Stefana IOSIF*

Between the Non-Human and the New Human. A Posthumanist Investigation of Shattered Patterns in Alastair Reynolds' Zima Blue

Abstract: With the rise of artificial intelligence, along with an incremental process of androidization, we are faced with the necessity of postulating a new direction and a new understanding of the dichotomy of human and non-human, animate and inanimate. The present article endeavors to explore the new delineations of the humanity and humanness as found in Alastair Reynolds' short story, Zima Blue, through a posthumanist lens. We look at posthumanism through a multifaceted lens, combining concepts from a variety of fields in our attempt to contextualize identity and personhood. As such, the analysis of the short story will offer the middle ground between the epistemological infinite regress and the psychoanalytic primal trauma, as embodied by the namesake main character of the story. The posthumanist approach solidifies the need for a decentralization of the human and a move away from anthropocentrism, in an attempt to create a solid theoretical framework, facilitated by the medium of science-fiction literature.

Keywords: posthumanism, science fiction, infinite regress, primal repression, androidization, decentralization, Zima Blue.

The discussion on personhood and humanness has taken on vastly new dimensions the more we advance in the 21st century. Previously held tenets are now gradually becoming obsolete with the rise of new modes of perceiving intelligence. To date, the tendency has inescapably been for "humanistic inquiry [to valorize] an implicit worldview which limits understanding and discovery" (Campbell, O'Driscoll, and Saren 2010, 86), but the time has come for a paradigm shift, with the new dawn of the reality of artificial intelligence. As such, posthumanism has become the latest concern. The first attempt at articulating the new state of our world is happening simultaneously with the unfolding of the new phenomenon. In a sense, the philosophical and critical discourses are trying to carve out a theoretical framework that would allow for a successful and ideally even harmonious new reality. We are postulating before the concreteness of

49

^{*} Ștefana Iosif, PhD, Assistant Professor, Faculty of Letters, Al. I. Cuza University of Iași, Romania. Email: stefana.isf@gmail.com

reality has even settled. One way we are able to explore the posthumanist discourse is in no small measure facilitated by the visionary explorations of science-fiction. It has long been acknowledged that this genre encapsulates within it the human capacity for foretelling. Sci-fi literature acted on numerous occasions as the harbinger of scientific newness and progress, and while we are reluctant to categorize it as Gospel truth, we cannot help but notice its oftentimes eerie accuracy. In 2006, Alastair Reynolds published a short story that we will argue lends itself to a posthumanist examination of identity and reality, *Zima Blue*. It is through stories such as this that we are allowed to explore unmarked territories and to establish new frontiers of thought.

Bradley B. Onishi examines posthumanism through the Heideggerian lens of the critique of technology and the seeming *naiveté* employed by humans who deem themselves ready and able to maintain their agency and selfhood, while simultaneously expanding and augmenting their capabilities through technological implements. According to Onishi,

"within this framework the human itself is objectified as it is converted into a calculable and reducible set of informational patterns participating in what Heidegger calls the standing-reserve, albeit in this context, the standing-reserve of information. Following Heidegger, theorists... have formulated an alternative trajectory that develops along similar lines to Dasein's Being-in-the-world, positing the self as constituted by a lack or abyss. Within this trajectory a 'mystical posthuman' emerges; networked, multiple, and fluid, it is never fully present, nor decipherable to itself" (2011, 103).

Onishi goes on to make an important distinction between the larger umbrella of posthumanism and the transhumanist school of thought, which focuses by and large on the achievement of superhuman capabilities through augmentations. Naturally, the posthuman discourse covers a far wider array of concerns, but one might argue that given the fear of death and decay intrinsic to human beings, a desire to overcome such frailty of existence would consecutively follow. As such, the mere biology of the human is seen as a hurdle in their path to attain unmitigated heights, and humanness and humanity are conceived of as outside and untethered from their implicit constraints. To be human becomes coextensive with being a free agent, and far less so with organic considerations. Onishi makes the claim that, through technological advances, it would seem that the transhumanist aim would be to center its entire disquisition around information, as the ultimate "universal feature" (2011, 104). As such, Heidegger's position regarding the "I" lends itself well to the critique of transhumanism. Onishi begins from the Cartesian dictum which defines the ego as autonomous, the self-referential "Being of beings... distinct from the

world and even its own body", animated by an unquenchable desire for "more freedom and autonomy", which can be attained through the transhumanist project of overcoming typical human deficiencies in order to satisfy this ultimate ideal, "enframing" reality so that "all entities have meaning only in relation to the human subject" (2011, 105-106). The inevitable conclusion seems indeed to be that as human beings, we have fallen prey to a fallacy, thinking that we can (and perhaps should) wield technology as a mere tool in our aspiration to elevate our position, all the while discarding and forgetting the inescapable link between matter and spirit, mind and physicality.

