

Nasty Nazis and Extreme Americans: Cloning, Eugenics,
and the Exchange of National Signifiers in Contemporary Science Fiction

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As the possibility of human cloning, genetic engineering, and the potential for a resurgence of eugenics become less and less the stuff of science fiction, ethical debates rage about these practices in both popular and academic discourse.¹ In particular, fictional depictions that focus on these near-future genetic technologies have taken on a polemic character since the 1990s, often focusing on the subjectivity of the clone or genetically engineered human. Contemporary texts thematize ethical questions that surround these technologies vis à vis the experiences of protagonists. Indeed, they do so with an urgency not found in older works, likely fueled by dawning reality. Yet, the topic itself is not new. At least since Aldous Huxley's 1939 *Brave New World*, eugenics and cloning have cropped up often in utopian-dystopian science fiction as a vehicle for critiquing larger cultural developments (e.g., Fordism, the Industrial Revolution in general, women's reproductive rights).² However, texts from the past two decades handle these technologies directly: as a specific topic of focus, as a key feature of their protagonists' lives, and as an entry point into the biotechnology debate through such depictions of subjective human experience.

Although Huxley's novel and other dystopian sci-fi works, old and new, are often set in totalitarian regimes that refer to or extrapolate upon "real-world" examples, contemporary German and Anglo-American narratives do something more specific. Several notable works since the 1990s feature stories that engage in the biotech debate through the use and exchange of German and American national signifiers in both text and subtext. Thus, after briefly introducing some of the trajectories of the cloning debate, the following discussion will concern chiefly three German science fiction novels that address and depict current and near-future bioscience applications: Barbara Kirchner's *Die verbesserte Frau*, Birgit Rabisch's *Duplik Jonas 7*, and Charlotte Kerner's *Blueprint/Blaupause*, which was also released in 2003 as a film starring Franka Potente. Alongside this discussion, I will offer a brief comparative view of some American works featuring similar themes. In the pages to follow, it will become clear that in both German and Anglo-American popular representation, recent depictions of cloning and eugenics freely employ key national signifiers that cross-reference one another. In the German works, contemporary bioscience is in part depicted as an unregulated new "Wild West" for renegade scientists wishing to explore as yet uncharted and unethical frontiers of genetic experimentation. Meanwhile, in the American texts, signifiers of Nazi Germany appear, referencing the past and

Hitler's oppressive eugenic approach to population control. There are also a few points of overlap and historical self-reference in these national texts that deserve mention. This article will explore the meaning behind this exchange, and in a more general sense, shed light on the nature of popular texts that engage with this timely topic of debate. Finally, these instances of German-American cultural cross-referencing will show the degree to which such cultural responses to bioscience can be said to reflect a specifically German historical awareness of these new technologies.

Cloning (Human) Nature

A major underlying premise of the present article is that, although Hitler's assumption of dictatorial power in 1933 was not the founding moment of eugenic thought and practice by any means, many if not all responses to and depictions of cloning and other reproductive technologies today—at least those that view eugenics negatively—tend to feature Nazi Germany as a point of reference. In that sense, the issue of genetic technologies inherently touches on Germany's history. It is thus no wonder that the aforementioned instances of cultural cross-referencing are so common.

In order to get a grasp on contemporary debates on the issue of cloning, it is important to gain a sense of the argumentation used in presenting Nazi programs designed to influence human heredity on a large scale. Beyond the above historical considerations, it can be said more generally that a major indicator of the divide between proponents and opponents of genetic technologies is visible at one key point, namely the point at which “nature” is defined and deployed. As was the case with the “racial science” that formed the basis for such measures as the Nuremberg Laws, arguments for eugenics (and now genetic engineering) have often been advanced by tying the proposed program to existing processes in the natural world. In *The Nazi Conscience*, Claudia Koonz details the indoctrination deployed in an attempt to convince average Germans to adapt to the eugenics program that went hand in hand with events that led to the Holocaust (103-4). The linchpin of the Nazi system of racial logic required a redefinition of “nature” that conformed to the Reich's founding doctrine of racial hierarchy. Paraphrasing the contents of a 1933 radio address by Nazi interior minister Wilhelm Frick, Koonz states:

In earlier times, Nature had allowed the weakest to perish before reaching maturity. Modern medicine, by “artificially” enabling weaklings to survive, had damaged the long-term health of the *Volk*. Criticizing the “outmoded” command to “love thy neighbor,” Frick advocated state-

sponsored eugenic intervention that fulfilled “Nature’s wishes.” (Koonz 104)

As Koonz explains, Frick implies here that the extermination of the “weaklings” (also called “negative eugenics”) and the propagation of more “desirable” genetic characteristics (i.e., positive eugenics) is merely an extension of a process already taking place in nature.

