



ADVANCE SOCIAL SCIENCE ARCHIVE JOURNAL

Available Online: <https://assajournal.com>

Vol. 05 No. 01. Jan-March 2026. Page#5802-5812

Print ISSN: [3006-2497](#) Online ISSN: [3006-2500](#)Platform & Workflow by: [Open Journal Systems](#)<https://doi.org/10.5281/zenodo.21964372>**Scientific Responsibility and Ethical Failure in Atwood's *Oryx and Crake*****Bisma Masood**

M.Phil. English Literature Scholar, Riphah International University, Faisalabad Campus.

bismamasood415@gmail.com**Muhammad Khakan Ajmal (Corresponding Author)**

Assistant Professor of English, Higher Education Department, Punjab, Pakistan.

Khakanonline711@gmail.com**Prof. Dr. Mazhar Hayat**

HOD DELL, Riphah International University, Faisalabad Campus, Pakistan.

dr.mazharhayat@riphahfsd.edu.pk**ABSTRACT**

Margaret Atwood's Oryx and Crake (2003) is usually discussed as an environmental parable or a warning about genetic engineering. This study takes a slightly different route and argues that the novel's real subject is the slow disappearance of moral accountability inside institutions that have convinced themselves accountability is unnecessary. Reading the text through Donna Haraway's (1991) cyborg theory, and in particular her insistence that technological hybridity carries an unavoidable demand for relational responsibility, the discussion shows that Atwood is less interested in technology as a threat than in what happens when the people responsible for technology stop asking whether they should use it. Crake, Jimmy, and Oryx each carry a piece of this argument: Crake as the scientist who mistakes design for morality, Jimmy as the witness who never quite manages to look away, and Oryx as the reminder that exploitation, once normalised, becomes almost impossible to name. Working closely with the text, the study traces this pattern of ethical failure through the corporate compounds, the biosecurity culture built on fear, the marketing of the BlyssPluss pill, and finally Crake's decision to end the human species in the name of improving it. What emerges is a novel less about apocalypse than about the ordinary, cumulative decisions that make apocalypse thinkable.

Keywords: *Biotechnology, Cyber-Dystopia, Ethical Failure, Margaret Atwood, Oryx and Crake, Scientific Responsibility.*

1. Introduction

Atwood's *Oryx and Crake* opens after the world has already ended, and spends the rest of its length explaining, almost reluctantly, how that ending became possible. Most readings of the novel treat it as a warning about biotechnology or environmental collapse, and there is good reason for that: genetic engineering, corporate greed, and ecological damage are everywhere in the text. But sitting underneath these more visible concerns is a quieter and, in some ways, more troubling one, the disappearance of moral responsibility from institutions that were once supposed to carry it. HelthWyzer, OrganInc Farms, RejoovenEsense, these are not simply corporations that happen to misuse science; they are places where the language of cure and progress has been repurposed to make exploitation sound like care.

This study treats *Oryx and Crake* as an extended case study in that disappearance. It asks how the novel represents the relationship between scientific ambition and ethical accountability, how it stages the illusion that technoscientific institutions can control what they create, and

how Crake in particular comes to embody the moment where competence stops being accompanied by conscience. The reading draws on Haraway's (1991) account of the cyborg, which treats entanglement with technology as something that demands relational responsibility rather than detached mastery, and which insists that scientific knowledge is never made from nowhere, that it always belongs to someone and answers to someone, whether the institution producing it wants to admit that or not.

What the novel resists, and what this study tries to preserve, is the temptation to read Crake as simply a villain. He is not written that way. He is written as the product of an upbringing, an economy, and a media environment that trained him to treat ethical complexity as something inefficient, something that could eventually be engineered out of the species the way a design flaw might be corrected in a later version of a product. It is this normalisation, quiet, incremental, and rarely dramatic in the moment, that the novel identifies as the actual catastrophe, long before Crake releases the virus that ends it.

This concern is not incidental to how the novel is put together. Atwood alternates between Snowman's disoriented present, stranded among the Crakers in a landscape stripped of almost everything human, and Jimmy's remembered past, in which the institutions and relationships behind Crake's catastrophe are gradually uncovered. That structure asks the reader to treat the apocalypse not as a single dramatic event but as the sum of many smaller failures: a corporation willing to treat animals as manufacturing platforms, a family willing to treat the destruction of diseased creatures as routine, a media culture willing to present suffering as entertainment, a scientific culture willing to treat ethical complexity as a problem to be engineered away rather than a dimension of experience to be taken seriously.