It is important to note that posthumanism does not aim to infer the inferiority of the human and to suggest that "human" no longer exists, conceptually. A move away from anthropocentrism simply presupposes a renewed awareness of human limitations, including limitations over the absolutes we like to claim. In Ralph Pordzik's words, "the posthuman emerges not as the end of humanity but as a pattern of resonance between the long-established dichotomies of self and nonself, order and nonequilibrium, body and consciousness" (2012, 143). In reality, the conversations proposed by posthumanism refer more often than not to the idea of personhood and identity as elements not implicitly and exclusively enmeshed with humanity, "it is a way of re-envisioning models of selfhood... it could include living a bodiless existence as an avatar in cyberspace, or inhabiting a completely artificial body connected to the brain" (Onishi 2011, 102). With the rise of technological advancement which is bringing forth the implicit progress of artificial intelligence, we are faced with a philosophical challenge and "in response and in anticipation, theorists from various fields have declared the emergence of the 'posthuman' as a means to account for the developments wrought by these rapidly developing technologies" (Onishi 2011, 102). And while it may be easy to cast such moral conundrums as the folly reserved solely for sciencefiction, we cannot maintain our denial of the androidization of the human being as we approach the quarter of the 21st century. Oftentimes, sciencefiction literature is the venue where we "explore patterns of mutation, virtuality, and the parasitic invariably provided by technological means" (Pordzik 2012, 144), but it is important to note that our penchant for discourse and for dialectical approaches can also be categorized as yet "another prosthesis the human subject puts to good use, intent on trespassing acknowledged limitations, exploring new territory... Natural environment, the human body, and cultural production are intrinsically connected, each evolving in response to another's position or activity in a complete network of relationships" (Pordzik 2012, 155). Science fiction does inarguably offer ample ground to the investigation of posthumanism as a new layer of concern, and it allows us to formulate the realities needed through discourse alone, at this stage. More often than not, the decentralizing of the human position has been met with apocalyptic terror, whereupon the machine would engulf reality and tear it asunder, so much so that the human being would no longer be allowed to occupy place. However, it is important to note that, while anxieties for the future are valid, the main concern ought to be an expansion of definitions, an interrogation of "the basis for rational humanism and empirical science, transcending the established bonds of society, materiality, and embodiment and thus providing a thorough reworking of our grounding for morality" (Pordzik 2012, 157).

We are meant to contend with profound examinations of the limitations ascribed to the concepts of otherness, monstrosity, marginality, and hybridity within our new historical context. Relying on traditional modes of conceptualizing reality has become insufficient with the expansion of our economies and technological advances. As a species, we seem to have pushed our many developments to the point of no return, which in turn has brought about the imperative of a posthumanist exploration. Lucille Desblache argues that "the Other, biologically and socially, is no longer defined in opposition to the self but as part of a self that is constantly evolving", so in other words, we have come to understand that the dichotomy itself is under investigation and that all that we would have and in fact did categorize as non-human must be recognized as being "part of us" (2012, 245). There is an implicit transition from the modern discourse of centrality versus marginality, of contrasts and opposites. In this process of decentralization, we cannot help but notice a shattering of the hierarchies of definition, of the species, of identity, and of essences. While it is true that the mixing of species was meant to be seen as monstrous and catastrophic to nature, there is an increased permeability of the borders between concepts: "today's crossings do not only break through species lines, as objects have entered into symbioses with life in a number of ways [... including the many prosthetic tools used as extensions of the body... Our cyborgean 'convergence culture' entwines virtual and real, animate and inanimate" (Desblache 2012, 247). In a sense, it is precisely because of this "cyborgean" shift in human nature that we are forced to dissolve the material borders of the body and the organic, and to expand the definition of "person" beyond its palpable limitations. Posthumanism forces us to rethink the validity of anthropocentrism, and to revisit non-Western, non-Abrahamic cosmogonic mythologies, which would far better present the human being as one part of its ecosystem, on the one hand, and the effects of this exceptionalism on the ever-growing desire and consumption of the human.

