

8. Failed Futures: Biomedical Security and the Biosecurity Individual in Fiction

Failure is simply the opportunity to begin again.

Henry Ford

The most prominent representations of the biosecurity individual come from the field of fiction. The countless renderings of the conjunction of science and the human represent a big body of texts that go far beyond the contemporary biosecurity individual and their stories, which I have discussed in the previous chapters. It is therefore hardly possible to examine these identities and the narratives that forge them without including a reading of the biosecurity individual in fiction. With this chapter I will turn to the limits and limitations of science and security, or rather the end of the legitimacy of the scientific security promise and how it is tested in fictional narratives. As in the last chapter I will turn to the failure of the messianic narrative of scientific salvation, the failed futures. I will focus on fictional narratives that represent the failure of established security narratives promising controllability. While the last chapter stressed the continuation and renegotiation of the security promise here I will turn to the bleak endings represented in dystopian speculative bio-fiction. By reading fictive texts I wish to focus on how a security practice and an understanding of biosecurity is made to appeal and how it is integrated into individual identity.

In contrast to the fairly contemporary biosecurity narratives discussed in the preceding chapters I will turn to dystopian fiction in two very different historic periods, the mid 19th century and the 21st century: Nathaniel Hawthorne's "The Birth-Mark" (1843) and Gary Shteyngart's *Super Sad True Love Story* (2010). I will consider both texts as dystopian, although "The Birth-Mark" precedes the emergence of dystopia as genre of science fiction.¹ However, the interconnections between biology and fiction are complex and man-

1 Jameson asserts in "Progress Versus Utopia" that "it is a commonplace of the history of SF that it emerged, virtually full-blown, with Jules Verne and H.G. Wells, during the second half of the 19th century" (149). For a more thorough definition of dystopia and utopia see Pfaelzer and R.M.P. "Parody and Satire in American Dystopian Fiction of the Nineteenth Century," or Ruth Levitas *Utopia as Method*.

ifold and cannot be restricted to the temporal limitations of narrow genre definitions.² Many of these texts circulate “what if”-scenarios that frequently depict utopian ideas gone wrong and often serve as a testing ground for social and scientific developments.

The wider genre of science-fiction is complex and has proliferated in the last 50 years with various subgenres and many questions of terminology arising; most important in the context of this book would be bio-fiction, bio-punk³, cyborg writers, or medical futurists, to name but a few. Jay Clayton in “Convergence of Two Cultures: A Geek’s Guide to Contemporary Literature” even introduces “a new genre of contemporary literature that focuses on science and technology. . . . Indeed, the increase in fictional explorations of scientific issues is one of the most striking developments in American literature at the turn of the century” (808). Though I will focus on texts belonging to this group, a genre definition is not attempted nor intended here as they are notoriously slippery and not essential for the purpose of my discussion.⁴ Like many others, I will use the term speculative fiction (Bieber Lake), or rather speculative biofiction, which indicates the increasingly important role of biotechnological developments in contemporary U.S. American culture. With Hawthorne I will therefore read an early expression of dystopian speculative fiction at a point in time when medical science did not represent a consolidated field of study and had not it assumed its position as the arbiter of security. With Shteyngart, in contrast, I will turn to the contemporary when biomedicine and biotechnology have turned into the unquestionable authority over body and life.

Dystopian speculative bio-fiction serves as an important element in articulating the fears of society regarding the increasing possibilities of biotechnological developments. Science fiction scholars such as Sheryl N. Hamilton assert that “Sf texts in a variety of popular media have been active in exploring and constructing the boundaries of the biotechnological imagination” (269). Eugene Thacker points toward the bifurcate relation of science fiction and biomedical technoscience. “[S]cience fiction is necessary in order for biotech and biomedicine to continue constructing their narratives of technological advancement and increasing sophistication of a biotechnology of the population” (“Science Fiction” 157).⁵ I wouldn’t dismiss this interrelation of fiction and science as a “common-sense position on the anticipatory nature of SF” (Jameson “Progress” 150).

-
- 2 Some of its most iconic texts include Nathaniel Hawthorne’s “The Birth-Mark,” and “Rappaccini’s Daughter,” Mary Shelley’s *Frankenstein*, H.G. Well’s *The Island of Dr. Moreau*, Aldous Huxley’s *Brave New World*, Robert Louis Stevenson’s *The Strange Case of Dr. Jekyll and Mr. Hyde*, Philip K. Dick’s *Do Androids Dream of Electric Sheep*, Margaret Atwood’s *The Handmaid’s Tale*, George Saunders’ *Tenth of December*, Kazuo Ishiguro’s *Never Let me Go*, Jodi Lynn Picoult’s *My Sister’s Keeper*, Gary Shteyngart’s *Super Sad True Love Story*.
 - 3 Jeff Prucher defines this subgenre as “science fiction which explores the societal effects of biotechnology and genetic engineering” (16) such as *Interzone* (1997) or *Frankenstein’s Daughters* (1999).
 - 4 For a discussion of genre definition of science fiction see John Rieder “On Defining SF, or not: Genre Theory, SF, and History.”
 - 5 And also speculative fiction changes and reacts to developments in biomedicine. The rise of the gene and the discovery of the structure of the DNA as a Double Helix changed the imagination represented in Science Fiction from evolutionary species change to genetic modification (Clayton, “Ridicule of Time” 327). While Theodore Sturgeon still imagined a new human based on “genetic mutation” in the sense of species development in *More than Human*, in Margaret Atwood’s *Oryx and Crake* genetic engineering is the explanation for the existence of its protagonists.

But I would like to stress a different facet of this anticipatory mode. I will argue that these texts circulate affective attachments, which dominate the representation and understanding of scientific research and its security promise. And today these narratives are virtually everywhere. They appear as references in negative media reports, and gain an even wider audience and increasing proliferation in movies.⁶ Despite its status as popular fiction, science fiction has been widely recognized as a genre dedicated to cultural critique, most explicitly in theories of posthumanisms.⁷ Speculative bio-fiction challenges the representation of the imaginable, the confines of what is human(e). In doing so many texts form connections between science and cultural theory that make them objects of biocultural investigations *par excellence*. More so than in the limits of the imaginable, however, I am interested in the construction of pervasive security promises and their failure.

In this chapter I will therefore focus on the question of desirability and ask how biosecurity practices that are doomed to fail are represented as desirable? How are they produced as a legitimate and convincing force in these fictional tales of biosecurity? While the texts analyzed in the previous chapters establish the security narratives legitimized by their claims to authenticity, the fictive texts establish the security narrative despite the failure of the promise, or rather to then let them fail. They therefore more clearly reveal their narrative constructedness of the understanding of security and show that, though not everything is security, the understanding of what represents security depends on narrative construction and affective attachment.

In the first part of this chapter I will focus on Nathaniel Hawthorne's "The Birth-Mark" and then turn to Gary Shteyngart's *Super Sad True Love Story*. The texts question or reconceptualize the boundaries of what is human. However, they also emphasize the process by which science constructs, or is complicit in constructing security and the security narrative that determines the "affective attachment to what we call 'the good life'" (Berlant "Cruel" 97). As literary examples the texts grant an insight into the logics and dynamics of biosecurity, offering a complex representation of how an understanding of biosecurity is produced as an essential part of identities. In the analyses I will therefore focus on how security is constructed in terms of belief, hope, threat, and fear.

The two texts deal with different structures: in Hawthorne's "The Birth-Mark" it is a markedly individual structure in the 19th century, while Shteyngart's *Super Sad True Love Story* is more obviously describing security in a broader, collective structure. However, both are based on the erasure of bodily marks as readable signs of threat. And both represent science utopias and their failures, emphasizing in different ways how the security narratives supporting these utopias are based on faith. In reading the two texts together

-
- 6 The following is a selective list of examples, which seems inexhaustible: *Blade Runner* (1982), *Gat-taca* (1997), *The Fifth Element* (1997), *A.I.* (2001), *Eternal Sunshine of the Spotless Mind* (2004), *The Island* (2005), *Inception* (2010), *Never Let Me Go* (2010), *In Time* (2011), *Prometheus* (2012), *Cloud Atlas* (2012), *Elysium* (2013), *Blade Runner 2049* (2017). The theme also increasingly appears in TV series such as *Black Mirror* (2011, 2013, 2017, 2018), *Orphan Black* (2013–2017), or *Westworld* (2016, 2018).
 - 7 There are distinct branches of posthumanism, hence the plural s at the end. Hayles represents a disembodied form of posthumanism while Wolfe represents the posthumanist. Both concepts are vastly different from conceptions of transhumanism (Nick Bostrom, Young), which are sometimes also subsumed under the umbrella term of posthumanisms.

I want to point out the continuities and changes in the representation of the biosecurity promise and its threats.

Failed Future in Nathaniel Hawthorne's "The Birth-Mark"

Knowledge, absolute sure of its infallibility,
is faith.

Yevgeny Zamayatin

The quest for perfection and immortality did not just emerge with the rise of biosecurity as a normative power, nor did the warnings against new scientific developments only surface with the birth of biotechnology. Rather scientific developments have always been eyed with suspicion. The proverbial scientist playing God has a long tradition reaching back to Daedalus and beyond. Nathaniel Hawthorne wrote about science and scientific experiments in many of his texts. "One of the plainest attitudes in Hawthorne's writing is a contemptuous distrust of science, which he personified in villain after villain of Rappaccini's stamp: Cacaphodol, Aylmer, Brand, Chillingworth" (Rosenberry 42). It is a recurring theme in Hawthorne's fiction. Undoubtedly one of the great figures of American Literature and known as a fervent critic of Puritanism and its haunting presence, Hawthorne both epitomizes the Romantic period and slightly transgresses its associated distance to any "real" society or politics.

"The Birth-Mark" was published in 1843 in *The Pioneer* and then later in 1846 as the first short story in *Mosses from an Old Manse*. It tells the story of the scientist Aylmer and his newly wedded wife Georgiana. It is set in the late 18th century "in those days when the comparatively recent discovery of electricity and other kindred mysteries of Nature seemed to open paths into the region of miracle" (Hawthorne, "Birth-Mark" 628). A little hand-shaped mark on Georgiana's cheek is identified by Aylmer as a "fatal mark" that he cannot tolerate, and which turns his and consequently her life into misery. He sets out to erase this imperfection of his otherwise ideal wife, experimenting on the consenting Georgiana together with his laboratory assistant Aminadab. Although he succeeds in removing the birthmark, Georgiana dies in the process.

The short story is usually read as a cautionary tale about the dangers of the uninhibited pursuit of science.⁸ The narrator himself describes it as a story with a "deeply impressive moral" (Hawthorne, "Birth-Mark" 628). Critical analyses, however, have provided a more complex picture. For some the story is a representation of how Hawthorne understood humanity (Wentersdorf),⁹ others see it as a rendering of the conflict of science and art (Rucker), or the practice of editing (Howe). More recent research often reads it as "a study of misogyny or racism" (Person 57), aspects which had been neglected in the earlier studies of the story that focus on perfection and idealization. Feminist readings

8 The short story is set before the advent of science and Aylmer as well as his experiments are marked as part of Alchemy. Nonetheless, the story is most commonly read as a comment on modern science.

9 Karl P. Wentersdorf describes how Aylmer "overlooks the claim of humanity and so destroys the very being whom he hoped to perfect" (174).

have pointed out how Georgiana is sacrificed on the altar of male pleasure: sexually objectified and reduced to her outward appearance, her story aligns well with today's plastic surgery craze. Judith Fetterley has famously highlighted the violence that is the source of Aylmer's supposed veneration: "'The Birthmark' demonstrates the fact that the idealization of women has its source in a profound hostility toward women and that it is at once a disguise for this hostility and the fuller expression of it" (24). Cindy Weinstein, on the other hand, stresses the representation of Georgiana as a reflection of the gendered market economy and labor. Relating the story to its contemporary political and social history Goreman Beauchamp sees Aylmer as a reformer, while Leland S. Person highlights that "'The Birth-Mark' illustrates the consequences of eugenic efforts to perfect and purify race and gender characteristics" (Person 57–8).¹⁰ In the field of bioethics "The Birth-Mark" has become the standard example emphasizing the errant strive for perfection – both aesthetically and metaphysically. It was famously used by Leon K. Kass in his "Welcome and Opening Remarks" in the 2002 session of the President's Council on Bioethics on human cloning which led to the Report of the Bioethics Committee that proposes a moratorium on cloning for medical purposes and a ban for reproductive purposes.¹¹ The text is, despite its age, used in bioethics classes to explain "what can happen when scientists becomes so preoccupied with his science that he disregards the dignity and worth of people" (Singleton et al. 284). While all these aspects are crucial I wish rather to focus on the construction of security, its promise, and its failure. I will focus on how the utopian hope is betrayed by the dystopian ending and how the scientific promise of security and its failure are narratively constructed. Hawthorne's short story not only represents the experiment of removing the birthmark as a failed security practice but emphasizes the importance and necessity of constructing a pervasive security narrative in the first place.

