

**“Whatever comes after human progress”: Transhumanism,  
Antihumanism, and the Absence of Queer Ecology in Lidia Yuknavitch’s  
The Book of Joan**

Sean Seeger, Department of Literature, Film and Theatre Studies, University of Essex UK

Accepted for publication in Sarah Falcus and Maricel Oró-Piqueras (Eds). 2023. Age and Ageing in Contemporary Speculative and Science Fiction. Bloomsbury  
<https://www.bloomsbury.com/uk/age-and-ageing-in-contemporary-speculative-and-science-fiction-9781350230675/>

**Please note:**

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher’s version if you wish to cite this paper.

## **“Whatever comes after human progress”: Transhumanism, Antihumanism, and the**

### **Absence of Queer Ecology in Lidia Yuknavitch’s *The Book of Joan***

Not progress denied but progress realized, is the nightmare haunting the antiutopian novel.

– Irving Howe, *Decline of the New* (Howe 1970: 67)

#### **Abstract**

This chapter puts forward a reading of Lidia Yuknavitch’s dystopian science fiction novel *The Book of Joan* (2017). Its argument proceeds as follows. Firstly, Yuknavitch’s novel is situated in relation to Anglo-American science fiction’s longstanding engagement with the humanist ideal of progress and some of the literary tropes associated with it, most notably that of ageing. Secondly, the novel is read as mapping two contrasting trajectories for humanity: the acceleration of progress in the form of transhumanism, on the one hand, and the rejection of humanist progress and a turn toward antihumanism, on the other. Thirdly, it is argued that some of the tensions within the novel are best explained by the absence of a third possibility, namely queer ecology. Drawing on queer theory, the chapter concludes by arguing that queer ecology may be able to avoid the conflict between nature and culture which compromises Yuknavitch’s attempt to think ecologically.

#### **Keywords**

transhumanism, antihumanism, queer, ecology, dystopia, science fiction, Lidia Yuknavitch

#### **Introduction**

Published in 2017, Lidia Yuknavitch’s critically-acclaimed science fiction novel *The Book of Joan* describes an apocalyptic future in which a combination of global warming and resource wars has left the earth largely uninhabitable. In the aftermath, the elite of the old world has taken refuge in an orbiting space station called CIEL, while the few survivors left below live underground in order to avoid the high levels of radiation on the planet’s surface. CIEL extracts what resources it can from the earth via a series of umbilical cord-like connections known as skylines. The space station is ruled over by the celebrity-turned-dictator Jean de Man, whose authoritarian regime employs state propaganda, mass surveillance, and robot enforcers to maintain its grip on power.

During the preceding decades, the human body has undergone significant changes due to radiation levels and other environmental factors, in a process referred to by one character as ‘devolution’ (Yuknavitch 2017: 151; hereafter cited by page number). With the sole exception of Joan, one of the two protagonists of the novel, the human race is now without hair, fingernails, toenails, or skin pigmentation. The process of mutation has likewise left them without sexually functional genitalia, meaning reproduction by conventional means is now an impossibility. Artificial reproduction, including cloning and other techniques, have been attempted aboard CIEL, but the extent of the mutations undergone by humanity cause these to fail in every case. In response, Jean de Man plans to engineer a new species of human which will reproduce asexually, though this plan has thus far been frustrated. De Man remains at war with the rebel faction led by Joan, who de Man previously captured and pretended to kill in a televised execution intended to demoralize his opponents. He has since learnt that, as the one person resistant to the process of devolution, Joan may hold the key to overcoming the barriers to his scientists’ research, leading him to pursue and attempt to recapture her during the course of the novel.

In an influential statement on the science fiction genre, Fredric Jameson has argued that, ‘the most characteristic sf does not seriously attempt to imagine the “real” future of our social system. Rather, its multiple mock futures serve the quite different function of transforming our own present into the determinate past of something yet to come.’ (Jameson 2005: 217) According to Jameson, science fiction is not an attempt to predict or anticipate the future, but rather an attempt to historicize the author’s own moment by viewing it as if it belonged to the past rather than the present, thereby opening up a critical vantage point which, on Jameson’s account, science fiction is especially well positioned to provide. In light of this, it is illuminating to consider how Yuknavitch’s novel addresses a number of pressing contemporary social and cultural issues from the estranging perspective made available by science fiction.

The argument of this chapter is as follows. Firstly, *The Book of Joan* is situated in relation to Anglo-American science fiction’s longstanding engagement with the modern ideal of progress and some of the literary tropes commonly associated with it, most notably that of ageing. Secondly, the novel is read as mapping two sharply contrasting potential trajectories for humanity: the acceleration of progress along humanist lines in the form of transhumanism, on the one hand, and the rejection of such

progress and a turn toward antihumanism, on the other. While these terms each have multiple, sometimes contradictory meanings, and so will need to be defined carefully below, vivid fictionalized images of each of them are to be found in Yuknavitch's novel. Thirdly, it is argued that some of the tensions and anomalies present in the novel are best explained by the absence from Yuknavitch's imaginative schema of a third possibility not encompassed by either transhumanism or antihumanism, namely queer ecology. One main reason for Yuknavitch's opposition to transhumanism is its view of embodiment and finitude as representing limitations on human power, a stance she portrays as ecologically ruinous. Yet the alternative put forward in *The Book of Joan* – a rejection of all forms of humanism combined with an unsentimental attempt to renaturalize humanity and resituate it in the natural world – arguably depends upon the same dualism as the humanism it is directed against, raising a number of related problems. In this way, the two opposing poles between which Yuknavitch situates the war for the future can be seen to resemble one another, at least in regards to their underlying orientation. Posthumanism is considered as an alternative critical paradigm here, but it is found to be unsatisfactory on a number of grounds. Drawing on recent queer theory, the chapter concludes by arguing that queer ecology may be able to avoid the conflict between nature and culture which compromises Yuknavitch's attempt to think ecologically, while at the same time refusing the drive to overcome embodiment and finitude which Yuknavitch correctly locates at the heart of contemporary transhumanism.