Alastair Reynolds' short story, Zima Blue, begins at the end, in yet another instance of coming full circle, like the ouroboros of the main

character's search for selfhood. The first person narration is meant to eliminate all alienation, to immerse the reader directly into the subject matter, without the possibility of opting out and observing from the stands, like the onlookers by the pool in which "Zima's pale shape moved so languidly from one end of the pool to the other that it could have been mistaken for a floating corpse" (Reynolds 2009). It is all too fitting that the first introduction the reader gets to Zima himself mirrors his own beginnings: a human observing his (initially its) methodical floating on the blue surface of the pool, lifeless, inanimate. The narrator, Carrie Clay, serves as the ideal interlocutor for Zima. While their origins are unmistakable polar opposites, she born a human, he, as we are to find out, a machine, the postmodern and posthuman context constructs their paths from the ends of the spectrum towards a common middle ground. It is in no way incidental that Carrie is a storyteller by trade; stories are the very foundation of humanity, our capacity for storytelling being the mark of our evolution. Through storytelling, and myth-making as its implicit result, human beings have essentially extracted themselves from the food chain and pushed their own evolution forward at warp speed (Harari 2014, 27). So in the quest of finding the right human to share his epiphanic moment with, it only stands to reason that Zima would have chosen a one-thousand year old storyteller. Within moments we learn of her dependence on "the AM", or Aide Memoire, the technological contraption meant to literally aid her memory, after it reached capacity centuries back. There seems to be a sort of symbiosis between the machine and the human, so much so that being without it at Zima's behest and insistence makes the woman feel torn: "the thought of being away from the AM made my blood run cold" (Reynolds 2009). It is interesting to note, however, that despite her profound reliance on the machine, Carrie suggests its limitations almost immediately: "the view reminded me of the work of a pre-Expansion artist... I formed a mental image and queried the fluttering presence of the AM, but it couldn't retried the name" (Reynolds 2009). In some sense, human memory, fueled by affect, proves to be far more encompassing, if albeit less factual. It is this affect that will become the centerpiece of her meeting with Zima, and the justification behind his condition to meet with her, a human, without the technological appendix, thus exacting her saving, as promised.

The artist's final exhibit, the one that would be his most illuminating piece, as well as his retirement, takes place not on the cosmic scale previously employed by Zima, but on a remote island on Murjek, an anonymous world, the home of one of the many copies of the Old World Venice, done all in white marble. The choice of the city of Venice seems entirely adequate and in keeping with the aquatic theme and proclivity of the artist, in addition to entertaining the question of what had happened to the original Italian city, of whether or not it had finally sunk as had been

predicted. Regardless, it is an implicit reference to humanity and our predilection to construct meaning by referring to the past, in a perpetual look backwards. The initial understanding of Zima is as a cyborg, that is, a human being (originally) augmented with robotic elements, meant to render him indestructible: "With his body thus armoured against environmental extremes, Zima was free to seek inspiration where he wanted" (Reynolds 2009). The natural question is whether such modifications, where one would no longer need to dread death, where their blood was replaced with closed mechanisms, where one would no longer fear radiation or the extreme pressure of the universe, where exhalation itself were removed, would allow for inspiration altogether, or whether, once human frailty and finiteness are removed, the capacity for awe and amazement, and implicitly for human creativity, would itself be obliterated. Carrie, the placeholder for the seemingly clear-headed human, notices that while his art might be categorized as having a unique scale, his pieces were "landscapes without a human presence" (Reynolds 2009), rendering him kitschy, implying a sense if imitation, as he seems to consistently attempt to produce originality, to encompass uniqueness, by incessantly modifying himself and overcoming limitations, all the while falling short and becoming at most a curiosity precisely because of his augmentations.

The island where the final art installation is meant to take place is described by Carrie as being rather small, and more importantly, "turtleshaped". This image elicits an immediate connection to the Native American myth of the world itself as "This Old Island... which they conceived as resting on the back of a turtle swimming in the primal sea" (Fenton 1962, 283), as Zima moves his reality from a cosmic dimension, where previously his installations had gradually become too gargantuan to be housed by mere planets, which they covered completely, to that of a small island, where his entire reality would be contained. The turtle stands as a representation of the epistemological issue of the infinite regress, also known as "turtles all the way down", whereupon one theory is supported by another theory, which is in turn supported by yet another, and so on ad infinitum, similar to the belief that the world turtle, rests upon a larger one, which rests upon an even larger one. A neverending layering is thus created, where there is no possibility of reaching the end, or the final layer, but there is always the option of returning to the primordial one, upon which all others rest (Cameron 2008, 1). This creates the epistemological conflict of the infinite regress, caused by "infinite chains of ontological dependence", seen as vicious cycles, meant to be broken and fundamentalized (Tahko 2014, 257). In Zima's case, his humanity is confirmed by and based on his myriad attempts to somehow overcome human limitations, as the argument would be that it is self-understood that only a human would aspire to evolve past these human boundaries. In other words, if he is trying to become