The discussion is organised in four parts. It begins with a review of existing scholarship on the novel's treatment of biotechnology, posthumanism, and corporate power, and identifies where the present study departs from that body of work. It then sets out the theoretical framework built from Haraway's cyborg theory, explaining how her account of situated knowledge and relational accountability can be used to read the novel's scientific culture without needing to borrow a second, separate theory of political power. The analysis that follows opens with a short overview of the novel's plot and then works closely with the text itself, tracing the failure of responsibility through the compounds, the biosecurity apparatus, the marketing of the BlyssPluss pill, and Crake's final redesign of the species. The conclusion then reflects on what the novel has to say about scientific power in an age of genetic engineering and artificial intelligence.

1.1 Statement of the problem

Atwood's *Oryx and Crake* are frequently read as a warning about biotechnology or environmental collapse, but existing scholarship has not adequately examined how the novel represents the systematic erosion of scientific responsibility within corporate and institutional structures. Crake's unilateral redesign of the human species, carried out without consent, oversight, or accountability, is often treated as an isolated act of villainy rather than as the outcome of a broader institutional culture that trains scientists to treat ethical complexity as an engineering problem to be designed away. This creates a gap in understanding: little research has used Donna Haraway's cyborg theory, with its emphasis on relational accountability and situated knowledge, to trace how the novel's institutions, and finally Crake himself, drift from ethical responsibility toward a catastrophic and unaccountable exercise of scientific power. This study addresses that gap by examining *Oryx and Crake* as a sustained critique of scientific responsibility and its failure.

1.2 Research Gap

What is missing from most of this scholarship, taken as a whole, is a sustained account of scientific responsibility as a single connected structure running through the novel, rather than a theme picked up briefly and set down again in favour of ecological or feminist readings. Very few studies stay with Haraway's cyborg theory for long enough to use its account of situated knowledge and relational accountability as the organising lens for the entire text; most treat it as a passing gesture, useful for explaining the Crakers or the pigoons and then largely abandoned once the discussion moves to plot or character. Fewer still ground that theoretical commitment in sustained close reading of the novel's own language rather than in summary of its themes. This study tries to close that gap, treating the collapse of scientific responsibility as the organising concern of the text, and using Haraway's framework consistently rather than as one lens among several applied unevenly across the discussion.

1.3 Research Questions

1. How does *Oryx and Crake* represent the collapse of scientific responsibility within corporate institutions?
2. How does Haraway's cyborg theory explain Crake's failure of relational accountability?
3. How does Snowman's role as witness reflect the novel's view of ethical responsibility?

1.4 Significance of The Study

This study contributes to existing scholarship on *Oryx and Crake* by offering a sustained, theoretically grounded account of scientific responsibility as the novel's organizing concern, rather than treating it as a secondary effect of its ecological or feminist themes. By applying Donna Haraway's cyborg theory consistently across the text, the study demonstrates how literary analysis can illuminate real institutional patterns, the displacement of accountability, the normalization of unethical practice, and the substitution of technical competence for moral judgment, that carry direct relevance to contemporary debates on genetic engineering, synthetic biology, and artificial intelligence. The research is significant for literary studies because it models a close-reading approach that grounds theoretical argument in the novel's own language rather than in thematic summary alone. It is also significant for broader interdisciplinary conversations about science and ethics, since it shows how speculative fiction can serve as a serious site of inquiry into the responsibilities that accompany scientific power. Finally, the study offers a useful framework for students, educators, and researchers examining the relationship between technology, institutional power, and moral accountability in contemporary literature.

1. LITERATURE REVIEW

Criticism on *Oryx and Crake* tends to cluster around a few recognisable positions, and it is worth mapping them briefly before situating this study within them. One long-standing approach places the novel inside the dystopian tradition running through Huxley's (1932) *Brave New World* and Orwell's (1949) *Nineteen Eighty-Four*, while noting what makes Atwood's version distinct: where Huxley and Orwell rely on a controlling state, Atwood replaces the state with the market. Nobody in the Compounds needs to be forced into compliance; the corporations simply make compliance profitable, and resistance expensive.

