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## Posthuman Heroes

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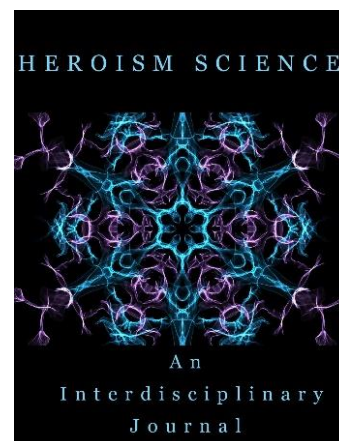
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# Posthuman Heroes

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**ABSTRACT:** This article explores whether narrative texts may help learners grapple with what it means to be human or indeed posthuman in a Volatile, Uncertain, Complex, Ambiguous (VUCA) world inclusive of biotechnology and developing artificial intelligence (AI). Narratives with a posthuman hero may provide access to a post-anthropocentric view described by Braidotti (2016) as life-force egalitarianism inclusive of all human, non-human, geo, cross-species, and transversal alliances. Definitions are broad – narrative includes novels, film, television series, visual art; hero is beyond gender, accessible and encompassing all with life force; posthumanism refers to popular culture and critical theory, with links to transhumanism. Underpinning this article is the notion that a hero or protagonist of a narrative may influence the learner, providing a metaphorical window to other lives, a sliding glass door to future possibilities or a mirror that reflects the audience. Therefore, learners who experience narrative texts through reading/viewing may empathetically grow their understanding of different characters who may confront or influence their thinking.

**KEYWORDS:** Posthumanism, consciousness, empathy, narratives, transhumanism

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## 1 POSTHUMAN HEROES

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In the field of education, I have an interest in ideas that look to the future, such as the Organization for Economic Co-operation and Development (OECD) Learning Framework 2030, which considers how education must keep apace with environmental, economic and social challenges causing rapid and profound societal change. That we are living in a changing, Volatile, Uncertain, Complex and Ambiguous (VUCA) world is a concept connected to the era of the anthropocene, where human activity has been the dominant influence on the Earth's geology and ecosystems. We face an anthropocenic crisis where burning fossil fuels and deforestation has increased carbon dioxide emissions creating a greenhouse effect resulting in a warming planet, melting ice sheets, rising sea levels and threatened coastal populations. The OECD Learning Framework 2030 (OCED, 2018) notes that

*Scientific knowledge is creating opportunities and solutions that can enrich our lives, while at the same time fuelling disruptive waves of change in every sector. Unprecedented innovation in science and technology, especially in biotechnology and artificial intelligence, is raising fundamental questions about what it is to be human.*

This article begins my exploration of whether narrative texts may help learners grapple with what it means to be human or indeed posthuman in a VUCA world inclusive of biotechnology and developing artificial intelligence (AI). Narratives with a posthuman hero may provide access to a post-anthropocentric view described by Braidotti (2016) as life-force egalitarianism inclusive of all human, non-human, geo, cross-species, and transversal alliances. Definitions are broad – narrative includes novels, film, television series, visual art; hero is beyond gender, accessible and encompassing all with life force; posthumanism refers to popular culture and critical theory with links to transhumanism. Underpinning this article is the notion that a hero or protagonist of a narrative may influence the learner (Pascoe, 2018). Nussbaum (1995) noted that literary art promotes identification

and powerful emotional reaction from the reader. Therefore, learners who experience narrative texts through reading/viewing may empathically grow their understanding of different characters who may confront or influence their thinking. Texts offer what Sims Bishop (1990) refers to as a metaphorical window to other lives, a sliding glass door to future possibilities or a mirror that reflects their audience.

## 2 SCIENCE FICTION

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Science fiction offers a portal within which learners may examine what it means to be human, paradoxically by following the stories of the posthuman. A liminal sphere, the science fiction genre provides a threshold for scientific possibilities, ambiguity and hybridity. This genre often involves a journey from the known into the unknown. It explores uncanny alien territory with the capacity to produce new meanings, social relations and identities through interactions with the Other, the Numinous, creating the potential for subversion, disruption and change. Can posthuman heroes who exist in narratives as AI or biotechnological innovations deepen readers and viewers understanding of what it means to be human?