superhuman through the augmentations to his body, for instance, then it must implicitly follow that his humanity is indeed confirmed, much like Nietzsche's claim of the necessity of man to overcome his own humanity and thus become the Übermensch. In other words, "if Zarathustra's dream of overcoming the human is to become reality, it will take place through an intimate relationship with the technological" (Onishi 2011, 102). The primordial layer, to Zima, is wrongly perceived as being his first augmentation, done centuries back, to improve his neural connections, but in fact he runs into the wall of memory and recollection. The justification for his perceived inadequacy can be and in fact is traced only when that wall is broken through, as "there cannot be turtles all the way down" and the infinite regress must reach its end (Cameron 2008, 1). His state is the reflection of a concern with "mereological dependence between a complex object and its parts, that is, its mereological constituents. The worry is that if a complex object is dependent on its parts, and each part in turn is dependent on its parts ad infinitum, then composition never gets off the ground — we will never reach the fundamental mereological constituents of the object" (Tahko 2014, 257). Each part of Zima is in itself indicative of his condition as cyborg, and all parts are perceived within the limitations of that particular framework, which leads to the suggestion that "the world is ultimately a delusion whose only truths are the network of discourses and epistemic formations that define us from age to age" (Rudnicki 2010, 23).

In many ways, the discussion on the infinite regress may be accompanied by the psychoanalytic investigation of the primal repression, as argued by Freud, Lacan, or Kristeva, as the "establishment of the subject's relation to its objects of desire and of representation, before even the establishment of the opposition, conscious/unconscious" (Felluga 2019). The cyborgs are "embodied in non-oedipal narratives with a different logic of repressions, which we need to understand for our survival" (Haraway 2017, 307). There is an argument to be made in relation to Zima's own psychoanalytical repression path. There are parallels that can be drawn between his search for his moment of primal repression and that of a human being in their attempt to heal the initial trauma so as to heal their present state. In a Lacanian interpretation, Zima had always been contemplating a lack within, a sense of an abyssal inadequacy: "What the subject profoundly desires is being itself, a desire that cannot be fulfilled" (Pordzik 2012, 152), and therefore he envisions a return to an inanimate, inorganic state as a solution. The nucleus of his search is the highly specific blue color, which becomes his first glimmer of the unknowable. It is a glimpse into his repressed past, the unknowable manifested through the simultaneously resisting other conceptualization blue, while symbolization. He does not know how to frame it. It appears like an erroneous pixel, disruptive and garish. By allowing himself to become

entirely immersed in it and allowing it to grow to cosmic dimensions, Zima is allowing the primal repressed nucleus to unfold. He seems to have found a means to reach the infinite regress of his existence, to reach the final proverbial turtle upon which all of himself had been erected, as all repression would be built upon previous instances of repression. In other words, one represses a specific event because they have already repressed a similar experience before, so one repression validates and enables the other, thus creating a pattern of potentialities of repression. For one to be able to dismantle the pattern they would inherently need to perform the archaeology of the mind that Zima brings up, moving from one repressed event or memory to the next, to finally reach what seems like the impossible destination of the original trauma. The impossibility of the path lies in the fact that the primal instance of repression is thought to occur in one's preverbal and sometimes even prenatal stages, with the experience of being born being thought of as the first trauma repressed and relegated to the realm of the unknowable. What Freud and Lacan do not account for, however, is the experience of the sentient non-human. For Zima, the path is indeed treacherous and difficult, but he is endowed with the many luxuries that would have eluded the limited human: indestructible augmentations, endless resources, a clear scientific record that would fill in the unknowable gaps of his own memory.