## **I. Science fiction, progress, and ageing**

The modern ideal of progress as formulated during the Enlightenment period has been profoundly influential within Anglo-American science fiction. During the nineteenth and especially during the twentieth century, science fiction in Britain and the United States was deeply informed by a conception of progress built on the Enlightenment model. This way of thinking about material, intellectual, and social development could take more or less explicit and more or less ambitious forms, but whatever form it took it was clearly one of the main organising principles and sources of narrative motivation for

a great many texts in this tradition, including the work of some of modern science fiction's most celebrated and influential authors.

Sometimes, as in the case of Isaac Asimov's *I, Robot* stories, for instance, progress is present merely as the steady improvement of technical devices and gadgetry ([1950] 2018). At others, as in Olaf Stapledon's monumental 'history of the future', *Last and First Men*, progress takes the form of the evolution of civilisation in all its respects over the course of billions of years ([1930] 1999). Elsewhere, progress takes place in the form of a sudden, dramatic shift from the familiar to the utopian, as in the case of Arthur C. Clarke's *Childhood's End*, in which a race of alien beings takes charge of human affairs and administers a prosperous and peaceful new age in world history ([1953] 2010). In other cases, humanity as it currently exists is rendered obsolescent by some new form of life representing a higher stage of development. This scenario can play out in a utopian guise, as in the case of the evolution of humanity into the immortal Star Child at the end of Arthur C. Clarke's *2001: A Space Odyssey* ([1968] 2018), or take a more dystopian turn, as in Philip K. Dick's *Do Androids Dream of Electric Sheep?* ([1968] 2010), in which synthetic lifeforms indistinguishable from human beings yet lacking many of their limitations are implied to be the natural successors to their flawed creators. Even in the case of the latter text, which offers a generally bleak view of the future and is typically seen as an expression of the 1960s counterculture, the Enlightenment principle of rational advancement through an increase in knowledge is implicitly retained in the form of technology that promises to overcome human frailties.

The homogeneity of this line of authors – as exclusively white, male, heterosexual, and educated in the natural sciences – was highlighted by some of the science fiction produced during the late 1960s and 1970s. As Tom Moylan has shown, writers of science fiction who participated in and contributed to the counterculture as it developed over the following decade – most notably Ursula K. Le Guin, Marge Piercy, Joanna Russ, Samuel R. Delany, and, slightly later, Octavia E. Butler – helped to diversify Anglo-American science fiction and reorient the genre around new perspectives, subject positions, and political projects (Moylan 2010). In doing so, these authors explicitly contested the foregoing emphasis on the hard sciences, militarism, empire building, and 'masculine' values. This important development was relatively short-lived, however, and was followed by a return to more

conservative forms as exemplified by William Gibson's work in the 1980s, and to a more conventional, Enlightenment-inspired outlook as exemplified by Kim Stanley Robinson's work in the 1990s. To this extent, Yuknavitch's *The Book of Joan* bears more of a resemblance to the science fiction identified by Moylan as belonging to the oppositional political moment of the 1970s than it does to the majority of Anglo-American sf either side of it.

Lying behind much of the Anglo-American sf written between the 1920s and the 1960s is the work of H. G. Wells, whose own commitment to progress, and to the belief in the transformative power of science and technology in particular, animates much of his extensive corpus, both in his fictional and nonfictional writings. In novels like *A Modern Utopia* ([1905] 2005), Wells articulated perhaps the most influential image of a techno-utopian future, where virtually every social and economic problem confronting humanity had been solved, in large part through the application of advanced technologies and modern social engineering. Such was the familiarity of this image thirty years after its initial appearance, Aldous Huxley was able to parody Well's vision of an antiseptic, brightly lit future in *Brave New World* ([1932] 2007) and count on his readers knowing which social prophet he was lampooning. Huxley's choice of the term World State for his anti-utopia takes on further significance in light of recent scholarly work on Wells. In her insightful study, *Inventing Tomorrow: H. G. Wells and the Twentieth Century* (2019), Sara Cole has shown that Wells held to a very specific understanding of the route out of the difficulties that beset the world during the early decades of the century, including the two world wars, nationalist chauvinism, colonial violence, the Great Depression, and the rise of totalitarian regimes. Wells vigorously opposed nationalism and made a passionate case for the need for unity in the face of the divisions of his time. He held that the only alternative to the decline or self-destruction of the human race – something anticipated at points in his dystopian novellas – was a universal, cosmopolitan world state, planned and directed by a single source of governmental authority (Cole 2019: 37). Cole argues that Wells possessed a prescient grasp of the interconnectedness of the modern world and of its links to the condition of total war, leading him to formulate a view of humanity as a collective subject by way of an alternative (Cole 2019: 39–40).

