Biopunk Dystopias

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Individuality, Choice, and Genetic Manipulation

Freedom of choice above everything, for everything, even for genes! Genetic choice will bring a new era of freedom! (Beck-Gernsheim 143)

Attributing this epigraph to German sociologist Elisabeth Beck-Gernsheim is a bit misleading, as she marks these words not as her own opinion, but rather as a poignant and slightly ironic commentary on The Economist, which in its cover article in April 1992 claimed that ‘Changing Your Genes’ should by right be within the grasp of the individual:

Should people be able to retrofit themselves with extra neurotransmitters, to enhance various mental powers? Or to change the colour of their skin? Or to help them run faster, or lift heavier weights? Yes, they should. Within some limits, people have a right to make what they want of their lives. The limits should disallow alterations clearly likely to cause harm to others […] Minimal constraint is as good a principle in genetic law as in any other. (11–12)

The article passionately argues for a libertarian stance in regard to genetic engineering and the right of the individual to decide his or her own fate – genetically as well as socio-politically. The text concludes with a snide remark on Sigmund Freud’s claim that ‘Biology is destiny’: ‘The proper goal is to allow people as much choice as possible about what they do. To this end, making genes instruments of such freedom, rather than limits upon it, is a great step forward. With apologies to Freud, biology will be best when it is a matter of choice’ (‘Changing Your Genes’ 12).

Beck-Gernsheim uses the article and its veneration of individual genetic engineering as an example of how the concept of health has,
under posthuman technoscience, become expanded to mean not simply the maintenance of functioning human biology but the shaping of one's genetic raw material to one's desire: ‘Biology, understood as the basic genetic endowment, is no longer destiny but starting point. Expectations of indefinite change and improvement are now the order of the day’ (Beck-Gernsheim 143). Health is no longer a necessity for survival in a social group that depends on it, but rather a lifestyle choice, the body becoming a work of art or a demonstration of scientific possibilities. As Anthony Giddens argues, ‘In the spheres of biological reproduction, genetic engineering and medical interventions of many sorts, the body is becoming a phenomenon of choices and options’ (8).

As such, Beck-Gernsheim claims, the option to genetically engineer the body into becoming posthuman is another instance of modernity's drive towards ‘individualization,’ a mechanism of liquid modernity that ‘tells us to seek biographical solutions to systemic contradictions’ (Beck and Beck-Gernsheim xxii). Individualization in this sociological sense, as opposed to the neoliberal usage of the word, refers to an institutional(ized) imbalance, which leaves the individual disembedded from secure social institutions but faced with growing global risks:

Opportunities, dangers, biographical uncertainties that were earlier predefined within the family association, the village community, or by recourse to the rules of social estates or classes, must now be perceived, interpreted, decided and processed by individuals themselves. The consequences – opportunities and burdens alike – are shifted onto individuals who, naturally, in face of the complexity of social interconnections, are often unable to take the necessary decisions in a properly founded way, by considering interests, morality and consequences. (Beck and Beck-Gernsheim 4)

Individuality is thus not a choice based on self-assertion, gained by taking control over one’s fate, and living to one’s desires. Instead, as Bauman emphatically argues, individualization is a fate that positions the ‘modernizing impulse, […] the compulsive critique of reality’ as a ‘compulsive self-critique born of perpetual self-disaffection: being an individual de jure means having no one to blame for one’s own misery, seeking the causes of one’s own defeats nowhere except in one’s own indolence and sloth, and looking for no remedies other than trying harder and harder still’ (Liquid Modernity 38).

The achievement of human identity, something that in pre-modern and even early, solid modern times had been a ‘given,’ has in liquid modernity been transformed into a ‘task,’ with responsibility handed
over to the individual. Autonomy, choice, and self-assertion have become essential aspects of every individual's life project, elements stated as fact and used in search for identity – not just one fixed and embedded identity, but options and choices of identity, never settling but always fluid (Bauman, *Individualized Society* 140–48). This search for identity in times of consumer society and with the advent of genetic engineering is not limited to social positions, jobs, partnerships, and so on; it includes posthuman development as well, leaving the formation of a new and better self to the individual (see Bauman, *Living* 148).

There is a noticeable gap, then, between liquid modern insistence on individuality, autonomy, and self-assertion on the one hand and the systemic risks and contradictions involved in achieving such conditions, caused by globalized flow of information, technology, and politics (e.g. network society, the Anthropocene, posthumanism), on the other. It is this gap that is at the heart of my argument in the analysis of the highly successful 2007 video game *BioShock* in this chapter. Science fiction as a genre here allows for the extrapolation and exaggeration of this gap by employing the posthuman as an extreme of human identity. The dystopian leaning of the narrative opens up the possibility of a bleak emphasis of the science-fictional dimension of consequence in terms of this development, whereas the medium of the video game uniquely provides the specific ideological commentary on the systemic nature of an illusion of autonomy, especially in liquid modern consumer society.

### 5.1 Objectivist Utopia and Posthuman Dystopia

*BioShock* is an extraordinary video game not so much because of any genuinely innovative gameplay or boundary-breaking new technologies – these aspects are quite unspectacular, even, the game employing a simple first-person shooter scenario. Rather the game has been given some of the highest rankings in game history and won several ‘best game’ awards because of its detailed, nostalgic, and unique aesthetics.

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1 *BioShock* has since spawned a whole franchise of products: the full-length video games *BioShock 2* (2k Games, 2010) and *BioShock: Infinite* (2k Games, 2013), several add-ons for all three games in the series, an alternate-reality game as part of the marketing campaign of *BioShock 2* (*There Is Something in the Sea*, 2009), a novel written by John Shirley (*BioShock: Rapture*, 2011), and even the plan for a film (which was subsequently cancelled).

taking place in an underwater city in an alternate history of 1960, as well as its intricate narrative storyline, which – surprisingly for a video game – has overt philosophical leanings. When Ken Levine, the creative director behind *BioShock*, announced the game roughly a year before its release, he thanked his ‘useless liberal arts degree’ for providing the literary inspiration for the game and referenced the ‘sort of utopian and dystopian writings of the 20th century […] [such as] Huxley, Orwell and Rand’ (cited in Perry) as the main motivation for the storyline. Especially, the game’s connection to Ayn Rand’s philosophy of objectivism and the intertextual reference to her novel *Atlas Shrugged* (1957) have been explored both journalistically (see McCutcheon; Sinclair; Bray) and critically (see Aldred and Greenspan; Hourigan; Kennedy; Packer; Tulloch).

As already mentioned, in terms of main game mechanics, *BioShock* is a first-person game, in which the visual non-existence of the avatar (aside from the weapon held) leads to what Britte Neitzel calls a ‘subjective perspective’ (194). Most players feel a stronger identification with the character (see Galloway, chapter 2; Rehak; Kennedy) than that experienced with other perspectives. Tanya Krzywinska stresses that with first-person perspective in horror video games, the ‘increased visual proximity to what lurks within such shadowy places, heighten[s] the sense of contact’ and creates in the player feelings of ‘disquietude and tension’ (‘Hands’ 210).

The game begins with the protagonist Jack – the player’s avatar – sitting on a plane, which shortly thereafter crashes into the ocean. Jack is the only survivor, rescued from drowning by his discovery of a tiny island with a lighthouse. Here, he accesses a bathysphere (a small spherical deep-sea submersible), which brings him to the underwater city of Rapture, hidden from the world and built as a utopian safe haven for meritocratic idealists. But upon arrival, Jack discovers that something has gone terribly wrong and that Rapture has instead become a corpse-strewn prison for the remaining grotesque, mutated, and violent inhabitants. In order to survive, Jack has to navigate the bizarre landscape of Rapture, kill the mutated citizens, and escape the underwater prison. The game’s narrative follows Jack on his way

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3 In my description of game scenes, I will refer to ‘Jack’ whenever (re)actions occur in-game, even though these are triggered and enacted by the player and will usually also have some influence on them in terms of emotional response. But I will limit myself to the use of ‘the player’ whenever I want to stress specifically the emotional reactions outside of the gameplay, for example in regard to ethical decisions or ideological judgment.
through Rapture, but allows the player to experience several story arcs that comprise the backstory of the city's creation and subsequent fall into ruin. These arcs are presented in-game as intradiegetic narration either by conversations with the (more or less) human inhabitants of Rapture or mostly by recovered audio diaries on tape.

Industrialist Andrew Ryan constructed Rapture after the Second World War as a libertarian, objectivist utopia to escape societal and governmental regulations. The city was supposed to be home to industrialists, scientists, artists – generally the best and brightest of society – who should then create and live beyond the grasp of sovereign systems of control (such as the state, social welfare, or the church). But the meritocratic society was challenged by raging elitism and social unrest, as the necessary menial labor created a growing underclass. On the one hand, the city’s inhabitants succeeded in incredible feats of scientific research and industrial manufacturing – their greatest discovery a sea slug that contains the key to targeted genetic engineering. By manufacturing specific stem-cell therapies as a commodity called ‘plasmids’ and advertising them as ‘Evolution in a bottle!’ (in-game ad), the city’s society soon turned into an unregulated consumer market for gene enhancements that facilitate superhuman powers such as mind control, pyrokinesis, or pheromone manipulation.

