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New Humanity of the Future and Its New Barriers of Otherness – Bruce Sterling's *Schismatrix* as a Science Fiction Speculation on Trans/Posthuman Evolution

Abstract

The possible future of mankind features prominently among SF topics. Despite a long record of failures, like unsuccessful grappling with the scourge of war, present day humanity has come a long way to assume a degree of unity it has never enjoyed before. The process of globalization has its anti-globalist opponents, but its idealistic aim is a better world without racial, social, economic and in some areas even national barriers separating people. This picture of multiracial, multicultural but otherwise ontologically uniform humanity amounts to a vision of a sentient species that is close to achieving its mature form. However, what may look like the final stop of our journey is treated by both the advocates (e.g. Ray Kurzweil) and critics (e.g. Fukuyama) of humanity's trans/posthuman development as the beginning of a new stage of our existence. A question arises if the new paths of evolution involve a danger that humans will fall victim to a policy of metaphysical laissez faire that will put the race's unity and continuity in jeopardy. Will the old walls of racial prejudice and social inequality between people that we have striven to break down be replaced by new ones? The objective of this paper is to use Bruce Sterling's Shaper/Mechanist universe as a literary illustration of the new barriers that the prospective trans/posthumanity may have to face and seek to surmount or leave behind.

Keywords: transhumanism, posthumanism, human evolution, otherness, science fiction

Are we all equally human, or are some more or some less human than others? Answering the question on the level of social discourse, egalitarian individuals would positively assert our common humanity while non-egalitarian ones could give vent to racial, ethnic, political and cultural prejudice. But if the inquiry concerned the ontological status of humans as representatives of a specific species, would it be considered viable at all in the 21st century that shares the universal consensus about Earth being inhabited by one and only humanoid species, regardless of the existing race and ethnic diversities? Strangely enough it might, for preposterous as it may seem to challenge the broadly acknowledged universal makeup of humanity, it

is for decades now that proponents of trans/posthumanism¹ have contemplated the advent of technology driven auto-evolution of man. Better fit for the task than conventional realist literature, science fiction has addressed the problem in a good number of notable speculative narratives like Dan Simmons' *The Hyperion Cantos* (1989–1997) and the *Ilium/Olympos* cycles (2003–2005), Peter Watts' *Blindsight* (2006) or Ramez Naam 's *The Nexus Trilogy* (2012–2015), to name but a few. All of these, however, follow in the footsteps of Bruce Sterling's extensive exploration of the topic in *Schismatrix* (1985). While the followers have dealt with specific aspects of a future augmented humanity, they, perhaps with the exception of Simmons, can arguably hardly match the scope of Sterling's evolutionary vision marked by a strong focus on the sense of otherness the consecutive stages of the trans/posthuman evolution might evoke. The objective of this paper is to present Bruce Sterling's Shaper/Mechanist universe as a literary illustration of the new barriers that the prospective trans/posthumanity may have to face and seek to surmount or leave behind.

The convolutions of the futuristic transformations of humanity depicted in *Schismatrix* are informed by both defensive tendencies, dictated by fear of the abominable otherness being the effect of progress, and progressive ones that facilitate the acceptance of the oncoming change. In order to better comprehend Sterling's posthuman world, it is beneficial to cast it in a historical perspective of eons of the evolutionary, and later cultural, development of mankind, marked by persistent, primeval impulses of opposing the unknown Other, only to ultimately accommodate it.

Since the evolutionary beginnings going back to the pre-hominids, humankind evolved spreading out from its African cradle by fits and starts to eventually settle other continents. Divided into visually distinctive races and separated by oceanic and continental barriers for dozens of thousands of years, humans had to cope with the frightful strangeness of the unknown others they encountered. They responded to the cognitive challenge either by incorporating them into the sameness of their community, largely through conquest and subjugation of the allegedly inferior people, or by isolating themselves, erecting all kinds of walls of stone and prejudice.

The process of widening the circle of common humanity often met with resistance in the modern era, but it progressed nevertheless, reflecting the "defining cultural pattern traceable to the Hebrew Bible: of history as a sinusoidal alternation of redemptive ups and degenerate downs going on and on through time, each time requiring the people to refigure themselves" (McCarty 2010: 3). The ancients held a limited definition of humanity that included only the members of the dominant or "center" culture, while denying human attributes to the others who occupied the culture's peripheries. Those who lived at the edge of the known world were viewed as subhuman because of their assumed monstrosity. In the 5th century B.C., in his *Histories*, Herodotus wrote about Libya: "Here too are the dog-faced creatures, and

¹ In this paper, the 'transhuman' refers to transhumanism defined by Nick Bostrom as a post-Enlightenment extension of humanism that "affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities" (2003:4).

