

2018

Rogue: A Novel - and - Wonderlust: the value of wonder for readers, writers, and The Vault: A critical essay

Amanda Betts
Edith Cowan University

Follow this and additional works at: <https://ro.ecu.edu.au/theses>



Part of the [Creative Writing Commons](#)

Recommended Citation

Betts, A. (2018). *Rogue: A Novel - and - Wonderlust: the value of wonder for readers, writers, and The Vault: A critical essay*. Edith Cowan University. Retrieved from <https://ro.ecu.edu.au/theses/2122>

This Thesis is posted at Research Online.
<https://ro.ecu.edu.au/theses/2122>

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Rogue: A Novel

- and -

***Wonderlust: the value of wonder
for readers, writers, and The Vault:
A critical essay***

This thesis is presented for the degree of
Doctor of Philosophy

Amanda Betts

Edith Cowan University
School of Arts and Humanities
2018

Abstract

This thesis consists of an original novel, *Rogue*, and an exegesis titled *Wonderlust: the value of wonder for readers, writers, and The Vault*.

Rogue is the second novel of the series titled *The Vault*, which is a speculative fiction duology for young adults (thirteen and above) with the possibility for crossover into adult readership. *Rogue* picks up the story of fifteen-year-old Hayley who, after choosing to leave her previous home of an underwater seed vault, finds herself washed onto the cliffs of Maria Island, off the coast of Tasmania. As Hayley ventures further into the terrestrial ‘real world’ of 2120, she must call on her wits, intelligence, and creativity to survive. *Rogue* is a story of new beginnings, discovery, belonging, relationships, choice, and responsibility.

Wonderlust: the value of wonder for readers, writers, and The Vault, is an examination of wonder which investigates the role of wonder in literature and how it can be evoked without relying on overused tropes of science fiction. The exegesis first explores the experience of wonder and its importance to us individually and collectively, along with its relationship to philosophy, psychology, nature, and science. Secondly, it investigates wonder in literature, particularly in speculative fiction: its composition, appeal, reception and potential, on and beyond the page. It specifically examines how narrative elements have been successfully manipulated to facilitate wonder in creating an original two-book series of speculative fiction for young adults titled *The Vault*. Thirdly, it discusses the role of wonder for the writer, both as initial impulse for creativity and as an experience during the writing process. In this, reference is made to the writing of *Rogue*: a novel inspired and shaped by wonder.

Ultimately, the thesis argues the value of wonder in fiction — particularly contemporary young adult fiction — and positions *Rogue* in this context as a work which reminds readers of the astonishments of this puzzling world, and their important place within it.

Rogue: A Novel

is not included in this version of the thesis.

EXEGESIS

CONTENTS

1. The experience of wonder: the philosophy and value of wonder

2. Wonder for the writer

a) Wonder as creative impulse

b) Wonder of the writing process

3. Wonder for the reader

a) Sense of wonder in fiction

b) The importance of wonder in young adult fiction

c) Shaping wonder in *Rogue*

4. Conclusion

1. THE EXPERIENCE OF WONDER

“the experience of astonishment before the world”

(Kingwell, 2000)

Wonder has long been a topic of philosophical fascination. In the fourth century BC, classical Greek philosophers labelled wonder a uniquely human trait beyond the reach of other animals who were merely satisfied with the “necessities of life” (Aristotle in Wittman, 2008, p. 16). It was Socrates who first proclaimed that philosophy begins in wonder (Metcalf, 2013, p. 208), for individuals “wondered originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters, e.g. about the phenomena of the moon and those of the sun and of the stars, and about the genesis of the universe.” (Aristotle in *Metaphysics*, in Wittman, 2008, p. 15)

The English word *wonder* can be traced to three sources: the Greek *thauma* (which is associated with magic); the Latin *mirari* (associated with admiration and miracles); and the Germanic *wundre* (associated with monsters and marvels) (Wittman, 2008, p. 17). Contemporary definitions point less to magic and monsters, and more to a subjective, personal experience. The Macquarie Dictionary defines wonder as “the emotion excited by what is strange and surprising; a feeling of surprised or puzzled interest sometimes tinged with admiration” (2009). Philosopher Adam Smith expresses the physicality of the experience: “that suspension of the breath, and that swelling of the heart” when one encounters something new that “memory cannot, from all its stores, cast up any image that nearly resembles this strange appearance” (Smith, 1987, p. 26), while scholar Kelly Bulkeley describes it as “the feeling excited by an encounter with something novel and unexpected, something that strikes a person as intensely real, true, and/or beautiful” (2005, p. 3). More simply, philosopher Mark Kingwell explains wonder as “the experience of astonishment before the world” (Kingwell, 2004, p. 62).

In her book *Wonder: A Grammar*, Sophie Vasalou admits that wonder is difficult to articulate for it “seems to lack the strong rational core that characterizes most other emotions” (2015, p. 3). Instead, the “pleasured response often shades dangerously into others – to a look of pained confusion, or frozen anxiety or awed terror...as we confront the grandeur of the world that surrounds us” (p. 3). These feelings – pleasure, confusion, anxiety and terror – fascinate me, as a writer and a human being living in Australia in the early twenty-first century, for this is how I feel when I dare to stand in ‘astonishment before the world’: an astonishment at all that is real, true and/or beautiful. It is this astonishment which motivates me to write, read, consume art and engage in learning. My novels manifest from an enchantment at the mysteries of the human experience, and the desire to grapple with them, regardless of the lack of guaranteed outcomes. My creativity is sparked by an excitement – mixed with fear, anxiety, and terror – at the things which are strange or novel. My stories develop

from my wonder at the world, and a yearning to get closer to the truth of it.

Yet the role and value of wonder in literature is seldom spoken of, especially beyond the domain of science fiction. In young adult fiction this is especially problematic, for adolescence is a time of personal, social, and political awakening, in which individuals yearn for those things which are ‘intensely real, true, and/or beautiful’. In today’s switched-on, technological age which encourages consumerism and rewards busyness, it is important to provide young readers space and opportunities for wonder, so that they too can be astonished by the world and, as a result, perceive new ways of being.

It is pertinent to investigate how I – and other writers for young people – can create stories to evoke experiences of wonder without relying on overused tropes of science fiction or self-defeating dystopian narratives. This exegesis explores my efforts to address this question using the methodology of practice-led research in which I analyse the experience and value of wonder, specifically in speculative fiction for teenagers through the process of creating the novel *Rogue*. As such, this thesis aims to make a significant contribution to creative writing in Australia by drawing attention to wonder as an important yet overlooked component of young adult fiction, and providing practical insights for writers based on my experience of creating *Rogue*.

The value of wonder

Regardless of their chosen definitions, philosophers generally agree on the importance of wonder as a rich human experience. Seventeenth century philosopher Rene Descartes nominated wonder as the first of all passions and one of the six principal emotions (along with joy, desire, love, hatred and sadness) (Fuller, 2009, p. 9). He described it as a powerful and “sudden surprise of the soul which brings it to consider with attention the objects that seem to it unusual and extraordinary”; a surprise that hits with “considerable strength” (Wittman, p. 18). (Further to this, Descartes believed the inability to wonder to be a sign of the dullness or stupidity of an individual (Fuller, p. 10).) Twentieth century philosopher Gabriel Marcel espoused wonder as being fundamental to philosophical pursuit, stating that a philosopher would only remain a philosopher “so long as he retains [the] capacity for wonderment (étonnement)...despite everything...that tends to dispel it” (cited in Kingwell, 2004, p. 70).

Wonder can be associated with various emotional states, most notably surprise, fear, joy, delight, love, reverence, admiration and interest. Most commonly, wonder is connected with curiosity, though distinctions between the two can be drawn. While Aristotle perceived curiosity and wonder as similar,

his successor Plato ascribed more weight and permanence to wonder, which he believed was linked “not to puzzlement or perplexity, but rather to a sense of awe or reverence with strong religious undertones” (Vasalou in Helsing, 2016, pp. 272-3). Thus, a ‘Platonic’ wonder is a more transcendental experience than a passing moment of curiosity or surprise – a surprise at a new invention; the appreciation of a beautiful sunset – which is readily sated. Wonder creates its own momentum which is self-perpetuating: wonder begetting wonder. It is therefore prudent, Fuller suggests, to speak “not only of experiences of wonder but also of an ongoing ‘sense of wonder’” (Fuller, 2009, p. 101-102) which is associated with a heightened consciousness, abstract thinking, otherness, compassion, awareness of connection, and a desire for meaning, regardless of the outcome. It is this ‘compulsion’ of wonder – a intellectual, physical, and spiritual desire to be continually amazed at the world – which is most of interest for readers who seek to find in fiction not only answers to questions, but a sense of astonishment at the human experience, and a wonder of what else might be possible.

Another emotion often associated with wonder is awe, though several philosophers have made efforts to differentiate the two. In their 2010 study investigating the experience of astronauts using a neurophenomenological method, Gallagher et al defined awe as “a direct and initial experience of feeling when faced with something amazing, incomprehensible or sublime”, and wonder as the resulting “reflective feeling motivated when one is unable to put things back into a familiar conceptual framework, leading to open questions rather than conclusions” (2015, p. 6). Awe, as a precursor to wonder, is a feeling of being enraptured, while wonder is the collision of the sublime and the ordinary: the juxtaposition that sparks a change in cognition. Thus, wonder infuses one’s perception of the real world with an outward gaze, instead of a narrowed, microscopic one. “Rather than encouraging behaviours that distance us from our environment, wonder induces receptivity and openness” from which individuals may embark on “new and creative engagement with their surroundings” (Fuller, 2009, p. 12).

In encouraging us to look outwards, wonder “opens our hearts and heads”, engaging us in matters of “life, beauty, or truth” (Fuller, 2009, p. 60), and in doing so we are more attuned to other people, fostering traits of “openness, gentleness and compassion” (Helsing, 2016, p. 275). This awareness of otherness extends to our environment and the relationships that connect us all. In other words, we are more receptive to the ‘bigger picture’ which frames our existence; a bigger picture that is impossible to otherwise perceive when caught up with ourselves or the minutiae of daily life. Says writer Anne Lamott “to be engrossed by something outside ourselves is a powerful antidote for the rational mind, the mind that so frequently has its head up its own ass — seeing things in such a narrow and darkly narcissistic way...offering hope to no one” (1995, p. 102). Sophie Vasalou claims that wonder allows us “to be alive in the consciousness of what stands before our eyes; to see, to *really* see”, resulting in a

“mode of attentiveness whose status speaks to our yearning for a way of being or way of living shaped by an intense aliveness to the world” (p. 204).

The experience of wonder is not a luxury reserved for those privileged to live in first world communities. It is a fascination which transcends class, time, and cultural context, “for everyone in every culture has felt a sense of awe and wonder looking up at the sky” (cosmologist Carl Sagan in Sagan & Druyan, 2006, p. 2). With a contemplation of ‘the bigger picture’ follows a new way of looking at one’s own surroundings, thereby viewing one’s society – and the rules which govern it – with new eyes. Wonder “momentarily suspends habitual ways of looking” (Fuller, 2009, p. 12), making us capable of more objectively perceiving our reality, and therefore enabling us to imagine alternative ways of looking, or being. “Reality is equally constituted by what we do and don’t know, can see and cannot see,” states Wittman, “and wonder makes us aware of the line between the two” (2008, p. 5). This sudden conjunct can be surprising and powerful. Wittman evocatively describes it as an “epistemological breach...a sudden apprehension of one’s ‘epistemic weakness,’ an awareness of a ‘horizon line’ in our perceptions and experiences” (2008, p. 7). This choice of words suggests a paradigm shift: a physical and visceral clash between our old self and our new, enlightened and/or critical one which is better placed to regard and question the socio-political climate of the times.

In this way, wonder can be a catalyst for change. When we see our world afresh, “an old way of knowing (or not knowing) has the potential to usher in a new one” (Wittman, p. 17). This is what Hepburn referred to as ‘legitimate wonder’, which scholar Kelly Bulkeley describes as an “abrupt decentring of the self when faced with a novel and powerful experience, and a recounting of the self in response to new knowledge and understanding” (Reinerman-Jones, Sollins, Gallagher & Janz, 2013, p. 298). Unlike the experiences of awe and curiosity — both triggers for wonder — legitimate wonder must be “wedded to a concern for truth (and) ultimate causes” (Hepburn in Kingwell, 2004, p. 67). Opportunities for personal and societal change are culturally specific, of course, influenced by one’s socio-economic condition. Legitimate wonder itself does not alter a status quo, but change is sparked by individuals who can see the shortcomings of society – such as inequalities, corrupt power structures, damaging values or unfounded belief systems – and who empower themselves, and others, to strive for alternative ways of being.

Herein lies the real potency of wonder: its capacity for change, empowerment and agency, both individually and collectively. As the Kenyan philosopher Juan De Pascuale explains in metaphor, wonder offers individuals “the opportunity to swim through the river of life rather than just float on it, to *own* your life rather than be *owned* by it” (De Pascuale, 2003).

It is only through individual agency that we can grasp a sense of our purpose. Says De Pascuale

If attended to, the experience of wonder gives birth to self-examination and to a mindful awareness of the world. In time you come to know yourself as you have been and are — and this give you the possibility of choosing how to be. Through the experience of wonder we become true individuals and true citizens of the universe. (De Pascuale, 2003)

If wonder enables us to become true individuals and citizens of the universe, why is it not something we are striving to nurture and protect, rather than view as a subject assigned to philosophers, scientists, and/or religious leaders? Why are we not campaigning for the possibility of choosing how to be, and recognising the value of collective wonder?

The value of collective wonder

Not so long ago, adults and children would be fascinated by enigmas that eluded them, such as the Bermuda Triangle or the ways of Amazonian tribes. But with the technological age — and the access to information this has brought — it seems there are fewer unknowns. Subjects of anthropology, history, economics and politics can be instantly accessed on smartphones, their secrets laid bare in multiple versions. Thanks to Google Earth, geography also holds few unknowns, resulting in few reasons for explorers to sail to the edges of the maps and marvel at dragons. Michael Harris bemoans the use of Google Maps, for “every cul-du-sac and alley, every corner store and vegetable garden... Each previously mysterious inch of the planet is charted and displayed, managed and labelled, by an authority far removed from our personal experience” (2017, p. 112). There is little need, anymore, to wonder what exists beyond our horizons and fill the voids with our imagining.

It is science, now, that is embracing the mysteries of our existence, and it does so with a vocabulary of wonder. Science, believes neuroscientist Raymond Tallis, is the “mightiest monument of collective wondering” (Tallis, 2014, p. 12). Fields of medicine, technology, communications and engineering are testimony to the importance of asking ‘what else is possible?’ and seeking solutions. The eminent inventor, Albert Einstein, warned peers and students against “stop[ping] to think about the reasons for what you are doing, about why you are questioning. The important thing is not to stop questioning. Curiosity has its own reason for existence” (Miller, 1955, p. 64).

Today’s scientists are heeding this advice. In the open source world of the twenty-first century, when information can be accessed and shared like never before, curiosity, inquiry and wonder are flourishing. In scientific domains, unknowns do not equate with ignorance or stupidity, but are catalysts for further investigation where mysteries beget mysteries. This is curiosity’s inherent

paradox, explains Alberto Manguel: “every one of our achievements opens up new doubts and tempts us with new quests, condemning us for ever to a state of inquiring and exhilarating unease” (2015, p. 42). Marcus du Sautoy, Professor for the Public Understanding of Science at Oxford University believes “science will never know it all. It would be terrible if we did. Science is a living, breathing subject because of what we don’t know” (Peters, 2016). Rather than be dispirited or embarrassed by what they don’t know, scientists are excited and motivated. In his TED Talk, ‘What will be the next big scientific breakthrough?’ futurist and neuroscientist Eric Haseltine happily admits he’s a scientist who believes “that what we don’t know is vastly more than what we do know” (2017).

Scientists take a gleeful pride in the seemingly unsolvable puzzles of our existence, delighting in their infiniteness. “Scientists are kids that never grow up”, the mathematician Brian Greene unapologetically admits as he grapples with string theory and hypotheses of multiple universes (Greene, 2017). In his final lecture, computer science professor Dr Randy Pausch pleaded with his audience to “Never lose the childlike wonder. It’s just too important. It’s what drives us” (Pausch, 2007). Similarly, at a 2012 public symposium in Cambridge, Stephen Hawking advocated “Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious.”

For the past forty years, wonder has become a feature “in the works of almost all major contemporary popularisers writing about physics, astronomy and cosmology” (Helsing, 2016, p. 271), resulting in a kind of renaissance in the way we approach science, far removed from the ‘certainties’ taught in schools. When astronomer and biologist Carl Sagan spoke of the mysteries of the universe in the 1970s and 80s, his language verged on the spiritual. In his introduction to the series *Cosmos: A Personal Voyage*, Sagan said

Our contemplations of the cosmos stir us. There is a tingling in the spine, a catch in the voice, a faint sensation, as if a distant memory of falling from a great height. We know we are approaching the grandest of mysteries. (Andorfer, McCain, Malone, 1980)

Through his imagery and language, Sagan aimed to shift our perspective to view Earth and the universe afresh. In urging us to look back on the Earth as if astronauts, he roused us to recall the ‘bigger picture’ of our existence, the vastness of time, and the folly of our terrestrial behaviours. In his 1994 book, *Pale Blue Dot*, Sagan tells us

The Earth is a very small stage in a vast cosmic arena. Think of the rivers of blood spilled by all those generals and emperors so that, in glory and triumph, they could become the momentary masters of a fraction of a dot. Think of the endless cruelties visited by the

inhabitants of one corner of this pixel on the scarcely distinguishable inhabitants of some other corner, how frequent their misunderstandings, how eager they are to kill one another, how fervent their hatreds. Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves. (p. 6)

And it is not only in the ‘hard’ sciences of astrophysics or mathematics that wonder features, but in areas of biology, zoology, and botany. Sir David Attenborough’s popular wildlife documentaries continue to fascinate millions of viewers; likewise, popular science television programs like *Catalyst* have drawn loyal followers. With infectious excitement, open-mindedness and childlike curiosity, such programs have capitalised on the public’s desire for mystery and surprise; an opportunity to be dazzled by our world and what might yet be possible. It is a rare opportunity for many of us, and we are craving it.

Threats to wonder

Beyond the arenas of philosophy and science, wonder is rarely promoted as valuable. Curiosity and wonder, which are considered innate human qualities, begin to wane in childhood when the “clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost” (Carson, 1956, p. 56) as questioning is discouraged, temporary retention of facts is encouraged, and big-sky dreaming is narrowed and shaped into appropriate pathways of employment.

By adolescence, the child’s endless appetite for knowledge is further diminished by the education system. “It is a miracle that curiosity survives formal education,” stated Einstein, for students “are trained to forget the questions that have no clear answers” (Kingwell, 2004, p. 86). This sentiment is echoed by Alan Dyer, lecturer at the Centre for Sustainable Futures, who bemoans the lack of “magic and enchantment...coupled with a lack of holism” in educational institutions which results in a learning process that is neither memorable nor life enhancing (2007, pp. 394-395). Instead of functioning as “forums for questioning and discussion”, schools act as “training camps for skilled labor”, with tertiary institutions continuing this trend by narrowing students’ focus as they learn “more and more about less and less” (Manuel, 2015, p. 4). Big questions such as “what kind of a world are we making?” and “what kind of a world should we be making?” are treated with “more and more scepticism and moved off the table” (Coleman, 2009).

In adulthood, the enemies of wonder are many. As Tallis expressed, “No one chasing after a bus to get

to an appointment on time has sufficient spare mental capacity to be astonished at the intricate coordination of everyday life that ensures that buses run to timetables..." (Tallis, 2014, p. 7). Not only are adults too busy for wonder, but it is deemed "an utterly inappropriate state of mind" (Tallis, p. 10), which may estrange us from others who might consider it unattractive, immature or embarrassing. Wonder can be viewed with misunderstanding and distrust, associated with naivety, idleness and passivity "most purely expressed in the child, staring with open-eyed fascination at a fire or a pussy-cat, gape-mouthed and even, perhaps, drooling (Rilke cited in Tallis, 2014, p. 9).

For an adult, experiences of wonder are atypical and fleeting, resulting from experiences of either love or illness.

We are rarely seized by wonder. Yes, there are circumstances when we are alive to the numinous mystery of the visible world. When we are in love we see the ordinary things about another person for what they are: not in the slightest bit ordinary. Likewise, the ordinary world sees through the eyes of a child, or the open spaces beyond the sickbed seen after a long illness.... We see what Philip Larkin called "the million-petalled flower of being here" for what it is. (Tallis, p. 6)

In the twenty-first century, there are even more threats to our capacity for wonder. Much has been said of our shortened attention spans and inability to concentrate on long-form texts, so what chance is there for private, sustained inquiry? De Pascuale believes wonder requires a "sense of place" and "time to come into being" (2003), but with the breath-taking rate of cultural, environmental and geopolitical change, the speed and impermanence of the twenty-four-hour news cycle, and the continued intrusion of technological advancements and diversions, the need for wonder can easily be forgotten or overwhelmed. Because of our "abstract, impersonal world fuelled by a mindless hunger for efficiency, progress and profit", life has become "a blur that produces confused anxiety rather than insightful wonder" (De Pascuale, 2003).

Raymond Tallis refers to a "metaphysical intoxication" (p. 6) in which we "quickly forget the things that excite or inspire us, skipping from one thought to the next without a chance for curiosity or deeper thought. Our senses are so overwhelmed by stimuli that the effect of each wonder cannot truly settle" (Tallis, p. 11). Solitude, Tallis adds, is necessary to allow a private "awakening that hints that much of what is taken for granted is a collective dream" (Tallis, p. 9), yet for many of us we have lost our ability to be alone with our thoughts, or alone at all.

Another threat to wonder is our deteriorated connection to nature; an issue not exclusive to our times, but one which has steadily become more apparent through the centuries. Even in the early 1800s,

Prussian scientist Alexander von Humboldt was already warning that “the restless activity of large communities of men gradually despoil the face of the Earth”. After exploring Latin America, Humboldt began to formulate theories of nature as a “net-like intricate fabric”, “animated by one breath” (cited in Wulf, 2016, p. 77). Being in nature “exercises a soothing and calming influence”, he noted, but it did more than that. His book *Views of Nature* (1808) captures the “mysterious communion” he felt with nature, and how the stars could “delight the senses and inspire the mind” (Wulf, p. 78). Contrary to the scientists of the time, Humboldt encouraged an interdisciplinary approach to science that encompassed the “magic charm” of poetry and art, for nature cannot be analysed in isolation: “What speaks to the soul escapes our measurements” (Wulf, p. 79).

More recently, the mid-twentieth century biologist, conservationist and activist Rachel Carson lamented our detachment from the physical environment in *The Silent Spring* (1962) and “Help Your Child to Wonder” (1956) (later published as *The Sense of Wonder*, 1965). The natural world, she believed, was a place of infinite wonders that we’ve become divorced from. More than an aesthetic pleasure, nature is deeply spiritual, literally grounding us in the present place and time. Without nature, we not only lose our sense of wonder, but we become disconnected from our humanity and our hope.

Those who dwell, as scientists or laymen, among the beauties and mysteries of the earth are never alone or weary of life. Whatever the vexations or concerns of their personal lives, their thoughts can find paths that lead to inner content and to renewed excitement in living. Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature — the assurance that dawn comes after night, and spring after winter. (Carson, 1956, p. 48)

Carson’s sensory descriptions of nature aimed to remind us of the mysteries and delights — for adults, as well as children — in seemingly commonplace occurrences such as lizards and trees. She described a physical reaction when attuned to nature: a “spine-tingling response to the vast, roaring ocean and the wild night around us” (1956, p. 25). Carson believed that answers to questions big and small can be found in our environment, for when “standing on a beach, we can see the long rhythms of earth and sea that sculptured its land forms and produced the rock and sand of which it is composed; when we can sense with the eye and ear of the mind the surge of life beating always on the shores — blindly, inexorably, pressing for a foothold” (Carson, 1998, p. xiii). In her writing, Carson wished for every child to possess a “sense of wonder so indestructible that it would last throughout life, as an unailing antidote against the boredom and disenchantments of later years” (1956, p. 46) and the numerous

threats posed to it.

But collectively, humankind is “suffering basic alienation from its own nature and possibilities — alienation that is not merely personal but threatens the vitality of a human future of the peculiarly human ‘principle of hope’” (Ernest Bloch cited in Kingwell, 2000, p. 87). In losing touch with nature, sustained thought, solitude and childlike awe and curiosity, we lose the daily reminders of the wonders of our existence, in magnitudes big and small. We lose an appreciation of the “million-petalled flower of being here”. We forget the impetus to look up. According to German Marxist philosopher Ernst Bloch, what we lose is, “at its base, our regard for amazement...” (in Kingwell, 2004, p. 66). Carl Sagan implored us to “Look again at that dot [of Earth]. That’s here. That’s home. That’s us. On it everyone you love, everyone you know...every human being who ever was” (1994, p. 8). Without this impulse, we forget how valuable this planet is. We are so busy being busy that we forget to stop and ask ourselves *What else is possible?*

But this is precisely what literature can do. In the noise and clamour of our lives, stories can offer refuge. They can turn our heads, shift our gazes, and allow us to see afresh. They can remind us to look up and out and wonder what else might be possible.

