**Bioshock as the Infinite Parent: Parenting and Play in the *Bioshock* Series**

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**Introduction: Will You Kindly Parent Properly?**

*Bioshock: Infinite* (Take Two Interactive/Irrational Games, 2013) was the first console game I played after my daughter was born, so it is no surprise that I approach it, and its predecessors, in relation to my new parental role. How might *Bioshock*’s (2K Boston/Irrational Games, 2007) design and story reflect some of current tensions in parenting—and my own questions? For example, do I give my kids the freedom to explore their new world, while running the risk of also letting them make mistakes and potentially get hurt (or worse)? Or, do I keep them constantly protected and safe, but in a well-watched and bounded bubble? What types of rules and boundaries should I provide—and what type of feedback do I give? Do I let them transgress boundaries? What type of world do I create for them?

These are common debates in the parental mediasphere. Consider the current disagreement over whether a more structured childhood or a free play-filled youth leads to better outcomes. In the recent *Atlantic* article, “Why Free Play is the Best Summer School,” Jessica Lahey describes research suggesting that structured, parent-driven activities leads to less productivity, self-regulation, executive control and goal setting later on[[1]](#endnote-1). Based on the findings of a 2015 Stanford University/National Bureau of Research study, Jenny Anderson admonishes against starting Kindergarten too early, partially, possibly because kids need more time involved in unstructured play to develop[[2]](#endnote-2). As the study notes, “Children who delay their school starting age may have an extended (and appropriately timed) exposure to such playful environments[[3]](#endnote-3).” On the other hand, parents are advised against starting kindergarten too late, in “Delay Kindergarten at Your Own Peril,” because schooling does help students to achieve more in the long run[[4]](#endnote-4).

These questions also reflect broader societal questions about how to govern. For instance, to what extent should government protect our citizenship by limiting access and freedoms, spying on our whereabouts and communications, surveilling our choices, or bounding our actions? How much freedom versus structure should be allowed?

As the chapters in this volume acknowledge, the *Bioshock* series is immensely popular and spans many different type of media (video games, books, posters, videos), has won many awards, and sold millions of copies[[5]](#endnote-5), making it one of the most popular game franchises ever. The game takes place in a fictional world and alternative history universe, and is a first-person shooter (FPS) with role-playing game (RPG) tendencies. The series showcases a range of complex parental and familial relationships, as Vanderhoef and Payne and Stang have addressed in the preceding chapters, particularly in the dynamic between the human-machine mutant hybrid “Big Daddy” protectors and the “Little Sisters,” who can be harvested for a unique and valuable resource, ADAM. Moreover, there are mother-child and father-child pairings throughout the games’ narratives, such as that of Andrew Ryan and Jack Ryan (the player), Sophia Lamb and Eleanor (a Little Sister), and Booker Dewitt/Comstock and Elizabeth.

In this chapter, I argue that the *Bioshock* series reflects familial tensions and questions, allowing us to play through some of the most crucial challenges confronting contemporary parents, and also shows us how parenting theory can provide a surprisingly useful framework for re-thinking game design. I specifically discuss how parenting styles, including overparenting, may be reflected in the *Bioshock* world. I argue that the *Bioshock* series“parents” the player -- which all games do, to some extent. Games, through rules, obstacles, goals, mechanics, and boundaries, tell the player what sort of behavior is right or wrong in the game system. Sometimes games bind and stifle the player, while other times they encourage more freedom and exploration. The *Bioshock* series serves as a type of “thought experiment[[6]](#endnote-6)” for parenting styles, and in particular, overparenting --more popularly called “helicopter parenting.” By playing *Bioshock*, we work through an alternative history, but also a simulation of what may happen when parenting -- and game design -- goes awry.

To understand the connection between games and parenting, and to analyze what the *Bioshock* series might express about this connection, I first describe key parenting frameworks relevant to this discussion. Then, I use these frameworks and game research to explore the connections among games, *Bioshock*, and overparenting (or “helicopter parenting.”) How does the *Bioshock* series problematize both parenting and game design, and what can we draw from the games to help us design both effective parenting and future playful experiences?

**Parenting, Overparenting and Attachment**

Games, when well designed, teach a player how to reach a particular goal. To do this, a game may set up a series of practice obstacles, which get increasingly more difficult. A game may also let the player fail a few times, so that they can learn from their mistakes and use this knowledge to succeed in the future. For instance, in *Bioshock*, the player, as Jack Ryan, needs to complete a series of tasks to confront the leader of Rapture, Andrew Ryan. The player slowly learns how to use weapons and plasmids, which are extreme genetic modifications that enable the player to perform super-human feats like using telekinesis to manipulate and move objects, shooting fire from their hands, or freezing enemies. The ability to use plasmids relies on the player to scrounge for EVE-filled syringes, a limited mana-like resource hidden throughout the game environment. Atlas (Fontaine’s alter ego and the rival of Andrew Ryan) guides the player through a series of trials and tutorials on a variety of game tasks, such as how to use plasmids and refill them with EVE, or how to use plasmids to defeat lower-level Splicers, the mutant enemies ruined by excessive plasmid use who roam the halls of Rapture. Atlas’s voice hovers over the naïve player, providing just-in-time clues and nudges to help them know where to go, what to do, and how to behave. The player feels vulnerable in this new environment, but also watched over, cared for, and protected by Atlas, who seems helpful and fatherly.

Just like players who are starting in a new game world, we also begin our lives in a vast and unfamiliar world. Infants are vulnerable and helpless at first, but they learn about their new world, in part, by pushing and pulling on the boundaries, and figuring out what they can and cannot do in this world. Parents help the infant navigate this new world, understand its rules, and know how to behave, act, and what to do to survive and succeed. Like Atlas, parents give feedback and support to help their children to reach certain goals (e.g., walking independently) within a varying series of constraints.

But just as there are many ways to design a game, there are also many approaches to parenting, such as how to best provide challenges at each stage of development, how to support failure and success, or how to set the pace at which a child or player is gradually “freed” to follow the path toward their goals. In this section I will look at two different parenting and attachment approaches to explore in relation to *Bioshock* and game design. The first is Baumrind’s parenting typology (1966, 1991) and its relationship with a fairly new concept in popular culture, “helicopter parenting” or overparenting[[7]](#endnote-7). The second is attachment theory, and the development of the child within a familial relationship.

In Baumrind’s framework, there are three different parenting styles, or overall parent-child relationship approaches: Authoritarian, Permissive, and Authoritative. These styles are drawn from the intersection of two different dimensions: one, the responsiveness of the parent to the child’s needs, and two, the demandingness, or the degree to which the caregiver expects particular behavior from the child[[8]](#endnote-8) (see Figure 1). While Baumrind’s original conception was visualized as a spectrum from permissive to authoritative, with authoritarian in the middle, we can also cross the two dimensions, and from this we can devise four basic types or styles of parenting depending on the intersection of the two dimensions.

**Authoritarian** (high demandingness and low responsiveness) parents expect obedience and conformity, dole out punitive punishment and actively discourage open or democratic dialogue.

**Indulgent or Permissive** (low demandingness and high responsiveness) parents focus on appeasing the child, and passively or do not enforce rules and guidelines, have few expectations, and do not discipline when the child is not behaving properly.

**Authoritative** (high demandingness and high responsiveness) parents have a child-centered, warm, and democratic approach but also enforce firm rules and boundaries, monitor and guide the child, and encourage the child to be independent and autonomous[[9]](#endnote-9).

Additionally, another parenting style has been described:

**Indifferent** (low demandingness and low responsiveness) parents minimally interact with their children, are passive about rules and expectations, and are withdrawn and distant, and possibly even neglectful[[10]](#endnote-10).

