Journal of the Austrian Association for American Studies

vol. 6, no. 2, 2025, pp. 172-85 doi: 10.47060/jaaas.v6i2.223



Transplantation and Alternative Worlds: Speculation in Doctors' Life Writing

Ruth Gehrmann

ABSTRACT

Even though organ transplantation has turned into a repeatable and comparatively reliable practice, it still presents ample cause for speculation. In fact, various works of speculative fiction explore the practice in relation to the future. Yet, as this article suggests, speculation about transplantation does not only occur within the pages of fictional works but also impacts the life writing of medical professionals. This article engages specifically with the life writing of transplant surgeons: Thomas Starzl's *The Puzzle People: Memoirs of a Transplant Surgeon* (1992), Kathy E. Magliato's *Heart Matters: A Memoir of a Female Heart Surgeon* (2010), and *Breathless: A Transplant Surgeon's Journal* by Thomas R. J. Todd (2007). By focusing on two distinct forms of speculation – the employment of elements from speculative fiction and the pervasiveness of the question "What if ...?" – this article emphasizes the underlying but often overlooked significance of speculation in medical contexts.

KEYWORDS

Surgeons' autobiography, surgeons' memoir, speculative fiction, medical humanities

Until 1983, when the immunosuppressive drug cyclosporine was approved for clinical use, the future of organ transplantation as a medical practice was marked by uncertainty. Today, however, organ transplantation is commonly framed as non-experimental as Cara K. Black et al. summarize: "Solid organ transplantation (SOT) has emerged from an experimental approach in the 20th century to now being an established and practical definitive treatment option for patients with end-organ

dysfunction" (409). While transplantation has become a "practical definitive treatment," discourses of organ transplantation, even after the release of cyclosporine, often engage in speculation and refer to speculative fiction. For example, in 1989, the heart surgeon William Frist recalls a moment when he carried a donor heart to an airplane and explicitly references a concrete genre of speculative fiction: "If someone had told Dad fifty years ago when he began practicing medicine what I would be doing that night, he would have laughed and shook his head in disbelief, dismissing it all as pure science fiction" (33). Transplantation is framed as part of an imagined world – one that belongs to the realm of science fiction –, and scholarship has highlighted how speculative fiction renders and envisions organ transplantation.¹

This article takes a different turn, as it analyzes how speculation enters autobiographical texts written by transplant surgeons. Hereby, it takes its cue from Emily Russell's concept of "speculative medicine," which she positions "as a parallel to the genre of speculative fiction" (268). Russell emphasizes the creative and imaginative forces at play in medical experimentation (268). Moreover, the article builds on Gayle Rogers's definition of speculation as "a certain kind of thinking and acting: a charged and unruly (and sometimes unscrupulous) 'cognitive provisionality,' rather than more rational and deliberate planning, knowing, and constructing" (4). This "cognitive provisionality" takes specific forms in the autobiographical texts discussed here. The article explores two ways in which speculation emerges in four autobiographical texts penned by transplant surgeons: Thomas E. Starzl's *The Puzzle People* (1992) and "In a Small Iowa Town" (1988), Thomas R. J. Todd's Breathless (2007), and Kathy E. Magliato's Heart Matters (2010). First, it analyzes how surgeons make intertextual references to speculative fiction, which is understood as an umbrella term that connects different genres with an emphasis "not so much on possible though fictional matters as on events that are impossible under the physical laws and constraints of our ordinary world" (Gill 72). Second, it illustrates how they employ "what if" narratives as a speculative mode to muse about the ways in which transplantation could benefit the world. Interrelating the life writing of surgeons with speculative fiction, this analysis contributes to demonstrating that medical professionals draw on fiction to make sense of surgically altered bodies and engage in speculation to assert the benefits of transplantation.

¹ For an overview of the representation of transplantation in science fiction and the genre's critical function, see Anne Chozinski's "Science Fiction as Critique of Science: Organ Transplantation and the Body" (2016). See also Gavin Miller and Anna McFarlane's "Science Fiction and the Medical Humanities" (2016), Emily Russell's *Transplant Fictions: A Cultural Study of Organ Exchange* (2019), R. D. O'Neill's "Frankenstein to Futurism': Representations of Organ Donation and Transplantation in Popular Culture" (2006). In my monograph *Future T/Issues: Organ Transplantation in Medical and Literary Narratives* (2024), I have traced the relationship between speculative fiction, life writing, and organ transplantation.