2. WONDER FOR THE WRITER

2a. Wonder as Creative Stimulus

Curiosity is often the trigger for my creativity. For as long as I can remember I have been drawn to small things, noticing items that others might not, such as abandoned shopping lists, buttons, or graffiti carved into trees. *What brought it here? Who is responsible for it?* Many of these imaginings are fleeting, forgotten soon after. Some of these, however, evoke a particular image or moment that are not as easy to forget. *What happens then?* my subconscious pesters me. *Then what happens after that? And why does it matter?* It is an itching curiosity that compels me to keep asking questions, with each question's possibilities raising more questions. I don't approach drafting with a plan but with questions, through which I *find* the plan.

Though my stories begin with curiosity, it is a sense of wonder that expands the ideas outwards and propels the narrative forward. *Why does this matter?* I keep asking. *How does this fit into the bigger scheme of things? What else might be possible?* I want to find out how a small, catalysing moment can alter a character's life. In the hero's journey, this singular moment would be known as the 'call to adventure', though for the reader (and character) it is simply an instance that is unexpected and possibly mysterious. I want to know how this one moment can lead to another, then another, in a 'domino effect' that will eventually change everything. Later, when multiple drafts have been worked over and themes rise to the surface, I am surprised to find the sense of wonder survives at the heart of the story. It is there as the impetus behind the characters' actions. It is there when they view the world and their role within it.

Reappraising my previous three novels (each works of contemporary realism) through the prism of wonder, I realise that my character arcs have always involved a moment of realisation that life is not completely within their grasp; that the unknowns are bigger than the knowns (and them); and that this is something to embrace rather than to fear. In other words, my character development comes from moments of wonder that cause an "epistemological breach, a sudden apprehension of one's epistemic weakness" in which "an old way of knowing (or not knowing) has the potential to usher in a new one" (Wittman, 2008, p. 7).

In my first novel, *Shutterspeed*, Dustin's worldview begins to shift as he "wonders what else he doesn't know" (p. 139). In my second novel *Wavelength* I use metaphors of dark matter and geology to explore ideas of scale and age, and the mysteries of both. Oliver is told that "the universe is growing faster today than at any time in history... It just keeps spreading out and no one knows what it's expanding into. Don't you love that?" But Oliver doesn't love it, for at seventeen he's trying

desperately to control his life and future, and the last thing he wants is mystery.

With *Wavelength* I was able to explore and develop my interests in the wonders of science and philosophy. A retired physicist explains

There is a point where science ends and imagination takes over... What we know is minuscule compared to what we don't. Quantum physics is just starting to teach us how electrons can disappear then reappear simultaneously at the opposite side of an atom. But in the meantime, there are some things we can know Oliver, like the appeal of a good coffee, and the way swimming cleanses the soul. (p. 186)

As the novel progresses, Oliver begins to loosen his grip on the future and allow himself to wonder. "Book in hand, Oliver stands on the step, overwhelmed by all the things he doesn't know" (p. 143). Walking home, "he sees stars and planets he can't name. The sky is full of them" and he "wonders which dot is Jupiter" (pp. 144).

A culminating scene in *Wavelength* involves Oliver considering the energy he feels when he thinks afresh about his future.

It's not chemical or kinetic, thermal or electric. It's not elastic or gravitational. It's something he can't name. It's an energy that reminds him he's alive; an energy that fills his lungs and gives him goose bumps. It's that feeling he had as a child watching the stage show in Sydney. It's those moments between the tiger disappearing and the woman rematerialising, when the musk of the animal is still there in the empty space. It's the pause between one magic act and the next, when the rules are suspended and something unknowable and wonderful is taking place in pockets of air he can't see. When the universe is reconfiguring itself around him and there's nothing he can do about it.

He breathes it in, this dark energy he can't name. And he senses it's not made of fear or desire, but anticipation. Something is materialising. He doesn't know what animal lurks in the darkness, but he senses its breath, and it's nothing to be afraid of. (p. 216)

Zac & Mia, my third novel, featured similar motifs of energy and scale to convey wonder. Though she's unable to articulate her thoughts on death and the afterlife, Mia understands it in a spiritual and physical way. "My grandma and grandpa are here. The ghosts of everyone who matters are with me, and in me. In my hands, the branch quivers with infinite pasts" (p. 301). Later, Zac considers the television footage of the landing of the Curiosity Rover on Mars.

From NASA's spacecraft, a robot vehicle the size of a small SUV is finally wheeling its way across the surface of Mars. Around Earth, scientists are cheering. Already they're analysing data and recording the numbers of molecules, gases, humidity, minerals. They're probing, scraping, looking for life.

It gives me hope, in a way. If a robot can navigate its way 560 million kilometres through our solar system, then scientists can find a cure for something as boring as my white blood cells.
(pp. 306-307)

Subconsciously, I have always been looking for patterns big and small, and drawing connections between the universe and individuals, science and the human condition. All along, wonder has been a motivator for my characters, and a source of enchantment for the story.

Writing *The Vault*, however, was a much more deliberate exercise in wonder, starting with its genesis in 2004. It was peak-hour on a rainy afternoon as I drove through Perth's Graham Farmer Freeway Tunnel. The traffic-flow inside the two-kilometre long tunnel was sluggishly 'stop-start'. It was while my car was stationary, as I stared blankly at the pattern of red brake lights ahead of me, that I noticed a drip of water fall from the ceiling of the tunnel.

That drip, I understood, was not a cause for alarm. I was safe. I reasoned that engineers knew how to build tunnels that could withstand rain. But because I was bored, and because there were no other distractions (no passenger for conversation, or time-fillers such as my phone or car radio) I let my eyes linger on the ceiling, and I allowed my mind to wander.

The following question occurred to me: *what if that drip did pose a problem?* (My subconscious evidently understands the importance of a 'problem' to a story.) *What if...* I considered. *What if this wasn't the Graham Farmer Freeway Tunnel I was driving in but an underwater tunnel...and I saw that drip?* I understood this would create more of a problem — more of a *danger* — as I imagined hundreds of cars trapped inside a tunnel about to break apart. I visualised panicked motorists in a violent, clambering fight for survival.

These images soon left me — my subconscious obviously unimpressed by such scenes — but because I continued to sit in traffic, and because I had no other distraction, the same question returned a second time: in what situation would the drip from a ceiling pose a problem? *What if...* I wondered again. *What if I wasn't in an underwater tunnel but in an underwater city...and I noticed a drip?* This would be even more problematic, I conceded, my mind's-eye flashing with childhood memories of

Atlantis illustrations, *Snorks* television cartoons, *The Little Mermaid*, and sci-fi covers of books never read. This underwater-city scenario felt more urgent and more interesting to me, yet I did not linger on this for too long either.

When the question imposed itself a third time, it pushed the limits further: in what situation would a drip from a ceiling cause even *more* of a problem? *What if...* I pondered. *What if I lived in an underwater city...but I didn't know that I lived in an underwater city...and I found the drip?* I paused. Considered it. I became aware of goose bumps on my arms and other, small questions that rose, unbidden. *But why would people be in an underwater city? How could they not know they lived underwater? And what would happen if one realised she did?*

Reality dissolved. I was no longer in my car, in traffic, but instead I was a girl in a small room, looking up with curiosity. A girl reaching up with fearful fascination at something she'd never before witnessed or considered. A drip from a ceiling. Water that shouldn't be. The impossibility of it. The strangeness.

This premise intrigued me. It *excited* me, because there were so many questions that I couldn't answer. Unlike the first two imaginings — with action sequences, or outlandish, fantastical settings — this one was quiet, compelling and potent. A girl catching a drip on her finger. A girl tasting salt water for the first time. A girl looking up with wonder.

These are the moments that inspire me to write: small, suspenseful encounters that will (eventually) change everything. From this single moment, my stories grow by asking a question, brainstorming possibilities, then committing to an answer. For instance, the question *Why would people be in an underwater city?* led to me brainstorm various possibilities, then commit to one answer: because life on Earth is threatened. This of course led to the question *Why is life on Earth threatened?* which led to brainstorming, research, then my chosen answer: because of an asteroid. Question, brainstorm, answer. Question, brainstorm, answer. This is repeated, again and again, with each answer provoking further questions which open up further possibilities. There is no grand plan or artistic genius at work, only a dogged truth-seeking mission that leads me into a story that seems to be piecing itself together just one step ahead of me. *What would I do if I were her?* I wondered. *What will she do? What will this change? And why does this matter?*

That afternoon in the tunnel, I hadn't been looking for story. I had been wanting to get home but, due to circumstances, I'd been bored. Due to my nature, I'd been observant, then curious. Driving home, I knew nothing of the story that would eventually become *The Vault*, but I felt intrigued and excited, and that was enough.

Over the next seven years, while I wrote, taught, and travelled, numerous story ideas came and went, but this one remained, growing in the back of my mind, waiting for its turn. Sometimes I'd dip into it, scribbling more questions in notebooks and toying with possibilities. It was not until 2012, in between edits of *Zac & Mia*, that I chose to make it a priority in my life. In October of 2012, I successfully applied for an Australia Council grant to develop it as a new work. In 2013 I started conducting research, and in 2014 I began my PhD. I understood that this project would challenge me in unforeseeable ways and that it would completely consume me for years. I knew it would be incredibly hard, but I also knew I had to do it. I was obsessed with this moment of the girl reaching up. I was compelled by the girl's curiosity as much as my own. A yearning to know — hers, and mine — what came next.

Because of course, she is me. Hayley is made of my DNA, as most of my characters are. Hayley's curious nature mirrors my own, just as her 'world' mirrors ours, for are there not cracks and drips in our lives we cannot understand? Are there not mysteries beyond our seeing? I find myself bewildered how people forget to 'look up'. How they choose not to explore the rest of this world, let alone consider the universe and its possibilities. How they busy themselves with trivial details (and is not most of it trivial?) rather than ask the big questions. *Why are we here? What are we capable of? What else is possible?*

I cannot help but marvel at the impossibility of seven billion of us on a blue planet orbiting around a sun as we hurtle through space. How is this not the first thought we have every morning? How do we not feel giddy with inertia when this world is moving so breathtakingly quickly, so quietly, so vulnerably, in a universe that has more suns than we have grains of sand on all of Earth's beaches? Our very existence defies the odds, and yet here we are, forgetting our impossibility. It saddens me. It maddens and frustrates. But it inspires me also. Uncertainties mean that anything can be possible. Flannery O'Connor urged the "modern artist to go beyond the naturalistic data to the regions of mystery and unknowing". I am a writer who is more "interested in what we don't understand rather than in what we do...more interested in possibility rather than in probability" (Scott & Streight, 2009, p. 409)

Unsurprisingly, I am drawn to writers similarly interested in mystery and wonder. As a teenager I was bewitched by the humorous *The Hitch-Hikers Guide to the Galaxy* series, in which Douglas Adams's playful ideas and language forced me to perceive the world (and its rules) differently. From its early description of spaceships that "hung in the sky in much the same way that bricks don't" (1979, p. 30), I was transfixed. Tales of destruction and conflict — such as in *War of the Worlds* — did not captivate me, but Adams's surprising characters, places and viewpoints did. At the same time, I was a

keen reader of Shakespeare's plays but, unlike my teenage colleagues, I did not care for the romance of *Romeo and Juliet* or the farce of *A Midsummer Night's Dream*. What mesmerised me were Shakespeare's characters who gazed upwards at the universe — the Sublime, mysterious, or supernatural — and grappled with existential quandaries. As Hamlet told us, "There are more things in heaven and earth... than are dreamt of in your philosophies" (Shakespeare). This quote filled my teenaged self with awe and promise.

I was, and continue to be, a great fan of Ray Bradbury's, both for his work and his approach to writing. Though he is regarded as one of the greatest science fiction writers in history, Bradbury did not consider himself a science fiction writer but a "writer of fairy tales and modern myths about technology" (Bradbury & Day, 1974). Influenced from a young age by history, science and magic, his childlike curiosity and wonder never dimmed. "We are an impossibility in an impossible universe," he stated (Krieger, 2002, p. 328), and it is this 'impossibility' that compelled him to seek meaning in fiction. In his interview with James Day, Bradbury shared his enduring sense of wonder and how it influenced his work: "I like to think of myself as part of the universe waking up... and looking around saying, 'hey, this is remarkable, look at this'... I'd like to keep this gift going" (1974). Bradbury did not consider himself special, but simply alive to his surroundings and their mysteries. "If you enjoy living, it is not difficult to keep the sense of wonder."

This sense of enjoyment infused Bradbury's writing with youthful excitement. His childlike enthusiasm is infectious.

I don't think life is worth living unless you're doing something you love completely, so that you get out of the bed in the morning and want to rush to do it... I can't understand people not living at the top of their emotions constantly, living with enthusiasms, living with some sense of joy, living with some sense of creativity, I don't care how small it is. (Day, 1974)

Bradbury's experience of living and writing 'at the top of [his] emotions', with 'enthusiasms' and 'joy', is anomalous to many adults in the twenty-first century who, as a result of education, work, technology or busyness, lack the time or capacity to do so. Yet these are the qualities which prompt readers to revisit Bradbury's work again and again, pursuing the wonder absent in their own lives. In his stories, readers find echoes of long-lost mysteries, and the excitement of what might yet be.

So too do readers keenly seek the work of one of the western world's greatest living writers of speculative fiction, Margaret Atwood, who admits to "walk[ing] around in a state of wonder every day. Everything's exciting" (Atwood, 2015). To Atwood, her storytelling "is a part of being human", in which her constant wonder can be explored and tested, manifesting in her speculative stories in

startling and wondrous ways.

Adams, Shakespeare, Bradbury, and Atwood used language to share the delights and terrors of the unexplained mysteries of our existence so that readers, too, can be reminded of the precious ‘impossibility’ of living. These writers nurtured qualities frequently associated with childhood – such as “innocence, wonder, and trust” (Archard, 2001, p. 83) – and sought joy in their lives and work. As such, they did not ascribe to the popular dictum of ‘write what you know’, and neither do I, for where is the excitement in this? I have always found a greater urge to write about the things I *don’t* know — the kind of things that intrigue, bother, elude, confuse or confound me. I write to get closer to the truth, no matter how difficult, or how much it tries to evade me. I write because I am *desperate* to know. In this respect I approach story not merely with curiosity, but with a Platonic wonder, each step opening up further questions and possibilities which cannot be satisfied; wonder begetting wonder. It is only recently, in my forties, that I have come to recognise my yearning for wonder, and to embrace it in my fiction.

Speaking at the Perth Writers Festival (26/2/2017), writer Alberto Manguel observed that numerous novelists who begin in traditional fiction turn to science fiction as it frees them of constraints and allows them to further expand on ideas. This makes me wonder if my shift to speculative fiction has been inevitable. Not only has it broadened my scope, it has allowed me to foreground a range of topics I deem important, with opinions which may come across as too didactic in a realistic novel. In his essay *Why I Write* (2005), George Orwell analyses four motives for writing. While the first three — egoism, aesthetic enthusiasm, and historical impulse — have value and credibility (and Orwell is quick to point out that multiple motives can compete simultaneously), the fourth motive of political impulse is what he viewed as the most important. In writing *The Vault*, I have discovered this impulse also, as I have had the urge to remind others of what exists now, to warn what might happen, and to suggest what might yet be. The political impulse can weigh heavily upon a story, especially in young adult fiction which can be loaded with messages already. There is a risk, therefore, of didacticism and propaganda, but it is a risk I have taken, armed with sensitivity, experience and the liberties accompanying speculative fiction. Political impulse, Orwell explained, can “push the world in a certain direction, to alter other people’s idea of the kind of society that they should strive for” (Orwell, 2005, p. 5). It is a noble goal, but literature is a powerful medium, so why not try? Why not ‘push the world’?

And so to my impulses of curiosity and wonder, I now add the impulse ‘to share’. Because some matters are too important not to write about.

2b. Wonders of the Creative Process

The creative process continues to fascinate and confound me. Over many years, my approach has softened as I have learned to listen to the workings of my subconscious. This is not to say I relinquish control or forgo rumination (for I still obsessively plan and brainstorm, outline and draft, investigate problems and possible scenarios), but I now understand that I am not entirely in control of what happens. I realise there is value in stepping away from the laptop at times, to let the thoughts breathe and allow ideas to find each other, connecting in ways I could not have otherwise imagined. In other words, I try to ‘get out of the way’ of the process.

This trust in the subconscious is a learned kind of wonder. I don’t understand it, but neither do I fear it or deny it. Pico Iyer, in his TED talk “The Beauty of What We’ll Never Know”, notes that the one thing he’s learned from being a writer for thirty-four years is that “transformation comes when I’m not in charge, when I don’t know what’s coming next, when I can’t assume I am bigger than everything around me” (2016). But it is not easy to relax one’s authority over a process that we are solely responsible for. After all, we are constantly reminded by peers, educators and advertisers that hard work pays off, and that we are the makers of our own destinies, so ‘just do it’. It feels almost unnatural — and sometimes lazy or shamefully fatalistic — to demote the conscious mind and surrender one’s control over the work.

Yet this is exactly what the creative process needs. The intellect, Ray Bradbury believed, is a great “danger to creativity (for) you begin to rationalise and make up reasons...instead of staying with your own basic truth” (Day, 1974). There must be room for dreaming, play and intuition. The trick, said Bradbury, is not to think. Instead “you must feel, and your intellect is always buried in your feeling anyway.... At the typewriter you should be living. It should be a living experience” (Day, 1974).

My subconscious influenced every stage of writing *The Vault*. On my second trip to Tasmania in 2015, I spent five days on Maria Island during which I hiked every trail and camped in many locations. I went with an open mind, a camera, notebook, and a phone to record the sounds. I arranged to meet again with Ranger Pete Lingard (who I’d first met on the island in 2013), to learn more about the fauna, edible plants, and locations of Aboriginal artefacts, all of which infused my world building. I walked the paths that Hayley might, my senses alert as I noted the sounds, smells and sights that she would encounter, for the first time. I needed to know how Hayley would think, react, and survive. I wandered in the days and nights. I saw the island from all angles, paying attention to its details and colours. I studied the cliffs she might wash up against and the rocks she would have to climb. I allowed my subconscious to be set free in the playground of the setting. *What might happen here?* I wondered. *What energy can I feel?* It was a way of getting a trace of a story. Catching glimpses of it. I

looked upon each place with delight and wonder, partly as myself, partly as Hayley, for I needed to be in the setting to let the (as yet unknown) narrative unfold before me.

It was an exciting time of daydreaming and discovery in which anything was possible, and I saw things that weren't actually there — things that *could* be. While walking the Bishop and Clerk trail to the lookout, for instance, I noticed a tree with a hollow space the size of a small person. I stopped, startled by a sudden vision of a small brown boy hiding inside. This 'spectre' is what led to the character of Kid, a cheeky Aboriginal boy who watched and waited for Hayley to move obliviously past. On another day, when I walked the Reservoir Circuit, I came across the overgrown ruins of the old 'Engine House', built in 1888. In my journal I described it as "a house and forest entwined". As I stepped through the rooms, I sensed a ghostly presence and conjured the manifestation of a family that might live there, inside the crumbling walls. This is how Kid's family was born: not as something I 'created' but as an organic, intuited response; a subliminal feeling that felt right in the environment. As a result, the roles of Kid and his family in the story feel right, as if they were meant to be there, all along, blending in with green paint and hand-signals instead of words. In this way, it feels I am not trying to 'tell' a story, but find its clues and piece it together, in the only way it can fit.

During the creative process, I feel particularly receptive to outside influences and willing to let them in, and it feels, reciprocally, as if the whole world is trying to send me clues. Logically, I understand it reflects less on the world and more on me as I view my days through a different lens. For instance, an article in *The Weekend Australian* about a little-known freshwater crayfish in Tasmania led to a scene with Jarod the trader that affected the development of his relationship with Hayley. A *Catalyst* television program led me to point to solar flares as a cause of destruction. A conversation with a Tasmanian-raised friend led to the reference of the 'Pigman' of Mole Creek. Political developments at the Nauru offshore processing centre led to my decision to convert Tasmania to a refugee island. Even postcards and cartoons (see Appendix i) which had been attached to my cork-board for years took on new meaning, as I began to recognise Hayley in the body language and facial expressions, and was inspired by their (previously unconsidered) impulse of wonder. Writing *The Vault* was a continuous, reflexive and organic process of development in which the story was discovered, rather than constructed purely of my own volition. It was a time when I had my eyes wide open, responsive to external influences that could filter into the story.

Usually, this fertile and electric time of creativity becomes blurred in memory once the final draft is completed, after which time I find myself reciting a much 'neater' account of the creative process to interested readers and workshop participants. Like a mother after childbirth (so I've heard) it is natural to forget the pain and messiness of the event, shaping it into a tidier recollection. The fact I can recall *The Vault's* stages and influences now is due to the detailed reflective journal I kept from

2012 to mid-2017. For the first two-and-a-half years, these were physical A4 notebooks with handwritten notes, drawings, and brainstorming. Then, as the journaling became less about world building and more about narrative, it became a typed text of over 40,000 words. At the time, the journal was a valuable resource in helping me apprehend the ideas and shape the story. It also allowed me to hold ‘conversations’ with myself, enabling a meaningful reflective process which was creative, analytical and increasingly personal.

Now, the journal serves as a comprehensive resource which provides clarity on *The Vault’s* development. On 21/11/15, for example, I write of the recent terror attacks in Paris and how “I heard the song *Imagine* by John Lennon. ‘No religion, too’. So, I’m going to ban religion in my future world. No religion. No air flight.” Without the journal, this influence would otherwise have been lost to me; the reference would simply have been absorbed into the process as a whole.

The journal reveals the centrality of wonder to the storytelling early on. On 25/10/13 I write “How do I create the world in a holistic, complex way...? The world must be ‘living’ and exciting; magical. We find magic in details and the wonder of life and beauty.” Over two years later I write:

The driving force is the sensawunda. She wants to see the mainland because it’s there, and how can she not? Put myself into it more. The urge to see, to know.... It’s about hope. Belonging. Dreaming of more. Sensawunda. Yearning for unseen places. (14/1/16)

The journal outlines my method for problem-solving as one of asking questions and brainstorming possibilities. To help move the narrative forward, I would often ask ‘what if?’ For example, on 12/6/16, I write: “What if Freya [later renamed Dee] climbs up too? What if Campbell [later renamed Buckley] is in the hut??” At times, I refocus myself with the question, “What is this story about?” (14/1/16). Other times I try to ‘write’ my way through problems. On 14/11/15 I record:

I made progress yesterday on the ‘trader-in-a-tree’ scene. I don’t know where this is going. I don’t think I can think my way through it — need to write through it.... He could be — kind, disabled (chopped off fingers of one hand in an accident). Once was a shoemaker. What’s his motivation? Lives on mainland. Trades letters that can’t get through. Refugees, resettled. Phones don’t work down here. What’s his pay/motivation? He can’t be completely altruistic. Is he a good guy? What role is he going to play in this? ...am pondering. Will go back into the scene now to see...

The journal was also a way of giving pause and considering larger questions of storytelling. On 14/11/13 I note: “I’ve managed to shift things, namely tense. I’ve rewritten the first chapter in past

tense, hoping it gives me more freedom. Chapter 1 still feels too crowded but slower. I'll keep going with past..." Another example is how I worked through issues of info-dumping:

My big decisions here are about where (and how) to 'reveal' info of Maria Island, Tasmania/Terra Firma, and Australia. I.e., explain the set up of the rules, and adding necessary (for the reader) history to do so, i.e. what's changed, why, how. While it's tempting to explain all of this as early as possible, I'm aware that these chapters are already full of detail, mostly about the environment and learning (with Kid then with books). There's a limit to how much I should dump. There's also a sense of giving info when Hayley requires it, not when the reader wants it... (1/5/16)

Throughout the process, I was careful not to impose ideas — of character, research, or society — on the story, but instead let them settle and find their own place. The journal entry of 15/5/16 records: "have been listening to more interesting podcasts on the future and survival. I'm trying to let these things filter in." As the journal progresses, it reveals a learned trust in the process. "Harder work awaits (fixing more info dumps, bee stuff and Will stuff) but I'll know how to do it when I get there (my subconscious is working on these things meanwhile, of course)" (4/9/16). On 27/10/17 I write: "I need to keep the story going, to let it guide the way."

