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*Schismatrix and the Posthuman: Hyper-embodied Representation*

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*Abstract: This paper argues that the “posthuman” is a dominant trope for SF, providing a justification for trans-and-posthumanist SF as inherently fantastic. To do so, it reads Bruce Sterling's Schismatrix stories as offering trans-and-posthuman representations definitive for twenty-first century SF, ones in which embodiment and materiality are prized over disembodied forms. Ultimately, these foundational stories represent posthumans within the context of the modern fantastic, an impulse in modern studies that foregrounds the increasingly imaginary elements defining contemporary, Western culture.*

*Keywords: Science Fiction, Posthumanism, Transhumanism, Fantasy Studies, Schismatrix, Bruce Sterling.*

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Posthumanism is a theoretical concept utilized with most sophistication by professional academics in a variety of disciplines from continental philosophy and critical theory to bioethics and visual art.<sup>1</sup> Broadly, a consensus drives theorists of posthumanism in critiquing the Enlightenment Project's narrow view of the human, one that has been challenged on a number of fronts, from the nineteenth century Romantic critique of Reason, to Darwin's assault on humanity's special providence, to Nietzsche's dismantling of core philosophical assumptions in Western culture, to Freud's displacement of the rational subject, to others that followed in the twentieth century. While such revisions are critical in understanding a sensible view of the human, less theoretical but highly textured articulations arrive via the multifaceted genre of science fiction.<sup>2</sup> In it, the philosophy of posthumanism retreats behind the impressionistic drawing of technological transhumans and, often, posthumans.

This paper investigates one early attempt at fusing the visual representation with the language of the posthuman, that found in Bruce Sterling's Schismatrix stories. These have been influential, although little acknowledged. In fact, while later writers such as Iain Banks, David Brin, Charles Stross, among others, have added to the picture, Sterling's most impressive feat is in representing hyper-embodied posthumanity. Embodiment in this context derives from grounding work pioneered by thinkers such as Francisco Varela, George Lakoff and Mark Johnson, Andy

<sup>1</sup> For a few key critical monographs, see Braidotti; Herbrechter; Wolfe; Badmington; Hayles. Also, for a look into how the discourses are screened, see Carbonell, Hauskeller, and Philbeck. For a succinct cartography of the major concepts, see Sharon.

<sup>2</sup> Henceforth, SF.

Clark, and numerous others who have reworked the computational theory of mind for one that views the material mind inherently defined by bodies and environments. For example, “embodiment” as a concept within the science-of-mind popularized by Clark in monographs such as *Supersizing the Mind* (2010) and *Natural-Born Cyborgs* (2003) means that the body “extends” mind into the world; thus, the tools we use become part of this embodiment process.

Of course, for decades philosophical embodiment and materiality have been situated within the purview of cultural philosophers, such as the phenomenology of Maurice Merleau-Ponty or the genealogical work of Michel Foucault locating the body as the central domain of disciplinary power. In posthumanism, following initial work by Donna Haraway, N. Katherine Hayles fired a shot over the bow of techno-fantacists when she critiqued how “information lost its body” (2) to challenge the idea that selves can exist in disembodied form. For Hayles, and others, embodiment is necessary for any construction of the human, especially those mediated by technology (Hayles 288).

Definitions of posthumanism typically fall either within a camp derived from critical and cultural theory, often called critical posthumanism, or within popular posthumanism, also called transhumanism. The former seeks ways out of problems with humanism, in particular, what it sees as entrenched dualisms reaching back to Cartesian philosophy. The latter views the human body as needing enhancement, technology being the best solution. Embodiment in both the critical and popular forms is important. For example, the discourse of posthumanism emerges as different ontological rhetorical positions, such as the Deleuzian subject as a rhizomatic body without organs (one leading form of critical posthumanism), to the post-biological human (critiqued by Hayles as a posthuman nightmare of disembodied posthumanity), to a world defined by the post-anthropocene (an era in which humanity has been superseded).

