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**Roimata**

**2010**

**The School of Languages and Social Sciences**

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A Thesis and Exegesis submitted to Auckland University of Technology in partial fulfillment of the requirements for the degree of Masters in Creative Writing.

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**Attestation of Authorship**

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Susan Younger

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## Abstract

The creative work *Roimata* is a contemporary novel set in New Zealand in 2010. The action takes place over eight weeks, between a proposal of marriage and a wedding. There is an element of mystery, as a forty-year-old murder story unfolds, but it is primarily literary fiction. *Roimata* explores the way in which childhood and memory influence our lives and who we become. It reflects on what 'truth' might mean and how we construct 'belief'.

*Beyond Belief* is an exegesis examining the concept of consilience in the novel *Roimata*. Consilience stems from an ancient Greek school of thought, that there is a unity of knowledge and that all is knowable by logic, as opposed to the mysticism in many cultures, religions and philosophical theories. *Beyond Belief* looks at some of the ideas about consilience coming from scientists E.O. Wilson and Edward Slingerland, literary theorist Brian Boyd and novelist Ian McEwan, all of whom believe the humanities and sciences can be seen as different ways of exploring the same, knowable truth. It includes some auto-ethnographic reflection on the process of writing *Roimata* and the way in which recent findings from neuroscience and evolutionary biology influenced the novel.

**Beyond Belief: Knowing, Not-Knowing, Science and Belief in *Roimata***

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## **1 Introduction**

Since the mid-twentieth century, art practice and the humanities have been dominated by 'theory'. Deconstructionism, postmodernism, poststructuralist, relativism, and others; all are movements which are invigorating, revolutionary and stimulating but have left some difficulties in their wake. Any kind of 'truth-claim' is now viewed with suspicion. All is open to question. The traditional, comfortable, boundaries, between fact and fiction, observation and imagination, evidence and prejudice, are gone. Barthes convinced many that "writing can tell the truth on language, but not the truth on the real" (Barthes, 1977, p.203).

Whatever individual theories have argued, they share the view that the



'knowability' of the human world is culturally constructed, any 'truth' socially negotiated. As Slingerland puts it, "the key claim is that individuals have no direct access to the world- no access to what John Searle calls "brute facts" – and thus no way to independently verify or disprove any elements of the socially constructed web of significations into which he or she is born" (Slingerland, 2008, p. 97).

At the same time, the territories of science have expanded. With an increased ability to examine the physicality of the brain and the human genome, things that once seemed 'unknowable' are becoming knowable. As novelist Ian McEwan has said, "emotion, consciousness, human nature itself, have become legitimate topics for the biological sciences. And these subjects of course are of central interest to the novelist. This invasion of our territory might be fruitful (quoted in Begley 2008, p. 23).

Theorists such as O.E. Wilson, Brian Boyd and Edward Slingerland and some fiction writers, most prominently Ian McEwan, have posited 'consilience' as one way forward. That is, the integration of science and the humanities, the belief that the world is "knowable" and that different disciplines can all contribute parts of the same 'knowable' truth. "If we are to...take the humanities beyond dualistic metaphysics, these human-level structures of meaning need to be seen as grounded in the lower levels of meaning studied by the natural sciences, rather than hovering magically above them ... Practically speaking, this means that the humanists need to start taking seriously discoveries about human condition being provided by neuroscientists and psychologists (Slingerland, 2008, p. 9).

In 2005, E.O. Wilson wrote, "either the great branches of learning – natural sciences, social sciences, and humanities - can be connected by a web of verifiable causal explanation or they cannot."

Novelist Ian McEwan is a naturalist, impatient with the constructivists and the theory debate, much more engaged by the discourse arising in science departments. He believes there are realities that await our investigation. “I find that I would rather read a cognitive psychologist, or an evolutionary psychologist, or a neuroscientist on human behavior, than I would, say, Jacques Derrida, Lacan, or Baudrillard” (quoted in Roberts, 2008, p. 189).

This exegesis looks at the novel *Roimata* in an auto-ethnographic way, exploring the way in which my reading in neuroscience and evolutionary biology influenced my writing. It also explores the way consilience, or the “knowability” of the world, acts as a “background hum” for the action of the novel.

First, if one is fascinated by reality, then why write fiction?

## **2 Beautiful Shapely Lies and Hard Exact Truths: Why Fiction?**

*“While each warrior thought of nothing but to kill the enemy and to defend himself, the poet was sharing the suffering of both sides” – the 12<sup>th</sup> Century Persian poet Nizami (Boyd, 2009, p.19).*

As if the question ‘Is there truth?’ weren’t hard enough to wrestle with, another arises immediately; how can we deal with “truth” in “fiction? Surely, fiction’s lack of ‘truth’ is as a defining characteristic? There go those old-fashioned boundaries again.