Exploring Western conceptions of the “natural,” Donna Haraway elaborates in *Modest Witness@Second_Millennium* on what she calls the “nature of no nature,” or, how cultural values are incorporated into the definition of “nature” and are therefore subsumed into a purity of purpose that is apparently value-free, utterly objective and incontestable (102). Haraway points out that, at any given moment, the prevalent definition of nature is what provides many of the metanarratives informing a given culture’s morality, sociology, ethics, politics, and technology:

In the fabled country called the West, nature, no matter how protean and contradictory its manifestations, has been the key operator in foundational, grounding discourses for a long time. The foil for culture, nature is the zone of constraints, of the given, and of matter as resource... Nature has also served as the model for human action; nature has been a potent ground for moral discourse. (Haraway 102)

One point illustrating this view involves the current definition, first popularized in Richard Dawkins’s influential work *The Selfish Gene*, of genes as replicators and human or nonhuman bodies as mere vehicles for this technologically connoted process.³ Haraway relates this definition of the gene to the now well-trodden path of Darwinist justification for capitalism as “natural:”

In commodity fetishism, inside the mythic and fiercely material zones of market relations, things are mistakenly perceived as the generators of value, while people appear as and even become ungenerative things, mere appendages of machines, simply vehicles for replicators. Without question, contemporary genetic technology is imbricated with the classical commodity fetishism endemic to capitalist market relations. In proprietary guise, genes displace not only organisms, but people and nonhumans of many kinds as generators of liveliness. Ask any biodiversity lawyer whether genes are sources of “value” these days, and the structure of commodity fetishism will come clear. (Haraway 135)

Genes and the products of biotechnology are unquestionably products, the products of human ingenuity, but the sleight-of-hand in the process has always been to retrofit the notion of nature to accommodate such endeavors and historical developments in a basically unbroken line from the dawn of capitalism through Nazism to the current cutting edge of genetic engineering. It thus appears that any progress is a mere upgrade on what has already been occurring in nature all along. Borrowing from Paul Rainbow, Haraway calls this practice the “operationalization of nature” (102). The proliferation of Richard Dawkins’s “replicating machine” description of the gene falls directly in line with just this notion of operationalization, and Haraway describes the result of this retrofitting process as “the inverted foundational narrative of nature and culture” (106). Paradoxically, science uses nature as a precedent in the service of its very triumph over nature. Haraway describes a 1990s high school textbook called *Advances in Genetic Technology*, the first chapter of which is called “Natural Genetic Engineering,” as a brash example of the normalization of this process (106). She elaborates, “The point is excruciatingly simple: Nature is a genetic engineer” (106). This definition of nature closely resembles the one that lay at the basis of Hitler’s attempt at population control, which included not only eugenics, but also forced sterilization, euthanasia, and finally outright genocide.

The reliance on nature as the first example of eugenics and population control did not dissipate with the end of World War II. Today, mainstream European and American scientific discourses on advancing technology, including cloning and other reproductive technologies, can be understood similarly as a post-Enlightenment narrative of progress, survival, and paradoxical triumph over, yet simultaneous continuation of, the processes of nature. Taking this perspective to its extreme conclusion, the clone, like the human product of eugenics, can be viewed as an inevitable and indeed positive development, even a “natural” development, in much the same way as eugenics was viewed under National Socialism.

Critics of cloning and genetic engineering do not ignore this connection, as they see the current trajectory of increasingly complex forms of intervention at earlier and earlier stages of human development—e.g., current technologies like embryonic preimplantation diagnosis and sex selection, or near-future developments like human cloning and full-scale genetic manipulation—as a slippery slope towards the possibility for dangerous political and social misuses of these technologies. Indeed, while some elements of today’s mainstream science view cloning and genetic engineering as positive, opponents charge that this understanding hinges on the same logic deployed under National Socialism to justify a spectrum of practices that included both “positive” and “negative” eugenics. Thus, virtually any discussion of genetic manipulation eventually leads back to the Third Reich, regardless of where on the spectrum a particular practice

may fall. For instance, in a 2013 public debate sponsored by the U.S. organization Intelligence Squared, the moral argument for an outright ban on genetic engineering centered on references to Nazi eugenics by the moderator as well as by respondent Lord Robert Winston, a professor of Science and Society at London's Imperial College (Krimsky et al 12, 18).

Jürgen Habermas views cloning and genetic engineering as a part of the same spectrum in *The Future of Human Nature*, which continued his ongoing public argument against cloning and other prenatal genetic manipulations. He notes alarmingly that the “reification” of the human gene may result in the normalization of these practices, which will in turn open the floodgates on a gradual course of events leading to nothing less than a highly advanced form of eugenics comparable to that promoted by Hitler in the 1930s and 1940s. A notable response to Habermas came in an apparent endorsement of genetic intervention in July 1999 from Peter Sloterdijk. In “Regeln für den Menschenpark” ‘Rules for the Human Zoo,’ a speech that was published soon thereafter in *Die Zeit*, Sloterdijk attacked humanism for its failure to “tame” the human animal through reason and letters. Citing the rise in violence in the media and in society, he saw this increase as evidence of our inability to tame our baser animal instincts, but he also noted that western culture has nevertheless become domesticated (servile), which he saw as a deadly combination. His solution was a proposed truce between philosophy and science, media and medicine, in which we humans use the scientific means at our disposal to tame ourselves where the dissemination of the written word could not. This inflammatory declaration appeared to critics, Habermas among them, as an endorsement of eugenics. They suggested that this endorsement could open the way for misuses of reproductive science on the spectrum of those accompanying fascism in the previous century. The “floodgates” or “slippery slope” argument appears to be a routine feature of debates on genetic engineering, as evidenced in the 2013 public debate referenced above (Krimsky 9).

