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## *Homo Crispr* and the Uncanny Art of Self-Reproduction

Dunja M. Mohr<sup>1</sup>

### **Abstract**

*Selected classic 19th- and 20th-century fictional texts, I argue, function as imaginative precursors of material fusions, either by prosthetic integration in the sense of repurposed imperfection or by internalizing genetic perfection, creating homo crispr. E.T.A. HOFFMANN's dark literary tale *The Sandman* (1816), MARY SHELLEY's gothic proto-science fiction *Frankenstein* (1818), VILLIER DE L'ISLE-ADAM's fin de siècle *Tomorrow's Eve* (1886), and ANGELA CARTER's carnivalesque *The Passion of New Eve* (1977) position the artificial other as both an externalization of the human desire for perfection in an uncanny act of autoerotic, poetic-scientific self-fertilization and as a reverse image of the composite self. They not only disrupt the perception of the other as external, but the subtexts, I contend, pre-empt this fusion of self and other that, in the logic of 21st-century discourse's reevaluation of imperfection, diversity, and dis/abilities, life sciences seek to realize with the imminent spectre of homo crispr's dissolved material self/other boundaries.*

**Keywords:** *The Sandman; Frankenstein; Tomorrow's Eve; The Passion of New Eve; Othering; Crispr-CAS*

I bring you my story, which is ours.  
—Shelley Jackson

The universe is made of stories, not of atoms.  
—Muriel Rukeyser

The future, once so monstrous, has already collapsed on an indifferent present.  
—Fred Botting

### **Introduction**

Both science and art tell stories about creating perfected humans. Art's motifs range all the way from Pygmalion's animated ivory statue, Faust's homunculus, the Kabbalah's Golem, dolls and automata, Frankenstein's creature, androids, replicants, cyborgs, robots, to clones. Real-life incarnations and manifestations range from 18<sup>th</sup>-century automata and dolls to the first walking 'bionic man' in 2013, roboticists Rich Walker's and Matthew Godden's amalgamation of artificial human organs, robotic limbs, to an exoskeleton, to the silicon Real Dolls eerily staged in Craig Gillespie's romcom film *Lars and the Real Girl* (2007) and exhibited in the Danish photographer

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<sup>1</sup> Dunja M. Mohr, Universität Erfurt, Deutschland. E-mail: [dunja.mohr@uni-erfurt.de](mailto:dunja.mohr@uni-erfurt.de)



Benita Marcussen's Men and Dolls series<sup>2</sup> and to the prospect of creating biogenetically modified humans with the genome-editing technique Crispr-CAS.

However, while we tend to believe science, we doubt literature. Plato categorically dismissed fiction as a source of truth, while Aristotle saw literature as “an alternative form of generative, anticipatory knowledge extrapolated from the individual particularity of historical fact” (Zapf, 2015, 1). Matthew Arnold defended a humanist education in light of technological progress in his famous Rede Lecture “Literature and Science” (1882) while C. P. Snow castigated the humanities for their alleged ignorance of scientific knowledge in his famous and helplessly conservative *The Two Cultures* (1961).<sup>3</sup> Yet up to the establishment of science proper in the early 19<sup>th</sup> century and the growing divide between science and literature from then on, both fields shared metaphors, narrative structures, rhetorics, concepts, and themes, engaging in an inspiring dialogue.

Contemporary views have come back to recognizing these reciprocally shared links and complementary continuities. The narrative turn in bioethics and the growing interdisciplinary fields of literature and science and science technology studies, encompassed by the “science studies umbrella” (Meyer, 2018, 2), exemplify how literature translates science into the cultural realm loading it with a “*surplus* of meaning” (Battestini, 2011, 62), while science uses literary tropes to “make its...reasonings more captivating” (Battestini, 2011, 67).<sup>4</sup> The “imaginative freedom of science fiction” (Stenger, 2018, 26) in particular activates and cross-fertilizes the scientific imagination,<sup>5</sup> both sharing a fascination with recombination, modification, amputation, transplantation, copying and hybridization, and they both explore the implementation of prosthetics, machine and body parts. Indeed, the 21<sup>st</sup> century's scientific advances materialize what literature and the arts have imagined in the past: the fusion of self and other. Bio-mimetic design, for instance, fuses non-natural machines with bio-imagery and breaks down established material boundaries, such as the soft-bodied bio-bots, the “slim-slime robot” (1999, Shigeo Horois and Takeshi Aoki, Japan) or Harvard's “GoQBot” (2011), inspired by caterpillars and snakes. Artificial intelligence's copying, simulating, and reproducing of human intelligence tend toward obliterating the human-machine divide.