The 'posthuman' is understood in a twofold way. First, following Rosi Braidotti's conception of a posthuman subject presented in *The Posthuman* (2013) viewed as "a sizzling vitalist inter-connectivity between the human and non-human environment, one embodied and embedded materialistically within the roaring universe of intersecting... relations," drawing on "raw cosmic energy-life (zoe) ... the self-organizing (smart) structure of living neural matter" (Nechvatal). Second, as a condition described by Katherine Hayles in which humans and information technologies are interwoven in such a way that consciousness viewed as an information pattern gains priority over material embodiment (1999: 2–3).

the creatures without heads, whom the Libyans declare to have their eyes in their breasts" (1996: 372). In the 1st century A.D., in his *Natural History*, Pliny the Elder described monstrous races, among them dogheaded men of Ethiopia, the one-legged Sciopods of India and the Blemmyae who "are reported to have no heads, their mouth and eyes being attached to their chests" ([1942] 1961: 253). Throughout the Middle Ages, Pliny's account of the strange creatures inspired popular imagination, some of the most conspicuous cases being *Liber Monstrorum de Diversis Generibus*, dated from the 6th to the 10th century, an Old English text *The Marvels of the East* written around 1000 A.D., and 13th century Marco Polo's *Travels* featuring dogheaded men. However surprising it may sound, Christopher Columbus expected to find monstrous races in the New World (Beding 2016: 293–296). In turn, Ferdinand Magellan's circumnavigatory voyage bred the legend of the giants of Patagonia that originated with Antonio Pigafetta, the chronicler of Magellan's expedition (1969: 46–47).

With the advent of the Age of Discovery, the European part of mankind gained the awareness of the existence of other continents, cultures and people who differed from them radically. Prior to that period, there had been faint awareness of the vast world beyond Europe. The paradox of the Age of Expansion was that while, as Tzvetan Todorv says in *The Conquest of America: The Question of the Other*, "men have discovered the totality of which they are a part" (1984: 5), they acted on the assumption that the populaces they 'discovered' were not ontologically the same as themselves but inferior subspecies of humanity. The consequence of such an approach was a tendency to other² the indigenous inhabitants of Asia, the Americas, Africa and Australia.

For over four and a half centuries since that time, the world has witnessed notable individual acts and more general trends of alternate openings and closures regarding the acceptance and assimilation of the non-white others that have started to make claims of rightful belonging to one human family. Though only partially successful, enlightened attempts were made in the 16th century to prevent treating the Indians as other than fully human beings. In 1537, Pope Paul III issued a bull that ran counter to the philosophy of *Dum Diversas* (1452) and *Romanus Pontifex* (1454), the bulls written by Pope Nicolas V that sanctioned enslavement of infidels and pagans by the Portuguese monarchs. A few years later, in 1542, King Charles V of Spain issued *The New Laws of Indies* where he expressly acknowledged the natives of America as fully human persons, thereby making them equal in status and rights with his European Christian subjects (2013: 43).

Although, as a consequence of European colonization of the Near East, Asia and the Antipodes, the process of othering affected all non-Caucasians, it was the African race that became the epitome of the less than fully human Other to white Europeans. African slaves, brought to the New World on slave ships were denied essential humanity and thus also any entitlement to human rights. A fine example of black people being othered as a subhuman species is the "Three-Fifths Compromise" reached between delegates from southern and northern states during the United States Constitutional Convention of 1787

² Othering is defined as "the process of casting a group, an individual or an object into the role of the 'other' and establishing one's own identity through opposition to and, frequently, vilification of this Other." It means denying "the Other those defining characteristics of the 'Same', reason, dignity, love, pride, heroism, nobility, and ultimately any entitlement to human rights" and essential humanity (Yiannis 2012).

