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Frankenstein's Children:

Ethics, Experimentation, and Free Will in Futuristic Young Adult Fiction

Literature often engages societal preoccupations with issues of free will related to social, scientific, and medical experimentation. In *Brave New World*, Aldous Huxley describes a dystopia that results from the stripping of free will by social engineering. In *The Bell Jar,* Sylvia Plath explores the pitfalls of psychiatric practices, including shock therapy and confinement. Finally, in *A Clockwork Orange*, Anthony Burgess reveals the social implications of experimentally altering individual free will.

Contemporary fiction surveys these same preoccupations. As technology allows for a vast number of scientific advances, the literature of our world continues to ponder the dangers inherent in our ever-increasing ability to play god. Coming-of-age novels occupy a crucial space in the body of work that addresses the ethical dilemmas accompanying medical or scientific experimentation. By investigating these social issues, novels that trace the maturation of young adult protagonists pose significant questions regarding the formation of identity, not the least of which is *In what ways do medical and/or scientific interference enable or disable the autonomy of young adult protagonists striving toward selfhood?* M. T. Anderson's *Feed* (Candlewick, 2002) and Peter Dickinson's *Eva* (Dell, 1988) engage these questions and offer compelling arguments regarding the process by which young adults develop into adults in environments shaped by aggressive social experimentation.

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M. T. Anderson's *Feed*

Titus, the protagonist of *Feed,* is part of a generation into which science has introduced revolutionary technology that affects individual health and autonomy as well as the health and autonomy of the group. This technology comes in the form of a "feed," a constant stream of corporation-controlled information that is transmitted into people's brains by way of an implanted chip. Because this feed literally invades the human body, it becomes part of the fabric of personality. However, rather than enhancing personality, the feed demolishes free thinking, turning individuals into rampant consumers and trend-crazed drones for whom the idea of autonomy is virtually nonexistent. As the main character, Titus, who comes of age in a world cluttered with noise, is faced with the choice of resisting the feed; his decision determines whether he will achieve autonomy and a healthy state of adulthood or languish in a world defined by empty uniformity.

In Titus's world, teenagers exhibit the same desires to be fashionable and to conform that are common during adolescence. They succumb to peer pressure, rebel against authority, and speak in slang. However, their world differs

in significant ways from, say, the world of 2008. For example, teenagers act jaded, but they are jaded about trips to the moon, not the mall or the coffee shop: "[T]he moon was just like it always is, after your first few times there" (4). At the same time, their slang reveals an important shift in the way human beings perceive themselves. The word "man" has been replaced by "unit" (6), a replacement that implies the emphasis on commodities in their lives. As creature commodities, they are only as good as their ability to remain current. For example, when Titus comments that his female friends go to the bathroom "because hairstyles had changed" (20), he is not being facetious. Finally, although Titus and his friends rebel against authority by drinking underage or going "mal," which is equivalent to doing drugs, they fail to criticize the true authority in their lives—the corporations who send the "feed" into their brains and have hijacked their ability to think or act independently. The fact that corporations control their every desire is not lost on Titus, who claims, "[I]t's not good getting pissy about it, because they're still going to control everything whether you like it or not" (49); however, the perks of being able to have a feed that "knows everything you want and hope for, sometimes before you even know what those things are" (48) keep Titus from rebelling against authority in any notable way.

What Titus and friends miss is that the changes to their bodies—the implantation of the feed chips—disables them both intellectually and physically. Intellectually, they are void of independent thought and, as evidenced by Titus, resist being alone: "You need the noise of your friends, in space. I feel sorry for people who have to travel by themselves [. . . .] When you're going places with other people, with this big group, everyone is leaning toward each other, and people are laughing and they're chatting, and things are great, and it's just like in a commercial" (4). Titus also fears "that silence when you're driving home alone in the upcar and there's nothing but the feed" (5). Titus's longings for companionship and the comfort he finds in groups may be common expressions of the teenage experience. However, while the technology available in his world increases his ability to maintain constant contact with others, even communicate telepathically, this same technology has disabled his ability to be alone or think independently. Therefore, while the feed ostensibly has improved Titus's life by providing constant access to an incessant flow of information, it has disabled him in significant ways.

