SCIENCE FICTION

A post-pandemic wilderness

Paul McEuen relishes the final instalment of Margaret Atwood's sweeping trilogy about a dystopian world devastated by a 'hot bioform'.

A decade after Margaret Atwood began her great dystopian tale, we have at last reached the end of that road. The Canadian novelist has taken us from *Oryx and Crake* (2003) and *The Year of the Flood* (2009) to this final instalment, *MaddAddam*.

A global pandemic dominates the trilogy. In *Oryx and Crake*, a disillusioned bioengineer (Crake) unleashes a 'hot bioform' that kills most humans. *The Year of the Flood* revisits the pandemic through the lens of a religious cult called God's Gardeners, whose followers try to survive the ravages of the pathogen. *MaddAddam* completes the saga with the story of two members of the cult, Toby and Zeb, as they live through the aftermath of the plague. In the dystopian tradition, the trilogy is a window on our possible near future — in this case, one driven to disaster by human ingenuity gone wrong.

As *MaddAddam* opens, with almost all of humanity having perished in Crake's "Waterless Flood", it turns out that the bioengineer

had good reason to reboot the human race. Atwood paints a picture of a pre-flood nightmare, class-divided, corporate and hegemonic. This was a world of *Hunger Games*-like death sports, rampant sexual enslavement and increasingly macabre genetically engineered hybrids. It begged to be wiped out.

The surviving humans must cope with a number of relics of pre-flood genetic tinkering. These include Pigoons — large, ferocious pigs with near-human intelligence, originally created for organ transplants — and domesticated goats with human hair known as Mo'Hairs. Also surviving is a small group of humanoids called Crakers, so-named for their creator and genetically

modified to be polyamorous innocents with a predilection for eating kudzu (an invasive plant). These are the meek whom Crake would have had inherit the Earth, but they face many dangers. The remaining humans, especially Toby and Zeb, protect them from the Pigoons and a pair of murderous death-game survivors who have already raped and killed some of their clan.

As time passes, the Crakers begin to show signs of culture. They sing songs, beatify their now-dead creator, and hunger for more myths and stories about their origins. Toby, the book's main protagonist, provides these as best she can, and we watch with hope and dread as she spins child-like tales for the Crakers out of the unseemly facts of the Flood.

Many of these stories are told in flashback, particularly the full story of Adam and Zeb, who are in some ways the moral poles of *MaddAddam*. It is a biblical tale of grace and punishment, false idols and vengeance;

MaddAddam
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ILLUSTRATION BY JOHN RIORDAN

but Atwood keeps the morality multifaceted, making a case for both pacifism and, when absolutely necessary, murder.

Technology is the apple in the garden. In the pre-flood world, it evolved faster than it could be assimilated. Technology overwhelmed its creators, preying on their basest instincts and enslaving and degrading them. Plucked from the tree, it spread and destroyed.

It is a pattern that threatens to repeat itself with the Crakers. Language, Atwood maintains, was humankind's first technology, and one of the most oddly chilling scenes occurs when the Crakers take the first bite of the apple. Toby is teaching one of the Crakers — a young boy named Blackbeard — about writing. The innocent Blackbeard refuses to accept the idea that pieces of the sensual world around him can be captured in lines on paper. Toby persists, showing the boy his name on a page. "This is how your name begins. B. Like bees. It's the same sound." But Blackbeard replies "That is not me," adding "It is not bees either."

Blackbeard learns in the end. He has tasted the fruit of the tree. But language is shown to be a saviour too. The secret to a new beginning for Toby, Zeb and the Crakers lies in forging deep links between the experiences of the humans and the Crakers, as well as the Mo'Hairs, bees and even Pigeons. This is how they start the world anew: as a process of weaving different languages and understandings of the world into a unified tapestry. Atwood shows us that what is missing in the fast-evolving technological world is a constant awareness of the link between the iPad and the exploited worker in China, or the hamburger on the plate and the factory-farmed cow.

Will Atwood's imagined future be our own? Some elements of it will undoubtedly happen. Bioengineered meats are a staple in Atwood's pre-flood world, and earlier this month a bovine stem-cell hamburger created by Mark Post, a tissue engineer at Maastricht University in the Netherlands, was cooked and eaten. Will our technologies swallow us? The book's palindromic title suggests as much: disastrous ends yoked to new beginnings, with one flowing into the other in a never-ending cycle. But *MaddAddam* also tells us, even in the face of a disaster, to persevere. Atwood's book is a warning but also, in its final accounting, a hopeful meditation on the cycle of life, death and the possibility of life anew. ■

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Books in brief

Scarcity: Why Having Too Little Means So Much

Sendhil Mullainathan and Eldar Shafir ALLEN LANE (2013)

Two scientists reveal that scarcity — "having less than you feel you need" — is a central factor in a raft of societal challenges. Economist Sendhil Mullainathan and psychologist Eldar Shafir posit that when we lack money or attention, for example, we obsess about it, leaving us little mental capacity to plan, meet other needs or practise self-control. We can become entrapped and eventually derailed by a vicious cycle. By reframing the dynamic as a mindset rather than a human failing, Mullainathan and Shafir train a new lens on chronic obesity, endemic poverty and desperate loneliness.

Deep Sea and Foreign Going: Inside Shipping, the Invisible Industry That Brings You 90% of Everything

Rose George PORTOBELLO BOOKS (2013)

Some 746 million bananas ("one for every European") can fit into the largest container ship, notes journalist Rose George. About 100,000 cargo carriers ply the world's oceans, transporting 90% of our stuff. Yet these metallic Moby Dicks criss-crossing the lawless reaches of international waters can be hotbeds of crime, magnets for piracy and nemeses for sea life. Travelling with George on the Maersk Kendal from Felixstowe in the United Kingdom to Singapore, we are regaled — and horrified — by her salvos of facts. Riveting.

Five Days at Memorial: Life and Death in a Storm-Ravaged Hospital

Sheri Fink CROWN (2013)

Medical ethics and disaster management take centre stage in this harrowing chronicle of a hospital besieged by Hurricane Katrina. Pulitzer-prizewinning journalist Sheri Fink tells how for five days in August 2005, a botched evacuation left hundreds trapped in the hot, increasingly filthy Memorial Medical Center in New Orleans. A handful of doctors and nurses were then alleged to have injected some of the severely ill with lethal drug doses. Fink reports on the ensuing nightmare with clarity and not a little compassion.

The Secret World of Sleep: The Surprising Science of the Mind at Rest

Penelope A. Lewis PALGRAVE MACMILLAN (2013)

The sleeping brain is not at rest: so reveals neuroscientist Penelope Lewis in this nippy primer on the biology and behaviour associated with snoozing. There is much to fascinate, such as the beneficial synaptic clear-outs enacted by slow-wave sleep, and the ascending reticular activating system — brainstem ganglia that send neurotransmitters to the rest of the brain to signal that it is time to wake up. From the latest on narcolepsy to the sleep-inhibiting qualities of smoked meat, this is wide-awake science.

Old Man River: The Mississippi River in North American History

Paul Schneider HENRY HOLT (2013)

It has been a bath for mammoths, a road for steamboats and a headache for engineers. The mighty Mississippi is a river that defines a nation, its tributaries branching out across the United States from Montana to Pennsylvania. In his natural and cultural history, Paul Schneider takes us from its origins 200 million years ago to its dammed and polluted present. His vast cast of heroes and eccentrics includes nineteenth-century showman Albert Koch, who haphazardly assembled fossils dug from Mississippi mud. *Barbara Kiser*