Speculative Fiction in Autobiographical Writing

As Emily Russell explains: "Transplant ideology is not only expressed in patient testimony or bioethical debates, it emerges through television medical dramas and sentimental tearjerkers, *People* magazine headlines and monster movies of the week" (25). Thus, not only organ transplantation but also its representation in the fictional realm has a specific history, as the latter has developed over time and has brought forth different tropes. In the genre of horror, for example, recipients may be haunted by the organs' donor (201), while in other instances, transplantation creates new forms of familial kinship or romantic relations (O'Neill 226).

These tropes and storylines, however, are not confined to the realm of fiction but extend into life writing. Autobiographical texts by surgeons are no exception with respect to the influence of fictional narratives. For example, Thomas R. J. Todd's autobiography *Breathless: A Transplant Surgeon's Journal* (2007) engages with the 1980s when the first single and double lung transplantations were successfully performed in Toronto, Canada. In his account, Todd remembers a complication: As a patient's organs began to swell, the medical team chose to leave her chest open, covering it with adhesive tape to relieve the pressure. Therefore, the patient's heart could be seen "beating away through the translucent material" (95). Clearly, the encounter with such a "misty window into the chest" (95) appears challenging to the medical team, who turn to an example of speculative fiction to conceptualize the patient:

In our distress, as we commiserated with each other, someone recognized the resemblance of the chest to the then popular alien in the movie ET. That comment provided the comic relief that was definitely required at that point. Diane will always be remembered in the ICU as "the ET girl." (95)

The reference to Steven Spielberg's *E.T. the Extra-Terrestrial* (1982) appears timely in the context of the 1980s when the film was the highest-grossing motion picture of all time (Chappell). *E.T.* created a paradigm shift by presenting a decidedly harmless alien instead of previous versions of fear-instilling invaders. Spielberg notes: "For the better part of five decades, Hollywood treated aliens as hostile invaders, but I felt that had been done enough. I always regarded the heavens as a source of great solace, curiosity, and wonder...." (qtd. in Gaines 12). The surgeons' assessment mirrors this reading of the alien as not only harmless but as a source of wonder. The reference to E.T. thus builds on creating an analogy: In the case of both the patient and the fictional alien, the usually concealed heart is rendered visible. The heart of the patient can be seen through the translucent material, that of the alien can be seen glowing inside his rib cage. *E.T.*'s optical effects coordinator Mitch Suskin explains: "I realized up front that to get over an audience's natural revulsion toward organs, we'd have to come up with some very warm, friendly innards" (qtd. in Gaines 78). In Todd's anecdote, E.T.'s "friendly innards" function as a vehicle, which not only likens Diane's heart to that of

the alien but soon turns her entire being into an alien Other: She becomes "ET girl." Here, the post-operative patient – whose organs are displayed – is intertextually linked to the alien and is no longer described using medical terminology.

While the renaming of Diane as "ET girl" is an intertextual reference to Spielberg's film, it also resonates with the significance of metaphors in medical practice and illness narratives. Although Susan Sontag has argued that science fiction imagery may contribute to an understanding of a patient with an illness as alien (68), Anita Wohlmann shows that metaphors hold creative potential, and "continued use is possible because new meanings and uses can emerge from even the tritest metaphors" (77). Central to such processes of reclaiming, however, is also who employs a given metaphor. Wohlmann postulates that "[a] lingering question concerns the problem of agency: Who exactly is doing the work of reusing metaphors?" (189). In *Breathless*, Diane is turned into "ET girl" and does not choose the reference herself. The impact of reframing the passive patient as alien, and thus as interesting, is palpable: Her room becomes a site of spectacle. Todd recalls: "The unit and indeed the whole hospital buzzed about ET. There was a regular queue outside the window of her room, and we had to mount extra security to prevent too much of a sideshow atmosphere" (97). A certain tension arises regarding the reference to E.T.: While in Spielberg's film the miraculous alien needs to be hidden from prying eyes, the use of "ET girl" has the inverse effect in Todd's hospital, as it renders the extraordinary patient overtly visible.