Although the controversy over these practices continues, now focusing chiefly on issues related to stem cell research and preimplantation diagnosis, the positions of Habermas and Sloterdijk still prominently represent the two poles in philosophical debates concerning the future of bioscience. Yet, regardless of their positions, both sides must contend with the historical specter of fascism, and both sides seem to concede that it is only a matter of time until the first instance of human cloning. The fear underlying this foreboding sense of inevitability—and ultimately underlying the arguments of all of those opposed to genetic engineering and/or cloning—is that the normalization of these practices would lead ultimately to a commonplace reacceptance of eugenic thought. And though perhaps the idea behind what Habermas calls “liberal eugenics” is not directly motivated by racial concerns today, we are right to consider the implications of

selecting individual human features. The conscious choosing of the “fittest” genes and/or embryos swings dangerously to eugenics. As Dorothy Nelkin and M. Susan Lindee point out in *The DNA Mystique: The Gene as Cultural Icon*, eugenic thought and practice “reached their ultimate expression in the eugenic policies of Nazi Germany, where the notion of genetic purity in the Aryan race became the justification for the racial hygiene movement. Fit individuals were encouraged to reproduce, and those judged unfit were sterilized or murdered” (32). One cultural anxiety fueling arguments against human genetic experimentation is the fear that the unthinkable could happen again, creeping up on us day by day through a very gradual process of normalization. Postwar cultural discourse on cloning and genetic engineering is thus inexorably tied to ominous images of Nazism, and as will be demonstrated, fictional depictions also contend with these associations, whether overtly or not.

Clones, Twins, and Augmented Women

With subsequent ethical questions that the historical precedent inevitably evokes, contemporary German texts that feature clones and genetic engineering often engage at least implicitly in the debates and historical discourses enumerated here. Indeed, although single-title German sci-fi novels form the minority compared to the proportion of Anglo-American sci-fi authors typically available in German bookstores, a noticeable subset of those at least touch on issues related to bioscience, cloning, and genetic engineering.⁴ The three works to be discussed below—*Duplik Jonas 7* by Birgit Rabisch, *Blueprint/Blaupause* by Charlotte Kerner, and *Die verbesserte Frau* (‘The Augmented Woman’) by Barbara Kirchner—can be viewed as exemplary of such texts, despite the appearance of more recent German novels that thematize contemporary bioscience to some degree. They are exemplary because they present three contemporary narrative prototypes that figure frequently in clone stories on both sides of the Atlantic: the colony of clones engineered for use as “spare parts,” the “first clone” as an exploration of clone subjectivity, and women cloned or “upgraded” for nefarious sexual purposes.⁵

In *Duplik Jonas 7* by Birgit Rabisch, a young man named Jonas Helken lives in a future Germany where wealthy parents can elect to have clones of their children made for possible medical use later in life. The Dupliks are borne by surrogate mothers and grow up in a colony known as a *Hort*, their health carefully preserved through a strict regimen of diet and activity.⁶ The Dupliks exist solely for use as spare parts for their ill counterparts outside, where the idea is actively propagated that Dupliks are not human, but rather, as Jonas Helken states: “Äußerlich zwar ähnlich, ja sogar identisch mit dem Menschen, dessen Gesunderhaltung sie dienen. Aber von ihrem Gefühlsleben weiß man ebenso

wenig wie von den Gefühlen eines Schimpansen. Oder einer Katze. Natürlich haben die auch Gefühle. Aber eben keine menschlichen” (Rabisch 56-57)⁷ ‘Outwardly similar, even identical to humans, whose health they serve. But we know as little of their emotional lives as we do of a chimpanzee. Or a cat. Of course they have feelings too. Just not human ones.’ Jonas Helken’s opinion on the keeping of Dupliks changes considerably, however, when he encounters the title character Duplik Jonas 7, whose eyes have been removed to restore Helken’s sight. Helken eventually joins a very risky but ultimately successful venture to free his Duplik/twin and influence the public in favor of abolishing the inhumane practice altogether.

In the case of *Duplik Jonas*, analogies to elements of the Nazi past are very apparent although again not specifically cited in the text. Much as the Nazis cultivated the belief that Jews differed essentially from other Germans, this belief is similarly propagated in the novel by cordoning off Dupliks in carefully regulated and separate communities, corresponding to Jewish ghettos or even concentration camps. Meanwhile, the actual physical purpose of the Dupliks parallels a grisly aspect of Nazism, in which Jews and other “undesirables” were used as subjects in cruel and grossly unethical medical experiments. In both cases, the body of the Other is viewed as property rather than as human, thus giving license to treat a person as a thing. This idea also corresponds to the reification of the human gene as product in the aforementioned discussion by Habermas.