³ While the provision was drawn up for the practical purpose of taxation and representation in the US Congress to hold new Union states together, it unquestionably reflected the southerners' deeply ingrained conviction of the blacks' incomplete humanity.

that ruled that black individuals were to be counted as three-fifths of a white person. In the following decades, abolitionist sentiments and actions did bring about the end of legal slavery in most parts of the world, but emancipation of slaves did not mean granting them equal rights or equal humanity status, an inglorious example of such discriminatory practices being Jim Crow Laws in the southern United States. Scientific racism, aiming to provide justification for the presumed superiority of the Caucasian race, drew on the racist theory of polygenism which "held that the human races had been created separately" (Graves 2001: 25) and thus did not constitute one human species. Though by the beginning of the 20th century phrenology may have been compromised as a pseudoscience, the ideas promoted by scientific racism that othered the abominable Negro did not fall out of popular favor. As late as the last decades of the 19th century, following Georg Schweinfurth's discovery of African Pygmies in 1870, there was a scientific discussion whether they could be classified as fully human; actually in 1906, 23-year-old Ota Benga and a group of other Pygmies were briefly put on display at the Bronx Zoo as an example of an evolutionarily inferior race (Bergman 1993: 140–149).

A gradual departure from viewing non-white individuals as racially inferior others has its underpinnings in accruing scientific evidence in support of the conviction that humanity is a united whole rather than an aggregation of distinctly different races among which the Caucasian one holds a pride of place. While in The Origin of Species (1859) Charles Darwin did not examine the question of human origins, he located the study of mankind within the new evolutionary paradigm in his later work The Descent of Man (1871). As Graves states, "Early on in the voyage of the Beagle, Darwin became convinced that all humans had originated form the same primal stock. He thought that all races were varieties within the human species" (2001: 58). More recently, for over one hundred and fifty years, first paleontology⁵ and later genetics have provided solid testimony of the sameness of all people of Earth. Consequently, it has been proven that the African, Asian, European, American and Australian geographical racial variants cannot be classified as subspecies, which was famously manifested in the 1950 UNESCO statement: "The biological fact of race and the myth of 'race' should be distinguished. For all practical social purposes 'race' is not so much a biological phenomenon as a social myth ... The unity of mankind from both the biological and social viewpoints is the main thing" (Bertucci 1996: 1217). On the level of the ontological concept of mankind, the borders of humanity have been expanded to eventually include all the human races, and even though instances of racial discrimination have not disappeared completely, they are stigmatized as shameful and barbaric. Now, seemingly, the new state of universal sameness might imply that as a species mankind can finally forget the problem of other people's ontological dissimilarity. After all, most of us agree unanimously that we are all equally human and thus, logically, the only crucial differences we have to handle are of social, economic or ideological nature.

Yet, the above consensus, though humanely laudable, might remain true only if one assumed that humanity has reached its evolutionary zenith, a form that is essentially finite. However, if human evolution is an ongoing process, an idea that Bruce Sterling champions in his visionary novel, then whenever new trans/posthuman alterations appear, we can expect a counter process of the older humanity barricading itself against the new Other, an enhanced man or an emergent Artificial Intelligence of the future. Actually, an intellectual defense of standard biological humanity is launched by such champions of bioconservatism as Francis Fukuyama or Leon Kass. In his book *Our Posthuman Future*, in which he makes a stand against

⁴ Paracelsus is believed to have presented one of the first polygenist theories in 1520 (Graves 2001: 25).

⁵ The first humanoid fossils were discovered by William Buckland in 1823.

a transhuman evolution, Francis Fukuyama invokes the notion of human nature treated as a benchmark quality against which being or not being human can be verified. Expressing his concern for the future of humanity, he says: "The deepest fear that people express about [bio]technology is ... that, in the end, biotechnology will cause us in some ways to lose our humanity - that is, some essential quality that has always underpinned our sense of who we are and where we are going" ([2002] 2003: 101). As he adds, "We do not want to disrupt either the unity or the continuity of human nature" which he calls "Factor X... related to our very complexity and the complex interactions of uniquely human characteristics like moral choice, reason and a broad emotional gamut" ([2002] 2003: 172). Fukuyama is seconded by Leon Kass, who in his essay "Ageless Bodies, Happy Souls: Biotechnology and the Pursuit of Perfection" writes: "Most of the given bestowals of nature have their given species-specified natures ... Cockroaches and humans are equally bestowed but differently natured. To turn a man into a cockroach ... would be dehumanizing. To try to turn a man into more than a man might be so as well" (Kass 2003: 20). Other bioconservatives like Jürgen Habermas and Bill McKibben share Fukuyama's and Kass's conviction of the fixity of human nature that should not be tempered with. In *The Future of the Human Nature*, Habermas opposes genetic engineering seeing in it a case of reification of a human who is turned into a product (2003: 53). McKibben speaks in a similar vein when he says in *Enough*: Staying Human in an Engineered Age:

If we aggressively pursue any or all of several new technologies now before us, we may alter our relationship not with the rest of nature but with ourselves. First human genetic engineering and then advanced forms of robotics and nanotechnology will call into question, often quite explicitly, our understanding of what it means to be a human being. (McKibben 2003: xii)

What all the authors share is not a Luddite fear of the new but an anxiety that the technologies of the future might put into doubt our very identity as human beings.