“The best art tells the most truth about life. Listen to the competing lies: to the tatty rhetoric of politics, the false promises of religion, the contaminated voices of television and

journalism. Whereas the novel tells the beautiful, shapely lies, which enclose hard, exact truth. This is its paradox, its grandeur, its seductive dangerousness.” (Barnes, J Author’s statement, British Council Website).

Thus, Julian Barnes elegantly, if somewhat smugly, articulates an insight that many share, that fiction can sometimes hold more ‘truth’ than non-fiction. This is a subtle and elusive concept. He references politics, religion, television, and journalism as potentially distorted and “un-truthful.”

Brian Boyd’s *On the Origin of Stories: Evolution, Cognition and Fiction* (2009) explores from an evolutionary perspective why human beings might tell stories and write literature. In summary, his answer is that it is about learning.

He tells us fiction can:

- Design story events and characters that provoke us to reflect on issues, concepts, emotions
- Engage us emotionally “without requiring our belief”
- Allow us to explore possibility as well as actuality
- Pre-select information, pre-focus on what is important
- Simplify the cognitive task of comprehension
- Pack our memory with compact and compelling examples of things we may or may not experience ourselves
- Appeal to, and re-inforce shared values
- Encourage a moral sense
- Allow us to see from different characters’ perspectives and aid our rapid understanding of real-life social situations

- Utilise the fact that our imaginations love stories and find them easier to comprehend and remember than abstract ideas
- Be “high intensity’ but ‘low-cost’. There is not a lot at stake, because it is make-believe, but there may be a lot to learn.

Dennett says, of the same process, “we refine our resources by incessant rehearsal and tinkering” (1996, p. 152).

Hence fiction provided the perfect medium to the explore concepts about the way in which childhood memory and the past shape who we are as human beings and whether this process is “explicable” or “mystical”.

### **3 Beyond Reasonable Doubt: Knowing and Not-Knowing in *Roimata***

I live in a time when boundaries between ‘knowing’ and ‘not-knowing’, truth and lies, fiction and non-fiction are blurred. In some ways, we are better informed than we have ever been. Science does mean progress. We have telescopes that can begin to show us the mysteries of space. We are the first generation that has mapped the entire human genome, though we are not yet very good at reading it. We see the ‘reality’ of wars, conflict, and politics, streamed live onto multiple devices in our houses, while we make dinner or do the washing. However, we are also aware of the limitations of all this. There are theories and counter-theories, conspiracies and counter-conspiracies and we are all too aware of the potential of propaganda. Television reality is heavily constructed and not reality at all. We all know this.

In *Roimata*, I wanted to explore something about knowing and not-knowing. I gave

my protagonist, Claire, a central dilemma of not knowing a 'truth' that was central to her life. This story is the 'framing' story of the novel. Was her father a murderer or wrongly convicted? How could her brain weigh up evidence, from so-called 'facts', which seem contradictory, from memory, notoriously unreliable, from 'history', intrinsically incomplete, from intuition and emotion, and still live with her situation? How did this 'not-knowing' influence her life?

By using the second person viewpoint for this 'framing story', I felt the passages gained a memory-like feeling. They gained a lack of reliability, a confusion, and a 'surreal' quality that I liked. Who is telling the 'you' (Patrick Bowerman) what happened? It can only be himself or an omniscient narrator. The speaker knows sensory details and thought details that can be known only to Patrick. Yet it is not first-person. Thus, it is his memory telling him. He is recalling, and, in that quality of recall, this memory includes justifications, selective details, potentially added by his brain over time. Both knowing and not-knowing. The audience can choose to what extent to believe this version of events.

"Her huge painted eyes are bewitching and she flirts like crazy while you're driving. Really flirts, grabbing your arm when you make a joke, holding your hand while you light her cigarette, even brushing her arm across your groin on purpose when she reaches for your bottle of beer"

(Younger, 2010, p. 5).

The protagonist, Claire, has got to a point where she thinks she has accepted not knowing. One of the central struggles for her is that others constantly challenge this. Her

partner and her daughter want to ‘know’, investigate’, ‘explain.’

“It’s so hard, not knowing whether he murdered that girl. I guess we could go and ask the gang. I could get Toby to introduce us or something.”

“No, I don’t think so. They’re not going to confess, which is the only thing we could believe. Let’s just leave it.”

“We’ll never know?” Yossi asks. “You can live with that?”

“I do live with it.”