A second line of criticism, associated with Bouson (2011) and Howells (2006), reads the novel through Atwood's long-standing interest in gender and bodily control, treating Crake's redesign of humanity as an updated version of older fantasies about mastering reproduction and desire. Howells (2005) goes further, arguing that the novel's bleakness is offset, however slightly, by its insistence on the ethical role of the survivor, a reading that lines up with how this study understands Snowman's compulsive storytelling near the novel's end.

A third body of work reads the novel ecocritically. Moss (2010) and DeLoughrey (2019) both focus on how Atwood's hybrid creatures, the pigeons especially, dramatise the collapse of any clean line between the natural and the artificial once biotechnology becomes an industry answering to shareholders rather than to any wider public. DeLoughrey situates the novel within a broader Anthropocene literature in which ecological collapse and institutional failure are treated as two sides of the same problem.

A fourth strand, more theoretical in orientation and represented by Gomel (2012) and Campbell (2013), places the novel within posthumanist and bioethical debate. Campbell reads it as a rewriting of the Frankenstein story for a technoscientific age, arguing that Crake's failure is not that he creates life but that he refuses any lasting obligation to what he creates. Gomel goes a step further, suggesting the novel stages, without resolving, a contest between utilitarian reasoning about species-level benefit and a more stubborn insistence on the value of individual lives.

It is also worth flagging a smaller, more methodological gap. Much of the criticism surveyed above works at the level of theme, identifying what the novel is broadly "about," without spending much time on the specific sentences that carry that meaning. This study takes the opposite approach wherever possible, staying close to particular lines and scenes, on the assumption that the novel's argument about responsibility is made as much through its choice of vocabulary, the clinical language surrounding the pigeon project, the flat justifications offered for mass incineration, as through its plot.

2. THEORETICAL FRAMEWORK

The analysis that follows relies on a single theoretical position, Donna Haraway's cyborg theory, and stays with it deliberately rather than supplementing it with a second, competing framework. The reasoning behind that choice is straightforward: Haraway's account of technological hybridity already contains, within itself, both an ethical claim about what human beings owe to what they create and an epistemological claim about how scientific knowledge comes to seem neutral when it is not. Those two claims are enough, on their own, to read the novel's collapse of responsibility from its quietest domestic scenes to its final catastrophe.

3.1 The Cyborg as Hybrid Identity

In *A Cyborg Manifesto* (1991), Haraway offers the cyborg, part organism, part machine, as a figure for the modern subject, one that unsettles the divisions Western thought has relied on to define the human: nature against culture, body against machine, self against other. The cyborg is not a threat to identity so much as an honest description of what identity already is, entangled, constructed, and never as pure or self-contained as older humanist accounts liked to claim.

Oryx and Crake take up this hybridity almost literally. The Crakers are engineered organisms, shaped by human design yet meant to outlast and replace their designers; the pigeons and wolvogs blur the line between livestock and pet, tool and creature, in ways that make the old vocabulary of "natural" and "artificial" increasingly useless. Snowman himself occupies a similar in-between position; caught between the human world he remembers and the post-human world he now has to survive inside. Read through Haraway, the novel is not simply imagining monstrous creations; it is dramatising a condition, hybridity, that her theory treats as already characteristic of technological modernity, and asking what happens when that condition is handled without care.

3.2 The Cyborg and the Collapse of Boundaries

Haraway calls the divisions she is most interested in unsettling the "great divides" of Western thought: human against animal, organism against machine, one sex against another. Her

argument is not that these categories should be defended more carefully but that they were never as stable as they claimed to be, and that pretending otherwise usually serves someone's interest in maintaining a hierarchy.

Atwood's dystopia stages this collapse with unusual literalness. The pigeons, pigs bred to grow human tissue, and the wolvogs, wolves crossed with dogs to produce something loyal in appearance and dangerous in practice, are not simply strange inventions; they are the great divides made flesh and then sold as products. Crake, the scientist responsible for so much of this hybridity, embodies something closer to its cold version: a mind organised entirely around logic and ambition, largely uninterested in the entangled, relational ethics that Haraway insists should accompany any serious engagement with hybrid life. He wants the Crakers free of jealousy and violence, and in pursuing that goal strips away a great deal of what, in Haraway's own account, makes hybridity valuable rather than merely convenient, its refusal to be reduced to a single design purpose.