Yet, Titus and his friends do not question the dangers of this type of technology. Although, technically, they have free will, the feed has disrupted their ability to exercise it or even to desire it. Titus's generation is not built to question the feed because it is, for them, one more functioning organ, an integral part of their body systems:

> I don't know when they first had feeds. Like maybe, fifty or a hundred years ago. Before that, they had to use their hands and their eyes. Computers were all outside the body. They carried them around outside of them, in their hands, like if you carried your lungs in a briefcase and opened it to breathe. (47)

Because the feed has become an integral part of their bodies and their personalities, even after Titus and his friends temporarily lose access to the feed—after being attacked by a hacker in a club—they fail to recognize that its absence might improve their lives. For exam ple, Titus admits that the day after he loses the feed is "one of the greatest days of my life" (57), but he lacks the analytical skills to understand *why* the day is extraordinary. He describes how he and his friends invent creative ways of entertaining themselves, but he fails to recognize that they had to think on their own to devise the activity. He comments that his friend Loga tells the best story she's ever told, but he fails to realize he derives pleasure from watching her physically act out the story rather than passively receiving her chat over the feed. He also provides a long, detailed description of the way his girlfriend Violet walks down the hallway, as well as the description of a garden that he says looks like "a squid in love with the sky" (62), but fails to understand that the emotional boost he feels is caused by his new awareness of the physical world, the world outside of his head. Even when Violet compliments him for being the only one of his friends who "uses

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metaphor" (63), Titus does not process that his creativity is enhanced by the absence of a functioning brain chip.

Titus's coming of age is catalyzed by his relationship with Violet, who comes from a different background than Titus and his friends, having had her chip implanted late in life—at the age of seven—because her parents were both poor and unconventional. Violet's parents had resisted the feed until it seemed inevitable that Violet would be left behind in the world if she did not have its advantages. However, Violet has remained an outsider to the rich and wealthy teenagers like Titus because she has been raised to be free-thinking and resistant to conformity. She questions the authority of the feed to the extent that Titus's friends complain, "She's always looking for like evidence of the decline of civilization" (184). When Titus's friend Quendy gets trendy, "sexy," lesions cut into her body so that muscles and ligaments are visible, Violet is the only one who expresses outrage: "Look at us! You don't have the feed! You are the feed! You're feed! You're being eaten! You're raised for food! Look at what you've made yourselves [. . . .] She's a monster! A monster! Covered with cuts!" (202). Her behavior prompts Titus to think, "The fucking party is over" (203), which signifies his transition into a new stage of maturity: awareness that he must make a choice between the lifestyle offered by Violet and the lifestyle he has always known.

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When Violet's chip starts to deteriorate and she slowly begins to die because the corporations who control the feed refuse to come to her aid, Titus gains an education about how detrimental the feed can be to the human body because it is connected to the whole limbic system. After losing control of certain body parts, Violet has been told she is "susceptible to malfunction" (170). When Titus asks her what that means, she responds, "Nobody knows. The feed is tied to everything. Your body control, your emotions, your memory. Everything. Sometimes feed errors are fatal" (170). Revealing his naïveté about the feed, Titus asks, "They can't just turn it off?" (171). Violet clarifies for him that the feed, once implanted, becomes part of the body, "part of the brain" (171). Titus's ignorance of how the feed operates underscores his enduring refusal to think for himself or to question his world. While Violet insists that he is "not like the others" and that he is "someone people could learn from" (276), he has done little more than turn an odd poetic phrase or two to prove his ability to think creatively. Other than dating someone like Violet, he had done nothing to pursue autonomy.

In fact, as Violet nears the point when she loses total control of her body, Titus deserts her, a move that suggests he is incapable of handling the emotional impact associated with suffering, a condition from which he has been sheltered all of his life. When Violet reaches out to him to help her experience the world before she is no longer able, he finally breaks up with her, arguing, "I didn't sign up to go out with you forever when you're dead. [We've only been dating] a couple of months. Okay? A couple of months" (272). His callous behavior reflects his unwillingness to give up the status quo and join in her dream of finding a life "without the feed" (262).