With the focus on how security is constructed I will turn to earlier readings focused on "idealization" and religion, such as Heilman's and in part Fetterley's feminist reading though they are not the cutting edge of more recent readings of Hawthorne. I will first turn to the relation of science and faith, and how the removal of the birthmark does not just represent a transgression of divine rule but becomes a religious practice itself (Heilman). Science does not replace religion, which remains absent from the text as such, but is represented as faith. I will then turn to the construction of threat that allows for the belief in the promise of Aylmer's powers in the first place, which Hawthorne renders in affective terms. Rather than a practice of revelation and truth, as a religious as well as scientific framework would suggest, Hawthorne emphasizes the use of fiction in order to maintain the dynamics of faith and fear that represent the gendered reality of security in "The Birth-Mark."

10 "Written in the early 1840s, shortly after the Trail of Tears culminated years of white efforts to displace and even exterminate Native Americans, shortly before the women's movement would gather momentum" (57–8). Person points out that the mark is red, not black referring to the ethnic cleansing that was being executed in the United States at that time.

11 For a discussion of this reading and its problems see Newman *Promethean Ambitions and the Quest to Perfect Nature* (1–6).

Hope, Belief, and Science

The mark as an evident flaw in Aylmer's otherwise perfect wife destroys the gendered security embodied by matrimonial happiness, putting at risk their relationship but also their well-being. Hawthorne makes clear from the beginning that Aylmer's quest to rid Georgiana of her birthmark is a Promethean pursuit bound to fail.¹² The protagonist, however, is "convinced of the perfect practicability of its removal" (Hawthorne, "Birth-Mark" 631). The attempts to remove the mark and save Georgiana from the threat embodied by her imperfection are therefore represented in terms of hope and belief rather than by the empiric foundation and rational practicability. Science and its promise are personified by Aylmer, who is a "philosopher" of the highest calling. He "had made discoveries in the elemental powers of Nature that had roused the admiration of all the learned societies in Europe" (Hawthorne, "Birth-Mark" 632). Aylmer is often read to represent the purity of science and intellectual pursuit since he epitomizes the rational role in the Cartesian split of body and mind. He is "a type of the spiritual element" (Hawthorne, "Birth-Mark" 633) who is paired with his laboratory worker Aminadab who "represent[s] man's physical nature" (*ibid.*).¹³ In his laboratory library Aylmer aligns with "Albertus Magnus, Cornelius Agrippa, Paracelsus, and the famous friar who created the prophetic Brazen Head" (Hawthorne, "Birth-Mark" 636). What all of them have in common is not their incredible achievements but that they "were believed, and perhaps imagined themselves to have acquired from the investigation of Nature a power above Nature, and from physics a sway over the spiritual world" (*ibid.*). Hawthorne emphasizes that Aylmer's, as well as his predecessors' achievements do not generate the claimed power but the alchemists *imagine* it, believing in their own powers. This hubris leads Aylmer to believe in the feasibility of an "elixir vitae" (634) and to regard it arrogantly as a manageable task for him. According to this conviction he claims powers higher than nature and also convinces others, or so it seems. Georgiana and Aminadab at least do not question him.

This faith and recognition is the central axis around which Aylmer's ambitions revolve. His research is not without reflection – he refrains from creating eternal life as "it would produce a discord in Nature which all the world, and chiefly the quaffer of the immortal nostrum, would find course to curse" (Hawthorne, "Birth-Mark" 634). It is not a potential moral transgression – Heilman calls it the understanding of evil (36) – that restrains Aylmer from this goal. Rather, the material ramifications that the creation of eternal life would cause deter him from this pursuit. Moral boundaries seem to be absent here as much as in the description of the attempt to eliminate the mark on Georgiana's cheek. In contrast, what Aylmer is seeking is recognition and fame. He exclaims that it "will be my triumph when I shall have corrected what Nature left imperfect in her fairest work!" (Hawthorne, "Birth-Mark" 632). He understands his actions not as a transgression or the cruel imposition of male power, but rather as a heroic quest to reach the perfection that

12 According to Greek mythology Prometheus stole the fire from the Gods and gave it to humans. For this act he was punished for eternity. He iconically stands for the human quest of knowledge and the unintended consequence due to the transgression of boundaries.

13 Wentersdorf emphasizes this dichotomy which he compares to the construction of Prospero and Caliban in Shakespeare's *The Tempest* (186).

seems so tangibly close, and so deserved by Georgiana. Hawthorne renders Aylmer's urge to establish security in perfection as a utopian endeavor and as an utter failure. Aylmer could not "find the perfect future in the present" (Hawthorne, "Birth-Mark" 641) and destroys "the mystery of life, . . . the bond by which an angelic spirit kept itself in union with a mortal frame" (ibid.). The attempt to tinker with nature is punished in Hawthorne's tale in the same way as in most Promethean quests – with the death of the loved one.¹⁴ He thus depicts a tragic end that is foreshadowed again and again throughout the narrative. Aylmer had dreamed of the failure of his attempt, every trick he performs somehow fails revealing the unpredictability of the quest, and all previous experiments in his career have been failures in comparison to their high aims. However, "poor Aylmer" does not perceive the warnings due to his eccentric belief in his science. The faith in his own powers is so strong at first that he does not even understand his own failure. It is Georgiana who recognizes when she exclaims "I am dying" (Hawthorne, "Birth-Mark" 641).

The scientific genius and uninhibited pursuit of science is based on such a delusion of grandeur that Aylmer forgets his previous "unwilling recognition of the truth" (Hawthorne, "Birth-Mark" 632). In studying the "human frame" he had accepted that "our great creative Mother Nature . . . is yet severely careful to keep her own secrets, and, in spite of her pretended openness, shows us nothing but results. She permits us, indeed, to mar, but seldom to mend, and, like a jealous patentee, on no account to make. Now, however, Aylmer resumed these half-forgotten investigations" (ibid.). Hawthorne emphasizes that Aylmer forgets the "mortifying failures" (Hawthorne, "Birth-Mark" 634) of his past because he is preoccupied with the belief and hope in his science. Instead, he sees himself closing in on the "triumph" of science: to creation itself. With "thought[s] which might almost have enlightened me to create a being less perfect than yourself. Georgiana, you have led me deeper than ever into the heart of science" (Hawthorne, "Birth-Mark" 631–2). Aylmer's ambitions are rendered as competing with religion for he is aiming to create "divinity," "celestial," "purity." Heilman points out that in fact the entire pursuit is described in a way that science itself becomes religion. Hawthorne does not only describe Aylmer's quest in religious terms but also the relationship between Georgiana and Aylmer. Georgiana claims her "worthiness" by how much she "worships" Aylmer using religiously connoted words. The terminology used to describe both science and scientist is, according to Heilman, a sign that science has taken the place of religion. "What Hawthorne has done, really, is to blueprint the course of science in modern imagination, to dramatize its persuasive faith in its omnipotence, and thus is taking on the colors of religion" (Heilman 41). It is not the practices promising security themselves that are religious here but the hope and the belief invested in them which elevates them to a

14 The hand has been variously read as humanity that Aylmer does not recognize and therefore destroys. Though it is nature that is imperfect Heilman and others claim that it is not nature but religion that Aylmer is competing with. The mark represents the "hand of God" which connects divine and earthly. The premise is that the "mistake" can be fixed to achieve perfection, or rather divinity. This attempt leads to the recognition that "you have rejected the best the earth could offer" (Hawthorne, "Birth-Mark" 641). Brenda Wineapple has argued that the breach and killing-off of Georgiana is comparable to an abortion, it allows Aylmer to return to his solitary pursuit undistracted by the woman.

force comparable to religion. Hawthorne thus renders the relation of the protagonists to the practice of achieving absolute security as a religious one.

Rather than by facts and empirical proof the scientific practice of security is defined by belief and trust echoing religious faith. And its first amendment is “doubt not” (Hawthorne, “Birth-Mark” 631), “it cannot fail” (Hawthorne, “Birth-Mark” 639). Hawthorne lets Aylmer repeat this claim throughout the story: “Do not mistrust me, dearest” (Hawthorne, “Birth-Mark” 635), “have you no trust” (Hawthorne, “Birth-Mark” 638), and “Believe me” (Hawthorne, “Birth-Mark” 633). But rather than the belief in science and the worshipping of scientific means, Hawthorne emphasizes the veneration and faith of the person that Aylmer claims and demands. He does not attempt to prove the power of science to Georgiana but his own command of those powers. In this context Heilman points out that “the story indicates that in the religion of science Aylmer is less a priest than God” (37) because Georgiana considers his aims as “holy” “and with her whole spirit she prayed that, for a single moment, she might satisfy his highest and deepest conception” (Hawthorne, “Birth-Mark” 639). Aylmer as a God figure does not only demand veneration but is worshipped by Georgiana indicating her complicity in this quest. “Drink, then, though lofty creature.!” (ibid.) commands the god scientist and she requests “Give me the goblet . . .” (ibid.). The belief and hope of both, Aylmer and Georgiana, elevate science to a religious faith that seems to be the source of legitimacy of the authoritative voice of science. However, the exclusive focus of the idealization of Aylmer the god-scientist as the arbiter and guardian of security neglects the other side of the coin. It is not only the persuasive belief in the God figure Aylmer but the construction of threat that legitimizes Aylmer’s cruel and murderous practice.

Threatening Aspects

The practice and the practitioner promising security from the fatal flaw embodied by the birthmark seem unquestionable. Heilman underlines the construction of science and scientific strive as religion, as faith-based for both Aylmer and Georgiana. But Hawthorne does not simply depict their conviction as a stable status quo governing the plot. Rather, he emphasizes how Aylmer produces the understanding that renders the mark a threat and the scientific practice that potentially threatens Georgiana’s life a valid and legitimate attempt and salvational practice. Rather than the reiterative use of religiously associated terminology describing the belief in the power of science Hawthorne emphasizes how the threat is narratively made present. He thus emphasizes the importance of threatening aspects to establish a convincing understanding of security.

There is no event that marks the shift from security, happiness, and good life to the insecurity and threat that Aylmer and Georgiana come to dread. Rather, it is a shift of perception that (re)defines the meaning of the mark on Georgiana’s cheek. It was “[o]ne day, very soon after their marriage” (Hawthorne, “Birth-Mark” 628), not a special day that was somehow out of the ordinary. But just one day so indistinguishable that it is not dated or specified. The little mark starts to bother and irritate Aylmer on his otherwise perfect wife. The “visible mark of earthly imperfection” (ibid.) shocks Aylmer. The construction of insecurity begins with an emotion, and almost more importantly with the

communicative act that follows his feeling. When Aylmer asks Georgiana, “has it never occurred to you that the mark upon your cheek might be removed?” (ibid.), Hawthorne makes Aylmer the mastermind behind the idea. In the short story the protagonist sets the narrative construction of threat in motion which will determine the understanding of security and threat. With this question Aylmer renders the mark a problem and flaw that should be corrected. However, the meaning of the mark is at that point still not fixed but rather fluctuating: “we hesitate whether to term it a defect or a beauty . . .” (ibid.).