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| --- | --- |
| **Authoritarian** | **Authoritative** |
|  |  |
| **Indifferent** **(not in Baumrind’s original conception)** | **Indulgent** |

Figure 1. Three parenting styles based on Baumrind’s Typology[[11]](#endnote-11), plus a fourth added more recently.

Research suggests that the outcomes of the four parenting styles on child and adolescent development varies. For example, Macoby and Martin (1983)’s work suggested that adolescents with permissive or neglectful parents did not have the parental coaching and mentoring necessary to develop cognitively and socially, and in turn, were the most irresponsible and least competent[[12]](#endnote-12). Lamborn, Mounts, Steinberg, and Dornbusch’s work suggests that adolescents with authoritative parents perform well on a number of measures, including achievement, social measures, and self-reliance[[13]](#endnote-13). On the other hand, children of authoritarian parents scored well on school achievement, but were less self-reliant, as well as not as independent or mature; children of permissive parents were high on social competency and self-confidence, but did not do as well in school and were not as well behaved in terms of drug and alcohol use[[14]](#endnote-14). This taxonomy of parenting and these subsequent results, however, have been critiqued as being culturally constructed and validated, and thus, may not have validity external to an American or European culture[[15]](#endnote-15). In addition, the reciprocal relationship between child and parent, and how the parent responds to the child’s behavior, should also be taken into account in terms of how they mediate child development outcomes. The subsequent discussion of attachment theory helps to provide this perspective.

The Baumrind model has been expanded and annotated in other ways, as well. The conception of “overparenting” or “helicopter parenting” has recently become popularized, and it has been connected to the Baumrind model’s authoritarian style[[16]](#endnote-16), and less so to permissive and authoritative styles[[17]](#endnote-17). Helicopter parenting was first defined in a parenting book series by Foster W. Cline and Jim Fay and then later popularized in a *Newsweek* article[[18]](#endnote-18). The term refers to parents who are overly involved, overprotective, and sheltering, and who may even take over for their children in decision-making, communication with others, and goal setting.[[19]](#endnote-19) The few empirical studies of the effect of helicopter parenting suggest a variety of outcomes, both positive and negative, though primarily negative. On the negative end, helicopter parenting has been associated with more anxiety and depression[[20]](#endnote-20); lower satisfaction with life and well-being[[21]](#endnote-21), as well as higher neuroticism, dependency, and less resilience or coping skills[[22]](#endnote-22) and greater sense of entitlement[[23]](#endnote-23). Approximately 60%-70% of college students report having a parent who hovers or exhibits some type of helicopter behavior[[24]](#endnote-24).

Although few empirical studies exist on overparenting, stakeholders have commented, anecdotally, on its negative effects. Academic administrators have observed that helicopter parenting has negatively affected grades, motivation, self-esteem and maturity[[25]](#endnote-25). Employers have noted parental intervention as being disruptive to privacy and productivity[[26]](#endnote-26). Odenwaller et al. explain that, “Popular press journalists have suggested parents’ intrusion enables children’s enduring dependency, stifles children’s development of independent problem solving abilities, stunts children’s psychological immunity to hardship and painful experiences, engenders destructive social skills, and fosters children’s external locus of control[[27]](#endnote-27).” The mythos of the entitled and coddled student, due to overparenting and overprotection, has led at least one college president to recently declare that college is not “daycare[[28]](#endnote-28).”

Some positive aspects of overparenting have emerged, such as more guidance and involvement from parents in their child’s life. Moreover, the effects of helicopter parenting are not always clear-cut—as there are mediating factors as well as a reciprocal relationship between parent and child. Nelson, et al. found that if the helicoptering was mediated by warmth and affection, then it led to more positive outcomes than if it did not[[29]](#endnote-29).

Odenwaller, et al.’s results suggest that the overbearing parenting behaviors have even stunted the decision-making, self-reliance, and self-efficacy of Millennial adults. Odenwaller, et al. explain that, “scholars have yet to provide evidence that helicopter parents encourage their children to be open about their private thoughts and feelings, to participate in family decision making, and to challenge other’s views and opinions[[30]](#endnote-30).” In other words, helicopter parents are perhaps not acting with an authoritative style—which has been shown to lead to better outcomes—but rather they are subduing, and possibly hindering, their child’s decision making and self-reliance skills. This finding -- that helicopter parenting are, in actuality, subduing their kids, rather than empowering them – may have implications for games and game design. If we over-constrain or over-help our players, we may be left with helpless, passive game consumers, rather than confident, creative players.

I also want to briefly mention attachment theory, because it helps to highlight that parenting is not necessarily an action done to a child, but it is an evolving relationship between parent and child. Likewise, games are not just enforced by the designer onto the player, but they emerge from a complex relationship among game, designer(s), and player(s). In attachment theory, attachment refers to the affectional relationship or bonding between infant and caregiver, which results in a secure foundation for a child[[31]](#endnote-31). The infant and parent teach each other -- infants teach the parent what their needs are and how to meet them, and parents teach their child that they can respond to their need and can be trusted to keep them safe.

Seifer and Schiller explain that attachment relates to five elements, including:

1. the attachment behavior, or the “specific behaviors related to increasing infants' proximity and contact with a caregiver,”
2. exploration, or the “specific behaviors that decrease proximity to the attachment figure but promote infants' interaction with the environment,”
3. attachment system, or “the theoretical organization and control of proximity and exploration behavior,”
4. attachment strategy, or “the organizational structure of behaviors observed in context from which a strategy for maintaining attachment relationships is inferred,” and
5. the bonds that form, “between infants and their caregivers attachment[[32]](#endnote-32).”

Having a secure base for this attachment is important for the baby, because while they may not be out in the “wild” anymore, there are other dangers and the baby relies on the caregiver for nourishment and protection due to his or her particularly precarious and delicate state[[33]](#endnote-33). Following the establishment of a safe base, infants slowly develop independence from their caregiver, and increasingly explore further and further away in proximity from their primary caregiver[[34]](#endnote-34). As with the other constructs, the attachment-relationship is mediated by other factors, such as temperament of child and parental sensitivity[[35]](#endnote-35). It also stems from a complex, dynamic system rather than one-way interaction, with both the parent and child developing the secure bond and staying together, and then both gradually letting the other be farther and farther away as the child explores his or her world, and the parent learning to “let go.” Likewise, the game itself is a dynamic system that relies on a bond between game designer and player. The game designer must “let go” of and “trust” the player (and the game itself), and allow the player to explore the new world they have created. In a well-designed game, the player is rarely unleashed unprepared into a chaotic new world; rather, the game designer shapes the game world to properly teach the player how to cope. Game players, over time, build trust with the game and its designer game designer, because they carefully receive the necessary information, feedback, and nudges to succeed. In the next section, I will use these frameworks to analyze the *Bioshock* series, and explore how it enacts the complexities of parenting, the tensions between game designer/game and player, and parent/child.

**Games and Game Designers as Parents**

As we can begin to see, certain characteristics and components of the practice of game design, and the games themselves, may make them particularly relevant to parenting, and specifically, the aforementioned frameworks. In this section, I will first highlight four components of games and their design and explore how they are similar to parenting (though they are not exactly analogous).

**I. Games have *rules, boundaries, and constraints*.** Like parents, game designers establish deliberate rules, based on values and assumptions about how a player should behave in a game[[36]](#endnote-36). Juul explains that games have a “rule-based formal system[[37]](#endnote-37),” and provide challenges to the player that are not easily overcome. The act of playing a game, Juul contends, “is an activity of improving skills in order to overcome these challenges, and playing a game is therefore fundamentally a learning experience[[38]](#endnote-38).” The act of playing a game relies on improving one’s skills and learning how to play it. Game designers must continually work with the player’s abilities to keep challenging them and helping them learn how to play the game[[39]](#endnote-39). *Bioshock*, for example, has rules such as that if you lose all your health, your play will terminate and you will respawn in a Vita-Chamber, or that you can only activate one plasmid at a time. These rules govern how the player can experience the game’s system and what outcomes they can have. In *Bioshock*, rules are expressed in a number of ways, most explicitly by the character Atlas, who often guides the player to follow him by using the words, “Would you kindly?” as a preface to an order. However, the player does not typically realize that “Would you kindly” is a preface to a command or rule until later in the game after the player has been following Atlas’s orders unwittingly, in part because the concept of following the narrator and game designer (author) as the “authority” is so embedded in our interaction with media, such as books, film and games, that we do not often question the design of the world we are given.