Ultimately, though, Titus experiences an epiphany and, at the end of the novel, begins to resist the feed and push toward autonomy. This climactic scene occurs when Titus visits Violet in her comatose "death" state and is confronted by her father, who tells him bitterly, "Go along, little child. Go back and hang with the eloi" (291). Not understanding the allusion to members of the elite yet ignorant upper class in *The Time Machine* by H. G. Wells, Titus prompts the father to explain the insult and is told to read the book for himself:

> "Read it."
> "I'm sick of being told I'm stupid."
> "So read it, and you'll know."
> "Tell me."
> "Read it."
> "Tell me."
> "You can look it up."
> "You can tell me."
> "Will you ever open your eyes?"

Titus's response is to race home and tear his clothes off until he is "completely naked" (293) and then furiously order merchandise from the feed until he has

"no credit" (294). Although he does not admit it to the reader, it becomes apparent that Titus has registered Violet's father's message. As he strips himself down physically and financially, he prepares to enter a new stage in life.

Titus's final coming of age is signified by his taking ownership of his own body and mind and exercising free will. When he returns to Violet's house two days later, he is reborn. He not only has begun to educate himself about the "strange facts" Violet would have liked, but also he is actively trying "not to listen to the noise on the feed" (296). Most important, he has initiated a plan to become a storyteller, engaging his talent for using metaphors and saying "things no one expects you to" (276)—the talent that only Violet saw in him. As he pledges to Violet to keep her story alive, he begins to cry for the first time in his life, signifying a move toward humanity and, ironically, adulthood. Finally, the focus of the story he begins to tell her clarifies his commitment to independence: "It's about this meg normal guy, who doesn't think about anything until one wacky day, when he meets a dissident with a heart of gold [. . . .] They learn to resist the feed" (297–298). Ultimately, Titus not only reveals self-awareness that signifies a transition into adulthood, but he also demonstrates selflessness and love that transcend the physical. Thus, he has learned to use his mind and spirit to master his body, which is in many ways as hampered by the feed as Violet's.

Peter Dickinson's *Eva*

While Titus is part of a generation that has been victim to invasive technology, the title character in Peter Dickinson's novel *Eva* is the subject in a unique and individualized medical experiment, one that saves her life but forces her to renegotiate her identity. After Eva is in a near-fatal car accident, her brain is placed into the body of a chimpanzee as part of an experimental procedure, and she awakes to a radically different existence. While Eva is less shocked than another 13-year-old might have been, since her father is a scientist and she is familiar with the work he has done with chimpanzees, Eva struggles to adapt to both the workings of her new body and to the expectations of the corporation that has preserved her life by sponsoring the experiment, an expensive procedure that her willing parents couldn't afford.

While Eva spends the opening pages of the novel adjusting to her new body and realizing that she will have to integrate the chimpanzee urges (for the chimpanzee body remembers its former chimpanzee life) with her human thought processes to forge a new identity, the most controversial issue with which she deals is the issue of ownership. In other words, several groups threaten to claim ownership of Eva in her new form, and she resists them all. World Fruit, the main advertiser of SMI, the "shaper people" who are essentially a future version of television media, has sponsored Eva's operation and has the option of using Eva "in some of the Honeybear commercials" (41) as recompense. As a research wonder, Eva is a hot commodity, and World Fruit has taken out an exclusive contract on her. However, "the Pool" to whom Kelly the chimpanzee belonged, threatens to claim ownership of Eva's physical body. Jane Callaway, a legal representative for SMI explains the risk:

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> I believe that when animals from the Chimpanzee Pool are sold for research they are sold outright, and the organization doing the research buys them. But in Eva's case, because the experiment was carried out by the Pool itself, in cooperation with the Pradesh Institute, no such arrangement was made—in fact, no arrangement was made at all [. . . .] There might therefore be an argument that Eva's body, at least, still belongs to the Pool. (69)

While on one hand, Jane Callaway argues that Eva has become "an extremely valuable piece of property" (69–70), on the other hand she suggests that her company accept "that Eva is fully human, with all that implies" (70); she is ready to defend Eva if a legal battle ensues. Because Callaway seems to be offering a certain level of protection, the family signs a contract with SMI, but Eva—who is rebelling already against everyone involved, including her scientist father—tells herself, "I'm going to see that I own me" (72). Thus, her struggle to exercise free will begins.

