

Part II: Fictions of Biosecurity

The time, has come, it may be said,
To dream of many things;
Of genes – and life – and human cells –
Of Medicine – and Kings.
Edward Tatum

These lines, which Edward Tatum offered at the inauguration of the Merck Sharp and Dohme laboratories in 1966 represent genetic research as the harbinger of future security. His poem celebrates the coming of genetics and its push for research in genetic engineering. It reiterates the messianic narrative of scientific salvation that was established by the biological revolution of the early to mid 20th century and stands paradigmatically for the hopes invested in genetic research. The age of the gene heralded in these lines has appeared graspable, an imminent coming of genetic science, fulfilling the messianic promise of science. Over half a decade later, the poem has become an almost staple reference and citation for scientific projects promoting their relevance and promises to this day.¹ But these lines do not just represent the fervent belief in science as the arbiter of security and herald of the messianic hope for humanity. They also indicate how much biosecurity relies on cultural forms of narrativizing, and on cultural imageries that are part of a cultural archive. Tatum articulates his vision for genetic engineering not in scientific explanations but in the traditional stanza form of the ballad with an alternating iambic tetrameter and iambic trimeter. He uses this familiar poetic and artistic form to convey and enforce the message this verse is meant to express: a promise of future security.² In doing so he formulates a fictive narrative of a future (security), a “necessary fiction” (Butler, *Gender Troubles* 98) to construct and make pervasive the promise of security, which science is to represent. As argued before, security only becomes present and

1 Such as NIH review on CRISPR-Cas technology and Stem Cells (Waddington et al. 9).

2 Tatum uses the poem to “paraphrase” (“Molecular Biology” 31) the tenor of his opening speech. He further cites and adapts Lewis Carroll’s 1871 poem “The Walrus and the Carpenter” from *Through the Looking Glass*.

pervasive in the stories we tell ourselves and others about it. In part II I will therefore turn to these necessary fictions by reading cultural representations of individual(ized) biosecurity.

In part I have shown that biosecurity narratives formulate projections of a future, and represent therefore a narrative act of making a future present. The security narratives and the promises established by biomedicine and biotechnology thereby create a close relation to the narrative form of fiction.³ This association is often used to dismiss either utopian or dystopian visions of a promised biological future. Both critics and supporters of biomedical progress use this label “as a way of trivializing the position of the other, while proclaiming that the research they cite is on the verge of transforming human nature and that the future scenarios they describe are plausible and impending” (Clayton, “Ridicule” 318). But the relation of biosecurity narratives and fiction is closer than such an accusatory rhetoric would like to admit. Not only are narratives necessary to justify security practices, such as costly research, medical interventions, or medical surveillance, but the rhetoric and articulations of research goals or new discoveries bear close resemblance to fictional narratives.⁴

The claim of the “fiction of biosecurity” has two lines of argument. On the one hand, it implies the performative understanding as something non-referential that is “made up,” less in a purely imaginative way but in a productive sense of “creating,” which I have discussed in the first part of this book. On the other hand, it gestures at the similarities between fiction (as a literary/artistic genre) and security narratives (be they fiction or not). The narrative construction is essential in “making present” the “cultural imaginary” (Iser, Fluck) of security. The claim of fictionality therefore serves to shed light on the production and reproduction of (bio)security narratives as well as the narrative construction used to establish the master-narrative of biosecurity.