On the other hand, the limited availability of the natural resource (stem cells from the slug, refined into a potent brew called ‘ADAM’) necessary for this genetic transformation caused the already divided society to erupt in a civil war over the control of ADAM and the plasmids. Widespread plasmid abuse led to side effects such as mutation, physical deformity, and mental instability, which in turn led to more violent reactions, to withdrawal, and to a more aggressive acquisition of further ADAM. The resulting creatures, called ‘splicers’ due to their spliced genetic make-up, are intelligent, driven, and cannibalistic – high-functioning zombies out for ADAM, which can be extracted from human bodies, dead or alive.

As I have noted elsewhere, *BioShock* presents the player with two worldviews via historical embedding: the objectivist utopian enclave of 1946 (through the use of the audio diaries and the remaining aesthetic components of Rapture), which is narratively reassembled from the ruined city, and the posthuman dystopian reality of a diegetic alternate history of 1960: ‘Because the game’s setting fatally collapses the utopian impulse into a posthuman dystopia and buries it in history, the player reconsiders, reflects and meditates on reasons, possibilities and choices that led to this dystopian turn’ (Schmeink, ‘Dystopia’).

As such, *BioShock*, more than any academic essay or journalistic criticism, can be understood as a fitting and effective critique of
Atlas Shrugged and Rand’s philosophy, as the game engages it in a format that achieved a similar level of creativity and popularity as the original novel, which is the basis for the success of objectivism: ‘Although Rand wrote scholarly work on Objectivist thought, it was her perennial best-selling novels that are largely responsible for her enduring popularity’ (Packer 208). This popularity is so immense and relevant, even today, that the Wall Street Journal’s Stephen Moore openly wished that Atlas would become ‘required reading’ for politicians and business leaders, blaming for example the Obama administration for not heeding Rand’s advice and ultimately stalling economic growth in the current financial crises. Conservative journal The Economist even lauds Rand as ‘Capitalism’s martyred hero’ (‘The Life’) and Terry Teachout of the National Review argues that her larger-than-life black-and-white dramatization of libertarianism is ‘so well suited to the needs of the “frustrated adolescent in search of fresh ideas”’ that it is no wonder Atlas is, according to the Library of Congress, the second most influential book in the lives of the American audience after the Bible (Teachout 46).

Rand’s philosophy of libertarian laissez-faire capitalism and the promotion of self-interest to civic duty as its highest value, as witnessed by the oath of objectivist principles (‘I swear by my life and my love of it that I will never live for the sake of another man, nor ask another man to live for mine’; Atlas 731), are thus idealized forms of the individualization claimed by Beck, Bauman, and others to be pervasive in liquid or second modernity. All aspects of life have become tasks and projects of the individual, all collective action has been eradicated, and all governmental control has become void. The difference between Rand’s ideals and the realities of liquid modernity lies in the shift from a solid, industrialized, and production-based society to a liquid, commodity- and consumption-based society. Whereas Rand argued that man’s rational will to live drives him to create and to produce, all in the interest of self-assertion and self-fulfillment (‘Wealth is the product of man’s capacity to think’; Atlas 411), that same self-fulfillment is now sought and found in consuming identities, contradictorily ‘solid enough to be acknowledged as such and yet flexible enough not to bar freedom of future movements in the constantly changing, volatile circumstances’ (Bauman, Liquid Modernity 49–50).

Beginning my analysis of BioShock, I would first like to remain on the level of ‘ideological critique,’ drawing connections between narrative content and the larger socio-political realities, before later extending my argument to include the ‘informational critique’ (Galloway 95, 99), which incorporates the procedural or algorithmic nature of the medium. I believe that BioShock negotiates ideological discourse
pertinent to liquid modernity and individualization especially in its
treatment of the posthuman, addressing those ‘frustrated adolescents’
described by Teachout through the medium of the video game, on the
level of aesthetics, narrative, and process. In the game, the individual’s
task of identity construction, most effectively dramatized in the form
of a genetic engineering of the self, becomes the foil for ideological
critique of individualization. In a sense, the game thus reveals Randian
objectivism as inspirational and relevant for contemporary socio-political
and economic realities, but also as deeply flawed. The game is a science-
fictional extrapolation of this form of liquid modern individualization
in the extreme:

*Bioshock* presents a bleak account of corporate domination,
technological disaster and totalitarian control. It can be read
as embodying deeply engrained cultural anxieties and concerns
about individualist and laissez-faire ideals and policies. The game
offers a complex rendering of an ideology taken to its extreme: a
society of self-motivation, self-advancement and, consequently, the
abandonment of ethics and social responsibility. It shows the player
a world where the end outcome of a free market, free-for-all culture
has caused societal collapse and the monopolistic domination of
one corporate entity: Ryan Industries. (Tulloch 29–30)

Returning to my epigraph: *BioShock* uses the idea of creating ‘new
man,’ even more so the idea of crafting yourself into ‘new man,’ and
places it in the individual. Given complete freedom of choice in terms
of manipulating the genetic structure of people, the game proposes
that self-assertion and identity creation are any individual’s right.
In an extreme vision of consumer society, and bleakly commenting
on contemporary health and beauty industries, *BioShock* literalizes
Bauman’s assertion that ‘there is and can be no limit to the level of our
self-perfecting exploits, and to the satisfactions brought by further rises
in that level’ (*44 Letters* 76). The discovery of plasmids and the option
to self-improve via genetic manipulation were logically followed up by
the creation of a demand for those commodities now available. The
marketing of plasmids in the game is strongly reminiscent of contem-
porary pharmaceutical campaigns for alleged health problems that did
not exist only a few years before (for example ADHD or the already
mentioned eyelash hypotrichosis; see chapter 3). In *BioShock*, the concept
is applied, for example, in promoting the use of the ‘Incinerate’ plasmid
(firing flames from your hands) as a kitchen helper for overworked
housewives (‘those happy family meals will take much less time to
prepare'), or as a smooth lighter replacement when flirting in a bar. Genetic engineering is displayed as a commodity, of use to everyone, assuming one can afford such a luxury item.

In the tutorial commercials, short introductory films that accompany each plasmid’s first in-game use, on the other hand, BioShock’s darker ironic commentary shines through, when the ‘Winter Blast’ plasmid (freezing objects or persons with your hands) is shown to be used by a husband to suspend his wife in ice, or ‘Incinerate’ helps the man escape the ‘attack’ of a doctor with a syringe by setting him on fire. Here, each plasmid’s weaponized usage is promoted. The tone is in tune with the game’s own advertising strategy, arguing that you have complete freedom in terms of weapon choices, even including radically ‘abusing’ genetic household helpers like ‘Incinerate’: ‘Turn everything into a weapon, biologically mod your body with plasmids, hack devices and systems, upgrade your weapons and craft new ammo variants, and experiment with different battle techniques’ (2k Games: BioShock).

The plasmids’ empowering abilities make possible an even greater economic, industrial, and creative success in Rapture and consequently bring out visions of posthumanist futures by enhancing the more radical ideals already present in the city because of Ryan’s free enterprise, no
interference policy. The extremes that such a policy ideologically attracts vary with the professional orientation, but the game proposes that any ideology taken to its limit amounts to a ‘fanaticism [that], even in the service of total freedom, must come to a bad end’ (Bray 46). The game enacts several such extreme fanatics as ‘bosses’ (enemies the player has to defeat at the end of a level or chapter, usually progressively bigger and harder than any opponents faced before): the plastic surgeon Dr. Steinman, constantly searching for physical perfection and styling himself ‘Surgery’s Picasso’ (AD ‘Surgery’s Picasso’);4 the artist and playwright Sander Cohen, wishing to create unique masterpieces beyond the limited scope of all the ‘doubters’ and ‘frauds’ around him (AD ‘The Doubters’; RM ‘Fort Frolic’); Frank Fontaine, the opportunistic and deceitful gangster boss and main threat to Andrew Ryan’s empire (all RM from the end of ‘Central Control’ on); or finally Ryan himself, self-appointed ruler of Rapture and unwavering believer in libertarian ideals and free will (all RM up to ‘Central Control’).