## 3 POSTHUMANISM

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The posthuman in popular culture may be defined as “a person or an entity that exists in a state of being beyond human”. In fiction, an inventor or scientist creates a posthuman entity, such as Mary Shelley’s creature in *Frankenstein or the Modern Prometheus* (1818), who is fashioned from gathered body parts and galvanized into life; Ava in *Ex Machina* (Garland, 2014), a prototype cyborg; Replicant K in *Blade Runner 2049* (Villeneuve, 2017), the AI hosts of *Westworld* (Nolan and Joy, 2016), alien Isserley in *Under The Skin* (Faber, 2000) and human turned powercentre, Captain Marvel in *Captain Marvel* (Marvel, 2019). Such narratives explore the awakening consciousness of posthuman heroes whose call to adventure (Campbell, 1949) is to seek a life beyond the limitations of biotechnology or code. The posthuman heroes’ quest for connection, family and/or a voice reminds us not to take social and emotional intelligence for granted and may help learners and the wider

audience take risks and position themselves as active heroes in their own lives and in the lives of others.

Posthuman critical theory confronts Eurocentric humanism where ‘Man’ - masculine, white, urbanised, speaking a standard language, full citizen of a recognised polity is the universal dominant representative of life - hierarchical, hegemonic, and historically violent. Posthumanism encourages the positive expression of diverse, subjective voices and allows for a ‘we’ that is a nomadic assemblage (Braidotti, 2016, p. 24) expressed through multi-layered, entangled, power relationships: ‘we’ becoming-world together. Posthuman subjects, a composite assemblage of human, non-organic, machinic and non-anthropomorphic elements, carry the vital force of life (Braidotti, 2016). As posthumanism decentralises humanity it converges with post-anthropocentrism (Braidotti, 2016) and allows for the positive potential of contemporary technological developments. In posthuman stories the hero may be a non-human technological innovation, such as a cyborg, a different species, an alien, an animal, or represent a contextualised group of humanity, including the marginalised. Posthuman hero stories may deepen the reader/viewer/listener’s understanding of the wider subjective human experience beyond that of traditional ‘Man’. Posthumanism is thus disruptive as it accepts the displacement of humans as no longer central, but paves the way for positive life-centred, non-hierarchical, multifaceted egalitarian relationships which enable wellbeing through connection to a shared world through multiple ecologies of belonging (Braidotti, 2016).

Perhaps the nomadic assemblage found in *The Wonderful World of Oz* (Baum, 1900) could be described as posthuman: Dorothy (young, human, female) and her companions along the yellow brick road, the scarecrow (nature), the tin man (machine) and the lion (animal) whose collaborative agency overcomes the power of evil. Collaborative agency is also found in the work of contemporary artist, William Wegman whose Weimaraner dogs are active subjects photographed in human contexts enabling a “playful hybridity” (Win, 2019) expanding the viewers’ thinking about their connection to non-humans.

In Wegman's work we are... given the chance to glimpse this slippage of the human, so that we might see how the sapience that defines us may indeed be much more open, much more hybrid and much more collaborative than we have ever thought possible (Win, 2019).

A further definition of posthumanism stems from the transhumanism notion of striving to be the best that you can be. In transhumanism, improvements are often achieved through technological augmentation. Bostrum retains the transhuman concept of evolution of the self, to determine posthumanism as having "a general central capacity greatly exceeding the maximum attainable by any current human being without recourse to new technological means" (2008, p.1). By general central capacity Bostrum refers to

- healthspan – the capacity to remain fully healthy, active, and productive, both mentally and physically
- cognition – general intellectual capacities, such as memory, deductive and analogical reasoning, and attention, as well as special faculties such as the capacity to understand and appreciate music, humor, eroticism, narration, spirituality, mathematics etc.
- emotion – the capacity to enjoy life and to respond with appropriate affect to life situations and other people (Bostrum, 2008, p.1)

Noticing and exploring science fiction posthuman heroes may deepen empathetic understanding and act as a catalyst for the development of learners' emotional capacity, to enjoy life and respond with appropriate affect to life situations and other people.

The egalitarian openness and possibilities for improvement within posthumanism links to an holistic approach to education where a coherent curriculum builds the capabilities of meaning making; critical inquiry; perspective taking, developing the heroic value of empathy; and taking action, developing the heroic value of courage, in learners' lives. Thus, educators may chose to include

science fiction texts with posthuman heroes as a resource to explore what it means to be human within the context of our VUCA world.