The connection between the idea of a world government or world state and that of a single, collective human subject is not unique to Wells, however. There are anticipations of this linkage in

earlier works of science fiction and it continues down to the present day, as Seo-Young Chu has explored (2010: 88–93). As Chu notes, both Wells and Olaf Stapledon, one of Wells’s most notable epigones, strongly favoured the unification of humanity and the overcoming of tribal differences (2010: 88). This view was likewise prefigured in the work of various nineteenth-century writers and intellectuals, including Percival Lowell, a US astronomer whose work was an influence on Wells, Stapledon, Asimov, Clarke, and other key figures in Anglo-American sf (Chu 2010: 90). Especially important here was Lowell’s concept of ‘planetary subjectivity’, a kind of world spirit in which humanity’s differences would be transcended through recognition of a single, underlying species mind. This widely shared, quasi-Hegelian idea is important for our purposes as it helps to fill out the picture sketched above of science fiction’s relationship to the ideal of progress. As Gary Westfahl has observed, works of science fiction have long had ‘an international aura, routinely positing the future emergence of a world government’ (2005: 2). Planetary subjectivity, however, while often presupposing the institution of a world government, need not necessarily do so. Planetary subjectivity can take various forms, from Clarke’s *Star Child*, which stands for the entirety of human progress focused to a single point, through to the more general underlying assumption – common to works by Wells, Stapledon, Asimov, Clarke, and many others – that there *is* such a thing as a necessary next or even final stage of human development, and that this will entail universal agreement on the values and goals proper to that stage. Cole has observed that Wells’s nonfiction writings embody this same ideal (2019: 37–40; 87). Wells’s popular multivolume history of the world, *The Outline of History*, first published in 1919, for example, switches from traditional history to ‘future history’ in its final section, casting the First World War as the prelude to a harmonious world state in which international divisions are healed once and for all. As Robert Crossley suggests in his biography of Olaf Stapledon, the narrative structure of Wells’s *Outline* was one of the main sources of inspiration for Stapledon’s own history of the future, *Last and First Men*, which begins in the fraught decades of the early twentieth century and culminates with the hyper-advanced civilisation of the so-called Eighteenth Men in the distant future (Crossley 1994: 155). Progress, as conceived by Stapledon, is progress on the part of humanity understood as a collective agent. *Last and First Men* was itself to prove a key influence on many other writers of science fiction in the twentieth century, including Arthur C. Clarke, Brian Aldiss, and Kim Stanley Robinson. There is

a genealogy that can be traced, then, from Wells's ideas about progress and unity through the work of Stapledon and then through subsequent waves of Anglo-American sf.

An important dimension to the planetary subjectivity which informs such writing is its association of progress with a process of maturation and ageing. If progress as it is understood and represented in Anglo-American sf can be traced back to the Enlightenment period, then it may be understood in light of Immanuel Kant's epochal formulation, 'Dare to know!' (*Sapere aude*). If, for Kant, enlightenment meant emerging from self-imposed immaturity, then this implied a view of progress as linear progression from ignorance to knowledge, from darkness into the light, and from childhood to a condition more fully approximating adulthood. For H. G. Wells, in both fictional works like *A Modern Utopia* and nonfictional works like *The Outline of History*, the history of humanity follows exactly this pattern: as a linear if halting movement away from an immature, irrational past toward a mature, rational future. For Olaf Stapledon in *Last and First Men*, the final iteration of the human species, the Eighteenth Men, are inconceivably wise beings who stand in relation to earlier human groups as adults to infants, and whose minds contain the entirety of human experience heretofore in a manner analogous to an individual's recollection of childhood. In the case of Arthur C. Clarke's aptly titled *Childhood's End*, progress is explicitly figured in terms of ageing and maturation. With the arrival of the alien Overlords and the dawning of the global utopia, earlier stages of human culture are reframed as a condition of childhood, which must now be relinquished along with the childish beliefs and habits that accompanied them.

The case of the Star Child in *2001: A Space Odyssey* would initially appear to be an exception to this trend: in this case, the final stage of human development takes the form of a mysterious cosmic child, in an apparent subversion of the traditional linear pattern. Taken in context, however, the implied meaning of this sequence is seemingly not that there has been a reversion to an earlier stage of development, but rather that every earlier stage has been so vastly superseded that some new symbolism is required to convey the magnitude of the transformation involved. It is noteworthy that, in Stanley Kubrick's film version of the novel, to which Clarke contributed, the protagonist of the story is portrayed, immediately prior to his metamorphosis into the Star Child, as rapidly ageing, appearing in the penultimate stage as an elderly man. Once again, then, human progress is figured via the process of



individual ageing, even if this culminates in something so radically new it must be portrayed in terms of the Star Child's symbolic infancy. A further question worth asking here is whether this sequence ought to be read as incorporating an element of decline as well as progress. The fact that the protagonist is portrayed as infirm and bedridden before his final transformation may point to the former. Whether or not old age carries an additional association with decline, however, the broader narrative of the maturation of the human species in which the sequence is embedded – the evolutionary path from the early hominids at the start of the story to the Star Child at its end – remains linear and cumulative, in keeping with the texts previously considered.

Having seen how progress, maturation, and ageing are explored in some representative works of the lineage of twentieth-century Anglo-American sf that descends from H. G. Wells we shall now turn to *The Book of Joan* to see to what extent Yuknavitch repeats, subverts, or leaves behind these familiar tropes and themes.

## **II. Transhumanism, materiality, and stagnation**

One facet of contemporary culture which *The Book of Joan* may be seen as responding to is a cluster of tendencies that can for convenience be brought under the heading of 'transhumanism'. This term has been defined by scholars and theorists in a variety of ways and considered from a range of perspectives, from the laudatory (Bostrom 2016; Lovelock 2019) to the critical (Gray 2016; Mason 2019). Perhaps the most instructive brief definition is that of Katherine Hayles, for whom transhumanism is a mode of thought that 'privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life' (1991: 2). Published in the same year as Yuknavitch's novel, Mark O'Connell's *To Be a Machine* (2017) offers an illuminating account of transhumanism through interviews conducted with prominent members of the international transhumanist movement, for whom the human mind and body are obsolete technologies awaiting replacement. As O'Connell shows, the epicentre of transhumanist thought is Silicon Valley, but the ideology is increasingly making inroads into mainstream culture and politics. In