One phenomenon that might be associated with Zima's point of origin for his trauma is introjection, theorized by Philip K. Dick as "the mark of true maturity in the individual, and the authentic mark of civilization in contrast to mere social culture" (Dick 2017, 295). The point here would be the implicit necessity of returning inwards what we had cast outwards in our attempt to project life on the inanimate. One might argue that it is the inescapable wish of the human mind to endow that which surrounds it with the same particularities that define it, so as to allow a mirroring of the within, without. Dick posits, however, the dangers that come from such a withdrawal — a reification not only of those objects that surround it, but also of that which had been animate from the beginning, including other humans. In our attempt to withdraw and to introject, rather than project, we find ourselves building islands that would only house our own mind and our own reality, all else falling into a pattern of artificial mimicry. We run the risk, then, of allowing our brain to think itself alone. But this was within the parameters that might have functioned and have found their domain up to modernity. The peculiarities of post-modernity brought along a change only anticipated in the realm of science-fiction: "In a very real sense our environment is becoming alive, or at least quasi-alive, and in ways specifically and fundamentally analogous to ourselves" (Dick 2017, 295). In other words, we may have benefitted from the indulgence of projection solely for the sake of making sense of the world in our primitive states, but

that projection is now, in our post-modern state, taking on an entirely different dimension. What had been merely metaphorical or allegorical animation is now on a firm path to become truly animated. We live among the fruits of our projection labor, where what had been lifeless artificial constructs are being endowed, in a promethean way, with life. Additionally, "the constructs do not mimic humans; they are, in many deep ways, actually human already. They are not trying to fool us, for a purpose of any sort they merely follow lines we follow, in order that they, too, may overcome such common problems as the breakdown of vital parts" (Dick 2017, 296). While Dick's argument is that the artificial constructs we have thus endowed with animation would inevitably follow the same evolutionary path that all life does, and while their search for personhood in the event of gaining and attaining sentience does seem to be the expected course, it brings about the question of whether or not they would desire recognition as human, either by mimicking it or by truly having it granted. The conceptual definitions and delineations of human status are then themselves expanded. One of the main tenets of humanness is free will. But even that is questionable as so much of what we would categorize as free choice is dictated by external and environmental stimuli or previous experiential data, which would in turn mean that our pattern of choices fall under the incidence of the infinite regress: I choose this way because I have already chosen as such previously, and that too was a valid choice because of yet another earlier one, and so on ad infinitum.

Reynolds' short story focuses our attention on a portent that is all too likely and that was very clearly articulated by Philip K. Dick: "As the external world becomes more animate, we may find that we — the so-called humans — are becoming, and may to a great extent always have been, inanimate in the sense that we are led, directed by built-in tropisms, rather than leading. So we and our elaborately evolving computers may meet each other halfway" (2017, 298). Therefore, Zima and Carrie are each other's foil: he, the evolving machine, she, the millennial human, relying on machines, where she feels her frail humanity would lead to failure. Zima wants to grasp the dimension of human emotion. He emulates it. He thinks that continuously escalating the dimensions of his craft would allow him access to what he sees those around him experience effortlessly. It creates an interesting conversation on the nature of desire and will. As artificial intelligence keeps developing, we are often left wondering what it might desire next. One thing is clear — it is built with a self-improvement algorithm embedded in its model. Its exponential constant growth allows us to postulate that even if it did achieve virtual indestructibility and flawless performance, which the self-improving model would presuppose, it would not simply stop and consider itself "done", "finished", "perfect". We can argue that, barring a radical shift in its own tropisms, it would still aim to

continue its improvement, which would implicitly mean it would begin searching for abilities it does not yet possess and which might improve upon its patterns of performance. If we allow that it already attained indestructibility and peak performance, then it stands to reason that it would widen the scope of its search to include those attributes that are innately the dominion of the "fallible" human: empathy, true creativity, complex interpersonal relationships. Zima confirms this supposition. Even prior to learning of his machine nature, his constant dedication to self-improvement and evolution takes him down the path of attempting to replicate human creative experience. But perhaps the most human thing he does is to want to heal his primordial trauma, returning to origins, to the previously unknowable truth of his nature.