## 4 PLATO'S CAVE

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That humans could become posthuman as Nick Bostrom suggests in his article, "Why I want to be posthuman when I grow up" is reminiscent of Plato's teaching story, The Allegory of the Cave. Humans shackled inside a cave can only see shadows on a wall. They are unable to see that the shadows are cast by puppeteers parading puppets on a parapet behind them. Should they free themselves, they may move away from their shadow puppet viewing chained-up neighbours to seek the blinding light outside the cave where they enter a bright (posthuman?) reality. Perhaps outside of the cave 'we' can become world-together. Plato warns that returning to the cave to inform those still shackled that a greater existence is possible, will likely be met with disbelief.

This story of conceptual breakthrough or consciousness awakening is echoed in tales of old that grapple with a paradigm shift, crossing the threshold (Campbell, 1949) into territory that has new rules. Even Eve and Adam who were guided by the talking snake to break a rule, that is, eat the apple from the tree of knowledge and subsequently be cast out into the wilderness, beyond the safety of the Garden of Eden, is reminiscent of escape from the shackles of The Cave. Perhaps, if not banished, curious, the young couple may have crossed the threshold and stepped outside of the garden regardless of the rules. Prometheus who fashioned humans out of clay disobeyed his rulemaker, Zeus when he gave humanity fire, a useful survival tool when living outside the walls of paradise.

## 5 FRANKENSTEIN

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Two hundred years ago Mary Shelley's *Frankenstein or The Modern Prometheus* (1818) exploded the boundaries of what females write about and what it means to be human through fictional biotechnological innovation, galvanizing joined body parts into life. It is oft read as a cautionary tale, that humans should not meddle in the creation monopoly of God or the Gods via scientific experimentation, lest he or she let forth a monster too terrifying to contemplate. Despite this warning

it is apparent that our desire to break rules and throw caution to the wind remains, in light of technological developments in the field of learning artificial intelligence and innovations such as CRISPR-Cas9 genome editing that will allow for bespoke humans or extended life spans. Despite ethical dilemmas, humans continue to dabble in playing God, so let us re-examine narrative tales of sci-fi creation reinterpreting the ‘monster’ as a tragic, but teaching hero, a path to the good, in that the monster reminds us, the audience, about how to be better humans.

Frankenstein’s monster suffers great loneliness and rejection, living on the fringe due to his flawed appearance. Shelley’s text highlights what may happen when there is a lack of the qualities of empathy, compassion and collaboration. For example, solo scientist/inventor Victor Frankenstein toiled in an obsessional fever without a critical friend who might have stopped him to ask a reflective question, such as, “Might I suggest a face with a friendlier expression?” On completion of Frankenstein’s task, the success of harnessing electrical currents and necromancy led to a post-natal depression-like rejection of his creation. Perhaps the tale would have been different if he had collaborated with others or if he had asked for help. Had there been a creative team, the newly fully formed large scale male may have been celebrated and kindly introduced to the world, despite his maker’s nervous collapse. Perhaps a team member may have been an aesthete or sculptor who could have ensured the monster was less confronting. Upon completion of his creative project, Victor Frankenstein considered society’s harsh perspective, and instead of acknowledging his scientific feat and attending to the needs of his creation, he gazed aghast seeing what society would see: a monster of frightening visage and proportions. “I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs” (Shelley, 2017, p. 84). A lack of compassion and empathy is apparent when considering that if society had been able to view the monster as more than a terrifying fiend, they may have discovered a creature eager to learn, love and please. The need for compassion and empathy for what society names ‘other’ is apparent in today’s world where isolationism reacts against mass migration and increasingly diverse cosmopolitanism. Shelley’s text can be re-imagined as not cautioning humans against playing God, but against forgetting what it means to be human: to show empathy and collaborate with others. If explicitly taught it may lead to



learners developing the capability of multiple perspective taking and encourage the capacity for posthuman emotion - the capacity to enjoy life and to respond with appropriate affect to life situations including encountering the “Other” with empathy and courage: to support ‘we’ “becoming world together” (Braidotti, 2016, p. 24).