the eyes of some of its adherents, transhumanism represents the next stage in the evolution of capitalism, often understood in terms of the eclipse of the human. The ruthless logic of this position is that, as technology begins to realize possibilities previously confined to science fiction, the human contribution to the functioning of the capitalist system will become increasingly irrelevant, raising the prospect of a world with no obvious role for the majority of people. The latter is a minority view, however, with the majority of transhumanists allowing for the continued existence of human beings, albeit in a post-biological form. One variant of this is dataism, whereby the concept of data is elevated to an ontological principle and the human mind is seen as nothing but a quantity of information capable, in principle, of existing in a wholly digital environment. As Yuval Noah Harari shows in his book *Homo Deus: A Brief History of Tomorrow*, current exponents of dataism look forward to a future in which, as in Hayles's account of transhumanism, biology has been transcended and mind is no longer constrained by materiality or embodiment (2017). A further important variant is that of the futurist Ray Kurzweil, for whom, in a clear rehearsal of the familiar science fiction trope of planetary subjectivity, the next stage of human progress is expected to take the form of the emergence of a near-omniscient superintelligence or 'singularity' destined to take charge of global affairs (2010). Lastly, there is the work of Zoltan Istvan, an American transhumanist political candidate and theorist of technology who, in line with billionaire venture capitalists such as Paul Allen and Peter Thiel, has argued in a series of books and articles that transhumanism ought to be understood as a moral crusade for radical life extension that is specifically directed against ageing and mortality (2013; 2020; 2021). One thing that Istvan's work highlights is the extent to which the transhumanist movement's attitude toward embodiment is motivated by its recoil from the ageing body, which is viewed by Istvan and some of the transhumanists interviewed by Mark O'Connell as the result of an oversight or 'bug' in the 'programming' of the human machine.

Following Jameson's guidance about how to approach science fiction, *The Book of Joan* is not best read as an attempt to intervene directly in debates about transhumanism and the techno-capitalist worldview associated with it. Rather, the novel projects an extreme, hyperbolically imagined future in which we may recognize facets of contemporary life reflected back to us in a distorted yet suggestive form. What Yuknavitch encourages us to think about through her fiction is the role and status not just

of the human body but of materiality more generally in the transhumanist imaginary, that is, not so much its explicit content but its guiding assumptions and values. In the words of Christine, one of the novel's narrators, 'After we tired of television, after we tired of films, after social media failed to feed our hungers, after holograms and virtual realities and pharmaceuticals and ever more mind-boggling altered states of being, someone somewhere looked down in despair at the sad skin of his or her own arm and noticed, for the first time, a frontier.' (16) Passages like this draw our attention to the attitude toward material embodiment implied by some variants of transhumanism. As Christine also informs us, sexual acts of any kind are prohibited aboard the CIEL space station: 'Our bodies are meant to be read and consumed, debated, exchanged, or transformed only cerebrally. Any version of the act itself is an affront to social order, not to mention a brutal reminder of our impotency as a nonprocreating group.' (34) As she crucially adds, however, 'Unlike those in power here on CIEL, reproduction wasn't what we mourned. We mourned the carnal. Societies may be organized around procreation, but individuals are animals.' (49–50) It is this animal dimension of the human – and, by extension, the human participation in nature – which is portrayed as imperilled by Jean de Man's drive to 'perfect' the human species. One of the main implications of the increasing disembodiment of humanity which Yuknavitch's novel makes us aware of is thus the elimination of the visceral and somatic basis of much of our experience.

As its name implies, transhumanism is generally understood as an extension of the humanist project initiated during the Enlightenment. As Cary Wolfe has observed, on a transhumanist picture of the future of the human species, "the human" is achieved by escaping or repressing not just its animal origins in nature, the biological, and the evolutionary, but more generally transcending the bonds of materiality and embodiment altogether,' meaning that 'transhumanism should be seen as an *intensification* of humanism' rather than as a departure from it (2010: xv). Echoing the terms of Katherine Hayle's own critique of transhumanism, Wolfe therefore agrees with those who view transhumanism as an extension of the liberal subject's power into new domains (ibid.). In Yuknavitch's novel, the transhumanist conjuncture of progress, power, and promethean humanism is strongly evoked by the oratory of Jean de Man, who in one of his holographic propaganda speeches tells the citizens of CIEL that, 'Your life is not for them, not for the putrid detritus resisting the future, clinging to Earth for

a life that cannot be sustained. Earth was but an early host for our future ascension. Your life can have meaning and justification if you but turn your sights toward a higher truth.’ (14) In de Man’s view and that of the faction he represents, human life as it has been lived up until his own moment has been the product of a persistent error, now recognized as such: the mistake of having been unduly wedded to material embodiment. Although at the stage of development depicted by Yuknavitch, de Man’s experiments primarily take the form of alterations made to the human body, the logic of his discourse throughout the novel points to a strong mind-body dualism, the fulfilment of which would be the triumph of the former over the latter through the untethering of mind from body. To this extent, the transhumanism practised on CIEL, while being a step beyond that of the early-twenty-first century, is arguably only a transitional moment on the way toward the final realisation of the transhumanist ideal of emancipation from our remaining links to the material world.

As John Gray has shown, there are clear parallels between transhumanism and ancient Gnostic traditions, in which a fatal cosmic ‘fall’ was involved in the movement from purely spiritual being to the deplorable condition of embodied, physical existence (2016). The loathing expressed at points by Jean de Man for humanity’s persisting relationship with the Earth may be read as a quasi-Gnostic longing for the overcoming of matter altogether. Looking back to the period immediately prior to the wars that have resulted in the apocalyptic circumstances of the main narrative, Christine observes that, it had then ‘seemed that technology and evolution were on the cusp of a strange bright magnificence. Technology had made houses smart, and cars, and employment centers, and education. The physical world seemed only a membrane between humans and the speed and hum of information.’ (75) The subsequent devastation of the planet obviously represents a major break in the history of progress, but the powerful strand of transhumanism aboard CIEL means the seeds of the future implicit in the old world are merely awaiting activation at a later date. The physical world, Christine recalls, had once come close to being little more than a ‘membrane’ between humanity and information. The rhetoric and ambitions of de Man imply that this remains the dominant vision of a liberated future among the new elite – both in the context of *The Book of Joan* and in today’s transhumanist culture as explored by O’Connell, Harari, Gray, and others.