(Younger, 2010, p. 236)

Central to *Roimata*, too, is the idea of the ‘know-able’ world. The physical versus some kind of Cartesian ‘ghost in the machine’. Many other characters in *Roimata* believe in a ‘supernatural’, ‘unknowable’ element to life. Either God (the Peterus), or “energy” (Kate Peteru) or Maori spiritual beliefs (the kuia who sees tears on the photo of Nanny Roimata) or Israeli cultural beliefs (Yossi’s parents). Claire believes, in the vein of Dennett and others, that all is knowable and all is physical. As Giulo Giorella, Italian philosopher, says, “Yes, we have a soul, but it is made up of tiny robots.” (Giorella, 1997. Quoted in Dennett 2003, p. 1) The ultimate end of Claire’s ‘physicalist’ belief system is rather disturbing, particularly when people die, and yet she wants to pass on the wonder of nature, art (in her case, music) and human kindness and love to her daughter. Just because life is potentially ‘knowable’ does not make it any less remarkable and worth living.

#### 4 The Philosophical Baby: Why Children?

There were two reasons I chose to use childhood and memory as a 'canvas' for my novel.

In discourse about belief, truth, and whether the universe is 'knowable', an excellent question is, what do we pass on to our children? This seems a form of 'ultimate' or key question. It catches people at their most vulnerable. Many an agnostic or atheist resorts to 'heaven' or 'a better place', when asked to explain where a beloved pet or grandparent has gone after death.

Claire and Yossi choose to pass on to Roimata a love of music, a love of nature and good values. In the end, *qua* parents, we have to believe there are some 'right and wrong' things that are universal. Yes, we ought to tell our children to question everything. Yes, culture is influential and understanding it helps us understand others who seem 'foreign'. Yes, be non-judgmental wherever possible.

Are there universal moral imperatives? Are some things (beating up helpless old alcoholic men for example) just wrong? We need to teach our children some way to judge this. In the end, in spite of class, gender, religion or ethnicity, human beings are far more alike one another than they are different. This is the 'belief system' Claire and Yossi wish Roimata to absorb. It provides Claire with great hope for the future to see Roimata developing with values she approves of. Hope for the future is so essential to happiness.

"What a fantastic kid she's got."

(Younger, 2010, p. 132)

The second reason for using childhood as a recurring motif in the novel is my fascination with the mechanisms by which babies and children learn. Babies are the ultimate practitioners of “consilience.” Babies learn more in the first year of life than they will ever learn again. They don’t argue amongst themselves about ‘truth’ or ‘knowability’. They don’t make choices between the ‘humanities’ and ‘sciences’ in learning about the world. They are excellent at looking for pattern. They utilise genes, experiments, make believe, play and observation and lay the foundations of their understandings of the world that will last them a lifetime. They are accomplished philosophers, scientists and psychologists.

So if we are to explore childhood, what does science have to tell us?

### **5 Experience Made Flesh: Early Brain Development.**

*“Experience involves the activation of neurons in the brain that respond to the sensory events from the external world—or to the internally generated images created by the brain itself, such as our experience of recalling times from the past” (Siegel, 2001, p. 2).*

Recent discoveries from a range of disciplines, including developmental psychology and cognitive neuroscience, can be synthesised to explore the way in which early interpersonal experiences shape the brain. It is theorised that the ‘mind’ develops at the interface between human relationships and the unfolding structure and function of the brain.

An ongoing debate, ‘Nature *versus* Nurture,’ has been re-configured as ‘Nature *and*



Nurture.’ Instead of *which* is more important, the fascination now lies with *how* they work together. An exciting example is the emerging field of epigenetics, the study of the way in which environmental factors can ‘switch on or off’ or ‘turn up and down’ the manner in which genes are expressed (Meaney, Gluckman and others). In this way, experience ‘prepares’ children for the environment they are likely to encounter.

Knockers leans over lazily and slaps Triumph’s tiny hand with his huge tattooed one.

“Put out your fuckin’ arm,” he growls. Triumph holds out his arm. Responds to the biggest, most powerful person in the room. This is Mangere language. Survival language. Because-you-have-to, don’t-show-weakness-whatever-you-do language.

When his dear little face crumples at the pain, Knockers glares at him.

“Don’t cry. Don’t be a fucking wimp.” He watches the boy, holds up his hand as if to strike, daring him to show pain.

“Don’t cry!”

He’ll show him pain, is what they’re all hearing.

He doesn’t cry.

“Good boy!”

He’s three years old. But Claire thinks she understands. Knockers is praising him for doing the right thing. Knockers is there.

The mother she's with looks at Claire in consternation, sharing a little conspiratorial, middle-class despair at the antics of these aliens. Rolling her eyes, tut-tutting. Wondering whether Claire will do something. Claire pretends she hasn't seen.