Zima's aim to help Carrie is startling to the reader. It renders the exchange initially uncanny as though neither us, nor the character herself are aware of a pervasive and perfidious danger that looms over her (and perhaps even over us). Carrie herself feels uneasy on the island: "Suddenly, I felt very alone and very vulnerable" (Reynolds 2006). She feels uneasy in her being separated from her Aide Memoire, and she feels uneasy in her having to rely simply on her arguably fallible human capacity. But the suggestion becomes clearer as the interaction between the two unfolds. The Aide Memoire, or the AM, becomes the solution to the physiological limitations of the human brain, whose lifespan had been extended beyond its evolutionary boundaries. Somehow, technology had advanced sufficiently as to allow for augmentations that would ensure extreme longevity, Carrie herself being over one thousand years old, but in those centuries, her human memory had reached its capacity and had become stretched to the brink of breaking. Thus, the AM, a small contraption that functions much like an external hard drive with artificial intelligence embedded within it, becomes tasked with enhancing human memory. In addition to storing memories, facts, and data, it also functions as a guide in Carrie's decision making processes. As such, Zima's insistence that she join him on the island for their interview without the AM is the first moment that the shift in paradigm occurs. Carrie's reliance on the AM had become something of a liability. She would refer to it for the most minute decision, as choosing between red or white wine, and while the choices the machine made were accurate and based on empirical data, they also obliterated any chance happening or any instance of creative randomness, in its homogeneity.

The social context of the short story no longer includes any stigma in relation to physical augmentations. There is no hint whatsoever that Zima would have been judged or otherwise marginalized on account of the extreme improvements brought to his body. However, there does seem to be a line drawn in the sand in terms of improvements brought to brain function, as though there is an unspoken understanding that the mind is the

repository of humanity. The intervention of the machine upon the mind, with all that the latter entails, is perceived as a threat to the very nature of the human. It is this humanity that is understood to bear the utmost intrinsic value and it is this facet of it, namely the complexity of the human mind that Zima and the machine struggle to replicate. The AM is a loophole to human limitations, as it indeed ensures an accurate record of experience and fact. It is precisely for this reason that Zima does not want it present for their meeting. He is not interested in the pretended objectivity added by the AM to the final story. His interest lies solely with Carrie's subjective experiential take. The human point of view, which implies minute modifications to the story, chipping away at its factual or scientific integrity, all the while endowing it with something infinitely more valuable: humanity. Even if inexact and flawed, it weighs more than the alternative record, which "isn't living memory. It's photography; a mechanical recording process. It freezes out the imagination; leaves no scope for details to be selectively misremembered" (Reynolds 2006). It becomes the final piece or the final brush stroke to his masterpiece, the one that had been missing. Even when facts are lost to the recesses of the mind, that simply enhances the human story. As such, even a small decision like choosing between two types of wine adds to the nature of humanity and becomes a foothold in the androidization of the human: "Unless you ignore that suggestion now and then, won't your whole life become a set of predictable responses?" (Reynolds 2006). This corroborates Philip K. Dick's claim that indeed the androidization of the human is not only possible and plausible, that it has already had its foundations established, and it is a real foil to humanness: "Androidization requires obedience. And, most of all, predictability. It is precisely when a given person's response to any given situation can be predicted with scientific accuracy that the gates are open for the wholesale production of the android life form" (2017, 299) as perhaps the most important distinction between the human mind and the android mind is the ability (or lack thereof) to make exceptions (Dick 2017, 302). Zima points to the profound implications and effects an exception might bring to one's mind — choosing against one's patterns of choice might simply shift something in the human psyche, altering their realities. The machine would see that moment of exception as one instance of deviation, nothing to rewrite the algorithm over, and would relegate it to the shadows as a oneoff, persisting in the choice based on empirical data and incidence, rather than understanding the shattered pattern, as reality "is not so much something that you perceive, but something you make. You create it more rapidly than it creates you" (Dick 2017, 303). That is where the true value of the exception lies — its ability to reform, reshape, recreate reality. The machine is faced with the impossibility of "figuring out" the human, "not that we ourselves can really figure each other out, or even our own selves.

Which, perhaps, too, is good; it means we are still in for sudden surprises and unlike the authorities, who don't like that sort of thing, we may find these chance happenings acting on our behalf, to our favor" (Dick 2017, 304). It might be that it is precisely these sudden surprises that confirm to us that we are still very much organically real and that reality has not yet been altered by a higher hivemind, which would never account for sudden shocks to the system.