As we have seen, a major strand of twentieth-century Anglo-American sf was informed by the Enlightenment ideal of progress, often figured via the trope of ageing. As shall be explored in the following section, *The Book of Joan* may be read as subverting elements of this tradition. At the same time, however, other elements of it are taken over and extended by Yuknavitch. The humanist ideal of writers like Wells, Stapledon, Asimov, Clarke, and their inheritors, for instance, morphs into the transhumanism of Jean de Man. The trope of ageing likewise recurs, though it is developed in a number of ways. Firstly, the possibility of ageing, at least beyond a certain point, has been eliminated among the population of CIEL. As a result of material scarcity, no one is allowed to live beyond the age of 50, at which point they submit to assisted suicide and the water and other elements from their bodies are efficiently recycled in what Christine calls ‘a finite, closed system’ (7). The explanation given for this practice in the novel is the need to conserve resources, yet it surely lends itself to being understood in relation to the turn against ageing taken by contemporary transhumanists. Although the link is never made in the novel, de Man’s decision to cap ageing at 50 could be read as a frustrated response to the same bodily processes lamented by Zoltan Istvan and the Silicon Valley transhumanists: if radical life extension proves unattainable, then ageing can at least be made impossible by preventing anyone from living beyond their fiftieth year.

On a second level, the capping of ageing at 50 is treated as symbolic of the social and cultural stagnation of CIEL. Whereas in novels like Wells’s *A Modern Utopia*, Stapledon’s *Last and First Men*, and Clarke’s *Childhood’s End*, old age is associated with the culmination of the long journey of the species, in *The Book of Joan* the impossibility of reaching old age aboard CIEL stands for the blocked road to the future. Here, however, a distinction needs to be drawn between the novel’s narration of the lives of individual characters, on the one hand, and its narration of the history of the human species, on the other. While the passage from youth to old age *at the level of the species* was represented as a linear path of development in the Anglo-American sf surveyed above, ageing *at the level of the individual* could, as in the case of the ambiguous concluding sequence of *2001*, potentially signify decline as well. In Yuknavitch’s novel, by contrast, history has fallen frustratingly short of the transhumanist aspirations of de Man and his followers. Scientific and technological progress nevertheless remains the preeminent goal, despite prevailing conditions meaning that society is trapped at a specific stage of development,

as is attested to by de Man's many botched experiments in remaking the human form. One conclusion that might be drawn from all this is that the apparent contradiction implied by regarding old age as *both* completion or fulfilment *and* something to be avoided or engineered out of existence is, from the point of view of a character like de Man or a transhumanist like Istvan, not a contradiction after all. The compatibility of the two views might be expressed as follows: while the historical evolution of humanity is best understood symbolically according to one familiar picture of the ageing of an individual human being (the passage from guileless infancy to sagacious old age), part of the promise of such evolution is the eradication of the empirical conditions which constitute ageing in the life of the individual. In this regard, de Man is an inheritor of a set of assumptions and a view of ageing that runs back through more than a century of humanist/transhumanist science fiction.

### **III. Antihumanism, nature, and culture**

*The Book of Joan*, it is important to note, takes place against a backdrop of ecological themes and concerns. The teachings of Joan herself, provided in brief instalments throughout the novel and then condensed into a letter to her partner at the end of the book, emphasize the human continuity with nature over against the alienated condition personified by the inhabitants of CIEL, 'fast becoming pure representations of themselves,' in Christine's words (63). By contrast with this, the relationship to nature embodied by Joan is framed as a return to humanity's authentic origins: 'You are giving them back their sacred relationship to the planet and the very cosmos they came from,' a resistance fighter says to Joan (227). As the title of the book suggests, Yuknavitch's novel clearly takes sides in the conflict it portrays, aligning itself *with* Joan and *against* Jean de Man, her nemesis and narrative counter principle. This conflict may be read on at least three levels: there is the war between Joan and de Man themselves, there is the ideological conflict over the destiny of the human species, and there is the more abstract opposition of nature and culture, which is shown to encompass the other two. If de Man's transhumanism may be understood as the end stage of the humanist progress narrative, Joan's prophetic teachings embody an antihumanist worldview running exactly contrary to the former.

In her letter to her partner, Joan writes, 'You deserve a world better than this. You deserve whatever comes after human progress and its puny failures.' (266) Joan identifies what has been called progress with the brutal subjugation of nature, including humanity itself through its participation in nature. In opposition to this, Joan's resistance movement represents an antithetical, antihumanist version of the human story. As Joan puts it, 'What if being human did not mean to discover, to conquer. What if it meant rejoining everything we are made from.' (227) Returning to 'everything we are made from' is Joan's radical alternative to de Man's longing for the elimination of matter and corporeality. Whereas de Man is convinced that the ultimate human purpose is to transcend the material world, Joan is no less convinced that humanity's true end lies in reversing course and immersing itself once again in the raw, lawless stream of natural processes. If de Man's vision stands for the triumph of control, Joan's represents a relinquishing of control in favour of a deferral to nature in its nonhuman otherness. From Joan's point of view, in a clear echo of deep ecological thought, the humanist conception of progress and its transhumanist progeny inevitably results in the destruction of the earth due to its inherent anthropocentrism, treating the planet as little more than a set of resources for human projects.