The journal provides evidence that much of the hard work of writing doesn't happen at the laptop, but when I am away from it. Some of my best 'a-ha moments' happened when I was elsewhere — walking or cycling, showering or washing the dishes, dreaming or reading — with my subconscious given free rein. On 20/10/15 I note: "characters are speaking in my head when I go for a walk. Solutions are finding me." On 7/11/15: "I've been day-dreaming about the book again."

I found walking and cycling — especially in nature — to be most beneficial for aiding problem-solving. In his (posthumously titled book) *Reveries of a Solitary Walker*, philosopher Jean-Jacques Rousseau wrote of the calm enchantment of being in nature that allowed him to lose sense of self. He considered solitary walking a kind of therapy far removed from the complications of society. I, too, experience such peace and clarity, and developed a useful routine of drafting or editing in the morning, then going for a bushwalk in the afternoon. After twenty minutes or so of letting my feet find a rhythm and my senses tune to the stimuli of wind, birds, and gravel underfoot, earlier problems would begin to drift up to my consciousness, along with new solutions. It certainly did feel like a kind of magic, one which can so easily be repeated again and again.

In her paper "Poetry makes nothing happen': Creative writing and the English classroom", Dr Wendy Morgan discusses how "ideas, images, solutions to problems will pop unbidden into mind" while she

walks, swims, or drives (2006, p. 25). Such physical activities occupy the “monkey mind” so that the “undermind” — a term coined by Guy Claxton in 1997 as “the intelligent [or ‘cognitive’] unconscious” (p. 19) — can be left to rumination, performing an “alchemy” with the materials of the outer, conscious world (2006, pp. 25-26).

Michael Harris calls this ‘mind wandering’, in which “industrious activity plays out while the conscious mind remains utterly unaware of the work” (2017, p. 49). This is anomalous to a method of problem solving that uses logical steps; instead it is a process of association leading to insight. Harris believes this is the default mode of the mind, which intuitively wants to make sense of seemingly random connections “with a curiosity and openness we might never choose to entertain” (p. 49). To achieve this, the mind requires solitude and time to shift to this default mode, which is what I find when I allow myself to wander in nature. Nature provides the “random elements [and] changing environments” which we need “in order to think independently and cobble together one’s own vision of things” (Harris, 2017, p. 148). According to architect Simon Nicholson’s ‘theory of loose parts’, nature, as opposed to constructed spaces, has the ‘loose parts’ our minds need to disengage and behave more freely (Harris, 2017, p. 147). For me, I require such unpredictable loose parts, which is why I crave time in the forest. When I am writing, I take my laptop to a park or my front yard — wherever I can see the sky and the changing environment — and I welcome the commotion and noise of a busy café. Only then does my mind feel it is given permission to wander also.

Alchemic experiences can be brief ‘aha’ moments of clarity, or fuller realisations which feel more like epiphanies. While touring New Zealand by bike, I had such unexpected insights into *The Vault*. On 8/1/2016 I record: “What I’ve been thinking is this: the story needs to be more of a sphere, the way I felt Zac & Mia was. More holistic, contained, as if it’s the only way it could possibly be, coming back on itself.” This idea of a circle recurs five months later:

Other thoughts while riding: the process is so much of a shaping of a circle, perhaps relating to cycles, circles, domes, sustainability, marble. The imagery of [this] novel. Every time I get a sentence just right, or a paragraph or page just right, or get a whole chapter just right...by the time I adjust something before or after it, then return to that ‘perfect’ chapter with perfect sentences, it’s no longer right. So the editing is a continuous revisiting. Yesterday I imagined it as a kind of slapstick comedy routine of fixing something which then breaks as I fix the next, and so on. (23/6/16)

Sometimes my daydreaming was self-reflexive, and the journal allowed me to meditate on how characters and ideas are influenced by my past. Hayley’s observations of the octopus in Book 1 prompted (and fed from) the following memories:

Also: been thinking back to childhood, days and evenings on beaches while family dragged nets. Amazed by what the sea brought [on]to sand: sting rays, prawns, little flapping fish, jellyfish. Prickly, frightened, trapped, trusting, fighting, surprised, confused. And the long days of collecting shells, favouring one type over another, as beautiful...seeing curious shapes and chips and evidence as 'story'. What makes one more beautiful/valuable than another? Collecting those that were imperfect. Then at sunset, the proof of god. The fingers, the irrefutable display. God, watching me. Approving. Not alone on a lonely beach. (16/10/13)

Other times, it is my present self that influences the story as I make connections between Hayley and myself. On 15/11/15 I write:

I made myself go for a ride today (which I'm glad of) and did some analysis. Apart from my lack of social contact, I realise I have no big goals — with this book, or with my life. I'm 'drifting' without a plan. It hasn't stopped me from writing. And I realised, with a moment of clarity, that this is Hayley's problem too — she's drifting along with no real motivation. She wakes up, walks, eats, sleeps — just like the rest of us. I've always had a problem with big picture desires — what do I want? A house? A relationship? I don't even know where I want to live! I float along, changing my mind, dreaming but not acting or committing. Which is fine for me (I guess), but not for a character in a novel. I need to give her purpose. So on the bike today, I soul-searched. I realised it isn't a home I need or love (two things already mentioned in the book — Hayley wants home, Petra wants love) it's a purpose. To live a meaningful life. To contribute. This feels more important to me than home or love. And maybe that's what Hayley might realise she's seeking too. Perhaps she needs to have an existential crisis like me: what am I doing? What's the point? In the vault, she had a purpose. Everyone felt necessary. I think she needs that again. Tired of running, chasing an unimaginable goal.

Such soul-searching can be difficult, but I have found it necessary to give characters truth and heart. A more personal connection with the story translates for the readers as well.

Interestingly, it is not just me who influences Hayley: it works both ways. When I was especially immersed in the manuscript, the boundaries between fiction and reality were fluid. On 24/4/16, I observe:

It's been an interesting morning, meeting new people at Voyage café where I've sat outside. They're lovely, and interested in this [manuscript]. It makes me feel good. And it's good for my soul, too, to meet new people. To connect to other humans. I feel...adrift in this world

sometimes. Invisible. Like Hayley, I think. This is an inevitable effect of writing, and it's also necessary, too, for writing... Maybe it's Hayley seeping into my life, or vice-versa. She's an anomaly. Misunderstood and unwanted in her world. She'd rather loneliness and fear than claustrophobia and dishonest circumstances... I [feel] anchorless.

Such intimate meditations came unexpectedly, infusing the tone and helping me connect with the character of Hayley more truthfully. At the start of any project, characters feel nebulous. It's impossible to visualise them, which sometimes makes me feel like a fraud. I have always envied writers who begin stories with a 'character profile' already formed, but for me, characters become more visible with every draft, though even at the end, I never truly know them. It is a relief when other writers share similar experiences, including the celebrated American short story (and speculative fiction) writer George Saunders. In his 2017 article, "What Writers Really Do When They Write", he admits,

there is something wonderful in watching a figure emerge from the stone unsummoned, feeling the presence of something within you, the writer, and also beyond you — something consistent, wilful, and benevolent, that seems to have a plan, which seems to be: to lead you to your own higher ground.

I see that the character of Hayley started becoming three-dimensional in 2016. On 27/5/16 I note she's feeling "more authentic", after which I started to work through the entire manuscript with the purpose of solidifying her personality, clarifying her motivations and 'smoothing out' her emotional journey until she finally emerged as a character who is likeable, imperfect, vulnerable, childlike, kind and optimistic. I admired the way she looked upon the world with fresh eyes, experiencing many 'firsts' — first love, first loss, first freedoms — as teenagers do, in uncensored and impassioned ways.

At the Sydney Writers Festival (May, 2017) I was keen to hear Saunders elaborate further on his creative process. He admitted that it is "mysterious" to him, and "a pain in the ass to discuss truthfully", for he is a writer with "neither a clear intention nor execution", which is at odds with popular fallacy of the artist as having "something he wanted to express". He described himself as a "revisionist", for the truth of a story only reveals itself after numerous revisions. His job, then (apart from 'finding' the story), is to ultimately ask "do I approve of this message?"

I identify with Saunders's revisionist method of writing. For me, this is what makes the process so fascinating and addictive. Unfortunately, it can also be laborious. On 13/4/16 my journal reveals

I can't see the forest for the shrubs. And I can't imagine any other way of tackling this than to

do what I'm doing now, then looking back over it with fresh-ish eyes another time. Such an endless circular process. Frustrating.

It can also be disheartening. Later the same day, I note

I'm feeling pretty down...like I didn't make much progress. That these chapters are messy, that I'm just faffing about with jigsaw pieces rather than making a new picture...I don't know how to fix it.

This attitude of 'fixing' the manuscript (rather than it being a deliberate, planned act) can be seen in my numerous journal references to the story as a mystery or puzzle. On 18/12/14 I write: "Starting to grasp its potential; to get a sense of its pace...It could be good. Not yet. But eventually." On 13/3/16 I note: "I still haven't solved the puzzle of where to put Will's message. I'll just keep writing." On the 12/4/16 I gleefully exclaim: "Much rearranging to do today. It's jigsaw puzzle time!" It is clear this provides motivation to keep me returning to the laptop, day after day for many years. I don't write because I have a story to tell: I write because I want to discover the story and make it whole. To set it 'right', just as it needs to be.

A puzzle is one of a number of metaphors used to refer to the manuscript. On 30/4/16 I write: "the revisions have hit a knot (is it like massaging a body and releasing the knots?) in Chapter 22. There's a lot to flesh out here, as Hayley learns the ways of the island/forest." On 23/2/16 I write: "I've had the Perth Writers Festival (exhausting, surprising, centring) and I feel, today, the knot of the ms loosening, pieces untangling. I can start to see it for how it can be better... There feels an unknottling in me too." Other metaphors are used throughout to represent my relationship with the manuscript. On 14/4/16 it feels like

I'm in a big surf, constantly dumped by waves. This — chapter 9, and yesterday, chapter 8 — feels unbeatable. Like I'm moving around chapters, having Hayley respond slowly to things. Like she keeps seeking answers...but finding dead ends. Frustrating and unsatisfying. But isn't this necessary?

The journal reveals not only references to the story as a tangible thing — a puzzle, a knot, a mess, an ocean — but often depicts the writing process as being a physical exercise. To my surprise, I have used hundreds of active verbs to describe my work, such as "wrestling", "chipping away", "dabbling", "tidying", "fixing", "streamlining", "culling", "juggling", "jiggling" and "wriggling". When I'm under pressure, I say I'll "push through", "plough through", "dive in", or "delve in". When I speak of editing, I "smooth things out", "comb through", "sweep through", "trawl through", or "clean up".

When the work is problematic I describe myself as “blocked”, “clogged”, “stuck”, “struggling”, “slogging”. It sounds more like a record of gym sessions (or housework) than a reflective, creative journal.

Perhaps it is little wonder *The Vault* took a physical toll on me. The most difficult sections to reread in the journal were those detailing the effects of extended isolation, focus and deadlines. “Tired”, “sick”, “exhausted”, “shattered” and “burnt out” make frequent appearances, as do descriptions of my mind being “foggy”, “mush”, “weary”, with “words swimming” on the screen. Metaphorically, I refer to my “personal battery” going flat, and the “cave” I must retreat to, avoiding others. I speak of editing myself into a hole (17/10/15). Physically, I become run-down and unfit. On 13/6/2016 I note:

I’m really struggling this morning. Slept in, feeling tired already. Brain is heavy. A feeling of dread. I tried reading. Eating. Now I’m at my desk with a coffee and fruit toast wondering if this is something I can push through or something I need to heed.

The next week I follow up with:

I haven’t been well. Dizzy. Lightheaded. Panicking. Hiding away...and I know it’s this. Too much pressure, too much staring at the screen trying to arrange words properly. I really need to decompress, do something else. Laugh. Travel. I don’t know. But I have to push on. Can’t stop now — so close. (20/6/2016)

Regardless of the initial impetus and enthusiasm, finishing *The Vault* was an exercise in single-minded endurance compounded by excessive rewrites and three major structural incarnations.

The traits necessary for creating a long work — curiosity, obsession, discipline and perfectionism — have a flip-side. Unchecked, they are unhealthy and destructive, as my journal attests. On 24/6/2016, as I am about to start a new revision, I write: “Trying not to become overwhelmed. This happens every time I start another round of edits...I don’t like what I read. I sink into despair again.” When the journal next resumes, it is with this:

Those fifteen days were excruciating. I had my head down, giving up on all else: emails, friends, teaching, housework, and even cycling... It was awful. This revision was sickeningly immersed — there were times the words made me nauseous on the screen and they made no sense. Nothing made sense. It was so bad, and I hate the slow frenzy of it — working so quickly, so intensely, but only managing to get through a page every half-hour (honestly, that’s what I averaged; at least it was better than the first half of editing, which took half an

hour to markup one page, than another fifteen minutes to type it up). Two hundred pages at over 30mins per page = 100+ hours. I didn't stop working. (10/7/16)

Six weeks later, after finishing the next round of editing, the journal reads: "I am spent. Burnt out. I'm truly over this process — the book, though, is good. I believe that. But it sickens me to look at it" (21/8/16).

To survive these all-consuming periods, I had to act as my own coach, championing myself forward. The journal reveals numerous reminders to slow down, breathe, and address one problem at a time. "It's coming along, keep patient" (11/10/13). "Onwards. Inwards," I advise (1/5/16). On 21/10/15 I write with resignation: "Just this. This is everything. Night and day... Still no sense of (it). Just keep swimming." Sometimes I pull myself up: "Am I taking this all too seriously and not having fun? Am I forgetting that it's fiction and that I can create my own rules?" (9/10/13). On 21/4/16 I write "I think my body does need some calming moments in the day. It's not that this revision process is stressful, but it is intense. I love it, but it takes from me." On 24/5/2016: "Not feeling so flash. I have to be gentle with myself today."

And yet I kept going, motivated by an unshakable faith that I would find the 'right' way to tell this story, and that the finished product would eventually be worth it; that it was special.

I'm really proud of the ms. When I worked on it, I felt its potential. I had butterflies: fleeting, flitting excitement that this will be well received, critically and commercially. This is dangerous. What if it's not? (But what if it is?) Looking back through my timeline, I see it's true (and not just felt): I've been working on this consistently this year and last. Yes, I'd begun years before, but for the past two years I have concentrated wholly on developing it and shaping it. Two years of head-down work and no room in my life for anything else. Yes, I need a break. (1/10/16)

To an outsider, reading this journal would be enough to question my sanity and warn me never to try such a project again. But as writers know, we have a love-hate relationship with the process that rarely prevents us from returning to the laptop with renewed energy and fresh optimism. Reflecting on his recent novel, *Lincoln in the Bardo*, George Saunders describes the process as a "beautiful, mysterious experience and I find myself craving it while, at the same time, flinching at the thousands of hours of work it will take to set such a machine in motion again" (2017).

I often question what it is that draws me back to begin a new manuscript. It certainly is not money or fame, and I doubt it is a yearning for status. What it is, I feel, is the wonder: the beauties and

mysteries and unforeseen possibilities that emerge when creating something new. It is a sense of capturing something precious and fleeting, and preserving it in a crystalline way. It is not for the reader that I do this, but for me, the first reader, as I wish to be surprised, stunned, and pivoted towards something which feels pure and special.

Wonder is not just the creative impulse for my stories — it is also the renewable fuel that keeps me going; a means of surviving the long, taxing process. It is sustaining and addictive as it taps into the “mystery which surrounds us” (Knight); a mystery we are a part of. Writing is a method of getting closer to truth, which is more appealing and rewarding than so many other aspects of ordinary life. The creative process is an immensely personal experience which can surprise, confound, and move me. At times, it verges on the spiritual, for though I am the creator, the work can feel as if it is bigger than me, from a place I’ll never grasp.

My job is to be awake to the wonders in the first place — in this case, the drip from the ceiling of the Graham Farmer Freeway Tunnel — then attuned and willing enough to find and curate the other pieces with patience, intuition and poetry, in the way it is meant to be. There’s a feeling, eventually, of everything falling into place in (almost) exactly the right way, and I’m compelled by a need to finish it, marvelling as I do so, working to give it the shape it needs to inhabit a place in the world that it must.

Though *The Vault* is not perfect, and never will be, I have a sense that I have gotten closer to the heart of it; closer to truth — which is the purpose of wonder, after all. Finishing *The Vault* has not brought me nearer to knowledge, but further away from it, for wonder humbly reminds us “You do not know everything about the world” (Wittman, p. 6). And so, once I catch my breath after the next stage of editing *The Vault*, I know I’ll start the process afresh, for new catalysing moments have already begun to ‘drip’ into my life, and already they are pulsing with potential, waiting for me to be brave enough to embrace the mysteries, look for the other pieces, and dare to find out what might be.

3. WONDER FOR THE READER

3a. Sense of Wonder in Fiction

Any child who has looked up at the stars at night and thought about how far away they are, how there is no end or outer edge to this place, this universe — any child who has felt the thrill of fear and excitement at such thoughts stands a very good chance of becoming a science fiction reader.

(Hartwell in Sandner, 2000, p. 283)

‘Sense of wonder’ in fiction — sometimes referred to as *sensawunda* — is not a new concept. The lineage of the term can be traced to the writer Samuel Taylor Coleridge’s *Biographia Literaria* (1817) in which he promoted the importance of poets continuing “the feelings of childhood into the powers of manhood... combin[ing] the child’s sense of wonder and novelty... with sun and moon and stars...” (Sandner, 2000, p. 283). At the same time, poet John Keats was espousing the value of ‘negative capability’: “when a man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason” (Rollins, 1958, pp. 193-194).

In children’s literature in the western world, sense of wonder came to the fore in the mid to late 1800s, in line with Keats, Wordsworth, and the other Romantic poets who encouraged a view of childhood connected with imagination and innocence. Prior to this, children’s stories were largely didactic and moralistic. In the late seventeenth century, Charles Perrault – whose 1697 *Histoires, ou Contes du Temps Passés* “sowed the seeds for early modern and modern fairy tales and tales about fairies” (Hunt, 2004, p. 262) – insisted his reimagined folk tales possessed a “useful moral” (Tatar, 1992, p. 110) marking them as superior to the “mere trifles” (Tatar, 1992, p. 25) which told stories of fairies and were often considered to be the frivolous “products of women’s imaginations” (Hunt, p. 262). So-called ‘instructional stories’ were soon commercialised by the London publisher John Newbery, who is often credited with publishing the first modern children’s book with *A Little Pretty Pocket-Book* in 1744. Between 1755 and 1767, Newbery published approximately 390 books, most of which were the educational market, such as the popular *The History of Little Goody Two-Shoes* (1765) which featured “a true moral sense for the middle-class children at whom it was directed” (Hunt, p. 244).

It was Lewis Carroll’s *Alice’s Adventures in Wonderland* that triggered the ‘Golden Age’ of children’s literature in 1865. There soon followed a wealth of children’s stories including Carlo Collodi’s *Pinocchio* (1883), Robert Louis Stevenson’s *Treasure Island*, and Rudyard Kipling’s *Jungle Book* (1894). Rather than provide moralistic instruction, these were “told in a moment of childlike spontaneity, as without purpose except delight, as reveling in the imagination” (Sandner, 1996, p.3). Oscar Wilde explained that his fairy tales (*The Happy Prince and Other Tales*, 1998) were “meant

partly for children, and partly for those who have kept child-like faculties of wonder and joy” (Sandner, 1996, p. 4). The Romantic movement encouraged childhood imagination, setting the scene for an explosion in the fantasy genre in the twentieth century, including works by C.S. Lewis, J.R.R. Tolkien, J.M. Barrie, L. Frank Baum, Alan Garner and Philip Pullman. Regardless of their content, these seminal fantasy stories featured mystery, uncertainties, and a “lack of explanation to go with it” (Sandner, 2004, p. 162).

Wonder was similarly at the heart of the earliest science fiction for young readers. Between 1863 and 1920, Jules Verne’s *voyages extraordinaires* (later published as the illustrated *Collection Hetzel: les Voyages Extraordinaire*) encompassed sixty stories written for adolescent boys that aimed to “outline all the geographical, geological, physical and astronomical knowledge amassed by modern science and to recount, in an entertaining and picturesque format...the history of the universe” (Hetzel cited in Alkon, 2002, p. 66). Though they often featured “encyclopaedic didacticism” and a “forcefully propelled narrative” (Roberts, 2016, p. 186), these were exciting journeys that captured the hearts of young readers around the world. On the back of these, Gernsback’s *Amazing Stories* magazine (later named *Wonder Stories*, 1926-1936) and Edward Stratemeyer’s first series of Tom Swift novels (1910-1941) found a willing readership, with stories revelling in the delights of invention, exploration and wonder.

It was science fiction writer and reviewer Damon Knight who first popularised the literary term ‘sense of wonder’ in the 1950s, highlighting the power of mystery and excitement that stories can tap into. “We live in a minute island of known things,” he reminded us. “Our undiminished wonder at the mystery which surrounds us is what makes us human” (1956, p. 25). Following Knight, writers David Hartwell and Gary Wolfe further consolidated sense of wonder as a term attached to science fiction. According to *Brave New Words: The Oxford Dictionary of Science Fiction*, sense of wonder is

a feeling of awakening or awe triggered by an expansion of one’s awareness of what is possible or by confrontation with the vastness of space and time, as brought on by reading science fiction. (Prucher & Wolfe, 2007, p. 179)

As *sensawunda* refers not to a novel’s content but to the response elicited in a reader, definitions are subjective. There may be a “crude astonishment at the marvellous, to a sense of ‘meaning-in-the-mysterious’ or even of the numinous” (Sandner 2004, p. 162). Editor John DeNardo describes *sensawunda* evocatively as

that jaw-dropping response one has when confronted with an object or idea that stretches the limits of prior conceptions. It’s when mankind first went into space and saw the earth hanging

in the sky, and it's seeing what the surface of Mars looks like. It's the first time you saw the opening shot of *Star Wars*...when the reader realises just how strange and wonderful some fantastic concept can be. (2011)

For Gary Wolfe, it is the result of “tension set up between the familiar and the unfamiliar, the known and the unknown” (1979, p. 24), which challenges a reader's previously held assumptions and forces them to consider an alternative. Wolfe goes on to describe it as an almost physical experience: “a feeling of endless possibility, like standing at the edge of a vast abyss that is close enough to us to be real, yet great enough to be unfathomable” (p. 24).

At its simplest, *sensawunda* is a feeling that you're “seeing something in a new way” (DeNardo, 2011) which may lead to “that final click of understanding, when all the puzzle pieces fall in place”. Like wonder, *sensawunda* remains long after the book is read. It can provoke a feeling of being “set in intellectual motion, of being led down a chain of potentialities with seemingly endless ramifications and endless mysteries” (Wolfe, 1979, p. 24).

It is unsurprising that wonder is widely associated with science fiction. Indeed, a sense of “wonder (and) awe at the vastness of space and time, is the root of the excitement of science fiction” (Hartwell in Sandner, 2000, p. 283). Key attributes of science fiction include the “mystery and the thrill of the unknown” and the lofty “quest for transcendence” (Panshin in Landon, 2002, p. 19) — fertile grounds for evoking wonder. With a seemingly limitless canvas to paint on, science fiction can tackle ideas on a grand scale. It can approach the mysteries of our existence, says Sandner, “not in small, everyday symbols, but in the big ones of space and time” (Sandner, 2004, p. 107). There is tremendous scope for teasing out the unknown, foregrounding our startling limitations of knowledge in dramatic ways.

Science fiction provides a “wow factor” (“sometimes ironized by contemporary fans as the “gosh-wow!” effect”; Westfahl, 2005, p. 707) but it does more than that. Unlike fantasy — which generates wonder “purely from the presence of the supernatural or impossible” (Sandner, 2004, p. 162) — science fiction “throws a rope of the conceivable...from our world to [the reader's]”, thereby making a connection to our current reality. Farah Mendelsohn describes science fiction as “a fiction of speculation” which is less a genre than a mode, or “a *way* of writing about things, events, and people, rather than a description of which things, events, and people should be written about” (2004, p. 291). It asks the quintessential question of ‘what if?’, but it goes further than that. It poses, “If we do this, what will happen/what will we find?” then “How will we react? What will be the consequences of that reaction?” (Mendelsohn, 2004, p. 291). Because of such questions, science fiction invariably overlaps with science, technology, philosophy, ethics and religion — other fields concerned with truth, possibility, and stretching the boundaries. The relationship between science fiction and these fields

can be symbiotic, as exemplified by the newly established ‘Writing the Future’ competition. Devised by the UK’s Kaleidoscope Health and Care enterprise, it invites science fiction stories with a “fresh perspective” to encourage “innovative thinking in health” in “hypothetical futures”. Explains Lord Ara Darzi in his article “From Fertility Trees to Killer Bloodbots, Sci-fi is Dreaming the Future of Health”, “Dreaming is what we should be doing, in science, in medicine and in life. If we do not imagine the future, how can we invent (or prevent) it?” (2017).