In the critical camp, posthuman subjects do not directly try to enhance or better their traditional human conditions but alter them for a variety of cultural, ethical, philosophical and ludic reasons that allow for new subject positions, new modes of being. In many ways we already have such incipient posthumans, their identities distributed across a wide range of networks, their bodies beginning to be changed by wearable and implantable technology, their selves ever shifting. We are, involuntarily, on this road. Untangling the varied articulations is difficult because critical posthumanism rubs shoulders with the popular form in its focus on technology. Transhumanism, a type of hyper-humanism, would continue the normative identities detailed during the Enlightenment, yet do so to such a degree these persons would clearly be advanced over unenhanced humans. In its discourse, it posits posthumans as the ultimate endpoint of such enhancement. We see this most clearly in SF and in real-world policy-making, bio-ethics discussion, and engineering circles.<sup>3</sup>

## SF and Fantasy

This paper argues that a focused reading of Sterling's *Schismatrix* stories reveals the posthuman to be a dominant trope in contemporary SF's modern fantastic. It works from a particular view of trans-and-posthumanist SF as inherently fantastic, especially when considering tropes like the posthuman. The recent emergence of modern SF has garnered much critical attention in the academy, yet even vetted SF is best viewed as a subset of the fantastic that formed with the science romances of Edgar Allan Poe, H.G. Wells, and Jules Verne, among others, as well as the adventure romances of Robert Lewis Stevenson, H. Rider Haggard, Sir Arthur Conan Doyle, Rudyard Kipling, Bram Stoker, and others, the sorts of imaginative texts that comprise a literary foundation for science fiction and fantasy's increasingly important role in defining contemporary culture.<sup>4</sup> From a literary frame, this article views the genres of the modern fantastic flourishing due to the perceived failure of literary realism as the arbiter of articulating the human condition, a failure

<sup>3</sup> For a recent, comprehensive attempt to disentangle the discourses, see Ranisch and Sorgner.

<sup>4</sup> See Saler for a current examination into the rise of virtual worlds that are part of Modernity's ronic enchantment.

refracted in tensions over wider complexities within the modern crisis from increasing materialism to mechanization.<sup>5</sup>

To begin my critique of Sterling's under-theorized but sharply drawn representations of posthumans, I ground my use of fantasy in Kathryn Hume's insightful *Fantasy and Mimesis: Responses to Reality in Western Literature* (1985). Fantasy as a foundational type of fiction is a recognizable descendant of what Hume calls a "blindspot . . . a long shadow" (6) that began in the West with Plato and Socrates' critique of the fantastic. Her argument is that Socrates and classical philosophers put the fantastic on the run by tearing "a hole in western critical consciousness," ultimately creating a "critical void" (xii–xiii). For Hume, her correction is in seeing the schema of mimesis and fantasy as two impulses that work together in fiction, one sometimes weighted more heavily than the other. She charts the earlier failure of mythos as critical in allowing a triumphant realism, a failure due to the skepticism of Socrates toward traditional mythology and later due to the Enlightenment's critique of Christianity. This myopia was a short-lived victory because literature is about human experience, both the rational and the irrational. Fantasy, according to Hume, emerges through tensions with an upstart realism that refuses to admit its weaknesses. Her approach strides beyond socio-economic marketing-and-publishing explanations to view fantasy as a fundamental impulse emerging in a variety of literatures. In particular, SF has become such a borderless phenomenon that Hume's recognition of the fantastic and the mimetic working together reorients the reader toward trans-and-posthumanist SF as inherently fantastic (see chapter 2 for Hume's historical perspective).

Literary scholarship's attempt to challenge the denigration of fantasy has been an ongoing project rooted in apologetics, yet one characterized by a diffusion of idiosyncratic approaches, such as the argument that a fantasy must be a convincing true world, and one that, with a touch of the divine, brings consolation and joy to the reader; to the insistence that an unexplainable "hesitation" occurs when we encounter the fantastic, an unstable place residing between our understanding of an uncanny, natural world and a marvelous, supernatural one; to the idea that fantasy moves beyond the marvelous or the fantastic to reveal subversive positions of desire; to a recent formalist schema of fantasy defined by how it enters the narrative as either a portal quest, an immersive fantasy, an intrusive, or a liminal one. [note 6]<sup>6</sup>