In addition to an implicit indictment of Germany in the last century, the America of the present and presumable near future (i.e., the novel’s past) is also implicated. Early in the story Jonas Helken explains the timeline that precedes the novel’s events, emphasizing the U.S. as the first country to allow and conduct experiments that would ultimately lead to *Duplikhaltung*, ‘the holding of Dupliks,’ because in Europe: “Leihmutterschaft, Eispenden, Embryotransfer, Eingriffe in die Keimbahn des Menschen, Klonen, transgene Tiere—alles wurde per Gesetz verboten. Man war einfach noch nicht so weit, sich rational mit den neuen Möglichkeiten auseinander setzen zu können. Doch in anderen Ländern war man weniger restriktiv—vor allem in den USA” (44) ‘Surrogate motherhood, egg donation, embryo transfer, interventions in the human genome, cloning, transgenic animals—everything was forbidden by law. We hadn’t progressed enough to deal with the new prospects in a rational way. But in other countries it was less restrictive—especially in the USA.’ The listing of increasingly complex and controversial genetic technologies suggests an inevitable progression corresponding to the “floodgates” argument, i.e., the gradual normalization of increasingly questionable practices, culminating in government-subsidized eugenics. Also implied in the above passage is an acknowledgement that US policy stemming from such unregulated exploration of the scientific frontier often influences or at least challenges European policy, as we see today in the

continuing controversy over exporting genetically modified foods from the US to the European Union.

In a similar manner, the reproductive cloning in *Blueprint/Blaupause* by Charlotte Kerner, also occurs where it does due to differences in national policies. In this novel, a famous concert pianist named Iris volunteers to be cloned for reproductive purposes, becoming the test case for human cloning. The story is narrated by Siri, the clone/daughter, and concerns the young woman's reconciliation of her own personhood after she is no longer overshadowed by her mother, whose death has preceded the main narrative. The Canadian scientist who had approached the mother about the prospect of producing the first human clone had sought not only to help her bear a child and increase her fame as a pianist, but also to increase his own renown as a scientist. *Blueprint/ Blaupause* highlights the personal struggles that might arise in the individual who results from this unlikely partnership. The English/German title of the novel emphasizes the North American connection to cloning technology and foreshadows the protagonist's dual geographic orientation as well.

Siri's possible feelings regarding her origin and purpose are ignored in favor of wider political and scientific goals, much as occurred under National Socialism in the Lebensborn project, for example. Again reflecting on the present and future as much as the past, however, the fact that a North American scientist performs the procedure once again shifts the source of trepidation about the social/historical developments in genetic reproductive technologies to Anglo-American culture. Again in this case, the unrestricted scientific Wild West represents a source of trends that could subsequently spread to Europe, exemplified by the European mother and her clone daughter.

Yet, as is especially apparent in *Blueprint*, the 2004 film adaptation, Canada also represents a frontier of a different sort. Not only is it a Wild West for unregulated scientific practices; its uncharted wildness also provides shelter to the narrator whose fame as the first human clone precludes the possibility of her living a normal life in her home country. The expansive forests of the Canadian Pacific Northwest give her some sense of anonymity that would be impossible in her geographically compact, densely populated homeland. After her mother's death, Siri flees Germany to live in a cabin in a remote, underpopulated area of British Columbia, and the film offers lingering shots of the lush, untamed Northern wilderness as a direct contrast to the flashbacks of crowds, social propriety, overcast skies, and cold, grey tones associated with her European origins. This visual contrast in the film serves to dramatize the thrust of the narrative, which consists of Siri's attempt to come to terms with her individuality and to understand her place in the world as a "natural" human despite the scientific intervention that has led to her creation as the genetic duplicate of her mother. The dual nature of North America as the "Wild West"—unregulated but

at the same time free and expansive—keeps us from drawing a simple one-to-one correlation of cross-referenced national symbolism, especially in the case of the film. Meanwhile, although there is no direct mention of the Third Reich in the novel or the film, the combined image of unrepentant, American-style capitalist science with the stereotypically imperious, Teutonic demeanor of the mother provides some implicit engagement with unflattering historical discourses originating on both sides of the Atlantic.

More explicit reflection of both countries' histories occurs in *Die verbesserte Frau* by Barbara Kirchner. Structured as a science fiction novel interwoven with some elements of detective fiction, the narrative revolves around a series of kidnappings, which the protagonist Bettina begins to investigate. As Bettina and the reader gradually discover, a biology professor named Ursula is connected to the kidnappings in a disturbing way. It comes to light that the disappearing women are taken to a mysterious Institute where their bodies are altered through genetic augmentation to make them into living sex dolls (Kirchner 55-57), inevitably harking back somewhat to the “sex robot” narrative exemplified by *The Stepford Wives* (Ira Levin, 1972). The women's memories are erased so that they have no recollection of their former lives, and their nervous systems are altered so that they become hypersexual and interpret pain as sexual stimulus (Kirchner 55-57). The leaders of the project apparently aim to transport these “prototypes” to America where they will be cloned and sold as products with which the purchaser can indulge in extreme sexual acts.