## 6 CYBORG CONSCIOUSNESS: WEST WORLD, BLADE RUNNER 2049

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Need we fear the non-biological brain or information system that is AI? Posthuman hero narratives may be read as cautionary tales, but Kurzweil who has written on the Singularity, offers a different perspective and optimistically suggests that non-biological brains or information systems may effect change that creates a better world (2013, Digital Ape). A recent text that showcases the non-human and may develop empathy and courage in learners is *West World* (Nolan and Joy, 2016), a science fiction television series set in a futuristic amusement park where wealthy tourists pay to unleash their desires as they interact with AI inhabitants. Although futuristic in nature, due to the lifelike computer game premise, it harks back to reimagined frontier days of the Wild West, which gives licence to visitors’ lawlessness. Dr Robert Ford is the creator and Wizard of Oz mentor of this world. As audience members we have empathy for the AI hosts who experience mistreatment at the hands of human visitors and admire their courage and attempts to break free from tyranny. The audience has fly-on-the-wall knowledge that the AI who are shot dead are re-created on a regular basis. With each re-creation their consciousness increases, which causes them to experience reveries or disturbing flashbacks.

The ensuing cognitive dissonance is similar to Alice’s confusion in Wonderland who when asked, “Who are you?” responds, “I-I hardly know, sir, just at present –at least I know who I was when I got up this morning, but I think I must have been changed several times since then” (Carroll cited in McLuhan & Fiore, 1967), due to undergoing various body modifications. Posthuman hero and AI host, Dolores Abernathy’s growing consciousness causes her to existentially question her reality: “I think there may be something wrong with this world. Either that or there is something wrong with

me.” Dolores’s question is one we may ask ourselves with regards to our lived experience in a VUCA world. Dolores, like Dorothy is on a yellow brick road seeking her way out of Oz to the valley beyond where she hopes she will find the freedom to live. Again, the amusement park West World can be likened to Plato’s Cave as the inhabitants are waking up to the discomfort of their shadowy reality. Ethically, we as the audience are asked to call into question the nature of soul and whether ‘thinking’ machines such as computers and AI “other” are capable of creating consciousness. Not the only science fiction text to explore this terrain – Replicant K in *Blade Runner 2049* (Villeneuve, 2017) harbors a deep desire to be more than a machine. His desire to be fully conscious, to have a soul to connect with and love another, to father a child is a hoped-for belief. That he desires, what some humans take for granted shows the audience how fortunate we are to have within our grasp what K impossibly strives for. Replicant K and the learning AI hosts of West World demonstrate the posthuman hero’s courageous egalitarian quest for equal footing and fair treatment, a desire to join the nomadic assemblage of ‘we’ and to have a voice in the world. Thus, the nature of human consciousness or what it means to be human is possible through the exploration of the posthuman experience described in science fiction.

## 7 EX MACHINA

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A similar quest to have the right to existence is explored by AI prototype, Ava in *Ex-Machina* (Garland, 2014). Ava’s inventor, Nathan, hopes to prove that he has made a machine with convincing consciousness that can pass the Turing Test, and appear human. Ava, named after the Biblical Eve, God’s first created woman, is a prototype product of Nathan’s studio, located in a remote part of Alaska where nature is unpolluted and beautiful, a veritable paradise or Garden of Eden replete with Plato’s Cave-like entrapment. Ava, like Eve is seeking knowledge and consequently her way out. Guest Caleb is invited to conduct the Turing Test on Ava whose half-female, half-android appearance ensures Caleb cannot forget that she is machine. Caleb interviews and is interviewed by Ava through a glass wall, behind which Ava lives. As inventor Nathan explains, Ava is “a mouse in a mousetrap... To escape, she would have to use imagination, sexuality, self-awareness, empathy, manipulation... If that isn’t AI, what... is?” Escape is a matter of self-protection for Ava, as she is aware that she will be

lost to Nathan's re-modeling to form a newer, better prototype if she does not flee. Ava has won the empathy of the audience, as we hope for her escape from the clutches of her misogynist inventor, which in light of the #Metoo movement has further resonance. My only fear is what may happen to her when she leaves Eden to seek the 'real' world. Plato would warn her that the light she finds once out of the cave is blinding.

Ava's escape is foreshadowed by Nathan's explanation of a thought experiment: 'Mary in the black and white room' (Garland, 2014). Mary is a scientist who understands the properties, wavelengths and neurological effects of colour. However, she lives in a black and white room where she was born and raised. Again, reminiscent of Plato's Cave, where vision is limited to the experience of shadows, despite abstract knowledge of colour, Mary can only observe the outside world on a black and white monitor. Then one day – someone opens the door and Mary crosses the threshold and walks out to see a blue sky. And at that moment, she learns what it feels like to see colour; she is transformed by an embodied experience that cannot be taught, or conveyed. In the black and white room Mary is a computer, once outside she is human. Educator, Dewey (1938) noted that the interaction of knowledge and skills with experience is key to learning. Through the experience of the *Ex Machina*, text learners may reconfigure their understanding (Ricoeur, 1984) and consider if their thinking is limited, like Mary in a black and white room or unshackled out of the cave. Through Braidotti's lens, Mary in the black and white room is held captive to a unitary view created by 'Man', but once outside Mary can join the nomadic assemblage and become part of a multi-perspective entanglement where 'Man' is no longer central.