Levine has commented on these bosses and the main idea of the game as ‘what happens when ideals meet reality,’ exposing a fanaticism in beliefs that ultimately fail, no matter what those beliefs: ‘They’re

4 All references to in-game radio messages (RM) and the audio diaries (AD) can be found as transcripts at the BioShock Wiki. If possible, I give the reference to the ‘name’ of the specific transmission in parentheses, but the bibliographic data given in the Works Cited is the main wiki page.
all reflections of Ryan. They’re all people who take an ideal. With the plastic surgeon, it was physical beauty. He would take his ideal, and with the plasmids, push too far. Is it the plasmids or is it him?’ (cited in Remo). The science-fictional dimension of possibility that the plasmids offer is thus *BioShock*’s expression of the dystopian. This dimension provides the basis for extrapolating and enhancing the utopian impulse in the ideology (of freedom, beauty, creativity, success) into the extreme fanaticism that is driving these people, and then to tip it over into the dystopian: ‘Well, the whole world is on the razor’s edge of beauty and horror. Ryan’s world, Fontaine’s world, even Steinman’s world – they’re trying to make beauty, but it edges over into horror. The visuals of Rapture are all about that razor’s edge’ (Levine cited in Remo).

The dystopian moment of the game originates not just in the plasmids and their potential for a posthuman (if not superhuman) development, but rather in the unregulated access and the freedom of the individual to decide on their usage. As Joseph Packer argues, the game installs the plasmid technology as allegory for ‘other technologies currently controlled by the government, such as recreational drugs and biotechnology’ and enacts them as critique of individualization: ‘the plasmids also represent the limitless potential of human ingenuity and the danger that potential poses when the government fails to regulate it’ (217).

When used too extensively, the ADAM needed to change the genetic structure of the host cells deforms the healthy cells, similar to a cancer, replacing some and destroying other genetic material, thus causing both somatic and psychological damage to the host as well as a strong dependency (see *BioShock Wiki* entry for ‘ADAM’ and ‘Splicers’). The substance (ab)users effectively become violent, mad junkies reminiscent of (fast) ‘zombies’ or ‘infected’;5 Driven to hunt for ADAM, they murder most of the ‘normal’ inhabitants of Rapture and engage in cannibalistic rituals of consumption. The game here posits the posthumans as inhuman and monstrous victims of their own desire for self-perfection and self-assertion (Aldred and Greenspan 482) – essentially individualized victims of a systemic risk in Rapture’s gene-enhanced consumer society.

Interestingly, though, *BioShock* presents the splicers both as collective masses and as individual victims, a contradictory moment found in the aesthetics versus the narrative description of their origin. As described above, the splicers are fully engaged in individual self-creation: They desire the advertised plasmids; they crave them as commodities (or better

5 For a discussion of zombies and the changes brought by shifting them into ‘infected,’ see chapter 7 on post-9/11 zombie films.
as necessities) that enable them to constantly perfect themselves and (re)define their identity, which as Bauman argues has replaced ‘human nature’ as a given, and melted it into ‘a task which every man and woman had no choice but to face up to and perform to the best of their ability’ (Individualized Society 144). Most important about this task though is that one remains flexible and always able to switch ‘identity’ according to possibly arising needs – a concept that the game naturalizes in ‘Gene Banks,’ biotech stations in Rapture that allow people to exchange genes in the form of plasmids as they would accessories. Plasmids in the game thus represent an individualized consumer society’s holy grail in that they commodify identity construction: ‘Making yourself to the measure of your dreams, being made-to-your-own-order: this is, after all, what you always wanted, only lacking thus far the means of making your dreams come true. Now the means are within reach’ (Bauman, Living 149). Whereas the previous chapters described ‘made-to-your-own-order’ posthumanity as social acts of procreation (in that the Crakers, the New People, and Dren are all created by and in addition to the human), in BioShock posthumanity becomes an act of self-creation, by modifying the original material beyond its existence – the human stops once the posthuman starts.

The contradiction, or better the ironic twist, lies in the net result, which BioShock visualizes vividly in the splicer aesthetics. The splicers’ search for ‘identity’ and biological perfection in the end leads them to an extreme loss of individuality, and of their humanness. They find themselves mutated by the ADAM, showing skin abrasions, open wounds, deformities. Their human individuality becomes subsumed by their status as splicers, monsters, inhuman. Beyond the scarring and mutations, the splicers lose all status as individuals and become a faceless mass – in terms of game mechanics, there are thousands of splicers in Rapture but only ten to fifteen different splicer ‘models’ are generated by the algorithm of the game.

To further enhance their inhuman ‘facelessness,’ many splicers wear carnival masks (originating from the 1958 New Year’s Eve festivities that were the start of the ‘Civil War’ in Rapture; BioShock Wiki, ‘Mask’), which marks the situation as grotesque and carnivalesque in the Bakhtinian sense: The masks hide the deformation of society, while at the same time leveling all social strata by granting everyone the same façade. They erase any underlying identity by providing an equalizing front (Bakhtin). Further, the situation itself, the Civil War, is thus claimed as carnival, as a zone outside of law, rules, and morals. The blood spattered over the masks as well as their slight decay mark the aesthetic as even more horrific and grotesque.
In terms of game mechanics, the splicers function as typical first-person shooter cannon fodder, alongside the ordinary fare of monsters, zombies, aliens, terrorists, or Nazis that otherwise populate the genre’s opponent rosters. As Krzywinska argues about zombies in gamespace: ‘they articulate [...] contemporary cultural fears about the loss of autonomy or the capacity of science to create apocalyptic devastation’ (‘Zombies’ 153). This connection to contemporary culture also holds true for the splicers, as these posthumans – through the biopunk framing of the game – are linked specifically to the science-fictionality (in terms of both possibility and consequence) of genetic engineering and the socio-political realities of an individualized society such as that in liquid modernity.

It is important to note, though, that the game’s cannon fodder needs to be ‘negligible from a moral standpoint,’ so that it functions as the faceless enemy mass; the player needs to be unconcerned to dispose of it: that is, the splicers need to be ‘morally quarantined’ (Tavinor 99) from any objections that players might have to killing them. Packer argues that this ‘moral quarantine’ is forced on the player due to the game’s depiction and critique of the objectivist ideology: ‘When Bioshock places Objectivists in the same role as these other groups [zombies, mutants, terrorist] viewed as complete evil, the game sends a message to any player familiar with the first-person shooter genre’ (215). In Packer’s argument, the in-game realities and the algorithmic nature (of BioShock as part of the first-person shooter genre) force players to ‘internalize the idea that Objectivists are dangerous enemies, seeking to inflict harm for their own personal gain’ (215). In a further analysis this rings true, as the game’s setting as well as mechanics seem to confirm the ideological framing. Packer argues that since a strong individualizing impulse has created the threat of the splicers, plasmids have weaponized uses, lethal security measures and regular weapons abound in the game, and everyone is armed to the teeth and out for their own gain, survival of the player is dependent on a similar ruthless usage of all weapons at their disposal: ‘power comes from possessing a large arsenal’ (Packer 216).

But the player does not know all this (beyond the procedural logic of any first-person shooter) when they start the game. Thus, BioShock has to establish this moral ideological imperative (‘Kill or be killed!’) in a few short but very effective scenes right at the beginning of the game. The moral quarantining of the splicers unfolds as Jack is still trapped in the bathysphere: Unable to open the door, he witnesses a man stumbling towards the bathysphere, believing it to be rescue. The man is ambushed by a splicer and then eviscerated. The splicer turns
her attention to the bathysphere, attacking it, punching holes in the hull with claw-like hooks but not getting in; she then jumps into the darkness, crawling onto the roof. The cinematic quality\(^6\) of the scene is important to note: lots of shadows, flickering low-key lights, the steamed-up reflective surface, water running off the sphere – all of this makes the scene visually highly unreliable and it is hard to make out the exact events and for the player to position themselves in the game’s geographical and ideological space. The attack of the splicer on the sphere then triggers a further loss of orientation as the player is unable to follow the movements of the attacker, as they can only locate the damage to the inside of the sphere; locating sounds (without a 360-degree audio simulation) is equally impossible and thus further disorientation is created. When the splicer withdraws and the door opens, the player realizes that they are ‘at the mercy of a creature that will more than likely savagely kill them – or rather, the character they are controlling – without mercy or hesitation’ (Kennedy 3). As Sean Kennedy’s struggle with the player/character distinction shows, the anxiety, disorientation, and loss of control is transported from the diegetic level of the game and mirrored in the player. In this scene, then, with the help of setting, mood, and narrative, the moral status of splicers has been thrown into serious doubt for the player as well as for Jack.