Claire tells Janet about it later.

"Some would say that's good parenting for the life he is likely to lead. He won't last long if he cries at every little prick." Janet says.

But he's three years old.

(Younger, 2010, p. 112)

This complex interplay between genetic and experiential factors lies at the core of human development and human behaviour.

From soon after conception our brains begin to form brain tissue. A foetus grows layer upon layer of nerve cells (neurons) and transports them to the correct region of the brain. These nerve cells interact with each other via axons and dendrites, which 'connect' via synapses.

At birth, though we have billions of brain cells, indeed, most of those we will ever have, they are only about fifteen percent 'connected up'. The growth of these connections is rapid in late pregnancy and early childhood. By age three our brain is eight-five percent 'connected up' in terms of dendritic growth and synapse-formation. At no other stage of life does the brain undergo such rapid development.

It is here that genetics and experience interact to form the unique brain. Factors such as type, frequency, intensity, quality, order, and number of experiences will all have a

profound influence on the enduring structure and architecture of the brain. “Genes do not dictate ‘always do this’. Even in organisms without minds, even in single-celled organisms, they build ‘if-then’ rules sensitive to context.... We should see genes not as the deniers of the role of the environment but as devices for extracting the information from the environment” (Boyd, 2009, p. 24).

In addition, there are critical and sensitive periods in early brain development during which rapid changes take place, and after which it becomes difficult, indeed in certain cases, impossible, to recapture those developments.

An easily understood example, of particular interest to a writer, is learning a language. Young children seem to ‘soak up’ any language they are exposed to, while adults struggle to learn a foreign language. While genes probably provide us with the ability to learn language and drive the connections necessary to learn language, there is no way our brains will learn that language unless exposed to it early. Thus, learning a language cannot be “purely” genetic, any more than it can be “purely” experiential. It is “experience-dependent,” i.e. laid down in the genes, but relying on activation by experience in order to be “expressed” in the organism. In addition, the culture children are born into affects which languages they are exposed to, with which sounds. So all of these things influence language development. The optimal time for learning language is from conception until age three.

Emotional and social functioning are theorised to be the same as language development. The circuits come “on-line” during the early years of life. The orbito-frontal region, which is central for a number of processes such as emotion regulation, empathy, and autobiographical memory (Siegel, 1999), may have an experience-influenced development that depends upon the nature of interpersonal communication during the

early years of life. Healthy development needs attunement between adult caregivers and child. Being loved teaches us to love (Siegel, Perry, Shaw, Gopnik).

Throughout *Roimata*, there are clues as to the way genes, experiences, temperament and culture work together to create each unique human. I have deliberately left echoes and hints throughout Claire's story about the way in which she may have been shaped by her childhood, without any definite "because of this, then this..." statements. Because Claire was surrounded by rumour and not-knowing, she loves 'fact' but through the events in the novel she grows a little more flexible in this.

Claire was very much the 'adult' in the relationship with her mother:

Claire goes over and cuddles her.

"It's alright Mum. I'll be fine. Don't you worry. I will make you a nice dinner when I get home. I'll cook that roast chicken we got. You have a rest. Shh! I'll be fine, Mum."

Rita is yelling so loud that Claire quickly shuts the front door behind her in case the neighbours hear. Poor Mum. But she shouldn't swear so much.

(Younger, 2010, p. 47)

While this may have made her somewhat 'crusty' and not good at making herself vulnerable in a relationship, the trade-off is that she is practical, calm and competent, excellent qualities for a surgeon. The complex interaction between nature and nurture most often ensure we get the brain we need to deal with the situation we find ourselves in

(Perry).

## **6 All We Can Give Our Children Are Memories**

Remembering and 'knowing' are inextricably linked. We all know memory is incomplete, to some extent inaccurate, changeable, and adaptable. Yet we all use it exhaustively to make sense of the world and our own history in it. It may be a limited perception but it is all we have.

Memory is an enduring mystery, even to neuroscience. There are many forms of memory; many ways the brain utilises sensory experiences in forming neuronal connections and patterns that allow us to make sense of past, present and future. One thing scientists do agree on is that there is "implicit" as well as "explicit" memory (Damasio, 2003, p. 101).

Those experiences we have early in life, before we have the language to describe them, before the "conscious" mind or "explicit" memory comes 'online', are nevertheless laid down in our bodies, in a 'visceral' set of responses to sensory experience.

What makes up the content of early, implicit memories? They are primarily driven by the behaviour of our caregivers, of course, upon whom we are dependent for our survival. We feel cold and we cry. Someone lovingly holds us against their skin or wraps us in a blanket. Or they don't and we remain cold, in an un-caring universe. We cry because we are hungry. Someone scoops us up carefully, murmuring gently, holds us to his or her breast and releases the perfect nutrition, custom-made for us. Or they don't.