Chatbots (e.g. ChatGPT, BardAI), AI systems with a human-competitive intelligence, that make AI and human conversations indistinguishable approximate the self-optimizing intelligent machines superior of human intelligence Nick Bostrom warns against in *Superintelligence* (2014). Combined with robots' evolving simulations of emotional features, superintelligent machines capable of outsmarting, replacing, and killing humans similar to Ava in Alex Garland's *Ex Machina* (2015) may become our future reality.

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<sup>2</sup> Marcussen's series respectfully portrays men—some socially isolated, others with family and children—in close every-day contact with their dolls, treating them like humans rather than objects. Marcussen's photographs capture loving relationships where relations are a matter of fantasy and imagination overrules reality.

<sup>3</sup> For a thorough analysis of the ensuing ‘two culture's controversy’ fuelled by F. R. Leavis's famous vitriolic response with regard to literature's critical and moral function, see Guy Ortolano (2005, 2011). See also F. R. Leavis, “The Significance of C. P. Snow. Two Cultures?” (1962).

<sup>4</sup> Led by the biochemist Leon Kass, the President's Council on Bioethics extensively discussed Nathaniel Hawthorne's “The Birth-Mark” (1846) for “a richer understanding and deeper appreciation of our humanity, necessary for facing the challenges confronting us in a biotechnical age” (Kass xvii). See also Jay Clayton (2007, 569-592), Gary Westfahl and George Slusser, *Science Fiction and the Two Cultures* (2009), Bruce Clarke and Manuela Rossini, *The Routledge Companion to Literature and Science* (2011), Martin Willis, *Literature and Science* (2015). In his introduction to *The Cambridge Companion to Literature and Science* (2018), Steven Meyer cautions, however, that the two “distinct fields” of literature and science cannot “quite so readily [be] folded into science studies” (2).

<sup>5</sup> Stenger fervently demands “a world free from the stifling opposition between so-called sound science and mere fiction or speculation, a world that cannot be reduced to issues dealing with its capacity to validate the knowledge that sciences...claim to be able, to extract from it” (2018, 29).



Correspondingly, the visual and cultural turn towards a valorization of technological enhancements combined with the human body reflects these changed perspectives on the human body, diversity, and disabilities that no longer abolish but integrate and celebrate imperfection and the material other. Two glamorous examples of this are the below-knee-amputee, fashion star, and performance artist Victoria Modesta's act—flashing her artificial designer leg decorated with mirror glass fragments, and glass crystals—as Snow Queen at the 2012 Paralympics closing ceremony in London and the American athlete and fashion model Aimee Mullins's regular appearances—prominently posing with prosthetic legs made from solid ash—on fashion magazine covers.<sup>6</sup>

### The future of *homo crispr* and the literary past

The spectre of *homo crispr*, however, suggests a deeper bodily human alteration of *inheritable* molecular changes, i.e. the hereditary customization of the human germline, that will make *homo crispr* indistinguishable from *homo sapiens*.<sup>7</sup> The Crispr/Cas9 gene-editing method, co-invented by Jennifer Doudna and Emmanuelle Charpentier in 2012, for which they won the Nobel prize in 2020, is a fast, relatively simple, precise, and cost-effective DNA-editing tool that leaves no traces of the initial manipulation. It has turned human genetic engineering into reality.<sup>8</sup> Originally a precise cutting tool of bacterial origin with a quasi-immunologic function, Crispr/Cas9 has been effectively used in human and other cells since 2013.<sup>9</sup> In 2017 scientists successfully created Crispr-edited viable embryos, yet refrained from implanting these in surrogate mothers (cf. Ledford, 2017)—for the time being. In 2018, the Chinese scientist He Jiankui, however, presented the first genetically edited babies, Lulu and Nana. And in 2019, the Russian molecular biologist Denis Rebrikov announced two Crispr germline experiments, targeting an HIV related gene and a recessive deafness gene in IVF embryos. Ever since then, scientists have called for a general ban on modifying human germline cells or have postulated a worldwide moratorium on human genome editing for clinical use.<sup>10</sup> Crucially, the genome-editing technique Crispr/Cas9 not only collapses the material boundary between self and other on a cellular basis, but *homo crispr*'s genetic change would be *inheritable* and *indistinguishable* from 'natural' *homo sapiens*,<sup>11</sup> thus levelling ingrained notions of identity and difference. On what grounds would and should we differentiate between *homo crispr* as the artificial human other and evolutionary, but (tech-modified, prosthetic-enhanced) *homo sapiens*, an allegedly 'natural' human self?

<sup>6</sup> Similarly, in 2014, the neuroprosthetic fusion of mind and body even enabled a young paraplegic with a mind-controlled exoskeleton to kick off the opening ceremony of the Brazilian World Soccer Cup.