Science fiction has long been a means for dreaming the future. Celebrated science fiction writer Ray Bradbury believed that Plato’s *The Republic* (approximately 380BC) was the first work of science fiction as it examined a “possible future democracy and the problems of humanity (asking) how do you put together a society that works?” Bradbury described science fiction as

any idea that occurs in the head and doesn’t exist yet, but soon will, and will change everything for everybody, and nothing will ever be the same again. As soon as you have an idea that changes some small part of the world you are writing science fiction. It is always the art of the possible, never the impossible. (Weller, 2010)

More widely, science fiction is believed to have been born with Mary Shelley’s *Frankenstein* (1818) which challenged the limits of realism, nostalgic romanticism, and fantasy of the time. A product of Shelley’s own sense of wonder, *Frankenstein* was influenced by scientific advancements in electricity and medicine, and a childhood surrounded by scientific and philosophical discussion in the company of her father, the social and political philosopher William Godwin.

In the nineteenth and mid-twentieth century, writers including H.G. Wells, Jules Verne and Hugo Gernsback tapped into the imagination offered by new technologies to fashion thrilling stories that extrapolated on their possibilities, such as time-travelling adventures or those in outer space or deep ocean. Following the two world wars of the twentieth century, writers such as George Orwell, Aldous Huxley and Ray Bradbury used science fiction to explore political, technological and social concerns of their time, following threads of possibility to their dazzling and/or terrifying consequences, evoking powerful emotional responses with opportunities to project, reflect, and wonder. The counter-culture of the 1960s heralded a “science fiction renaissance” (Scott Card, Athans, Lake, 2013, p. 122) which continued into the 70s and 80s with seminal writers including Ursula Le Guin, Arthur C. Clarke, and Philip K. Dick. Simultaneously, the increasingly popular medium of television brought in a wave of inventive science fiction series, such as *The Twilight Zone* and *Dr Who* in the 60s, followed by *Star Trek* in the 70s, leading to a more mainstream engagement with the genre. These were tales of grand, interstellar adventures, with thrilling, action-packed plots, staunch heroes, and previously unimagined, unembodied antagonists such as Daleks, aliens and ghosts.

While science fiction and fantasy stories are thriving in today's film industry — which, thanks to technological wizardry, is having a renaissance of its own with works including *Alien*, *Interstellar*, *Arrival*, and the *Marvel* and *DC* comics — science fiction stories of the twenty-first century are vastly different to those which came before, influenced by our modern lifestyles, issues, and readership. Some feel we live “in a science fiction world already. Every day we hear of advances in science and technology: astronomers finding planets around distant stars, the first hints of a possible cure for HIV, cloning, self-driving cars...” (Scott Card et al, 2013, p. 124). With such dizzying rate of change, it is a fertile time for science fiction writers to tap into concerns that are increasingly widespread and real.

As a looking glass for society, many contemporary writers of science fiction are tapping into the zeitgeist and responding to concerns surrounding the ‘Anthropocene era’ in which we currently live. Their novels are often endowed with dystopian bents, featuring more terrestrial, political matters than their predecessors, including global concerns of climate change, government control, poverty, refugees, and scientific advancements beyond our imagining. Even the label of science fiction today has shifted, with works often referred to as speculative fiction — an umbrella term also encompassing works of dystopia, fantasy, alternative histories — with a focus on the speculation of what might be possible.

Just as the content and mood of science fiction have changed, so too has the public's reaction to it, especially the genre's ability to evoke *sensawunda*. The once lauded ‘wow factor’ is now deemed hackneyed, redundant, and even childish, particularly within the science fiction community. In *SFE: Encyclopedia of Science Fiction*, sense of wonder is condemned as “debased...even within sf Fandom which these days is as likely to use it ironically, spelling and pronouncing it ‘sensawunna’” (Clute, Langford, Nicholls & Sleight, 2015). Writer and critic Darko Suvin goes so far as to say the term is a “superannuated slogan...ready for retirement” (2010, p. 89).

Adult readers are no longer awed by ‘firsts’, with their experiences of *sensawunda* long relegated to nostalgia. “By the time you hit 30, or worse, 40, that old ‘sensawunda’ has become a bit jaded”, bemoans reviewer David Barrett (1998, p. 31). Adults are neither innocent nor impressionable. This is not to say they are immune to the wonders of science fiction, but it is difficult to sustain prior levels of enthusiasm, astonishment and wonder, especially if they feel it has all been said before. In his blog post entitled ‘Why Sense of Wonder Sucks’, Damien Walter complains

stories that attempt to create a ‘Sense of Wonder’ fall in to a variety of traps. They return to ideas and images that evoked the sensation at some time in the writer. So we keep writing about manned missions to Mars, long after the idea has gone stale... The writers[*sic*] job is

just to make the reader stop and look. Leave the ‘Sense of Wonder’ to us [the reader]. (2012)

Some critics blame the poor writing quality of contemporary science fiction. Others blame a market saturated with recycled ideas in which writers can easily ‘counterfeit’ sensawunda simply through using two key ingredients of science fiction: scale and ‘scientific ideas’. Scale can be engineered with deep space and/or alien worlds, while scientific ideas can be created with “huge planet-busting weaponry” and “big dumb objects” (Westfahl, 2005, p. 707). Unsurprisingly, the tropes of scale and scientific ideas are now considered overused and clichéd, with savvy readers resistant to familiar formulae and manipulation.

Others believe the demise of sensawunda is due to the prevalence of weighty political content, differentiating contemporary stories from the daring and compelling adventures of mid-to-late twentieth century written by Robert Heinlein, Arthur C. Clarke, and Isaac Asimov. Says author Nancy Kress, “Maybe the world has gotten too grubby and jaded for ‘awe’” (2008). Jane Abbott’s Australian novel *Watershed* features a future “devoid of rain” in which “the earth has shrunk to dust and salt, hemmed by a swollen sea” in which “survivors gather to re-establish order but it’s nothing like before” (2016), while James Bradley’s *Clade* (2015) features a deadly virus, extreme weather events, and infertility, amongst other issues. In her article “A Golden Age for Dystopian Fiction: What to make of our new literature of radical pessimism”, Jill Lepore observes “this spring’s blighted crop of dystopian novels is pessimistic about technology, about the economy, about politics, and about the planet, making it a more abundant harvest of unhappiness than most other heydays of downheartedness” (2017). This aligns with the recent resurgence of classics such as *Nineteen Eighty-four* (Orwell, 1949) and *The Handmaid’s Tale* (Atwood, 1985), which topped the 2017 bestseller lists following the election of American President Donald Trump and reinvigorated discussions of political intervention and feminism.

So is there a place today for science fiction which is neither ‘grubby’ nor ‘jaded’, pessimistic nor overtly political? Can science fiction – in any of its sub-genres – still be taken seriously if its goals include a “quest for transcendence” (Panshin & Panshin, 2010) and ability to “deliver us from the written page into a universe of wonder infinitely renewed” (Hartwell in Landon, 2002, p. 20)? With a readership intolerant of ‘traps’ and clichés, is it even possible to provide readers with stories which allow them to project, reflect and wonder?

It is worthwhile to consider how sense of wonder *can* manifest in fiction, beyond the overused tropes of traditional science fiction.

Reappraising Sense of Wonder

To inspire wonder is a worthy goal, not something to be disparaged as childish or superfluous. There is a place for wonder in fiction, and there is a need. We only have to peruse one of the many ‘best-loved’ fiction lists to recognise a yearning for wonder. The ‘2017 Top 101: the best 101 books voted by Dymocks Booklovers’, for instance, features an abundance of novels with wonder at their core, including *All the Light we Cannot See*, *The Book Thief*, the *Harry Potter* series, *Nineteen Eighty-Four*, *To Kill a Mockingbird*, *The Illuminae Files*, *The Night Circus*, *The Lord of the Rings*, and *The Messenger*. In each of these we find beloved protagonists — most often children or adolescents filled with naiveté and idealism — whose eyes are opened with curiosity, fascination and bravery as they imagine, empathise, and marvel at the incredible beauties and cruelties of life.

Year after year, this is the kind of book that *adult* readers cherish and hold closest to their hearts: books with an impulse of wonder, uncertainty and mystery, in which child-like characters resist the norm and instead seek individual meaning and truth. Though they may be deceptively simple, these enduring stories remind us how it feels to have our eyes opened and consider possibilities beyond our seeing. They approach the questions of *Who are we? Why are we here? What is special? Is there more? How do we live this life well?* These stories present themselves in various styles and genres. Few of them would be classified as traditional science fiction, and yet they satisfy the definition of sense of wonder by invoking “a feeling of awakening or awe triggered by an expansion of one’s awareness of what is possible” (Prucher & Wolfe, 2007, p. 179).

So how does a writer evoke wonder without relying on overused tropes of science fiction?

Literary critic Colin Manlove points to a “contemplation of strangeness” as a fertile ground for arousing wonder (in Sandner, 2004, p. 308). While strangeness is often associated with science fiction — which is sometimes referred to as the ‘literature of cognitive estrangement’ (Suvin & Canavan, 2016, p. 15) — strangeness can be considered more widely as the “essential operation of all literature” which seeks to draw “us away from the world we live in — or think we live in” (Viktor Shklovsky quoted in Sandner, 2004, p. 308). In Carroll’s fantastical *Alice in Wonderland*, the experience of estrangement is striking. Not only is Alice physically transformed, but she finds herself in foreign worlds with rules the opposite to her own. Such strangeness sets up conditions which “thwart instantaneous recognition, and defy cognition” (Wittman, 2008, p. 6) causing a “tension set up between the familiar and the unfamiliar, the known and the unknown” (Wolfe, 1979, p. 24) for both Alice and the reader. Estrangement can be experienced in more realistic texts also, by drawing attention to the mysterious, the uncanny, the Sublime, and the gothic. Writers may employ techniques

such as alienation and defamiliarisation, as practised by twentieth century writers Franz Kafka, Samuel Beckett and Bertolt Brecht.

As science fiction writers know, the manipulation of scale is a familiar method for evoking wonder, but scale does not necessitate a setting of deep space. A simple dislocation of scale can be enough, believed Freud, to set “the imagination in motion to imagine what cannot be fully imagined, to somehow apprehend what cannot be comprehended, precipitating the sublime moment” (Freud in Sandner, 2004, p. 74). Eighteenth century German philosopher Immanuel Kant believed the Sublime effect could be created in two ways: by forceful events (such as “the boundless ocean set into rage” or “flashes of lightning and crashes of thunder”) and overwhelmingly large features (such as “a lofty waterfall on a mighty river”, “mountain ranges” or “the starry heavens”) (Helmut Wenzel, 2005, p. 106). Immense power and size can alter our view of ourselves and the world, prompting an almost religious awe. These conventions are available to writers of *all* genres, reminding us of our human smallness and weakness, and the huge spectrum between the universe and the macro.

One of the effects of estrangement and the Sublime is terror, which can serve as both a product of and vehicle for wonder. The Sublime can “easily tip into the ‘tranquil terror induced by the contemplation of great size, extreme antiquity and decay’”, sparking an “abyssal realisation of our insignificance and vulnerability” which can lead to nihilism (Anderson, 2015, p. 87). In her 1826 essay, “On the Supernatural in Poetry”, Ann Radcliffe explained how, when faced with uncertainties, readers fill the gaps with “association, the hints of what lies beneath [from which] the reader draws on their imagination” (Townshend, 2014). Terror can exist hand-in-hand with pleasure, argues Marina Warner, and both are the consequence of wonder.

Wonder has no opposite; it springs up already doubled in itself, compounded of dread and desire at once, attraction and recoil, producing a thrill, the shudder of pleasure and of fear. It names the marvel, the prodigy, the surprise as well as the responses they excite, of fascination and inquiry; it conveys the active motion towards experience and the passive stance of enrapturement. (Warner, 1996, p. 3)

Terror is not unique to science fiction or thriller genres, but can be found in whichever stories dare to investigate the human experience with mystery, for “uncertainty and danger are always closely allied, thus making any kind of an unknown world a world of peril and evil possibilities...” (Landon in Sandner, 2004, p. 104).

It is important to note the difference between terror and horror. Radcliffe was the first to differentiate the two, explaining that terror “expands the soul, and awakens the faculties to a high degree of life”,

while horror “contracts, freezes, and nearly annihilates them” (Townshend, 2014). A feeling of terror does not induce purely negative emotions of fear, panic and dread but can facilitate excitement and pleasure. In speaking about the uncanny, Freud spoke of the imagination as being “overwhelmed in a moment of bafflement but also exhilaration” (Sandner, 2004, p. 74). These two emotions — fear *and* excitement — go hand in hand in some of the best works of literature, regardless of genre. This is also the case in children’s fiction, and we need only look at fairy tales to find evidence of wolves and wicked stepmothers. Says Simon Barnes in his book *How to Be Wild*, “We have a need for monsters. We have a need for fear” (2008, p. 131). For Alice in her ‘Wonderland’, some of the situations are indeed terrifying (including claustrophobia, threat of decapitation, and the uncertainty of escape), but with terror comes tension, momentum, character development and endless, thrilling delights for the reader. Alice’s wonderland is not a dystopia but a place of endless possibility that dazzles and exhilarates as we consider mad hatters, un-birthdays, morality, and alternative ways of being.

Other potential methods for evoking wonder in literature include tapping into the natural world to reconnect with nature, as Rachel Carson encouraged, and drawing on the scientific wonders that popular scientists and documentary-makers enthusiastically endorse. Science and literature are often considered dichotomies, with individuals encouraged to ‘choose’ between the disciplines in education and employment. Such polarity is naïve and disadvantageous for there is fertile ground in the overlap between them. Dara O’Briain (cosmologist and stand-up comedian) tries to bridge the “cultural gulf between the humanities and the sciences” because “there’s no reason why one should belong to one or the other...they’re both full of wonder” (Durham, 2017). In the nineteenth century, French physicist Armand Trousseau stated, “every science touches art at some points — every art has its scientific side; the worst man of science is he who is never an artist, and the worst artist is he who is never a man of science” (Applebaum, 2010, p. 47).

Literature and science are compelled by the same desires to encounter mystery, seek truths, and consider possibilities. As Richard Dawkins explained in *Unweaving the Rainbow*, “The impulses to awe, reverence and wonder which led Blake to mysticism...are precisely those that lead others of us to science. Our interpretation is different but what excites us is the same” (2000, p. 17). Physicist Lisa Randall agrees:

Art, science, and religion all aim to channel people’s curiosity and enlighten us by pushing the frontiers of our understanding. They promise, in their different ways, to help transcend the narrow confines of individual experience and allow us to enter into — and comprehend — the realm of the sublime.” (2011, p. 42)

Every writer, regardless of genre, has access to the wonders of nature, science, and the many

mysteries which surround us. Damon Knight admitted that “What we get from science fiction — what keeps us reading it, in spite of our doubts and occasional disgust — is not different from the thing that makes mainstream stories rewarding, but only expressed differently (in Sandner, 2004, p. 107). All stories have the capacity for wonder.

The purpose of literature, in all its forms, shouldn’t simply be to hold up a mirror to our society. It should aim, too, to remove the mirrors and films of familiarity so that we can see it all, from all angles. “Look again at that blue dot!” it should insist, as Sagan insisted. *Consider what else might be possible*. This is what I wish to do with my stories. I hope to give my readers new eyes through which to see the world afresh and wonder what else might be possible.

The opportunity to influence readers is a great privilege and responsibility, particularly when the readership is young adults: an audience which is open-minded and vulnerable; a readership which will, one day soon, shape the world. As a writer for young adults, I understand I am more than a storyteller. I am, as authors quoted at the 2017 Reading Matters Conference, an educator, role model, and “ambassador of empathy” (Coates, 2017). Writing for adolescents requires a special sensitivity to ideas, consequences, and the significance of wonder.

3b. The Importance of Wonder in Young Adult Fiction

On the cusp of adulthood, teenagers are an ideal audience for wonder because they possess “vision and energy, they are open-minded, and they are neither committed to the status quo nor complacent about its dangers” (Konner in Hintz, Basu, & Broad, 2013, p. 110).

As future leaders of an uncertain world, young people are “the key to the tipping point process” and it is up to them, therefore, “to imagine a new world” (Konner cited in Ostry, 2013, p. 110). But when adolescents’ wonder is threatened by schools, the transition to adulthood, and a relentless saturation of information, there is little scope for them to boldly and expansively imagine new worlds. Nor are they encouraged to practise “self-examination and a mindful awareness of the world” or “the possibility of choosing how to be”, which is what wonder enables (De Pascuale, 2003).

The possibility of choosing how to be is exactly what teenagers are desperate for, and precisely what our world requires of them. Young people need spaces to unashamedly ask questions, marvel, and dream. “The ability to fantasise is the ability to survive...to grow,” said science fiction writer Ray Bradbury during his interview with James Day in 1974. For children above the age of ten, he continued, “the most important time of their day is...before they go to sleep...dreaming themselves into becoming something, into being something. When you’re a child you dream yourself into a shape” (1974). This is especially so in an era of political cynicism, fear, and environmental pessimism. Young people need opportunities to dream themselves — and the world — into a new, malleable shape.

Literature is one way to do so. Stories are “crucially implicated in shaping the values of children and young people” (Bradford, Mallan, Stephens, & McAllen, 2008, p. 2) and can be lasting influences on a teenager’s life. Stories also shape the way we view the world and act upon it. They can “help to shape our perception of ‘reality’ for better or worse” (Lenz, 1993, p. 203). Prominent anthropologist and epistemologist, Gregory Bateson, emphasises the importance of an “ecology of the mind” in which we are “concerned with the urgency of adopting a new way of seeing reality, of achieving a transformation of consciousness, essential to preventing the destruction of civilisation” (cited in Lenz, 1993, p. 199). Speculative fiction stories, especially — with their broad horizons and projected futures — have “transformative potential . . . as they warn young adult readers about the future while mobilising them into action” (Von Mossner, 2013, p. 71).

During the vulnerable, impressionable period of transition from childhood to adulthood — when there are competing messages from parents, schools and peers — stories can be a port of refuge where readers can find themselves, along with fictional incarnations of the self they wish to be. Stories

remind us we are not alone, which is especially important for teenagers. By reading about other characters — especially those involved in difficult situations — they can find opportunities for connection, empathy and insight into their own experiences. Characters provide models of behaviour to identify with, lean towards, or resist.

It is little wonder that adolescence is considered by many to be the ideal time for reading science fiction. Adolescence is a time of ‘firsts’, when we are most open to the surprises and mysteries of our surroundings, and our minds are continually expanding with each new discovery. A time when ‘what if?’ questions are self-perpetuating and we consider them with curiosity, courage, and a lack of cynicism. Some say the “golden age of science fiction is twelve” (Graham & Hartwell in Hartwell, 1996, p. 13) referring to the age many readers discover science fiction, “and that thrill of discovery remains locked in the memory, always to evoke a golden glow” (Ashley, 2000, p. 135). Twelve is a time of innocence and optimism, when a reader can position themselves as heroes in far-flung adventures. Sociologist David V. Barrett refers to the “galaxy-roaming, the battles in space, the strange civilisations on other planets, the aliens themselves” as exciting adventures which capture the imagination of a young reader (1998, p. 31). But it is not only science fiction that can have a tremendous effect on young readers. All genres can tap into the desire for the ‘other’, presenting a cornucopia of questions, possibilities and wonders for adolescents seeking truth.

That teenagers are not reading enough is a commonly heard cry. Research into the reading habits of adolescents suggest that, though the social status of books remains mostly positive, recreational reading has declined, with only 36% of teenagers regular readers (Merga & Moon, 2016, p. 128). According to the recent ‘Teen Reading in the Digital Era’ research project led by Deakin University, 31% of 15-16 year olds don’t read a book in an average month (Rutherford & Johanson, 2017). Fingers are pointed at the abundance of media exposure through various platforms, with seemingly unlimited and uncensored access. Other challenges include the demands of homework and work (47% of teens are in paid employment; Merga & Moon, 2016, p. 131) and inability to concentrate on long-form texts (Hill, 2010).

The books that *are* consumed are vastly different from those held in nostalgic reverence by a well-meaning public with views on what teens ‘should’ be reading, and as such are consistently held under a microscope. Since the start of the young adult publishing boom in the early 2000s, the area has been the subject of much scholarly writing and criticism. Of particular interest is the fantasy and science fiction books which have “exploded onto the scene”, and with it a new female readership in a previously ‘male genre’ (Athans in Scott Card, Athans & Lake, 2013, pp. 107-108). Mendelsohn notes that contemporary science fiction for young adults is not “true SF” (as previously written by Heinlein or Norton) but more didactic, with overlaps of romance, fantasy, and general fiction, which

is considered more interested in the individual than society (2004, p. 286). Today's books also herald "unprecedented levels of pessimism" (Sambell, 2004).

In particular, today's teenage readers — and the adults who make up 55% of the young adult market (Bowker Market Research, 2012) — have a seemingly insatiable yearning for stories of damaged, oppressive futures. What began in the 1970s with Robert C. O'Brien's *Z for Zachariah* (1974), continued into the 1980s and 90s with post-war dystopias including Victor Kelleher's *Taronga* (1986), John Marsden's *Tomorrow* series (1993-99), Isobelle Carmody's fantasy *The Obernewtyn Chronicles* (1987-2015) and Meg Rosoff's realistic *How I Live Now* (2004), but since the turn of the millennia, the trend has exploded, with today's teenagers becoming "connoisseurs of disaster" (Roiphe, 2009). Between 2000 and 2009, the number of English-language dystopian novels "quadrupled that of the previous decade, and...we have already left that decade's record in the dust" (Sturgis, 2014, p. 47).

Set against a background of climate change and its resulting wars, *The Hunger Games* series, (Collins, 2008-2010) was a publishing phenomenon. In August 2012, Amazon announced it had surpassed the *Harry Potter* series as the best-selling children's/YA book series with over 50 million print copies sold (Scholastic website). The story of a feisty, athletic Katniss leading a revolution against inequality, political exploitation and oppression struck a chord, as did her love triangle. In Katniss's wake followed other highly successfully series such as *Divergent* (Roth, 2011-2013), *Chaos Walking* (Ness, 2008-2010), and *Maze Runner* (Dashner, 2009-2016), featuring young people fighting against a corrupt and controlling regime which has limited individual self-expression and choice.

It is easy to see the appeal of dystopia: the destruction of cities, chaos, battles to the death, desperate love stories, heart-rending sacrifices, and teenagers overthrowing restrictive regimes to take control. These are edgy, fast-paced narratives of emotional and physical tests as the young protagonist learns to determine right from wrong and ascertain who can be trusted. In other words, it is the roller-coaster ride of adolescence made real. Dystopia exploits the literal and metaphoric 'deaths' that young people experience between childhood and adulthood, and the anxieties and uncertainties accompanying these times of change. Teenagers already "feel ostracised or alienated from current society" (Hintz, Basu, & Broad, 2013, p. 6) so misfit characters in an oppressive regime seem relatable. A misfit who triumphs as a hero is especially attractive. As Muller states, "young readers enjoy projecting themselves in a future space, especially one that resembles their own but takes elements of its already troublesome forms to stark extremes" (Muller in Pearce, Muller & Hawkes, 2013, p. 43).

Mirroring the trends of adult publishing, young adult eco-dystopias — or 'cli-fi' novels — have become "increasingly popular and provocative" this century as they address "the fears, questions, and

issues that interest children and young adults” (Hintz & Ostry, 2003, p. 12). The dramatic potential is obvious: writers for young adults “have as a backdrop an unpleasant present and a dubious future” says Thomas J. Morrissey in his chapter ‘Parables for the Postmodern, Post-9/11, and Posthuman World’ (Hintz, et al, 2013, p. 190). As such, cli-fi novels like Bacigalupi’s *Ship Breaker* (2010), Saci Lloyd’s *The Carbon Diaries* series (2009-2010), and Julie Bertagna’s *Exodus* trilogy (2002-2011) feature realistic scenarios in damaged near-futures struggling with issues of carbon depletion, severe weather patterns, drowned cities, violence, drug-abuse, poverty and corruption.

In Australia, young adult dystopias already take advantage of our already extreme climate and vast, inhospitable landscapes, as seen in *The Books of the Change* series (Williams, 2001-2002), *Daywards* trilogy (Eaton, 2005-2010), *Vulture’s Gate* (Murray, 2009), and *The Sky So Heavy* (Zorne, 2013). These books create evocative post-apocalyptic scenarios which tap into local and global concerns about nuclear fallout, class, race, dispossession and survival. More recently, Mark Smith’s *The Road to Winter* (2016) is the first of a trilogy featuring a teenage boy surviving on a small coastal Australian village after a virus has killed his family and community. Threatened by violent gangs, the novel has resonances of the *Mad Max* films. In James Bradley’s 2017 *The Silent Invasion* (also the first book of a trilogy) the source of the deadly virus is alien, and its invasion is threatening to destroy the entire human race and environment of 2027. Writer Paolo Bacigalupi explains the appeal of such stories: “I suspect that young adults crave stories of broken futures... because they themselves are uneasily aware that their world’s falling apart” (2012).