This point is then further developed in a scene when Jack injects himself with his first plasmid (more on this below) and blacks out for a while. The diegetic loss of control is taken up algorithmically by making the scene a cut-scene not an in-game scene (meaning the player cannot enact any reaction at this moment): Jack blinks in and out of consciousness, symbolized by black screens. He awakes to two splicers discussing how to extract the freshly injected ADAM from his body. They are disturbed by a different creature, though: a hulking monster in a diving suit, and his companion, a pale and sickly-looking little girl in a pastel dress bearing a gigantic needle. She is there to extract ADAM from the ‘angel,’ but realizes that Jack is still alive. She leaves him, certain that ‘he’ll be an angel soon’ (*BioShock*, ‘Plasmid Cutscene’). Again, the

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\(^6\) This scene is not a cinematic cut-scene in the usual sense. Instead, the player is able to manipulate both movement and viewpoint of Jack but cannot escape the bathysphere. The action takes place outside the sphere, but the player is still ‘in control’ of Jack. Also, of course, the term ‘cinematic’ is not used in its strict sense as there is no filming involved but everything is created digitally. The terminology, though, is borrowed from film studies. More on the function of cut-scenes and their usage in *BioShock* follows below.
player’s as well as Jack’s loss of control and inability to act against the splicers is stressed by the game, effectively showing the player that they need to be ready to defend Jack’s life at any moment.

In the first 20 minutes of the game, Jack is thus twice shown to be at the mercy of his environment and he has had to dispose of several splicers, which very poignantly at the beginning has to be done with a wrench, necessitating very close contact and strong violence, by bashing in the heads of the splicers. When Jack now moves up a flight of stairs, he finds the entrance to the Kashmir restaurant, the light shining out of the hall, casting the shadow of a woman fussing over an old-style perambulator. The woman soothingly sings and gestures to the pram. The scene is bathed in an eerie bluish-green backlighting; the woman is not recognizable, as her back is turned towards Jack, and she seems to be busy with her child. When approached, she spins around and reveals a deformed face, screaming at Jack, and viciously attacks him. After Jack kills the woman with the wrench, the scene reveals the full extent of the moral degradation of Rapture’s society: Firstly, the perambulator contains not a baby but a revolver, which Jack can use from now on to rid himself of the splicers. And secondly, this is the first time that Atlas, Jack’s guide throughout most of the game, comments on the creatures in more detail and explains their origin and status: ‘Plasmids changed everything. They destroyed our bodies, our minds. We couldn’t handle it. Best friends butchering one another, babies strangled in cribs. The whole city went to hell’ (RM ‘Welcome to Rapture’). With his radio messages, Atlas functions as the moral baseline for the player and his judgment of the splicers is copied and internalized. His motivation (rescuing his wife and child from Rapture) and his commentary about the inhumaness of strangling babies in their cribs here enhance the image of the debased mother Jack just had to kill. As the scene makes emphatically clear, any humanity is gone from these creatures and the player should have no qualms whatsoever about killing them – morally, splicers do not belong to the same order of beings as Jack, or the player controlling him for that matter.

In a last step, the game goes further than simply using verbal and visual rhetoric to implement its critique of individualization and libertarianism, as seen above (Packer 218). The game also enacts this critique, to use Ian Bogost’s terminology, with a ‘procedural rhetorical frame’ (104), forcing players to enact the ideology themselves. The art of persuasion through procedural rhetoric, Packer claims, can be seen in BioShock when the game forces the player to take part in the individualizing process and in the objectivist struggle: ‘Rather than viewing the Objectivists who used plasmids as simply acting irrationally, the game
shows the player that plasmids (a metaphor for rampant science and drug use) makes [sic] sense in the dog-eat-dog world that Objectivists seek to create’ (218). In order to survive, the game drives the player to make extensive use of weapons, but the plasmids are simply one of several options that can be used to kill the splicers. They are a sensible choice in terms of the player’s gain, and usage of them is procedurally encouraged (as exemplified by Atlas: ‘Give ’em the combo: zap ’em then whack ’em. One-two punch!’; RM ‘Welcome to Rapture’). But not only do the plasmids thus simply ‘make sense’ in the procedural rhetoric of the game as a weapon choice, but they are, beyond that, absolutely necessary to progress in the game – on a simple algorithmic level, should the player not participate in the genetic self-creation that the plasmids signify, they will not be able to move further along the game’s trajectory.

Already early on in the game, as mentioned above, Jack must inject himself with his first plasmid – the game presents this as one of very few cut-scenes, the extraordinariness of which will warrant more attention later. The scene happens only minutes into the game, when Jack encounters a locked door. The locking mechanism is broken and sparkles with electricity. To progress in the game, the player will have to find a way through the door, as all other exits are barred – this means jolting the blocked circuits with electricity. Around the corner, there is a plasmid vending station, called ‘Gatherer’s Garden,’ advertising ‘Genetic Modifications.’ It is broken, but one glowing red bottle of plasmid and a blue syringe with the energy boost EVE (the ‘fuel’ to use the plasmids) are sitting openly in a compartment. The game mechanics highlight these as usable and important by surrounding the items with a glowing yellow shadow.

Using the power-up then triggers the cut-scene, a ‘diegetic machine act,’ in which the machine takes over the game (Galloway 12) and shows the player Jack’s reaction to the plasmid injection: his pain, the unconsciousness, and the vulnerability when his DNA is rewritten (Kennedy 4). The action is inescapable, though, as the game would not progress if the player refused to use the plasmid power-up. Similarly forced uses of plasmids occur with ‘Telekinesis,’ which is needed to retrieve a key otherwise unreachable, and with ‘Incinerate,’ which is needed to melt a frozen hallway in order to pass through it – all of which occur in the first quarter of *BioShock* to assure the player’s complicity with the game’s ideological stance. The procedural rhetoric of the game here clearly marks the self-creation aspect, the individual act of becoming posthuman, as non-optional. As Bauman remarks on individualization, but very fittingly for the algorithm that governs
BioShock as well: ‘Let there be no mistake: [...] individualization is a fate, not a choice. In the land of the individual freedom of choice the option to escape individualization and to refuse participation in the individualizing game is emphatically not on the agenda’ (Liquid Modernity 34, emphasis added).

Moreover, the procedural rhetoric of BioShock further persuades the player to accept fluid posthuman identity as a component of the world of Rapture. As Bauman argues, ‘Risks and contradictions go on being socially produced; it is just the duty and the necessity to cope with them which are being individualized’ (Liquid Modernity 34). In Rapture, this refers for example to the systemic insecurity of life and livelihood. The fierce competition, class separation, and no-holds-barred capitalism effectively lead to precarious existence on all levels. Solutions to this systemic risk are found in individual choices: Plasmids are used not just as weapons but, in the form of their smaller variant as ‘gene tonics,’ also in order to provide a smoother interaction with the hostile environment or to provide security – effectively: to be better, healthier, safer. Gene tonics are available in three categories (combat, engineering, physical) and regulate different aspects of a precarious life: ‘Hacking Expert’ allows you to circumvent security and open safes, ‘Human Inferno’ reduces damage taken from fire, ‘Extra Nutrition’ allows you
to gain more energy from food, and so on. The extended metaphor of plasmids as biotechnology that keeps the body healthier and fitter is inescapable in the game: Plasmids and gene tonics are an indispensable commodity for life in Rapture (especially now that it has become such a hostile environment).

The game stresses the individual need for flexibility of life choices and the constant adaptation of the self to new challenges. The player starts out with two ‘slots’ but will soon have more gene tonics available, forcing the player to determine which tonics to ‘equip’ for which situation or buy more slots. The constant need to adapt to environmental challenges explains the availability and functionality of ‘Gene Banks,’ which store the additional tonics until they are needed and used. Switching your genetic make-up becomes as easy as finding a nice song on iTunes to go with whatever task is at hand. The game plays with cultural anxieties over precariousness and offers ‘becoming-posthuman’ as an individual life-choice consumer solution. As Bauman jokes, responsibility for living the right life and living it happily are individual tasks, solved with consumer logic: ‘Now you will have to buy yourself the gene of your choice that will make you (without the detested need for the “sweat of your brow” [...] enjoy the kind of happiness of your choice’ (Living 145).

5.2 Freedom of Choice, Individuality de jure, and Morality

As we have seen, BioShock explores the contemporary trend towards individualization by extrapolating and mapping it onto science-fictional developments of posthuman genetic engineering. The ideological critique of the game allows us to read BioShock as making a statement on individualization as an existing sociological process and the necessity of seeking ‘biographical solutions to systemic contradictions,’ as mentioned by Beck and Beck-Gernsheim. Supporting this, the game seems to promote a specific ‘ludic contract,’ as Clint Hocking argues, that ‘is in line with the values underlying Randian rational self-interest.’ According to this contract, acting in line with what the player perceives to be best for themselves will reap the greatest benefit and provide the biggest gain also for society – as claimed by objectivism. This ludic contract would thus be celebrating the same ideals as Rand’s work, that individualism is not only necessary but also superior to collectivism, ‘that self-interest is not only a right, but also a duty manifest in the very logic of life itself’ (Packer 212). Individuality is then a question of autonomously setting moral standards for any action possible (with regard to the moral
imperative: what is best for me is best for society), determining the best action according to those standards, and freely making the decision to do what I truly desire.