Never has she heard herself saying anything as worth saying as that operatic dawn “hellllloooo”; her attuned voice finding the perfect pitch for love, sending Roimata the message, trust me, trust the world.

(Younger, 2010, p. 29)

Similarly, these early memories are about the joy of discovery. When we see the wonder of a flower, someone experiences it with us, explains to us, stimulates our curiosity. The world delights in us, in our vivid consciousness, reinforcing the best in us. Or it doesn't. Rather, caregivers might admonish us for being slow, abuse us for being tiny, or take out their frustrations with the world on us. We learn about the world from the way it takes care of us. Those templates remain with us, writ deep in the primitive parts of our brain, shaping our expectations. “We play out our unconscious knowledge in every unthinking move we make in the dance of loving. If a child has the right parents, he learns...that love means protection, caretaking, loyalty, sacrifice... If he has emotionally unhealthy parents, a child unwittingly memorises ... that love is suffocation, that anger is terrifying, that dependence is humiliating, or one of a million other crippling variations” (Lewis, Amini, Lannon, 2000 p 116).

All this forms a ‘canvas’ upon which *Roimata* is painted. Yossi has been shaped by the secure experience of his childhood, in spite of growing up in a traumatised nation, into a positive, joyful, functioning, generous human being. Claire, on the other has grown up in a relatively safe and secure wider society, but her “buttoned up” defensiveness is clearly the result of a paranoid mother and an alcoholic father.

Learned attitudes toward risk forms a background theme to the book. Yossi is most

afraid of political and social unrest and terrorism.

The agony he had felt when Roimata was due to be in Kings Cross Station on the way to a violin lesson, just an hour after the bomb exploded, was no different from than if she'd had his blood running through her veins. He had wept for what might have happened and resolved to move his family to a peaceful place. About these random things, Claire was so rational. Hated how irrational everyone else was.

"But an hour is no closer than three hours or thirty hours. She wasn't there. Our chances of being in the wrong place at the wrong time are negligible." Yossi felt differently, perhaps because he had himself picked up the remains of children blown to smithereens. He'd wanted out of London. Besides, anti-Israeli feeling was fermenting and, wherever he went, he sensed resentment and hostility."

(Younger, 2010, p. 63)

Claire is far more aware of the danger posed by those close to her; of the way loving makes her vulnerable.

"It's great having family here," Yossi says to Roi as they see Rachel out. "That was so much fun."

Can't he see the danger?

(Younger, 2010, p. 81)

In spite of enormous class and cultural differences, Claire is drawn into an almost visceral understanding with Patch, Knockers and Che. All have had the experience of love as dangerous vulnerability. “All I can say about my childhood,” Patch tells us, “is I survived it.” She and Claire have this in common. They can connect.

Similarly, Yossi and Rachel connect, based on positive experiences of early love within their families but both have also had to deal with cultural and political conflict in their immediate environment.

The influence of Claire’s childhood on her adult life and, in particular her impending marriage to Yossi is a central organising principle in *Roimata*. Once I decided that there would be a slow reveal that baby Claire was in the car during her father’s encounter with Kathryn Phillips, I was told by several friends and my mentor that she needed to be older – say, three. It’s amazing how accurate their assessment was of when we begin to lay down explicit or ‘conscious memory’. “She needs to remember it,” I was told, “or it won’t seem relevant.”

Knowing about implicit memory, I persisted with her being a baby. I wrote and re-wrote the penultimate scene. It didn’t work. It didn’t seem that the events would have any effect on a baby. The reader would question why it would matter, and why Patrick would forever feel ashamed.

Then, at two o’clock one morning, I got it. (At least I hope I did.) Whereas the scene had stopped with Patrick’s decision to drive away from the scene, effectively abandoning the hitch-hiker to her fate, I added Patrick’s thoughts to the end of the scene and his attempt to calm his baby afterwards,



Get your baby out of this mess. Drive away.

She's wide awake most of the way back to Auckland. You stop at the side of the road and put her carrycot on the front passenger seat beside you. Every time you look at her she's alert, looking around, jerking her arms and legs. She's soaking everything up, like a big sponge. You don't know how to comfort her, what to say, what to do. You're so tense. You can't calm down: you talk to her, but it sounds desperate, you rock her, but too fast, you stroke her, but not gently enough-

It's as though she knows. As though her nerves and her muscles will remember this always, though she won't ever have the language for it.