<sup>7</sup> In Kyoto, Nobel prize winner Shinya Yamanaka and team froze pluripotent cells; in Kobe where Yoshiki Sasai's team lay the stem cell groundwork for organoids; ophthalmologist Masayo Takahashi successfully transplanted iPS-cell pigment tissue.

<sup>8</sup> In contrast, the previous rival molecular scissors, the zinc finger nuclease technology (1990s) or the TALEN gene scissors (2000), are more expensive, slower, and do leave traces of the gene editing.

<sup>9</sup> In 2015, Junju Huang's Chinese research group at Sun Yat-sen University in Guangzhou successfully edited genes in zygotes, fertilized human eggs. Peer reactions were ambivalent, "the study is a landmark, as well as a *cautionary tale*?" Harvard stem-cell biologist George Daley commented (qtd. in David Cyranoski and Sara Reardon; my emphasis). Gene-editing cures, however, become reality. In Nov. 2023, the UK Medicines and Healthcare products Regulatory Agency approved the first Crispr-based therapy, called Casgevy, for inherited blood disorders (see <https://www.nature.com/articles/d41586-023-03590-6>). The Crispr technology is also increasingly used in crop improvement and resistance breeding (see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10671001/>). In July 2023, Japan's Ministry of Health, Labour and Welfare and Ministry of Agriculture, Forestry and Fisheries approved the first Crispr-edited nutrition richer tomatoes. Fusing generative A.I. with Crispr will allow synthetic gene editor tools such as OpenCRISPR to edit human DNA, taking the potential of Crispr to another level.

<sup>10</sup> At the 1975 Asilomar Conference in California, a similar moratorium was reached for the then new recombinant DNA method. The Asilomar guidelines are still in effect. At this highly symbolic location, physicist and AI scientist Max Tegmark (Future of Life Institute) initiated a similar ethics-oriented Asilomar Conference on Beneficial AI, resulting in the Asilomar AI Principles, in 2017 (see <https://futureoflife.org/open-letter/ai-principles/>).

<sup>11</sup> The US company Excision BioTherapeutics was assigned patents for a Crispr-based therapy targeting HIV-1 in 2022.

Indubitably, Crispr-induced genetic therapy could potentially cure hereditary diseases or repair defects in the future, germline-editing could perfect and customize humans for non-medical reasons, e.g. for the creation of a super race. Unsurprisingly, bioethical debates revolve around eugenics, equipping children with genetic variations that make them stronger, more beautiful, healthier, prolong the human life span, or herald a disease-free future, the curing or repairing of defects. The recent cultural archive seconds either scenario. The biopunk movie *Gattaca* (1997) for instance describes a bleak future of virtually mandatory genetic editing, where genetic discrimination splits society into affluent “valids”, genetically profiled and altered humans selected for top-notch jobs, and “invalids”, genetically inferior ‘natural’ humans resigned to menial or low-paid jobs. Bioengineering could move towards Kazuo Ishiguro’s ‘clone donors’ in *Never Let Me Go* (2005) or towards the replicants of Ridley Scott’s iconic *Blade Runner* (1982) and Denis Villeneuve’s sequel *Blade Runner 2049* (2017), based on Philip K. Dick’s *Do Androids Dream of Electric Sheep?* (1968). Bruno Latour’s argument (2010)—aimed at the ecological crisis—that modernity, despite desiring the future, is in fact haunted by a monstrous past rings terrifyingly true for the scientific infatuation with creating the perfect human. If we take the cross-fertilization of the literary and the scientific imagination seriously, we need to reread what the monstrous past has to tell us.

Building on the 18<sup>th</sup>-century discourse (Montaigne, LaMettrie) on imagination’s capacity to produce material reality, 19<sup>th</sup>-century gothic fiction in particular turns to the creative imaginative male gaze, or dream, that animates wooden and android creatures, or dead body parts. The question is why the male gaze so readily accepts these constructions as real, as (more) perfect? Perhaps because they are “phantoms of ourselves”, as Clara observes in *The Sandman* (Hoffmann, n.p.), and thus, inherently externalized parts of the self that seeks reintegration. Gothic fiction abounds with perfected humans that externalize such fears about the (often female or racial) other and ultimately confront the (male white) self with its narcissistic desire for a monstrous self-duplication. These artificial humans negotiate a rigid gender dichotomy and externalize an identity crisis triggered by radical sociocultural changes that the new sciences, mechanics, technology, and industrialization have instigated. It is a polarized cultural discourse that constructs nature as the wild, uncontrollable, dangerous, feminine or non-human other to be tamed by the white male scientist (and colonizer/explorer) at all costs, while, ironically, the very technology, science, and industrial machinery employed to control nature proves uncontrollable and dangerous. Destabilizing and undercutting these rigid dualisms and subtly confusing gender roles, the Gothic “monsters of the nineteenth century metaphorize...modern subjectivity as a balancing act between inside/outside, female/male, body/mind, native/foreign, proletarian/aristocrat” (Halberstam, 1995, 1).