As in *Feed*, *Eva* highlights the struggle to achieve autonomy and exercise free will in a society character-

ized by rampant media coverage and consumerism, as well as irresponsible medical experimentation. Published in 1988, Eva anticipates a future media that is chillingly like the media that exists today, twenty years later. In Eva's world, Public Response Indicators constantly monitor audience reaction to programming, people view things that happen in the "shaper zone" as "more important, more exciting than anything that happened in their own lives" (74), and the paparazzi aggressively swarm the famous, even when fame comes accidentally, as it does to Eva. SMI, the company that runs the media, intimidates even the police from interfering to provide citizen safety because "the shaper people always got their own back by putting on programs that made the [police] department look like crooks or idiots" (64). Thus, it is this corporation that in many ways threatens Eva's autonomy.

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Eva's loss of choice is reflected also in the loss of control she experiences over her body. She cannot exercise human free will because the body she inhabits is still driven at times by animal instincts that she cannot control. Frustrated with her father, who fails to acknowledge the depth of her struggles to satisfy both her human and chimpanzee needs, she flies into a primal fury: "Her whole body was electric with the impulse to rush around the apartment, breaking and destroying. She had watched the eruption almost as if from the outside, powerless to stop it, only able to direct it a little" (85–86). Thus, Eva's attempts to achieve autonomy are complicated by her situation: freedom to Eva's human brain means one thing, freedom to her chimpanzee body means another.

As Eva progresses, she learns that the chimpanzee side of her personality is stronger than scientists predicted. In fact, after spending time with other chimps at the Reserve, where she is free to roam alongside them in a natural setting, Eva's connection to other chimpanzees grows stronger. Combined with her ever-increasing realization that the scientists who made her are continuing to create new cross-breeds with no regard for the suffering caused to both human beings and chimpanzees, this affinity for chimpanzees drives Eva to take a daring leap toward autonomy, which requires a surprising and irreversible step away from her human life. The first step of this leap toward freedom is the rejection of the human world.

In the human world, Eva's rights are infringed upon as both science and the media limit her freedoms. Even two years and five months after Eva wakes up in her new body, Jane Callaway is quick to point out that "the legal question of whom [Eva] belonged to was still unresolved" (148); therefore, Eva's rebellious attempts to use the media to expose the unethical exploitation of chimpanzees backfires on her. After speaking out against this exploitation on a shaper program, she is told that she will have to "restrict her appearances" and that she must only answer questions that have been pre-approved (148). Reminding Eva that she does not have free will to spread her incendiary ideas, Callaway warns, "SMI owns complete rights to all reproductions of any performance by Eva, and this includes the unfortunate episode last night. They will refuse permission for all future showings of it, and any such showings will be illegal. Any support by you for such a showing, public or private, will be treated as a breach of the contract" (148–149). Therefore, despite the public's support of her tirade, Eva is unable to publicly speak out further. Even in class when her teacher wants to hold a discussion of animal rights, Eva "told him she wasn't allowed to" (149). Thus, the human Eva who seeks freedom of expression is stifled into silence.

Faced with these unbearable restrictions, Eva decides that her best chance for autonomy is to join the chimpanzee world completely; her body craves it and her mind reasons that it is the only option for real freedom and growth. Once she and the other chimpanzees are placed into an experimental jungle on Madagascar, Eva leads an escape into the wild in hopes of truly freeing herself and the others. During this time, she makes the conscious decision to pursue as a chimpanzee the autonomy that has eluded her as a human. First, she starts to identify as a chimpanzee, noting that "humans" have arrived on the island to reclaim the escaped chimpanzees; Eva even infects the other chimps with a "wariness of humans" (191). Also, she begins to eat like a wild chimp, learning "to gnaw the meat raw off the thin bones [of a marmot]" without thinking "about it with her human mind"

(191). Most important, she has made the commitment to mate with her chimp companion Sniff: "Eva had already decided that when [estrus] happened, she was going to let Sniff mate with her, if he wanted, which presumably he would. Why not? You couldn't choose some of this life and not all of it" (192). Eva's decision to sever all ties with the human world is a bold step toward a new identity; however, her decision also seems inevitable, a choice that was determined for her in many ways when she was placed into a non-human body.