3.3 Situated Knowledge and the Critique of Disembodied Mastery

A further part of Haraway's theory, developed alongside the cyborg essay, is her insistence that all knowledge is situated: made by someone, from somewhere, shaped by that position, and therefore always answerable to it. She is sharply critical of what she elsewhere calls the pretence of a view from nowhere, a kind of disembodied, unaccountable mastery that scientific institutions like to claim for themselves precisely because it lets them treat their conclusions as neutral facts rather than as choices made by particular people with particular interests.

This critique maps closely onto the scientific culture Atwood depicts. The Compounds operate as though their knowledge of viruses, genetics, and human behaviour were simply true, arrived at from nowhere in particular, rather than produced by institutions with obvious commercial incentives to reach convenient conclusions. Crake's confidence that he can redesign the human species without consulting anyone affected by that redesign is, in Haraway's terms, close to the purest possible expression of disembodied mastery, a claim to knowledge so total that it no longer feels any need to answer to the people, or the species, it acts upon. The recurring outbreaks and containment failures that run through the novel can be read as the material returning to unsettle that pretence, evidence that the knowledge on offer was never as complete, or as neutral, as it presented itself to be.

3.4 Relational Responsibility and the Ethics of Entanglement

The strand of Haraway's theory most important for this study is her insistence that entanglement with technology is not, in itself, a problem to be solved or avoided; it is a condition that carries an ethical demand. Because human beings are already bound up with their machines, their engineered animals, and their biological interventions, the real question is not whether to accept that entanglement but how to remain accountable within it, to the beings created, to the communities affected, to the knowledge claimed.

Read this way, *Oryx and Crake* becomes a sustained study of what happens when that demand is ignored rather than met. Every hybrid creature in the novel, every engineered virus, every redesigned body, represents exactly the kind of entanglement Haraway describes; what the novel adds, and what makes it disturbing rather than merely speculative, is the near-total absence of anyone treating that entanglement as something requiring an answer. The analysis that follows uses this single framework consistently, tracing how far the novel's institutions, and finally Crake himself, drift from the relational accountability Haraway treats as inseparable from any responsible engagement with hybrid, technological life.

It is worth being explicit about what this framework does and does not claim. Haraway's cyborg theory is not a moral checklist that tells a reader, scene by scene, whether a given act of

genetic engineering is permissible. It is closer to a diagnostic habit, a way of asking, whenever hybridity appears in the text, whose interests that hybridity serves and who has been left out of deciding how it should be made. Applied consistently across the novel, that single question does a surprising amount of work, because almost every institution Atwood depicts fails it in roughly the same way: by treating the beings and communities affected by their science as recipients of a decision rather than participants in one.

3. RESULTS AND DISCUSSION

4.1 *Oryx and Crake*

Atwood's novel unfolds across two intercut timelines. In the narrative present, a man calling himself Snowman, once known as Jimmy, appears to be the last human being alive, sheltering near a group of gentle, genetically engineered beings called the Crakers, whom he has been left to protect and explain the world to. Woven through this present are Snowman's memories of his earlier life as Jimmy: his childhood inside the corporate Compounds, his friendship with a brilliant, detached boy who renames himself Crake, and his relationship with Oryx, a woman with a difficult past whom both men come to love. As these memories accumulate, the novel reveals that Crake has secretly developed both the Crakers, meant to replace humanity, and a pill called BlyssPluss, marketed as a sexual enhancement product but designed to sterilise and ultimately exterminate the human population. Jimmy survives the resulting pandemic and is left, as Snowman, to care for the Crakers in a ruined world, a task the analysis below returns to throughout.

4.2 The Manufactured Calm of the Compounds and the Illusion of Scientific Control

Oryx and Crake keep returning to a particular kind of scene: scientific authority presenting itself as settled and dependable, right before it turns out not to be. The Compounds, where corporate scientists and their families live sealed off from disease, poverty, and disorder, read as a working example of Haraway's critique of disembodied mastery, a claim to order that depends on hiding the actual choices, and the actual costs, that make that order possible. Life inside a Compound is not simply comfortable; it is arranged so that the real price of biotechnological research lands somewhere else, on the pleeblands, on the animals bred for parts, on anyone outside the fence.