Initially, Aylmer’s opinion of the mark as defect and sign of threat is just one of various attitudes. Georgiana had never considered it a threat but believed her suitors when they told her it was a charm.¹⁵ Aylmer’s scientific view is juxtaposed against the romantic mythical understanding of Georgiana’s admirers: “Georgiana’s lovers were wont to say that some fairy at her birth hour had laid her tiny hand upon the infant’s cheek, and left this impress there in token of the magic endowments that were to give her such a sway over all hearts” (Hawthorne, “Birth-Mark” 628). They either loved it or just wished “the semblance of a flaw” away (Hawthorne, “Birth-Mark” 629). Curiously, Aylmer’s otherwise distinctively male perspective and gaze aligns him with the women of society who see it as a “bloody hand” (ibid.) that made Georgiana “hideous” (629) and the narrator adds: “But it would be as reasonable to say that one of those small blue stains which sometimes occur in the purest statuary marble would convert the Eve of Powers to a monster” (ibid.). The society surrounding the experiment is only represented in this initial description of ambiguous meanings attached to the mark. The process of fixing the meaning and eradicating the contrasting viewpoints on the meaning of the mark takes place behind closed doors. This process of establishing one unquestionable truth, with no other truths beside it, takes place in the “safe” space of matrimony and is exclusively negotiated between the couple, so between domineering husband Aylmer and his persuadable wife Georgiana.¹⁶ Hawthorne therefore describes how Aylmer’s disgust triggered by the little flaw turns her into a *monster* also in her own understanding.

It is not a deeper understanding of the mark that leads to the understanding of the birthmark as a threat, as “the crimson hand.” Rather, “selecting it as the symbol of his wife’s liability to sin, sorrow, decay, and death, Aylmer’s somber imagination was not long in rendering the birthmark a frightful object, causing him more trouble and horror” (Hawthorne, “Birth-Mark” 630). Aylmer does not discern the mark as a sign of a deeper and hidden “truth” but makes it up, imagines it.¹⁷ Hawthorne, thus, indicates a certain degree of non-referentiality to an external truth. Furthermore, it is Aylmer’s imagination that causes his affective response and creates the meaning of the mark. It is not reason but an affixation and a rather arbitrarily selected signifier that generates the unfolding of the story. Over time Aylmer “found this one defect grow more and more in-

15 Georgiana replies to his inquiry: “‘No, indeed,’ said she, smiling; but perceiving the seriousness of his manner, she blushed deeply” (Hawthorne, “Birth-Mark” 628). This example indicates Georgiana’s affective response to the threatening “feeling” in this situation.

16 In today’s terminology of violence, the dynamics between the two would be described as psychological abuse.

17 In feminist readings as well as autobiographical readings of the short story the mark is read as a reference to sexuality and Aylmer’s disgust an expression of his fear of female sexual pleasure (Zanger).

tolerable with every moment of their united lives" (Hawthorne, "Birth-Mark" 629). In the beginning the mark is not always there, "now vaguely portrayed, now lost, now stealing forth again and glimmering to and fro with every pulse of emotion that throbbed within her heart" (ibid.).¹⁸ Once Aylmer's mind has constructed the mark as threat, he becomes obsessed. "[I]t became the central point of all. With the morning twilight Aylmer opened his eyes upon his wife's face and recognized the symbol of imperfection; and when they sat together at the evening hearth his eyes wandered stealthily to her cheek" (Hawthorne, "Birth-Mark" 630). The repeated perception of the mark as odious seems to fix the mark in its meaning as well as in its physical appearance. The meaning is thus enforced and stabilized by its iterability. Hawthorne stresses that the performative and reiterative quality of the threat is based on exchange, a communication between the two protagonists. Aylmer's affective response and attachment to the mark circulates between the couple gaining force every time it is perceived. Georgiana "learned to shudder at his gaze" (Hawthorne, "Birth-Mark" 630). By the time they entered the laboratory his repulsion is so strong that "he could not restrain a strong convulsive shudder" (Hawthorne, "Birth-Mark" 633) which causes Georgiana to faint. Hawthorne's rendering of establishing the meaning of the mark rests on the horizontal "communication" of affects. Georgiana does not react to the mark but to her husband's response to it. Hawthorne thus portrays an affective economy in which the mark is attached with meaning that becomes increasingly fixed and unquestionable the more it circulates between the couple. She faints because of the meaning that is attached to Aylmer's expression of disgust, which ultimately signifies the exclusion from her assigned role as adored wife.

The rejection by her husband, or rather his horror and disdain gradually make Georgiana perceive herself, or rather her mark as threatening. It disrupts her domestic life and characterizes her identity and understanding of security as deeply relational. She is taught, so to speak, that her mark is "the fatal flaw of humanity" and that "[t]he crimson hand expressed the ineludible gripe in which mortality clutches the highest and purest of earthly mold, degrading them into kindred with the lowest, and even with the very brutes, like whom their visible frames return to dust" (Hawthorne, "Birth-Mark" 629). The mark becomes the sign of mortality itself, which also Georgiana begins to perceive as a flaw and threat. In this meaning making process, Aylmer is the active part persuading Georgiana of his opinion and instituting the meaning of security. The threat and meaning of the mark is narratively established within the story. Aylmer's behavior and explanations, his thoughts and descriptions dominate the narrative until the threat of the mark is established as fact. Then, "[n]ot even Aylmer now hated it so much as she" (Hawthorne, "Birth-Mark" 636). "Giving in," or being persuaded to hate her own mark makes the healthy young woman ponder that "methinks I am of all mortals the most fit to die" (Hawthorne, "Birth-Mark" 639). She becomes a monster in her own understanding, not worthy of life.

18 The emphasis on affects not only defines the meaning of threat. They are in the short story also responsible for determining the appearance of the mark: "But if any shifting motion caused her to turn pale there was the mark again, a crimson stain upon the snow, in what Aylmer sometimes deemed as almost fearful distinctiveness" (Hawthorne, "Birth-Mark" 629).

In this affective economy threat and hope circulate, becoming more forceful in their relation to one another. While the threat of the mark makes Georgiana regard her own life as unlivable, the removal of the mark becomes the only hope – promising the return to the security of a good life. “If there be the remotest possibility of it,” continued Georgiana, “let the attempt be made at whatever risk. Danger is nothing to me; for life, while this hateful mark makes me the object of your horror and disgust, – life is a burden which I would fling down with joy. Either remove this dreadful hand, or take my wretched life! ...” (Hawthorne, “Birth-Mark” 631). The overemphasis conveyed through the adjectives describes the resolution to attempt the birthmark’s removal in predominantly affective terms. Georgiana’s fear of rejection and her urge to please and appeal define her understanding of the mark as threat. The threat to security and the desirability of the practices to remove it are thus determined by the fear of having to live with the stigma that the scientific narrative has created rather than the belief in the powers of Aylmer the God-scientist. “There is but one danger—that this horrible stigma shall be left upon my cheek!” cried Georgiana. “Remove it, remove it, whatever be the cost, or we shall both go mad!” (Hawthorne, “Birth-Mark” 638).

Science indeed is “able to provide an ultimate account of reality” (Heilman 37). However, it is not the ultimate account of its power and authority only, but of what is perceived as threat and as security. In the end the experiments that Aylmer performs for Georgiana are only almost “enough to warrant the belief that her husband possessed sway over the spiritual world” (Hawthorne, “Birth-Mark” 633–34). While “the illusion was almost perfect” (Hawthorne, “Birth-Mark” 633) and she is *almost* convinced of the powers, the threat and its affective repercussions are so forceful and real that the feasibility of the practice becomes irrelevant. The practice is the object of “cruel optimism” as Berlant termed it, and represents the cluster of promises that are attached to security. “[T]he fear is that the loss of the object or of the scene of promising itself will defeat the capacity to have any hope about anything” (“Cruel” 94). By performatively creating the threat as an affective reality the practice to remove the mark is legitimated. Not surprisingly, the practice is requested by Georgiana in the end “to save your poor wife from madness” (Hawthorne, “Birth-Mark” 631) not impurity. Hawthorne’s use of fear and hope show what the security promised by science really stands for: the return to a normal and normative “good life,” rather than the achievement of divinity, purity, or fame, which it represents for Aylmer. It is his disgust and horror that violates the rules of the affective economy that characterizes the gender roles in the 19th century United States. Horror and disgust take the place of admiration and desire destroying the promise of heterosexual nuclear family and of the possibility to please as the underlying and mandatory security practice.

Fiction of Security

Hawthorne does not only foreground the narrative construction and affective force of science as normative power and arbiter of security superseding and replacing the religious grasp on society. He likens the narrative construction of security and threat to fiction. This “allegory of science itself” is an “intricately wrought commentary on the fic-

tion of science" (117) as H. Bruce Franklin points out.¹⁹ Aylmer describes his science "in glowing language of the resources of his art" (Hawthorne, "Birth-Mark" 634) connecting it to "a history of the long dynasty of the alchemists" (ibid.) and the quest for eternal life, the "elixir vitae." Science and its quest for self-empowerment and control is represented as narrative, as stories of scientific geniuses that are housed in the library of the apartment. And Aylmer is part of this narrative materially in form of his book which stands in the same bookshelf as those genealogies of scientists, and as a scientist because he is their successor. Franklin points out that Hawthorne likens science to storytelling (120) as in the scene when Georgiana passes her time in the library. "Georgiana turned over the volumes of his scientific library. In many dark old tomes she met with chapters full of romance and poetry" (Hawthorne, "Birth-Mark" 636). The history of science is read as an aesthetic object, as stories rather than histories or scientific texts. From Georgiana's perspective Hawthorne describes the book of Aylmer's scientific studies as an autobiographic text. "The book, in truth, was both the history and emblem of his ardent, ambitious, imaginative, yet practical and laborious life" (Hawthorne, "Birth-Mark" 636). And reading his text Georgiana has to acknowledge that it is an autobiography of many failed futures. "Much as he had accomplished, she could not but observe that his most splendid successes were almost invariably failures, if compared with the ideal at which he aimed. . . . The volume, rich with achievements that had won renown for its author, was yet as melancholy a record as ever mortal hand had penned" (ibid.). Hawthorne's narrative establishes Aylmer as the tragic hero through Georgiana's reading, rather than an evil and sadistic murderer (Heilman).²⁰ More importantly though, the text as literary object is affecting Georgiana, making her cry. The essence of Aylmer's "sorcerer's book" (Hawthorne, "Birth-Mark" 637) is not based on its scientific findings but on melancholy and a longing for something absent and unachievable.

Furthermore, Hawthorne renders science as a form of fiction. Rather than empiric and scientific findings, or the different experiments and approaches to finding a cure, science is represented by illusions. At almost no point is Georgiana or the reader introduced to scientific explanations. Instead, science is represented by illusions and tricks that Aylmer performs to impress Georgiana. "In order to soothe Georgiana, and, as it were, to release her mind from the burden of actual things, Aylmer now put in practice some of the light and playful secrets which science had taught him among its profounder lore" (Hawthorne, "Birth-Mark" 633). Aylmer represents the power of science by creating fiction that is detached from any negative associations. "Airy figures, absolutely bodiless ideas, and forms of unsubstantial beauty came and danced before her" (Hawthorne, "Birth-Mark" 633). Science and its security practices do not show its real face but represent a performance staged for Georgiana as its captive audience.²¹

19 Franklin's main point is to argue that Hawthorne can and should be regarded as a Science Fiction writer. However, I find his reading of science as fiction in the short story much more rewarding.

20 This scene also expresses Hawthorne's inclination for irony creating a character defined by his many failures who needs to erase the only little flaw of his otherwise perfect partner.

21 This representation of science reiterates the ambiguous delineation of science and pseudo-science at the end of the 18th and beginning of 19th century as the example of alchemy for instance reveals.

The illusions and tricks are performed to impress Georgiana, but at the same time, they disguise the reality of the security practice. Aylmer's real research, the true treatments and procedures he tries remain hidden from Georgiana as well as from the reader. Only after all his tricks failed, Aylmer discloses a glimpse of "true" science when he resorts to his most prized exhibition. He shows Georgiana an elixir that is reminiscent of Rappaccini's poison. "[H]e showed her a small vial, in which, he remarked, was contained a gentle yet most powerful fragrance, capable of impregnating all the breezes that blow across a kingdom" (Hawthorne, "Birth-Mark" 635). The potion represents both "piercing and invigorating delight" (ibid.) and the power to kill at Aylmer's will. "No king on his throne could keep his life" (ibid.). The potion represents both security and threat and by no means the fiction of pure security Aylmer seeks to construct. It is the first time in the short story that science is perceived as threat. "Why do you keep such a terrific drug?" (ibid.) Georgiana asks. This destabilizing moment of "truth" almost disrupts the fiction of security that the reiterations of belief and trust had formed.