Despite its occasional political heavy-handedness, the connection drawn between sadomasochism, *Frauenhandel* ‘sex trafficking of women,’ and cloning in this novel reflects more than just a surface-level condemnation of the objectification of women. The connection between cloning and commodification goes further, highlighting the utter devaluing of people that could occur when genes and bodies are viewed as products. The novel takes up the specific question of female subjectivity in light of possible future developments in bioscience, sketching out the most extreme extension of the sex industry. America is once again implicated as an unbridled frontier of science and capitalism. Yet, although the women are scheduled for transport specifically to America in order to be cloned and sold, the novel and the cruelty leading up to the attempted transport of the women nevertheless take place in a German context. Underscoring this awareness, the protagonist Bettina compares Ursula at one point to Dr. Josef Mengele, notoriously cruel concentration camp physician, so the objectification that this project represents is necessarily a combination of both the dehumanizing influence of American capitalism and the negation of individual human life that accompanied Nazism (Kirchner 211).

A pattern emerges in the discussion of these novels. While these German texts tend to reference America as an uncontrolled, cowboy frontier of unbridled

science, they deal, at least at a subtextual level, with the legacy of Nazism as well. These three novels also exemplify three prototypical narrative trajectories that lend themselves to a cross-cultural awareness of totalitarian regimes that connote Nazism on the one hand, and a rampant, American-style capitalist approach to bioscience on the other. *Duplik Jonas* 7 represents a strain of texts thematizing the clone as a part of a separate community, used as a commodity, a source of spare parts and life insurance for a “real human” counterpart in the outside world.⁷ While the subjective experience of the Dupliks, and of Duplik Jonas in particular, is emphasized in this novel, *Blueprint/Blaupause* more readily highlights the increasing tendency to treat the clone as individual, as opposed to the more typical depiction of the faceless drones from Huxley, and more recently, the clone armies of the *Star Wars* prequels (2002, 2005).

A more recent German entry in the “clone subjectivity” category is Andreas Eschbach’s *Perfect Copy: Die zweite Schöpfung* ‘Perfect copy: the second creation,’ a 2005 young adult novel that deals similarly with the first human clone, in this case a boy named Wolfgang, who finds out he was cloned as a replacement for a (presumed) dead brother. The North American association in this case is with Cuba, again depicted as an unregulated scientific frontier. In this story, however, the subtext alludes to Communist dictatorships as well as to Nazi Germany, both of which are depicted in the form of Wolfgang’s father, the increasingly maniacal genetic researcher Dr. Richard Wedeberg.⁸ The US is also mentioned as a source of early clone experimentation, and here again, the English/German title places that connection at the forefront of the reader’s mind (Eschbach 141).⁹

Taking up the commodification of bodies in a similar vein to *Die verbesserte Frau* is Juli Zeh’s 2009 medical dystopia *Corpus Delicti*, though the novel does not overtly thematize cloning. Set in a future Germany ruled by *die Methode* ‘the method,’ a relentlessly surveillant technocratic regime obsessed with perfect physical health, protagonist Mia Holl must stand trial to defend her brother against a crime he did not commit. The regime views any form of neglect that either leads to or promotes illness as an act of terrorism (138). Through the Kafka-inflected trial process, Mia begins to root herself in a growing subjectivity defined against the politico-medical establishment that she had once accepted more or less wholeheartedly. *Die Methode*’s radical pro-health politics and rhetoric echo the Nazi obsession with health and hygiene and the characterization of “Other” elements of German society as a metaphorical as well as literal disease agent. At the same time, the novel satirizes contemporary globalized media forms through which *Die Methode* dominates the populace: for instance, via a talk show called “Was alle denken” ‘What everyone thinks’ (83). As in Nazi Germany, residents of *Die Methode*’s Germany must undergo genetic counseling before choosing a mate.

In one way or another, all of the three narrative strains detailed here indict authoritarian regimes that, in most cases, artificially ascribe a qualitative difference to cloned versus non-cloned individuals. In so doing, they dramatize the effects of scientific or medical practices that intervene in the lives or bodies of individuals at the expense of their subjectivity.

Givers, Dolls, and Renegade Clones

While the German texts under discussion contain, for the most part, only subtextual reference to the Nazi past, some corresponding American texts even more overtly feature genetic technologies in the framework of highly restrictive regimes, sometimes including specifically Nazi-inflected signifiers. It should be noted that some texts featured in the discussion to follow are visual rather than literary. It is true that several significant Anglo-American novels that feature clones and related themes have figured prominently in the last two decades and include examples corresponding to the three narrative strains detailed above. But also due to that correspondence, a few notable media examples bear discussion as well.