### ***The Sandman***

In E.T.A. Hoffmann’s dark literary tale *The Sandman* (1816), the pathologically narcissistic student Nathanael turns schizophrenic when he falls in love with the mechanical Olympia, a wooden automaton, and condemns his rebellious fiancée Clara as a soulless, “lifeless, damn automaton”. Hoffmann’s arabesque “Night Piece” reverses the gender roles with Clara (representing the Enlightenment) rationalizing and analyzing Nathanael’s feverish frights (the Romantic viewpoint), his perception of life as a dream in which he is a puppet, incapable of reigning in his imagination. Criticizing the mechanistic worldview virulent in German Romanticism’s determinism and the dichotomous gender discourse, Hoffmann satirically inverts the puppet motif: The submissive mechanical other, created through the feverish male self’s imagination/gaze, perfectly fulfils male desires: Olympia *is* Nathanael’s female autoerotic reflection.



Nathanael's infatuated imagination moves the motionless Olympia into a feverish dance, and attributes an "inner world, full of love and deep knowledge" to her mechanical imitation of life. In turn, Nathanael progresses towards physical immobility—his "joints cracked" and, previously Coppelius "screwed off [his] hands and feet"; he dances stiffly and acts "mechanically" until he becomes unconscious, incapable of controlling his imagination. Symbolizing the confusion of the animate and inanimate, Olympia not only doubles Nathanael but becomes his self. Hectored by Clara's rationality and frankness, he flees into the silence of the perfect "admirable listener" Olympia, who never responds, contradicts, or criticizes him. As a caricature of female role expectations, Olympia's "noble mind"—silent and a mere vessel for Nathanael's narcissistic overflow—becomes the echo of his solipsistic creative output. As reflector image, Olympia intensifies Nathanael's monstrous imagination caught in an endless loop of solipsisms, "only in the love of Olympia do I find *myself* again", undercutting the stereotype that "[w]oman as a sign of difference is monstrous" (Braidotti, 1997, 65), for it is not the mechanical woman but Nathanael's logic of the hallucinatory *image* of an externalized self, projected onto the wooden automaton, that is monstrous.

### ***Frankenstein***

In Mary Shelley's gothic proto-science fiction *Frankenstein* (1818), hubristic Victor Frankenstein—equally fearful of femininity, female sexuality, and procreation—obsessively experiments with the duplication of female procreation, experimenting with charnel body parts and electricity to create a "new species" (F 39). Victor is neither a "human being in perfection" nor of a "calm and peaceful mind" (F 40), and his endeavours cannibalize his psyche. His autoerotic desire precludes any *real* attachment to his "celestial" (F 20) Elizabeth, sublimating his erotic desires with improper science, fervently longing "to penetrate the secrets of nature" (F 25).<sup>12</sup> Externalizing his monstrous inner self as the monstrous New Adam, his fear that monstrous New Eve "might turn with disgust from him [the New Adam] to the superior beauty of man [e.g. the 'old Adam' Victor]" (F 150) signals an autoerotic return of feminine aspects Victor cannot endure. Sexuality must be eliminated, and he therefore destroys the unfinished female monster, just as the creature—his monstrous self, the externalization of his alter ego in disguise—kills Elizabeth.

Here, in Shelley's gothic "birth myth" (Moers, 1996, 216), male science symbolically penetrates female nature. Imitating maternity, Victor substitutes the denied biological procreative act with the scientific appropriation of the (female) capacity to give life, figuratively and literally reproducing himself. The animation of the monster mimics the sexual act, when Victor labours to penetrate *and* give birth. Victor's famous post-coital dream, his "post-creation nightmare" (Gilbert, 1978, 58) where his deadly kiss turns Elizabeth into the "corpse of [his] mother" (F 43), reveals not only his oedipal erotic desires, but his subconscious wish to re-birth his dead mother and thus himself: the self (re-)turns to another version of the self in an endless loop of self-annihilation and rebirth.

As Susan Gilbert writes, like "figures in a dream, all the people in *Frankenstein* have different bodies and somehow, horribly, the same face, or worse—the same two faces" (1978, 56), and like reflections of a broken mirror, Victor, Captain Walton, Clerval, and the monster, they all represent versions of the same *male* self, caught in a homoerotic duplication loop. In their isolation and madness, Walton, Victor, and the monster echo one another, and each one represents an aspect of the self-divided, fallen man. Walton, however, also embodies the vision of a future salvation or of an alternative path (that Victor denies himself) exactly *because* Walton could answer the exhausted

<sup>12</sup> In fact, much like today's decoding of the genetic text, Victor wants to "unfold to the world the deepest mysteries of creation" (F 33).