As a readership, teenagers are acutely aware of climate change and the dangers it poses to themselves and the natural environment. They understand they have inherited a world which is ecologically compromised and threatened. Dystopian stories often reflect frustration at the actions (and lack of) by supposed role models, with young characters who are “often full of disgust at the way things are, and charged with an overweening idealism as to the way things might be (Heather Scutter cited in Weaver, 2011, p. 110). By taking action, these proactive characters rail against the system, presenting a whole package for young readers, including “liberty and self-determination, environmental destruction and looming catastrophe, questions of identity and the increasingly fragile boundaries between technology and the self” (Muller in Pearce et al, 2013, p. 48). Even if these stories might ‘frighten’, they can also ‘warn’ (Hintz et al, 2013, p. 1) and “provide young people with an entry point into real-world problems, encouraging them to think about social and political issues in new ways, or even for the first time” (Hintz et al, 2013, p. 5). In her chapter “Utopia in Dark Times: Optimism/Pessimism and Utopia/Dystopia” (2003, p. 14) Ruth Levitas states utopia, in any guise, can be a “catalyst for change”. Critical readings of texts such as these “help young people realise that ignorance and unexamined premises can have fatal consequences” (Lenz, 1993, p. 203).

Foregrounding significant issues is immensely relevant, as is presenting idealistic characters who challenge the status quo. As such, dystopian stories — and speculative fiction in general — can have great value for young minds of today. But it is pertinent to ask what is being neglected in these stories. By underscoring despair and exhorting revolution, is there room left for characters — and readers — to think creatively about the gaps and silences? Is there opportunity for them to be curious as to what might yet be, and excited by future possibilities, the way young readers once were?

It is important to ask: *Where is the wonder?*

For me as reader and writer, battles and love-triangles (however exciting) are not enough. Conquest is not enough. As Sturgis posited, “What giant step for man can the members of the next generation achieve when the most their heroes can hope for is to survive?” (2014, p. 51). In many dystopias, there is little chance to be conscious of the world, let alone to view it with curiosity and awe, revelling in the mysteries and marvels of our existence: Philip Larkin’s the “million-petalled flower of being here”. There are few opportunities for characters, and readers, to view with new eyes, prompting them to ask why we’re here and what else might be possible. With a focus on struggle and power, there are limited reminders of what’s actually worth fighting for. This is not to suggest that all speculative fiction is lacking in meaning and potential. Says Professor of Cultural Studies at Monash University, Andrew Milner, “I will settle for the argument that there are indeed suitably apposite tales of resonance and wonder, intelligence and warning to be found in Australian dystopian SF [speculative fiction]. We just haven’t learnt to value them. Not yet anyway” (2009, p. 836).

One weakness of popular dystopias is the resolution of the stories. Mendelsohn points out that most contemporary science fiction stories do not extend reader’s political thinking, but instead “follow a recursive and consolatory pattern that appears to prize stasis over the provision of agency and consequence” (2004, p. 305). With closed, tidy endings that revert to the status quo, there can be found a “cop out pattern” as heroines “ultimately [give] up their independent vision and [subside]...into traditional behaviour” (O’Keefe cited in Hintz et al, 2013, p. 125). The resolution of *The Hunger Games*, for example, “is less a political arrangement than a conception of home as a stable, loving home and nuclear family, insular and protected from the outside world” as Katniss “defaults” to a conventional family situation and the gender stereotypes which accompany it (O’Keefe in Broad, 2013, p. 125). Despite the revolution driving the narrative, traditional preconceptions prevail after all, without a sense of how the ‘new society’ will be better. “Dystopia used to be a fiction of resistance,” laments Jill Lepore (2017). But now?

It’s become a fiction of submission, the fiction of an untrusting, lonely and sullen twenty-first century, the fiction of fake news and infowars, the fiction of helplessness and hopelessness. It

cannot imagine a better future, and it doesn't ask anyone to bother to make one...it doesn't call for courage. (Lepore, 2017)

If stories about change revert to the familiar (and unequal) status quo, the final message readers are left with is one of futility — why bother in the first place?

Representations of good and evil can be similarly simplistic and, arguably, patronising and predictable. President Snow, the antagonist in *The Hunger Games*, is an embodiment of greed and cruelty; likewise, Jeanine Matthews is the ruthless antagonist in *Divergent* (Roth, 2011); and in the *Chaos Walking series* (Ness, 2011-2013), Mayor Prentiss (who later proclaims himself the President of New World) is unashamedly manipulative and power-hungry. These representations are not far removed from lessons learned in childhood of archetypal wicked witches and big bad wolves. In emphasising the dichotomy between good and evil, there is little room for ambiguity or moral analysis. As Carrie Hintz explains, many contemporary dystopias have “easily digestible prescriptions [which prevent young readers] probing the nuances, ambiguities, and complexities of social ills and concerns too deeply” (Hintz et al, 2013, p. 5). The battles against the villains — such as Katniss's strategic revolt against President Snow — may be dramatic, but they are largely irrelevant and uninspiring for teenagers seeking to find characters and situations to relate to. Young readers will not find themselves fighting to the death in an arena, or liberating enslaved alien armies, so what, if anything, can be gleaned from such fictional plotlines? And what are they learning about the entanglement of good and bad, right and wrong?

Inspiration and hope do not come easily in a dystopian narrative, particularly for teenaged readers with a distrust of falsity or condescension. The innocent adventures of Tom Swift (1910-1941) or the didacticism of Verne's *Voyage Extraordinaires* (1863-1920) would not appease today's teenagers, who are arguably more savvy and worldly than their predecessors, possessing reading practices that are discriminating, self-reflexive, and cynical. Yet opportunities for wonder are possible in the form of ideas, story, imagery, perspective and tone. Ed Finn, co-editor of Hieroglyph — a project which combines “big ideas”, “real science” and “great stories” with writing that “reignites the iconic and optimistic visions of the golden age of science fiction” (as described on website, <http://hieroglyph.asu.edu>, 2014) — suggests young adult dystopias would benefit from a renewed excitement and playfulness. He points to the film *Back to the Future 2* as an example of how, despite the negative environment Marty McFly finds himself in, there is room for humour, novelty, strangeness, manipulation and wonder, with the film serving as an inspiration for future scientists and politicians (Finn, 2015).

Amid the conflict, corruption, and ruined settings of contemporary dystopia, there needs to be room

for playfulness, surprise, and ambiguity. Young readers need opportunities for “astonishment before the world” (Kingwell, 2004, p. 62) and excitement which is “intensely real, true and/or beautiful” (Bulkeley, 2005, p. 3). There needs to be space for the kind of wonder which continues off the page and transcends the story; wonder which elicits a shift in perspective and a new view of this world. A wonder which reminds you that anything is possible. Stories should prompt readers to be in awe of the world, not afraid of it. They should connect readers with the future, not alienate them from it. Wonder “does not re-enchant the world” says Wittman, “it merely says, ‘You do not know everything about the world.’ As such, the feeling of wonder serves as a powerful harbinger of change” (Wittman, 2008, p. 6).

There is a need for wonder in our stories, and there is room for it, especially in those with future settings. In a world which already devalues wonder, there is a place for stories which are not tired or recycled, written by adults who are not jaded or discomfited by unknowns. There is room for wonder in stories that are relevant, exciting, inspiring and transformative. This is what I wish for *The Vault*.

Creating *The Vault* was an exercise in wonder. The following section outlines how I deliberately shaped sense of wonder on the page through character, representations, scale, nature, science, and narrative, with a mindfulness of estrangement, uncertainty, terror, the Sublime, and childlike innocence.

3c. Shaping Wonder in *Rogue*

i. Protagonist

The Vault duology begins with Hayley, the protagonist, as a mostly contented fifteen-year-old girl. She is quiet, hard-working and often serious: “Hayley, you frown too much” (Celia, *Hive*, p. 31). Unlike Celia and the other teenage girls, Hayley is not preoccupied with boys or marriage. Nor does she care for remembering or retelling tales from childhood. Instead, she is known for her wit and ability to solve puzzles and riddles — “Think on it Hayley, you’re a clever girl. Sharp as a tack” (Geoffrey, *Hive*, p. 5).

Because of this, Hayley develops a critical view of her world and its ambiguities, such as expressions that have little meaning: “at the drop of a hat”, “quick as lightning” or “right as rain”. When she is shown a ‘bird’s-eye-view’ of the world, Hayley asks the teacher, “What’s a bird?”, to which he replies, “It’s just a word.” Hayley’s curiosity is a source of bored frustration for her best friend Celia, and an annoyance for teachers who have no real answers other than “God works in mysterious ways”. Hayley’s curiosity creates conflict in a society suspicious of difference, but it is Hayley’s curiosity which leads her to find a friend in Luka, a diarist of the netter house with an interest in odd beasts (fish and other marine life) which are brought up in the nets. Hayley’s curiosity then attracts the attention and scrutiny of Will, the heir of the ‘judge’ and the next in line to take role of leader. It is curiosity which leads Hayley to be ostracised by friends, shamed by the society, then treated for ‘madness’. Eventually, however, it is this same curiosity which leads her to discover truths and freedoms that take her to the ‘real world’ of Book 2, *Rogue*, and even there, Hayley’s curiosity continues to drive her actions, despite ugliness, danger or fear.

Curiosity has often been used as a warning in cautionary stories, such as Eve in the Christian Bible or Pandora in the Greek myth *Pandora’s Box*. “A certain curiosity seems permissible,” observes Manguel, but “too much is punished” (2015, p. 40). The proverbial killer of cats, curiosity is often a mistrusted trait, yet it is curiosity which reveals cracks — and opportunities — in our beliefs and social systems, and therefore enables change. Hayley, like Alice, is armed only with curiosity and language, but these are enough to propel narrative momentum.

Where should I go, I wondered, now I could go anywhere? Where should I go on a map of a world that resembled a giant puzzle?

Where would Will go?

Anywhere.

Everywhere.

I'd once envied Will his freedom. I'd craved his ability, as the son, to wander unquestioned through the houses. I'd often imagined the things I would do, if I were him. I would go to the kitchen for no reason but to smell the nutmeg and touch the polished copper pots. I would explore the seeder house, opening every cupboard until I found the one with the seed of a plum. I would hide in the engine house way whenever I had headpains, without bothering to lie of a rogue.

Now, that freedom was mine and it was greater than Will would ever know for this was a world without walls. This forest seemed endless and I wanted it to be. It was sprawling and dense and everywhere, and I was so very small in it. So wonderfully, perfectly invisible. It was as if I didn't exist.

Where should I go?

Where shouldn't I go? (p. 62)

Hayley's inner voice is an echo of my own, for I, too, have always felt restless with the knowledge there is so much of the world waiting to be known. How can I *not* want to see it? The "twinning of the curiosity that leads to travel and the curiosity that seeks recondite knowledge is an enduring notion" notes Manguel (2015, p. 35), and can be found in our notion of wanderlust. In Sweden it is known as *Resfeber*: 'a longing to travel; a desire to experience new things; anticipation for the unknown'. It is more than just being in a new place: it is an openness to the world. Renowned anthropologist Wade Davis writes of his "restless desire to move" as he "sought escape from a monochromatic world of monotony, in the hope that I might find in a polychromatic world of diversity the means to rediscover and celebrate the enchantment of being human" (2001 p. 8).

My yearning to travel aligns with my yearning to write. Both ask: *what does it mean to live somewhere else, or as someone else? What is it like to exist other than this?* Through travel and story, I have the opportunity to sample many lives. Travel, I have discovered, fills my soul, while writing draws from it, in a continued cycle of filling up and emptying out. Both pursuits take me out of my own head and into a world which is rich with meaning and mystery. Both pursuits are solitary, yet connect me with others.

In his book *The Undiscovered Islands*, Mallachy Tallack tells us that, before mass transport, people used to stare at the horizon and dream up islands, mythical or real. "Absence is terrifying, and so we fill the gaps in our knowledge with invented things... For societies living at the sea's edge, the dream of other shores is the most natural dream there is" (2016, p. 11). Archaic maps would declare 'here be

dragons’, and even so, explorers would brave the oceans for “The temptation of the horizon is always present...even if, as the ancients believed, after the world’s end a traveller would fall into the abyss” (Manguel, 2015, p. 33). But now, in our internet age, the urge to look out and imagine is dimmed. There is little impulse for exploration or adventure when it appears to have all been done before. With Hayley’s yearning for adventure, I wish to remind readers of the appeal of uncertainty, whether it be for place, people, or their own futures which lie ahead. This is the real thrill: that our fates haven’t been written; that we can alter the course of the future; that there are spaces for us to expand into. Hayley becomes an embodiment of this excitement.

Hayley’s desire to know is coupled with the necessary courage to find out, and she goes willingly with a relentless optimism and openness. In *Hive*, many of Hayley’s decisions had been made *for* her, making her behaviour reactive rather than proactive. In *Rogue*, however, I was conscious of developing her characterisation to show boldness and surety. I did so by explicitly giving her choices and observing her responses to these. Hayley’s choice to go inland rather than return to Maria Island, for instance, reveals courage and independence. Her choice to proceed to the mainland of Australia suggests she is no longer ‘running away’ from fear, but ‘running towards’ a better life. (These choices also mean she — and the reader — can encounter more of the future-settings first-hand rather than hear of them via others.) Her choice to help Will at the jetty rather than escape to the mainland shows a self-sacrificial bravery. Hayley’s characterisation is continually fortified with such decisions, and we see her more as a heroine than a victim. She establishes herself as empowered and responsible: an agent of change. In this way, Hayley’s journey can be traced to a major influence of the story: *The Truman Show* (Weir, 1998). The film had beguiled me with its character, Truman (the unwitting protagonist of a television reality program), having to make a choice between remaining in his comfortable but ‘fake’ world, or entering the real one. It is the program’s creator, Christof, who poses the question: *Would you rather live a beautiful lie or an ugly reality?* Hayley — like Truman — boldly chooses the latter. Like Truman and Alice, Hayley continually stands up for what she believes to be honest and right, and actively seeks justice.

Hayley’s newness in the world means she looks upon it all with childlike innocence and wide-eyed rapture. Nothing is ‘ordinary’ in the Tasmanian environment, but special, mysterious, and miraculous, which Hayley experiences in a heightened state of consciousness and emotion. Though the settings may be familiar to local readers, they appear fantastical and strange to Hayley, whose experience resonates with Alice. Like Alice, Hayley is proactive in ‘following the white rabbit’, and choosing to go further from her previous ocean home. Her gaze is often uplifted, seeking the horizon, the canopies of trees, the ever-changing sky or the startling, colourful birds. The discovery that birds are real fills her with unbound joy.

They shrieked through the forest in dazzling flocks. They filled the whole air with their wings and their noise and they didn't even look down on us with their *bird's-eye-view*. I couldn't stop looking up, amazed...

Sometimes a single song would rupture the sky. Sometimes there were many songs, overlapping. It was Will I thought of here. *There are birds, Will. So many birds, singing! You should hear this. You should know this.* (p. 29)

The seemingly endless surprises contrast with her previous world of the vault in which everything was known through lessons and religion, and any uncertainties were explained with religion or madness. In this new, foreign place, birds' spontaneous calls and flight-paths reflect her own untethered desires, while other discoveries evoke a sense of magic. In Chapter 10, when Hayley first hears music from a radio, she imagines it as "a kind of magic...to conjure music in air. I watched, curious, while he watched me" (*Rogue*, p. 57).

Everyday subjects are imbued with a sparkling quality of otherness so that the reader may see their own world afresh. For me, this one of the great rewards of reading: to be reminded of the exquisite marvels of our existence, or, as Coleridge put it, 'to lift the film of familiarity'. Why *shouldn't* we consider the rising of the sun a miracle, just because we've seen it before? Why shouldn't we marvel at a bird in flight? With familiarity comes apathy, and we forget to see the miracles great and small, each worthy of our attention. We forget we inhabit a planet with seven billion others, in an immense universe we don't understand. But when we (re)see the world through Hayley's naive, willing eyes, we experience her 'discoveries' along with her, as if for the first time. We crave to share her innocence, fascination and unadulterated joy, because we realise we have lost the ability to be astonished by this world. The choice of first person point of view enables this immediate, visceral connection with the reader.

Unlike Alice, Hayley's experience of her curious 'Wonderland' does not conclude with a departure and return to the status quo. Instead, Hayley must continue living in this strange new world, and her curiosity and awe metamorphose into wonder — a more sustained and expansive state which curiosity and awe preface. For while curiosity is extinguished by knowledge, and awe is diminished after the encounter, wonder is self-perpetuating, embodied as a way of being, thinking, and seeing, rather than as a finite experience. Despite learning about animals or the cycles of the moon, Hayley continues to delight in the sensory experiences of this world, spending much of *Rogue* wide-eyed with wonder. The arrival of rain, for example, is terrifying at first, but the terror gives way to fascination. "Of all the wonders, rain was the best," she begins, before describing its personified behaviour as "the playful pattering of a child", "shy, soft", "grim" or "violent" (*Rogue*, p. 29). Rain also prompts a

philosophical contemplation. “I paused, wondering if another world existed above this one. Could there be more layers of worlds yet? It was the kind of impossible thinking that dizzied me” (*Rogue*, p. 30). Other natural events which other characters — and readers — take for granted are viewed with rapture.

There was only one distant light and it came from my left, out above the ocean. It was the colour of fire yet contained as a ball. It rose up along a wall that didn't burn but changed its colours, not one at a time but all together, fusing golds, reds, pinks, yellows and blues that spread and shifted. I sat mutely while *sun* and *sky* worked their astonishing magic.

(*Rogue*, p. 6)

Wonder — and the inspired perspective it brings — is an antidote for fear. Hayley's attitude towards the new world is one of courage, even for the things which may harm her, such as snakes and strangers. When she first encounters Kid she is more mystified than frightened. “When he heaved, his face contorted and his nostrils flared. But it was his skin that shocked me the most... This boy's face was green.” (*Rogue*, p. 13). In Chapter 11, when savage dogs are coming to chase her down, she doesn't run. “Sounds deafened me. Tremors paralysed me. Fear held me, but curiosity made me turn and watch as the dogs broke through” (*Rogue*, p. 64).

The character of Will is also charged with wonder. Originally regarded as selfish and cowardly in *Hive*, Hayley begins to recognise their similar qualities, especially his curiosity. In *Rogue* she remembers him as “a boy ablaze with wonderment” (p. 100), “curious and brave, craving to know what else existed” (p. 9). She recalls him as “A boy unafraid to look up. A boy who longed for sky.” (p. 73).

He'd been enthralled by the very possibility of another world, real or not. Even when he'd been in the sleeper, recording the message for me inside the ugly doll, he'd promised that he didn't know *'if the other world's still there, but I wish I could know, more than anything...'* (*Rogue*, p. 152)

Wonder is the link that unites them, and the reason she risks her own safety in Chapter 17 to assist Will's liberation. She no longer acts to fulfil her own desire to see the world, but is compelled by the need to “rescue him – in return for him rescuing me” (*Rogue*, p.100).

Selflessness is a trait that Hayley develops through *Rogue* as she begins to grasp the possible consequences of her actions, both on the terrestrial landscape and for the inhabitants of the vault. She is learning, for the first time in her life, she is powerful, and must decide how to wield this power: for

her own freedom? or for the good of the vault? Such choices raise interesting questions of morality for Hayley (and the reader) for, unlike in *The Truman Show*, Hayley's 'fake world' remains, containing three hundred people she knows, loves, and now wishes to protect in a maternalistic way. With good reason, she fears they would not fare well in this 'real' but unsafe world.

'You call this safe?' I rebuked. 'Twice, the ocean's almost drowned me. A snake poisoned me. I don't know how many men have hunted me. Machine-dolls trapped me in their rooms. A Romeo and Juliet still want to steal my blood. This world isn't safe... Who's really safe up here? Drifters float across oceans only to be made sterile and purposeless. Bees have been made extinct, and most of the animals. Even your blood can turn on you. (*Rogue*, p. 147)

While Hayley's motives are compassionate, the soundness of her decision is debatable, and I wished to present it as such so the reader can wrestle with it also. Who is to determine what constitutes 'safe'? Kid, for instance, believes his world to be safe, as shared in his message in the bottle in the epilogue: "It's safe here and it's good" (*Rogue*, p. 169). But Kid is not qualified to deem what is best for others, and neither is Hayley. There is no black and white answer.

Unlike other heroines of dystopian fiction, Hayley doesn't possess special strengths. She has no weaponry skills (like Katniss from *The Hunger Games*) or toughness (like Triss from *Divergent*). Hayley's heroic qualities were already seeded in *Hive*: problem-solving, lateral thinking, observation, dedication, loyalty, curiosity, and a desire to learn. Increasingly, these are developed in *Rogue* and embodied in her language, tone, thoughts, behaviours and actions. Chapter 2, for instance, sees her solving the puzzle of how to find drinking water and shelter. Chapter 12 sees her using Kid's lessons to help her navigate north with the sun. In escaping Buckley she recalls lessons of camouflage (of the octopus, in *Hive*) and chooses to "go as a tiger would go, camouflaging in the forest so I'd be small, invisible and free" (*Rogue*, p. 70). Hayley's 'heroism' stems from her wits and moral compass, making her credible and relatable as a protagonist.

ii. Resistance of simplification

The contemporary issues we face are complex and impossible to attribute to one particular person, policy, or organisation. There is no 'villain' today — no President Snow or Darth Vader to vanquish — and neither will there be in the future. Failure has numerous causes, just as conflicts have various viewpoints. Fiction for young adults, therefore, should give credit to both the complexity of society and the intelligence of the reader. In creating representations in *The Vault*, I aimed to resist tropes of dystopia and instead draw on my experience of writing realistic fiction in which there are no assigned

antagonists or bullies, but conflict borne of the tensions between individual desire and society. Similarly, I chose to disregard traditional story formulae (such as Joseph Campbell's 'hero's journey') with prescriptive roles and narrative structures. Though *The Vault* has elements of both dystopia and the hero's journey, I strove to defy simplification in narrative and representations, offering instead a fresh, surprising outlook with original ideas.

To do so, characters were represented with ambiguity, for they — like real people — are not concrete entities but change according to situation as they choose (for the most part) what they believe to be right. Initially a source of resentment in the vault, Will presents as a 'typical villain' until revealing a selfless side to Hayley as he risks security to aid her. In *Rogue*, however, Will's motives are once again muddled as we discover he's been untruthful to Hayley all along. Is he acting out of kindness? Duty? Or cowardice? Will's complexity and mystery presents him as a 'shapeshifter': an "archetype of change" (Vogler, 2007, p. 14) who may shift in form, age, or mask, alternately adopting roles of 'mentor' and 'antagonist'. As such, Will's characterisation keeps the reader curious, engaged and guessing, rather than emotionally or intellectually detached.

Similarly, Kid first appears as an antagonist who wishes to harm Hayley, but we later learn his actions were protective, and Kid goes on to become a great source of friendship and knowledge. Likewise, the 'drifters' are initially portrayed as terrifying and monster-like, until Hayley comes to realise they are only people like her: homeless and hopeful.

I wanted to watch the boat and see if the drifters resembled monsters, or if they looked more like me, for weren't drifters just people who'd come floating from a different world, hoping for another? I wondered how far away had they come from. Further than I had? (*Rogue*, p. 43)

The character of Buckley is another example of a shapeshifter, with unclear motives and a changeable personality. When we first meet him in *Rogue*, Buckley resembles a traditional 'villain' with no social etiquette. A hermit in the forest, he is a whisky drinker who skins Tasmanian Tigers for trade. His tattooed skin suggests insanity and alien-ness to Hayley, while suggesting subversiveness and rebellion for the reader. His enjoyment of tiger meat is a source of repulsion for Hayley and disgust for the reader who would surely view this previously extinct species with reverence. Worse, his motives for helping Hayley seem repugnant: first to benefit financially, then to entrap her for sexual reasons. When Hayley is on the run from him, Buckley is a cause of terror that leads her to hallucinate visions of him. It is only later, in Chapter 25 that Hayley (and the reader) realise her interpretation of Buckley was misguided. Illiterate, the tattoos are his way of preserving memories. His interest in Hayley hadn't been sexual or financial, but motivated by his responsibility in aiding Will and ensuring the preservation of the vault. All along, he'd been an unexpected kind of 'mentor'.