Joan's antihumanism needs to be distinguished on this point, however, from a dominant current within critical theory which offers a comparable critique of the dominance of techno-scientific rationality. In a helpful essay on the politics of posthuman and transhuman technologies, Luciana Parisi has identified a line of thought within critical theory descending from the Frankfurt School and running through to the present day according to which 'technoscientific epistemology – or knowledge generated through technoscientific rationalisation or conceptualisation of the real – determines the ontological condition of thought, thus reducing the possible configurations of political subjectivity mainly to what can be known, measured, [or] calculated' (2017: 215). Set against this, there is what Parisi calls the 'anti-technoscientific view' which, as she puts it, 'works to preserve the ontological condition of thought (that is, of political thought autonomous from the technoenvironment in which it operates)' and which 'necessarily identifies technology with power on the one hand and separates the sacredness of human thought from the mechanical and automated systems invented by humans on the other' (2017: 215–16). Despite the affinities between this anti-technoscientific stance and Joan's antihumanism, there is also a crucial difference, which is arguably decisive for the overall import of Yuknavitch's novel.

This is that the critique of technoscientific rationality on the part of critical theory remains humanist in its guiding ethical orientation: as Parisi observes, it attempts to establish a bulwark between human political rationality and the encroachments of technoscience. Joan's antihumanism, on the other hand, is a repudiation of the entire humanist legacy, radically decentring humanity and stripping it of any claim to uniqueness. For her, the human animal is simply a species among other species, equally a part of nature and equally dependent upon it: 'We always look up. What if everything that mattered was always down? Where things are base and lowly. Where worms and shit and beetles bore their way along.' (147) Later, in her letter to her partner, she writes:

There is no longer any reason to further a philosophy. There is only being. 'Knowing' has one use-value that I can see: Does it extend survival and promote a thriving species, plant or animal? If not, it's just the life of the mind, and the life of the mind has no telos without relationships to every other alive thing. (263)

Here and elsewhere, Joan's denunciation of reason and progress is not presented by Yuknavitch as a prelude to a proposal for alternative modes of reason and progress, but as a rejection of any attempt to transcend our common animal existence.

The question of the relation of Joan's antihumanism to the trope of ageing in twentieth-century sf and the role played by ageing aboard CIEL discussed in the previous two sections is relevant here. Aside from occasional references made to the immense age of the earth, the topic of ageing is only engaged obliquely in the Joan strands of the narrative. Nevertheless, Joan's rhetoric of 'everything that mattered' lying at our feet all along is surely suggestive. Maybe, she implies, *our* new beginning will take the form of a return to *the* beginning. Perhaps, that is to say, the fresh start sought by an exhausted human species lies in a recovery of its earliest origins rather than in further onward movement toward a future coordinate on a linear timeline. Breaking with established sf convention, infancy and old age would then seem to be oddly conjoined, with the 'new' life of humanity being marked by its dissolution into the primeval life of nature. This way of construing Joan's antihumanism may help to explain why



the trope of ageing is less explicit in these sections of the novel: her ideal implies a timeless condition that is beyond the contrast between youth and old age.

The picture of nature implied by Joan's antihumanism can also be contrasted with that of ecological theory, to which it stands in a complex relationship. The 'return' to nature envisaged in *The Book of Joan*, it should be noted, does not depend on a conservative or nostalgic image of the natural world. The idea of a pristine, unspoiled nature supposedly in 'equilibrium' with itself has been powerfully criticized by, among others, Timothy Morton, beginning with his major study *Ecology without Nature* (2007). At the same time, however, Joan evidently adheres to a binary opposition between nature and culture, albeit with the former taking priority. Rather than pointing toward the triumph of culture over nature, as in the case of de Man's transhumanism, Joan looks forward to a time when culture will be seen for what it is: a regrettable detour taken by nature in its chaotic striving for life. As the following thoughts on the part of Christine indicate, this view is not confined to Joan but is shared by those aligned with her:

I've been thinking about how our desires and fears manifest in our bodies, and how our bodies, carrying these stories, resist the narratives our culture places on top of us, starting the moment we are born. It's our idiotic minds that overwrite everything. But the body has a point of view. It keeps its secrets. Makes its own stories. By any means necessary (71).

Passages like this suggest a sharp dichotomy between nature and culture, as well as between body and mind. To this extent, Christine, the earth resistance fighters, and Joan herself share a common outlook, according to which there has been a fateful 'fall' from nature into culture – a fall redolent of de Man's quasi-Gnostic sense of embodied life as the fallen condition of pure mind, but this time in reverse. The fact that Christine goes on to speak of the body as carrying stories, suggesting that it too is possessed of a kind of narrative sense, might seem to spell difficulties for this reading, blurring as it does the line between nature and culture. This difficulty is defused, however, by recalling that the stories Christine has in mind are not ones *authored* by her body, but rather ones she has manually *inscribed* on herself, and which therefore still take the form of culturally authorized symbols. In the world anticipated by the

resistance's antihumanism, in which humanity's animality is fully embraced and 'our idiotic minds' are no longer permitted to overwrite our bodies, there will presumably be no such symbols. Having built such a stark opposition between nature and culture into the narrative and thematic framework of her novel, Yuknavitch is forced to choose between the only two options on offer: transhumanism *or* antihumanism. Presented with this choice, she opts for the latter, accepting whatever tensions and anomalies this may give rise to in the text.