These biosecurity fictions circulate in various different forms and pervade society and culture at every turn, shaping the material realities of a “biosecurity culture.” However, they not only describe a collective future security but suffuse the individual and intimate narratives of the self, becoming part of individual lives and life narratives. They heavily influence the understanding of the self, and identity formation on a collective as well as individual level. As cultural forms, these narratives represent not only fictions of biosecurity but represent necessary fictions as stories “we tell ourselves . . . in order to live” (Didion).⁵ I chose, therefore, to analyze different forms of life writing as expres-

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- 3 In fact, both fiction and science always had a very interdependent relationship. Clayton especially emphasizes how “discourses surrounding genetic enhancement is inflected with the ‘science-fictional habit of mind’” (“Ridicule” 320), and also other scholars such as Collin Milburn and Eugene Thacker have suggested similar interrelations. Similarly, Latour points out that outside of the laboratory science is almost always represented “as the mirror image of the world” (“The More Manipulation, the Better” 349).
 - 4 Jay Clayton even asserts that science statements of bioethics bear a striking similarity to the genre of Science Fiction (of the 1950s). He exemplifies this with an array of almost indistinguishable quotes from both fiction and science concerning the nearing (posthuman) future (“Ridicule”).
 - 5 In *Time and Narrative* Paul Ricoeur has suggested that narratives are necessary to make time and human existence meaningful (52). Similarly, cognitive studies have increasingly suggested that life is lived and made meaningful in narrative form, reiterating Ricoeur’s early concept of “narrative

sions of what I have called the biosecurity individual. These expressions of self, which I do not restrict to non-fiction nor to written texts, represent a promising vantage point on how security narrative are constructed and how they change our relation to the body and impact our understanding of individual life and self.

In the analysis of the biosecurity narratives I will attempt to avoid the pitfalls of both “security realism” (Völz, “Aestheticizing” 619) which reads texts for proof of political and sociological concepts, as well as overwriting the violence and oppressions of security practices by prioritizing aesthetic concepts as if they were apolitical (D. Watson, “Beautiful Walls”). Committed to a performative approach, the aesthetic and the political can hardly be seen as divisible entities, nor can they be fully understandable without one another. The narrative construction of security and its aesthetic qualities are thus important for a more thorough understanding of the material effects produced by these narrative practices. I will emphasize the narrative construction and aesthetics of the text to make clear how security becomes pervasive motivating individuals to act. Similar to Völz I wish to focus on how security narratives “appeal” to people (Foucault, *Security* 21). While Völz seeks to investigate the “appeal” of the concept of security by analyzing the narratives provided in literary fiction, my own approach focuses on diverse discursive forms emphasizing the antagonisms, commonalities, and reciprocities of the different forms of biosecurity narratives. I chose different discursive formations to argue that fictions of biosecurity and its intertextual dependence on a messianic narrative of scientific salvation are not restricted to fictional renderings. I will therefore turn to the genre of life writing and Huntington’s Disease; I will read diverse forms of testimony as activism and performance in the context of breast cancer; I will focus on documentary and testimony in the process of dying, and I will analyze fictional narratives. The discursive formations of the security narratives – all with their own specific claims to “truth” – are crucial for the understanding of security and identity represented by these narratives.

Understanding narratives as the most crucial way in which humans understand themselves and their surroundings logically implies that these narratives take on a variety of different forms and, thus, cannot be restricted to specific genres, nor to the traditional understanding of a text as a written document. Nonetheless, in the analysis of the cultural representation of biosecurity, narratives will be analyzed in Literary Studies terms. I will analyze the biosecurity narratives provided in these different discursive formations like fictional narratives, regarding them as constructed. They represent a constructed story through the “artistic construction of incidents” (Aristotle, 1450, 29–32), though not necessarily following the Aristotelian ideal model of beginning, middle and end established in the *Poetics*. Narratives are thus defined by temporally organized incidents which are instigated by a change or obstacle as the plot generator. In the selected narratives, “security” represents the organizing principle establishing the causal relation that gives meaning to the story, to paraphrase E.M. Forster’s famous definition of the plot. It is thus important to distinguish between story (*histoire*) and discourse as established by Gerard Genette’s narrative theory. The discursive formation chosen, as well as the way the “text” is assembled are crucial for understanding security

identity” (“Narrative”), while scholars such as Jerome Bruner suggest that life is constructed in the act of writing (and reading) an autobiographical text.

as something decisively influenced by voice, perspective, choice of protagonists, and narrative frame, as also Annick T.R. Wibben stresses in her analysis of security narratives regarding 9/11. The narrative construction of expressing the story (*histoire*) in discourse thus also defines the meaning of security.