In terms of genre, most thinkers read Bruce Sterling's *Schismatrix* stories as a SF blend of cyberpunk and space opera, with a focus on a near-future earth. But Veronica Hollinger notes that "*Schismatrix* (1985) [is] one of the earliest sf scenarios consciously to construct its characters as 'posthuman' and to explore some of the implications of the term" (269). Hollinger's recognition demonstrates that the genre of trans-and-posthumanist SF had yet to emerge. Most criticism, though, sidesteps the fantastic posthuman for genre or structural commentary. Larry McCaffery calls *Schismatrix* "Sterling's radicalized antinovel" (211) because of its staccato style full of structured "disruptions" (229). Moreover, in an interview with McCaffery, Sterling himself provides a helpful way to conceptualize the novel as three mini-novels, each reflecting the major modes of space opera. Part one is an adventure story in the vein of the pulps, part two follows the tradition of social interaction, and part three concerns the mystical move into "Clarkean transcendence" (McCaffery 228). Other thinkers, like Norman Spinrad see the *Schismatrix* stories reflecting a natural process whereby human space colonization splinters microworlds into differing environments much as evolutionary mechanisms have splintered biological organisms into their differing classificatory groups (132–133). This evolutionary process, of course, is technological in the imagination of Sterling when representing humanity's proliferation in a future world of space exploration, a fitting naturalistic analogy that works well in the novel.

Sherryl Vint provides an extended reading of the *Schismatrix* stories related to the posthuman and embodiment. She sees Sterling's contribution as valuable in positing a posthumanity

<sup>5</sup> See Roberts for a focus on increasing materialism and Luckhurst for mechanization.

<sup>6</sup> See Tolkien; Todorov; Jackson; Mendlesohn.

focused on change. Her reading is part of a project to insert an ethical understanding of how embodiment embeds bodies in materiality. "Giving up old categories when they no longer serve rather than defending them against inevitable change is the mark of posthumanism" (Vint 175). While Vint views embodied change as the core aspect of Sterling's posthumanism, I focus on his imagined embodied subjectivities as radical representations. Thus, the type of imagined multiplicities of bodies found in SF fiction like the Schismatrix stories foreground subject formation as a key process in understanding the posthuman, one that reflects an inherent modern fantasism that Sterling refuses to admit or adhere to because it would undermine his work as SF, rather than fantasy.

## Schismatrix

These representations of hyper-embodied posthumans begin with "Spider Rose" (1982), the earliest of the Mechanist/Shaper stories, wherein Sterling has not yet defined the term "posthuman." Within the Schismatrix stories, he mentions "posthumanism" in "Cicada Queen" (1983) when he defines it as "a metaphysic daring enough to think a whole world into life" (274). This conceptualization is within the discourse of technological transhumanism (a form of hyper-humanism) and, for Sterling, its imagining of future humans performing grand, planet-changing projects.

However, some thinkers find Sterling's SF representations of these trans/posthumans highly dissatisfying. For example, Bruce Clarke challenges Sterling for encouraging a naive acceptance of the Western, liberal subject. Clarke focuses his critique on Sterling's use of aquatic posthumans who will inhabit the terraformed moon of Jupiter, Europa, claiming that these creatures are "anything but posthuman" (161) because, according to Clarke, they represent the ideal of the rugged, self-sufficient individual. In Clarke's reading, key tenets of humanism are strengthened and valued in the stories. What is happening here with Clarke, and so much of critical posthumanism, is a refracting of the concept into a specialized tool that challenges the Enlightenment Project's constructed notion of the human (and all its faults).

Sterling's use of the posthuman, like those that derive from SF studies, often work outside these narrow parameters. In fact, for thinkers like Sterling, the "posthuman" is a technologically constructed subject rather than a philosophical posture. What we see with Clarke and much of critical posthumanism are political positions on a continuum of antihumanisms; however, an actualized posthumanism like that seen in SF might function more like the nonhumanism of object-oriented philosophy found detailed in Bryant, Harman, and Srnicek's *The Speculative Turn* (2011), an approach that seeks an ontology of things without the Kantian blinkers of the phenomenal world, a truly daunting task for any artist or writer wishing to draw such representations. Such challenges negate the traditions of Renaissance humanism and the articulations in the Enlightenment, as well as Jacob Burckhardt, Wilhelm Von Humboldt, and Matthew Arnold's nineteenth century reimagined humanisms (see Davies).