A significant American novel that comes to mind in the context of the genetically engineered colony à la *Duplik Jonas* 7 is Lois Lowry's 1993 Newberry-winning bestseller *The Giver*, which likewise first appeared as young adult fiction. With protagonists in both works named Jonas, the ties between the novels become apparent at the very outset, and we might even see Rabisch's *Duplik Jonas* as an homage or response to Lowry's "runaway renegade" Jonas in *The Giver*. The nature of the genetic engineering in *The Giver* must remain heavily implied through the perspective of this Jonas—except for a lone vague reference to "genetic scientists"—because Jonas, like the other residents of the "community," is kept intentionally un- or misinformed (95). Likewise, idle but possibly accurate speculation on the part of Jonas's sister Lily opens up the possibility that the "communities" are clone colonies. More directly in keeping with *Duplik Jonas* 7, Lowry's novel is rife with euphemisms. Although Jonas in *The Giver* does not learn the facts until later, it is clear to the reader, for example, that to be "released" is to be euthanized and that the "Elsewhere" to which they are released is actually death.

Other veiled references to Nazism abound. The "Sameness" on which Jonas's community is founded reminds the reader of Nazi *Gleichschaltung*, 'making the same' or 'bringing into line,' and extends to the residents' race: "There was a time, actually [...] when flesh was many different colors. That was before we went to Sameness. Today, flesh is all the same" (94). Children who do not develop at a pace set within a strict range of "normal" are "released." As the newly chosen Giver, who serves as a repository of the knowledge and history that

are kept secret from other community members, Jonas becomes privy to this information. The novel's climax comes when Jonas mounts a risky but successful escape to save the life of Gabriel, a baby assigned to his family until authorities decide he will be released due to motor skills that develop more slowly than the predetermined norm. Unlike *Duplik Jonas 7*, *The Giver* provides no origins of the genetically engineered community, but as in the *Hort*, the members of *Giver* Jonas's society are subject to rigorous health routines, assigned "families," and take sexuality-suppressing medications beginning at the first signs of puberty. All of these measures, combined with a coordinated lack of information about the cruelties perpetrated by their respective societies, lead the Jonases in both texts to resist their totalitarian surroundings.¹⁰

A paradigmatic example of American cross-referencing of the Nazi period appears in the film *Gattaca* (1997), which is set in the "not-too-distant future."¹¹ Members of this future society, presumably a future America, must undergo genetic counseling in order to determine their fitness for reproduction, as was the case under National Socialism. Further, in an extrapolation on the less technological means of selection available in the time of National Socialism, parents must conceive via in vitro fertilization and are required to select the "fittest" embryos for implantation, which are then further modified to produce or eliminate particular genetic traits according to the parents' wishes. Meanwhile, the "old fashioned," unregulated method of impregnation, believed to produce inferior and sickly offspring, is strongly discouraged, and the resultant children are not given equal educational or career opportunities later in life.

Underscoring the authoritarian nature of the regime in this film, visual and verbal cues consistently refer to Nazi Germany. Vincent, the protagonist, wears a double-breasted, dark pinstriped suit with broad shoulders and a wide collar reminiscent of the 1940s. His love interest Irene wears World War II era women's business attire and a hairstyle clearly connoting that period as well. Cars appear to be updated, futuristic versions of 1930s and 40s German luxury cars. Along with these visual elements, verbal references rife with Nazi connotations abound. Vincent, conceived in the old fashioned, unregulated manner, is referred to many times in the film as "invalid" and "inferior." The government pervades every aspect of people's lives in a way that is equally reminiscent of National Socialism. Everyday life is controlled and strictly scrutinized, down to the very content of people's cells. Meanwhile, although the "invalids" do not live in separate colonies, they certainly live in separate spheres, and as in the case of *Duplik Jonas 7*, the qualitative differences ascribed to those occupying the separate spheres prove highly consequential in terms of individual experience and in the perception of others. Vincent is relegated to the position of janitor at the quasi-governmental *Gattaca* complex where his genetically enhanced brother enjoys much higher status and financial rewards.

The contemporary American text most closely aligned with the *Frauenhandel* ‘sex trafficking’ depicted in Kirchner’s *Die verbesserte Frau* is *Dollhouse* (2009-10), a TV series by Joss Whedon. It also incorporates elements of all three narrative strains treated by the three German novels: the clone in the context of an authoritarian regime, the clone as individual, and the clone as a nexus of sexual politics. *Dollhouse* deals with a group of male and female operatives (“dolls”) deployed by an ill-defined quasi-governmental organization for missions that require the operatives to continually adopt different skills, appearances, and even personality traits. In some cases victims of kidnapping and in some cases criminals who surrender their personalities willingly, the dolls live together in a compound referred to as the Dollhouse, where their former memories are wiped, and they exist in a vapid state of personality limbo not unlike the Dupliks or the members of the community in *The Giver*. Their diet and exercise regimen is strict in order to keep them healthy for physically demanding “engagements.” They are repeatedly programmed and reprogrammed with different personalities and skills based on the needs of particular high-paying clients. The narrative arc of the series concerns one particular renegade female named Echo, who begins to retain some memories from mission to mission and begins a process of self-discovery. Eventually, she wishes to free herself and her companions from the nefarious organization that invades their bodies and minds in this manner.

The notion of a “Dollhouse” full of compliant drones (if not clones) with wiped memories bears a distinct resemblance to the Institute in *Die verbesserte Frau*. Although the Dollhouse has both male and female residents, and the engagements are not exclusively of a sexual nature, the reference to “dolls” has a dehumanizing effect as well as a sexual connotation reminiscent of the kidnapped women in Kirchner’s novel.