In all four examples, security, its maintenance or recovery, represents the motor of those stories and their overt teleology. The security narratives are therefore often end-directed narratives. The closure that many security narratives provide are based, however, on promises of (a) future, which stands in contrast to and in constant struggle with threats. “An ideal typical security narrative,” Völz asserts, “opposes the present with two different futures” (“A Nation” n.p.). He defines this tension between security and insecurity competing for the future as a conjunction or interplay of utopian and dystopian narrative. He asserts that the mutual dependence between dystopian and utopian narrative elements “prevents” either from “becoming proper dystopias or utopias” (Völz, “A Nation” n.p.). Especially in the context of biosecurity this competition between hope and fear is crucial to give shape to a pervasive and convincing security narrative.

Utopian and dystopian narratives in the context of scientific progress and medicine as gatekeeper of security have a long tradition, and have pervaded cultures in diverse ways. Literary history is filled with representations, negotiations, and aestheticizations of the messianic narrative of scientific salvation and its all-encompassing security promise, as well as with its downsides and potential dangers. These fictional renderings range from classics such as Mary Shelley’s *Frankenstein; or, The Modern Prometheus* (1818), and H.G. Wells’ *The Island of Doctor Moreau* (1898), to Theodor Sturgeon’s *More than Human* (1953), and Kazuo Ishiguro’s *Never Let Me Go* (2005). But also less overtly fictional discourses in the context of biomedical and biotechnological advances have a long tradition of either “utopian” visions of scientific developments such as Donna J. Haraway’s “Cyborg Manifesto” or warnings about possible biotechnologically facilitated dystopias, such as the warnings of an engineered and “purified” society in Francis Fukuyama’s *Our Posthuman Future*. Similarly, science journalism has followed these two narrative frames in an at times precarious way.⁶ In fact, the fields of utopian and dystopian writing could be understood as a form of what Hayden White calls “emplotment” (*Metahistory* 12).

Biosecurity narratives, however, do not provide a narrative frame for historical events only, but rather for a future. While the narratives of medical and scientific progress could probably be categorized in what White defines as “Romance” (*Metahistory* 135–162), more importantly biosecurity narratives shift to a different temporal frame.⁷ In “Progress Ver-

6 The relation of science journalism and the public has been studied (and criticized) widely (Nelkin, *Selling Science*; Conrad, “Use of Expertise”) pointing toward the simplified and sensationalized representation of scientific studies. And since “science journalists become gatekeepers for the infusion of scientific information into the public sphere” (Conrad, “Use of Expertise” 285) these utopian promises of cures and new knowledges or dystopian headlines on newly discovered threats play a crucial role in how science is understood in public discourse.

7 History as romance expresses, according to White, the continual progress toward improvement, very much expressing a teleological idea of history. Romance was “the narrative form to be used to make sense out of the historical process conceived as a struggle of essential virtue against a virulent, but ultimately transitory, vice” (*Metahistory* 150). The other forms are comedy, tragedy, and satire.

sus Utopia” Frederic Jameson asserts that the birth of science fiction represented a new understanding of reality. In accordance to Lukacs’s theory of the historical novel Jameson asserts that the shift to utopian narratives expresses a different consciousness to that of the historical novel. “Capitalism demands in this sense a different experience of temporality” (149), one that he recognizes in Science Fiction. Though not focusing on Science Fiction texts, the future represented in biosecurity narratives similarly reflects the present rather than the particular vision of a represented future only, as Jameson asserts. Especially in *Seeds of Time* he makes clear that utopia is always ideology expressing and reflecting the present rather than the future. In the same manner the biosecurity narratives I will analyze represent a present ideology, and are at the same time intervening in this present.