(Younger, 2010, p. 240)

It works for me now. I think perhaps it is having a father, in character, sense something as though having had a glimpse of a mystery or 'truth'. This is more effective than having a narrator lecture us, or a neuroscientist bamboozle us with long words about implicit memory. At this point, we can only ever 'sense' these kinds of 'truths'. Claire may not consciously remember the incident, but the amount of tension and conflict around it and the fall-out from it have profoundly influenced the way she is as an adult.

Memory provides a rich canvas and setting for *Roimata* in other ways too. Elements such as Yossi's background in the Israeli/Palestinian conflict, the introduction of the Te Hira family and thus Maori/Pakeha history, the fact that Claire and Brent meet in the Commonwealth War Graves Cemetery, all provoke reflection on guilt and innocence

and rights and wrongs of the past. How far are we responsible for the wrongs of earlier generations? How does the past affect the present?

## **7 Resilience**

Recently, in psychology, there has been much interest in “resilience.” That is, rather than study the factors that put children at risk, which are now well known, emphasis has shifted to those characteristics that seem protective when children face adverse circumstances. This concept emerged from longitudinal studies (Werner and Smith, 1987; Silva and Stanton, 1996) of groups of children ‘at risk’ from a variety of individual, family and environmental factors, as they encountered life stressors.

From this research it has emerged that three factors are significant in determining which children prove resilient (Compas, 1987; Brown and Rhodes, 1991; Garmey, 1994):

- The characteristics of the child, including temperament and high self-esteem
- The presence of a supportive family environment
- A supportive person or agency in the environment

Resilient children often:

- Participate in group activities.
- Contribute and help others.
- Practise problem solving.
- Overcome difficulties and reflect on it.
- Have routine and structure in their lives.

- Are engaging to other people (likeable).
- Are good at some things that they value and/or others value  
(such as sport, schoolwork, music, art)
- Have hope that difficult things can be overcome

Adolescents who will go on to be resilient have been identified as having the following characteristics:

- Social competence
- Problem-solving skills
- Mastery
- Autonomy
- A sense of purpose and future

(Atwool, 2010)

Once I had written a couple of flashbacks to Claire's childhood and discovered just how disturbed her parents were, both by their own problems, and by the course of events around the disappearance of Kathryn Phillips, then I began to doubt whether Claire really would have turned out 'resilient'. I had written her so strong, so independent. I admire her tremendously (though I am sure not all readers will) for the way she has overcome her past.

How could I make it believable that she would do so well, with such a background?

I had three deliberate strategies:

(1) I mention several teachers who took an interest in her and encouraged her. I made her excellent at science. Her “drive” to achieve and, later, to contribute to others’ lives through medicine is another feature of resilient children.

(2) Although her father is a drunk, in jail and is often absent in her life, he is not arrested until she is five, and thus is present for her early childhood. However, all that time the suspicion and guilt hangs over him, as well as the inability to cope with his wife’s mental illness. This renders him unable to be a good parent. However on occasion, they do share a lot. He passes on a love of music. He reads her Pooh Bear, he reads her Ferdinand the Bull. He gets Meccano for her and leaves it in the Emergency box at Pearly Bay. Even these small things can matter, in the context of a brain looking for attachment, programmed to learn empathy and love.

What stops her in her tracks, though, knocks the breath out of her, leaves her standing in the middle of the room gasping like a stupid goldfish is not a photo or a letter or an official document but a battered copy of Winnie the Pooh. He’d read it so well. They’d laughed so much. They’d always shared this sense of humour; her mother thought them silly and childish. Right through her childhood, when she’d had times of contact, her father would hold her close and call her “A bear with a pleasing manner but a positively startling lack of brain.” They both loved to say “Time for a little something” when they were headed into the kitchen to search for snacks.

(Younger, 2010, p. 234)

These moments of attunement, of ‘good enough’ parenting, just may be enough to

build resilience. In the novel, as indeed in 'real life', it is hard to pin down.

(3) I also gave Claire characteristics which demonstrated that, in order to be resilient, she was making 'trade-offs.' Her social skills are adequate at best. She has difficulty trusting. She can be 'prickly', and 'sad'. She is matter-of-fact and pragmatic and, in comparison with Yossi, does not always get joy out of her life. She is often operating in survival mode. On the other hand, in a power cut or a difficult operation or standing up to a violent stepfather, she is someone I would want to have beside me 'in the trenches'.

She is particularly tested, of course, in the action of this novel, as she comes home to New Zealand and is confronted with her past. This was one of the hardest things; to have her respond to the challenges by being tough, yet to have the audience care about her.