Rules are also embedded implicitly through the boundaries and constraints of the game’s world, and a player learns these rules by performing within the world and experiencing the results. In other words, the boundaries and constraints of the game create a type of “possibility space” where the player can learn which actions and behaviors are allowed. This relates to the rules, but it also reflects the physical boundaries created by the game world itself, or boundaries established by the world’s properties, its story or characters. Walker explains that, “While they allow for a certain level of consumer agency unprecedented by other forms of media, video games are bounded in that they are constrained by sets of rules and algorithms. Players have agency in the choices they are allowed to make, but the options are limited”[[40]](#endnote-40). Likewise, parents also create boundaries for children—whether through physical gates around a playspace, YouTube video guards, the allowing or disallowing of particular media or playdates, or removing one’s child from a bullying situation and other emotional difficulties.

In *Bioshock* in particular, the lead writer and director, Ken Levine, has explained how the game tried to create more organic boundaries than just locked doors and walls by creating an underwater city that already has built-in barriers, and also by using the voice of Atlas and sound to create more psychological boundaries for the player[[41]](#endnote-41). The possibility space of *Bioshock*—the twists and turns of the path toward Andrew Ryan, and the story that emerges—feels open, even though this space is actually carefully controlled by the game designers. Levine tried to make the physical and emotional boundaries in the game make sense in the fictional underwater world of Rapture. For instance, because you are in an underwater city, it is necessary to include walls and borders around the city to keep the water out, which also serves to keep the player on a particular path in the game.

Similarly, parents may also set boundaries without explicitly evoking them or even being aware of them. Babies seem to adhere to the invisible circle of security that surrounds the parent. They may crawl away, but they also watch to make sure their parents are in still within sight. Toddlers, as they begin to walk, start to push outward on these invisible boundaries, creeping farther away from their parents, though they still look for them. Parents may need to establish physical boundaries around play spaces, such as gates, doors, and locks, to enforce safety, but may also use large toy sets or cushions to create more playful boundaries and constraints. Similarly, playgrounds may use toy xylophones, drums, steering wheels, and other interactive objects on barriers to gently reinforce the playspace.

II. Building off of boundaries, **games also need to provide *feedback* to teach you how to play within its world**. A good game should be responsive to the player’s behavior and provide just-in-time and appropriate feedback on how the player is interacting within the game’s constraints. Game designers should devise clear cause and effect, or consequences, for a player’s actions, so that the player can learn how the world of the game works, what is valued, and how they can progress toward the goal. Likewise, parents may be responsive to their child and provide feedback to let the child know what the rules, constraints, and boundaries are, so that the child knows how to reach the goals and behave appropriately in the world. For instance, if a player attacks Splicers with a weapon, the game will provide immediate feedback on whether the Splicer was damaged or even eliminated, such as the Splicer screaming when hit, falling down and not moving after a hit, and the ability to scavenge their bodies for supplies (e.g., ammo). Textual, visual, and interface cues provide information on controls in the game and give feedback to the player. For instance, a player needs EVE to use their plasmid modifications (such as Incinerate!, Telekinesis, or Winter Blast), and the amount of EVE left is expressed through the game’s interface as a blue meter, which is next to a number (the amount of EVE needles left) and a small needle icon. Players can also unlock new plasmid modifications with ADAM, a limited resource found in Rapture, which acts like currency in the environment and can be harvested from the Little Sisters. If a Little Sister is harvested, a number of cues let the player understand that the amount of ADAM has increased, such as a text notification on the interface and a graphic of the ADAM tube showing the increase, as well as the voice of Atlas explaining that you “did the right thing” and that the “ADAM should do the trick.”

*Bioshock* does not just throw the player into the game, however. Rather, the game designers scaffold the experience, revealing the rules slowly and gradually removing boundaries as the player gains more practice and understanding of the new world. Well-designed games provide appropriate, timely feedback and build a relationship with the player, ensuring that the player understands each rule, control, and allowable behavior, and has the opportunity to test it within the game’s possibility space, and through a series of tasks and obstacles. Parents, similarly, build a relationship with their child, responding and providing feedback to the child, and removing boundaries until a child can be independent and autonomous. Infants need proximity to their parents to feel secure, and that need for physical closeness slowly decreases as the child grows. The parent also simultaneously “lets go” and allows the child to be farther away.

Likewise, in the games of the *Bioshock* series, players start out exploring a closed, safe space that is initially free of enemies while the player learns how to explore the world and master its controls and concepts. In *Bioshock*, you start in the water, post-crash, and are “born” into the game. You need to establish your character and your selfhood, and slowly learn about your world. The game first provides you with a weapon (wrench) and tests your use of it, and then it gives you one plasmid and lets you explore how to use it before you enter the bathysphere, and travel to the rest of Rapture. You have closer proximity to safety and security first, with fewer and easier enemies, less responsibility, more Vita-Chambers (respawning locations), and more expository feedback. As you gain more experience with fighting Big Daddies and Splicers, you start to gain more abilities, and have more freedom to choose which plasmids or weapons you want to use, or what strategies you incorporate in your battles. Similarly, in *Bioshock: Infinite*, you walk around and explore a lighthouse before you go to Columbia and its more treacherous missions. You learn how to interact with items (e.g., use a basin, search a cabinet), collect objects (e.g., pick up silver eagle coins), control your avatar (e.g., navigate a staircase), complete a puzzle, and increase health (e.g., eat cereal), while being acclimated to a new game environment and storyworld.

While the world of the infant is not filled with monsters and villains, there are enemies (unsafe liquids, choking hazards) and like the player, the baby needs a caregiver to keep them safe. Parents need to keep their infant in their arms, a carrier, crib, carseat, and stroller, until they are ready for greater exploration of their space. Parents need to then continue to monitor and guide the child until they are able to more independently interact with the world. Schulzke explains, “The world of an FPS is violent, chaotic, and dangerous, as almost every inhabitant is aggressive and potentially hostile[[42]](#endnote-42).” The game/game designer needs to protect the player completely and then slowly let them explore more and more until they are autonomous. Likewise, the player needs to learn the game and grow in relation to it. In other words, the player and game designer/game need to build and continually reinforce trust with each other, and secure the attachment between player and game, until the player is ready to be “let go.”

**III. Games are *dynamic* systems that enable player *choices, decisions, and goals* that may affect the system.** Games, when well designed, are dynamic, evolving systems, in which the player, rules, constraints, goals, mechanics, and controls, in addition to many other elements, all work together to create an interconnected and emergent experience. Game designers, when designing games, pose challenges that need to be solved and overcome by the player. However, effective design is not just about creating a string of challenges, but rather, a responsive holistic world that players can inhabit to strive to meet those challenges. Thus, games can act as mini-worlds or microworlds[[43]](#endnote-43) where players can interact with the elements to create a unique and active play session, and achieve particular goals, needs, or tasks.