The artificial division of security and threat which Aylmer attempts to maintain by hiding the practices is recreated in the spatial representation Hawthorne offers. The apartment where the story takes place is defined as a space completely secluded from the public.²² In fact, the society and country surrounding Aylmer and Georgiana are remarkably vague, disappearing outside the closed off apartment the story unfolds in: "They were to seclude themselves in the extensive apartments occupied by Aylmer as a laboratory . . . during his toilsome youth" (Hawthorne, "Birth-Mark" 632). The laboratory is the space of white male discovery, rationality, and conquest of nature's secrets (ibid.). It is the space which harbors the potential of the practices promising security. Science as the pure, intellectual male pursuit is contrasted with the female, love, and emotions that initially represent the rivaling forces introducing the story. Georgiana is described as tempting Aylmer to abandon his higher pursuits and leave his work (-space) for domesticity – threatening his scientific career. While Aylmer literally washes off his work when he "cleared his fine countenance from the furnace smoke, washed the stain of acid from his fingers, and persuaded a beautiful woman to become his wife" (628), the space has to be similarly prepared for Georgiana's arrival. Her entrance into the space of the apartment reiterates the marriage ritual and reveals the true unity formed: that of science and domesticity. Georgiana "is carried over the threshold of the laboratory" (Hawthorne, "Birth-Mark" 632) which accomplishes the performative act of marriage, however, "Georgiana was cold and tremulous" (ibid.). The "intertwining" (Hawthorne, "Birth-Mark" 628) of both passions, domesticity and love of a woman as well as science and pure male intellect is only a semblance. The narrator clarifies from the beginning that the love for Georgiana could only "be by intertwining itself with his love of science" (Hawthorne, "Birth-Mark" 628). Hawthorne's spatial construction of laboratory and abode, however, masks this unity by the artificial separation Aylmer creates.

The apartment is subdivided in laboratory and boudoir, which is the part of the apartment where Georgiana is treated and where she lives. "Aylmer had converted those smoky, dingy, sombre [sic] rooms, where he had spent his brightest years in recondite

22 Hawthorne designs a similar reclusive space with Rappaccini's garden, the setting for his other famous short story rendering the scientific experiment of a "mad" scientist.

pursuits, into a series of beautiful apartments not unfit to be the secluded abode of a lovely woman" (Hawthorne, "Birth-Mark" 633). To Georgiana it "looked like enchantment," "a pavilion among the clouds" (ibid.) that feels comfortable. What is represented as the accommodation of a space to the needs of a woman and the creation of a mock domestic sphere is really the careful construction of a space of security which hides the threats and risks contained in scientific practices. In fact, it separates not only the different spaces of domestic and scientific labor but hides the intertwining of both. The room itself represents an experimental set-up that hides its true purpose and characteristic.²³ "Aylmer, excluding the sunshine, which would have interfered with his chemical processes, had supplied its place with perfumed lamps, emitting flames of various hue, but all uniting in a soft, impurpled radiance" (ibid.). The outside is carefully concealed, creating a seemingly completely self-contained artificial space that "appeared to shut in the scene from infinite space" (Hawthorne, "Birth-Mark" 633). It is the stage for the performance of science that is dressed up as domestic, secure space, the proper space for a woman. A safe space, literally as Aylmer "was confident in his science, and felt that he could draw a magic circle round her within which no evil might intrude" (Hawthorne, "Birth-Mark" 633). In this make-believe space not only the appearance is changed but the whole "atmosphere" (ibid.) is created. The "boudoir" is prepared for Georgiana by burning "a pastil" (ibid.) which "had recalled her [Georgiana] from her deathlike faintness" (ibid.). In this simulated space every little bit is a performance put on for Georgiana, a fiction created to hide the underlying reality. Though "Georgiana began to conjecture that she was already subjected to certain physical influences, either breathed in with the fragrant air or taken with her food" (Hawthorne, "Birth-Mark" 636) she could never be sure until Aylmer confesses the failures of all his attempted remedies. Georgiana is held in a naïve, fictional safe space, objectified and secretly experimented on.

The narrative perspective shifts with the entry to the apartment from Aylmer to Georgiana and the boudoir. It is where most of the story takes place, where Aylmer performs his scientific illusions and where he assumes the figure of the God-scientist. The laboratory in contrast remains vaguely alluded to as "an inner apartment" (Hawthorne, "Birth-Mark" 633) that Aylmer and Aminadab appear from or disappear to. "She could hear his voice in the distant furnace room giving directions to Aminadab, whose harsh, uncouth, misshapen tomes were audible in response, more like a grunt and a growl of a brute than human speech" (Hawthorne, "Birth-Mark" 635). As Georgiana is confined to her space, Aminadab is confined to the laboratory reduced to animal grunts. The racism contained in this executor of Aylmer's experiments is striking.²⁴ More important for the analysis here, however, is that he (as the practitioner of science) and she (as the object of science)

23 This "hiding" the true purpose of the room could be compared to high-end hospital or care facilities which are designed to hide the clinical purpose they are built for as much as possible.

24 The description paired with the chosen name indicating the ethnic otherness of Aminadab is a clearly racist depiction reiterated in the lowly "dirty" work of science which has to be executed for Aylmer. In 1987 Thomas Pribek still reiterates the racist imaginary contained in the name "Aminadab" is an exotic name fitted to a kind of grubby person" (177) when discussing the origin and meaning of the name.

barely come into contact. The two spaces of domestic security and scientific security remain artificially separated, while they are nonetheless connected. The two spaces produce two disparate representations of science, one room of “magic” (Hawthorne, “Birth-Mark” 634) and one of anxiety and threat.

When Georgiana “intruded for the first time into the laboratory” (Hawthorne, “Birth-Mark” 637) “[t]he atmosphere felt oppressively close, and was tainted with gaseous odors which had been tormented forth by the process of science. The severe and homely simplicity of the apartment, with its naked walls and brick pavement, looked strange, accustomed as Georgiana had become to the fantastic elegance of her boudoir” (Hawthorne, “Birth-Mark” 637). Hawthorne renders the boudoir as a “fantastic space” that is opposed to the reality of the working of science. With Georgiana trespassing the boundary to the space of male science Hawthorne grants the first and only view into the work performed in the laboratory representing the promised security. The space is described by the enumeration of laboratory equipment. Rather than the material reality, however, the space reveals an affective shift. Georgiana sees Aylmer hunched over his experiment muttering “[n]ow, if there be a thought too much or too little, it is all over” (Hawthorne, “Birth-Mark” 638). Rather than the actual scientific work Hawthorne uses emotions to portray the practice. “How different from the sanguine and joyous man that he had assumed for Georgiana’s encouragement!” (ibid.). The repetition of trust, belief and faith that had determined Georgiana’s understanding of the practice, had in fact been a charade, a fiction performed for her. With her transgression the seemingly clear affective attachments are threatened as Georgiana exclaims: “You mistrust your wife; you have concealed the anxiety with which you watch the development of this experiment” (ibid.). The fiction of security represented in the spatial division of the boudoir and the laboratory maintains the division of emotions and their circulation which constitutes the gendered reality of security.

Not surprisingly then, her transgressing the boundary of the gendered security space triggers a strong affective response: when Aylmer sees her “[h]e rushed toward her and seized her arm with a gripe that left the print of his fingers upon it” (Hawthorne, “Birth-Mark” 638). The fiction of domestic security crumbles and reveals the violence that the practice hides, and which represents the real threat to Georgiana as opposed to the mark. The transgression and revelation of the previously secret violence opens up the potential in which Georgiana could assume an autonomous subject position.²⁵ In the moment of transgression she contradicts Aylmer and his unbroken authority over security. When Aylmer wants to send her away she insists on the truth until Aylmer whispers “there is danger” (ibid.). Georgiana, deeply embedded in the economy of affects that determine the practice as the object of cruel optimism, decides in the end to follow the suicidal practice of removing the mark. The desire of security rendered in the urge to please and appeal for just one moment wins over the reality of threat: “Longer than one moment she well knew it could not be; for his spirit was ever on the march, ever ascending, and each

25 This reading also indicates the revelation of the “security practice” to protect and perfect Georgiana as heterosexist violence against a woman, which would also be easily readable as a clear case of domestic violence which started with psychological violence and tragically ended in the woman’s death – a common trajectory in many such cases even today.

instant required something that was beyond the scope of the instant before" (Hawthorne, "Birth-Mark" 639). Georgiana realizes long before the narrator tells the reader explicitly that Aylmer and his scientific pursuit to control life and create security "failed to find the perfect future in the present" (Hawthorne, "Birth-Mark" 641). The quest would continue, moving on to the next target, the "next" promise, the next object of study. And again the findings will seem like failures "compared with the ideal at which he aimed" (Hawthorne, "Birth-Mark" 639). This motif of failing to find the perfect future in the present could also be the guiding theme of biological security in *Super Sad True Love Story*, which I will discuss in the next section.

Failed Future in Gary Shteyngart's *Super Sad True Love Story*: The Very Near Future

The biological invention then tends to begin as a perversion and end as a ritual supported by unquestioned beliefs and prejudices.

John B. S. Haldane

While in Hawthorne's short story the birthmark embodies the threat to Georgiana's and Aylmer's security, in Gary Shteyngart's *Super Sad True Love Story* it is corporeal signs of ageing which represent the clutches of mortality and the obstacle to finding security and happiness for Lenny, the main character. The book is the third of Shteyngart's novels published in 2010 following the *Russian Debutante's Handbook* in 2002 and *Absurdistan* in 2006. With *Super Sad True Love Story* the author appropriates the dystopian genre, which has proliferated since the millennium (Willmetts 267), to express his social and political critique of what many scholars call "technocapitalism" (Trapp 71).²⁶ Shteyngart paints a grim picture of America's future in his "blistering satire of neoliberal society" (Willmetts 271).

The novel tells the story of Lenny's (Leonard Abramovic) and Eunice Park's (aka EUNITARD) relationship set in a future society. The world they live in is marked by illiteracy and digital culture, driven by endless data streams that direct the consumer capitalism of this dystopian future. Society is centered around, shaped and determined by technological and biotechnological developments that facilitate a pervasive digital surveillance "state." In this context, security is not so much embedded in an individual but a collective structure. All that seems to matter is the constant ranking of individuals based on data harvested from the "äppäräti" everybody is wearing around their neck. The story of Lenny's and Eunice's relationship and the destruction of the United States around them is told interchangeably from the perspective of both protagonists. The narrative takes

26 In Shteyngart's piece in *The New York Times* promoting the publication of the novel he makes this critique of social media and reliance on smartphones more explicit ("Only Disconnect"). Simon Willmetts even asserts that it is "one of the most critically acclaimed examples of this [surveillance based] new wave of dystopian fiction" (286). I would widen the group of dystopian texts that Willmetts specifically refers to and include biotechnological (surveillance) dystopias that have similarly gained in number and prominence.

the form of an epistolary novel and each chapter represents either diary entries by Lenny or messages to and from Eunice Park's GlobalTeens Account. Besides the obvious love story between Lenny and Eunice there is another love story: that of Lenny (and his future society) with youth and the hope for eternal life. The novel represents the utopian promise of biosecurity, namely that the consumption of biotechnological services yields the power to efface ageing and death. Lenny's work place "The Post-Human Services," is a company which trades in "eternal life extension" treatments. Both the relationship with Eunice and the love story of Lenny with eternal life end in betrayal and failure. Eternal Life is unachievable for Lenny and turns out to be a fraudulent practice.

Predominantly, the novel is read as a social dystopia compared to George Orwell's 1984, receiving excessive praise for its treatment of security in the context of a digitalized surveillance state. Many critics focus on the dystopian representation of already existing contemporary practices and developments such as digital surveillance. Brian Trapp calls it "a dystopian political critique, a sort of speculative and satiric worst-case scenario and an indictment of current trends in global technocapitalism" (71). Simon Willmetts points out that the novel emphasizes the change of how these surveillance practices – as security practices – have turned from a Foucauldian vision of control of normativity and massification in terms of suppressing difference to a "decentralized, modulating, and 'dividuating' nature of surveillance" (269). Though describing collective structures the practices nonetheless define and impact individual lives. This individualizing form of surveillance, further exacerbates classist, sexist, and racist stereotypes as Trapp and Roy Goldblatt emphasize in their readings on ethnic identity construction in the novel. Though the novel offers a complex construction of a dystopian world, my analysis will focus on the representation of the bio-security promise of eternal life, which is pervaded and governed by the logics of the surveillance state.