We should note, though, that Sterling's Shaper/Mechanist stories maintain a stable humanist core, most importantly, one that reaffirms the traditional preference of life over death. The novel begins with the most tragic of human literary themes: suicide. Sterling's young protagonist, Lindsay Abelard, is a Preservationist. He lives aboard a lunar orbiting world where he dreams of salvaging old-Earth culture prior to the fragmenting of humanity in space. Sterling writes that Lindsay watches his love, Vera, who flies high above him in a glider. She nose dives into the ground, ending her life in a grand existential gesture that agency is exemplified by taking one's own life. In a nod to Hamlet, as well as to Romeo and Juliet, Sterling writes of Lindsay's desire to follow his love to the grave. But Lindsay is sent to another orbiting world where he begins his journey away from petty human desires into a variety of posthuman existences. The tension, though, between normative human values and those offered within the new posthuman, Schismatrix solar system emerges along a few key thematic lines.

For example, suicide also features into the final scene between Lindsay and the antagonist, Philip Constantine, Lindsay's old friend who once espoused Preservationist values but exchanged these for the thrill of conquest and human ambition. Constantine has been living as a wounded person since losing a duel with Lindsay. At this point, Constantine's life has been salvaged, but he exists in a liminal place between life and death. After years of recovery, he has forsaken his old ambition and is ready to die. He will take his life, but not before correctly stating that Lindsay will never follow the path of those who want to create aquatic posthumans. Lindsay will step aside at the last moment, which Lindsay does, choosing a much more mysterious path. The reason for Constantine's skepticism is that Lindsay has been a "sundog," a solar-system nomad, ever since he failed to kill himself, always surviving when danger crept too close. This adaptability is a key attribute of Sterling's protagonist, ultimately minimizing the thematic importance of traditional humanistic values in the novel, for more radical insights.

However, Sterling maintains suicide as a key humanist concern. For example, in the "Cicada Queen" (1983) he presents special rooms devoid of surveillance called discreets, where people pass time in privacy. These discreets enter the narrative, though, as places where the distraught end their lives. Moreover, in the very last mini-narrative in *Schismatrix Plus*, which combines all of Sterling's mechanist and shaper stories, "Sunken Gardens" (1984) sees the protagonist Nikolai Leng end his life due to ennui. What must be preserved by these characters who long for the ease of death is their sense of a humanity connected to a past. We have already seen this on the lunar world where the novel begins, and where Lindsay's love, Vera, has killed herself. The entire habitat has become a museum world. We see its proprietor, Pongpianskul, in his office, with its cluttered papers and its imported mice, objects directly relating to a vanished past. This cultural heritage is what is being lost as humanity transforms itself. And, for Sterling, a latent humanistic nostalgia and romanticism runs like a strong thread through the novel, never fraying or disappearing, even as he erects monuments to the imagination of the hyper-embodied.

## Posthumanity

In the novel, Sterling draws posthumans in a variety of forms. A cursory version is represented right away with mention of inhuman people living beyond a wall on a space habitat. They are inhuman in the sense of devolving, a common trope in SF, but one Sterling forgoes exploring. Instead, he provides iconic representations, first, with a horrific image of the Yarite, a meatpuppet beyond the "limits of the clinically dead" (39). It possesses nerve impulses, some biological existence beyond the fully dead, even awareness, as Lindsay notices after he awakens it with a slap. In contrast, the genetically altered Shaper Kitsune is very human at this point (because of her sexual desire), but Sterling, in his inching toward a radical posthuman embodiment, has Lindsay reflect that Kitsune is also not human. Kitsune is "posthuman" in the sense of being altered, yes, but she is represented in a mode we now recognize as "transhuman," a word still in its nascent stage at the time these stories were written, and one Sterling does not use. She is transhuman because she is using technology to enhance what are, in essence, core human elements. She is on the verge of becoming posthuman. When we meet Kitsune, her womb replaced with brain tissue, sweat that smells like perfume, a tongue with glands excreting aphrodisiacs, these alterations fail in comparison with Kitsune's later transformation.

