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# Genetically Enhanced Possibility Spaces

## Depth and Coherence in Bioshock

DORIS C. RUSCH

As Henry Jenkins once noted in his weblog, it is considered all right to spoil, as long as you give fair warning. But be assured, this review about the science fiction first person shooter *Bioshock* will not contain any spoilers. It is less concerned with the development of the storyline than with the multifunctionality of its game elements and the question how this constitutes depth and coherence of the game-play experience.

The game begins with the player experiencing a plane crash, that she must immediately struggle to escape from. But one is in the middle of the Atlantic Ocean and there isn't exactly a range of choices to turn to for rescue. But wait, there is a lighthouse! You swim towards it, enter a biosphere and dive into the heart of an underwater city called "Rapture". Rapture has no similarities to what might be expected of an underwater facility, but, in the words of my colleague Matt J. Weise, it looks as if 1930's New York sank to the bottom of the Ocean, complete with skyscrapers and luminous advertisements. The scenery is dark and foreboding, but turning back is not really an option and so you might just as well let it take your breath away. *Bioshock's* graphic design is gorgeous, the level of representational detail fantastic. Once you get your breath back, and take a look around your new environment, you can almost taste the salt on the air. The feeling of "being there" and immediacy is very intense in this highly dramatic videogame. This is not your average first person shooter. It is something more.

*Bioshock* is a game that has managed to make its fictional context matter to the player throughout the game, to couple rules and fiction in a way that feels natural and takes advantage of the game's premise without using lengthy cut-scenes. But how is this achieved? It will be argued that *Bioshock's* experiential coherence and depth is due to the multifunctionality of its various game constituents rather than a particularly fine-grained simulation of the game-world.

Within the first minutes, *Bioshock* raises two key questions for the player:

1. What is the secret of this underwater city?
2. How do I get out of here?

The first question is directed at the fictional context of the game. The second question concerns the actual game-play. The beauty of *Bioshock* is that answering one of them goes hand in hand with answering the other. None of these questions can be ignored to successfully play the game. Progress in uncovering the dark secret

of Rapture and its mutant inhabitants quite naturally brings about progress in character development and in the game as such.

The underwater city of Rapture is the nightmarish result of mad capitalist Andrew Ryan's dream to create a world without governmental regulations and moral restrictions, where every man "is entitled to the sweat of his own brow", and where money can buy you beauty and superhuman powers through surgery and all kinds of genetic enhancements. This is the premise of the game with all design decisions appearing to be its natural and logical result. Since there obviously is no room for modesty and content in a place like Rapture, the greed for ever more power and beauty has caused the genetic experiments to get out of hand, turning the formerly brilliant inhabitants into xenophobic monsters with superhuman abilities. Et voilà, the nature of the player's enemies is plausibly established. That Ryan's Utopia would not have been tolerated by the rest of the world further explains the fact that it was built out of sight, underwater, which also motivates the player's need to face its dangers after the plane-crash rather than just turning away from them and running.

The game's premise defines the aesthetic appearance as well as game-play affordances of its game-spaces. Having been built for and by the genius minds of their time in the 40's of last century, Rapture features a luxurious and stylish environment that due to lack of maintenance and its isolation from the rest of the world has obtained an anachronistic, ramshackle look. The multifunctionality of *Bioshock's* game-spaces play a particularly relevant role in making the game-world and its various elements tangible to the player, thus creating experiential coherence and depth.

Apart from providing considerable voyeuristic pleasures, the game-world acts as narrative space (see Jenkins and Squire (2002)) that both raises and answers many questions. Elaborating on the capitalist motif, advertisements and vending machines are used as essential props of the narrative game-space, playing an interesting double function in the hypothesis-building process that always includes both of the earlier introduced key questions. On the one hand advertisements and machines hint towards the (genetic) experiments that have been conducted in Rapture, e.g. ads for cosmetic surgery, images of people who illuminate light bulbs with their bare hands, or vending machines that sell Gene Tonics or Plasmids. Thus, these props provide background info about Rapture's dark secret and explain the grotesque appearance as well as superhuman powers of its citizens. On the other hand, they offer clues for the abilities the player herself (or rather her avatar) must acquire over time if she is to get out of this nightmare alive. Speculating about future abilities fosters further hypothesizing about coming obstacles and enemies, keeping the player guessing about what the narrative implications of these spaces will hold in store for them game-play wise.

The machines are actually worth a short excursion from the macro level investigation of *Bioshock's* multifunctionality of game spaces to the micro level of the multifunctionality of certain elements of the game-world. Apart from fostering hypothesis building, reinforcing an industrialist / capitalist ideology, offering power-ups or, in case of fighting machines, presenting a threat to the player, the machines offer an additional function: after they have been stunned with an electrobolt, they can be hacked by the player. This provides an extra game-play challenge in form of a mini-game that simulates the process of redirecting the current flow of the machine. A

successfully hacked machine will grant you favors. Depending on the kind of machine you have hacked, a fighting machine or a vending machine, it can become your ally that will from now on attack your enemies, or it allows you to buy products for a lesser price. Both can be crucial for your survival when pressure is high and your resources are low.

Back to the macro level: The situation that Rapture is quite literally falling apart due to its inhabitants' preoccupation with their various obsessions is not only an atmospheric asset, but it is also employed as a game-play affordance that takes into account the special abilities the player acquires over time. There are many areas in the game where water has found a way inside and the combination of the wettest of all elements and the player's ability to shoot electrobolts promises an electrifying game-play experience. But water can also freeze and thus the incinerate ability comes in handy, e.g. letting you melt away blockages.

The alignment of possible genetic enhancements (e.g. electrobolts) with the aspects of the game-world that can be interacted with (e.g. water, machines, etc) makes the game-world very tangible while also enabling a dynamic playing style that encourages the player to seek individual strategies to counter enemies. Again, the game space can become a powerful ally (or antagonist) in the player's struggle for survival. Seeking out puddles to lure groups of enemies into so they can be eliminated with one electrobolt aimed at the water, or checking the surroundings for oil barrels that can be blown up with a fire bolt, thus quickly voiding the area of numerous foes at once, keeps the player very much aware of her environment, preventing it from being reduced to mere scenery.

*Bioshock* does not offer an extremely detailed simulation of the game world. It only creates the illusion of one. Only very specific fictional elements have been integrated into the rule-system, such as navigable space, a limited range of searchable containers (desks, ashtrays, trashcans, corpses), a specific range of consumable goods (chips, wine, liquor, cigarettes and various Plasmids and Gene Tonics), money, a limited range of weapons that is complemented by certain objects that can be thrown, a range of various machines, specific physical characteristics of the surroundings such as water in its various states of aggregation and flammable material such as oil and, of course, the enemies themselves. What creates the feeling of depth, coherence and immediacy is the multifunctionality of each of these elements. There is not one variable, be it fiction or system related, that serves only one purpose.

*Bioshock* is a prime example of a game that makes very efficient use of its various constituents, effectively coupling a stimulating narrative experience with interesting game-play affordances.

## References

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