Scholars such as Ulla Kriebner or Roy Goldblatt also focus their readings on the representation of biotechnology, or more specifically, the representation of age in the novel. In a similar vein as Trapp, however, Kriebner emphasizes the similarities of the novel to extradiegetic developments in biogerontology.²⁷ Though I will turn to the representation of biotechnology in Shteyngart's novel, I will not compare these developments to an extradiegetic present reality.²⁸ Rather, I will analyze how biosecurity and its promises are represented within the dystopian vision of an excessive digitalized neoliberal capitalism. Shteyngart's text imagines the failure of scientific pursuit to provide control of biological security through continuous biomedical surveillance and intervention. In Shteyngart's novel identity is highly dependent on biosecurity and represents "an 'unfulfilled project' in which the individual is in a permanent state of becoming" (Willmetts 272). The permanent state of becoming is marked by the perpetual threat and risk

27 Kriebner focuses especially on the similarity to the "immortality prophet Aubrey de Grey" (62), who is a British theoretical biogerontologist. Aubrey de Grey, however, is not the only person Joshie and Post-Human services could be modeled on – Bill Fallon and his *Life Extension Foundation* would be another.

28 Nonetheless, I agree with Jameson that "SF does not really attempt to imagine the 'real' future of our social system. Rather, its multiple mock futures serve the quite different function of transforming our own present into the determinate past of something yet to come" ("Progress" 152).

of spiraling downward in the social hierarchy instead of upward as the American Dream would define it. This threat is not exclusive to but especially salient in terms of biosecurity and the possibility of approximating step by step the ultimate security of eternal life. I wish to show how the individual is defined as a biosecurity individual, representing not a passive consenting individual like Georgiana, but an active consumer subject. I will then show how the motivation of this biosecurity subject embodied by Lenny is nonetheless guided by a fiction of biosecurity based on hope and belief. As in Hawthorne, the security practices and the institution promising security take on a religious characteristic. However, in contrast to the 19th century vision of science gone wrong, Shteyngart's strive for absolute biosecurity in immortality is not a higher goal to achieve but a representation of the commodification of risk in which security is for sale.

The Biosecurity Self and Eternal Life

"I work in the creative economy,' I said proudly. 'Indefinite Life Extension. We're going to help people live forever. I am looking for European HNWIs – that's High Net Worth Individuals – and they're going to be our clients. We call them 'Life Lovers'" (Shteyngart 12). This is how Lenny, the novel's main protagonist, describes his occupation at the start of the novel. While Hawthorne spends a lot of time and detail on how the fact of the fatal threat of the birthmark is established, in Shteyngart's novel the facts are fixed and ingrained in society. Society is not only marked by race, class, and gender but by health and age, producing biosecurity individuals who are intimately defined by security practices. Youth and eternal life represent the promised security for rich individuals provided by Post-Human Services where Lenny works. In this transhuman era, the practice of "dechronification" – a reversal of ageing – represents the pinnacle of the veneration of youth as a mandatory security practice. Here, all diseases seem subsumed under the cipher of ageing, which is understood as an avoidable disease (Kribernegg).²⁹ The most minute signs of ageing represent the telltale signs of nearing death and are thus understood as a threat to the biosecurity individual socially as well as existentially. In contrast, indefinite life extension – with its reversal of ageing – embodies the security practice and promise of security.

The youthful and healthy body is not only celebrated but represents the norm of able-bodied security in *Super Sad True Love Story* that defines the individuals in their biosecurity identities. Biological security represents the precondition for a good and successful life as well as the main paradigm of difference. It is continuously determined in biological risk assessment produced by the devices everybody wears and projected publicly for everyone else to see. Any deviation from the ideal of the perfect youthful and healthy body is penalized by exclusion from society. Both corporeal parameters of health and youth determine the position of individuals in the social hierarchy. Lenny, for instance, is an outsider at work and bullied because of his age – he is 39 – and his biological data. "[T]he graffito in the bathroom reads 'Lenny Abramov's insulin levels are whack'" (Shteyngart

29 Heike Hartung and Rüdiger Kunow describe this "decline view" with David Gem as a result of the biomedical narrative that dominates the "narrative of old age which depicts the ageing process as completely devoid of positive meaning" (15).

57). Health data and appearance serve to superficially categorize people but also define their access to security in this highly stratified society.

The hierarchization is not rendered as an abstract invisible process imposed from above but as practiced by the people themselves in this data driven world. Lenny is advised by his friends to “[l]earn to rate everyone around you. Get your data in order” (Shteyngart 70). Constant ranking constitutes a crucial security practice providing people with a sense of belonging and identity which seems equally important to the practices of self-care to improve one’s bio-statistics. When Lenny learns how to use the functions of his device in the chapter “RateMe Plus” (Shteyngart 76–96), the app reveals Lenny’s life expectancy: “life span estimated at eighty-three (47 percent life span elapsed; 53 percent remaining)” (Shteyngart 90). Health in terms of longevity represents an identity marker that is understood by Lenny as the most important indication of his security status. Health and youth are thus essential components in the stratification of society. Everyone is marked by their biosecurity identity based on health statistics.

Resembling the permanent state of crisis in their country, the protagonist’s life is marked by the constantly looming threat of sliding down the ladder of biomedical and consequently financial security. At Lenny’s work health ranking is used as a clear hierarchization of the employees, indicating the security of their position within the company.

[T]he flip board displayed the names of the Post-Human Service employees, along with the results of our latest physicals, our methylation and homocysteine levels, our testosterone and estrogen, our fasting insulin and triglycerides, and, most important, our “mood+stress indicators,” which were always supposed to read “positive/playful/ready to contribute” but which, with enough input from competitive co-workers, could be changed to “one moody betch today” or “not a team player this month.” (Shteyngart 58).

The biological parameters serve as indicators of a person’s worth. The numerical description signifies both the corporeal security status, as well as the social status of the individual. Biosecurity markers designate the position of the individual in the work force and can determine their exclusion from it. Success and therefore class-belonging are thus tied to biological markers since bodily decline directly affects one’s social status. Not ranking on the score board could imply the loss of one’s job, which for Lenny resembles the exclusion from the source of security. For Lenny, the loss of his position at Post-Human Services would represent “the loss of the object or scene of promising itself” (94) as Lauren Berlant puts it in “Cruel Optimism.” This loss “will defeat the capacity to have any hope about anything” (ibid.) revealing the impossibility for Lenny of reaching the desired security. The practice of health ranking and analyzing data contains the promise to approximate total security imagined as eternal life. Though Shteyngart makes clear that Lenny’s hope for dechronification treatments are futile, his position in the company nevertheless gives him hope.

“New” biological stratification does not replace old discrimination of class and ethnicity but represents a further intersectional marker. And the intersectionalities determine both the accessibility of security through unlimited life extension as well as the accessibility of this security narrative. Lenny confesses:

but in the end we are still marked for death. I could commit my genome and proteome to heart, I could wage nutritional war against my faulty apo E4 allele until I turn myself into a walking cruciferous vegetable, but nothing will cure my main genetic defect: My father is a janitor from a poor country. (Shteyngart 60)

Shteyngart makes clear that the dream of indefinite life extension and prioritization of self-care is not available to all. When Lenny finds the dead body of an elderly person from his apartment building in the entrance hall he is outraged about the undignified treatment of the corpse. "I backed away. A body badly sheathed in an opaque plastic bag sat in the wheelchair, its head crowned with a pointy pocket of air..." (Shteyngart 79). Lenny's interrogation of the Hispanic undertaker of the "American Medicle [sic] Response," who comes to pick up the corpse, shows that the man is so far removed from Lenny's imaginary of security and world of indefinite life extension that he for one, smokes without caring about its negative impact, and that he regards death as normal: "It's just death.' 'Happens to everyone, Paco'" (Shteyngart 80). For Lenny as the epitome of a biosecurity individual striving for immortality, the old people that he associates with "the daily carnage of the Death Board by the elevators" (Shteyngart 53) serve as the feared negative horizon to his vision of security. Those unable to compete and deviating from the norm are excluded and left behind.

The security of individuals is marked by their belonging to two groups that are distinguished according to their net worth (High Network Individuals (HNI) and Low Network Individuals (LNI)) and their access to biosecurity practice of dechthonification (Life Lovers and Impossible to Preserve (ITP)). In the flight lounge Lenny describes the chasm between HNI and ITP. The disgust and amazement about this "one guy who registered *nothing*" reveals the position of those considered "disposable:" "He was at the margins of society, because he was without rank, because he was ITP or Impossible to Preserve, because he had no business being mixed up with real HNWI's in a first-class lounge" (Shteyngart 35). ITPs are not just marginalized; in the biosecurity ideology of Post-Human Services the judgment on those deemed unfit for indefinite life extension is even harsher, clearly categorizing the worth, or rather worthlessness of their lives. The deaths of many rioters, all of them LNI marked by the lack of access to basic medical care, is explained away as Lenny puts it:

We have to remember that our primary obligation is to our clients. We have to remember that all those who died in Central Park over the last few days were, in the long run, ITP, Impossible to Preserve. Unlike our clients, their time on our planet was limited. We must remind ourselves of the Fallacy of Merely Existing, which restricts what we can do for a whole sector of people. Yet, even though we may absolve ourselves of responsibility, we, as technological elite, can set a good example. (Shteyngart 181)

Here people are not only subdivided into High and Low Net Worth Individuals but in the two categories of Life Lovers (the wealthy clients of Post-Human Services), and the Impossible to Preserve (ITPs) as those too poor or too unfit to receive the treatments. People are thus marked in terms of their security potential, so their ability to access biosecurity.

In contrast to the biosecurity individual, the ITPs are marked as “less than human.”³⁰ They are not just at the bottom of society and therefore more at risk but in Lenny’s understanding completely excluded from the “we” of the worthy individuals because of their lack of access to eternal life.

Shteyngart’s biosecurity individuals expose how much the logics of security inform their self-understanding. Lenny writes in his diary: “A body at the chronological age of thirty-nine already racked with too much LDL cholesterol, too much ACTH hormone, too much of everything that dooms the heart, sunders the liver, explodes all hope” (Shteyngart 5). Lenny’s self-description exemplifies the centrality of the biological security parameters for the individual to understand his body. Shteyngart represents the numerical reality defining the security status as an affective response which refers to the future rather than the present. None of the risk markers cited by Lenny is explained as impacting his present state of well-being – Lenny does not suffer any corporeal ailments *yet*. Rather, the present is understood as an indicator for future security determined by risk assessment. And this statistical risk is here represented in affective terms, or what Woodward has termed “statistical panic” (Woodward, *Statistical* 13). The indication of risk markers “explodes all hope” (Shteyngart 5) causing fear and anxiety.

To fit in and to be a successful part of society one has to have perfect health scores as well as look young. This ideal of the youthful and fit body is based on self-care. The successful biosecurity individual has to therefore engage in biosecurity practices to manage their biological parameters and to be able to embody this ideal of a healthy body. Biological security is thus represented not as passive fate but as based on one’s own responsibility. Lenny is repeatedly reprimanded to “Stick with the diet and exercise. Use stevia instead of sugar” (Shteyngart 126). “Take care of yourself. Go to the Eternity Lounge. Put some Lexin-DC concentrate under your eyes” (Shteyngart 61). “You need to detoxify, Len” (Shteyngart 64). As these examples show, Lenny is not really an ideal example of a responsible biosecurity individual in this society of self-optimization. Nonetheless, the biosecurity promise is central to his identity.

The connection of outward appearance and health shows that also in this data-driven future society the outwards signs of the body are read as indicators of a hidden (and threatening) process within the body. When Joshie comments on Lenny’s bald spot he elaborates: “I’m not talking aesthetics here. All that Russian Jewish testosterone is being turned right into dihydrotestosterone. That’s killer stuff. Prostate cancer down the road. You will need at least eight hundred milligrams of saw palmetto a day. . . .” (Shteyngart 65). This scene highlights the reading of the body for signs of risk potential and the associated responsibility of the individual to prevent or minimize that risk. It stresses that prevention and pre-emption dominate the biosecurity thinking of this future. While all ailments and diseases are related to ageing, the cure of distinct disease once they have surfaced is not part of the anticipated goals represented in the novel. Security is not found in an all-encompassing biomedical practice of curing. Rather, the decline of the body has to be preempted before it really starts.