### **8 A Background Hum: How Has This Reading Influenced *Roimata*?**

One danger with the decision to inform my book with science was apparent to me right from the start; I wanted my novel to be first and foremost a work of fiction, a work of art, creative writing firmly placed within a tradition of contemporary literary novels. Not treatise, not sermon, not political or social rhetoric. Not didactic. It was important to me that a reader would be absorbed in the story, transported to that wonderful place the best fiction takes us, unable to 'put the book down', not because they were aware it was based on evidence, but in spite of this.

Ian McEwan encapsulated this in an interview while writing his latest novel, *Solar*. "I have given a false impression that it will be about climate change...it will just be the

background hum of the book” (in conversation with Zalewski, 2009, p. 4). In the article based on this same interview, the interviewer wrote, “McEwan’s interest in science isn’t antiseptic; it sets his mind at play” (Zalewski, 2009, p. 2).

I understood from the outset the importance of not letting the ‘facts’ of the science drive my story and my characters. They must have a life of their own. In this way fiction reflects ‘reality’ better than ‘non-fiction’ does, in the sense that, no matter how much structure and meaning we put onto life, it always still feels somewhat random, unpredictable and unstructured. My characters and my story insisted on a life of their own, at times, even when it flew in the face of what I knew to be “most likely” according to the science.

Why is this? What is different about fiction? Is it the experience and expectations of the reader? The reader plays an active part. The engagement of his imagination, his emotions and the intricate utilization of different parts of his brain all contribute.

When reading the information I have gathered from academic research for this exegesis the reader will (mostly) engage their cortex, the rational, logical part of their brain. (Though their emotional experiences of being a child and perhaps being a parent, will also mediate this cortical thinking.) If I am writing well, their brain will become engaged and weigh up, consider, looking for facts and evidence, weighing my claims against the “maps” they already have of the world and the way it works, against what they already perceive to be the case. They will be looking for ‘clarity’ and ‘logic’.

When reading fiction it may be that the reader ‘turns down’ his cortex and ‘turns up’ his midbrain and limbic system, or at least changes the way in which the two are interacting. This middle area of the brain, which mostly occupies itself with desires, memories, appetites, dreams etc. may look, when reading a story, to be ‘transported’,

'moved'. These very words suggest quite a different process from reading non-fiction. We are 'taken to' somewhere. We want a convincing depiction of "another world", "other people," The very phrase "suspension of disbelief" that we use about fiction, suggests this process. It involves exploration and possibilities.

It is not easy to trick this part of the brain. Just as a piece of fiction must have "truth" in order to be believed, even if it is about a non-existent, wholly imagined world, so it must be fiction, be imagined. If the reader is expecting a work of fiction, and instead they get a thinly disguised treatise, it will fail to feel satisfying.

Our brains are not fooled when a work of the imagination masquerades as a research essay, a treatise, or a work of non-fiction. (There are obvious, deliberate exceptions to this such as 'mockumentaries' but it takes cleverness and they almost never fool those with any knowledge in the field concerned.)

Why then, should we expect to take a body of knowledge, add a few characters and a 'story', and, *voila*, produce a satisfying work of fiction? We can't. I couldn't. So Roimata went through many other processes as well.

What I did, then, was to read furiously at the beginning of this year, and 'marinate' myself in this knowledge. I read books, journals, articles and websites. I talked to a neuroscientist, a paediatric surgeon, an advocate for children, a paediatric oncology nurse and some teenage mums as well as several people from the Maori community and the Jewish/Israeli community. I read the transcripts of some old interviews with gang members I'd done a long time ago.

Then I left it upstairs in my bedroom. And wrote, downstairs. And wrote. And crossed out stuff. And wrote more. Every so often I read some things on the web, when I

needed 'factual' detail, such as how long is the radiotherapy treatment for Wilms Tumour before surgery? What are the ethical issues for doctors when parents refuse treatment for their children? How many letters and numbers were there on number plates in 1970?

I didn't read any more 'science' for a while. The science of early childhood I left far behind, deep in my brain somewhere, fermenting, morphing, marinating, half-remembered.

An example of this process of "marination" is my choice of occupation for my protagonist, Claire. She is a paediatric surgeon. A reader would be easily excused for thinking this a considered and deliberate choice, in order for me to be able to explore a number of family situations and children's stories, and to provide a setting for a novel exploring these issues.

In fact, Claire as a character presented herself to me a long time before I started on the novel. She came 'almost complete'. I knew she was a success in her career. I knew she loved surgery with its technical and practical emphasis on the 'knowable', the 'tangible'.

There were several times during the writing process where my "logical," "cortical" processes were suggesting to me that Claire ought to be a generalist paediatrician, not a surgeon. This would have facilitated her coming up against a much broader range of situations and illnesses and would have given me a freer rein in inventing her patient list, since general paediatricians treat a far greater range of complaints than surgeons. But, in that weird process of fiction, she insisted on being a surgeon.