The reference to the speculative text thus does not retain its role as a source of relief in a moment of distress, nor is it used merely to frame the patient as vulnerable and in need of protection or seclusion. Instead, it becomes an attribute that defines the patient's role as a foreign form of life, as a spectacle to be looked at. As I have noted elsewhere (10), the reference to speculative fiction offers an alternate frame of meaning-making, a frame that distances the patient from her identity as human and imagines her as an alien in need of human assistance. Interestingly, this shift does not function analogously to Sontag's argument that sick patients (cancer patients in particular) are seen as alien because their body is being invaded by "mutant" cells (68). In Diane's case, it is a surgical intervention and its narrative framing that "create" "ET girl." In other words, not her prior illness but the surgeons' employment of translucent material invites the intertextual reference to Spielberg's alien, and it is the surgeons themselves who reframe their patient in these terms. While speculative fiction has been understood to create awareness in the public about scientific advancements (Gerhard), this example, through life writing, hints at the ways in which medical professionals are also impacted by and deliberately refer to speculative fiction in an effort to make meaning of surgically changed bodies.

Heart surgeon Kathy E. Magliato's memoir Heart Matters: A Memoir of a Female Heart Surgeon (2010) offers another example of how references to speculative fiction are used in surgeons' life writing. This text uses the figure of the cyborg as it describes the implantation of an artificial heart and clarifies: "The human heart has to be prepared to accept the machine [the artificial heart] and the machine has to be assembled in such a way as to be accepted by the heart" (155). Here, humans and machines are paired, as both become part of medical intervention and preparation. Recalling the development of her program focused on artificial hearts, Magliato recounts the story of a patient, Lindsey, whom she understands to be key to the program's success. In a chapter titled "The Bionic Woman," Magliato imagines Lindsey as the titular "bionic woman" (157). Even though, in contrast to Todd's direct reference to E.T., Magliato does not further elaborate on the phrase, its use evokes a speculative text of the same name, namely the successful television series The Bionic Woman (1976-1978), in which a young woman receives bionic implants that grant her superpowers, specifically advanced hearing, strength, and speed. Commenting on the series, Donna Binns observes that "[t]he bionic man and woman represent an early television look at the complications of becoming both human and machine" (90). This perspective aligns with Magliato's reflection on the fusion of humans and machines: Both her memoir and the television show explore the intersection of the human and the mechanical.

While the label "bionic woman" distances the post-operative human from her preoperative self, it does not turn Lindsey into an alien. Instead, it allows for interpreting her as superhuman. Importantly, being a cyborg in the series is a trait that viewers are invited to aspire to, and Herbie J. Pilato notes that "[a]ll these years later, one thing remains indelibly true: these shows were fun. It should be fun to be bionic, and it was" (loc. 117). Magliato's framing of the recipient of bionic implants might present Lindsey as different, yet it suggests a gain in her agency, power, and even the mere "fun" of being alive. The transplant story becomes the ultimate success story: Surgical intervention has turned the patient into a "bionic woman," a superhuman who inspires Magliato's readers. As a result, readers may feel inclined to understand Magliato's work in line with the doctors in the series who turn the accident victim Jamie Summers into a bionic woman. Magliato's use of "bionic woman," specifically when read in the framework of the television series, suggests that surgical intervention and the implantation of an artificial heart have changed Lindsey in the eyes of the surgeon: Lindsey no longer appears completely human. Similar to Todd's use of "ET girl," surgical intervention functions as an agent of transformation; in Lindsey's case, this results in the shift from human to "bionic woman." Reading Magliato's use of "bionic woman" in its intertextual relation to a speculative text and its pop cultural significance illustrates the ways in which fictional stories of enhancement can impact the conceptualization and narrative framing of people who use prosthetic devices.