The heroes in all of these examples are renegades who eventually align with counterparts outside their closed communities in order to alert the world to a fact that is painfully obvious to the audience, namely that absolutely no essential difference exists between the clone and his or her counterpart. The dramatic tension in all of these texts results from the protagonists’ desperation to be recognized as autonomous agents and to inform an ignorant public of the injustice that is being perpetrated in the name of greed and vanity. As with Duplik Jonas, the rebellion of the Jonas of *The Giver* is sparked by an existential crisis that is uncharacteristic in his surroundings, where stress is kept to a minimum and any meaningful questioning of the situation is discouraged. It is here that the analogy to concentration camp inmates breaks down somewhat. *Giver*-Jonas and Duplik Jonas are both kept to a strict health and fitness regimen. This aspect corresponds more to the Nazi idea of racial hygiene and the fitness obsession that is visible, for example, in Leni Riefenstahl’s *Triumph of the Will* with its precise rows of young

Nazi men engaging in calisthenics or in “candid” moments featuring controlled displays of boyish antics auspiciously devoid of any overt sexuality. Both Jonases receive drugs that suppress sexual desire, such that both are kept in a state of perpetual boyhood and therefore sexual as well as physical purity. This emphasis on purity and hygiene highlight the aims of so-called positive eugenics. In both cases, the process of sexual discovery that occurs when they leave their colonies accompanies the discovery of their own subjectivity, which relates once again to the theme of clone-as-individual characterized by the protagonist in *Blueprint/Blaupause*.

Cross-Referencing, Common Fears

Further examples of the association of reproductive biotechnologies with signifiers of Nazi Germany can be found in other recent Anglo-American texts; for example, in the old Nazi doctor turned mad scientist in J.C. Hutchins’s clone-themed podcast novel trilogy *Seventh Son* (2006-2009). However, as in all of the Anglo-American examples mentioned here, the association of eugenics with Nazism lacks a feature that is common to the German texts, namely an explicit connection of these genetic technologies to America as a scientific and capitalist frontier. Instead, the more explicit association of these technologies with fascist regimes appears in the American texts. This observation suggests that, while both American and German culture share similar fears associated with these seemingly inevitable technologies, the German texts are quicker to implicate both cultures more readily than do the American texts. This could be a question of medium. American self-criticism tends to be less overt in order to be deemed acceptable in popular entertainment. Blatant signifiers of Nazism have therefore provided a more removed context in which to express reservations about the coming of these new genetic technologies.

This is not new, of course. As has often been the case in science fiction, projecting current problems onto “alien” cultures serves as a safe way to examine future implications of contemporary scientific advances. Yet, despite the apparent focus of science fiction on the future, elaborations on the connection of American market realities to the propaganda and cruelties of Nazi fascism have been in existence at least since the Frankfurt School critics. Meanwhile, the added dimension of applied genetic sciences renders the marketing of human resources a disturbingly literal contingency. Therefore, this topic has proven ripe for examination in the laboratory of science fiction since the 1990s.

All three German novels discussed here exhibit varying degrees of reservation, the same echoed by Habermas and other opponents of cloning, regarding current and near future developments in biotechnology. Whether in a German or American context, and regardless of which national signifiers are most

often employed, fear surrounding the implications of these scientific developments is a constant. These trepidations connect to the changing definition of nature and who will influence that definition. Each text ultimately deals, in one way or another, with questions of what is “natural,” and how humanity will understand this term in the coming years. They also communicate a certain amount of unease with the “unnatural” aspect of the cloned human, but the political implications of such uneasiness may suggest differing interpretations. On the one hand, this trepidation belies a possible veiled affirmation of the nuclear family, an attempt to continue the status quo and not pursue any positive potential in the evolution of reproductive biosciences. On the other, these texts raise important questions about the scientific establishment’s reappropriation of reproduction and what, if any, freedoms will actually be gained either for women or for society as a whole by adopting these practices on a routine basis. Beyond such theoretical considerations, however, the novels I have examined above serve to display the personal experiences and complicated familial structures that might result from cloning, along with potentially repressive political situations that could accompany the wide acceptance and adoption of such practices.

Principally, though, the political ramifications, implicitly including the possibility that cloning opens up an avenue in which past abuses could reoccur, provide a narrative subtext to the three novels discussed here. From the European perspective of these texts at least, the future of genetic experimentation lies in a deregulated America, a place both literally and figuratively removed from the blood that was spilled and bodies that were violated decades ago on a continent far across the ocean. The same fears of genetic engineering as portrayed in the novels are the fears shown on the news each time the European Union continues to refuse US attempts to open the EU market to American genetically modified foods. Other instances in these novels exhibit similar trepidations about America’s tendency to place the ideals of science over those of humanity. Haraway’s observations are underscored by these texts in their connection of the proponents of biotechnology to the original defenders of “scientific” capitalism through the common denominator of “nature” and those who define it. This motif has appeared again and again from early capitalism, through Nazism, up to the coming gene revolution that may well develop in America first. The North American scientist who wants to clone Iris in *Blueprint Blaupause*, the deregulated America where the first human clones (and eventually Dupliks) appear in *Duplik Jonas 7*, the unrestrictive America where *verbesserte Frauen* can be freely replicated—all of these instances point to one conclusion in relation to the clone: the worst perpetrators of the past century were German, but those of the current century may well turn out to be American. Nevertheless, all of the texts I discuss here, both German and American, suggest similar unease with and distrust of recent developments in bioscience, and both imply in various ways the same

possibility: that the unreflective and unrestricted application of gene technology could eventually lead once again to the unthinkable.¹