Victor's frenzied questions ("Do you share my madness? Have you drunk also of the intoxicating draught?" (F 13)) in the affirmative yet Victor becomes his remedy. Where Clerval represents for Victor "the image of my former self" (F 143), the monster allegorically represents Victor's corrupted psyche, and hence both must exclaim, "I bore a hell within me" (F 72 and 121). Quite appropriately then, popular usage has transferred Frankenstein's name to the monster: Frankenstein is indeed the monster. Since Victor's self-reproduction results in self-imitation, the monster expresses Victor's most pressing questions underlying Victor's very experiments when it implores, "Who was I? What was I? Whence did I come?" (F 113). An answer to these questions might be—slightly rephrased—Donna Haraway's claim that the human-machine intersection, or in this case, the creation of the New Adam actually discusses the "reproduction of the [monstrous] self from the reflections of the other" (1991, 150). If we deny the other's existence, if we dissociate from it by externalizing and demonizing it as a disguised fe/male other, we literally self-destruct—just like Victor, Nathanael or Lord Ewald in *Tomorrow's Eve* do.

### *Tomorrow's Eve*

Villier d'Isle Adam's fin de siècle novel *Tomorrow's Eve* diversifies this duality of creator/creation. *Tomorrow's Eve* employs two creators, Isle-Adam's fictionalized Thomas Edison and Lord Ewald, and presents us with an amalgamation of several female characters into three artificial women. Exposed "like a corpse on the dissecting table in an amphitheatre" (TE 125) in his artificial inverse underground Garden Eden lab turned tech-hell at Menlo Park, Edison creates the female android Hadaly, a "scientific Eve" (TE 164) or the "new electro-human creature, TOMORROW'S EVE" (TE 98).<sup>13</sup> She is Athena, the "daughter of [Edison's] my mind" (TE 88), materializing Edison's genius, "Hadaly on the outside is nothing but a consequence of the inner Hadaly who took shape within my brain" (TE 98). Hadaly's creation also constitutes the textual body, as Edison's and Ewald's dialogues inscribe their masculine discourse on the female body/bodies, a practice in which the readers involuntarily participate.<sup>14</sup> Yet only when the female spirit Sowana leaves the medium Mrs Anderson to reside in Hadaly, when the *supernatural* (or the human spirit) and technology intersect, does the perfect mechanical puppet become truly alive.

Hadaly remains undecipherable and obscure, a foil for imaginations, a "humble unreality" (TE 124). She becomes literally a co-reproduction of Edison's mind and Lord Ewald's desires, a forerunner of the *RealDoll*, a material externalization of Ewald's self, "I will duplicate the living woman in a second copy, transfigured according to your deepest desires!" (TE 64), as Edison promises. Like the silicon dolls, the female characters operate visually as projection surfaces; their silences, muteness, or occasional echoes of male thought render them statuary, similar to Japanese robotics engineer Hiroshi Ishiguro's geminoids, identical duplications of humans that will be fully acceptable partners with

<sup>13</sup> The image recalls Frankenstein's creation and his necrophilia. Hadaly is not a *living* creature, but a repository for the translated Alicia. *Tomorrow's Eve*, however, also includes orientalist overtones that are openly racist. As the dark "sorcerer" (TE 93) from the East, Edison taints technology with magic; Eastern imagery darkly punctuates biblical imagery with the Arabic-Persian name Hadaly (meaning 'ideal') undercutting the Eve imagery. The lab doors open magically "as if some 'Open, Sesame!' had made it swing", the air is full of an "odour of roses and musk", and "the spacious underground chamber" resembles those "under the [caliphs'] palaces of Baghdad" (TE 91). Fritz Lang's iconic film *Metropolis* (1927)—based on his wife Thea von Harbou's eponymic novel (1925), clearly based on *Tomorrow's Eve*—visually retains these allusions with the scientist Rotwang wearing an Eastern dress (potentially indicating anti-Semitic undertones) and "red shoes" (*Metropolis* 43). Rotwang's malign house, built by "a magician, who came from the East (and in the track of whom the plague wandered)" (*Metropolis* 43), is marked with "the seal of Solomon, the pentagram" (*Metropolis* 43) and a lingering "odour of hyacinths" (*Metropolis* 45).