Magliato's use of "bionic woman" can also be understood as positioning her patient's abilities beyond those of common humans, given that the referenced fictional character's bionic body is supernaturally strong and fast. An understanding of the post-operative patient in these terms resonates with the "supercrip" narrative, in which people with disabilities are shown to overcome their disability and, thus, become a source of inspiration. Carla Filomena Silva and P. David Howe explain: "Supercrip narratives can be considered to be an expression of society's low-level expectation placed upon people with disability, which ultimately perpetuates the understanding of their existence as a 'problem'" (175). Magliato's use of "bionic woman" can be brought into conversation with these narratives. After the artificial heart starts to fully work in her chest, Lindsey is no longer in need of assistance, and Magliato remarks: "With each step that Lindsey took, she grew stronger and my MAD [Medical Assist Device] program grew stronger" (157). Lindsey's personal improvement is linked to the program that facilitated her survival and turned her into a "bionic woman." The patient's resilience is intertwined with the series' framing of the transplant narrative as a triumph over previous limitations – a narrative that runs the risk of evoking the supercrip storyline.

The influence of speculative texts on the development of prosthetic devices that is at stake here also becomes evident in other instances, for example, in the design of a prosthetic arm by the non-profit Limbitless Solution, which drew inspiration from the Marvel Cinematic Universe (MCU). In a promotional video (2015), the fictional Tony Stark (Robert Downey Jr.), the tech-savvy entrepreneur behind the superhero Iron Man, is shown visiting the 7-year-old Alex, who has a partially developed arm, to deliver a prosthesis which was modeled after the suit worn by Iron Man (Objective 3D). In her analysis of the marketing campaign, Susan Smith explains that it perpetuates the supercrip stereotype and "problematically portrays an impaired child 'in need' of 'repair' and subsequently 'fixed' by technology" (259). The supercrip narrative can thus also present a shift that is facilitated by the implantation of technology: People with disabilities or chronic illnesses are narrated as a "before" version of their later, fully developed selves. With regard to Magliato, it becomes apparent that Lindsey is conceptualized as human prior to her surgery and as a "bionic woman" after it. While Magliato may understand the label as a compliment - a compliment also directed at herself as the yielder of the life-saving technology – she also suggests that, similar to Alex, Lindsey has been "fixed' by technology" (Smith 259). Limbitless Solution's reference to a character from the speculative world of the MCU may be expectable, given that elements reminiscent of speculative texts are often used in reports on biotechnological progress,²

² The employment of elements borrowed from speculative fiction in news reports on organ transplantation are manifold, for instance, already in 1963, an article in *Time* featured a description of an operating room in which "[t]he grey-gowned figure in charge looks like a visitor from another planet. Between skull cap and mask, his head sprouts a startling pair of binocular spectacles" ("Surgery: The Best Hope of All").

yet Magliato's use of "bionic woman" suggests the permeable boundary between the life writing of medical professionals and speculative fiction.

These examples thus illustrate that references to speculative fiction can express the transgressive force of surgical intervention and frame their patients as different from their pre-operative selves. The references posit possibilities and challenges that relate to the use of metaphors in the medical realm. They may run the risk of dehumanizing patients: The use of "ET girl," for instance, turns a patient into a spectacle through the narrative rendering of a medical intervention intended to facilitate her healing. In the discussed cases, elements borrowed from speculative fiction are used to assess patients from the surgeons' perspectives, a tendency that resonates with Wohlmann's reading of institutionalized metaphors: "And when metaphors are institutionalised or become associated with a hegemonic cultural discourse, they can be instrumentalised in power dynamics between the 'definers' on the one hand and the 'defined' on the other" (27). Although the discussed references to speculative fiction cannot be understood as "institutionalised," they have become part of a hegemonic discourse of doctors speaking *about* their patients. Tying into Wohlmann's argument regarding "definers" and "defined," patients are thus understood to be changed by surgery and defined by the labels they receive from their surgeons. The use of "ET girl" and "bionic woman" shows that speculative elements enter physicians' life writing and give concrete form to abstract and complex readings of the human body changed by transplantation.