*Bioshock*’s designers crafted the game around clear goals, such as reaching Andrew Ryan, eliminating Big Daddies, or understanding the history of Rapture, and then shaped the world in a way such that players could effectively reach each goal, without it seeming dissonant with the game’s theme or story. The result is that the player does not need to “think too much” about where to go or what to do next, but feels like they have free will and agency, even though the game is structured more like a narrative path or scavenger hunt. In other words, the designers did not create a fully dynamic world in *Bioshock*, where each player could have multidimensional effects on the game’s world and narrative. However, because the game designers so carefully and organically placed all of the game’s constraints and signposts, such as the vodaphone audio diaries, the bounded city walls, or Atlas’s gentle commands, the player never feels like a puppet -- until the end of the game.

The game world of *Bioshock: Infinite* is more open to exploration and unique choices and consequences. Although there are common narrative “beats,” goals, and quests that most players will encounter, the order of events and how a player interacts with particular choices may dynamically affect the game’s world, how other characters respond to the character, and how the player’s game is experienced. *Bioshock: Infinite* was designed with consideration to the potential of games to function as complex systems, and an understanding that the player and game could evolve dynamically, affecting each other in infinite unique ways.

On the other hand, in *Bioshock*, although the designers constrained the path through Rapture and carefully placed Big Daddies and other enemies throughout the game, ultimately, each play session is unique and each player’s strategies and style will vary. Even in *Bioshock*, players can have many different experiences because they also arrive at the game with different contexts, experiences, and expertise. And, in *Bioshock; Infinite*, although you can more dynamically explore the game’s world, you ultimately experience the same core narrative regardless of your actions and choices.

Like game designers and players, parents and children do not exist in a vacuum, and there is not just a direct parent-to-child effect. Caregivers and children form a dynamic system, reciprocally affecting each other, but are also affected by external contexts and sociocultural factors, just like games. Parents may strive to raise a well-behaving and/or successful child, and they may help challenge their child to reach those goals. Children, however, may have their own goals, which might conflict with their parent’s. Parent and child might negotiate rules and constraints back and forth until they have created a new system in which to inhabit. In *Bioshock: Infinite*, a primary narrative and game goal is to rescue Elizabeth and defeat any enemies that try to stop you, but you may also have other secondary goals and choices that may even conflict with the primary goal. For instance, a secondary goal may be to avoid persecuting others in the game. At one point, you have a choice of whether to stone or stand up for a biracial couple, and then you experience the results of your actions. Certain choices may make it more difficult to reach the primary goal, particularly if it unleashes more enemies, obstacles, or other burdens.

As the player, you learn about your avatar’s identity over time (including fixed characteristics, such as the name, Booker DeWitt, or variable characteristics, such as whether he would stand up for the biracial couple). To some extent you have control over how you learn about these characteristics, through the pacing, choices you make, paths you take, and missions you encounter. How you interpret what you learn may also differ depending on the order of events, how the narrative unfolds, the characters you meet, and your own experiences, background, and life stories. For instance, when I first played *Bioshock: Infinite*, I had just given birth, and I could personally understand Booker’s love for his baby, Elizabeth, as I had for my own daughter. Later, upon revisiting the scene of losing her, I was able to empathize even more deeply with his pain, as I had also recently lost a child. Thus, the *Bioshock* seriessimulates a fascinating alternative universe, but itself is also affected by our own universe, and the micro-universes created when players inhabit this new world. However, I could not go against the game’s pre-established narrative. I tried *not* to give the baby Elizabeth away at first, with the consequences of being stuck in a room until I did, because it was the only way to move the game’s narrative forward (and therefore, to continue playing the game). My only other option would have been to stop playing.

**Games can have meaningful choices, stories, and themes**. Game designers can help control a play experience by offering particular choices and narrative options for players. Through the use of choices and story elements, designers can also relinquish control, and help players make meaning in the game by deciding what to do, how to do it, and when to do it. Schulzke explains that, “Gameplay mechanics set the rules that govern players’ range of choices[[44]](#endnote-44).” Parents also may enable their child to make meaningful choices and decisions. The relationship between choice and consequence is brought to the forefront in *Bioshock*, both story-wise and through gameplay[[45]](#endnote-45). In *Bioshock*, one of the much-critiqued choices is the decision about whether to harvest or liberate the Little Sisters. The choice has emotional resonance and some gameplay consequences, but may not have a holistic effect on one’s gameplay or on one’s interactions within world itself, other then different narrative endings to the game. However, there are also many other choices in the game—from what weapon or plasmid to use, to how to best explore Rapture and interact with its stories—based on what is allowable within the constraints and boundaries (possibility space) provided.

In addition, games may have storiesthat can themselves express these themes as well. Many game designers use story and gameplay in tandem to reinforce each other, though *Bioshock* in particular has been singled out as exhibiting what Clint Hocking calls ludonarrative dissonance[[46]](#endnote-46), or divergence between what the gameplay and story may explore. In *Bioshock*, the story revolves around the Rapture society, and the precarious tensions between free will and determinism, and individuality (selfishness) and society (selflessness). These are, likewise, tensions found in parenting, particularly in terms of balancing structure and freedom, and letting one’s child explore and make one’s own decisions (and mistakes) or wanting to protect and direct them. Moreover, the themes of *Bioshock*—abandoning one’s children and finding one’s children or parent—also directly reflect parenting itself. And taking it even one step further—the metastory of *Bioshock*—that it is a game, a FPS, and an object of contention, particularly in the realm of parenting—contributes to manifestation of the tensions even more. Games, kids, and citizens must be governed, and possibly even over-controlled.

We can start to see the connections between parenting and games, and *Bioshock* in particular. How, then, can we use the aforementioned game elements, coupled with the parenting frameworks, to elucidate and problematize overparenting (helicopter parenting)? Furthermore, what can we learn about designing play, and analogously, about designing parenting experiences?

**Games and Parenting Styles**

Looking back at the original four dimensions of parenting tendencies, we can also conceive of this framework as another new way to categorize games and their design. We can consider game designers, and their games, like parents of their players, each with different styles and approaches to rules and boundaries, and variations in the enforcement of those rules (discipline and demandingness) and feedback used (responsiveness).

For instance, an authoritarian approach to game design is strict, inflexible, and unyielding. The player cannot bend the rules and lacks creative control or free exploration of the game. Examples of games with an authoritarian game design might be *Tetris* (Alexey Pajitnov/Vladimir Pokhilko, 1984), *Pac-Man* (Namco/Midway, 1980), or *War*, where mistakes cause your game to end quickly, and there are clear rules, feedback and consequences. There is not much flexibility for changing rules, altering how the game is played, or modifying and customizing one’s play experience. For instance, in *Tetris*, the game rules are clear-cut and you cannot change them or avoid them. Players are randomly given an object from one of very few preset shapes, and can only switch that object to one of very few preset configurations. Once the piece drops and reaches the bottom, it is stuck until you can complete a row. The levels continue to become brutally faster and faster, until the objects reach the top and the game is automatically over—no restarts, extra lives, or do-overs.

A playful experience that is overly indulgent or permissive and does not have *any* rules would not even be considered a game. It might instead be considered a toy, sandbox, story, or theater performance. Some games have aspects of permissiveness within a more structured framework. For instance, games such as *Minecraft* (Mojang/4J Studios, 2011), *The Sims* series (EA/Maxis, 2000-ongoing), *Grand Theft Auto* series (Rockstar Games, 2004-ongoing), *Fallout* *4* (Bethesda Game Studios, 2015), and *Red Dead Redemption* (Rockstar Games, 2010) have options where you can explore and make your own rules in an extremely open world, and/or you can easily flout rules or create your own rules like an outlaw, without many harsh consequences. For instance, in the *Grand Theft Auto* series, you are given primary missions to complete, but you can decide instead to spend hours exploring the virtual game world, complete side quests, or interacting with non-player characters. You can choose to spend your time stealing cars, hooking up with prostitutes, or even shooting at police officers—activities you couldn’t necessarily do in real life without social or even criminal penalties. In the game, however, you are sometimes lightly penalized, but you may even be rewarded for such nefarious activities and free explorations.