30 Shteyngart condenses the attitude of the global North toward problems and human crises in the global South in the representation of the fictive biosecurity classes of the United States.

True security can therefore only be attained with dechRONification treatments. “‘Eternal life is the only life that matters. All else is just a moth circling the light’” (Shteyngart 275). And to achieve this is the responsibility of the self-reliant biosecurity individual. The blame for letting one’s body deteriorate is placed squarely on the individual. For Lenny this represents a chosen and incomprehensible decline, because “Why not keep off drugs and demanding women, spend a decade in Corfu or Chiang Mai, douse his body with alkalines and smart technology, clamp down on the free radicals, keep the mind focused on the work, beef up the stock portfolio, take the tire off the belly, let us fix that aging bulldog’s mug?” (Shteyngart 18) Security in *Super Sad True Love Story* is achieved by diverse forms of “technologies of the self” (Foucault). It is not a God-like scientist who subjects an individual to experimental practices but the individual that has to seek out, or rather decide for the security of eternal life by practicing “self-care” – wellness and fitness – paired with biotechnological treatments that represent an informed consumer choice.

The biosecurity clients in Shteyngart’s novel are white and male: “Their white, beatific, mostly male faces . . . flashed before me.”³¹ They are affluent and powerful consumers of security, empowered by their choices and the “privilege of futurity” (Nye 112). The biosecurity subjects – though determined and ranked according to their youthful appearance and biological risk assessments – do not represent a form of biological determinism. To the contrary, nature and biology are understood as fully malleable and controllable if one makes the right choices.³² Biological security is represented as radical self-empowerment to change and shift one’s biological fate if one takes the proper choices of security. The different treatments of dechRONification represent a security practice for the wealthy and healthy, while the rest are left with the promise of self-improvement in terms of life-style and discipline. Though the security of eternal life remains unattainable for Lenny, the hope and optimism attached to the security practices enforce their promise as if they were accessible.

Only towards the end does Shteyngart reveal the full extend of what the promise of eternal life looks like and entails when Lenny visits Joshie: “I was looking at dechRONification in action. I was looking at Joshie Goldmann himself, his body reverse-engineered into a thick young mass of tendons and forward motion” (Shteyngart 216–7). The true security practice thus goes far beyond sousveillance and the recreational use of surveillance medicine. The promise of eternal life – or the eradication of the ultimate threat of death – is not based on making the biological body as such survive. “Joshie straightened up and I could see the muscle tone, the deep-veined reality of what he was becoming, the little

31 The female perspective on security in the novel is very different, for the women in *Super Sad True Love Story* are still dealing with domestic violence and “the politics of idealization” Fetterley pointed out in Hawthorne. Also in other aspects the novel is deeply gendered. While the urge for biosecurity, and its reckless neoliberal elitism is represented almost exclusively by male protagonists, the humane, compassionate side is represented by Eunice, a female. Simon Willmetts points out that Eunice is the protagonist that represents hope and autonomy as a subject, one that defies Jameson’s critique that dystopian fiction leaves no possibility of imagining an alternative (270).

32 The biosecurity individual is based on biotechnologically facilitated control that relies fully on the self-reliant and responsible individual. The control, however, is here largely described by consumable goods and services.

machines burrowing inside him, clearing up what had gone wrong, rewiring, rededicating, resetting the odometer on every cell" (Shteyngart 218). Biosecurity is represented here by the biotechnologically enhanced body which reveals the practice of indefinite life extension as a replacement rather than a healing or enhancement of the ageing body. Shteyngart represents the biosecurity of this future world not as a form of radical self-empowerment in terms of controlling the organic biological make-up, or by altering it. Shteyngart renders future biosecurity as a replacing of vital organs and a re-coding of biological matter echoing the processes of artificial intelligence.

Not surprisingly then, the dechRONification process does not only alter the body but the self. As a side effect the treatments alter the personality, "because every moment our brains and synapses are being rebuilt and rewired with maddening disregard for our personalities, so that each year, each month, each day we transform into a different person, an utterly unfaithful iteration of our original selves" (Shteyngart 65).³³ From the perspective of the main protagonist, the promise of security is worth the risk of this potential loss of the self in the post-human future. The hope invested in the security practice by Lenny legitimizes this risk, similar to how Georgiana feels in Hawthorne's story. In fact, beside this one scene describing the material reality of eternal life, Lenny's hope and belief are the main constituents Shteyngart uses to represent immortality.³⁴ The fervent optimism of both Lenny and Joshie creates the "reality" of the practice, establishing it as an unquestionable fact.

Hope, Belief, and the Fiction of Security

Shteyngart does not dedicate much detailed explanations to the exact science that provides eternal life. Rather than expounding and developing the details of the biotechnical processes, which is a hallmark of science fiction writing, Shteyngart leaves this rather vague. Within consumer culture not even the representatives of the practice seem to fully know how the security practices work. The knowledge is outsourced to specialized science teams. Rather, Shteyngart stresses the desires and hopes attached to the security practices establishing the reality of the practices affectively:

The technology is almost here. As the Life Lovers Outreach Coordinator (Grade G) of the Post-Human Services division of the Staatling-Wapachung Corporation, I will be first to partake of it. I just have to be good and I have to believe in myself. I just have to stay off the trans fats and the hooch. I just have to drink plenty of green tea and alkalized water and submit my genome to the right people. I will need to re-grow my melting liver, replace the entire circulatory system with "smart blood," and find

-
- 33 Within the array of practices promising security, writing becomes a security practice in its own right. "Joshie had asked us to keep a diary because the mechanicals of our brains were constantly changing and over time we were transforming into entirely different people" (Shteyngart 193).
- 34 With this emphasis on hope and belief Shteyngart overcomes the impossibility of representing immortality, which Jameson describes in his chapter about "Longevity and Class Struggle" (*Archaeologies*). Jameson argues that representations of immortality are representations of a class struggle serving as a "substitute for some more concrete and fundamental worry and fear – some deeper contradiction – at issue in the unconscious" (332).

someplace safe and warm (but not too warm) to while away the angry seasons and the holocausts. And when the earth expires, as it surely must, I will leave it for a new earth, greener still but with fewer allergens. (Shteyngart 5)

The descriptions in the quote continue to the end of the universe, indicating early in the novel the absurdity and fanaticism associated with the quest for immortality. It also describes Lenny's vision of bioscientific security as the belief and the hope he places in the practices. The hurried list of things he *just* has to do to reach eternal life overtakes the "almost" that introduces the description and places the practice more firmly in the realm of future and hope than a present reality. Rather than representing a full-fledged practice Shteyngart stresses the importance of affective attachments to validate the security practices propagated by Post-Human Services.³⁵

It is Lenny's narrative perspective and faith placed in the promise of security that produce the practice as if it was entirely "secure." "[S]ave money for initial dechRONification treatments; double own lifespan in twenty years and then just keep going at it exponentially until you gain the momentum to achieve Indefinite Life Extension" (Shteyngart 51). In this description of his quest to achieve the biological and financial status to be eligible for the treatment promising infinite life the potential is merely related to the ability of the individual to qualify for the treatment. Lenny's faith placed in the technological fix turns the possibility of indefinite life extension into fact, though the security practice is rather a promised security that is *not yet* fully accessible by scientific and technological means. After all, "[t]he technology is almost here" (Shteyngart 5), meaning *not yet*. The security is thus not much more than a promise.

While Joshie personifies the security practice of dechRONification serving as an idol of the movement of "Life Lovers," Lenny gives the practice its meaning, its context, and its force, as it is mainly narrated by him. Lenny anchors the narrative and his navigation through the thicket of this brave new world provides the narrative guard rails for the reader. But also intradiegetically it is Lenny's storytelling that gives shape to the security practice. As the main storyteller he brings the practice to life representing a new version of a very old tale – immortality.

I painted him a three-dimensional picture of millions of autonomous nanobots inside his well-preserved squash-playing body, extracting nutrients, supplementing, delivering, playing with the building blocks, copying, manipulating, reprogramming, replacing blood, destroying harmful bacteria and viruses, monitoring and identifying pathogens, reversing soft-tissue destruction, preventing bacterial infection, repairing DNA. . . . "How soon?" Barry asked, visibly excited by *my* excitement. "When will all this be possible?" "We're almost there," I said. (Shteyngart 123–4)

It is not the mind-blowing biotechnological practices that affect the client's reaction. Rather, Lenny's hope and belief in the practices and his excitement establish the secu-

35 While the hope and belief invested in the security practice of indefinite life extension define its symbolic capital, it likewise defines its monetary worth. The services sold by Post-Human Services are in this context venture capital, and an investment in a future in its literal as well as metaphorical sense.

rity of eternal life as tangible, as “almost here.” Shteyngart emphasizes the importance of narrative construction to create a pervasive fiction of security which relies on affective attachments rather than scientific facts. Lenny does not explain scientific procedures but rather “paints a picture.” He creates an image of his vision, embodying an artist rather than a salesman of clinical procedures. Lenny’s vision of security represents the creation of a science fiction.

The connection between the vision of biotechnologically facilitated security and science fiction is further increased by Shteyngart’s description of the posters that adorn Joshie’s living room.

Posters from his youth – science-fiction films . . . – framed conservatively in oak, as if to say they had withstood the test of time and emerged, if not masterpieces, then at least potent artifacts. The name alone. Soylent Green. Logan’s Run. Here were Joshie’s beginnings. A dystopian upper-class childhood in several elite American suburbs. Total immersion in *Isaac Asimov’s Science Fiction Magazine*. The twelve-year-old’s first cognition of mortality, for the true subject of science fiction is death, not life. (Shteyngart 217)

With this description of Joshie’s home Shteyngart exposes the origin of his vision of dechronification both intra- and extradigetically. The home represents a shrine to 1970s and 1980s sci-fi revealing an origin story of Post-Human Services that clearly underlines the fiction of security. The description thus emphasizes the often-cited connection of biotechnological developments and science fiction. But it also points to science fiction as one of the most important objects circulating different versions of (failed) biosecurity narratives. Since a majority of biotech sci-fi represents dystopian vision, Shteyngart foreshadows with these intertextual references the failure and deconstruction of the security promised by indefinite life extension.

The fiction of security in Shteyngart’s novel thus does not only refer to the necessity of creating a pervasive narrative but also to the failure of the promise. The biosecurity promise of Post-Human Services as a successful and promising experiment of radical self-empowerment over the given corporeality represents a thinly veiled fiction. Already early in the novel, descriptions of Joshie’s body reveal little glimpses of his age: “Joshie turned away from me. From this angle, I could see another side of him, the slight gray stubble protruding from his perfect egg of a chin – the slight intimations that not *all* of him could be reverse-engineered into immortality. Yet” (Shteyngart 66). In the beginning of the novel, these little glitches are explained by technology not being there yet. However, in post-rupture New York, Lenny informs the reader in a post-scriptum epilogue to the publication of his diary and Eunice Parks GlobalTeens Messages that the treatments turn out to be dangerous and in the end deadly. Lenny reports from an event where a visibly deteriorating Joshie announces the failure of the project: “Onstage, my ersatz papa’s face, initially contorted into a serious academic expression, quickly fell apart, and he began to twitch from the recently discovered Kapsian Tremors associated with the reversal of dechronification” (Shteyngart 328). Since Joshie embodies the practice, he also embodies its failure: “Drooling magnificently over his interpreter, he told us, without preamble or apology: ‘We were wrong. The antioxidants were a dead end. There was no way to inno-

vate technology in time to prevent complications arising from the application of the old” (Shteyngart 328). Though the security practices of dechronification failed it is not represented as a failed goal but simply as a failed attempt, the wrong method. The attempt to replace nature, or correct it simply did not work. But instead of a moral of having misunderstood what humanity means and being unable “to enjoy the perfect future in the present,” as Hawthorne’s narrator puts it, Lenny describes the remorphing of the institution of biosecurity and its practices into something new. “Howard Shu took over Post-Human Services and made of it what he’d always imagined, an enormous lifestyle boutique doling out spa appointments and lip-enhancement surgery” (Shteyngart 329). The failure of the practice does not really represent an end, but a deferral and a new beginning.