<sup>14</sup> Jean-Louis Schefer was the first to note this creative-textual parallel, see "Du Simulacre à la Parole" (1967). While *Metropolis* renders the imaginative body construction of the robot Maria visible, Shelley Jackson's hypertext fiction *Patchwork Girl* (1995) adapts the assemblage of story, textual body, and monstrous body to the digital age and adds a further twist in that the reader's choices construct the textual body.



duplicated emotions, indistinguishable from the humans they copy in a postbiological future. Ewald falls for the beautiful singer Alicia Clary because her human body incarnates the composite “Venus Victrix statue”, rendering her a living copy of a composite copy. As Edison flatly diagnoses, “it’s this objectified projection of your own soul that you call on...that you CREATE in your living woman, and *which is nothing but your own soul reduplicated in her*” (TE 68).<sup>15</sup> However, Alicia is an unsatisfactory love object as her ‘mediocre mind’ fails to comply with Ewald’s ideal of a woman’s personality: she fails to sufficiently reflect Ewald’s self. Edison thus models Hadaly, *his* ideal woman, after Alicia’s image and Hadaly becomes Lord Ewald’s autoerotic dream woman, a mechanical incarnation of the desired other that, in truth, is a fraction of his self.

As a modernist “‘crossover’ text” (Lathers 1996b, 24), *Tomorrow’s Eve* displays the intersections of machine, nature, and gender discourses. Illusion and simulation become the new reality while the living female is *dis*-covered as a fraud not meeting male expectations. In an endless textual, highly-image-driven *mise en abîme*, the simulacrum surpasses the real when Hadaly becomes the ‘real Alicia’ whom Ewald can love. At the same time, Alicia cannot fulfil Ewald’s projections. Her singing, for instance, allegedly lacks originality, because it doesn’t match the pre-imagined ideal. With Hadaly, Edison explains, “[t]he word that comes will always be the *expected* word, and its beauty will depend entirely on your own suggestive powers” (TE 133). To simulate (masculine) speech, Edison has recorded “the greatest poets, the most subtle metaphysicians, the most profound novelists of this country” (TE 131), in short what society has deemed male genius, on a gold phonograph, turning Hadaly effectively into the mouthpiece of masculine speech. In other words, all that Ewald ever re-hears is an autoerotic masculine discourse in an endless loop, what Friedrich Kittler calls a “technological eurythmy” (1990, 272).<sup>16</sup> With Hadaly, imitation becomes the original; the “false Alicia” becomes “far more *natural* than the true one” (TE 194).<sup>17</sup> *Tomorrow’s Eve*, “the future Alicia, the real one, the Alicia of your soul” (TE 133), is then the epitome of man’s erotic dreams.<sup>18</sup> In sum, the Venus Victrix, Alicia, Evelyn Habal, and Hadaly can all be read as living (and then dead) embodiments of fractions of the male self. The novel, then, comes to a logical conclusion when the inconsolable Ewald wires Edison a last farewell and presumably commits suicide after Hadaly, trapped in her coffin-like trunk, has died on board the sinking ship, finally conjoined with Alicia, who has also drowned. Like Victor and Nathanael, Ewald remains infatuated with death, regretting the loss of the simulacrum, but what he mourns most is the lost reflection of his narcissistic self.

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<sup>15</sup> Marie Lathers analyzes the Alicia/Venus relationality in terms of Western art’s historical images of femininity as “ideal and identical or artificial” (1996a, 48). Hadaly, “the perfect (postmodern) copy of the *Venus de Milo*...the perfect pastiche or simulacrum” (1996a, 65), epitomizes then the absurdity of originality, of essentialism, “femininity itself is the non-existent original, the copy that no woman can embody...a corporeal harmony that never existed” (1996a, 65).

<sup>16</sup> For Kittler, Hadaly epitomizes the transition from Romanticism to modernity, the demystification of the divine femininity, the poetic muse, distilled into a mechanical process, “Woman as simulacrum” (1990, 349).

<sup>17</sup> Blaming his friend Edward Anderson’s tragic suicide on the seductions of the dancer Evelyn Habal, another modern (human) Eve, Edison accuses women of artificiality, the “make-up”, the “falsies”, “polish”, and “lacquer” (TE 120), “the BASIS of the smile...the real machinery of those enchanting expressions” (TE 121), and declares woman “a sad phantom”, a “hybrid creature”, a seductive “female vampire” (TE 122) much easier to mechanize. In short, if “any woman...is more or less an Android, either morally or physically—in that case, one artifice for another, why not have the Android herself?” (TE 123). On the representation of the female body in *Tomorrow’s Eve*, see Jennifer Forrest, “The Lord of Hadaly’s Rings” (1996).

<sup>18</sup> Hadaly, a sublime creator herself, undercuts this narcissistic representation, “I called myself into existence in the thought of him who created me, so that *while he thought he was acting of his own accord, he was also deeply, darkly obedient to me*. Thus, making use of his craft to introduce myself into this world of sense, I made use of every last object that seemed to me capable in any way of drawing you out of it” (TE 198; my emphasis). Although a “creature of dream” (TE 198), Hadaly entices Ewald to will her into existence, “[r]einforce me with your self... I will come to life...to precisely the extent that your creative Good Will has penetrated me. Like a true woman, I will be for you only as you desire me” (TE 199).