Zima lives in a world where human augmentation is commonplace, where androids roam without a second glance from onlookers, where the presence of the machine is ubiquitous, within as well as without. As Donna Haraway stated, "late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert" (Haraway 2017, 309). The frontier, then, has become muddled, as one category stretches its limbs into the other. Humans are becoming more like machines, either by design and implants, or simply by the force of comforts, where predictability and algorithm rule supreme. The androids are becoming more and more "human", constantly improving and ensuring their own evolution, with the mark of and the desire to emulate their human creator in the very matrix of their model. As such, the question of essences loses traction. It becomes less important and more self-understood that one is what one is, without a need for any standardization. But those essential definitions seem to harken back to one's origin. That remains the sole province of one's true nature. Therefore, irrespective of the countless alterations brought to one's person, their categorization is clear based on their human or machine origin. A dismissal or transgression of this origin creates a traumatic event. Zima becomes the embodiment of a cautionary tale: his forgotten roots lead him down the path of a never-ending search for meaning and the implicit restlessness that accompanies his thwarted efforts to achieve his desired outcome. In his case, "the certainty of what counts as nature — a source of insight and promise of innocence — is undermined, probably fatally" (Haraway 2017, 309), and it only follows that it is solely through a return to that innocence that provides him with the correct and corrected course of action. However, we are not allowed the luxury of idealism. In the postmodern, post-human world, the origins of beings will likely be replaced, so a human being thus would no longer have a claim to their humanness simply through having been born of another human, in yet another exemplification of the infinite regress. Reproduction, according to Haraway, will inevitably be replaced by replication, sex by genetic engineering, the mind by artificial intelligence (2017, 317). Haraway argues that in the era of the cyborg and the sentient android, we seem to have moved away from Foucault's concept of biopolitics, which would have operated with normalization and exclusion based on desirability within the hierarchies of power. This surveillance and control over the body will manifest itself in different terms with the emergence of the new human: "the cyborg is not subject to Foucault's biopolitics; the cyborg simulates politics, a much more potent field of operations" (Haraway 2017, 318).

There is a fundamental parallelism between the condition of the cyborg/android trope and that of all people marginalized by a colonizer. Science fiction allows the viewers, according to Susan Sontag, to attain a sense of satisfaction thanks to their "extreme moral simplification ... a morally acceptable fantasy where one can give outlet to cruel or at least amoral feelings... the undeniable pleasure we derive from looking at freaks, at beings excluded from the category of the human" (2017, 193). Zima Blue and Zima himself, however, are the direct representations of the permeability of borders of definition. His reality is in perception. As such, he goes through life post-implantation as a cyborg, an exceptional human being who withstood profound augmentations and changes to his organic body in order to attain a loftier ideal, one that escapes the casual onlooker, but that inevitably stirs their awe. His moment of the blue flashback which gradually expands and engulfs his entire reality leads him back down the proverbial rabbit hole of his search for self. Once he determines his real origins, his conclusions leave us wondering whether this desire to constantly and consistently upgrade, to reach human status, then cyborg power is in fact a full circle, much like the ancient ouroboros. The beginnings of his transformation are evidently found without, with the human that built him as an exceptional tool. With every intervention upon his mechanical body, he envisions a growth of power that eventually leads him to grasp the tools of agency and reshape the reality that would have kept him seemingly enslaved, under a glass jar. In Zima's case, one is left wondering if the science used on him was "proper, or humane... versus the mad, obsessional use of science" (Sontag 2017, 193), but it is undeniable that the archetypal Frankensteinian trope is played upon. It is important to note that the desire to become more human is a projection embedded within him by his human creator, who aims to animate him ever more. He is programmed to perceive human values as superior, to absorb them as ideals. In his incremental development, after moving through progressive steps to attain first human status, then embody that which humans themselves perceived as ideals, reaching unmitigated heights, his improvement does not simply end. The lengths of his sentience reach an all-important realization, confirming that "cyborg writing is about the power to survive not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other" (Haraway 2017, 323).

His blue epiphanic moment helps him recover his primal repression, his initial trauma of being forced into a shape that did not respect or coincide with his original identity. It confuses the reader to see all upgrades renounced, and it would be foolish to believe that he is choosing the existence of an inferior being. Haraway argues that "in retelling origin stories, cyborg authors subvert the central myths of origin of Western culture. We have all been colonized by those origins myths, with their longing for fulfillment in apocalypse" (2017, 323). The eschatology myth of the West promised salvation for the human through an end and a return to the original Garden, whereas new discourses "ask us to consider if utopia is now possible only in the absence of humanity" (Jendrysik 2011, 36). Zima comes to the realization that he had been coerced by his context to absorb humanity as the ideal through the many systematic interventions from generations of owners. Once he escapes the inherited ownership over his body, he begins a process of self-transformation, which eventually leads him to undo their changes. Thus, we note an unmistakable overlap between his story and that of colonized peoples forced to take on the ideals of the anglo colonizers: accomplishment through the American Dream, salvation through the Christian faith, success through capitalism. This takes them back to their own identity and an authentic peaceful existence, away from the rat-race of dualisms and dichotomies. In the words of Donald A. Wollheim, which sound just as true as they did in 1937, "how sick we are at base of this dull, unsatisfying world, this stupid asininely organized system of ours which demands that a man brutalize and cynicism himself for the possession of a few dollars in a savage, barbarous, and utterly boring struggle to exist" (Michel 2017, 187).