What If ...?: The Alternative Worlds of Transplantation

Another way in which surgeons' autobiographies engage in practices of speculation concerns their construction of alternative pasts and presents by deploying "what if" narratives. By wondering "what if" and speculating about days yet to come (whether from a vantage point in the present or in the past), surgeons' life writing also uses a mode that is commonly associated with science fiction. The pursuit of "what if" as a fundamental guiding question presents an entryway into the speculative mode that is shared across fictional and non-fictional genres and forms of writing. Tracing the role of speculative thought in physicians' life writing, the following discussion focuses on autobiographical texts by two surgeons: Thomas Starzl's "In a Small Iowa Town" (1988) and his memoir *The Puzzle People: Memoirs of a Transplant Surgeon* (1992) and Kathy E. Magliato's already discussed *Heart Matters*.

As late as 1988, more than twenty years after the first heart transplantation had made headlines in 1964, Thomas Starzl remarked about organ transplantation: "How new this field really is, and how unexpected" ("Small Iowa Town" 12). Starzl, who was the first to successfully transplant a liver in 1967 and who has been called "the father of modern surgical transplantation" (Black et al. 409), still assesses transplantation

as utterly novel. This reading of the practice as cutting-edge is further substantiated by surgeon Bud Shaw, who recalls a conversation in 1983 in which Starzl explains: "You're riding a rocket ship to the stars, you know. The sky's the limit. Shit, the limit's beyond the sky" (170). This hints at the way in which the perceived boldness of transplantation turns the practice into a part of an imagined, technologically facilitated future: Medical practice itself becomes a "rocket ship," a novum of technological progress promising hope for patients.

Starzl had already established the ties between transplantation and a medically advanced future at the annual session of the American College of Physicians in 1967, where he argued that many advances in transplantation were "fed by the needs and wishes of desperate patients who had the misfortune of not becoming ill at a later and more convenient time" (The Puzzle People 164). This "later and more convenient time" is a compelling vision of a future in which transplantation already produces dependable results. Following this vision of the future as a more "convenient time" to be requiring medical assistance, Starzl speculates about the future as a realm of possibilities in which the death and suffering the surgeon has witnessed is made obsolete. He thus remembers his colleague's child, a "beautiful daughter, who died in childhood of a disease that would not have been fatal if it had come a few years later" (The *Puzzle People* 183). What was once a deadly disease ceases to be one in the (respective) future: Speculation opens an imaginative space for alternate histories in which medical treatment, and transplantation in particular, change the course of past events. Here, transplantation itself can be understood as a novum in Darko Suvin's sense "as an important deviation from the author's norm of reality" (36). This unprecedented development offers the basis for the surgeon's thought experiment and presents a beneficial force in the lives of those fortunate enough to be born after its establishment.

It is also noteworthy just who Starzl imagines benefitting from transplant practices: By speculating how transplantation could have impacted past events, he envisions alternate life courses shaped by the practice's existence. In "In a Small Iowa Town," the surgeon muses about how the introduction of the immunosuppressive drug cyclosporine made transplantation easier and triggered further speculation:

To many physicians, thoughts turned back to what might have been. How much more complete might the world have been if Mozart had been treated with renal transplantation instead of dying of glomerulonephritis at the age of 34. Or, closer to home, what might have become of that little girl so mourned by Father O'Toole 50 years ago in a small town in Iowa. The people who could be most helped by transplantation were those with the greatest potential, often at a young age, who had been doomed by failure of a single organ system but with all other organ systems intact. Now, they could be saved. It was like a miracle. ("Small Iowa Town" 12–13)

Starzl constructs an alternative history that reinterprets the past, positioning transplantation as the novum within a speculated past. How might the world have changed, he wonders, if transplantation had been there at an earlier time to make it "more complete"? Starzl's phrasing suggests that the world is made "more complete" by the survival of people "with the greatest potential," among them are two individuals: Wolfgang Amadeus Mozart and a young, unnamed girl. Dying young, they function as the epitome of innocent and promising lives being lost. Mozart, the "Wunderkind," and the unnamed girl have died before their time, a wrong that could now be righted by transplantation. Moreover, the girl's death and the priest's grief introduce the impact of transplantation on an utterly private and intimate level, inviting empathy while also implicitly alluding to Christian beliefs and family values. Moreover, both the unnamed girl and Mozart can be presumed to come from educated households and are products of Western upbringing. While they are thus part of a specific part of the world and social sphere, their survival is portrayed as universally beneficial. In effect, the artist and the girl's "potential" contributes to a speculated world that is more "complete" due to the novum of transplantation as a beneficiary force.