As mentioned previously, games with extremely open worlds sometimes run the risk of not being seen as games at all, but rather as unstructured play spaces (such as in the case of *Second Life*), and/or they are critiqued for not instilling enough boundaries, such as needing to set stricter rules to reduce cheating, online harassment, or bullying. In the case of the open world aspect of the *Grand Theft Auto* games, they are even popularly seen as being negligent or even inciting violence in the real world[[47]](#endnote-47).

A game with an indifferent game design approach may be one that is poorly constructed or badly designed—as these are games that do not provide strong enough feedback or do not seem to care enough about whether a player engages in it or what a player wants or needs. For instance, we can think about many poorly designed games, failed games, and early iterations of games, where players feel lost, rejected, and quickly give up. A game may be designed to be purposely indifferent to the player’s needs, or obtuse to create mystery or make a particular argument. Such games, which may be playable and innovative for some, may be too obscure or inaccessible for others[[48]](#endnote-48). For instance, in Mollendustria’s game, *Everyday the Same Dream* (2009), the player needs to interact with the game environment, while doing the routine of getting ready for work, traveling to work, and then being at work. The theme relates to breaking away from this routine, and interacting with the game in unexpected ways, such as clicking on objects twice, moving backward to a new frame rather than forward, and generally “disobeying” game design conventions. The actual goals of the game are not explicitly stated, and the theme, while powerful, is not always apparent unless you are able to complete the sometimes frustratingly hidden tasks. In one of my classes, the students were not experienced game players, and quickly gave up on the game before they were able to fully digest the game’s meaning. For the more veteran game players in another one of my classes, however, the students enthusiastically continued to complete the game, and by doing so, were able to provide deep perspectives on the game’s meaning. Thus, the game might have been “indifferent” to some types of players, but not others, and as a result, the goals in *Everyday the Same Dream* were never met for some players--purposefully or not.

In games with an authoritative approach to game design, there may be clear rules, goals, and guidelines, and an enforcement of rules and consequences, but there is also a degree of openness and bidirectionality in how the player can behave and shape the world and/or her character. The designer is not necessarily the final authority in how the game is played, and instead the player and designer act in tandem to co-create the play experience. The world of the game and its rules might even continue to evolve based on player feedback or gameplay. Players might be able to contribute modifications to the game, and communities within and around the game might emerge organically. Such games vary, but aspects of *Farmville*, *the Sims*, *Spore*, *Fallout 4*, *Mass Effect*, *WoW*, *Skyrim*, *Team Fortress 2*, and *Dragon Age* might fit this style of design. For instance, in *Fallout 4*, players control an avatar, shape its behavior, and can openly explore the post-apocalyptic world of Boston. Based on their interactions, missions and quests will unlock, and the world also evolves (e.g., in how NPCs or non-playing characters treat the avatar or which settlements appear). Players can modify their character, by updating weapons or armor in the game, but they can also modify the actual game by using *Fallout 4* Edit (Fo4Edit) to change the game’s existing properties of armor or weapons, for example.

It is important to emphasize that just as with the *Grand Theft Auto* series, *The Sims* series, *Minecraft*, the *Bioshock* series, and *Red Dead Redemption*, certain aspects of *Fallout 4* could be considered more authoritative (such as in the limited narrative choices) or permissive (such as the ability to freely explore the environment), as well as more authoritative. What may be more useful to think about is how the player experiences the balance among these different styles of design.

Like with Baumrind’s four parenting styles and outcomes for children, the outcomes for the game and its players might differ depending on how the design approaches are balanced throughout the play experience. Players of the primarily “permissively” designed *Minecraft* might be able to explore and grow, and feel powerful, but unless restrictive boundaries are established in local servers, players may also demolish buildings or bully other players and negatively affect other’s experiences. Part of the fun of *Grand Theft Auto* is that, when players are not engaged in the more authoritarian-style missions or authoritative narrative, they are allowed to do almost anything in its virtual world, including partaking in villainous activity like car theft, murder, and prostitution. This degree of permissiveness may help players feel more confident and empowered, but it also may feel too discordant with the real world. The permissive behavior may also be too jarring with other aspects of the *Grand Theft Auto* series, such as the lack of ability to alter your character(s) or role(s), and the more restrictive narrative choices.

In more overtly authoritarian games, such as *Tetris*, players may be able to achieve a great deal, such as higher and higher scores through repetitive and rigorous practice, but players do not necessarily feel more creative, independent, empowered, or self-reliant in this game world. Players of games with a “neglectful” or “indifferent” game design may just stop playing and withdraw from the world altogether, which means they won’t be able to fully engage, learn, or grow within it. (On the other hand, for some determined game players who persevere in “indifferent” games, they may learn quite a bit, sometimes by necessity).

A game designer that takes an authoritative approach may help encourage players to navigate a well-balanced mix of exploration and boundaries, and freedom and restriction. *Fallout 3* and *4* players may feel like they can deeply and freely explore the wasteland, but they can also actively make meaningful choices that have an affect on their interactions with other characters and factions, which may open up new stories and choices to them (or even restrict them), while dynamically changing the game world and themselves.

Thus, a game designer who is too permissive or indulgent to the player’s desires, and their games run the risk of too “loose” of a game, with not enough structure to guide the player into an engaging experience. When a game designer is too strict, their games may feel overbearing and stifling, and players may not want to participate.

The analogy does not always carry, however, as sometimes some types of game experiences and designs may be more appropriate or more rewarding at a given moment for a given player. While it may seem like the authoritative design approach might make for the most meaningful game experience, this is not always true. Multiple approaches and styles may work for different contexts and individuals, and sometimes players may want a more open world in which to explore, or a more restrictive design, depending on their mood, interest, or need at the time. In other words, an authoritative game design approach may not always lead to better player outcomes, even if authoritative parenting might tend to overall, lead to better parenting outcomes.

***Bioshock* and Parenting Styles**

So where does the *Bioshock* series fit into the parenting styles framework? Is *Bioshock* an authoritative game, which lets you explore with appropriate constraints, or is it an authoritarian game, forcing you into a linear path, not giving you choices, and not adapting to your actions?

I argue that the series feels like it fits a more authoritarian style, with a balance between freedom and constraint. However, it is actually much more authoritative in design – and even plays on the notion that you may feel like you have choice and freedom, but in reality, do not.

In the first *Bioshock* game, you are primarily on rails, and subtly forced, through gameplay, audio, and narrative, as well as the physical barriers of the underwater city, to “kindly” follow the story and weave a particular path through Rapture. Ultimately, you are pushed to find (and later kill) Andrew Ryan, which happens no matter what you do. The only path you have control over is based on your decision whether to harvest the Little Sisters—and this decision is quite limited. You can either decide to harvest the Little Sisters or you can spare them, but either way you get the same amount of ADAM (in the former, right away, in the latter, later on in the path, such that the choice feels more like a “Marshmallow test”[[49]](#endnote-49) of whether you can delay your gratification for ADAM, rather than a meaningful choice with dynamic results that personally reshapes the game’s world). The only difference in the gameplay and narrative is that if you harvested any of the Little Sisters, your final game ending is different from if you decided to liberate all of them. In *Bioshock*, the environment (“dungeon paths”) of the game, while not as constraining as a single-screen platformer, is bounded by carefully crafted walls, destruction, and decay. The narrative, told in part through vodaphones and via Atlas’s voice, continually compels and propels the player in particular direction, though you can travel backward and get lost if you disobey the audio, visual, and interface cues provided. This, however, is not an enjoyable game experience, and is rather disorienting.