That *BioShock* does not uncritically uphold such a ludic contract, or, therefore, any uncomplicated reasoning regarding individuality, has already been shown in regard to the dystopian turn that Ryan’s extreme laissez-faire politics engendered. Further, the game’s procedural rhetoric in regard to becoming-posthuman as a consequence of individualization has been shown to incorporate an element not simply of necessity but of coercion. Individuality, in the game, is granted only *de jure* (to stick with Bauman’s distinction) and not *de facto*.

This distinction is best observed in regard to the game’s enactment of player autonomy and the freedom to choose a specific path within the game. For Grant Tavinor, the artfulness of *BioShock* as a video game (thus in the Bogostian sense its procedural persuasiveness) can be found in two features, which strongly emphasize its ‘themes of freewill and morality’ (93) by meta-fictionally highlighting its algorithmic nature. Firstly, the game’s procedural rhetoric forces players towards a morally ambivalent decision in regard to their acquisition of ADAM from the gatherers, the so-called Little Sisters. This decision has been argued by critics to represent an ethical dilemma (albeit a badly executed one; Sicart 159; Stephens), or an algorithmic commentary on the loss of innocence (Packer 218–19; Bray), or on objectivist logic (Hocking). Secondly, roughly three-quarters of the way into the game, *BioShock* further uses a narrative plot twist that in a meta-commentary discloses an underlying ‘informational critique’ (Galloway 99) of the procedural nature of all video games and connects it to the question of player autonomy and societies of control in general. In the following, I will thus analyze both game mechanics and their relation to liquid modern individualization processes in more detail.

As mentioned above, most of the gameplay revolves around the first-person shooter’s conventional mechanisms of progressing from level to level, surviving the hostile environment, and killing adversaries that stand in your way (Manovich 222). In order to best be able to survive this hostile environment, the player thus needs to have as many advantages on their side as possible. In *BioShock*, this means that the player will need not only to become posthuman by injecting themselves with ADAM when no other option is available, but also to use plasmids and tonics excessively. In order to do so, the player will need to spend ADAM, distributing it to create plasmid slots or paying for additional plasmids. Aside from the already mentioned first cut-scene, there is just one source of ADAM in the game: the Little Sisters.
Little Sisters are young girls (roughly aged six to eight) that have been genetically altered to process raw ADAM, to recycle it from dead bodies, and concentrate it for industrial production by the use of an implanted sea slug in their system. In effect, they are posthuman biological ADAM factories, strolling through the halls of Rapture, looking for corpses to extract any residual ADAM from. Since they are small and vulnerable, they are paired with another genetically altered creation, the Big Daddies – oversized bodyguards in diving suits spliced into powerful fighters, bound by their DNA to protect their charges. Jack’s first encounter with such a pair has already been described in the first cut-scene of the game, but this scene is not relevant in terms of the mentioned moral dilemma.

Rather, when Jack finally stumbles upon a Little Sister whose Big Daddy has been killed, granting him access to the girl, the game provides two different diegetic options for the player to proceed. On the one hand, geneticist Dr. Brigid Tenenbaum reasons with Jack that he need not kill the girl, but with a plasmid she offers him will be able to undo the genetic changes and thus rescue the girl from her status as Little Sister. Tenenbaum promises a reward for letting the girl live: ‘I will make it to be worth your while’ (RM ‘Medical Pavilion’). On the other hand, Jack’s guide Atlas argues along objectivist lines to get as much ADAM as possible by simply killing the girl and ripping out the sea slug from her system: ‘Listen to me boy-o, you won’t survive without the ADAM those … things are carrying. Are you willing to trade your life … for Tenenbaum’s Frankensteins?’ (RM ‘Medical Pavilion’). The game then offers the player the choice: First a non-diegetic screen explains the situation in terms of diegesis (the girl dies vs. you rescue her) and in terms of game mechanics (more ADAM vs less ADAM). Additionally, Tenenbaum’s promise is stated as an unknown variable, as to its function in game mechanics.

The player closes the screen and is faced with the overlay of their action options: ‘Rescue’ or ‘Harvest.’ In either case, Jack grabs the girl, fighting and screaming against the procedure. Should the player harvest the girl, smoke starts to fill the screen, which fades out to black, and then fades back in to show Jack holding a writhing black slug instead of the girl. Should the player rescue the girl, lines of white light flash over Jack’s hand and the girl’s face. The screen fades out to white and then back in to show a normal, healthy little girl standing before Jack.

In terms of narrative, the decision of whether to rescue or to harvest the girl comes to fruition in two different endings of the game. In the ‘Harvest’ ending, Jack becomes ruler over Rapture, unleashing his splicer army on the world and capturing a nuclear submarine to receive even
more power. In the ‘Rescue’ ending, Jack frees the girls from Rapture and grants them a chance to live out their lives (according to a very conservative family utopia). Narratively, the moral decision of the Little Sister mechanic thus provides the player with the power to grant the realization of Rapture’s heritage as either utopian or dystopian (see Schmeink, ‘Dystopia’).

But according to Alexander Galloway, games are ‘uniquely algorithmic cultural objects’ (86), and rather than producing their meaning simply in constructing a narrative, they can be seen as meaningful only as actions taken by the user. Whereas films, Galloway claims, hide the political dimension of control in their own structure, games on the other hand openly present it through their algorithmic structure and by making the gamer complicit in their production:

Video games don’t attempt to hide informatic control; they flaunt it […] The gamer is […] learning, internalizing, and becoming intimate with a massive, multipart, global algorithm. To play the game means to play the code of the game. To win means to know the system. And thus to interpret a game means to interpret its algorithm (to discover its parallel ‘allegorithm’). (90–91)

Mastering the game for players thus means understanding the behavior of the simulated system, understanding the machine’s reactions, the ‘hidden logic’ of the underlying rules:
[The player] is discovering the algorithm of the game itself. I mean this both metaphorically and literally. For instance, in a first-person shooter such as *Quake* the player may eventually notice that, under such and such conditions, the enemies will appear from the left; that is, she will literally reconstruct a part of the algorithm responsible for the game play. (Manovich 222–21)

A similar moment occurs when players are confronted with the Little Sisters mechanic, as the game openly flaunts its own algorithmic nature and provides disparate information on several levels. On the one hand, as Packer notes, the presentation of the Little Sisters and the moral choice given the player further function as ideological critique of objectivism and its ‘self-interest’ morality. In referring to their zombie-like aesthetics, Packer claims, the game connects the girls to ‘the dehumanized worker under capitalism […] That the Little Sisters are children furthers the critique, because it juxtaposes an age of innocence with a gruesome task. *Bioshock* uses this imagery to connect success in capitalism with the loss of innocence’ (218). This would also be implicit in the symbolism of the images of white light versus black smoke – the decoding of which is possible for players, as the game mechanics allow a small number of Little Sisters to be harvested without receiving the negative ending. Further, as Jeroen Bourgonjon et al. argue, the scene introducing the moral decision (i.e. Tenenbaum and Atlas stating their respective cases) is designed to evoke a specific moral reaction. Tenenbaum’s presence (versus Atlas’s disembodied voice) and her argument in line with ‘dominant beliefs’ for a strategy that values ‘long-term vision’ and the ‘innocence of childhood’ implicitly position her as ‘good,’ whereas Atlas’s self-interest argument is based solely on a ‘purpose-driven rationale’ (96), which implicitly condemns him as ‘bad.’

On the other hand, understanding the ‘hidden logic’ of the game and realizing the decision as a means to distribute power might lead to a different reading of the Little Sisters mechanic. For example, Hocking reads the overall game mechanics as clearly promoting self-interest (‘Kill or be killed!’), a typical first-person shooter ideology, and then argues that “dressing up” the mechanics of this contract in well

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7 For an evaluation of player responses towards this implicit moral coding see both Packer and Bourgonjon et al., who argue that players’ reactions are driven by their non-gaming experience and morals. The image of the little girls is key to this reaction, as Bray comments: ‘But there’s a particular, throat-catching poignancy this time. Those Little Sisters are just too cute to shoot.’
realized content [i.e. the narrative around the moral decision] I literally experience what it means to gain by doing what is best for me (I get more Adam) without consideration for others (by harvesting Little Sisters).’ In this fashion, the underlying rules of the game promote self-interest by granting a larger amount of ADAM – rescuing the girl grants 80 points, whereas harvesting grants 160 points. Especially in harder difficulty settings, this amount can be vital for the player’s chances of beating the game.