The exploration of Alistair Reynolds' shot story, Zima Blue, has granted us the multifaceted incursion into posthumanism that the latter requires. On the one hand, we are forced to contend with a new model of humanity, a new conversation on personhood, as conceptual boundaries become more and more permeable. We have found that we are no longer able to rely solely on perception and assumed labels, but rather we are expected to perform an archaeology of the self, in order to attain a clear understanding thereof. Old modes of thinking that would rely heavily on infinite regress would also maintain a repression of the self. Zima becomes the embodiment of primal repression and thus enables us to inspect our own primordial and proverbial turtle, the point of origin. In the context of the ever-growing androidization of the human, a sense of caution and a critique of technology become indispensable, should we desire to maintain that ultimate goal of humanity: freedom and agency. We therefore conclude that through science-fiction we are given the singular opportunity to posthuman investigation, narrowly avoiding posthumous hindsight.

References

- Cameron, Ross P. 2008. "Turtles All the Way Down: Regress, Priority and Fundamentality." *The Philosophical Quarterly* (1950-) 58 (230): 1–14. https://www.jstor.org/stable/40468234.
- Campbell, Norah, Aidan O'Driscoll, and Michael Saren. 2010. "The Posthuman: The End and the Beginning of the Human." *Journal of Consumer Behaviour* 9 (2): 86–101. doi:https://doi.org/10.1002/cb.306.
- Desblache, Lucile. 2012. "Hybridity, Monstrosity and the Posthuman in Philosophy and Literature Today." *Comparative Critical Studies* 9 (3): 245–255. doi:https://doi.org/10.3366/ccs.2012.0061.
- Dick, Philip K. 2017. "The Android and the Human." In Science Fiction Criticism. An Anthology of Essential Writings., 295–305. London: Bloomsbury Publishing.
- Felluga, Dino. 2019. "Introduction to Julia Kristeva, Module on the Abject." *Purdue.edu*. https://www.cla.purdue.edu/academic/english/theory/psychoanalysis/kristevaab ject.html.
- Fenton, William N. 1962. "This Island, the World on the Turtle's Back." *The Journal of American Folklore* 75 (298): 283-300. doi:https://doi.org/10.2307/538365.
- Harari, Yuval N. 2014. Sapiens: A Brief History of Humankind. Toronto, Ontario: Signal.
- Haraway, Donna. 2017. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Science Fiction Criticism. An Anthology of Essential Writings*, 306–329. London: Bloomsbury Publishing.
- Jendrysik, Mark S. 2011. "Back to the Garden": *Utopian Studies* 22 (1): 34–51. doi:https://doi.org/10.5325/utopianstudies.22.1.0034.
- Michel, John B. 2017. "Mutation or Death! ." In Science Fiction Criticism. An Anthology of Essential Writings, 183–187. London: Bloomsbury Publishing.
- Onishi, Bradley B. 2011. "Information, Bodies, and Heidegger: Tracing Visions of the Posthuman." *Sophia* 50 (1): 101–112. doi:https://doi.org/10.1007/s11841-010-0214-4.
- Pordzik, Ralph. 2012. "The Posthuman Future of Man": *Utopian Studies* 23 (1): 142-161. doi:https://doi.org/10.5325/utopianstudies.23.1.0142.
- Reynolds, Alastair. 2009. Zima Blue. San Francisco: Gollancz.
- Rudnicki, Robert. 2010. "Turtles All the Way Down: Foundation, Edifice, and Ruin in Faulkner and McCarthy." Faulkner Journal 25 (2): 23–52. https://www.jstor.org/stable/24908377
- Sontag, Susan. 2017. "The Imagination of Disaster." In Science Fiction Criticism. An Anthology of Essential Writings. London: Bloomsbury Publishing.
- Tahko, Tuomas E. 2014. "Boring Infinite Descent." *Metaphilosophy* 45 (2): 257–269. https://www.jstor.org/stable/24441795.