While Starzl was one of the pioneers of transplant practices, the tendency to wonder "what if" cannot be reduced to transplantation's early days. In 2010, Kathy E. Magliato follows a similarly speculative approach when musing in *Heart Matters*:

One donor can change – no make that *save* – the world. What if the recipient of that lung goes on to find the cure for cancer? What if the recipient of that kidney goes on to develop the alternative clean energy source that can power all forms of transportation? What if the liver recipient achieves world peace? (176, original emphasis)

It is interesting to note that Magliato, too, presents people who might make the world more "complete," to echo Starzl's framing ("Small Iowa Town" 12). The crucial difference with her imagined individuals is, however, that their potential survival appears to relate solely to global benefit: By focusing on cancer-curing, alternative energy sources, and world peace, Magliato imagines the contributions of transplant recipients as deeply intertwined with global welfare and as extending beyond the boundaries of medicine. Ultimately, these speculative future people survive because of the organ donation of one person, and this donor, Magliato comments, has in fact saved the world. The donor - and the practice of organ transplantation - then, are speculated to have changed the course of history and to have shaped a world of tomorrow. As I have argued elsewhere (101), the imagined impact of transplantation is solely beneficial: The patients saved by the practice not only go on to live what can be assumed to be fulfilled lives, they also actively change the world for the better. In this fantastical narrative, Magliato, somewhat unsurprisingly, refrains from alluding to, for instance, the financial strain of long-term medication (Elshiekh et al. 49). Nor does she mention that organ transplantation can also facilitate organ markets which are

linked to structural inequality. As interviewees in Nancy Scheper-Hughes's study in Brazil and South Africa observe, there is a tendency of "organs moving from poor and black bodies . . . for transplantation into more affluent white bodies" (10). Instead, transplantation appears as a force that moves the world solely towards global benefit, given that a recipient may "achiev[e] world peace." The imagined recipients, it can be concluded, are not supposed to present an average group of people, or, possibly, include a person whose survival could be destructive to the imagined better world of tomorrow. The surgeon's world of tomorrow is thus ripe with developments discussed in speculative fiction: It boasts clean energies, no cancer, and world peace. This future is based on medical intervention, the willingness to donate, and an exceptional group of people who have received medical treatment. In effect, this exceptional group may also be read as specifically deserving of the medical care they have received. In Magliato's future, then, transplantation is introduced as a universally beneficial practice that functions independently from any socio-political markers that may impact the practice in her present.

By wondering "what if" and specifically by imagining who might be saved by transplantations and their impact on a more "complete" ("Small Iowa Town" 12) world of tomorrow, Magliato and Starzl thus illustrate the underlying significance of speculation for medical practice, invention, and motivation. As transplantation becomes possible, Starzl muses about time as a tragic element: It is patients not falling ill at a more "convenient" time that proves to be fatal, rather than their illness. By focusing on the impact of one donor on the imagined grandeur of those saved by transplantation, Magliato suggests that organ donation contributes solely to a greater, universal good, without accounting for the more ambivalent socio-political realities in which the practice is also embedded.

Conclusion

This article has shown that speculation shapes surgeons' life writing and their perception of their field. It ties into Gavin Miller and Anna McFarlane's understanding that "[s]cience fiction clearly matters to medicine" (213) and shapes the minds of those invested in medical practice. Even though organ transplantation had become an established practice by the time the works discussed in this article were penned, it continues to be imagined as a radical novum in these texts. Firstly, it has become apparent that surgeons intertextually draw on speculative fiction in different forms and with different impacts: Todd's reference to *E.T.*, for instance, illustrates that popular narratives impact those invested in the medical practice and offer a frame of meaning-making beyond medical explanation. While these references to speculative fiction serve as shortcuts to denote the complex alterations that transplantation causes in patients' bodies, they also run the risk of dehumanizing post-transplant

patients or of unknowingly perpetuating stereotypical understandings of the post-transplant body. Secondly, the readings have revealed the speculative potential of wondering "what if" in surgeons' life writing. Here, the imagined futures brought about by transplantation are understood to be, as Starzl phrases, more "complete" ("Small Iowa Town" 12), and people saved by transplantation are imagined contributing to a better world. Thus, the novum of transplantation is removed from sociopolitical contexts and imagined as a purely beneficial force that serves the universal good. Magliato, wondering whether an organ donor might make world peace possible, presents a comparatively clear-cut version of a future shaped by transplantation. The fact that her imagined recipients contribute to universal good may even frame them as being specifically deserving of the medical care they receive.