But this is only the first layer of the algorithm designed around this mechanic, as the awarded amount of ADAM levels out in the long run due to the promised intervention by Dr. Tenenbaum, which grants the player an additional 200 points of ADAM after saving three girls. The ‘harvest’ option grants only slightly more ADAM,8 whereas the ‘rescue’ option offers additional benefits in the form of plasmids and tonics otherwise not available to the player (see BioShock Wiki, ‘Little Sister’). In terms of the underlying rules of the game, the decision whether to ‘rescue’ or ‘harvest’ might thus be reduced to the simple choice of which style of play one prefers. As Bourgonjon et al. poignantly remark: ‘From this perspective, the central theme is neither about morality nor objectivism, but about the choice of weapons’ (96).

To complicate the situation further, there is no real other consequence in terms of game mechanics. The moral decision thus does not become ‘an integral part of gameplay’ (Schulzke), as it does in game series such as Mass Effect (Electronic Arts, 2007–16) or Fallout (Bethesda Games, 1997–2016), where it significantly influences non-player characters’ decisions and reactions, limits the player’s access to specific areas, or even causes the game’s overall trajectory to change. Apart from the different endings and the difficulty and style of playing, BioShock does not actively confront the moral decision made.

For Miguel Sicart, this lack of responding to the player’s choices ultimately deprives them of any meaning, at least in regard to their ethical dimension. For him, the Little Sister mechanic could have involved ‘the player as an ethical agent in the game world’ (159), but failed, because the lack of consequences within this world shapes the players’ reactions (as is reflected in Hocking’s comments above):

Players will react to the dilemmas not with a moral stance, but with their player logic, focused on achieving their goals in the game experience [...] The game turns their alleged key ethical

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8 Twenty-one Little Sisters can be harvested for 3360 ADAM or rescued for 3080 ADAM.
decision-making mechanic into a resource management process that does not require any type of moral reasoning for the player to succeed. (Sicart 160)

The moral decision embedded in the Little Sister mechanic is revealed to be of little consequence for the game itself and thus does not provide a nuanced reflection of the game's ethical value system: 'Rapture, it seems, does not care much about the ethics of its inhabitants, and all choices are deprived of meaning' (Sicart 160). The individual's decision does not change the ethical framework of the society. With Bauman's distinctive gap between individuality *de jure* and *de facto* in mind, we can then read this inconsequence of the player's moral choice as an ideological critique of individualization. The systemic contradictions of Rapture's society (the need to exploit others) cannot really be solved by biographical solutions (rescuing the Little Sisters) – in terms of game mechanics the simulated system (the game world) remains the same and no significant change occurs.

Lastly, and this will provide a bridge towards the discussion of the second feature of the 'freewill and morality' complex, a commentary should be made about the additional benefits that 'rescuing' the Little Sisters provides.9 The player receives not just additional ADAM from Tenenbaum but also a special plasmid, 'Hypnotize Big Daddy,' and several tonics, as well as ammunition, health, and EVE. The 'Hypnotize' plasmid is most interesting to note here, as it allows the player, for a time, to turn a Big Daddy from a fierce enemy into an ally with almost unmatched power. Similarly, several tonics and plasmids allow for a gameplay strategy that emphasizes turning the hostile environment against itself: hacking turrets and security cameras, the 'Enrage' plasmid, which has splicers fighting each other instead of Jack, or the 'Security Bullseye' plasmid, which focuses the security measures on the splicers. All of these are methods of undermining the system of Rapture that provide the player with a sense of control.

This mode of playing is then essentially an option that allows the player to enact their own critique of the systemic risks and to learn to accept them – to use the system and take the little control it offers. As Scott

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9 I owe the discussion of this aspect to my student Hakob Aridzlanjan, who, in the summer term of 2013, handed in a brilliant term paper on the deconstruction of player freedom in three recent video games. He noticed the 'theme of control [...] prevalent in several other game mechanics' of *BioShock*, which enable players to empower Jack with the ability to 'hack the system' of Rapture and thus turn 'control society' against itself.
Lash argues for the shift from solid to liquid modernity, where in solid modernity ‘a logic of structures’ determined the individual’s responses, liquid modernity now offers a ‘logic of flows,’ from which it follows that systemic risk is chronically indeterminate and that ‘living with risk is of much more a piece with […] the partial, the elusive determinacy of flow’ (vii). The non-linearity of liquid modernity means that individuals have to adapt to new forms of systemic risk. Liquid modernity is thus much more in tune with procedural ideology, the ‘allegorithm,’ of video games, in that it pushes the individual not towards ‘determinate judgement and rule following’ but rather towards ‘rule finding and reflective judgement’ (Lash xii). If players choose to ‘rescue’ the Little Sisters, then the game strengthens a gameplay option that is ‘reflective’ in flaunting the theoretical manipulability of the system itself. Collective resistance by solidarity with the girls, instead of self-interest, brings an additional option to gain a modicum of self-assertion.

5.3 Autonomy and Agency in Video Games

The second game aspect that determines BioShock’s artfulness (according to Tavinor), and that has been argued to be its key innovation, is the game’s meta-commentary on the procedural nature of video games in general, a commentary that has been applied to reveal controlling aspects of informational societies (among others, see Aldred and Greenspan; Sicart; Tavinor; Tulloch). With the mentioned narrative plot twist occurring late in the game, BioShock enacts ‘the procedural confusion surrounding agency and free will’ that is common for most video games and ‘ultimately mocks your helplessness at both a procedural and a narrative level’ (Aldred and Greenspan 490).

One of the key features of video games as media is that they are ‘premised on the notion of user agency’ (Tulloch 31), mostly debated under the term ‘interactivity.’ The distinction to be noted here is that interactivity can function in two ways – in a ‘figural sense, interactivity describes the collaboration between the reader and the text in the production of meaning’ (Ryan 16), thus hardly qualifying as specific to video games; in the ‘literal sense,’ interactivity means the ‘textual mechanisms that enable the reader to affect the “text” of the text as a visible display of signs, and to control the dynamics of its unfolding’ (Ryan 17). In video games, Ryan argues, interactivity defines the position of the ‘interactor,’ who ‘performs a role through verbal and physical actions, thus actually participating in the physical production of the text’ (17) – the text in this case being ‘an active medium […] one whose very
materiality moves and restructures itself [...] an action-based medium’ (Galloway 3). Further, it is important to note that agency in an interactive medium does not equal authorship. Interactors are able to actively shape the materiality of the text, to create the specific instantiation of the text by traversing a chosen path (see the concept of ‘ergodic literature’; Aarseth 1), but they ‘can only act within the possibilities that have been established by the writing and programming’ (Murray 152). Video games are simulated systems (see Frasca), which have been created with specific sets of rules that allow interactor participation: ‘Authorship in electronic media is procedural. Procedural authorship means writing the rules by which the texts appear as well as writing the texts themselves. It means writing the rules for the interactor’s involvement, that is, the conditions under which things will happen in response to the participant’s actions’ (Murray 152).

Nonetheless, the general tendency among players as well as critics of video games is to imbue the term ‘interactivity’ with a meaning that stresses agency, proposing connotations of ‘individual freedom of choice, personal development, [and] self determination’ (Jensen, cited in Tulloch 32). Katie Salen and Eric Zimmerman (both game designers) make the connection explicit: ‘We have argued that in order to create instances of meaningful play, experience has to incorporate not just explicit interactivity, but meaningful choice’ (ch. 6, sec. 5). In order to experience the game as meaningful, the player needs to be actively involved and be able to choose their path, to feel in control of their avatar. Players thus believe themselves to be individuals de facto, that they as players have achieved ‘individuation’ by living ‘self-sustained and self-propelled’ (Bauman, Liquid Modernity 34) lives. BioShock intervenes at this point and exposes the players as individuals de jure, given ‘no choice but to act, even if counterfactually, as if individuation has been attained’ (Bauman, Liquid Modernity 34), even though risks are still systemically produced and keep exerting control over them. Or as Galloway argues, ‘video games are allegories for our contemporary life,’ reflecting the ‘informatic control’ of liquid modern societies, so that consequently the games’ ‘allegorithm’ needs to be understood as ‘enacted metaphor’ (106) of the ‘logic of flows’ mentioned by Lash.

In terms of player agency, video games can employ different techniques that allow for different levels of control and thus provide either perceived freedom or limitation, a few of which are relevant to my analysis of BioShock and the guidance of the player through the game world: the game’s ‘pedagogic mechanism’ (Tulloch 23), its spatial linearity, and the sparing use of narrative cut-scenes. I will discuss these mechanics and their implications for systemic control and individualization processes
in liquid modern society, but first, I would like to shortly address the narrative behind BioShock’s plot twist.