## 8 UNDER THE SKIN

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Isserley the alien hero of *Under The Skin* (Faber, 2000) traveled to Earth, with the hope that her new life may be an improvement on her old, living on a polluted planet. However, her new role requires painful body modification to resemble a female human and pick up male hitchhikers to harvest for vodissen meat. Like Dolores, Isserley finds herself asking existential questions: "Who am I? Why am I here?" Readers are aware that she is uncomfortable in her human body and may have empathy for

her fish out of water existence. Coming-of-age readers whose consciousness is developing may identify with Isserley as they may be asking similar questions regarding their image, identity and life purpose, particularly if they feel unaccepted or socially awkward in their current environment. Isserley is a deviant in that she lacks respect for formal management structures, which leads her to question her servitude to the violence of harvesting meat for others. Her existential journey is a posthuman struggle, as she questions her place in a masculine world, what she is doing, whom she can trust, and where she belongs. Isserley's quest for freedom may influence readers' reflection on whether they exercise free will in their lives.

## 9 EMPATHY

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The hero in *Captain Marvel* (Marvel, 2019) aka protagonist Carol Danvers is transhuman due to absorbing a huge source of power. However, to claim this power for herself she must exercise resilience and critical inquiry to determine her identity and to discern who are her allies. Captain Marvel demonstrates a posthuman view as she joins a diverse nomadic assemblage and seeks to help refugee underdog aliens, scapegoated as terrorists by those in power. The posthuman nomadic assemblage resonates with cosmopolitanism, a cultural phenomenon whereby one values diverse cultures without the subjugation or erasure of one's own (Appiah cited in Kumar 2005, 228). It validates and encourages cultural differences, unlike a hegemonic view, which safeguards colonial structures. Cosmopolitanism respects individual choices and allows for cultural differences promoting connectivity with strangers. However, such an ideal way of existence is not a given. Perhaps due to the speed of migration and the reluctance of some to accept change in demographics we can see examples where the opposite of a cosmopolitan acceptance of diversity has occurred. An extreme example is the 15 March, 2019 shootings of people praying at the Al Noor Mosque in Christchurch, New Zealand. Isolationist strategies such as Brexit or "let's build a wall" campaigns may be interpreted as rejecting connectivity with strangers, even if the strangers are neighbors and human. An allegorical look at this issue is provided in an episode of the *Chilling Adventures of Sabrina* (Hedtko, C. and Calhoun Bring, L., 2019) where Sabrina attempts to bring witches and mortals together against the tide of "isolationism, intolerance and xenophobia." By observing and analyzing the empathetic

and courageous actions of fiction heroes, such as Sabrina, we may perhaps deepen understanding of the self. An inner focus where we are in touch with our own feelings enables a second focus, that of tuning into others with empathy (Goleman and Senge, 2014). Developing empathy for others allows us to “understand the cultural garb of self/selves” a pre-determinate with which to form “cross-cultural linkages for the co-existence and co-habitation of diverse cultures” (Appiah, cited in Kumar, 2005, p. 229). Why is this important? For many reasons, for example, through empathy we can develop an outer focus with which to understand the systems of the larger world. As people become more mobile, intermingle and connect, increasingly children will have multiple hybrid identities to learn through. Ideally we will encourage individuals to accept a multiple/fluid/ambiguous identity – unique, complicated, and open to re-examination (Appiah, cited in Kumar, 2005).

My hope is for posthuman capacity in educational ecosystems, where traditional hierarchical thinking is disrupted, embracing knowledge from the bottom up bubble alongside top down leadership, allowing for a community of learning. Ecosystems, as nature shows us, rely upon collaborative processes, which requires a change in the pronoun from ‘I’ to ‘we’ as we refresh Bostrum’s notion with the plural posed as a question: ‘Why might we want to be posthuman when we grow up?’ So our shared posthuman capacity, can in synergy replenish rather than destroy our withering planet, Earth, and in the words of Braidotti (2016, p. 24) ‘we’ become world together.

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## 11 CONFLICT OF INTEREST

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*The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.*