Other characters whose roles shift through *Rogue* include the trader Jarod (whose initial gruffness stems from fear, but is a genuinely compassionate and helpful character) the ‘girls’ in the processing centre (who present as friendly but are manipulating and dishonest) and Dee and Owen (whose motives are selfish yet forgivable as they are driven by love). None of these characters is ‘evil’, nor will their ‘defeat’ lead to a change of order. Each character is simply a casualty of the constraints of society. Each is childlike, in their own way, hoping for a better world in which they are happy, and we cannot help but admire them for this. By shaping the characters as dynamic and three-dimensional, I have created room for nuance, ambiguity and empathy so that the reader is invited to interrogate notions of right and wrong in a world that’s as morally ambiguous as our own. The realism this creates enables an honest engagement with the narrative, not as a children’s fable or morality tale, or a story with a foregone conclusion, but as a surprising and emotional experience which rouses them out of complacency.

iii. Scale

In science fiction, exploitation of scale is a common method for evoking awe and wonder in the reader. Though *The Vault* is not set in other galaxies, I wished to manipulate scale and space so that the reader has a sense of moving continually outwards into the vast, while regularly being reminded of the relationship with the macro. In other words, I aimed to draw attention to the patterns and interconnectedness of nature. It is a technique used by William Blake in his poem *Auguries of Innocence*:

To see a world in a grain of sand
And a heaven in a wild flower
Hold infinity in the palm of your hand
And eternity in an hour. (1977, p. 506)

In stark contrast to the claustrophobia of *Hive*, *Rogue* places Hayley on a comparatively massive island surrounded by an endless ocean. As the sun rises and Hayley first witnesses the expanse, she stares at the horizon with wonderment, unable to comprehend the scale. “I couldn’t see an end to it and my eyes hurt to try. I’d never had to look so far” (p. 2). Her reaction of terror is both physical and emotional.

I sat and breathed in the night. The air was different here. Dry and thin, it felt like I couldn’t get enough of it though I gulped for it, the back of my throat burning with each effort. Panic shook

me as the reality of what I'd done took hold. I wasn't safe here – wherever this was – and it was safety I craved now. (p. 5)

Later, when she stands atop the Bishop and Clerk trail lookout, she becomes giddy at the breadth and height of this world. “This world was bigger than a hundred of my old ones. Bigger even than that” (p. 12). Such vastness and uncertainty fills her simultaneously with terror and awe which Freud believed could set the “imagination in motion to imagine what cannot be fully imagined, to somehow apprehend what cannot be comprehended, precipitating the sublime moment” (in Sandner, 2004, p. 74).

Through first-person perspective, the reader's sense of space broadens incrementally as Hayley's does. We learn of the dimensions and layout of the island as Hayley moves through it, slowly then quickly. Every time Hayley's boundaries shift, her worldview alters, expanding her perspective and ours. She considers Maria Island the whole world until Kid shows her an atlas in Chapter 7. Here again I manipulate scale. With Hayley turning the atlas's pages, we watch the landforms shrink or expand, shift and reconfigure. “There's more?” she continues to ask. This lesson tests her attachment to the vault, and sets in motion her desire to venture further. Not only is Hayley realising she is not at the centre of the world, but that she is just one tiny part of it. This is a paradigm shift especially poignant for adolescents whose individual boundaries are being stretched, new choices offered, with the sky the new limit to their freedoms. Hayley must come to terms with how huge the world is and, therefore, how tiny and inconsequential her previous home must be. Her movement away from the vault represents a movement from the confines of family and sanctuary and into the ‘wildness’ of independent thought and action. The opening up of her life into the ‘vast’ is both a cause of terror and exhilaration, tapping into elements of the Sublime, for adolescence — and life — *is* a fearsome, thrilling experience. Or at least, it should be.

Hayley's first-hand encounters of the vast seem limitless. In the grip of a flying drone, Hayley looks down and over Bass Strait and the southern edge of Victoria with awe. “Left to right, there seemed no end to it, and this was only one edge.” she observes (*Rogue*, p. 104). Not even her fear of the drone or her separation from Will can diminish her astonishment at the increasing size of this world until abruptly and dramatically her space shrinks as she's enclosed in the Geelong processing centre. Despite its reminiscence of hexagonal rooms of the vault, Hayley is unnerved by the sudden confinement of this alien and sterile setting, and she yearns for wildness and space. The reader shares her frustration and is relieved when, in Chapter 24, Hayley is free once again. “One of the walls had a smudged window through which daylight filtered. The crisp blueness was a shock. It gave me comfort to find it still there, despite everything” (p. 145). Soon she is liberated in the endless forest, finding solace in being ‘invisible’.

In manipulating scale, I approached scenes the way a cinematographer might. As if through a camera lens, I was conscious of zooming in or pulling back. In Chapter 2 of *Rogue*, for instance, the zoom is macro as Hayley studies leaves and butterflies, before arcing suddenly upwards and outwards as she climbs the Bishop and Clerk trail. With this alternation between the vast and the macro, Hayley revises her understanding of dimensions, trying to triangulate her place in this world as she comes to terms with her smallness, freedoms, and power. Only months earlier, she'd stared at the ceiling of the vault, believing it to be the highest point of everything — “When I hadn't known otherwise, that world had felt huge” (p. 127) — but her horizons are moving infinitely outwards, like the universe forever expanding. It excites and empowers Hayley, and she wants to share this with Will, “to explain that this world was big enough to lose yourself in, again and again” (p. 158). The repeated movement between smallness and vastness was a fascinating exercise for me. Not only did it help convey Hayley's shifting perspective, but it was useful in building pace, energy, and tension. I am aware, in retrospect, of the echoes of *Alice in Wonderland*, with the continued shifts in magnitude and proportion (created by the ‘drink me’ potion, for instance) and the delights and terrors these caused for Alice.

My interest in the vast is not new, I realise now. It has found its way into my previous novels, influencing characters' humility, motivation and values. In this regard, my writing reflects the beliefs of Carl Sagan.

By far the best way I know to engage the religious sensibility, the sense of awe, is to look up on a clear night. I believe that it is very difficult to know who we are until we understand where and when we are. I think everyone in every culture has felt a sense of awe and wonder looking at the sky. This is reflected throughout the world in both science and religion. (Sagan & Druyan, 2006, p. 2)

In Chapter 8 of *Rogue*, Hayley does exactly that. In a sweeping ‘extreme long shot’ of the night sky, Hayley marvels at the stars and (re)considers her place in the universe.

These are stars, Will, I thought. Stars weren't like the phosphorescence that he'd shown me in the netter hub that night. These didn't swirl or flare, or follow the sweep of a hand if one could somehow reach up and brush through them. The glistening stars were constant and real. They knew exactly where to be. (p. 46)

The wide sky panorama reoccurs several times, and each time it is with a view of situating Hayley in time and place, reminding her of the interconnectedness of all things, and of her small but important

role in it all. With her senses attuned, Hayley begins to find patterns between the macro and the micro, which reflects my own (layman's) interest in astrophysics, and its relationship to mathematics, art and philosophy. Great thinkers through the ages have long looked between the vast and the minute to find correlations which might suggest the origins of the universe and meaning of our existence. Carl Sagan stated in episode one of *Cosmos: A Personal Voyage*, "The cosmos is full beyond measure of elegant truths, of exquisite interrelationships, of the awesome machinery of nature" (Andorfer & McCain, 1980).

I chose to use visual metaphors to create threads of connection, one example being the repeated use of the marble. Mentioned in *Hive* merely as a small toy for children, the marble 'reappears' at the end of the book as a larger blue 'capsule' which transports Hayley through the ocean. In *Rogue*, when Hayley views the room-sized three-dimensional 'film' of the world, she recognises, a giant, spinning marble, with Earthly landscapes she's come to know. This is Hayley's version of an 'overview effect': the effect of looking at Earth from a distance. In Reinerman-Jones et al's study, it was concluded that the overview effect induced in astronauts (regardless of background or religion) experiences of awe and wonder akin to a spiritual awakening. After witnessing the vastness of space and the vulnerability of their own planet, astronauts returned to Earth with an overwhelming urge to protect it. Likewise, Hayley begins to see the planet as something beautiful, special, and in need of protection. This is a great privilege, I believe, of growing older. As a teenager, I'd believed the world to be huge, and that I was too small and trivial to have any consequence. My litter, for instance, would simply drift in the sea and disappear. My environmental footprint was minimal, and my life would have little impact. I realise now — because of travel, wisdom, tolerance and insight; my personal 'overview effect' — just how small the Earth is and how potent my actions can be. This is what I aimed to instil in Hayley and young readers. Such thoughts can be giddy, but they're also liberating, motivating us to be brave, bold and consequential. There is little to lose, but so much to gain.

Another visual metaphor which alters in scale is that of the star, which is used as a symbol of unexplained mystery throughout *The Vault*. In *Hive*, 'stars' is the label Hayley gives the tiny, glowing phosphorescence.

'Are they signs from God?' I asked.

'I don't know.'

'Are they plants? Or meat?'

'They are what they are.'

Then they're stars, I thought. (p. 141)

Stars reappear in *Rogue* as faraway celestial suns, before transforming once more to become the floating ‘growlights’ from the vault in Chapter 27. “Other growlights rose and bobbed, glimmering within their warm, thin shells, illuminating the ocean with unthinkable beauty. Flotsam of a forgotten world” (p. 163). Each of these ‘star’ incarnations are similar in colour, shape and appearance, yet differ in proximity and size. Hayley ‘connects the dots’, so to speak, understanding their recurrence is a reminder of unattainable beauty and knowledge; uncertainty she’ll never grasp.

A third recurring visual metaphor is that of the hexagon. In *Hive* it appears as the small honeycomb of the beehive and the larger structure of vault. It reappears in *Rogue* as chicken-wire which Hayley discovers on the walking trail (a detail inspired by my own venturing on Tasmania’s Overland Track), then in the processing centre at Geelong: “Countless hexagons connected like a giant honeycomb-hive of cells. In this barren, bewildering world, it was a shock to find such a vivid reminder of my old one” (*Rogue*, p. 105). Considered one of the strongest natural shapes, the hexagon symbolises unity, community and resilience. It is a positive reminder of home, Hayley’s role within it, and the importance of bees. The hexagon is also a perfect ‘building block’ to which others can be added in all directions, making it ideal to represent Hayley’s shifting mindset as she contemplates the expansion of scale and the possibility of space stretching into infinity.

iv. Nature

As Rachel Carson conveyed, a relationship with nature is crucial for inspiring and sustaining wonder. It is a relationship I have explored subconsciously in my previous novels in which my characters find peace, healing and insight in natural settings such as oceans, farms and bushland. *The Vault* continues this trend, more purposefully. In *Hive* especially, Hayley finds sanctuary either with the bees or alone in the forest. “But sometimes solitude was exactly what I craved, and in those times I was especially grateful for the bees and the tranquillity I would find within the cage surrounding the hive... The bees’ constant humming didn’t bother me, nor did their furry crawling over the edges, and me. I let them” (*Hive*, p. 67). Later, she moved “between bamboo and slipped around brambling bushes, moving to the blackwood where I slumped between its lumpy roots, sinking into soil and solitude” (p. 91).

Using nature as a symbol for safety, hope and rebirth is well established in literature, especially in works of dystopia. From Thomas More’s *Utopia* (1516), to Wyndham’s *The Chrysalids* (1984), to Marsden’s *Tomorrow* series (1993-99), nature is often presented as a distant idyll away from the artifices of technology, society, or political control. Nature — especially wilderness — promises freedom, individuality and self-expression, particularly for protagonists trapped in tightly-controlled, immobilised communities, such as an underground silo (*Wool*; Howey, 2013), poverty-stricken

District Twelve (*The Hunger Games*; Collins, 2008-2010), an underground system of tunnels (*Enclave*, Ann Aguirre, 2011) or a war-ravaged city (*The Bridge*; Higgins, 2011).

As appealing as this may be, I understood that conveying nature merely as a sanctuary in *Rogue* would have been too simplistic, for in a future affected by climate change, there will be no ‘faraway’ pockets of farm or forest to escape to, and to suggest so would be naive and irresponsible. Rather than relying on nature as a utopian destination to aim for, I chose to make nature central to the whole of Hayley’s experience in *Rogue*. Nature is not ‘the other’, but the ‘everything’, for this is how we remember we are human and connected to our planet, and that nature’s survival dictates our own. As such, each character has their own relationship with nature. Hayley is immersed in nature, vulnerable to it, dependent upon it, and ultimately willing to save it. Says Scott Russell Sanders: “modern, mundane fiction in general tells trivial stories and fails to acknowledge the presence of wilderness, the vast universe in which we live” (Sandner, 2000, p. 283). I wished to draw attention to the unpredictable, surprising wilderness. I felt it important to also present nature as vulnerable for “we only recently have seen nature as fragile”. Only with such knowledge is there “a fierce sense of joy...[that] this is too good to lose” (Barnes, 2008, p. 6).

In 2012 I chose Tasmania as the key setting, as its geographical isolation from the Australian mainland meant it could be malleable as a microcosm, as well as being more susceptible to climate change. Though I hadn’t yet visited, I was aware of Tasmania’s ‘wildness’, and I understood that, logistically, its cold seas would be preferable for a seed vault. I was also intrigued by Tasmania’s troubled history, from its brutal indigenous displacement and near genocide, to its barbarous penal settlement, to its late twentieth century environmental protesting. More recently, socio-political issues of unemployment and poverty have caused unrest, further ostracising the state’s inhabitants from those on the mainland. All this on a small island that is stunningly beautiful, pristine, and a gateway to another vulnerable area: the Antarctic.

I travelled Tasmania twice — first by bicycle in 2013 to find settings, then by foot in 2015 to immerse myself in the flora, fauna, landscapes and people. I knew that realism would be paramount in enabling readers to suspend their disbelief of my future depictions. With the exception of some creative licence used for Hayley’s geographical journey northward (in which I truncate her walk for reasons of pace) the descriptions of the natural world are factual, founded on research and first-hand experiences. The swamp, for instance, rings with the “insistent *ree ree ree* of brown tree frogs and the funny *dub dub* of the banjo frog” (p. 42) which I encountered. The Cape Barren Geese honk and waddle, and the forty-spotted pardalote nestle in branches of manna gums, just as I observed them.

I initially planned to use Tasmania’s western side as the place Hayley would be washed up onto. With

its rugged and windswept coast, its temperate forests and shocking convict history on Sarah Island, the west coast was an ideal place for excitement and danger. But this changed because of an off-hand comment made by a stranger who encouraged me to take a day trip, half-way up the east coast of Tasmania. As soon as I saw Maria Island take form from the ferry, I knew it was right. My travel diary records: “Maria Island. Heaven. This is how it felt [to me] and this is what I want my character to believe as well. For the first time, the novel is speaking to me and this is where she needs to come ashore” (28/1/2013). On my return in 2015, I record: “I’m back in my paradise...It is staggeringly beautiful” (12/1/2015). With its stunning blue skies and seas, and its forests rich with animal life, Maria Island is pristine — exactly the ‘Eden’ or ‘Wonderland’ I needed. It feels like an almost mythical place that readers could visualise as an embodiment of ‘nature’ at its purest. Throughout *The Vault*, allusions to Eden are deliberate, including the symbolism of plums (I figured apples would be too obvious a motif for prohibited desire) which she enjoys greedily but guiltily, aware they are still ‘forbidden’ back in the vault. Says Barnes, “Eden is something we have lost: Eden is something we long for... We need little touches of Eden everywhere” (2008, p. 3). It is a part of our collective dreaming.

Both the Garden of Eden and Wonderland belong in the universal imagination, says Alberto Manguel, as “a place we know exists without ever having set foot in it...the recurrent landscape of our dream life” (2015, p. 140). Maria Island fits the bill perfectly. A wildlife sanctuary since 1971 and a national park since 1972, Maria Island has the essence of a place forgotten by the rest of the world. While walking the Bishop and Clerk trail in 2013, I met the senior ranger, Pete Lingard, who generously sat atop the cliff lookout with me and shared insight into the island’s history, seasons, and ecosystems. We sat and hypothesised how the island would appear in a hundred years’ time if all the people left. My diary records

“the grass will be kept in check if the macropods continue to thrive, trees will spread and grow, reclaiming the areas cleared for farming...large crayfish [are] nearby, whales migrating, honking geese, diving swallows. Also, mutton birds — I can go see them near Swansea if I follow the trail.” (28/1/2013)

I could imagine it all.

Hayley’s first experience of Maria Island, however, was to be less than idyllic. Coming from the vault, she feels overwhelmed in the forest, her senses alert. Everything feels too bright, too wide, too noisy and strange; everything is ‘curiouser and curiouser’. Her experience is an intensified version of my own as I walked through these settings, or camped at night. I felt small and unnecessary. I felt enraptured and in awe at the quiet, majestic beauty of the forest. I felt the urge to know it, but also to

leave it undisturbed, aware of the effects of my trespassing.

The forests of Maria Island (and later, the Tasmanian mainland) become a temporary pocket utopia as Hayley learns the patterns and rules of the forest. “My bare feet were sore but they found their own cadence. Between roots and trees, they soon made sense of the slippery, stony trail” (*Rogue*, p. 69). She learns to read the forest and how to blend in. “I went as the tiger went, slipping into forest and freedom” (p. 69). The further she ventures, the greater her sense of freedom becomes, for the “forest seemed endless and I wanted it to be. It was sprawling and dense and everywhere, and I was so very small in it.” (p. 69). It is here, in this wild place, Hayley finds a sense of peace.

Though not entirely. Unconditioned to the forest, Hayley is physically vulnerable. “My toes stubbed every rock, my skin snagged every fern. Branches smacked my chest, face, hands” (p. 43), and later, “My feet slipped too easily. My ankles twisted, weakening each time” (p. 84). There are very real dangers, including snakes (another deliberate biblical reference), code-seeking drones, then later, hostile dogs, imprisoned drifters, and traders like Buckley who want to capture her. “Because of him I shunned the sunlight, preferring the dark forest, though even there I might flinch at a snapping twig, or jolt at a crooked tree whose branches were shaped like a man was poised there, aiming a gun” (p. 70). Hayley must keep on her guard. She simultaneously fears the forest’s hazards and hidden terrors, yet cherishes the sanctuary it provides. The relationship Hayley has with nature is ever-changing. It is at different times a mystery, a danger, a refuge, a home, a delight, an escape, a wasteland, a possession, and a warning.

Nature often takes the spotlight as a character in its own right. Sometimes it is gentle — “the soft soughing of leaves overhead and...the distant slapping of waves” (p. 21) — and other times vindictive. Reciprocally, the characters who live in the forest adopt traits of nature and animal behaviour. When Kid paints his skin green, he appears as “mottled greens and browns in haphazard strokes and swirls... a forest embodied” (p. 13). I describe Kid’s movements as those resembling a monkey’s — “forever wiggling, shifting, leaping on skinny legs from one place to another” (p. 31) — to convey spontaneity and playfulness. Buckley, on the other hand, is ascribed reptilian descriptors to emphasise danger and alien-ness. As an older woman, Gigi embodies the island itself. “Her wrinkles reminded me of the contours of maps. Highs and lows. Swamp. Ruins. Cliffs...Her eyes were oceans” (p. 44). Hayley, after a time, acquires the qualities of the (reintroduced) Tasmanian Tiger, reflecting her unlikely ‘return’ to Tasmania, as well as her solitariness and desire for camouflage.

Though I stayed true to the natural environment of the area, creative licence was necessary to imagine the natural settings one hundred years from now. Some variations were influenced by my research into climate change, weather events, and the collapse of honey-bee colonies, but many occurred

through the writing process in response to what the story required regarding tension, pace, symbolism, and themes. With Maria Island, for example, I chose to exaggerate the current sanctuary conditions, envisioning a place where nature is allowed to run rampant now that tourism has ceased and Tasmanian Devils (which were introduced in 2013 and 2014 to preserve the species threatened by facial tumour disease) have taken over and disrupted the balance. Maria Island is therefore a wilder, more extreme version of itself, on which nature imposes its own rules. Its historical convict buildings have further crumbled into disrepair, and the singular island has been divided into north and south due to higher sea levels. Beyond the confines of Terra Firma cities, we witness the forest slowly, confidently, re-taking the land, while the ‘hermits’ within it find ways to live symbiotically. In these Tasmanian forests, we see nature playing the ‘long-game’.

The mainland of Australia tells a different story, as the reader witnesses the true effects of climate change. The land is more hostile here, its arid plains foreign and wasted.

The sky was hidden by low bloated clouds. Either side of us, hills rose out of the ground then fell away again. Trees, out here, were a rarity. The ones I saw were bent in twisting, pointing poses. Grass was long and tousled by the wind’s unseen fingers. Soon, even the grass dwindled out, revealing groundcover which was loose and dry. At times, dirt whipped up and hurled itself into gritty spirals that forced me to shut my eyes.

This far north, the land was dry and hot, bare and ugly. There was nowhere to hide and I felt vulnerable. I gripped tighter, keen to leave this island where Buckley and traders chased me for reward. (*Rogue*, p. 96)

In a narrative twist, we learn (as does Hayley) that this devastation has been wrought from the collapse of honey bee colonies. My 2012 research into the sobering topic of ‘how civilisation might end’ pointed to numerous causes, but two stood out to me as most likely and believable: an asteroid impact, or the extinction of bees. Since the 1940s, we’ve become increasingly aware of the accelerating loss of bees and grown apprehensive of the terrifying consequences of bee extinction. Bees, which have survived for over 50 million years, have recently had their numbers decimated by disease, mites, pesticides, crop management and changing weather and, since 2006, colony collapse disorder. With a third of our food sources pollinated directly or indirectly by bees (Van Engelsdorp, 2008), a loss of bees would mean the loss of vital fruit, vegetables and grains, and in turn, the loss of livestock.

It was this significant threat which prompted me to assign Hayley the seemingly ‘trivial’ job of beekeeper in *Hive*, imbuing her with importance in the unknown scheme of things, (which even I did

not know of then), so that in *Rogue* she can find a bigger purpose. Nature, Hayley learns, is not just a backdrop but a dynamic, vulnerable life source that is directly affected by our endeavours, large and small. The depictions of landscapes in this bee-less future are strange, terrifying, yet believable. While bleak, this vision provides a very real thread of connection between our contemporary actions and possible impacts, reminding us that dystopias “are rarely sudden but incremental” (Anderson, 2015, p. 43).

Along with the terrestrial landscapes, the ocean features throughout *Rogue* as an omnipresent, dynamic life-source which influences Hayley’s choices and the story’s outcome. I was inspired to foreground the ocean because of my daily proximity to it as resident of a coastal suburb of Western Australia. Much of *The Vault* was written while sitting at beach-side cafes while looking out upon the Indian Ocean. It was here that I conjured the opening line: *We had no word for ocean*. The ocean has long been a source of inspiration for me, one which continues to draw me back. As Jacques Cousteau famously declared, “The sea, once it casts its spell, holds one in its net of wonder forever.”

Rogue opens with the “fitful ocean that continued to whump and slop about me, murmuring things I didn’t understand” (p. 4). A source of terror, it threatens to drown Hayley. Then, when Hayley crosses it for anti-venom from Buckley, the ocean is lovingly soothing: “*There, there*. I felt the sway of the water-slap rhythm. *There, there*” (p. 46). Weeks later, Hayley is surprised to encounter the ocean again. “How could there be so much of it, reappearing in unexpected places? That day it was a fitful grey-green which soaked in the light. It affected me all over again, this fluid connection to my old life” (p. 96). Encapsulating Hayley’s confusion, the ocean sends mixed messages. Though it “accepted us [Hayley and Will], concealed us, once again” (p. 101) it also smacks, stings, and tries to drown them.

By the end of *Rogue*, the ocean is an entity Hayley has come to respect, comprehending it is not hers to control. She is beginning to understand the ‘language’ it has been speaking to her all along. Drawn to the ocean by instinct, she is conscious that the ocean, though dangerous, doesn’t frighten her anymore. As she tracks down Will, the ocean softens, becoming “calm and dark and willing” (p. 160), an impartial witness to their meeting. When it is known that the underwater vault has been destroyed, the ocean rocks them with a calming “shhh” (p. 168). Finally, with the epilogue, we learn that the ocean has been an ally, enabling the important message-in-a-bottle to find its way to the vault.

In this way, the ocean is neither romanticised nor reviled, but presented as a character with moods of its own. It is not the ocean’s purpose that has changed, but Hayley’s attitude towards it as she sees nature neither as a safe haven nor antagonist, but as an ancient and infinite source of strength, fascination, and wisdom.

v. Technology and Science

In the same way that nature can be oversimplified as a refuge in popular speculative fiction, science and technology can be vilified as corrupt and destructive, especially in books for young adults. There is a trend in which “technology dehumanises and literature gives expression to humanity”, with humanities and arts acting as “saviour” from the problems created by technology (Applebaum, 2010, p. 62). According to Noga Applebaum, novels since 1980 have mostly demonised technology, with a few exceptions including *The Giver* and *Exodus* (2010, p. 6). Apart from the obvious risks of cliché and formulae, there is a risk of coming across as didactic and ‘out-of-touch’, thereby alienating young readers who’ve been raised with smartphones and do not know otherwise.