### ***The Passion of New Eve***

*The Passion of New Eve*, Angela Carter’s incredibly rich and radical burlesque of gender normativity brimming with biblical, mythical, cultural, film, literary, and gender theory references and intertexts, differs from these 19<sup>th</sup>-century texts in that it rips apart rigid body perceptions, normative sexuality and gender attributions while “brazenly steal[ing] Villiers’ basic plot” (Tonkin, 2012, 182) and mining *Frankenstein* and *The Sandman* for good measure. Nothing is what it seems in *The Passion of New Eve*. Carter’s feminist grotesque fantasy novel attacks patriarchal images of femininity, reverses gender roles and archetypes, emphasizing the socio-cultural construction and performativity of gender in its transgressions of binarisms. Set in an alternate 1960s USA, the retrospective narration brims with indistinguishable voices as it follows white, promiscuous Evelyn’s travel to the USA for a teaching position and his enforced transfiguration into New Eve. It is New Eve/lyn’s crossgender story we read, the ‘abject object’ filtering the subject’s his/story, and we witness the narrative production of the gendered and sexualized body and its collusion with gender stereotypes. For Evelyn, all women are objects of (ab)use and replaceable except for the silent cinema star Tristessa, his idol of femininity: “Tristessa. Enigma. Illusion. Woman? Ah!” (PNE 6). She impersonates all feminine roles of suffering: the submissive, victimized, childlike, alluring woman on display. Evelyn’s disillusion begins with a photograph of Tristessa in male attire, a “long, lean, flat-chested woman” (PNE 7), puncturing the image of the “fleshy synthesis of...both dreamed and dreamer” (PNE 9). Evelyn’s own demise begins when he embarks on a trip to the West Coast where the plastic surgeon Mother and her militant feminists of the Amazonian underground city Beulah<sup>19</sup> capture him. Mother, a gigantic, many-breasted coloured goddess of her own making and ironic executer of Freudian psychology, castrates Evelyn as an act of peace, ridding him of his “weapon” (PNE 66). Inverting Gaia’s devouring of her children, Mother’s techno-womb first rebirths Evelyn as his/her “own diminutive, Eve” (PNE 71), who then undergoes “[p]sycho-surgery” (PNE 68). Mother’s ultimate plan—to inseminate New Eve with his/her own sperm—is a cruel parody of parthenogenesis, perfidiously commenting on the art of self-reproduction. Transfigured Eve/lyn becomes the perfect artificial woman, bionatural and techno-altered unnatural. Now “a tabula erasa”, Eve is “both more and less than a real woman” (PNE 83) with remnants of Evelyn’s mindset persisting. Tellingly, Eve does not recognize herself in the mirror, or rather, the mirror truthfully reflects his/her alluringly/monstrously split self:

But when I looked into the mirror, I saw Eve; I did not see myself. I saw a young woman who, though she was I, I could in no way acknowledge as myself...I was the object of all the unfocused desires that had ever existed in my own head. I had become my own masturbatory fantasy. (PNE 74-75)

The violent construction of Eve’s now grotesque material body divorces anatomy from (sexual) identity, turning him/her into a living paradox. Eve initially rejects her transgressive body in disgust, similar to Victor’s recoiling from his composite monster, comparing her new material self with Mother’s body, the abject female body. Subjected to female experiences in a male world, Eve approximates femininity and, eventually, becomes a cluster of feminine symbols immersed in and detached from all stories, human and beyond human, “at the beginning or end of the world and I,

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<sup>19</sup> While the biblical Beulah describes a future state of bliss that will join again what has been separated (Isaiah 62:4), the literary Beulah is a mystical restful place (John Bunyan’s *Pilgrim’s Progress* 1678) or a heaven-like land (William Blake’s *Vala, or The Four Zoas* 1797/1893), albeit with stereotypical gender roles. Carter’s novel recasts Beulah as a womb-like locus of separatism and gender-bending where phallocentrism is destroyed, located beyond the sterile desert, a labyrinthine twilight zone of disorder: “Beulah lies in the interior, in the inward part of the earth, its emblem is a broken column” (PNE 47).





in my sumptuous flesh, was in myself the fruit of the tree of knowledge; knowledge had made me. I was a man-made masterpiece of skin and bone, the technological Eve” (PNE 146). Gradually, Eve develops a new passion for herself, “I delighted me...in a sudden ecstasy of narcissistic gratification” (PNE 143), but only the return to her artificial origin at the end allows her self-acknowledgement.