The next time Lindsay sees her, a mechanical lamp swings his way, and two human eyes peer from beneath a shade. She is becoming a living habitat, the highly imaginative representation of a hyper-embodied being. She is alive, with massive cardiac pumping stations, sensitive walls and floors, and even a mind that has memory and volition. Kitsune, in these forms, still lives. Yet, she must use one of her clone's bodies to communicate, to feel, to experience the everyday world. She has given herself to an ontologically problematic transformation that ends with her existing as an industrial being in the "emergent technology of the flesh" (212). Lindsay sees her as a person who

has taken embodiment to its conceptual end. As much as I agree with this assessment, Sterling's refusal to go beyond is an unfortunate choice.

What is interesting in Sterling's *Schismatrix* stories is that his representations of the hyper-embodied are clear because they are drawn in stark relief with pitiful humanity. We have examples of genetically altered Shapers transforming themselves into a variety of forms, from aquatic posthumans to big-brained "Patternists." Yet, we also have representations of frail bodies ready for transformation. Sterling began sketching these sharp, hyper-embodied images early with the representation of an alien queen in the short story "Swarm" (1982). Descriptions of her "monstrous body" with "warm and pulpy flesh" (248) evoke disgust and terror. The alien queen is a factory for the colony that digests material and produces eggs, endlessly repeating the process like a biological machine.

Sterling also presents a tension between the dirty, virulent, smelly, human body and all of its crawling bacteria with a number of opposites. He juxtaposes frail flesh with the hyper-rationalized disembodied world of the wire-heads. Like the character Ryumin who Lindsay first meets when he becomes a "sundog," wireheads shed their bodies for the pure, disembodied world of data. Later, Lindsay meets Ryumin again, who is now a computer-generated face like William Gibson's super AI Wintermute at the end of *Neuromancer* (1984). Newly arrived on this particular space habitat, Lindsay is tainted with its bacteria. He is suffering a raging upper-respiratory infection. He has a runny nose. We can imagine rashes and eczema. We understand all the frailties that encourage Shapers to become radically embodied entities and Mechanists to discard the body.

On what side of the embodiment vs. disembodiment debate does Sterling fall? Surely, his representations of the hyper-embodied outweigh the disembodied in sheer numbers of representations and pages written. But, more subtly, the physical world has the most vocal advocates used as thematic mechanisms. For example, near the end of the novel, before Lindsay decides to create "aquatic posthumans" (232) on Europa, one of his admirers, Gomez, asks Lindsay, "What about the flesh? We are the flesh. What about the flesh?" (200). Here, by one of the founders of cyberpunk, and a forerunner for a later biopunk that foregrounds biotechnology and its effects on human beings, the flesh is valued, if acknowledged to be flawed.

Sterling is strongest as a writer when he is describing the material. One of the most descriptive passages comes when Lindsay has returned to Earth's seas to capture organisms for his Europa project:

Life rose all around them: a jungle in defiance of the sun. In the robot's lights the steep, abrasive valley walls flushed in a vivid panoply of color: scarlet, chalk-white, sulfur-gold, obsidian. Like stands of bamboo, tubeworms swayed on the hillsides, taller than a man. The rocks were thick with clams, their white shells yawning to show flesh as red as blood. Purple sponges pulsed, abyssal corals spread black branching thickets, their thin arms jeweled with polyps. (Sterling 227)

The language is like the best of Darwin describing the "entangled bank" at the end of the *Origin of Species* (1859). Other thinkers have noted this connection. For example, Brian Stableford writes that

posthumanists see the future evolution of humankind in terms of a dramatic diversification of types, partly accountable in terms of adaptive radiation and partly in terms of aesthetic impulses. . . . the first significant popularizers of the notion of posthuman evolution in science fiction included Bruce Sterling, in the Shaper/Mechanist series. (Stableford 401–2)

