned to make several stories – a predictable one, an unpredictable one, and a balanced one – and to evaluate the engagement levels of readers for each of them. However, it is very hard to make the stories which are quite suitable for their own purposes and, at the same time, have similar fun factors except predictability. Also, it might be difficult to evaluate the engagement level of each story.

Thus, now I am thinking about designing the experiment using computer games. The game is to avoid enemies which are falling with four patterns.

- A totally predictable pattern. The enemies are falling with a fixed pattern which can easily be recognized and predicted.
- A totally unpredictable pattern. The enemies are falling at random.
- A balanced pattern I. The next falling enemy is generally predictable, but always slightly different from expectation.
- A balanced pattern II. It is almost same with the first pattern, predictable one, but sometimes there are random falling enemies.

To maintain the difficulty of all the four games, the speed of falling enemies of each game is set differently to make the average score of each game same.

At first, participants of the experiment are required to play every game for 3 minutes per each to know the characters of each game. And then, the participants can play the games freely for 20 minutes. In the manner of that engagement cause people to do the thing again and again, each game's level of engagement can be evaluated by how many times it has been played.

A basic structure of the experiment is not changed from the previous proposal, but this version of the experiment is much clear to modulate predictability and unpredictability without changing any other factors, to get numerical results, and to analysis them.