When in another plot twist, the mad poet Zero captures, enslaves, and rapes New Eve, she experiences her/his ultimate epiphany as *selfother*: “I felt myself to be, not myself but he” and comes “to know myself as a former violator at the moment of my own violation” (PNE 101-102). Both Lord Ewald’s desire for artificial Alicia/Hadaly as a copy of the copy’s copy and Evelyn’s infatuation with Tristessa, the self-fashioned drag-queen, are essentially homoerotic. Tristessa is the “bound female man...the perfect man’s woman” (PNE 128), a perfect illusion of femininity that deconstructs the ‘ideal woman’ as a gender-bending *selfother* character. Where Mother violently shapes New Eve from Evelyn, Tristessa “had made himself the shrine of his own desires” (PNE 128-129).

In an enforced drag-wedding, the sexual communion of New Eve and Tristessa unites the compound identities and hybrid bodies, “a double wedding—both were the bride, both the groom” (PNE 135). Carter virtually strips all gender roles of their inscriptions and inverts and criss-cross-dresses characters into “anti-being[s]” or anti-bodies, demasking gender attributions as cultural projections, severed from corporeality, “idea[s]...[with] no ontological status, only an iconographic one” (PNE 129).<sup>20</sup> Subjected to another fantastic symbolical rebirthing journey, metamorphosed New Eve eventually emerges as the new-born pregnant Eve and takes a boat, “a coffin” (PNE 189), to return to England as a late reincarnation of Frankenstein, his creature, the terminated female monster, and dead Elizabeth, all combined into one, becoming both mother and father of a new race.

While the inanimate Olympia only ‘lives’ in Nathanael’s autoeroticist madness, Frankenstein’s monster has been denied a female companion, and Hadaly is constructed as an erotic desire machine, the New Eve represents the self-gratifying hermaphrodite fe/male. Eve, “the interrupted continuum I refer to as myself” (PNE 167), signifies the transcendence of the solipsistic self-reproduction immanent in (Western) culture. Carter’s hallucinatory and hyperbolic tour de force of contradictory meanings, semantic confusions, corporeal hybridity, and multifarious de/constructions thus opens up a subversive ‘fictional space’ that offers endless loops of self-inventions, metamorphosis, and recombinations, speculatively merging, in the mode of magic realism, the fantastic and the real into a web of possibilities.

## Conclusion

While the 19<sup>th</sup>-century texts externalize the other in different material embodiments—the wooden doll in *The Sandman*, the composite creature resurrected from human/animal dead body parts in *Frankenstein*, the metallic robot Hadaly in *Tomorrow’s Eve—The Passion of New Eve* reveals the other as a constant dormant im/material part of the self. Clearly, the 19<sup>th</sup>-century texts question the rationalization of a male imagination that in essence re-creates an external version of itself, a perfected, desirable or abhorrent reflector self that leads to madness, death, and destruction. Solely in Carter’s novel do the mutilated and refashioned character(s) of Eve/lyn survive. Ultimately, all

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<sup>20</sup> Zero re-transforms New Eve into a “double drag”, dressing her as a “Baudelairean dandy... I had become my old self again in the inverted world of the mirrors. But this masquerade was more than skin deep. Under the mask of maleness I wore another mask of femaleness but a mask that now I never would be able to remove...although I was a boy disguised as a girl and now disguised as a boy again, like Rosalind in *Elizabethan Arden*” (PNE 132).

four texts trouble the perception of the other as external and suggest that the other is a central part of the composite self, pre-empting the other's fusion with the self that 21<sup>st</sup>-century science seeks to realize. The spectre of *homo crispr*, looming between fiction and reality, dissolves the material boundary between self and other and the self re-emerges as an ambiguous 'selfother' with the formerly monstrous other incorporated, as creator and creation (materially) become one.

With Crispr/Cas-9's hereditary customization of the human germline, the material boundary between self and other collapses on a cellular basis in a biotechno-scientific (re-)birth. Having thus become invisible, the other becomes a naturalized integrative part of the bionic body, levelling identity and difference and puncturing definitional categories of what it means to be human. Where critical posthumanisms (Hayles, Haraway) celebrate the dilution of artificial boundaries between organisms and species, between culture and nature, and transhumanism (Kurzweil, Moravec) yearns for humanity's upload, the spectre of *homo crispr* promises a future culture of new human 'germlined' selves. *Homo crispr* represents, therefore, both a monstrous cautionary image—implying a new power asymmetry with biological humans as the new abnormal—and a bright incentive. As creator and creation, a future *homo crispr* could uncannily participate in the scientific and cultural discourse on what ways we pave: towards self-destruction, madness, and the arbitrary abnormal or towards a reality with multiple corporeal normalities. The art of self-reproduction might not seem uncanny to him or her or them at all, as *homo crispr* effortlessly blasts Masahiro Mori's uncanny valley altogether.

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