While bioconservatives would barricade humanity within the bastion of familiar sameness and ossification, there are trans/post-humanist thinkers of all sorts – bioprogressives, technoprogressives, extropians, singularitarians, postgenderists – who would rather launch the human race on a trip beyond the comfort zone toward a trans- and possibly also posthuman development. While making a caveat that transhumanist progress should be "guided by life-promoting principles and values," Max More is nevertheless a definitive advocate of transhumanism viewed as a philosophy "seek[ing] the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology" (More 2013: 14). Ray Kurzweil is positively enthusiastic about transhumanist advancements when he says:

We stand on the threshold of the most profound and transformative event in the history of humanity, the "Singularity"... This merger of man and machine ... These technological revolutions will allow us to transcend our frail bodies with all their limitations... Human existence will undergo a quantum leap in evolution. (Kurzweil 2006 [n.p.])

Anders Sandberg, one of the leading figures of transhumanism, asserts in his essay "The Transhuman Vision," that the evolution of our species has not ended but only its character has changed, "And evolution is still accelerating... We are no longer bound by biological evolution, we can choose our own path: the era of autoevolution has begun" (n.d., n.p.).

The Mechanist/Shaper universe Sterling created in his novel *Schismatrix* is well advanced on its way to reinventing humanity through technology. Within the novel's futuristic time frame, the primeval

division line between accepted human sameness and rejected otherness is drawn between planet Earth and the solar system colonized by the descendants of the first space explorers. For centuries Earth has been placed under the most rigorous interdict that was promulgated and observed by both parties. The reason for the mutual schism (sic! the title *Schismatrix*) was their irreconcilable attitudes to technology. It is not that the people of Earth were opposed to technology as such for, after all, the whole history of mankind has been linked to the use of tools. As Bernard Stiegler, invoking the observations of anthropologist Leroi-Gourhan, aptly remarks in *Technics and Time*: "the human invents himself in the technical by inventing the tool by becoming exteriorized techno-logically" (Stiegler 1998: 141). The cause of the split between conservative Earth and the progressive space branch of humanity was the fact that technology started to pose a danger to Earth's safety. Though the point of contention is only mentioned in passing, the conflict can be reconstructed applying Jean-Michel Besnier's train of thoughts presented in his essay "Will New Technologies Reinvent Humanity?".

Making an educated guess based on present-day concern with uncontrolled progress that might be rushing our civilization toward a disaster, we can infer that rampant technology on pre-Interdict Earth must have endangered humanity's "process of coevolution with an environment that it modifies constantly and that modifies it constantly" (Besnier 2011). Technology is expected to change things, but it should not change them fundamentally, otherwise Besnier asks, "How does the perspective that humanity is reinvented by this technology seem to us to alter what we have held as obvious until now?" And if technology begins to interfere with our very sense of being human, then it acquires "characteristics that overturn the anthropological arrangement that it guaranteed" (Besnier 2011). Such was the situation of Sterling's Earth when it was critically affected by technology induced ecological meltdown. Pressed by the crisis, Earth's governments chose to stick to a stable human identity, rejecting the abomination of technology that was transforming humans into their no longer human antithesis. In confirmation of the validity of the above conjecture, Abelard Lindsey, the main protagonist of the novel, can be cited as he says "The Terrans wanted stability, that's why they set up the Interdict. They didn't want technology to break them into pieces, as it's done to us. They blamed technology for the disasters" (Sterling 1985: 224). And he adds later:

The parting had come with hatred: with those in space condemned as antihuman thieves, and Earth's emergency government denounced as fascist barbarism. Hatred made things easier: easier for those in space to shrug off all responsibility, easier for Earth to starve its myriad cultures down to a single gray regime of penance and pointless stability. (Sterling 1985: 225)