When Jack arrives in Rapture, he is first addressed by a voice from a handheld radio system. The voice turns out to be that of Atlas, an Irish working-class immigrant, who claims that he is trying to escape from Rapture together with his wife and son (BioShock Wiki, ‘Patrick and Moira’; RM ‘Neptune’s Bounty’). Atlas becomes Jack’s guide through Rapture, explaining both the environment and the politics that shaped the city into what it is. While Jack and Atlas are trying to escape Rapture, Andrew Ryan believes Jack to be a spy sent to infiltrate Rapture and dispatches splicers and security measures to stop him. When Ryan destroys the bathysphere in which Atlas and his family wanted to escape, supposedly killing his wife and son, Atlas swears revenge on Ryan and the game thereafter follows the struggle between Ryan and Atlas, with Jack in the middle of the conflict. That is, until Jack confronts Ryan in his office, and Ryan reveals a conspiracy revolving around Jack. Jack is not an outsider but the genetically altered and carefully planted illegitimate son of Andrew Ryan, who has been given false memories and been manipulated into the situation unwittingly. The puppet master behind the conspiracy is Ryan’s rival Frank Fontaine, who has staged his own death, altered his appearance, and controlled Jack via a genetically embedded code phrase to do his bidding, disguised as the benevolent Atlas. Every time Jack hears or reads the phrase ‘would you kindly,’ it acts as a subliminal trigger that makes it impossible for Jack not to act upon it. The realization of this manipulation is then presented by the game in a powerful cut-scene with key uses of the phrase, which reveals the extent of the manipulation and the manufacture of the action to the very last detail – Atlas has been ‘guiding’ Jack with a soft touch, but effectively nonetheless. Afterwards, Ryan demonstrates the power of the phrase by demonstrating his ideological principles, interspersed with commands to Jack – ending in the ultimate command to kill: ‘Stop, would you kindly? ... “Would you kindly” ... Powerful phrase. Familiar phrase? ... Sit, would you kindly? ... Stand, would you kindly? ... Run! Stop! Turn. A man chooses, a slave obeys. ... Kill! ... A man chooses! ... A slave obeys! ... OBEX! (BioShock; BioShock Wiki, ‘A Man Chooses, a Slave Obey’). The enormity of this revelation and the powerlessness of both Jack and the player in this central scene are a radical intervention into the illusion of free will and player agency on the parts of the game designers. The decision to kill Ryan in this manner – in a cut-scene completely out of the hands of the player – demonstrates the power and fanaticism of the ideological system at play in the game, as Ken Levine argues:
And it’s out of your control. At the end of the day, everything [Ryan] had to do, had to be about his ideology. Nothing was more important to him, even his life [...] It was more important for him to show you he was the master of your will than to live. I think that it was really the ultimate insult to the player, that he chooses to die but you can’t choose to do anything. You have no will at all [...] Ryan sort of had to show you, as a character, that there are things more important to a character than winning the fight. He could die, as long as he died with his ideology intact, and while showing you that you had no ideology, that you were nothing. (Levine cited in Remo)

For most players, the scene comes as a shock; it cleverly reveals the underlying algorithms of any video game and flaunts the ‘hidden logic’ of procedural authorship. The game shows itself as a scripted simulation that allows players only a very limited reach of agency, where most other video games try to gloss over any such limitation. As Andrew Vanden Bossche argues, ‘BioShock not only involves the betrayal, but really makes players conscious of how much the game controls their actions, rather than the other way around.’

Vanden Bossche claims that a player’s illusion of control is necessary for the enjoyment of a game and that ‘authoritative voiceovers,’ which openly tell the player to do things, get in the way of the feeling of player agency. Instead, cleverly executed games such as BioShock will lead players through the pre-scripted actions by other mechanisms. Instead of using a tutorial level, which overtly addresses the player and interrupts the diegesis by displaying ‘how to’ information on screen, BioShock favors more subtle cues in order to guide players towards desirable actions.

BioShock introduces Atlas as its ‘primary pedagogic mechanism’ (Tulloch 33), instructing the player from within the diegesis as a relational character (not as some abstract supervisor dishing out orders) and providing strong narrative motivation for character actions – for example, suggesting to Jack that he pick up the wrench in order to be able to defend himself against the first splicer outside the bathysphere. This guidance is necessary in every game, as the mechanics of each game are specific and need introduction. In BioShock, Atlas simply appears to be a ‘clever framing device’ for this ‘technique of standardization and control’ (Tulloch 33) over possible player actions, which by design will necessarily have to be limited: Players will be able to explore only a spatially limited area (certain parts of Rapture), have interaction with only a limited amount of objects (weapons, doors, power-ups, audio diaries, bodies), and express only a specific set of actions (running,
killing splicers, jumping, and crouching are possible; lying down flat on the ground is not, and neither is shooting yourself, for example). The function of rules that govern the player’s actions is, according to Juul, twofold: Rules function either by ‘limiting player action’ or by ‘setting up potential actions, […] they also add meaning to the allowed actions and this affords players meaningful actions that were not otherwise available; rules give games structure’ (58).

What is interesting to note about Atlas as a pedagogic mechanism is that he limits himself to rules as ‘affordances,’ not to those as ‘limitations’ (Juul 58) – he does not tell the player what not to do, but only adds meaning to actions that are possible. As Atlas is only a voice over the intercom, he cannot prevent the player from moving Jack in any direction – the spatial limit is still something the player has to encounter through barricades, and so on. Rather, Atlas suggests a meaningful strategy, ‘an overall plan for how to act in a variety of different states that the game may be in’ (Juul 59) – as does for example Tenenbaum, when she offers a different strategy to beat the game. The limitations of the game rules need to be explored rather than having them explained, whereas the affordances are presented as possible strategies to master the game – in this way, the game leaves the player with a lot of perceived freedom of choice. Tavinor calls this illusion ‘pseudo-freedom: giving the player as much freedom as possible within the determinate framework of the narrative and game’ (101). The player is never forced through a non-diegetic tutorial, the game limiting non-diegetic interference to a necessary minimum (as with the Little Sister mechanic screen). Atlas’s requests, on the other hand, are diegetically motivated. Plus, they seem reasonable within the genre confines of first-person shooters, and they keep up the illusion of player control. As Vanden Bossche argues, feeling in control and having the ability to actually decide things are not the same: ‘It’s possible for players to feel in control, even if they don’t actually have the ability to choose, as long as “what the game asks” and “what the player wants” align.’

Even though the game has similar rule algorithms as any first-person shooter, by glossing over limitations in the rules and highlighting affordances as strategies, BioShock’s pedagogic mechanism conveys an individualistic feeling of autonomy: The player is in control; they decide on the strategy to beat the game. That the systemic (in this case procedural) reality is quite different and that in fact the player is purposefully misled by the game, that they are confronted with ‘imperfect information’ regarding the rules of the game, meaning that they have ‘only partial knowledge of the game state’ (Juul 59), is then the revelation that makes the ‘would you kindly’ mechanic all the more powerful.
Rule systems are not the only features that reveal issues of control in video games – rather the largest strain on the feeling of player control comes from the most common function of narrative progression, generally used in video games to convey backstory or to provide information deemed indispensable: cut-scenes, which ‘temporarily steal away the player’s agency, a problem that has led to the increasing abandonment of cut-scenes in recent games such as BioShock’ (Tavinor 103). For Galloway, these machinima, mostly pre-scripted in-game interludes and high-gloss video scenes, are diegetic machine acts that signify pure machinic action, but are ironically also the most non-gamic aspect of a game (due to the cinematic feel and staging of the scenes):

In these segments, the operator is momentarily irrelevant – [...] the operator is forgotten. But instead of being in a perpetual state of no action, the cinematic elements in a game are highly instrumental and deliberate, often carrying the burden of character development or moving the plot along in ways unattainable in normal gameplay [...] The necessity of the operator-machine relationship becomes all too apparent. These cinematic interludes are a window into the machine itself, oblivious and self-contained. (11–12)

Interestingly, BioShock has very few purely ‘rendered video’ cut-scenes and rather concentrates on ‘procedural, in-game action’ (Galloway 11), both of which are independent of the operator, but engender a slightly different feeling of control. Whereas rendered cut-scenes completely take control over the characters, in-game machinima pay lip service to player agency by allowing minimal control – the player may be able to move the avatar’s viewpoint or move in a tightly regulated space, but still cannot interact or stop the machine act from happening (short of stopping the game). The starting sequence in the bathysphere would be a good example of how player agency is maintained on the superficial level (Jack can move around the sphere) whereas the machine act reveals the underlying authorial agency by taking on the narrative burden of conveying the harsh reality of Rapture’s ideological basis (the splicer killing the man, then attacking the sphere). No real interaction takes place and the player’s choices are irrelevant, signifying the procedural rhetoric underlying this scene.

That BioShock reintroduces the rendered cut-scene in its decisive moment, when Ryan reveals the ‘would you kindly’ mechanism, is then of course deliberate procedural commentary on the nature of player agency and perceived freedom of choice. On the narrative level, Jack is revealed to have been a pawn in Atlas’s game – but the real eye-opener
is that player agency is debunked as a myth: ‘the game has manipulated us through its use of environmental nudges, game-world obstacles, and objectives we have been kindly asked to achieve, so that for the most part, we have “sleepwalked” through the game, unaware of the artifice, an actor in someone else’s artwork’ (Tavinor 104).