Science and Religion

Security is not only depicted as an “affective fact” (Massumi, “Future Birth”) produced by a fiction of biosecurity, which ultimately falls apart. Shteyngart represents the hope and belief placed in the security promised by indefinite life extension as a form of religious following of Post-Human Services. As in Hawthorne, the description of the space of security is enticing. With the spatial construction Shteyngart renders the scientific promise of security and self-empowerment as an analogy to religion. The headquarters of Post-Human Services is called the “Life Lover’s Outreach division” (Shteyngart 124). It is a public space that has little in common with Aylmer’s secluded apartment, and much less with the dungeons of Dr. Frankenstein. Rather, it represents a sanctuary and a place of worship where Life Lovers come to perform the medical rituals obligatory to become immortal.

The analogy with religion is not subtle in Shteyngart’s text but constitutes a literal replacing of the old space of security. Echoing the colonial practice of occupying formerly sacred spaces, the headquarter occupies an old and abandoned temple.³⁶ “The Post-Human Service division of the Staatling-Wapachung Corporation is housed in a former Moorish-style synagogue near Fifth Avenue” (Shteyngart 56). The spatial description is thus reminiscent of a spiritual conquest of another civilization or culture, in this case the religious framework is replaced by the culture of biosecurity.

The company appropriates the space filling it with their own practices of worship as well as the odor of their own security practices.

The first thing I noticed upon my return was the familiar smell. Heavy use of a special hypoallergenic organic air freshener is encouraged at Post-Human Services, because the scent of immortality is complex. The supplements, the diet, the constant shedding of blood and skin for various physical tests, the fear of the metallic components found in most deodorants, create a curious array of post-mortal odors, of which ‘sardine breath’ is the most benign. (Shteyngart 57)

36 As one example of many, Mexico City was constructed on top of the Aztec temples of Tenochtitlan.

Though familiar, the “smell” of security practices is in fact a stench. Heavy air freshener is used to conceal this uncomfortable side-effect in the otherwise clean and designed space: “Everything bathed in soft colors and the healthy glow of natural wood, office equipment covered in Chernobyl-style sarcophagi when not in use, alpha-wave simulators hidden behind Japanese screens, stroking our overactive brains with calming rays” (Shteyngart 60). As in Hawthorne’s story, the scientific space is concealing its true, threatening character. The space of security is altered by smells and design to support the fiction of effortlessness by “hiding” the traces of its practices.

The belief in eternal life by biotechnological means displaces the Jewish tradition that Lenny continuously describes disparagingly as misguided faith. It takes over its space and makes use of the symbolic and spiritual places once assigned to holy objects. “The ark where the Torahs are customarily stashed had been taken out, and in its place hung five gigantic Solari schedule boards” (Shteyngart 58) on which the ranking of the employees is made public. By placing the scoring board of the employees in the position of the holy scripture Shteyngart makes the practice of quantifying the self and statistical risk assessment take the place of the word of God. The practices of assessing individual security statuses is thus likened to a religious practice. Central for the characters to improve their ratings is visiting the Eternity Lounge. This lounge, where the employees practice age prevention techniques as central security practices represents a displacement of a central space within the old synagogue.

The Eternity Lounge was crammed full of smelly young people checking their äppäräti or leaning back on couches with their faces up to the ceiling, de-stressing, breathing right. The even, nutty aroma of brewing tea snuck a morsel of nostalgia into my general climate of fear. I was there when we first put in the Eternity Lounge, five years ago, in what used to be the synagogue’s banqueting hall. (Shteyngart 61)

The spatial continuity of old and new security practices marks the employees more clearly as a community based on faith. It represents a group united by a common belief as well as common practices. Security is thus not only produced by the individual security practices such as “breathing right” but by belonging to the “we” that is produced by the collective practice. And this we represents an exclusive elite whose “lives are worth more than the lives of others” (Shteyngart 165).

Initially, Lenny insists on the difference to the old overcome religious practices: “The truth is, we may think of ourselves as the future, but we are not. We are servants and apprentices, not immortal clients. We hoard our Yuan, we take our nutritionals, we prick ourselves and bleed and measure that dark-purple liquid a thousand different ways, we do everything but pray” (Shteyngart 60). Only at the end does the protagonist himself recognize, or rather acknowledge the spatial continuity. “I stood before one of the stained-glass windows depicting the tribe of Judah, represented here by a lion and crown, and for the first time considered the fact that to several thousand people this had once been a temple” (Shteyngart 255).

Not surprisingly then, Lennie describes Joshie as a form of guru: “And there he was. Younger than before. The initial dechronification treatments – the beta treatments, as we called them – already coursing through him. His face unlined and harmoniously still, . .

. Joshi Goldman never revealed his age" (Shteyngart 63). To Lennie, Joshie appears in this first description of his "ersatz Papa" as a revelation, a spiritual leader. His age reversed and on his way to eternal life Joshie's youthful looks show the material reality of indefinite life extension for the first time to the reader. He lacks any outward signs of ageing and wrinkles that would expose his chronological age and therefore personifies security. But Joshie is not only described as a spiritual leader by Lenny in terms of a connection to and teacher of a higher power. "Joshie's office was on the top floor, the words 'You Shall Have No Other Gods Before Me' still stenciled into the window in English and Hebrew" (Shteyngart 64). Joshie is depicted as a God-figure who is the ultimate judge deciding who is granted access to security and who is not.

However, rather than Joshie, Lenny describes himself and his work analogous to being God "the creator." "I picked out the profiles that appealed the most to me, . . . : I scanned the good cholesterol and the bad, the estrogen buildups and the financial crack-ups," when he is overcome by "an intense desire to set it right" (Shteyngart 123). While Joshie is only represented in his self-centered practice of rejuvenating himself Lenny most closely resembles the urge of his scientific forbears. He wants to correct the mistake nature had build into the human design to improve and help others, if not the worthy part of humanity at large. In Shteyngart's novel the flaw that has to be obliterated is the biological make-up of the human body. And Lenny understands his work to eradicate this flaw and lift the human to a higher level of security as sacred: "Affecting a god-like air – my Eunice-kissed proboscis pointed toward the ceiling, both hands caressing the data in front of me, as if ready to make man out of clay – I scanned the files of our prospective Life Lovers" (Shteyngart 123). Data is represented as the essence and the material a human is made of, and Lenny feels a hubris similar to Aylmer's creationist quest. Like Aylmer's, Lenny's faith in the utopian promise is so strong that he cannot confront the failure leading to a denial of its reality: "Eunice left Joshie even before the decline began. I know little about the young man she left him for . . . After Joshie has finished his warbling, I ran out of the auditorium. I didn't want to ask him what it was like to know that he was about to die. Even at this late date, even after he had betrayed me, the foundation myth between us precluded that question" (Shteyngart 329).

Biosecurity for Sale

As the founder and head of Post-Human Services Joshie represents the part usually associated with the scientist genius – such as Aylmer. However, Joshie is not a scientist, neither is Lenny. They are "[m]ore like a salesman," (Shteyngart 17) as the sculptor in Italy puts it when Lenny boasts to Eunice about his profession in "nanotechnology and stuff" (ibid.). The biosecurity practice is therefore not only part of a capitalist system and a commodity for sale but is represented by the business delegates rather than the scientists themselves. Not surprisingly then, the headquarters visited by clients is situated in the center of the city, while the scientific practice and research is spatially outsourced to "

the ten-story slab of concrete that once served as an adjunct to a large hospital" (Shteyngart 124–5) in a wasteland.³⁷

As previously noted, the "frontiers of science and technology" (Shteyngart 22) are an elitist practice only affordable for the wealthy. Lenny's utopia is not based on high principles of equality but is utterly exclusive. It represents a utopian promise for the few that have the "privilege of futurity" (Nye 112). To be eligible "[m]oney equals life. By my estimation, even the preliminary beta dechronification treatments, for example, the insertion of Smart-Blood to regulate my ridiculous cardiovascular system, would run three million Yuan per year" (Shteyngart 77). All the self-improvement and regimen of self-care is thus useless if one does not have the matching wealth to afford the final steps. Or as Vishnu puts it "'Fuck that Immortality bullshit. Ain't going to happen for us anyway. Look at us. We're not HNWIs.' ... We're poster children from Harm Reduction" (95). For the seeker of eternal life such as Lenny, health and wealth are mutually important: "I owed Howard Shu 239,000 yuan-pegged dollars. My first stab at dechronification – gone. My hair would continue to grey, and then one day . . . I would disappear from the earth" (Shteyngart 70). Lenny's pondering makes clear that capital is the first prerequisite to be able to access biological security followed by biological capital. Concerning the cruelty of financial inaccessibility of the treatments to most, Joshie replies: "Those who want to live forever will find a means of doing so," Joshie said, a cornerstone of the Post-Human philosophy" (Shteyngart 126). The cornerstone of the "philosophy" thus represents the fervent belief in the U.S. American foundational myth of self-reliance, as well as the neoliberal ideology of self-regulation.

The commodified nature of the security practice is further emphasized when on their way to the subway Lenny discovers a new billboard by the "Staatling-Wapachung Corporation" (Shteyngart 152) for "AN EXCLUSIVE TRIPLEX COMMUNITY FOR NON-U.S. **NATIONALS.**" The offer includes "EXCLUSIVE Immortality Assistance from our Post-Human Service Division" (Shteyngart 152). Lenny is outraged about this offer:

"EXCLUSIVE Immortality Assistance"? Beg pardon? You had to *prove* you were worthy of cheating death at Post-Human Services. Like I said, only 18 percent of our applicants qualified for our Product. That's how Joshie intended it. . . . Now they were going to bestow immortality on a bunch of fat, glossy Dubai billionaires who bought a Staatling Property "TRIPLEX Living Unit"? (Shteyngart 153)

Eternal Life is here most clearly marked as a commodity, a simple good or service which represents the deflation of the dream and image Post-Human Services and Lenny had propagated. Lenny's representation of the exclusiveness and elite position of the practice that is based on strict rules and tests is contrasted with this adherence to capitalist flows.

37 The inner workings of biosecurity are racist and entrenched in neo-colonial practice: "It was time for him to meet our Indians. We have this Cowboy and Indians theme going on at Post-Human Services. At the Life Lovers Outreach division, we call ourselves Cowboys; the 'Indians' are the actual research staff, mostly on loan from the Subcontinent and East Asia, housed at an eighty-thousand-square-foot facility on York and at three satellite locations in Austin Texas; Concord, Massachusetts; and Portland, Oregon." (Shteyngart 124–5)

Furthermore, only the connection of Post-Human Services to capitalism makes it a source of security. Rather than the provided services their belonging to a powerful cooperation provides Joshie with the position of security during the destruction of the United States. In this context eternal life is simply one branch of a big corporation in the business of security.³⁸ Lenny stresses the connections to security when he describes his employment to the Parks: “I work for a division of Staatling-Wapachung,” I said. . . . Property and security and life extension I guess are the three things that we do. All very important in a time of crisis” (Shteyngart 194). Biotechnology and the hope of controlling the body are part of a diversified investment strategy of a big company which also represents the privatized military force. This merging of biotechnology and security services in one company embodies the ideological fusion of individual and national biosecurity.³⁹ The corporate link becomes increasingly important as the country around the protagonists slips into crisis. After the first revolts Lenny’s *apparat* is upgraded to see who of the guards on the streets belongs to Wapachung Contingency. Lenny’s employment at Post-Human Services and proximity to Joshie enables him to move relatively unrestricted through the various check points established by the security forces. While the United States is descending into armed conflict the Staatling-Wapachung Corporation, the company that owns Post-Human Services takes over control.

The reliance on and intimate connection to capitalist circulation is established in comments by Joshie throughout the novel. When Lenny initially points out to Joshie that the political and economic situation of the nation is dire Joshie responds: “This is all going to be great for Post-Human Services! Fear of the Dark Ages, that *totally* raises our profile. Maybe the Chinese or the Singaporeans will buy us outright” (Shteyngart 66). Following the first riots in Central Park, which introduce the rupture, Joshie gives a motivational speech to the employees that ends in, “I say to all the naysayers: The best is yet to come.’ / ‘Because we are the last, best hope for this nation’s future.’ / [sic] We are the creative economy.’ / [sic] And we will prevail!” (Shteyngart 181). Joshie repeatedly stresses in his messages to shareholders and executives that “[t]he expected collapse of the Rubenstein/ARA/Bipartisan regime presents us with great possibilities” (Shteyngart 240). The violent collapse of the nation and the casualties this produces are reflected by Joshie merely in terms of another business opportunity. Rather than a risk, the insecurity of the rupture is seen as a potential, a possibility that can and should be used. It is not “no more America” as Lenny asks timidly. “Fuck that. A *better* America” Joshie replied (Shteyngart 257). But he does not just refer to the potential of new investors. Rather, the insecurity produced by the rupture increased the symbolic capital of Post-Human Services. “The Rupture created a whole new demand for not dying” (*ibid.*).