While the barrier of the Interdict means a stop to human evolution on Earth, it is a veritable springboard for an ongoing process of at first transhuman and eventually posthuman transformations of the space colonizing brand of mankind. The seeds of the new transhuman race of people first establish the Concatenation, the ten pioneer circumlunar artificial worlds, only later to move on to the Asteroid Belt and the Rings of Saturn rich in ice. No longer meeting resistance from conservative circles on Earth, the spacefarers should supposedly be entering an era of free, unrestrained technological development in which any progressive option should be equally welcome. This is not the case, though, for apparently neither human nor speculative trans/posthuman societies can establish their subjectivity without identifying their opposite Other. It does not take long for the latter to break into two major factions, entrenched in their bastions of fiercely protected Sameness while treating the Others as deadly enemies. The cybernetic Mechanists are technoprogressives who augment the human form merging flesh with

machine technology and fighting the curse of aging with advanced prosthetics, including eventual mind uploading. The Shapers are bioprogressives who have chosen the path of artificial evolution which is effectuated through genetic engineering. The generic divide is widened by divergent habitat requirements, for the Mechanists live in living complexes whose environment includes natural bacterial fauna, while the Shapers live in absolutely sterile conditions since their body tissues are quite aseptic. Additionally, the two branches of post-Earth humanity have parted in terms of their manners of reproduction. The former do not deviate from traditional, natural ways of conceiving children via sexual intercourse, or if needed via artificial insemination. The latter treat reproduction as a way of investment in new and better gene lines, which means that conception cannot be a matter of chance. Thus, Shaper children are genetically designed or cloned and incubated in artificial wombs, which an AI system in a Shaper/Mechanist universe story "Twenty Evocations" explains to a young Shaper Nikolai, saying "The first true settlers in space were born on Earth—produced by sexual means. Of course, hundreds of years have passed since then. You are a Shaper. Shapers are never born" ([1984] 1996: 313). Consequently, sexual drives are permanently suppressed as no longer existentially important, which anticipates the transhumanist idea of postgenderism that "foresee[s] the elimination of involuntary biological and psychological gendering in the human species through the application of neurotechnology, biotechnology and reproductive technologies" (Dvorsky, Hughes 2008: 2).

A mutual inability to accept the equal rights of the other side to pursue its chosen mode of self-evolution leads to a war that results in the stalemate of a prolonged siege of the Saturn-orbiting Shaper Ring Council by the Mechanists. As so frequently in human history, the futuristic intrasolar world Sterling created perpetuates the same pattern of social behavior that consists in raising walls of hatred to ward off a racial and cultural Other. Curiously enough, the warring parties move toward a détente period being reconciled by a sudden first contact with deep space reptilian aliens, given the name of Investors due to their profiteering attitude. The aliens' compelling and irresistible otherness serves as a catalyst that reestablishes a degree of sameness among the representatives of the divergent tracks of trans/post-human evolution. While neither of them gives up their philosophy of life, they are able to coexist. And even though they repeatedly go through spasms of hostility for decades on end, they feed on each other, defecting to each other's camps, and eventually taking advantage of each other's technological advancements.

The mode of handling differences in a 'non-standard human' universe is an extrapolation of the practices of cultural adaptation long known to traditional humanity. Since the rise of man, human societies have been developing by reiterating two opposing tendencies "a tendency toward sameness and a tendency toward change ... wholeness versus breakdown of that wholeness, integration versus differentiation" (Mol 1979: 14). Ideally, the opposites tended toward an equilibrium but any temporarily reached state of balance always contained a vector of change. As Hans Mol remarks, too much change (otherness) may mean disintegration but too much sameness means loss of adaptability (Mol 1979: 14), which is deadly for the species' prospective evolutionary future. For the balancing of the opposites to be fruitful then, a Hegelian dialectic reconciliation of the conflicting ideas needs to be worked out "[i]n the same way as chemical structure and chemical reaction form a new equilibrium or heredity and mutation form a new variation" (Mol 1979: 14).

The trans/post-human evolution that Sterling conjectures in *Schismatrix* proceeds along the same dialectic pattern of thesis-antithesis-synthesis, beginning with the historic parting from Earth, progressing through the phase of colonization of the Solar System and finally embracing bold plans of "an advance"