#### **IV. The absence of queer ecology**

As we have seen, *The Book of Joan* portrays a future in which two possibilities are set against one another: transhumanism and the triumph of culture over nature, or antihumanism and a turn back toward nature, understood as the true source of all life. As a courageous, noble, inspiring figure, Joan is unambiguously cast as the hero of Yuknavitch's story, while the cruel, sadistic, malevolent figure of Jean de Man is unambiguously the villain of the piece. Insofar as the novel may be read as an indirect reflection on the possibilities open to humanity in the early-twenty-first century, confronted by ecological, technological, and political threats of multiple kinds, however, this dichotomous thinking is liable to seem reductive and may occlude other valuable options. One such option would be *posthumanism*, of the sort formulated by Katherine Hayles (1999) or Cary Wolfe (2010). Posthumanism is more suited than either transhumanism or antihumanism to think the imbrications of nature and culture and to make allowance for the presence of nonhuman forces within the human. There may in fact be intimations of the posthuman in some of the passages of the novel focusing on the narrative carried by Christine's body of the sort we saw above, which perhaps accord with Wolfe's observation that posthumanism calls for much greater attention to how materiality shapes mind and thought (2010: 120). This strand is not, however, sufficiently developed by Yuknavitch to stand as a fully-fledged alternative to the positions represented by Joan and de Man. The prefix 'post' in the term posthumanism, meanwhile, may entail its own difficulties in the present context. Despite Wolfe's insistence that 'posthumanism comes both *before* and *after* humanism' (2010: xv), it is hard to avoid the sense of an

implied historical teleology of the sort that *The Book of Joan* is clearly directed against, and which has in any case come to seem dubious in light of the dystopian conjuncture which late modernity has brought us to. To this extent, posthumanism may present problems it is incapable of resolving, whatever its appeal in other regards.

Another, potentially more fruitful approach to the issues of materiality, ecology, and temporality raised by *The Book of Joan* is that of queer theory, and specifically queer ecology. Morton has argued that queer theory has ‘a strange friend in nonessentialist biology,’ according to which ‘life-forms themselves undermine distinctions between Natural and non-Natural’ (2010: 277). An alliance between queer theory and ecology ‘would suppose a multiplication of differences at as many levels and on as many scales as possible’ (Morton 2010: 275), contradicting views of gender and sexual variability as a ‘cultural’ imposition on a given set of ‘natural’ binaries. Indeed, the absence of queer ecological thought of this sort may help to explain another of the novel’s anomalies. At the climax of the story, during the defeat of Jean de Man, it is unexpectedly revealed that de Man ‘is not a man but what is left of a woman’ (245), with evidence of multiple gender reassignment surgeries, including ‘several dangling attempts at half-formed penises’ (245). It is very unclear how this scene ought to be interpreted or how it might be integrated with everything else in the novel, and no critic to date has offered a satisfying explanation of it. It could be argued that the seemingly transphobic implications of the exposure of de Man in this way are a further consequence of the novel’s nature/culture binary. Whatever Yuknavitch may have intended by making de Man transgender, the framing of her novel in terms of an opposition between ‘raw’ nature and ‘artificial’ culture means that she cannot avoid coding him as an ‘unnatural’ figure, as is implied by the use of the word ‘attempts’ with reference to his genitalia, which establishes a clear continuity with the many earlier references to the failed attempts to create a new human species aboard CIEL. The limitations of the novel’s reimagining of nature and of the position of human beings within it are perhaps nowhere more apparent than in its treatment of gender.

In his book *No Future: Queer Theory and the Death Drive*, Lee Edelman has influentially criticized what he terms reproductive futurism, which places heteronormativity outside contestation and renders queer resistance to the status quo unthinkable through a culturally embedded understanding of the future oriented toward reproduction (2004). During the course of his argument, Edelman puts

forward an interpretation of P. D. James's *The Children of Men* (1992), a dystopian novel focusing on a sterility crisis, which Edelman sees as an especially clear illustration of the logic of reproductive futurism (2004: 12–13). On Edelman's reading, the novel reiterates the heteronormative trope of achieving symbolic immortality and maintaining the social order through reproduction, while childlessness is coded as anti-social, narcissistic enjoyment or jouissance. In the case of Yuknavitch's novel, the rebel faction could perhaps be seen as following Edelman in preferring the 'anti-social' option of refusing the future as represented by CIEL's attempts to restart the human race, thereby potentially fulfilling the role of the queer who 'comes to figure the bar to every realization of futurity, the resistance, internal to the social, to every social structure or form' (Edelman 2004: 30). The radical negativism of Edelman's project is not the only queer theoretical paradigm available to us, however.

While Edelman's stance, like Joan's own antihumanism, represents a rejection of humanist teleologies, Elizabeth Freeman's book *Time Binds: Queer Temporalities, Queer Histories* is concerned with thinking history otherwise and with non-teleological ways of relating to time in which nonnormative gender and sexuality play a central role. On Freeman's account, queerness is a site from which to contest modern Western conceptions of time. 'Queer time,' she writes, 'overtakes both secular and millennial time,' displacing linear chronologies and pointing to nonlinear modes of temporal experience (Freeman 2010: x-xi). It is noteworthy that for Freeman, 'Moments of participation in queer time are often grounded in *bodily* experiences/pleasures' (2010: xi), meaning they transcend the nature/culture binary: queer time is simultaneously natural *and* cultural. Although Freeman does not explicitly forge connections with ecological thought, the parallels between her understanding of queer time and Morton's reflections on the queer potential of ecology and developments in the life sciences are clear. A further parallel, this time with work in age studies, may also be noted here. Cynthia Port has drawn attention to some of the commonalities between queer subjectivity and the condition of old age: 'No longer employed, not reproducing, perhaps technologically illiterate, and frequently without disposable income, the old are often, like queers, figured by the cultural imagination as being outside mainstream temporalities and standing in the way of, rather than contributing to, the promise of the future.' (2012: 3) Obviously, however, the fact that queers and the old often do not participate in conventional modes of temporality does not mean that they exist outside of time. Rather, as Port shows,

they inhabit what Freeman calls in a related context ‘structures of belonging and duration that may be invisible to the historicist eye’ and which cannot be subordinated to teleological and normative temporal frames (Freeman 2010: xi). As in the case of gender, then, *The Book of Joan*’s handling of temporality is arguably constrained by a forced choice between linear progress and its refusal. Queer theory may have much to offer here.