Likewise, *Bioshock: Infinite*’s design feels like an authoritative style, based on the Baumrind framework, in that players have some freedom, but are still bounded using play and story. Players feel like they can explore the vast world of Columbia and to some extent, decide which quests, storylines, and locations to attend to and when. However, the storyline is actually extremely bounded as players do not have complete freedom of movement or activity – the game uses “scripted events, narrative bottlenecking,”[[50]](#endnote-50) and “locks” certain storylines until specific points in the game, similar to chapters of a book. Players feel like they can go anywhere and to anytime -- they have the freedom not only to explore a new world, but also to discover a new moment in time. In actuality, however, they can only access tears (where they can travel in time) at specific points in the game. Players are also literally “on rails” when they travel around the game world on the game’s “skyhooks,” and can only get on and off the rail line at particular intervals. Some areas of the world and buildings open up due to certain storylines and missions being completed or accessed.

In game design, tensions between permissiveness and authoritativeness, demandingness and indifference, freedom and protection, and exploration and constraint, are continually present. A designer must question one’s own role, and the player’s role, in shaping an engaging and enjoyable game experience. How much should the designer allow a player to do on their own, and how much should they do for the player? Do we truly have free will, or are our choices predetermined? Should play and people be constrained or liberated? How can we create a better citizenry and society? What does it mean to be truly free? I argue that these are also the same tensions and complexities that exist within the parent and child relationship.

While such questions and tensions may be present in every game design process, *Bioshock* expresses these tensions not just through its design, but also explores them through its narrative, storytelling, and characters. Moreover, an analysis of the *Bioshock* series helps to reveal to us what happens when these tensions are out of balance—when we have overparented, overdesigned, stifled, and overconstrained both our player and our child.

In *Bioshock*, the player, as Jack Ryan, is pre-programmed by Atlas/Fontaine. He is told what to do, and compelled through the words, “Would you kindly.” Rather than be able to choose and make decisions for himself, he is enslaved by this world and this voice and must obey. Likewise, the player must follow. The player is not allowed to, for instance, *not* kill Andrew Ryan. The player cannot explore certain realms of Rapture out of order and cannot win without completing all of Atlas’s tasks. However, there are memorable moments of agency and control—such as whether to harvest the Little Sisters or how to strategically defeat an enemy. Problematically, these choices do not always have appropriate or dynamic effects on the game’s world, leading the player to having a less autonomous, though more protected and guided, experience.

Moreover, in *Bioshock*’s “third act,” once the player, as Jack Ryan, kills the father, Andrew Ryan, and then learns the truth about Atlas (the helicopter parent substitute), chaos ensues. As the player kills Andrew Ryan, the ceiling of Rapture starts to crumble, with sparks and dust shooting outward. Jack’s identity seems to fracture. The game environment mirrors this and is overcome by decay and destruction. The game replays vignettes from earlier in the game, such as the initial crash or an image of a Little Sister standing by a fallen Big Daddy, leading up to a wall with “Would You Kindly” written on it, and Andrew ordering Jack to “obey.” Once Andrew Ryan has been defeated, the override key is inserted, and Atlas is revealed, the player is now suddenly alone, without any “overparent” who is telling them what to do. Rather than feel independent and self-reliant, this transition feels overwhelming both narratively and from a gameplay perspective. Jack Ryan must now escape as rapture erupts in chaos, with enemies attacking, until the Little Sisters lead the overwhelmed and near-death Jack into the darkness, heart racing. Once the overparents (Andrew Ryan and Atlas) are destroyed -- killed by their own creation -- the game ends. The game appears to illustrate what happens when the helicopter parent is no more, and one’s bubble of protection bursts, but also that the complete opposite behaviors (neglect and absolute freedom from parenting) are not effective either. The result of parenting and governing that is out of balance is that society and our “selves” are quite literally crumbling[[51]](#endnote-51).

The game, thus, functions suitably as a meditation on what happens when parenting goes awry and becomes a “thought experiment”[[52]](#endnote-52) for both an overparented and underparented world. The duel tensions are exhibited in both the story and the gameplay--first in the use of seemingly nonlinear narrative (e.g., selection of the order of vodaphone audio files to hear) that is really quite linear in its expression, and second, in the inclusion of seemingly free choice in gameplay and game navigation that is really constrained compliance to the rules and boundaries of the game. In other words, the player “feels” like they have a lot of agency and freedom, but in fact, they have very little ability to freely explore the Rapture world. These tensions of meaningful agency and compliance (“Would you kindly”) and are then echoed in the metastory of the concept of the decaying once-free society and dystopic Rapture city that remains. It is also echoed in the characters, such as Jack Ryan, the avatar, who is at once overparented and controlled, but ultimately left alone by his parents. He is the child who had helicopter parents, but then does not know how to independently navigate the world now that he’s on his own. This analysis suggests that, in terms of showing the different extremes of a world and a parenting experience out of balance, *Bioshock* does not have the “ludonarrative dissonance”[[53]](#endnote-53) that Clint Hocking initially proposed. Rather, gameplay and story work together well in *Bioshock* to highlight what happens when governance and control are imbalanced.

As the rails start to peel off in *Bioshock: Infinite*, we continue to see what happens when players feel like they are in an even less overparented and less structured game world than *Bioshock*, particularly one that is juxtaposed against the more parented society (that of Columbia, the secret parallel world in the clouds). Gameplay in this sequel has fewer constraints than in *Bioshock*, as there are many more choices on how to interact with enemies, characters, the story, and with the world itself. But, are these choices meaningful? Is the player less protected from narrative disarray or directional confusion? Are they more able to explore one’s own identity, forge one’s own path, and make changes to the world itself? Although *Bioshock: Infinite* is more open in terms of choice, the narrative, character development, and even the gameplay and exploration of the world is still bounded and controlled.

To what extent does an authoritarian approach require a designer to generate a “feeling” of more freedom and choice, but also enable *meaningful* choices that make a real, evocative impact? I argue that *Bioshock: Infinite* is still somewhat authoritarian in approach, though, perhaps, designed to *feel* more authoritative than *Bioshock*. The hidden controls and constraints, and the false freedoms both games encourage, seem to function as a commentary on the general lack of choice and control that anyone -- player or human being -- has over one’s life, the world, or time. This approach seems to be a commentary on game design as well, and the balance between control and freedom. Can anything that is *designed* enable meaningful freedom? Do *any* games have impactful choices, particularly since at the end of the day, a game is still just a game? Is game design really just about controlling an experience? Sure, some games may *feel* free, but in actuality they are highly contained and intensively crafted experiences. And going beyond games, is any person ever truly free to make meaningful choices in any world, whether game or real, regardless of the parenting, governing, or design approach? Does what we choose or how we act ever really matter?

Ultimately, the *Bioshock* series shows us, both through its gameplay and its storyline and themes, what it means to live in a stifling environment by overparenting us as players--and in this sense it is successful. Games and their designers can act like parents, sometimes bounding and structuring play, and other times enabling freedom and exploration. The series also shows us, and lets us playfully explore, the dangers of overparenting and overdesigning, without ruining the fun of the game. The game designer, Atlas, Comstock, Sophie Lamb, are all monstrously parenting us, and this gives us a beautifully monstrous glimpse into the problems and pitfalls of helicopter parenting. By being overdesigned and perhaps “overparenting” the player, the *Bioshock* series also shows us the need in game design to continually search for the right balance between freedom and structure, and meaning and control.

**Parenting and Playful Freedom**

The *Bioshock* series illustrates the complex tension between wanting to constrain and protect the game experience for the player, versus opening up the experience to co-creation with the player. However, it is not necessarily “better” that *Bioshock: Infinite* feels more authoritative, even though both *Bioshock* games are mainly authoritarian in design. Positive outcomes—such as a fun, engaging game experience—may be achieved by many different design approaches, as the game experience is mediated by a variety of factors. Parenting is no different. The player and game, and parent and child, are part of a dynamically evolving system, which continually must respond to the needs that each other has at a particular time.