Furthermore, Tom Maddox in *Storming the Reality Studio* writes that Sterling is a writer with a firm notion of both evolutionary theory and complexity theory and how these sciences portend a possibly frightening future for human beings. In this way, Sterling's stories of the *Schismatrix* solar system and its contending Mechanists and Shapers are ontological before anything else. Maddox notes that

Sterling is aware of the tradition of representation within SF in which humans evolve beyond our current evolutionary history. He mentions Olaf Stapledon as well as Arthur C. Clarke's visions as precursors, not to mention Frank Herbert's use of transformation in the Dune series. Maddox argues that no one has provided such intensity or style to these representations as has Sterling. (Maddox 324–330) Thus, Maddox's reading, as well as that of other SF critics, writers and fans demands that the posthuman, as a concept, must be considered within the context of SF studies and its representations of the human and/or the posthuman instead of automatically attuned to the discourses of critical posthumanism.

I must admit that the connection with evolutionary theory only skims the surface of the novel and short stories, rarely exploring theoretical nooks and crannies. These tales of biological evolution in the solar system imagine human societies splintering and evolving rapidly via a technological process similar to artificial selection, rather than natural. Sterling writes more than once: "Life moved in clades" (225). The representation of radical human evolution stems not just from the sciences of evolutionary biology but from complexity theory.

Throughout the stories, Sterling references Prigogenic levels of complexity, a concept he formed from Ilya Prigogine and Isabelle Stenger's Nobel-prize winning work into self-organizing systems, *Order out of Chaos* (1984). In Sterling's stories, he refers to four levels of complexity, each building on the last to emerge into a new mode of being. Of course, like Sterling's ideas of evolutionary theory, these imagined levels are under-theorized. We must piece together what these levels mean to see how they relate to the hyper-embodied posthuman. The first is "ur-space," a vague reference to whatever undergirds space-time itself, which comprises the second level. The third level in which complexity emerged is organic life, and the fourth, that of intelligence. He constructs these so that he can postulate, then back away from, a mysterious "fifth level."

One can imagine this new level to be nonhuman/posthuman similar to the speculative posthumanism (SP) postulated by David Roden in *Posthuman Life* (2014), a term that defines posthumanism as completely other from the human and, thus, beyond our comprehension. Sterling details in his introduction to *Schismatrix Plus* (vii), that when Prigogine was offered the stories to read he said they had nothing to do with his work. And nor should that be a requirement. Sterling's novel is a work of the imagination, fantasy-SF that blends cyberpunk and space opera. Even better, it is an early text that uses the terminology of the posthuman. Some of the clearest representations of posthumans make them an extreme other: as different from us as is a human from a butterfly. For example in *Schismatrix*, one curious example can be found in the Lobsters (294). These posthumans live encased in form-fitting metallic armor. Like lampreys, they attach themselves to the sides of ships where their extra-human senses commune with the universe.

You would imagine, that achieving this fifth level of being is what Lindsay desires above all else. But, no, the main narrative rushes head long for another dream: "Life-spreading. Planet-ripping. World-building. Terraforming" (188). This grand plan is "humanity's sublimest effort" (283) akin to the civilization building documented in our literary epics. We see the project underway by the brightest of the Shaper "posthumans," called Cataclysts, a neologism that blends cataclysm and catalyst. They attempt such world-building on Mars and Europa to further their "biomorality" (190) and "bioaesthetics" (302), two aspects of a worldview the novel suggests is the true outcome of a worthwhile posthumanity (170). Again, Sterling's humanism surfaces with such hubris to reinforce the idea that a latent transhumanism colors many of his posthumans.