I felt it important that the technology in *Rogue* should be incorporated into future settings the way it exists now: not as the enemy, but as tools used by humans for comfort, productivity and control. The technology itself is not the problem, but how we have chosen to utilise it, and as *Rogue* progresses we learn of such problems: unhappiness and purposelessness brought about by lack of jobs (due to robotisation); disease-warfare; bio-hacking of 4D printing; code-tampering (also known as ‘tweaking’ or CrispR-ing); and indoctrination caused by a city’s compulsory ‘wiki-chips’ (reminiscent of the brainwashing in *Brave New World*). These issues don’t vilify technology itself but the organisations and systems motivated by greed or power.

Thus, I aimed to promote intrigue in the technology and science of our future, rather than a fear of it. In this regard I align myself with Elaine Ostry, who feels “the opposition between art and science is, perhaps, a tired one that needs to be reconsidered”, suggesting “it would be more interesting to have protagonists inspired by science and the creativity that it can encourage, especially at a time when children are technologically adept in an overwhelmingly technological world” (2009, p. 188). Science (and science education) is most effective when utilising story and mystery, and inspiring wonder. Likewise, fiction is most compelling when it embraces the knowns and unknowns of science and nature.

In the nineteenth and twentieth century, many works of science fiction were influenced by a passion for science. As Sturgis points us, authors such as Heinlein, Anderson and Norton, were

either trained in the sciences...or sympathetic to them. Like the pioneering author/editor Hugo Gernsback, they believed that quality futuristic fiction could seduce readers into a love affair with science and show them the possibilities it held for a better future.” (2014, p. 49)

Some of the works of H.G. Wells and Jules Verne anticipated the development of real technologies

including genetic engineering, telephones, television, lasers, helicopters and the lunar travel (along with associated problems of man-made climate change and government corruption) while E. M. Forster's story *The Machine Stops* (1909) prefigured the networked society of today. Albert Robida's prophetic trilogy (1883-1892) set in 1950s Paris predicted an underwater tunnel linking France and England, continents built on reclaimed seas, cities growing skywards, mass production of food, women's liberation, and versions of television, telephones, computers and the internet (Anderson, 2015, pp. 289-290). In such stories, progress and science "walk[ed] hand in hand" but more often than not, today's stories portray science as "the problem rather than the solution" (Sturgis, 2014, p. 49).

I am drawn to contemporary writers who, like myself, are passionate about science and technology, and succeed in channelling this into their futuristic fiction with playfulness and wonder. Canadian author Margaret Atwood is passionate about the overlap between science and fiction. Her *Maddaddam* series "crackles with a gleeful inventiveness that is sometimes tonally at odds with its apocalyptic content", with genomes edited to remove sexual jealousy, and skin cells altered to "repel ultraviolet rays and mosquitos" (Mead, 2017). The daughter of an entomologist, Atwood "places 'science' as much as 'fiction' at the heart of an urgent creative matrix" with her "pressing interest" being the planet and its future (McCrum, 2010). Atwood describes her speculative fiction as that "which could actually happen" (as opposed to science fiction which has "monsters and spaceships" or "talking squids in space") (Mancuso, 2016). In Australia, Sean Williams's *Twinmaker* series is a thrilling, teenage adventure in a future with matter transportation, that marries "moral ramifications of future technologies...with a strong, capable teen heroine and heart-pounding action" (Kirkus Review, 2013), while Jay Kristoff and Aime Kaufman's *Illuminae* space opera series (2015-2017) features "zombie-like viruses, epic battles, a manipulative AI, along with countless, but no less engaging moments of character-driven dramas and a network of thoughtfully-explored relationships" (Atkinson, 2017). In each of these books, science and technology are prescient, unpredictable, and engaging.

At the 2017 Reading Matters conference, Kristoff spoke of speculative fiction as being "the exploration of the possible" (Coates, 2017). Though his *Illuminae* series is set in 2757, he and Kaufman deliberately used technology which is either "provable or plausible" (Kristoff, 2017). Kristoff explained

We might not exist 500 years from now, but the laws of physics aren't going to change in that time. It was very important for us to get the science of our science fiction correct. So to that end, we had our astrophysicist sit down and explain to us the way in which a nuclear explosion would work in space, the way gravity interacts, the way a disease could be...transmitted and mutate in a sealed environment. (2017)

Like Kristoff, Kaufman, Williams, and Atwood, it was important for me to ground my narrative in the realms of the possible. Each of my technological references is provable or plausible, allowing for the reader to remain absorbed in the credibility of the story. Extensive research led me to choose technology which is either currently in use, existing as prototypes, or under development. TED Talks and podcasts were terrific sources of information and inspiration as they shared trail-brazing designs, revolutionary concepts, or futurists' predictions. One example is the small fission reactor from the vault (referred to in Chapter 23 of *Rogue*), which was inspired by nineteen-year-old Taylor Wilson's design, as outlined in his TED Talk 'My radical plan for small nuclear fission reactors' (2013). Though it is not yet operational, the design has been patented and has drawn some interest.

Such technology is introduced gradually and subtly in *Rogue*, with the reader encountering devices at the same time as Hayley. On Maria Island, where the family lives 'off the grid', there is little evidence of gadgetry apart from a 'stunner' (a gun with electric current; bullets have long been banned), drones, an 'alert' connected to set off an alarm, and a charge worn around Pop's ankle which generates power. Here, technology is a novelty for Hayley, and a practical aid for others. It is only Petra who longs for the immersive entertainment of mainland cities and the social networking it offers.

It is when Hayley arrives on the Tasmanian mainland that the reader gains knowledge of 'smart' blankets, solar bikes, DNA splicing, 4D printing, and synthetic meat. The further north Hayley ventures, the more we see technology used for control, with invisible fences, algae prison farms, and genetically modified dogs ("part-Vizsla, part-ridgeback, part-machine"). We also learn of humanoids in the processing centres. These are sex dolls reclaimed after the criminalisation of pornography and reconditioned for they are "the perfect interrogators. Most got sent here. Each one's unique, but generally friendly, unassuming, flattering. They know how to smooth things over, fill in time. They get the story while pathos sorts the blood." (p. 127). More importantly, DNA technology has been harnessed as the primary means for organisation and discipline via 'blood laws'. More reliable than implants or micro-chipping, blood-coding is a way of monitoring and controlling the world's population. We learn that everyone is 'blood-stamped' at birth, given an 'ID' onto which a person's history is attached.

Your id is your identity: your blood history and genes. Your DNA in a snapshot. They started coming in after 2025, and your people went down in what . . . 2020? Lucky. Everyone in the real world's got one, even the weirdos like Buckley who were born in the forest 'cos if you're not blood-stamped at birth, your mother's gets passed down anyway. Your id's how the law knows who you are. It's better than implants, which were too easy to remove. It's kind of like a . . . fingerprint in the blood, and it's where your blood-codes get hooked onto, like pegs on

a clothesline, updating through your life. Your id's permanent but codes can be changed.
(Petra, p. 54)

Unable to be easily altered, blood is now the universal language, and the only one that cannot lie.) Blood determines a person's history, status, and freedom, and it can also cause their death if they should choose to cross invisible borders. In a world that has eradicated disease, blood-matching is necessary for marriage and reproduction (to avoid dormant genetic illnesses). Blood, Hayley learns, is a sacred commodity, one that people are willing to risk everything for. Like many of my choices, this was made because of the narrative possibilities it would provide. As Hayley's blood was 'clean' of code and therefore valuable, it gave her leverage and power, providing opportunity for conflict and moral challenges.

Though numerous ideas intrigued and fascinated me — such as memory-banking and storage, the internet of things, and colonisation of other planets — I chose to include only the technologies which were relevant to Hayley's immediate story and gave insight into the nature of society. Like Mary Shelley, I am less interested in the 'wow' of technology, and more in the moral 'what if?' questions that follow it; in other words, how humans adopt advancements for their own use. One example of this is the algae prison farms first referred to in Chapter 15. These were originally inspired by my investigations into synthetic meat production, which futurists predict will inevitably become mainstream in the near future. Still in its infancy, (the first trial, in Maastricht University in The Netherlands, cost 250,000 euros in 2013) synthetic meat production requires four elements: growth medium (currently blood serum from a foetal calf), a starter culture, scaffolding (like a CD tower) and movement (currently with electrified impulses). The 'what if' question I asked was: what if this laboratory process could be extrapolated on a grand scale? I devised huge meat production farms in otherwise arid areas which use algae as growth medium — a scientifically viable alternative to calf blood serum. While movement *could* be provided by renewable energies, I recalled a story from my travels in Ireland of Oliver Cromwell using exhaustive manual labour (such as building meaningless stone fences) as a cruel form of punishment for Irish prisoners. This led to my concept of "human stirrers for biofuel", and a backstory for Jarod the trader. The algae prison farm therefore feels technologically plausible and humanly possible — and is more frightening because of its real associations.

Interestingly, *Rogue* reveals a future devoid of some of our current technologies. Guns and airplanes, for instance, no longer exist as a measure to control acts of terrorism. Even international travel and religion have been banned. The internet exists, but not as we know it, as a result of the havoc wrought by the asteroid and resulting 'star storms' of 2020. It is now a commercial property, overseen by the government. My future, therefore, is not simply a version of our present with added technological

features, but a way of life that has evolved with the changing nature of technology, politics, environment and society.

vi. Society

My goal was to create a wholly credible society which is charged with the surprises and wonders of what might yet be. As such, it was critical to avoid familiar dystopian tropes of homogeneity, oppression, claustrophobic cities, desert warlords, techno-dystopias or eco-dystopias. I also wished to avoid a ‘blanket’ outlook of the future experience, for even in the bleakest circumstances, perspectives vary, individualism persists, and optimism can be a prevailing impulse. (Similarly, varying experiences can be found in the most utopian of settings.) It is my belief that whatever the future holds, it will feel neither dystopian or utopian to its inhabitants, particularly those who are born into it and know no alternative. Individuals will view their society in the way that we do today: as an imperfect world that privileges some groups more than others, with people striving to make sense of their lives and seeking happiness however they can.

The world building in *Rogue* is not a singular construction, therefore, but pockets of experience which are numerous and diverse. ‘Society’ is revealed incrementally as Hayley moves through settings and interacts with people. Each of the people Hayley meets has their own philosophy of the local and global status quo, and adapt to it as best they can. To create various human experiences of living day to day, I drew from my experience of writing contemporary realism, with a focus on authentic characters, emotions and motivations. I was guided more by personal moral quandaries than overarching social ones; questions such as *What is it like to be this person in this time and place? What is it they value? What choices are available to them? And what will they decide?* Unsurprisingly, individuals are rarely uncomplicated, so my characters’ motives can be contradictory, allowing room for ambiguity and creative interpretation.

To create a plausible political reality, I pored over Australian newspapers to pinpoint current concerns then posed ‘what if’ questions to tease out possibilities and follow trajectories into the future. For example, after reading about the Australian government’s treatment of asylum-seekers, I asked: *What if refugee numbers increase due to climate change? What if it’s impossible to protect our borders?* Our current off-shore processing systems led me to wonder: *What if we tried a more extreme version of off-shore processing?* It was this line of questioning that led to the idea of using Tasmania as an island for refugees. Repackaged as ‘Terrafirma’ (Latin for ‘solid ground’) it is offered to refugees as sanctuary where “there is room for all” (p. 107). With beautiful gardens and peaceful communities, Terrafirma appears (in its propaganda film) a kind of utopia of its own, making Hayley envious of the

drifters who are allowed to settle here. But the off-shore ‘solution’ reveals a geographical and emotional distance from the problem, and a disdain for the asylum seekers who need it. This is further seen in my choice to rename refugees as ‘drifters’, suggesting a depersonalised attitude toward unseen masses. Worst of all, there is a price for sanctuary that most are not willing to pay: a relinquishing of both religion and fertility. “There’s room for all,” explains Owen, “but breeders” (p. 128). Like the vault that Hayley escaped from — and the fake reality of Truman’s existence in *The Truman Show* — it raises the importance of choice. Without personal choice, there can be no happiness in refuge, however utopian it appears.

My decision to remove locals from Tasmania offered an interesting opportunity to connect future politics with the present. As Buckley explains to Hayley, Tasmania “‘wasn’t working’ anyway” (p. 51), referring to contemporary environmental and political issues I encountered first-hand in 2013. Most strikingly, it connects to Tasmania’s troubled history, particularly its near extermination of indigenous people from the island in the early nineteenth century, culminating in the ‘Black Line’ of 1930, during which authorities formed a human chain across districts to capture and relocate the indigenous people. This difficult time has been told in evocative fictionalised accounts such as *The Roving Party* by Rohan Wilson (2011). In my future Tasmania, the island is ironically cleared once again, this time of *all* inhabitants, regardless of race. As Buckley explains, “Before the handover they combed out the locals like nits. Did you know that? The law walked a long line across the island” (p. 46). In making this connection I wished to comment on history coming full circle, and the danger of not learning from our mistakes. Even the name, *Terrafirma*, is an echo of *terra nullius*, a term used by governments to rationalise or excuse the possession of land deemed to be ‘nobody’s land’, regardless of its inhabitants. My choice of Latin terminology suggests a continued, Euro-centric ignorance and misunderstanding of place and nature. Interestingly, in my future 2118, race is not even mentioned. Hayley notes only the different shades of skin along the spectrum, and no-one is identified as simply ‘black’ or ‘white’. In this, I wished to suggest conservative attitudes toward race are about to be superannuated.

The greater source of conflict comes from the ongoing, escalated refugee crisis. With this issue I wanted to resist objectification and instead bring Hayley — and the reader — gradually closer to the heart of it. At first drifters are described as a distant source of fear so that Hayley imagines ‘monsters’, inciting panic, distrust and hate when she glimpses them through the trees. But Hayley comes to learn they are just people looking for a safe place to belong, and so she shares a commonality and empathy: “weren’t drifters like me: people no longer welcomed in their old home? People who’d floated, hoping for another, safer place?” (p. 43). When Hayley is later captured and imprisoned as a drifter, the reality of the issue hits home. No longer an ‘us versus them’ scenario, the refugee problem becomes an immediate experience of injustice and terror. By zooming in from the

‘other’ to a first-hand account, I hope readers may be prompted to see in ways previously unavailable to them. Hayley is the protagonist we’ve been cheering for, so to put her in the shoes of a refugee is to make the issue ‘real’ and personal.

Rogue has numerous subtle references to present and past events. Rather than focus on these (and detract from the narrative) I chose to manipulate language. Along with *Terrafirma* and *drifters*, other terminology has been invented or altered, such as *Pathos* (for pathology) which draws a connection between blood and pity or sadness. Swearing, especially, has been used as a means of suggestion. Rather than use current obscenities, I have reappropriated the words *fracking* and *trumping*, (used by Jarod and Petra respectively), suggesting that the topical controversies of fracking (as a means of mining) and Donald Trump (as American president), will prove to cause devastating outcomes that will integrate them into a future lexicon. The reappropriation of language provides humour, cognitive estrangement, and surprising and subtle links to the reader’s contemporary reality.

The depictions of urban environments weren’t consciously modelled on any I’ve come across in other texts, but shaped by my ‘what if?’ questions as I extrapolated on current factors and possible trends: the rise in unemployment due to automation and digitisation; increasing dependence on the internet for information; a prevalence of ‘smart technologies’ which make short-term memory and/or problem-solving redundant; a muddying of fact and fiction as witnessed with the rise of ‘alternative facts’; increased loneliness and mental health issues despite constant social networking; security threats which make us reconsider the internet and curtail our behaviours; strict marriage/procreation laws due to overpopulation and genetic diseases; the prohibition of religion in response to terrorism and religious wars (in-text, I refer to John Lennon’s song *Imagine* as a kind of anthem for peace). In contrast to the busyness of the vault, these cities feature idleness and individualism in a way that is plausible and identifiable. Futures, Anderson explains, are “built from fragments of the present rearranged, reconditioned, reimagined” (2015, p. 347).

As such, I chose not to use ‘megacities’, as forecast by many futurists, but instead fashion organised city structures in response to extreme weather events and governmental design. On mainland Australia, domed cities dot the landscape offering safety from UV rays and storms. Inside, ‘cityzens’ are segregated into strata, with the wealthiest in the centre and poorer literally marginalised. Beyond the city domes, “outlier suburbs decayed as ghost towns, relinquished to the ghosts and the rats” (p. 93). These areas are waterless and abandoned, inhabited by cats or refugees lucky enough to have made it through mainland fences. Far beyond cities are distant algae prison farms, and huge greenhouses for fruit and vegetables.

The cities are variously described to Hayley second-hand via several characters, causing a deliberate

ambiguity for the reader. As Hayley tries to discern what is ‘true’, so does the reader, actively questioning the reliability of accounts and the gaps and silences that remain. To Petra, memories of cities are nostalgic and idyllic. “You’re never too cool or too hot. You’re never hungry or bored. You’re never alone or unsure of what to do” (p. 53). To Jarod the trader, cities are home: “I don’t care about you or Buckley or anyone. I just want to get back to my city” (p. 94). To drifters, cities are worth risking everything to get to. The most negative descriptions come from Buckley.

He’d said they were evil: ‘heartless domes like giant warts and never-ending laws for where you could walk, work, live, breathe, what you could plant, what you owned and owed.’ Cities, he spat, were incestuous and soulless, with ‘nowhere for a man to hide in’; its walls both real and invisible, controlled by the language of blood. Where only the rich could live in the city-centres, ‘while the poor sods got the fringes, if they were lucky’, and the most pitiful couldn’t get in at all and so they wandered as outliers, scavenging in long-forgotten suburbs.

‘And the people there are all messed up. Not a single thought between them. There’s no books, you see, there’s no *history*, just the city’s enterprising wiki-chips brainwashing them with lies and who-knows-what. They’d all come running down here in a heartbeat if they knew half of what they were missing. Good thing they don’t. They can stick their cities and their virtual non-realities and those fancy 4D printers that give them everything they dream of except for actual food, because they didn’t count on bio-hacking, did they? The scientists didn’t think that one through, which means every city’s food now has to be made under supervision in inland algae-farm prisons, but geez, the meat that comes from there just smacks of chemical and . . . bureaucracy. It’s not even worth the salt.’ He licked his lips. ‘Bio-hacking 4D printers – any fool could’ve seen that coming, along with the hacking of driverless cars. Bloody genius, that was. Terrorists dreams all came true. They could stop blowing themselves up when all they needed was a joystick in their bedrooms on the other side of the world. People stopped using *this* long ago,’ he’d said, tapping his head. (p. 85)

The various perspectives challenge simplistic notions of good and bad, allowing readers to fill the spaces with visions of their own imagining. Just like our current societies, there are freedoms and constraints, with no singular ‘utopia’ or overwhelming dystopia. There are attitudes, memories, and the impulse of hope. The future I present is simultaneously strange and identifiable, disturbing yet conceivable. It is also a place with potential for love, playfulness, and ambiguity. Such ambiguity increases the risks involved in Hayley’s journey and emphasises the difficulty of her choice: to go north, to remain in Tasmania, or return to the vault.

vii. Resistance to closure

Providing a satisfying and hopeful conclusion to a dystopian novel is recognised as a ‘creative dilemma’, a term coined by Kay Sambell (2004). Fictional future scenarios rarely lend themselves to optimism, yet hope is widely acknowledged as one of the key attributes of young adult literature. Author Monica Hughes explains “You may lead a child into the darkness, but you must never turn out the light. . . Dystopian worlds are exciting but the end result must never be nihilism and despair” (cited in von Mossner, 2013, p. 71).

At the same time, “a ‘happily ever after’ utopian world is a trap to be guarded against”, warns Hughes in her chapter “The Struggle Between Utopia and Dystopia in Writing for Children and Young Adults” (Hintz & Ostry, 2003, p. 160). Such infantilising would be repulsive for discerning adolescents who have grown out of ‘Disney-type’ resolutions. The “perceived need to reassure children that the universe is stable, safe, and *just*” can result in a tone which feels didactic and patronising, and can limit the choices of the writer (Mendelsohn, 2004, p. 286). Additionally, an unrealistically hopeful ending is “a jarring and clichéd device...that undermines or counteracts the narrative logic of the preceding story” (Sambell 2004). Sambell explains by saying that children are, naturally, weak and naïve, and therefore “easy prey...in the aggressively masculine world of the imagined future.” To have them defeat the odds and change the world suggests the world building was not credible in the first instance.

In tackling the creative dilemma of *The Vault*, I chose to avoid a closed resolution (which neatly ties up the threads in a ‘happily ever after’ fashion) for the world’s problems are too longstanding and complex to be fixed so easily. Instead, *Rogue* ends with the continuing impulse of hope and wonder. Hayley is an embodiment of hope as she charges across the ocean towards Will with a conviction that she can have an impact on his and others’ happiness. Then, after experiencing the shocking realisation that the vault has been lost, Hayley’s attention is turned to a different symbol of hope: the literal beacon of the lighthouse which is sending her a signal from Kid, the constant source of childlike awe and optimism. The hive that surfaces in the capsule on the last pages of *Rogue* is a golden, living, symbol of new life. In a world in which honeybees have been extinct for seventy years, the hive’s appearance holds potent promise. The survival of the honeybees, I believe, is enough to instil an impulse of hope and change, setting in motion a hypothetical chain of events which could alter the world’s environment. I did not feel the need to explain what might happen in the long-term, only to suggest that there is weight in these final moments.

I didn’t need to ask, for I’d smelled the smoulder of paperbark. I’d heard the smoke-drowsy hum of honeybees.

Someone must've known.

Someone had bundled the hive inside a capsule to send up to a world without bees. Of all the things they could've saved, it was this. (p. 168)

My resistance to closure and traditional narrative structure was evident through the entire process of writing *The Vault*. Initially envisioned as a trilogy (like many popular works of speculative fiction for teenagers) I came to the realisation in 2014 that the story would fit better into two books: one to test Hayley and allow her to choose freedom; the second to expand her boundaries, question the notion of 'home', truth and responsibility, and have her return to the vault to connect both worlds. My reflective journal explains: "Thinking today that this work might be better in a series of two, not three. Often dystopias culminate with a third book to see the enemy/system overthrown. But mine won't be like that — there is no villain" (10/12/14). What mattered more than conquest or a final 'encounter' with the villain, was imparting of a sense of consequence and change. The two-book structure enabled me to do so.

Despite the expectations of young adult fiction, I have always preferred to write (and consume) stories that end with elements of ambiguity and a sense of forward momentum, as if the characters will continue long after the book is closed and their futures are for us to imagine. I don't need my stories to end with absolutes, and neither does the reader. To prompt wonder, it is not certainty we should be offering, but mystery. I am often asked by fans what happens after the end of *Zac & Mia*, to which I reply, "What do you think happens?" They eagerly share and I tell them, "Then that's what happens." I wish to give young readers permission to continue the story and write the future they want — for shouldn't this be our goal, as writers for children and adolescents?

Even after *The Vault's* narrative has ended, there is a momentum forward into a future with hope and the potential for change. This is not dissimilar to works of adult speculative fiction, such as *The Handmaid's Tale*, which, despite its darkness, "is a story that is left open to the possibility of change given that it is told post-regime. Even dystopias pass. Time is the final dictator" (Anderson, 2015, p. 44).

While "all fiction requires some form of resolution" Mendelsohn argues,

in the 'full SF story,' the resolution is not the end of the story, it is the beginning, for SF resolutions are about *change* and *consequence*. Not infrequently, the resolution of a problem is merely the beginning of an SF story... The 'story' is merely beginning." (p. 289)

Rogue's final scene is a short epilogue, which explains just enough to (I hope) satisfy the reader. It feels right that Kid's message-in-a-bottle should be the conduit between the real world, the vault, and Hayley. With his indomitable curiosity, kindness and wonder, Kid has been able to pull the threads together and give meaning to all of them.

A message of love, as all messages are.

A message which netter aunts and uncles pondered over but couldn't understand. A message the judge read, in private, already worried about her son gone too long, and the quickening of the drip.

Not a message: a sign.

A sign to summon a world. (p. 169)

While not a closed ending, the epilogue does come full circle to the story's origin — a technique I have long used and admired. The final image of Hayley looking up at the cliff lined with people echoes of the initial image of her looking up at the drip. This time, though, it is not with the fear of madness, but with relief, love and belonging, with a continued purpose to care for the bees. I hadn't planned this — it came naturally to its ending point in a way that felt natural and fulfilling.