Simultaneously, *Bioshock* and *Bioshock: Infinite* are games, and as such, can also be seen as rebellious escapes into a more playful and free world, and away from both overbearing parenting or a stifling society. Games are perceived as objects that parents must control and limit, rather than cohabit, coexplore, or cocreate with their children, further expressing the notion of the “overparent[[54]](#endnote-54).” The act of play could feel like freedom, even within an authoritarian world.

So what lessons does the *Bioshock* series have for us? What does it tell us about effective parenting? And, in turn, what does it tell us about good game design?

First, effective games **appropriately balance rules and freedom**; choices and consequences; and structure and unstructured play. Game designers, like parents, need to respond and adapt to the player or child and the world around her. Rules should not be overbearing but should be firm and flexible, revealing the boundaries and topology of the world, but not dictating one’s play (or life) experience. Playful rebellion should be allowed, even in the most strict and structured designs.

Second, **effective games are responsive to the player** and provide useful feedback as to what is right or wrong in the world. Parents, also, need to provide guidance as to what is valued and allowed in their world. However, the game designer, like the parent, does not need to overbear or overparent at all times, and should instead enable the appropriate amounts of exploration, choice, and freedom when necessary. Boundaries and constraints do not always need to be overt, but could be gently nudging in ways that let the player *feel* free, even if they aren’t that free.

Third, **effective games enable the player to slowly build** **and develop** one’s self and one’s abilities. These games make you stronger, more confident, and more self-reliant, by scaffolding learning and then taking off the training wheels as the player gains more experience. The player should eventually overcome bigger obstacles and reach increasingly difficult goals, adding to the sense of accomplishment and mastery. Too much challenge or too much ease might stifle progression toward goals. Parents, too, need to appropriately challenge children without over or underwhelming them. They also need to let children eventually try to overcome obstacles so they can ultimately reach bigger and bigger goals.

Fourth, **effective games care about their audience and want their audience to succeed**. And, conversely, games should make you care about and empathize with their own world and its people, and make you want to learn about its idiosyncrasies. Parenting is not just about caring and shielding, but about helping a child find a path to his potential and become a unique and active participant in the world.

Finally, analyzing the *Bioshock* series and its design using parenting theories also reveals its gaps and biases. For one, authoritative parenting (and subsequently, authoritative game design) may be an act of legerdemain, pretending to be more “free,” when it’s really just secretly authoritarian, like a story that hides its linearity or a demagogue who hides their true intentions. Does it matter whether the choices that players make in a game are meaningful, evocative, and impactful? Do players need to act as co-designers with game designers to truly be “free” in a game, or is it enough for players to have some meaningless control (e.g., dialogue choices, weapon choices) in an otherwise wholly-designed story and world? Can game designers enable “pretend” control because games are in some sense “pretend?”

Moreover, parenting theories, particularly ones from European and North American cultures, often focus on the best ways to teach children to conform, follow rules, engage in “good” behavior, and achieve certain goals, such as financial and familial stability. The mark of a successful parent-child dyad is a child who independently follows the rules and creates their own family, and a parent who does not need to continue parenting. However, we need to problematize these values in light of games and game design. Is a game only successful if the player follows the rules properly and the game designer is no longer needed? If a player breaks the game’s rules, or modifies the game with new rules, what then? What about games where the relationship between game designer and player evolves, where the designer might continue to hover, and reshape the world based on player interactions? What about games that rely less on individual success and more on collective success, such as games that crowdsource knowledge or attempt to make real-world impact and solve actual problems[[55]](#endnote-55)? Just as we can learn from *Bioshock* and parenting theories, we need to learn from what they do not address, as well as their values and biases.

1. J. Lahey, “Why Free Play is the Best Summer School,” *The Atlantic*, June 20, 2014, accessed at: http://www.theatlantic.com/education/archive/2014/06/for-better-school-results-clear-the-schedule-and-let-kids-play/373144/ [↑](#endnote-ref-1)
2. J. Anderson, “Stanford Researchers Show We’re Sending Many Children to School Way Too Early,” *Quartz*, November 11, 2015, accessed at: http://qz.com/546832/stanford-researchers-show-were-sending-many-children-to-school-way-too-early/ [↑](#endnote-ref-2)
3. J. Anderson, “Stanford Researchers Show We’re Sending Many Children to School Way Too Early” [↑](#endnote-ref-3)
4. S. Wang and S. Aamodt, “Delay Kindergarten at Your Child’s Peril,” September 25, 2011, accessed at: http://www.nytimes.com/2011/09/25/opinion/sunday/dont-delay-your-kindergartners-start.html?\_r=0 [↑](#endnote-ref-4)
5. Y.A. Walker, “Would You Kindly Consider the Consequences?”, 2015, Press Start, Vol. 2(1), accessed at: <http://press-start.gla.ac.uk/index.php/press-start/article/view/20> and K. Acuna, “Bioshock will continue despite closure of game studio,” 2014, *Business Insider* [↑](#endnote-ref-5)
6. M. Schulzke, “Simulating Philosophy: Interpreting Video Games as Executable Thought Experiments,” 2014, *Philosophy &Technology*, 27(2): 21-265. [↑](#endnote-ref-6)
7. D. Baumrind, “Effects of Authoritative Parental Control on Child Behavior,” 1966, *Child Development*, 37(4), 887-907; D. Baumrind, “Child Care Practices Anteceding Three Patterns of Preschool Behavior,” 1967, *Genetic Psychology Monographs*, 75(1), 43-88; D. Baumrind, “The Influence of Parenting Style on Adolescent Competence and Substance Use,” 1991, *Family Studies*, 11(1), 56-95. [↑](#endnote-ref-7)
8. Baumrind, “Effects of Authoritative Parental Control on Child Behavior”; Baumrind, “Child Care Practices Anteceding Three Patterns of Preschool Behavior”; Baumrind, “The Influence of Parenting Style on Adolescent Competence and Substance Use” [↑](#endnote-ref-8)
9. All of the styles are taken from: Baumrind, “Effects of Authoritative Parental Control on Child Behavior”; Baumrind, “Child Care Practices Anteceding Three Patterns of Preschool Behavior”; Baumrind, “The Influence of Parenting Style on Adolescent Competence and Substance Use” [↑](#endnote-ref-9)
10. Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In E. M. Hetherington (Volume Ed.), Handbook of child psychology: Vol. 4. Socialization, personality, and social development, 4th edition; and L. Steinberg, S.D. Lamborn, N. Darling, N.S. Mounts, & S.M. Dornbusch, “Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families,” 1994, *Child Development*, 65, 754–770. [↑](#endnote-ref-10)
11. All of the styles are taken from: Baumrind, “Effects of Authoritative Parental Control on Child Behavior”; Baumrind, “Child Care Practices Anteceding Three Patterns of Preschool Behavior”; Baumrind, “The Influence of Parenting Style on Adolescent Competence and Substance Use” [↑](#endnote-ref-11)
12. Maccoby, E. E., & Martin, J. A. “Socialization in the context of the family: Parent-child interaction” [↑](#endnote-ref-12)
13. Steinberg, et al. “Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families.” S.D. Lamborn, N.S. Mounts, L. Steinberg and S.M. Dornbusch,