This prevalence of speculation emphasizes medicine's position within a specific cultural framework and suggests that transplantation is not only a medical procedure but also a cultural practice. Thus, transplantation is not only connected to the availability of technology, for instance, the heart-lung-machine, or pharmaceutical developments, such as the release of the immunosuppressive drug cyclosporine, it is also tied to a specific understanding of the body. This body, accordingly, can be understood "as simultaneously a physical and symbolic artifact, as both naturally and culturally produced, and as securely anchored in a particular historical moment" (Scheper-Hughes and Lock 9). The employment of elements from speculative texts makes visible how fictional texts reveal but also contribute to the cultural establishment of the body. Speculative fiction, then, does not merely serve as a mirror for ongoing developments in the life sciences but offers frameworks in which medical professionals think and create alternative frames of meaning-making.

By tracing the presence of speculation in doctors' life writing, this article suggests the significant and long-lasting impact of speculative fiction and underlines its ability to create ripples across disciplinary boundaries. As I have also suggested elsewhere (4), speculation appears as a mode that surpasses barriers between fictional and non-fictional writing. A focus on speculation connects seemingly different texts and emphasizes their shared strategies: By wondering "what if," surgeons' life writing mobilize Rogers's "cognitive provisionality" (4). Even though they present accounts of medical practice, they simultaneously envision alternative worlds that deviate from the present and that are shaped by what surgeons imagine to be the eternal novum of organ transplantation.

Acknowledgements

This article builds on research developed in the Collaborative Research Center 1482 "Studies in Human Differentiation," which is funded by the German Research Foundation (DFG) based at Johannes Gutenberg-University Mainz, Germany, and on earlier work developed during my doctoral studies in the Graduate Training Program "Life Sciences – Life Writing," also funded by the DFG at Johannes Gutenberg-University Mainz.

About the Author

Ruth Gehrmann (she/her) is a postdoctoral researcher at the Obama Institute for Transnational American Studies at Johannes Gutenberg-University in Mainz, Germany, and a member of the Collaborative Research Center "Studies in Human Differentiation" at Mainz. Her work focuses on the significance of age as a marker of differentiation with a particular interest in the representation of age-related processes in pop culture and new media. Her dissertation explored organ transplantation in the life writing of surgeons and speculative fiction. A revised version was published as *Future T/Issues: Organ Transplantation in Fictional and Medical Narratives* (De Gruyter, 2024).

Peer Review

This article was reviewed by the issue's guest editors and one external reviewer.

Disclosure Statement

No potential conflict of interest was reported by the author.

Works Cited

Binns, Donna. "The Bionic Woman: Machine or Human?" *Disability in Science Fiction: Representations of Technology as Cure*, edited by Kathryn Allan, Palgrave Macmillan, 2013, pp. 89–101.

Black, Cara K., et al. "Solid Organ Transplantation in the 21st Century." *Annals of Translational Medicine*, vol. 6, no. 20, Oct. 2018, p. 409. *PubMed*, doi.org/10. 21037/atm.2018.09.68.

Chappell, Caitlin. "Steven Spielberg Directed the Highest Grossing Movie Ever 42 Years Ago Before He Broke the Record Again." *ScreenRant*, 16 Dec. 2024, screenrant.com/steven-spielberg-et-highest-grossing-movie-record-jurassic-park-broke-box-office-factoid/.