Biosecurity narratives and their “ideal typical” (Völz, “A Nation” n.p.) form of utopian and dystopian narrative elements take on a particular American narrative turn, which further emphasizes this temporal relationality of present and future. The drama of biological security is frequently rendered in apocalyptic narratives lamenting the status quo that would lead to doom and destruction, as in the discussions of the grey doom, or the obesity crisis among many others.⁸ Jay Clayton even recognizes a specific form of “scientific jeremiads” (“Ridicule” 334), which functions as a “spiritual renewal” by creating a threatening scenario to “motivate people to act in history – to resist a feared future” (Clayton, “Ridicule” 335), similar to the Puritan predecessor.

Jeremiads are often read and understood as lamentations about the status quo in the contemporary time they were written in, representing doomsday visions of the nearing end. Sacvan Bercovitch asserts in his seminal study on the American Jeremiad that

its distinctiveness, however, lies not in the vehemence of its complaint but in precisely the reverse. The essence of the sermon form that the first native-born American Puritans inherited from their fathers, and then “developed, amplified, and standardized,” is its unshakable optimism. In explicit opposition to the traditional mode, it inverts the doctrine of vengeance into a promise of ultimate success, affirming to the world, and despite the world, the inviolability of the colonial cause. (6–7)

Though the threat and the apocalyptic visions are crucial constituents of Jeremiads, the most important observation that Bercovitch formulates in this quote is the transformation of the threat into a promise. The threat and danger of an impending apocalypse form the horizon for the image of the future that is marked by “unshakable optimism.” In that sense the warnings expressed in Jeremiads are rather a narrative element of the optimist’s tale that forms the center of the Puritan sermons as much as of today’s (bio)security narratives. Examples such as Haldane’s or Tatum’s speeches, which I have discussed previously, represent precisely this structure of utopian promise struggling against the otherwise inescapable future doom of society. Though biosecurity narratives are neither

8 The elderly and the expansion of longevity has been conceptualized as a risk for the nation within decisively apocalyptic tones (Kunow, *Material* 250–252). Similarly, the problem of obesity is framed in an apocalyptic rhetoric forming an “obesity panic” (Campos et al. 58).

purely dystopian nor purely utopian but a confluence of both, they represent a “promising-machine” (Buchanan 22),⁹ as something that orients and motivates individuals, providing a form of a “secular providentialism.” With the analysis of the individual(ized) biosecurity narratives I will show how this collective narrative is applied to individual life.

Biosecurity narratives pervade the more intimate spaces of individual experience and individual expressions. They structure the individual and individualizing biosecurity narratives. I will show that the confluence of utopian and dystopian narrative elements expresses more than just the imminent threat and ever encroaching ways in which humans are controlled and overdetermined by the master-narrative of biosecurity. I will therefore focus on the way the security narratives are constructed to represent, challenge and change the understanding of security produced by a given material as well as discursive “injury” to the body. I will explore the role of narrative in the context of the biosecurity.

With my reading of Alice Wexler’s Huntington’s memoir in chapter 5 I will explore how the scientific security narratives influenced the understanding of the self, at a time when the security practice of genetic testing was just emerging. In chapter 6 I will turn to the contemporary moment, when genetic testing is not only possible but an ethical imperative for a responsible biosecurity individual. I will analyze the creation of the previsor who stands paradigmatically for the contemporary biosecurity individual and the messianic promise of scientific salvation. From the epitome of the biosecurity individual I will turn to the possibility of escaping biosecurity in chapter 7. I will read the documentary “How to Die in Oregon,” which advocates physician assisted dying and the possibility of resistance to the normative biosecurity narratives. In chapter 8 I will then turn the end of the biomedical utopia represented by Nathaniel Hawthorne and Gary Shteyngart.

9 Ian Buchanan develops this term of a “promising machine” in reference to Jameson’s text on utopia and his dialectic of hope.