“Patterns of Competence and Adjustment among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families,” 1991, *Child Development*, 62(5): 1049-1065. [↑](#endnote-ref-13)
14. S.D. Lamborn, N.S. Mounts, L. Steinberg and S.M. Dornbusch, “Patterns of Competence and Adjustment among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families”; Baumrind, “The Influence of Parenting Style on Adolescent Competence and Substance Use”; Steinberg, et al. “Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families”; L. Steinberg, J.D. Elmen, & N.S. Mounts, “Authoritative Parenting, Psychosocial Maturity, and Academic Success among Adolescents,” 1989, *Child Development*, 60, 1424–1436. [↑](#endnote-ref-14)
15. Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*, 65, 1111-1119; J.U. Ogbu, “Origins of Human Competence,” 1981, *Child Development*, 52, 412–429. [↑](#endnote-ref-15)
16. L.J. Nelson, L.M. Padilla-Walker, M.G. Nielson, “Is Hovering Smothering or Loving? An Examination of Parental Warmth as a Moderator of Relations Between Helicopter Parenting and Emerging Adults’ Indices of Adjustment,” 2015, *Developmental and Educational Psychology*, 3(4): 282-285; K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials,” 2014, *Communication Studies*, 65(4). [↑](#endnote-ref-16)
17. The association between Helicopter parenting and the authoritarian style is not surprising as the developmental outcomes, at least in the few empirical studies completed, which have been more similar to the authoritarian style. However, there are some key differences, which are noted later in this chapter. [↑](#endnote-ref-17)
18. F. Cline and J. Fay, Parenting with Love and Logic: Teaching Children Responsibility, 1990, Colorado Springs, CO: Pinon Press; N. Zeman, “Buzzwords,” September 9, 1991), Newsweek, 9; K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-18)
19. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-19)
20. T. LeMoyne & T. Buchanan, “Does ‘Hovering’ Matter? Helicopter Parenting and its Effect on Well-Being,” 2011, Sociological Spectrum, 31(4): 399-418; L.J. Nelson, L.M. Padilla-Walker, M.G. Nielson, “Is Hovering Smothering or Loving? An Examination of Parental Warmth as a Moderator of Relations Between Helicopter Parenting and Emerging Adults’ Indices of Adjustment” [↑](#endnote-ref-20)
21. L.J. Nelson, L.M. Padilla-Walker, M.G. Nielson, “Is Hovering Smothering or Loving? An Examination of Parental Warmth as a Moderator of Relations Between Helicopter Parenting and Emerging Adults’ Indices of Adjustment” [↑](#endnote-ref-21)
22. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-22)
23. C. Segrin, M. Givertz, P. Swaitkowski, N. Montgomery, “Overparenting is Associated with Child Problems and a Critical Family Environment,” 2015, *Journal of Child and Family Studies*, 24(2): 470-479. [↑](#endnote-ref-23)
24. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-24)
25. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-25)
26. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-26)
27. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-27)
28. E. Piper, “This is Not a Daycare. It’s a University!” November 2015, accessed at http://www.okwu.edu/blog/2015/11/this-is-not-a-day-care-its-a-university/ [↑](#endnote-ref-28)
29. L.J. Nelson, L.M. Padilla-Walker, M.G. Nielson, “Is Hovering Smothering or Loving? An Examination of Parental Warmth as a Moderator of Relations Between Helicopter Parenting and Emerging Adults’ Indices of Adjustment” [↑](#endnote-ref-29)
30. K.G. Odenweller, M. Booth-Butterfield, & K. Weber, “Investigating Helicopter Parenting, Family Environments, and Relational Outcomes for Millennials” [↑](#endnote-ref-30)
31. R. Seifer & M. Schiller, “The Role of Parenting Sensitivity, Infant Temperament, and Dyadic Interaction in Attachment Theory and Assessment,” 1995, *Monographs of the Society for Research in Child Development*, 60(2-3): 146-174. [↑](#endnote-ref-31)
32. R. Seifer & M. Schiller, “The Role of Parenting Sensitivity, Infant Temperament, and Dyadic Interaction in Attachment Theory and Assessment,” 147. [↑](#endnote-ref-32)
33. R. Seifer & M. Schiller, “The Role of Parenting Sensitivity, Infant Temperament, and Dyadic Interaction in Attachment Theory and Assessment,” [↑](#endnote-ref-33)
34. R. Seifer & M. Schiller, “The Role of Parenting Sensitivity, Infant Temperament, and Dyadic Interaction in Attachment Theory and Assessment,” [↑](#endnote-ref-34)
35. R. Seifer & M. Schiller, “The Role of Parenting Sensitivity, Infant Temperament, and Dyadic Interaction in Attachment Theory and Assessment,” [↑](#endnote-ref-35)
36. J. Juul, *Half-Real: Video Games Between Real Rules and Fictional Worlds*, 2005, Cambridge, MA: MIT Press; K. Salen and E. Zimmerman, Rules of Play, 2003, Cambridge, MA: MIT Press. [↑](#endnote-ref-36)
37. J. Juul, *Half-Real*, 6. [↑](#endnote-ref-37)
38. J. Juul, Half-Real, 5. [↑](#endnote-ref-38)
39. J. Juul, Half-Real [↑](#endnote-ref-39)
40. Y.A. Walker, “Would You Kindly Consider the Consequences?” [↑](#endnote-ref-40)
41. TK Ken Levine Interviews. [↑](#endnote-ref-41)
42. M. Schulzke, “Simulating Philosophy: Interpreting Video Games as Executable Thought Experiments” [↑](#endnote-ref-42)
43. S. Papert. Mindstorms, 1980. Cambridge, MA: MIT Press. [↑](#endnote-ref-43)
44. M. Schulzke, “Simulating Philosophy: Interpreting Video Games as Executable Thought Experiments” [↑](#endnote-ref-44)
45. Y.A. Walker, “Would You Kindly Consider the Consequences?” [↑](#endnote-ref-45)
46. Hocking, “Ludonarrative Dissonance in Bioshock,” October 7, 2007, accessed at: http://clicknothing.typepad.com/click\_nothing/2007/10/ludonarrative-d.html [↑](#endnote-ref-46)
47. For example, J. Schreier, “Grand Theft Auto Blamed after Eight-Year-Old Shoots Grandmother,” August 26, 2013, *Kotaku*, accessed at: http://kotaku.com/grand-theft-auto-blamed-after-eight-year-old-shoots-gra-1201375715 [↑](#endnote-ref-47)
48. A question that may arise is whether indifferent game design is really so “indifferent.” If a game has been intentionally designed as being indifferent, how can it be indifferent if it is intentional. I think this is an understandable position. However, I see “indifferent” game design as not being focused on the needs of the player. The indifferent designer may be very intentional in their own needs to make a statement, make an argument, or show a new way of looking at the world. They may be intentional in making the game, and this may be a very effective and groundbreaking creation. However, the indifferent designer may not also take into account what the player might need to have an effective experience. Some players may still find the resulting game to be satisfying, but the intent of the designer was not to take these needs into consideration, and therefore, they were indifferent to the player. [↑](#endnote-ref-48)
49. W. Mischel, Y. Shoda, M. Rodriguez, Delay of Gratification in Children, 1989, *Science*, 244(4907): 933-938. [↑](#endnote-ref-49)
50. Personal correspondence with Jessica Aldred. [↑](#endnote-ref-50)
51. On the other hand, the society and Rapture underwater city illustrated in the game has become itself a dystopia, in part, by allowing too much individuality, showing us that a balance is necessary between overparenting and underparenting. [↑](#endnote-ref-51)
52. M. Schulzke, “Simulating Philosophy: Interpreting Video Games as Executable Thought Experiments” [↑](#endnote-ref-52)
53. C. Hocking, “Ludonarrative Dissonance in Bioshock,” October 7, 2007, accessed at: http://clicknothing.typepad.com/click\_nothing/2007/10/ludonarrative-d.html [↑](#endnote-ref-53)
54. H. Cash and K. McDaniel, *Video Games & Your Kids: How Parents Stay in Control*, 2008, Enumclaw, WA: Idyll Arbor. [↑](#endnote-ref-54)
55. K. Schrier, *Knowledge Games,* 2016, Baltimore, MD: Johns Hopkins University Press. [↑](#endnote-ref-55)