- Chozinski, Brittany Anne. "Science Fiction as Critique of Science: Organ Transplantation and the Body." *Bulletin of Science, Technology and Society*, vol. 36, no. 1, Feb. 2016, pp. 58–66, doi.org/10.1177/0270467616636198.
- Elshiekh, Cleopatra, et al. "Financial Challenges of Being on Long-Term, High-Cost Medications." *Neuro-Oncology Practice*, vol. 12, no. 1, Jan. 2025, pp. 49–58, doi.org/10.1093/nop/npae098.
- Frist, William H. *Transplant: A Heart Surgeon's Account of the Life-and-Death Dramas of the New Medicine*. Atlantic Monthly P, 1989.
- Gaines, Caseen. E.T. The Extra-Terrestrial: The Ultimate Visual History. Titan Publ., 2022.
- Gehrmann, Ruth. *Future T/Issues: Organ Transplantation in Literary and Medical Narratives*. De Gruyter, 2024.
- Gerhard, Danielle. "How Speculative Fiction Expands Scientific Horizons." *The Scientist*, 29 Mar. 2025, https://www.the-scientist.com/how-speculative-fiction-expands-scientific-horizons-72855.
- Gill, R. B. "The Uses of Genre and the Classification of Speculative Fiction." *Mosaic: A Journal for the Interdisciplinary Study of Literature*, vol. 46, no. 2, 2013, pp. 71–85.
- Magliato, Kathy E. *Heart Matters: A Memoir of a Female Heart Surgeon*. Three Rivers P, 2010.
- Miller, Gavin, and Anna McFarlane. "Science Fiction and the Medical Humanities." *Medical Humanities*, vol. 42, no. 4, Dec. 2016, pp. 213–18, doi.org/10.1136/medhum-2016-011144.
- Objective 3D. "Objective3D: The Collective Project Robert Downey Jr Delivers a Real Bionic Arm." *YouTube*, 26 Oct. 2015, youtu.be/jD4pouY4sgQ?feature=shared.
- O'Neill, Robert D. "'Frankenstein to Futurism': Representation of Organ Donation and Transplantation in Popular Culture." *Transplantation Reviews*, vol. 20, 2006, pp. 222–30.
- Pilato, Herbie J. *The Bionic Book:* The Six Million Dollar Man *and* The Six Million Dollar Woman *Reconstructed*. BearManor, 2015.
- Rogers, Gayle. Speculation: A Cultural History from Aristotle to AI. Columbia UP, 2021.
- Russell, Emily. *Transplant Fictions: A Cultural Study of Organ Exchange*. Palgrave Macmillan, 2019.
- Scheper-Hughes, Nancy. "Theft of Life: The Globalization of Organ Stealing Rumours." *Anthropology Today*, vol. 12, no. 3, 1996, pp. 3–11, doi.org/10.2307/2783143.

- Scheper-Hughes, Nancy, and Margaret M. Lock. "The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology." *Medical Anthropology Quarterly*, vol. 1, no. 1, 1987, pp. 6-41.
- Shaw, Bud. Last Night in the OR: A Transplant Surgeon's Odyssey. Plume, 2015.
- Silva, Carla Filomena, and P. David Howe. "The (In)Validity of *Supercrip* Representation of Paralympian Athletes." *Journal of Sport and Social Issues*, vol. 36, no. 2, May 2012, pp. 174–94, doi.org/10.1177/0193723511433865.
- Smith, Susan. "Limbitless Solutions': The Prosthetic Arm, Iron Man and the Science Fiction of Technoscience." *Medical Humanities*, vol. 42, no. 4, Dec. 2016, pp. 259–64, doi.org/10.1136/medhum-2016-010963.
- Sontag, Susan. Illness as Metaphor. Vintage, 1977.
- Starzl, Thomas E. "In a Small Iowa Town." *Transplantation Proceedings*, vol. 20, no. 1, 1988, pp. 12–17.
- ———. The Puzzle People: Memoirs of a Transplant Surgeon. U of Pittsburgh P, 1992.
- "Surgery: The Best Hope of All." *Time*, 3 May 1963, content.time.com/time/magazine/article/0,9171,828174,00.html.
- Suvin, Darko. "The State of the Art in Science Fiction Theory: Determining and Delimiting the Genre." *Science Fiction Studies*, vol. 6, no. 1, 1979, pp. 32–45.
- Todd, Thomas R. J. Breathless: A Transplant Surgeon's Journal. General Store, 2007.
- Wohlmann, Anita. *Metaphor in Illness Writing: Fight and Battle Reused*. Edinburgh UP, 2022.