The procedurality of BioShock, ripped from being a ‘hidden logic’ and shoved out into the light of the diegetic level of the game, is shocking:

This is precisely what the narrative of BioShock is actually saying: we had no choice, at all moments we were guided by a force more powerful than our own will [...] The change from actor to spectator, from agent to passive being, marks what should be read as a designed ethical experience: we are powerless, contemplating a horrendous act of which we are mere witnesses, yet that we have caused by our previous actions. (Sicart 156–57)

Individual autonomy in the ‘allegorithmic’ form of player agency (to use Galloway’s term) is an illusion; the game’s procedural nature, its setting of rules and limits, cannot be overcome – no matter how much some games try to gloss over this fact and provide a rhetoric of ‘interactivity’ highly stylized into ideology. In a sense, then, the whole genre of the first-person shooter in itself is ‘an allegory of liberation pure and simple’ (Galloway 104) that undermines its own ideology by its procedurality. On the one hand, eliminating threats in first-person shooters functions as an act of liberating yourself from oppression and trying to break free from societal constraints – allegorically speaking, when you are playing a shooter, you are taking control, as an individual, self-asserting via the avatar. But at the same time – in a lateral step, as Galloway argues and as BioShock overtly states in its ‘would you kindly’ mechanism – the game itself is an assertion of informatic control over the individual by providing gameplay rules: It is ‘a new manipulation, [...] using wholly different diagrams of command and control’ (Galloway 106).

As an allegory on control societies in liquid modernity, BioShock uncovers the impotence of the individual in regard to systemic risks not ‘as a personal failing but rather shows it to be a ludic and political inevitability. The coupling of the deconstruction of complete agency with the game’s narrative advances the overall thematic problematization of ideologies of individualism’ (Tulloch 34). The power exerted on the player (via their avatar Jack) is revealed to be culturally mediated through pedagogy and media (the audio diaries, Atlas’s transmissions). Agency, autonomy, and self-assertion are never truly realized de facto as the individual is still embedded within social systems of control: ‘The
notion that the individual can exist external to power is shown to be dangerously naïve’ (Tulloch 34).

Even though this realization of a systemic contradiction weighing on feelings of agency and individualization is brought to full fruition with the ‘would you kindly’ scene in Ryan’s office, BioShock does indeed foreshadow the message on different levels. Throughout the game ‘issues of autonomy, identity, power/powerlessness, and control’ (Krzywinska, ‘Zombies’ 156) are raised, which needs to be understood as part of its generic make-up as first-person shooter positioned between science fiction and horror:

Autonomy and agency are regularly put to the test, undermined, or threatened in the [horror] genre. The particular combination between player autonomy and the shaping qualities of the game design that controls and limits player power to create a structured experience, story, or suspense is one that resonates well with the thematic concerns of the genre. (Krzywinska, ‘Zombies’ 167)

Whereas the science-fictional dimension of possibility projects the posthuman onto the landscape of a libertarian utopia that enables transhumanist development, it is the horror element of those posthumans turning into the zombie-like splicers (in a sense an embodiment of the science-fictional dimension of consequence) that clearly marks the game as a dystopian imagination of liquid modernity and drives home the point even more effectively. Horror (as a genre) often builds upon a shifting relation of power and powerlessness, a threat presented towards human agency; horror video games effectively enact this ‘dynamic between states of being in control and out of control’ (Krzywinska, ‘Hands’ 208) through their procedural rhetoric. It is specifically the ‘game’s infrastructure [that] invokes for the player an experience of being subject to a predetermined, extrinsic, and thereby, Othered force, which is balanced against the promise of player autonomy offered by the game’s interactive dimension’ (Krzywinska, ‘Hands’ 208).

BioShock makes the highly volatile ground of player agency the central aspect of the gameplay: By covering up the pedagogic mechanism and confusing the in control/out of control distinction via the use of procedural in-game machinima, the horror of losing control is more subtly pushed aside by the player. At every crucial decision point, the game nevertheless flaunts its control over the player by almost imperceptibly taking control. The most overt moment is when Jack receives the first plasmid: The game mechanics announce this only as ‘Electro Bolt: Power Up (E),’ as we have seen above. Before this moment,
picking up an item (the wrench for example, or a First Aid Kit) added it to your inventory – use of the item was in player control via pressing a specific button. When the player ‘picks up’ the plasmid there is a sudden and very disturbing moment of loss of control: The game shifts into a fully rendered cut-scene that then delivers Jack helplessly to the splicers and introduces both a Little Sister and her Big Daddy. Not being able to fully see, due to the position of the camera and the inability to move, makes the scene all the more horrific.

In later moments of import, a similar dynamic of being ‘out of control’ occurs: When the player meets Dr. Steinman, he is secured behind glass and any action taken by the player is futile until the machine act has finished and the ‘boss fight’ starts – Steinman engages the door locks and starts firing. When the player meets the next Little Sister, Atlas asks him, ‘would you kindly lower that weapon for a minute?’ (RM ‘Welcome to Rapture’) and the game then automatically shuts off the option to shoot or switch weapons. The avatar’s weapon is no longer visible on screen. The player may be able to control Jack’s movements (restricted to a single room), but interaction with the machine act that introduces the creatures and their relation is impossible. This technique of imperceptibly manipulating the player and taking control out of their hands is pervasive throughout all of the game.

5.4 Deep Structures and the Impossibility of Learning

The manipulation of the game and the disguised nature of the ‘in control/out of control’ dynamic make the ‘would you kindly’ mechanic all the more horrific and really drive home the point to the player ‘that they [were] being acted upon by the game’s deep structure’ (Krzywinska, ‘Hands’ 216). In combination with the allegorithm of the game, its strong connection to liquid modern society, libertarianism, and individualization, these structural elements perfectly naturalize the dystopian horror that Bauman describes so vividly in regard to the gap generated between the conditions of individuals de jure and de facto: ‘It is from that abysmal gap that the most poisonous effluvia contaminating the lives of contemporary individuals emanate’ (Liquid Modernity 39). ‘Being out of control,’ BioShock shows us very effectively, is a condition inherent to liquid modernity, one that we – as players – have long since accepted and learned to overlook unless it takes center stage.

How deep this acceptance goes is also enacted in the game. As mentioned before, the ‘would you kindly’ scene takes place roughly three-quarters of the way into the game. Obviously, the last quarter
then narratively deals with a rebellion against Fontaine (Atlas) and his manipulation by getting the means to defeat him and finally killing him. Since Fontaine has a chokehold on Jack due to the phrase, Jack is once more not quite the master of his own fate, but rather needs to rely on Dr. Tenenbaum to undo some of the conditioning and free him from the ‘would you kindly’ slavery. Afterwards, it is Tenenbaum who takes over the role of guide from Atlas and tells Jack where to go and what to do. She leads him around Rapture to discover the genetic compound to fully break free from Fontaine’s control over Jack, and then tells him to confront Fontaine. When Fontaine flees and Jack needs to get through a specific door, which only Little Sisters can open, Tenenbaum tells him that he needs to transform himself into a Big Daddy and helps him gather up the needed parts.

Aside from the narrative-ideological aspect of Jack further becoming erased as an individual by donning the Big Daddy gear, the game mechanics of the last quarter of the game show no change whatsoever to the game mechanics before the revelation. The only difference is that Jack – and thus the player with him – is now being ‘guided’ by Tenenbaum. Loss of control is as much a part of the game as before – and all the abovementioned procedural elements remain in place. Knowing about the control mechanisms does not change the power they exert on the player. The only option to stop the systemic control and to truly become a free individual would be to stop playing altogether, which never really was a choice, as Bauman argues for individualization: ‘Individualization is here to stay; and thinking about the means of dealing with its impact in the fashion in which we all conduct our lives must start from acknowledging this fact’ (Liquid Modernity 37). As Packer points out, ‘If one views the decision to keep playing BioShock as a choice, however, then the critique of Objectivism is not that human freedom is illusory, but rather that players choose to accept limitations on their freedom to further their own entertainment’ (221, note 7).

More than a work on this subject in any other medium, BioShock, because of its procedural nature and the manifold opportunities to let the player meaningfully and actively participate in the production of the game’s rhetoric, comments on the power of social control exerted on the individual. It reveals liquid modern society as a dystopian present that de jure positions its members as individuals while maintaining systemic control over them and exposing them to incalculable, unpredictable, and individually unmanageable risks. The nature of this dissonance can be procedurally reflected in many video games as informatic control and BioShock most effectively demonstrates the inevitability of this kind of control.