While the story of indefinite life extension ends in an apocalyptic event it is not marked by an end. When Lenny goes to an exhibition post rupture he encounters the

38 Johannes Völz and Russell A. Berrmann point out that “Liberalism, many critics across the humanities and social sciences now insist, is a type of political rule that employs the logic of security” (4).

39 Donna Haraway’s “Cyborg Manifesto” warns against this connection of technology and the military sector. However, the warning is rather against the abuse of power granted by the biotechnological developments (303, 306).

same group of people who were clients at Post-Human Services: “The Staatling-Wapachung bigwigs were dressed like young kids, a lot of vintage Zoo York Basic Cracker hoodies from the 2000s, and tons of dechronification, making me think they were actually their own children, but my *äppärät* informed me that most of them were in their fifties, sixties, or seventies” (Shteyngart 319). Instead of an end, Shteyngart describes a continuation. *Äppäräti*, data streams, and the practices that determined pre-rupture society continue in the same way as Post-Human Services continues. Though an apocalyptic event, the rupture is not an attempt to narrate an ending but rather represents the dystopian and apocalyptic idea in the continuation and iteration of “the same,” which marks post rupture America: “Welcome to America 2.0: A GLOBAL Partnership/ *THIS* Is New York: Lifestyle Hub, trophy City” (Shteyngart 322). New Credit Poles screen “Life Is Richer, Life Is Brighter! Thank You, International Monetary Fund!” (Shteyngart 305) because in post-rupture New York City “Nothing’s changed but the uniforms” (Shteyngart 285). The rupture does not register as the “apocalyptic end” of a nation. Security is simply re-established when connectivity is regained: “at 5:54 p.m. EST, the precise time Telenor, the Norwegian telecommunications giant, restored our communications and our *äppäräti* started whirring with data, prices, Images, and calumny; 5:54 p.m. EST, a time no one of my generation will ever forget” (Shteyngart 283).

The only security that can console Lenny in this limbo of continuation is the recognition and acceptance of his own mortality. The beginning of the last letter mirrors the incipit of the novel: “Today I’ve made a major decision: *I am going to die*” (Shteyngart 304). These are the same sentences reversed in their meaning. In contrast to the continuation that marks the dystopian narrative of a biosecurity future, *an end* becomes the only hope. Shteyngart thus renders the failure of the commodified practices of biosecurity as an individual recognition that allows the main protagonist to withdraw from the seemingly inescapable consumer’s urge to attain biosecurity.

Past – Present – Future

Hawthorne’s “The Birth-Mark” and Shteyngart’s *Super Sad True Love Story* both represent the utopian promise of ultimate control that is supposed to elevate the human to something more than human – divine or eternal. And both caution against the quest to enhance or perfect the human body as an ultimately dangerous life-threatening practice. The biosecurity practices in both stories reveal themselves as errant quests, as failures of utopian promises. And both texts formulate the fearful visions that have been attached to science, most recently by scholars of risk. “[C]ertain knowledge and rational control over nature have given way to a permanent sense of anxiety” (S. Hamilton 267), which is tested in the fictional worlds created by Hawthorne and Shteyngart. In a way, both stories represent expressions of emergent risk produced by the (unexpected) side effects of technological and scientific progress, though in both cases the ensuing risk is rather direct and not affecting third parties or places.

Hawthorne devises a clear warning against tinkering with human nature (regardless if understood as nature or as God-given). Shteyngart rather indicates that the pursuit of eternal life – through biotechnological enhancement – is but one more practice, one

more consumable good that promises security. Rather than leading to security, however, both practices move the protagonists further away from the “good life” they had hoped for. Georgiana and Joshie die and Lenny is not going to become immortal. The promised security remains out of reach for the protagonists and is as such absent from the narrative. It is represented by the security practices and their promise of security. The practices as stand-ins for security, however, never represent security as such, as Joshie’s and Georgiana’s fates make clear. Rather, their meaning is fixed by the affective attachments invested in them.

I began this chapter with the question of how the security practices – despite their uncertainty – are made desirable and how they are produced as legitimate and convincing ideas. The literary examples of biosecurity narratives emphasize the centrality of affective attachments that lead to the “solidification” of the understanding of security and its desirability. The position of hope and fear is thus where “the object hovers in its potentialities” (Berlant, “Cruel” 93). In both stories fear of being disgusting and unworthy – because of the mark of the hand or the mark of the body and the data stream – drive the urge and desire for the security practices. The hope attached to eradicating those marks determines the legitimacy and unquestionability of the security practices. Security never just is, but is represented by hope and fear that define the felt proximity, the potentiality, but not the “thing” itself. In both stories affective attachments determine the meaning of the security practice, which turns them into objects of “cruel optimism:” “the condition of maintaining an attachment to a problematic object *in advance* of its loss” (Berlant 94). The practices themselves come to stand in for the promise they reference turning into place holders of the promise of “good life” itself. Berlant describes this “mode” of hovering in a potential with Barbara Johnson’s concept of the apostrophe, in which the object/subject is created as a present reality in its absence. Johnson is referring to the representation of an absent lover in a poem, or the representation of a fetus through an ultrasound scan. In the stories the “apostrophe” are the affects attached to the practice of security, which represent security as a present reality.

The focus on threat and hope helps to “track the affective attachments” (Berlant, “Cruel” 97) that define what “good life” is. The fear of not achieving security in purity or eternal life is not really the fear of not being pure or not living eternally but of being barred from the promise of happiness. In both cases the affective attachments reveal a rather normative understanding of security and happiness. For Georgiana it is domestic happiness within the limits of her assigned gender role and division of labor as adored and desired wife. And also Lenny mainly longs for the normative happiness, which is however primarily motivated by fear and meaninglessness.

Security is therefore rather a belief than an actual reality or fixed state. Both stories “dramatize its [the biosecurity practice’s] persuasive faith” (41) to borrow Heilman’s words one more time. By likening the security practices to religious belief and practice Hawthorne and Shteyngart relate it to a form of dogma that does not allow for an alternative understanding. Taking over the place of religious doctrine both authors underline the nearly blind following of the security individuals. The security practices’ basis is faith which hide their risk – the impossibility of achieving security – behind belief and hope. This belief also hides security’s complicity in the structures that form what “is for so many a bad life that wears out the subjects who nonetheless, and at the same time, find their

conditions of possibility within it" (Berlant, "Cruel" 97). In both cases the security practices promise the protagonist the opportunity to escape their "bad situation" but in both texts the practices and fictions of security hide the real cause of the "bad life:" in Georgiana's case an abusive heterosexual relationship and in Lenny's case, a superficial hyper capitalist society.

Furthermore, both stories emphasize the narrative construction that the security practices are based on. This means that the practices are as much scientific as they are cultural practices of storytelling. They are understood and framed within a cultural narrative that renders their meaning and are embedded in the cultural narrative of their worlds. Georgiana is the meek and mum loyal wife in a misogynist oppressive world in which she can represent the object of experiments dressed up and understood by herself as "pure love." And the constant anxiety of Lenny about being able to receive dechronification treatment only makes sense in the highly stratified world of financial and biological security where youth and health are capital – biological capital. This narrative constructedness is further emphasized by both authors with their explicit references to the role of storytelling and fiction. In Hawthorne's story, Aylmer's narrative power establishes the mark as threat and the scientific promise of providing security is continuously likened to fictional storytelling. Similarly, Lenny as the main narrator constructs the narrative of security which represents immortality as security. The promised security of purity and eternal life are both narratively constructed within the story. They represent fictions of the production of the fiction of security.

What distinctively separates these fictions is their temporality. Hawthorne's story is set in the past, it is a warning of a past failure to affect thoughts and understanding in the present. Shteyngart, however, makes, as Frederic Jameson puts it, the present a determined past. Following Georg Lukács, Jameson proposes in "Progress and Utopia" to understand "genre as a symptom and reflection of historical change" (149). "[T]he emergence of the new genre of SF as a form which now registers some nascent sense of the future, and does so in the space on which a sense of the past had once been inscribed" (150). In both stories the critique of the texts is directed at the present. However, the temporal relation indicates a different understanding of the present that is comparable to the logic of pre-emptive security. The protagonists in *Super Sad True Love Story* are not so much understood as products of their past but are defined by their potential future. This kind of speculative fiction therefore not only circulates fear of science and skepticism toward their messianic biosecurity promise, as I set out in the introduction, but normalizes an understanding of present and future that is fundamental in the understanding of the contemporary biosecurity self. This is an identity that is continuously becoming, continuously under threat like Lenny's, rather than the fixed characterization of Georgiana's identity.

The different structures that the two texts describe also formulate different versions of power and control and different technologies of security. Georgiana represents a "controlled" subject created by the authoritative voice of Aylmer the scientist. He defines her and locks her in her position, quite literally within the space of the boudoir. It represents a power structure where the source of power, those intangible entities floating in most theoretical texts, is fixed and identified. It is the individual scientist and his megalomania that oppresses, transgresses, and exerts his power. In contrast, Shteyngart describes

a broader collective structure. The premises and practices pervade the entire society of the novel. However, collectivization takes a particular form that transcends the imagination of top-down control. The security practices are not imposed by a defined power controlled and surveilled as in Foucault's panopticon. Rather, as Willmetts points out, it is individuated. Aylmer and the oppressive state of dystopian novels such as *1984* are replaced here by the seemingly democratic use of data analysis and ranking. This "democratized" or fragmented form of power equally determines, inscribes, and ultimately oppresses. However, its source remains intangible and invisible. As a commodified good, the practices contain the promise of transcending one's "assigned" category. This false sense of possibility that self-quantification simulates represent the same top-down power-relation and fixes individuals in a determined group of belonging. Aylmer's disgust caused by Georgiana's mark is replaced by algorithms, which are based on knowledge produced by science. Though the hope of transcending one's group is built into the narrative of biosecurity in Shteyngart's near future, this hope is a device for fixing identities rather than a real possibility of change.

Furthermore, in Shteyngart's vision the biosecurity practices have moved from the margin to the center symbolized by the space of the security practices. Dystopian biofiction often represents the threat, the beginning of dystopia as a transgression of the boundary due to the scientist's inexhaustible thirst of knowledge. Aylmer's research practice is confined to secrecy and isolation set apart from society. It forms a space of transgression that is mirrored within his laboratory. In contrast to this, Post-Human Services are a public company that is situated prominently and powerfully in the middle of society. While the spatial division of laboratory and boudoir allowed for a transgression of the boundary, Shteyngart does not allow for such a shift. Science is reduced to "the occasional glass cage with mice or some kind of spinning thingamabob" (Shteyngart 124–25) and Lenny's fantastic explanations. The revelation of the "true" working of science is unnecessary as Shteyngart does not formulate a generalized fear of scientific developments. The fear of science has become a fear of commercialized science and corporate interests.⁴⁰ This fear of commodified biosecurity, which exacerbates health risks for low-paid individuals, indicates that money and markets instead of higher ideals and ethics create the security narratives represented in the novel. Read together with the temporal logic of Science Fiction that Jameson offers, this constellation describes the biosecurity logic as a logic of the market. The present worth of the individual is based on his or her future potential worth which is predicted by data algorithms. The biosecurity individual of the future can only overcome the biotechnological determination of his identity by accepting death, as Lenny decides that he wants to die after all, abandoning his quest for immortality.

40 A historical observation of the narrative construction of science, scientists, and scientific advances is tale-telling in that regard. Frankenstein was created in a secret dungeon, apart from society and literally under ground, and Dr. Moreau is hidden on a pacific island (a place probably as far removed from society as Wells could imagine in the late 19th century). In contrast, contemporary scientists and scientific experiments are "whitewashed" clean laboratories if narrated in James D. Watson's life writing text *The Double Helix* on the discovery of the structure of the DNA to dystopian narratives of *Jurassic Park*, *Terminator*, the *Island*, etc. (van Dijck, *Imagination* 18).