I note that this didn't stop me trying. I wrote several scenes with her as a general paediatrician, in order to include a family that were insisting on feeding their terminally ill daughter an un-proven "remedy", which left her screaming and unhappy in the last days of



her life. This would have been a much richer source of the sort of stress derived from 'ethical dilemma' I wanted Claire to be under.

It just wouldn't work. She didn't want to be a paediatrician and she didn't want to deal with families like this. It sounded like I was preaching ethics.

When in my reading I hit upon Wilms Tumour, a reasonably common situation for paediatric surgeons to deal with, I reluctantly came up with the Peteru family situation, actually far more straightforward as an ethical decision, but in keeping with Claire. The Peteru family as a set of characters, particularly the mother, Kate, presented themselves to as fully formed characters, without an effort to "tease" them out of the thematic considerations, whereas the family I had been trying to draw in the other situation had never done this. It was Claire insisting on being a surgeon, I think.

Since making the decision that she would be a surgeon, rather than a paediatrician, it occurred to me that this did mean she was dealing with "anaesthetised" patients, which provides potentially rich material in terms of my interest in the problem of consciousness and also a recurring motif in the novel of "anaesthetizing" or "numbing" emotional pain.

There are specific instances in the book where my 'evidence-based' reading has had a more conscious, more deliberate impact.

On the news that night, the Peteru family going into hiding is the lead story. Claire is rushing to get to Sam's birthday dinner tonight. Some gentle, weird guy hooks Rory up to a ridiculous machine he calls a "quantum booster," a box of wires that looks like something out of *Frankenstein* or 'weird science.' In the next scene, the family prays with their Samoan minister.

“Didn’t God give him the cancer in the first bloody place?” Claire says to the television.

“Western medicine is just one more belief system,” some earnest academic is saying.

“Yeah, let’s get a Buddhist nun to do your surgery,”

(Younger, 2010, p. 70)

While this last line of dialogue is an in-character thing for Claire to say, as I have developed elsewhere her rather sarcastic, dark and sceptical sense of humour, it originally derives from an idea I have read many times, for example: “It is now the received wisdom that Western science and technology are merely hegemonic cultural constructions that should not be epistemologically privileged over any other form of discourse. If those who propound these views were to take their propositions seriously enough to live by them...the propositions themselves would soon disappear along with the observers. Medical science provides an obvious example. It is, I think, a safe assumption that the multitude of people like Ulin, Beer, Pitts, Barrish, Smith, Serres, Levine, Foucoult, Bono, Hassan and Jameson....use antibiotics, visit the dentist regularly, and willingly undergo surgical procedures designed to save their lives. When they are sick, they do not go to a semiotician for a linguistic consultation; they do not submit their diseased bodies to literary colleagues for rhetorical analyses” (Carroll, 1995, p. 81).

My most successful blending of the science and the art of the novel, though, is the following passage from a scene where the protagonist, Claire, meets Brent, the biological father of her fifteen year old daughter, for the first time since their ‘one-night-stand’ in

Italy that led to her pregnancy:

She tries to stop herself staring at Brent, looking for elements of Roimata, of course. Something about the way he holds his head, the curve of his cheek hollow, the slightly amused default expression of his mouth. And a lot more, too. All those ridiculous false dichotomies her culture is so good at. Nature versus Nurture. Genes versus Experience. As if it could possibly be one or the other. She knows it is a complex interaction, a random, inelegant dance. Brent has that outgoing, intelligent engagement with others that she and Yossi find so interesting in Roimata. But she and Yossi have nurtured it, turning it into wisdom, taste and caring. What a pointless exercise, this trying to unravel is. She knows that, but can't help indulging in it anyway.

(Younger, 2010, p. 124)

This is my favourite passage of the novel.

## **9 Conclusion**

There are a myriad of ways in which we try to make sense of the world. Science offers great insights, splendid discoveries and invigorating rigour. Fiction offers a rich and textured discourse about a wealth of human experience that science does not yet have a language to explore. Consilience gives us a chance to benefit from both.

Children instinctively know that both are useful. Like intrepid scientists they explore and observe, use their five senses to utilise their genetic gifts to learn, to see

pattern, to understand how things work. From an early age, they are equally intrepid artists. They endlessly play and 'make believe'. They never tire of listening to stories. They beg parents for their favourite books over and over. Because of this time of huge learning, childhood affects what kind of adults we become.

Adults could learn from the open-minded approach to making sense of the world taken by children. Children practise 'consilience'. Good writers can too.

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