Displacing and implicitly critiquing the tendency within Anglo-American sf to rely on a humanist conception of progress modelled on the development of the individual from infancy to maturity, Yuknavitch instead advances an antihumanist agenda in which historicity would seem to be suspended in favour of a return to a nonhuman, precultural condition. The role of age and ageing here is ambiguous, and varies depending on which level of the text one focuses on. At the level of the individual, *The Book of Joan* recapitulates by way of the designs of Jean de Man the generic tendency to associate technological progress with the elimination of bodily shortcomings, including ageing and ultimately embodiment itself. At the level of the species, however, where the novel takes Joan’s side against de Man, the trope of ageing is either replaced by ecological metaphors – such as returning to ‘everything we are made from’ (227) – or gives way to the timeless present of the nonhuman where, as Joan says, ‘There is only being’ (263). In this way, Yuknavitch simultaneously contests the humanist/transhumanist conception of progress while reproducing its guiding opposition between the historicity of culture and the timelessness of nature. By contrast, queer ecology’s contestation of the dominant nature/culture binary, combined with its ability to forego historical teleology without foreclosing the possibility of historical existence, arguably makes it a more promising candidate for beginning to articulate ‘whatever comes after human progress.’

## References

- Asimov, I. (2018), *I, Robot*, New York: HarperVoyager.
- 2001: *A Space Odyssey* (1968), [Film] Dir. Stanley Kubrick, USA: Metro-Goldwyn-Mayer.
- Bostrom, N. (2016), *Superintelligence: Paths, Dangers, Strategies*, Oxford: Oxford University Press.
- Chu, S. (2010), *Do Metaphors Dream of Literal Sleep?*, Cambridge, MA: Harvard University Press.
- Clarke, A. C. (2010), *Childhood’s End*, London: Pan.

- Clarke, A. C. (2018), *2001: A Space Odyssey*, London: Orbit.
- Cole, S. (2019), *Inventing Tomorrow: H. G. Wells and the Twentieth Century*, New York: Columbia University Press.
- Crossley, R. (1994), *Olaf Stapledon: Speaking for the Future*, New York: Syracuse University Press.
- Dick, P. K. (2010), *Do Androids Dream of Electric Sheep?*, London: Gollancz.
- Edelman, L. (2004), *No Future: Queer Theory and the Death Drive*, Durham and London: Duke University Press.
- Freeman E. (2010), *Time Binds: Queer Temporalities, Queer Histories*, Durham and London: Duke University Press.
- Gray, J. (2016), *The Soul of the Marionette: A Short Enquiry into Human Freedom*, London: Penguin.
- Harari, Y. N. (2017), *Homo Deus: A Brief History of Tomorrow*, London: Vintage.
- Hayles, N. K. (1999), *How We Became Posthuman*, Chicago: Chicago University Press.
- Howe, I. (1970), *Decline of the New*, New York: Harcourt, Brace, and World.
- Huxley, A. (2007), *Brave New World*, London: Vintage.
- Istvan, Z. (2013), *The Transhumanist Wager*, Nevada: Futurity Imagine Media.
- Istvan, Z. (2020), *The Anti-Deathist: Writings of a Radical Longevity Activist*, Nevada: Futurity Imagine Media.
- Istvan, Z. (2021), *A Transhumanist Journal: Writings that Launched the Transhumanist Movement*, Nevada: Futurity Imagine Media.
- Jameson, F. (2005), *Archaeologies of the Future*, London: Verso.
- Kurzweil, R. (2005), *The Singularity is Near: When Humans Transcend Biology*, London: Duckworth.
- Lovelock, J. (2019), *Novacene: The Coming Age of Hyperintelligence*, London: Allan Lane.
- Mason, P. (2019), *Clear Bright Future: A Radical Defence of the Human Being*, London, Allan Lane.
- Morton, T. (2007), *Ecology without Nature*, Cambridge, MA: Harvard University Press.
- Morton, T. (2010), 'Queer Ecology,' *PMLA*, 125 (2): 273–282.
- Moylan, T. (2010), *Demand the Impossible: Science Fiction and the Utopian Imagination*, Bern: Peter Lang.
- O'Connell, M. (2017), *To Be a Machine*, London: Granta.
- Parisi, L. (2017), 'Automate Sex: Xenofeminism, Hyperstition, and Alienation,' in H. Gunkel, A. Hameed, and S. O'Sullivan (eds), *Futures and Fictions*, 213–230, London: Repeater.
- Port, C. (2012), 'No Future? Aging, Temporality, History, and Reverse Chronologies.' *Occasion:*

*Interdisciplinary Studies in the Humanities*, 4, <http://occasion.stanford.edu/node/98>

Stapledon, O. (1999), *Last and First Men*, London: Gollancz.

Wells, H. G. (2005), *A Modern Utopia*, London: Penguin.

Westfahl, G., (2005), 'Introduction,' in W. Kin Yuen, G. Westfahl, and A. Kit-sze Chan (eds), *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution*, 1–18, Hong Kong: Hong Kong University Press.

Wolfe, C. (2010), *What is Posthumanism?*, Minneapolis, MN: University of Minnesota Press.

Yuknavitch, L. (2017), *The Book of Joan*, London: Canongate.