Notes

1. “Genetic engineering” will be defined in this article as any human intervention (which may include but is not limited to cloning) in which the DNA structure of an organism is altered for any medical, reproductive, or commercial purpose with the intent of producing particular traits in that organism and/or its progeny. “Cloning” refers to any deliberate human intervention that results in a genetic duplicate of an organism, human or otherwise. This definition encompasses all cloning techniques, from the current “nuclear insertion” cloning process used in the famous case of Dolly the sheep in 1998 to as yet untested theoretical technologies, real or fictional.
2. In the case of Huxley’s *Brave New World*, problems taken up by the narrative include the rise of totalitarianism and increasing economic inequality in the first half of the 20th century. In Charlotte Perkins Gilman’s *Herland*, the inequalities between the sexes take center stage. In both cases, technologies of reproduction or alternative forms of human reproduction serve respectively as a symptom of or solution to greater sociopolitical problems.
3. The first few sentences of Dawkins’s book sum up his approach to genetics, which has since been adopted by mainstream science as a whole, and has served to provide a scientific/genetic basis for sexual difference, sex roles, and compulsory heterosexuality, to name a few of the metanarratives affected and/or supported by his conclusions: “This book should be read almost as though it were science fiction. It is designed to appeal to the imagination. But it is not science fiction: it is science. Cliché or not, ‘stranger than fiction’ expresses exactly how I feel about the truth. We are survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes” (Dawkins ix).
4. I specify single-title science fiction novels here, as opposed to category or serial novels, which tend to be derivative and/or based on sets of existing characters, settings, and plot arcs. Science fiction novel series by German authors appear to be relatively common, a continuing trend that is attributable at least in part to the popularity of pulp staples like *Perry Rodan*. By and large, however, the majority of shelf space in the science fiction section of the typical German bookstore remains dominated by translations of Anglo-American works.

5. Multiple texts discussed here first appeared as young adult novels, e.g., *Duplik Jonas* 7. Though also of similar origin, *Blueprint Blaupause* by Charoltte Kerner was released as a film in 2003 starring Franka Potente (*Run Lola Run*, the *Bourne* series), and the book was subsequently published for and read by a wider adult readership.

6. My own translation.

7. The term *Hort*, used by Birgit Rabisch, is often compounded as *Schulhort* or *Kinderhort*. In German, the term is most associated with after-school and daycare for programs for children with working parents, particularly in reference to the state-provided daycare in the former GDR. The term has connotations of safety and cultivation in the form of an educational program. It comes from the same root as our word “horticulture,” from the Latin *hortus*, meaning “garden.” Thus, the term in this instance links not only to German pedagogical culture but also to its etymological root in the sense of “cultivation” for human use or consumption, thereby giving it an uncanny effect for the reader.

8. This narrative model of the “clone as organ donor” appears to have originated with the American B-movie *Parts: The Clonus Horror* (1979), of which Michael Bay’s *The Island* (2005) was an uncredited remake. A similar motif can be seen in Jack Finney’s 1955 novel *The Body Snatchers*, also the subject of several movie adaptations. Robin Cook’s 1977 book *Coma* and its popular 1978 film version also feature captive human organ donors, although they are not clones. The Hitler-clone tale *The Boys from Brazil* by Ira Levin also originates in the late 1970s. One might wonder what led to the clone fascination during this specific period.

9. See 135, 190, 191, 202, 205, for examples that associate Dr. Wedeberg with dictatorial rule. As the story progresses, he is presented as an increasingly unhinged mad scientist. These two factors function in tandem to suggest, though not directly reference, associations with Nazism.

10. I do not go into more detail with this novel and do not include it for specific analysis because of its seemingly derivative nature, published as it was after *Blueprint/Blaupause* and dealing with a very similar topic in a less developed manner.

11. Japanese-born British author Kazuo Ishiguro also wrote a novel featuring a donor clone colony, 2005’s *Never Let Me Go*, which was adapted as a film in 2010. Although similar in theme, Ishiguro’s delves very little into the scientific

and political elements of the protagonists' world. Instead, this text focuses on the tragic nature of the relationships between the characters.

12. *Gattaca* came up in the Intelligence Squared debate as a paradigm for a future scenario in which humans are evaluated solely on the bases of their genes (Krimsky, et al 41).

13. Special thanks to Vibs Petersen (Drake University), Alison Guenther-Pal (Lawrence University), and Bruce Campbell (The College of William and Mary) for their invaluable comments on early drafts of this article.

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