into the galactic arm" (Sterling [1985] 1996: 215). At each stage. Progress meets with resistance, barriers are erected but eventually they always give in to change. And, as the narrator says at the end of the novel: "The history of the Schismatrix was one long racking chronicle of change ... new Shaper ideologues embraced the aggressive schemes of visionary Galacticism" (Sterling [1985] 1996: 214). The initial shock of the discovery of the nineteen known races of aliens waned. "Now the Galacticist prophets stood ready to abandon humanity entirely, to achieve a Galactic consciousness where mere loyalty to species was obsolete" (Sterling [1985] 1996: 214). For a short time a bitter rivalry between the Mechanist and Shaper factions was renewed but it abated soon. As the narrator continues, "History's kaleidoscope worked its permutations, its pace ever faster, approaching some unknown crescendo. Patterns changed and warped and flew apart" (Sterling [1985] 1996: 215). The new, now properly posthuman evolution is obsessed with life in all possible forms and is on its way to rise to the Forth Prigoginic Level of Complexity, a metaphorical Omega Point. Driven by a sense of competition, the reductionist conservatism collapses into its progressive opposite. In a dialectic way, the otherness of posthumanity is assimilated to become a part of overall acceptable sameness. As the narrator comments, "The breakaway factions were much more bizarre than ever before, but people had grown used to this, and their horror had lessened. Frankly antihuman clades like the Spectral Intelligents, the Lobsters, and the Blood Brothers were somehow incorporated into the repertoire of possibility and even made into jokes" (Sterling [1985] 1996: 195).

The universe that Sterling depicts is overwhelmed with a passion, a headlong rush to set life free from all possible constraints. The vision seems to echo Friedrich Nietzsche's idea of *the will to power* also identified later by philosopher Ayn Rand as "the fundamental and ultimate choice perpetually confronting every organism: To live or to die" (More 1993: 15). Nietzsche deems *the will to power* to be the essence of life. For him it is "the ontological dynamic of being" and "primarily an ontological concept which refers to the way in which all things are in flux" (Fink 2003: 115). And such is the philosophy of the advocates of unrestrained human evolution in *Schismatrix*. One may erect dams to stop life but it will overflow nevertheless. The future belongs to posthumanism, says Wellspring, one of the book's characters, "Not to nation-states, not to factions," which by the way stand for barrier makers. "It belongs to life, and life moves in clades" (Fink 2003: 170).

In conclusion, Sterling's *Schismatrix* may be read as a futuristic polemics with Wendy Brown's observation made in her book *Walled States, Waning Sovereignty* about the human tendency to barricade itself against the strangeness of the Others (Brown 2010: 7). Metonymically, a barrier symbolizes a belief in the finiteness and fixity of reality. What Sterling suggests about posthumans is that such a conviction would be a folly. In the world of the far future, as envisioned in the novel, Robert Frost's quotation from his poem "Mending Wall" would be more applicable. "Something there is that doesn't love a wall" writes Frost, meaning that walls bespeak a lack of freedom. Facing the indeterminacy of freedom, some people will be raising barricades but their attempts will be always in vain, Sterling suggests. There is no escaping the challenge of progressive otherness for it is part of ourselves. This knowledge is all too obvious to Abelard Lidsey, now two hundred years old, but it is not equally obvious to us, Earth-bound humans, which is presented as lamentable. And Abelard does grieve over the old human prejudice: "Tears came to him... He mourned mankind, and the blindness of men, who thought that the Kosmos had rules and limits that would shelter them from their own freedom. There were no shelters. There were no final purposes. Futility, and freedom were Absolute" (Sterling [1985] 1996: 224).

Posthuman evolution, as depicted by Sterling, has no end. Repeatedly raised barriers of otherness may persist, but they are doomed to be shifting and transitory. Sterling's first trans- and later post-humans

deliberately abandon the human bios gravitating toward life understood as zoe, the former defined by Paul Rabinow as "the appropriate form given to a way of life of an individual or group," while the latter as "the simple fact of being alive and applied to all living beings (animals, men and gods)" (Rabinow 1998: 180).6 Passing through the transitory forms of the transhuman Mechanists and Shapers, they eventually take to pursuing life itself in its limitless variety. Theirs is a new type of posthuman subjectivity that Rosi Braidotti determines as "an expanded relational self... [that] is not confined within our species, but ... includes non-anthropocentric elements: the nonhuman, vital force of Life ... zoe ... the transversal force that cuts across and reconnects previously segregated species, categories and domains" (Braidotti 2016: 22). The final transformation that Abelard Lindsey undergoes takes him still further, beyond the fixity of the biological embodiment and towards Hayles' abstraction of a bodiless conscience, an information pattern that retains its subjectivity while shedding the human form. Becoming immaterial, the ultimate formula of posthumanity represented by Abelard that Bruce Sterling seems to celebrate may be liberated from confronting the challenges of variously embodied otherness but not without a price. Being the hard version of Hayles' posthuman "that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being" (Hayles 1999: 5), Sterling's radical posthuman experiences a full transcendence but, in the process, loses its link to humanity, however broadly and loosely understood.

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⁶ Rabinow refers to Giorgio Agamben's discussion of bios and zoe in Homo Sacer: Sovereign Power and Bare Life (1997).

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