## Game Development and Theory of Fun

I was reading this book in Russian translation, so many quotes may be a bit misinterpreted.

Reading this book, I found several interesting things that I wanted to elaborate on. Firstly, there is a philosophical debate on what is the game and how it matches the knowledge I have already through my observations.

I liked the description on how the brain works. Throughout my life I noticed my changing behavioral pattern. I also tried slowing down the thought process and to my surprise it worked. Author states, that the brain tries to find the pattern and explore it. As I observed, my brain does so because of necessity. "There are 3 stages of thinking". That is also what I explored in my thoughts. So, to mix it up in some meaningful string of thoughts, let's match that. From what I noticed, the brain really cuts down the information into pieces, because our memory storage is non-linear. I found out, that it is quite limited and more so, there are priority groups. Brain does pattern matching because it saves resources for computation and storage. If we could decompose something complex there is a high chance, that we will know what it does, and how it does that. Our mind works by interpolating the key factors and extrapolating behavior. Knowing that allowed me to make up for small memory compartment with associations and interpolations, that greatly reduces the workload needed for learning new information.

The second idea I caught on is sensory load. Namely the deprivation and overload. There is a variety of aspects to it, and I'd say there is a certain range for every man of what their sensory capabilities are. For me those resistance bars are very high for an extended period for deprivation and quite low for overload. I tend to be very resistant to the deprivation, since I spend a lot of time near the computer with only keyboard sounds, trying to solve puzzles called work tasks. But I also get super overwhelmed when I get to a party of some sort, even the small one.

Rewinding the chapters there is a 2-year crisis concepts, and other interesting observation about kids' psychology. Those interest me because I would like to have kids soon as well, and it was a small sneak peek inside the head of a child. The whole notion of game as learning instrument is very common amongst the psychologists. And for me the game is much more then child's play.

But the book is about games, so there some nitpicks for games themselves:

- Chaos is not an option, there must be a pattern within aspects of the game.
- The pattern should not be too easy, because that becomes boring. (unfortunately, Wolfenstein 3D)
- The game should not be super deep, many mechanics, if not presented gradually may overwhelm (hello Rimworld)
- Making game hard too fast leads to frustration (Dark souls?)
- Making it hard slowly makes for boring play (Wolfenstein: The New Colossus)

There are some thoughts on archaic aspects of the modern games, that persist to this day. I am a kid of the 90s and the games of that era are super straightforward, even without deep lore. Like John Carmack once said: "Story in a game is like a story in a porn movie. It's expected to be there, but it's not that important". However, the game development took a U-turn and started to produce games with a deep meaning to them. Several aspects remained the same even in modern games:

- Blind following orders (Call of Duty)

- Hierarchy and Black-and-White separation (Avatar game from Ubisoft)
- Use of force to solve problems (DMC, Nier Automata, Avatar, name a few)
- Xenophobia (Avatar)

>> Don't play avatar, wasted money on graphics.

Another text that caught my attention was: Usually people tend to choose games they are strong in. But logically they should be exercising in what they do worse. The whole idea is that the game is projection and fulfilment purpose is the main one among the players. That's why no one plays something like chemistry molecule designer or math problem solver simulator (Baldy is exception). Also, we like to make the game or any situation for such more predictable so any reasoning for that is pointless.

Cheating is breaking the pattern of a game. Our mind wants to make shortcuts. Cheating and exploiting the loophole are two different things.

Not much I can say about that chapter, but searching exploits is embedded into our minds. You would always want to take more out of situation, make less effort for more profits. That is the main idea behind any business and companies nowadays.

How to make games with learning experience:

- Variable feedback: unpredictable result of the match
- Mastery problem, qualification
- Loss cost

As for me, learning experience is better served gradually, although losses are inevitable there are some rules to that. They feel the same as for childcare:

- Don't punish efforts but induce them.
- Make gradual steps. You don't want to make 4096 decision paths with unpredictable results.
- Make winning countable, this may be number of figures on board or number of cards.

Even though we like the education process, and from early childhood we learn through games and our brain tells us to learn our entire life WE ARE LAZY.

I like this quote. All universe is lazy, everything is trying to consume less energy. We are no different. But on social level I'd say mostly we talk about optimizations of patterns. We are less interested in learning new things if we have pattern in our mind that is already requiring us less energy just to follow. And the meta optimization is energy consumption.

From that moment there are tables of activities, and later philosophy, ethics, and hierarchy. But I already wrote a lot. I'd like to discuss the matters about social and psychological state of games, but that might turn into a book of its own.

I rate this book 6.5/10. Easy to read, a lot of thoughts on how everything works. But I'd say it's more a tale or philosophy, than something to look up to.