Besides Kitsune or terraforming as defining factors, what representation could Sterling have drawn of posthumans that are truly othered? Such an imagined fantastic ontology might be impossible to represent. Here the tension between the embodied and disembodied demonstrates the possibility of representing the former, while the later proves difficult. In an article on "Cyberpunk and Posthuman Science Fiction," Booker and Thomas compare Sterling's *Schismatrix* with Gibson's vision of our posthuman future, arguing that Sterling sees human nature as highly flexible in such a way that denies Gibson's ambivalence. The authors derive this interpretation from the fact that

Lindsay refuses to be bound by the ideologies of either the Mechanists or Shapers (he's had Shaper conditioning, but also sports a prosthetic limb). Lindsay accepts his ultimate transformation at the end of the novel when he abandons his body with the aid of an alien Presence. The authors see his resistance to ideological ossification, as well as the abandonment of a body, as an "optimism and openness to new experiences and forms of embodiment" (Booker and Thomas 114). While this interpretation is fair, I read Lindsay's final choice of alien living as a negation of embodiment. It is a passive narrative choice by Sterling and, worse, one unwilling to usher its SF-inflected fantasism to its proper end.

Hyper-embodiment has been represented with sophistication and could have been exemplified in detail with Lindsay's final choice of becoming an under-water-living posthuman (an "Angel"), or with some other embodied being. Lindsay's jaunting off with an alien "Presence" into disembodied life leaves the reader with a sense that Sterling balked when he should have delivered. Fantastic precedents of the ineffable are present in hard SF (i.e., Clarke's being called Star Child), but this tradition of foregrounding the fantastic within a hard-SF frame (and Sterling's refusal) demonstrates how difficult it is to represent the truly transcendent. Frederic Jameson went so far as to say that Greg Egan (who has attempted to map this difficult terrain) is "relatively unreadable" (68). Moreover, with Sterling's imaginative transformation of Kitsune into a living, biological space station, we see a representation of hyper-embodiment begging for more exploration by the novel's protagonist. Sterling shies away from the implications of hyper-embodiment on an industrial scale to reveal an alien Presence that ushers Lindsay to the Fifth Prigogenic Level, in essence, relieving him of the tyranny of Descartes' dualism and ushering him into the truly fantastic realm. Sterling refuses to explore this other realm.

Granted, Sterling has company in his retreat. Edgar Allan Poe is criticized for failing to narrate the end of the *Narrative of Arthur Gordon Pym of Nantucket* when his narrator is faced with the transcendent, but refuses to embrace it (Panshin and Panshin 35). Moreover, H.G. Wells, while known for venturing far into the imaginary realm of where science might take us in the universe, far beyond anyone before him, hesitated at imagining how humans could live in those horrific gulfs of space. We should also not forget that H.P. Lovecraft's alien/deities cause madness with even a glimpse. Here at the precipice of imagining where all of these fiddling posthuman technologies might lead us, Sterling backs away from true alterity. He avoids warping the genre of the new space opera in the direction of mythic fantasy to avoid radically altering his novel. Or maybe he refuses because of the difficulty. Getting beyond such categories, yet not retreating to traditional myth, has been a daunting challenge for modern science, one addressed by numerous SF writers, as well as in the text often considered the first true SF novel: *Frankenstein; or, The Modern Prometheus* (1818).

What then does *Schismatrix* reveal about the posthuman as a state of being? When Lindsay is challenged by the alien Presence to forgo becoming an aquatic posthuman and to, instead, take a leap into the Fifth Prigogenic Level, the Presence says this entails experience, not answers, and that the result will be "eternal wonder" (236). SF began its modern incarnation, after the science romances of Verne and Wells and the science fantasy of Burroughs and Merritt, to become a literature of wonder. This emotion was touted by Hugo Gernsback in *Amazing Stories* and later in the bedrock of John W. Campbell's *Astounding Science Fiction*. However, in the end, the wondrous still proves difficult to represent.

Sterling's representations of posthumans defy theory's attempt to dictate the discourse of trans-and-posthumanism. SF-and-fantasy studies, therefore, provide a ripe field of investigation with such fruitful artifacts, many of which are undervalued. My analysis has attempted to show that his most complex representations are of hyper-embodied, technological posthumans, a trope that far exceeds others in SF when defining the modern fantastic. In fact, such representations may be foundational for new articulations of the posthuman in the coming century that will rely on discursive formations tied to materiality. At this point, such imaginings are fantastic yet not purely imaginary. They retain their potential for SF extrapolation by remaining within the realm of the



possible. As such, Sterling's Schismatrix stories play an important role in the modern fantastic and its continued articulation through science fiction and fantasy texts.

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