Eva's dilemma begs the question: *To what extent is identity tied to the body?* From the moment Eva wakes up in a chimpanzee's body, she is no longer viewed as human, which allows for companies like SMI and scientists like Maria to exercise dominance over her. These attempts at domination and ownership speak to the role of the body in determining identity: If Eva had had a chimpanzee brain put into her human body, she would certainly still have been viewed as human, and there would be no question about who had "ownership" of her. Also, Eva's struggles between her chimpanzee urges and her human reasoning suggest that the brain alone does not control self-actualization. In other words, Eva's body drives her behavior as much as her human brain does—so much so that the disability of being placed into an animal's body eventually, and perhaps ironically, enables her successful development of an adult identity.

Eva's arrival at adulthood is, ironically, much like that in the original bildungsroman model as conceived by Goethe; she successfully integrates into a society, ready to adopt the principals of the status quo. However, Eva's coming of age differs radically because the society into which she integrates is not a human society, not the society into which she was born. Only years into her adulthood as a chimpanzee, just before her death, do readers understand the level of integration she has achieved and the fulfilling life she has lived as a chimp. Eva has come to understand chimps in a way that "has nothing to do with any human" (205); she even understands that the human part of her must be passive, as she wills "the human Eva [to be] no more than a guest" (205). As a result of Eva's ability to turn her disability into an opportunity, Eva creates a fulfilling life for herself by breeding with males, bearing intelligent children, and teaching the other chimps skills that will help them survive after her death. In this way, Eva becomes not only a member of chimp society, but also a leader, which confirms her maturation into an adult.

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Moreover, Eva's successes are highlighted by the contrasting failure of human civilization, which seems to be facing extinction: "It's the same all over. You can't get a bridge built or a solar replaced. You can't get a road repaired. People won't pay their taxes. They won't invest or save. Some districts there's trouble getting the farms planted—just enough to feed the planters another year, that's all. A few kilometers north of where I live there was a community meeting last year where they passed a resolution to stop eating" (214). In the human world, life has become so bleak that populations of people are committing mass suicide by starving themselves to death or drowning themselves in groups. Thus, as humans decline, chimps become the hope for Earth's future, and Eva becomes the hope for chimps. This process could never have occurred if Eva had not insisted upon finding a way to exercise free will. Ultimately, and accidentally, the medical interference that allowed Eva to live, albeit in a non-human body, allows for potential survival of the chimps, who are viewed by some as "the Inheritors" and "the human future" (215).

The Transformation of Self

In both *Feed* and *Eva*, the journey toward adulthood and autonomy becomes complicated by scientific experimentation with human lives. But is this type of interference any different than the environmental interferences found in any young adult novel? One could argue that the disabilities presented in these two novels are similar to those in many contemporary novels in which a young adult protagonist faces a central crisis that catalyzes him or her into a reshaping of the self. In this respect, anything that disables the protagonist from staying the same—a rape, a car accident, the death of a family member—is a mechanism of change and necessary to the main character's trans-

formation. However, while the trials faced by protagonists often lead them to desire a return to normalcy, the trials faced by Eva and Titus lead them to insist upon change, to escape from what was once normal.

The same process that has brought Eva and Titus to adulthood has also brought them to rebel against societies that have allowed technology to advance without ethical concern for individual rights. Their rebellions lead them into dire situations that threaten to destroy both their bodies and their minds permanently, preventing any type of coming of age. Thus, when M. T. Anderson and Peter Dickinson imagine extraordinary futures for their protagonists, they also anticipate extraordinary threats to personal identity and free will. Ultimately, these threats to mind and body not only spark personal growth, but also inspire these young adults to change their worlds.

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