It is enough, I feel, to end with Hayley looking up. For despite all that is wrong with the world, there are people like Kid and Hayley who still look out and up and dream of what might be. *This* is what excites me about speculative fiction. It is not the damaged worlds, technological wizardry, or love-triangles. Looking up feels like the perfect solution to my 'creative dilemma'. There has been no change of political systems, no vanquished villain, no new land (or planet) discovered. Instead it is a subtler kind of hope. There is no 'ending' of the old, but a sense that a shift has been made, one with the potential to create a gradual, realistic kind of change that comes from love, optimism, and wonder. The ending suggests that Hayley's actions will have consequence. Says Mendelsohn, "Consequence in science fiction is the rippling out of effect, the quantum butterfly that flaps its wings..." without which "any SF tale is incomplete" (p. 289). Mendelsohn goes on to say that the best science fiction is that in which "the actions of the protagonists spark long-term change, which refuse the consolation of powerlessness, and leave the reader speculating on the result" (p. 306). This is exactly what I wish for *The Vault* to do.

4. CONCLUSION

Philosophy is said to begin in wonder (Socrates, n.d.). From wonder springs the desire to consider, to ask, to know. Wonder is “basic to human consciousness”, prompting every child to ask “why is there something rather than nothing?” (Kingwell, 2004, p. 65). Wonder is inborn (Carson, 1956, p. 55) and universal, according to cosmologist Carl Sagan, “for everyone in every culture has felt a sense of awe and wonder looking up at the sky” (Sagan & Druyan, 2006, p. 2). The feeling of awed wonder “is one of the highest experiences of which the human psyche is capable...a deep aesthetic passion to rank with the finest music and poetry” (Dawkins, 2000 p. x). Wonder turns our gazes outwards. *What is it like to be someone else? Or something else?* Wonder lifts our eyes and hooks our curiosity. *What if...?* It poses. *What if...things were different?* Wonder compels us to consider our lives afresh, prompting us to ask *What else is possible?* Wonder is the impulse for knowing this world and the motivation to discover others.

And yet we have a difficult relationship with wonder. Despite it being espoused and harnessed by contemporary popularisers of philosophy and science, it is endangered by lifestyles which are increasingly disconnected from the elements that can foster it: nature, spirituality, solitude, and opportunity for sustained thought. While it is central to discovery, achievement and individual experience, western society in general shuns it, deeming it frivolous, childish or pointless. While our most-treasured books have wonder at their core, sense of wonder is mocked as out-dated and redundant in contemporary fiction. Even science fiction no longer aspires to startle or transform its readers in the way that it once did. Sensawunda is under threat, considered childish, clichéd and derivative, as if everything has been described before, in better ways. The stories that once awed and provoked have been replaced by tales of doom with little room for wonder.

But this is reductive, disingenuous and harmful. Wonder in fiction should not be derided as ‘quirky’, feminine, or superfluous. The pursuit of wonder should not be viewed as inferior to more serious ‘literary’ goals. For what greater purpose can literature have but to allow us to view our human experience in a new light? Sense of wonder can be disruptive, challenging or subversive, altering the way we see the world and our roles within it. It can inspire new thinking, leading to a paradigm shift in which beliefs and actions are irrevocably altered. It is a lofty goal to inspire others to see the world afresh, but literature is a powerful vehicle which can do so. Fiction doesn’t have to be merely a mirror to reflect our current situation. It can present alternatives, good and bad. It can challenge us, amuse us, wound us. Stories cannot change the world, but they can alter the hearts and minds of the people who *can* the change the world.

Literature, particularly for young people, has the space and potential for wonder. There is more to the present and future worlds than triumph over an antagonist, rebellion against an oppressive regime, or the attainment of a love interest. There is appeal and value in harnessing the best elements of science fiction and dystopia, while avoiding those which discourage wonder and hope. In encouraging readers to ‘save the world’, it is important also to suggest how and why, for the problems we face don’t necessarily arise through conflict, but manifest through apathy and boredom: a disenchantment with nature and cumulative disconnect with this planet which is miraculous, precious, and in danger. Adolescent readers are those most in need of wonder, for not only are they at their most vulnerable, they are inheriting a world which is vulnerable, and problems that demand creative solutions and bold action. Young people need to be astonished by possibilities and ideas that haven’t yet been considered. The opportunity to influence readers in becoming “true citizens of the universe” (De Pascuale, 2013) is a great privilege and responsibility that we should not take lightly. At a time when we “badly need a literature of considered ideas” (George Turner in Milner, 2009, p. 834), books have extraordinary potential in nurturing and validating the spirit of inquiry, yearning and discovery.

There is value in following threads of possibility into versions of futures that are more nuanced and plausible than a closed dystopia; futures that do not prompt a defeatist response, but instead stimulate curiosity, delight and an awareness of the importance of now. *This* is where empowerment lies. It is not skill with a bow and arrow, a magical ability, or an understanding of warfare. It is the knowledge that the unwritten future has infinite possibilities, each of which can be altered with your actions. It is knowing that you are the hero of your story, and the consequences will be of your making.

This has been my goal in writing *The Vault*. From the initial impulse of wonder, through the wonders of the writing process, to the manifestation of wonder on the page, *The Vault* — especially *Rogue* — aims to share the instinct of wonderlust: the desire to look up and out, as Hayley did; to value uncertainty; to seek truth. It wishes to offer “the experience of astonishment before the world” (Kingwell) and remind readers of the “million-petalled flower of being here” (Larkin). I wish to urge young people, as Ray Bradbury did in his 1951 novel *Fahrenheit 451*, to “Stuff your eyes with wonder... See the world. It’s more fantastic than any dream made or paid for in factories” (p. 150).

As such, my thesis *Wonderlust: the value of wonder for readers, writers, and The Vault*

Aims to make a significant contribution to creative writing in Australia, firstly with its novel *Rogue* — a work of young adult speculative fiction which harnesses appropriate tropes of science fiction while challenging expectations of populist dystopian narratives — and secondly with the exegesis which dissects the role of wonder in society and literature before proposing how writers may modify their approaches and stories to provide opportunities for wonder — both for themselves and their readers.

We must allow room for wonder in our private thoughts, in our public conversations, and in our creation and consumption of story. There is a need in our lives for wonder: a yearning to be reminded of how precious, miraculous and precarious our existence is. There is room for it, in stories of transcendence, for we “seek that which is beyond the bounds of our best knowledge...This is how human beings learn, and how cultures change and develop” (Panshin & Panshin, 2010, p. 16). Story can remind us of the marvels and mysteries that we’ve forgotten to see. Speculative fiction, especially, has transformative potential. It can tell us of the vastness of space, the smallness of us, and all the unknowns in between. It can change the way we see our world, and how we choose to live upon it.

REFERENCES

- Abbott, J. (2016). *Watershed*. Sydney, Australia: Vintage Books, Penguin Random House.
- Adams, D. (1979). *The Hitchhiker's Guide to the Galaxy*. Sydney: Pan Books.
- Alkon, P. (2002). *Science Fiction Before 1900: Imagination Discovers Technology*. New York: Routledge.
- Andorfer, G., McCain, R. (Producers), & Malone, A. (Director). (1980). *Cosmos: A Personal Voyage* [Television series]. United States: PBS.
- Anderson, D. (2015). *Imaginary Cities*. London: Influx Press.
- Applebaum, N. (2010). *Representations of Technology in Science Fiction for Young People*. New York: Routledge.
- Archard, D. (2001). Philosophical Perspectives on Childhood. In C. Jenks (Ed.), *Childhood: Critical Concepts in Sociology* (pp. 81-94). London, UK: Routledge Taylor & Francis Group.
- Ashley, M. (2000). *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the beginning to 1950*. Liverpool, England: Liverpool University Press.
- Atkinson, F. (2017, January 21). Gemina review: Amie Kaufman and Jay Kristoff venture back to the Illuminae world. *The Sydney Morning Herald*.
- Atwood, M. (2015). *A state of wonder: how technology shapes story*. Paper presented at the 2015 Future of Storytelling Summit. Retrieved from <https://vimeo.com/138888472>
- Atwood, M. (1985). *The Handmaid's Tale*. Toronto, Canada: McClelland & Stewart.
- Bacigalupi, P. (2012, December 26). Room for debate: The dark side of young adult fiction. *New York Times*. Retrieved from <https://www.nytimes.com>
- Barnes, S. (2008). *How to be Wild*. London: Short Books.
- Barrett, D. (1998, August 1). The higher the tower. *The Spectator*, 281(8869). Retrieved from <http://www.archive.spectator.co.uk>
- Betts, A.J. (2008). *Shutterspeed*. Fremantle, Australia: Fremantle Press.

- Betts, A.J. (2010). *Wavelength*. Fremantle, Australia: Fremantle Press.
- Betts, A.J. (2013). *Zac & Mia*. Melbourne, Australia. Text Publishing.
- Blake, W. (1977). *William Blake: The Complete Poems*. London: Penguin Classics.
- Bowker Market Research. (2012, September 13). *Young Adult Books Attract Growing Number of Adult Fans*. Retrieved from <http://www.bowker.com>
- Bradbury, R., & Day, J. (1974, January 21). *Day At Night* [Television broadcast]. Retrieved from <http://www.cuny.tv/show/dayatnight/PR1012346>
- Bradbury, R. (2013). *Fahrenheit 451* (Anniversary Ed.). New York: Simon & Schuster Paperbacks.
- Bradford, C., Mallan, K., Stephens, J., & McCallum, R. (2008). *New World Orders in Contemporary Children's Literature: Utopian Transformations*. Basingstoke, Hampshire: Palgrave Macmillan.
- Bulkeley, K. (2002, November). *The evolution of wonder: religious and neuroscientific perspectives*. Paper presented at the annual meeting of the American Academy of Religion, Toronto, Canada.
- Carroll, L. (1865). *Alice's Adventures in Wonderland*. England: Macmillan.
- Carson, R. (1956, July). Help your child to wonder. *Woman's Home Companion*. 24-26; 46-48.
- Carson, R. (1962). *The Silent Spring*. United States: Houghton Mifflin.
- Carson, R. (1998) *Edge of the Sea* (Reprint Ed.). New York: Mariner Books.
- Clute, J., Langford, D., Nicholls, P., Sleight, G., (Eds). Sense of Wonder. *SFE: The Encyclopedia of Science Fiction*. Retrieved from <http://www.sf-encyclopedia.com>
- Coates, B. (2017, June 15). Here's what I learned at Reading Matters [Blog post]. Retrieved from <https://www.readings.com.au>
- Coleman, L. (Presenter). (2009). *Liz Coleman's Call to Reinvent Liberal Arts Education*. [Video]. Retrieved from <https://www.ted.com>
- Collins, S. (2008) *The Hunger Games*. United States: Scholastic.

- Darzi, A. (2017, May 4). From fertility trees to killer bloodbots, sci-fi is dreaming the future of health. *The Guardian*. Retrieved from <https://www.theguardian.com>
- Davis, W. (2001). *Light at the Edge of the World*. Canada: Bloomsbury.
- Dawkins, R. (2000). *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder*. Boston, United States: Houghton Mifflin Company, Mariner Books ed.
- De Pascuale, J. (2003). A Wonder Full Life. *Notre Dame Magazine*. Retrieved from <https://magazine.nd.edu>
- DeNardo, J. (2011, June 1) *SF Signal: What is 'Sensawunda'?* Retrieved from <http://www.kirkus.com>
- Durham, P. (2017, March 18). Dara O'Briain: the science behind stand-up. *The Weekend Australian, Review*. Retrieved from <https://www.theaustralian.com.au>
- Dyer, A. (2007). Inspiration, enchantment and a sense of wonder...Can a new paradigm in education bring nature and culture together again?, *International Journal of Heritage Studies*, 13(4-5), 393-404. doi 10.1080/13527250701351106
- Dymocks Australia. (2017). 2017 Top 101: the best 101 books voted by Dymocks Booklovers. Retrieved from <https://www.dymocks.com.au/top-101>
- Finn, E. (Speaker). (2015, October 21). *Hack Program* [Radio broadcast]. Triple J Radio; Australian Broadcasting Corporation.
- Fuller, R. (2009). *Wonder: From Emotion to Spirituality*. United States: University of North Carolina Press.
- Gallagher, S., Reinerman-Jones, L., Janz, B., Bockelman, P., & Trempler, J. (2015). *A Neurophenomenology of Awe and Wonder: Towards a Non-Reductionist Cognitive Science*. London, England: Palgrave Macmillan.
- Green, B. (Speaker). (2017, March 17). Helping the world make sense of string theory [Audio podcast]. Conversations with Richard Fidler. Retrieved from <http://itunes.apple.com/>
- Goodall, J., & Boag, Z. (2016). Divorced from nature. *New Philosopher* (14). 58-61.
- Harris, M. (2017). *Solitude: In Pursuit of a Singular Life in a Crowded World*. New York: Thomas Dunne Books, St. Martin's Press.

- Hartwell, D. (1996). *Age of Wonders: Exploring the World of Science Fiction*. New York: Tor.
- Haseltine, E. (Speaker). (2017, February 24). Can the past guide us to future scientific breakthroughs? [Audio podcast]. TED Radio Hour. Retrieved from www.npr.org
- Hawking, S. (2012, March 21). *A Brief History of Me*. Paper presented at the State of the Universe, Stephen Hawking 70th Birthday Conference/Symposium, University of Cambridge, England. Retrieved from <https://sms.cam.ac.uk/media/1228899>
- Helmut Wenzel, C. (2005). *An Introduction to Kant's Aesthetics: Core Concepts and Problems*. Victoria, Australia: Blackwell Publishing.
- Helsing, D. (2016). Uses of wonder in popular science: Cosmos: A Personal Voyage and the origin of life. *International Journal of Astrobiology* 15(4), 271-276. doi:10.1017/S1473550416000124
- Hill, A. (2010, June 1). Why teenagers can't concentrate: too much grey matter. *The Guardian*. Retrieved from <https://www.theguardian.com>
- Hintz, C., Basu, B., Broad, K. R. (Eds.). (2013). *Contemporary dystopian fiction for young adults: Brave new teenagers*. New York, NY: Routledge.
- Hintz, C., & Ostry, E (Eds.). (2003). *Utopian and Dystopian Writing for Children and Young Adults*. New York, NY: Routledge.
- Hunt, P. (Ed.). (2004). *International Companion Encyclopedia of Children's Literature*, (2nd Ed. Vol. 1.). New York, NY: Routledge.
- Iyer, P. (Presenter). (2016). The beauty of what we'll never know [Video file]. Retrieved from <https://www.ted.com>
- Kingwell, M. (2000). Husserl's Sense of Wonder. *The Philosophical Forum*, 31(1). doi: 10.1111/0031-806X.00029
- Kingwell, M. (2004). *Practical Judgments: Essays in Culture, Politics and Interpretation*. Toronto, Canada: University of Toronto Press.
- Kirkus Review. (2013, June 15). *Book reviews: Twinmaker*. Retrieved from <https://www.kirkusreviews>

- Knight, D. (1956). *In Search of Wonder: Essays on Modern Science Fiction*. Chicago: Advent Publishers.
- Kress, N. (2008, November 21). Piracy [Blog post]. Retrieved from <http://nancykress.blogspot.com.au>
- Krieger, R. A. (2002). *Civilization's Quotations: Life's Ideal*. New York: Algora Publishing.
- Kristoff, J. & Kaufman A. (2016, November 3). The Garret [Podcast]. Retrieved from <http://itunes.apple.com/>
- Lamott, A. (1995). *Bird by Bird*. New York: Anchor Books.
- Landon, B. (2002). *Science Fiction After 1900: From the Steam Man to the Stars*. England: Taylor & Francis.
- Lenz, M. (1993). Raymond Briggs's When the Wind Blows: Toward an ecology of the mind for young readers. In C. W. Sullivan III., (Ed.). *Science fiction for young readers*. London, England: Greenwood Press.
- Lepore, J. (2017, June 5). A Golden Age for Dystopian Fiction: what to make of our new literature of radical pessimism. *The New Yorker Magazine* online. Retrieved from <http://www.newyorker.com/magazine>
- McCrum, R. (2010, November 28). Go three days without water and you don't have any human rights. Why? Because you're dead. *The Guardian*. Retrieved from: <https://www.theguardian.com/books>
- Mancuso, C. (2016, August 11). Speculative or science fiction? As Margaret Atwood shows, there isn't much distinction. *The Guardian*. Retrieved from <https://www.theguardian.com/books>
- Manguel, A. (2015). *Curiosity*. London: Yale University Press.
- The Macquarie Dictionary* (5th ed.). (2009). Sydney, Australia: Macquarie Dictionary Publishers Pty Ltd.
- Mead, R. (2017, April 17). Margaret Atwood, the prophet of dystopia. *The New Yorker*. Retrieved from <http://www.newyorker.com/magazine>

- Mendelsohn, F. (2004). Is there any such thing as children's science fiction?: A position piece. *The Lion and the Unicorn*, 28(2), 284-313. doi: <https://doi.org/10.1353/uni.2004.0022>
- Merga, M. K., & Moon, B. (2016). The impact of social influences on high school students' recreational reading. *The High School Journal*, 99(2), 122-140.
- Miller, W. (1955, May 2). Old man's advice to youth: 'Never lose a holy curiosity'. *Life magazine*, 38(18).
- Milner, A. (2009). Changing the climate: The politics of dystopia. *Continuum: Journal of Media & Cultural Studies*, 23(6), 827-838. doi: 10.1080/10304310903294754
- Morgan, W. (2006). 'Poetry makes nothing happen': Creative writing and the English classroom. *English Teaching: Practice and Critique*, 5(2), 17-33.
- Orwell, G. (2005). *Why I Write*. New York: Penguin Books.
- Orwell, G. (1949). *Nineteen Eighty-Four*. United Kingdom: Secker & Warburg.
- Ostry, E. (2009). Clones and other formulas in science fiction for young readers. *Jeunesse: Young People, Texts, Cultures* 1(1). doi:10.1353/jeu.2010.00017
- Panshin, A., & Panshin, C. (2010). *The World Beyond the Hill: Science Fiction and the Quest for Transcendence*. Maryland, United States: Phoenix Pick.
- Pausch, R. (Speaker). (2007). *Randy Pausch Last Lecture: Achieving Your Childhood Dreams* [Video file]. Retrieved from https://www.youtube.com/watch?v=ji5_MqicxSo
- Pearce, S., Muller, V., & Hawkes, L. (2013). *Popular appeal: Books and films in contemporary youth culture*. Cambridge, England: Cambridge Scholars Publishing.
- Peters, L. (2006, October 4). Science will never know it all: Richard Dawkins, Margaret Atwood and others predict the future. *The Guardian*. Retrieved from <http://www.theguardian.com>
- Prucher, J. (Ed.) & Wolfe, G. (Introduction). (2007). *Brave new Words: The Oxford Dictionary of Science Fiction*. Oxford, England: Oxford University Press.
- Randall, L. (2011). *Knocking on Heaven's Door: How Physics and Scientific Thinking Illuminate the Universe and the Modern World*. New York: HarperCollins.

- Reinerman-Jones, J., Sollins, B., Gallagher, S., & Janz, B. (2013). Neurophenomenology: an integrated approach to exploring awe and wonder. *South African Journal of Philosophy*, 32(4), 295-309. doi 10.1080/02580136.2013.867397.
- Roberts, A. (2016). *The History of Science Fiction* (2nd ed.). London: Palgrave, Macmillan.
- Roiphe, K. (2009, June 6). It was, like, all dark and stormy. *The Wall Street Journal*. Retrieved from <http://online.wsj.com>
- Rollins, H. E. (ed.). (1958). *The Letters of John Keats*, 2 volumes. Cambridge: Cambridge University Press.
- Rudin, S., Niccol, A., Feldman, E. S., & Schroeder, A. (Producers) & Weir, P. (Director). (1998). *The Truman Show* [Motion picture]. United States: Paramount Pictures.
- Rutherford, L., & Johanson, K. (2017). *Teen Reading in the Digital Era*. Australia: Deakin University & Murdoch University. Retrieved from https://teenreadingdotnet.files.wordpress.com/2017/04/teen-reading-folio-report_email.pdf
- Sagan, C. (1994). *Pale Blue Dot: A Vision of the Human Future in Space*. New York: Ballantine Books, Random House.
- Sagan, C., Druyan, A. (Ed). (2006). *The Varieties of Scientific Experience: A Personal View of the Search for God*. New York: Penguin.
- Sambell, K. (2004). Carnivalizing the future: A new approach to theorizing childhood and adulthood in science fiction for young readers. *The Lion and the Unicorn*, 28(2), Baltimore, United States: Johns Hopkins University Press.
- Sandner, D. (1996). *The Fantastic Sublime: Romanticism and Transcendence in Nineteenth-Century Children's Fantasy Literature*. London: Greenwood Press.
- Sandner, D. (2000). Habituated to the vast: Ecocriticism, the sense of wonder, and the wilderness of stars. *Extrapolation*, 41(3). 283-97.
- Sander, D. (2004). *Fantastic Literature: A Critical Reader*. London: Praeger Publishers.
- Saunders, G. (2017, March 4). George Saunders: what writers really do when they write. *The Guardian*. Retrieved from <https://www.theguardian.com/books>

- Saunders, G. (2017, May). *The Singular George Saunders*. Presented at the Sydney Writers Festival, Sydney, Australia.
- Scholastic Inc. (2012, July 19). *News Room: Scholastic announces updated U.S. figures for Suzanne Collins's bestselling The Hunger Games trilogy*. Retrieved from <http://mediaroom.scholastic.com>
- Scott Card, O., Athans, P., Lake, J., & Editors of Writer's Digest. (2013). *Writing Fantasy & Science Fiction: How to Create Out-of-this-world Novels and Short Stories*. Ohio, United States: Writer's Digest Books.
- Scott, R. N., & Streight I. H. (Eds). (2009). *Flannery O'Connor: The Contemporary Reviews*. Cambridge, England: Cambridge University Press.
- Smith, A. (1987). *The Essential Adam Smith*. United States: W. W. Norton & Company Inc.
- Sturgis, A. H. (2014, October) Not your parents' dystopias: Millennial fondness for worlds gone wrong. *Reason*. Retrieved from <https://www.reason.com>
- Suvin, D. (2010). *Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology*. Oxford, London: Peter Lang.
- Suvin, D., & Canavan, G. (Ed). (2016). *Metamorphoses of Science Fiction: On the poetics and History of a Literary Genre*. New York: Peter Lang.
- Tallack, M. (2016). *The Un-Discovered Islands: An Archipelago of Myths and Mysteries, Phantoms and Fakes*. Edinburgh, Scotland: Polygon.
- Tallis, R. (2014). *In Defence of Wonder and Other Philosophical Reflections*. London: Routledge.
- Tatar, M. (1992). *Off With Their Heads! Fairytales and the Culture of Childhood*. New Jersey: Princeton University Press.
- Townshend, D. (2014, March 15). An introduction to Ann Radcliffe. *British Library online*. Retrieved from <https://www.bl.uk>
- Van Engelsdorp, D. (Presenter). (2008). *A Plea for Bees* [Video File]. Retrieved from <https://www.ted.com>

- Vasalou, S. (2015). *Wonder: A Grammar*. Albany, U.S.; State University of New York Press.
- Vogler, C. (2007). *The Writer's Journey: Mythic Structure for Writers* (3rd ed.). California, United States: Michael Wiese Productions.
- Von Mossner, A. (2013). Hope in dark times: Climate change and the world risk society in Saci Lloyd's "The Carbon Diaries 2015" and "2017". In C. Hintz, B. Basu & K. R. Broad (Eds.). *Contemporary dystopian fiction for young adults: Brave new teenagers*. New York, NY: Routledge.
- Walter, D. (2012, September 1). Why Sense of Wonder Sucks [Blog post]. Retrieved from <https://damiengwalter.com>
- Warner, M. (1996). *Wonder Tales: Six Stories of Enchantment*. London, England: Vintage.
- Weaver, R. (2011). *Apocalypse in Australian Fiction and Film: A Critical Study*. London, England: McFarland & Company, Inc.
- Weller, S. (2010). Ray Bradbury: The Art of Fiction, No. 203. *The Paris Review*, 192. Retrieved from <https://www.theparisreview.org/interviews>
- Westfahl, G. (2005). *The Greenwood Encyclopaedia of Science Fiction and Fantasy: Themes, Works and Wonders Volume 2*. London: Greenwood Press.
- Williams, S. (2001-2002). *The Books of the Change* series. New South Wales: Voyager.
- Wilson, T. (2013). My radical plan for small nuclear fission reactors [Video file]. Retrieved from <https://www.ted.com>
- Wittman, K. (2008). *In States of Wonder in the Nineteenth Century British Novel*. (Doctoral dissertation). Umi Dissertation Publishing (UMI No. 3332951).
- Wolfe, G. (1979). *The Known and the Unknown*. Ohio, United States: Kent State University Press.
- Wulf, A. (2016). In awe of nature. *New Philosopher*, 14. 77-79.

APPENDIX i

Stimulus images relating to wonder:

Images are not included in this version of the thesis