The pigoon project makes this displacement almost visible. Jimmy remembers its purpose in strikingly technical language, describing the animals as "transgenic knockout pig host" organisms (Atwood, 2003, p. 29). That precision is not incidental. Once a living creature has been redescribed as a host, a platform, an output, the ethical question about what is being done to it has already been quietly closed before anyone gets around to asking it, an evasion Haraway would recognise as knowledge presenting itself as neutral rather than as a choice made by particular people for particular ends.

The Compounds' confidence in their own safety does not survive contact with an actual outbreak. Jimmy recalls his father's bewilderment when containment fails, captured in the plain question "How did they do it?" (Atwood, 2003, p. 26), and the retrospective admission that the scientists had assumed their safeguards were "airtight as a drum" (Atwood, 2003, p. 26). It is a small moment, but it does a lot of work: confidence in a fail-safe system collapses in a single line, and nothing in the institution's response afterwards suggests it learned anything from the collapse.

What follows the outbreak is procedure, not reflection. Infected animals are destroyed, and Jimmy remembers the justification offered at the time in purely functional terms: "They had to be burned to keep it from spreading" (Atwood, 2003, p. 27). There is no grief in that sentence, no acknowledgment of loss, only containment logic. Atwood pushes this affectlessness further

through Jimmy's father, who jokes that Jimmy himself would probably be burned if he got sick, a joke Jimmy recalls answering with a flat "most likely" (Atwood, 2003, p. 27). The exchange is almost throwaway, and that is precisely the point: catastrophe has become ordinary enough to joke about at the dinner table, which suggests a household, and by extension a culture, in which technical necessity has fully replaced ethical concern as the default register for talking about death.

It is worth noticing how little space the narrative gives to any character actually objecting to this arrangement. Jimmy registers discomfort, but it stays private, unspoken, folded into memory rather than voiced as protest. No one in the Compounds resigns, reports a colleague, or refuses an assignment on ethical grounds. Once a practice has been reframed as a purely technical matter, burning animals to contain a virus, redesigning a pig to grow organs, objecting to it starts to sound less like a moral stance and more like a failure to understand how the system works. The institution does not need to silence dissent because it has already made dissent look irrational before anyone gets the chance to voice it.

This same manufactured calm extends into the novel's treatment of biosecurity, which builds a steady picture of fear as something to be managed rather than addressed. The threat of contamination or sabotage justifies an ever-expanding apparatus of surveillance and containment, presented within the story as a rational, protective response to genuine danger. Atwood is careful, though, to show how the language of security becomes its own way of dodging accountability, drawing a hard boundary between those inside the fence and those outside it in exactly the manner Haraway's cyborg theory treats with suspicion, since that boundary is defended as though it were natural rather than acknowledged as a choice made to protect particular interests. This normalising of fear also has the effect of burying a harder question: who created the risk to begin with. Several of the diseases requiring such drastic containment are themselves the product of corporate biotechnology, whether through negligence or competitive sabotage, so that biosecurity often treats symptoms produced by the very system it claims to defend.

The characters inside this system are not simply passive recipients of manufactured fear, either. Several of them, Jimmy's mother included, express open scepticism about the official justifications offered for containment measures, only to be met with a kind of gentle institutional condescension that treats scepticism itself as a symptom requiring management. What the novel suggests is that dissent, even well-founded dissent, had no functional channel through which it could actually alter institutional behaviour, which is arguably a more unsettling diagnosis than simple deception would be.

4.3 The False Covenant: Technology as a Mask for Ethical Decay

Underneath the novel's plot sits an implicit bargain between technoscience and the public: that scientific progress will come bundled with moral progress, almost automatically. Atwood spends much of the novel quietly dismantling that bargain, most visibly through the way life itself, human and animal, gets treated as something for sale.

Oryx carries the weight of this argument most directly. Sold as a child before later becoming entangled with Crake's world, her history shows how completely market logic can displace ethical judgment, even where a child's exploitation is concerned. When Jimmy presses her about the man who bought and abused her, she resists his need for a clean moral verdict, observing that the man "could have done much worse things" to her. Jimmy wants the man reduced to "vermin," a "cockroach"; Oryx's more complicated memory refuses him that simplicity, and in doing so exposes something the novel keeps circling back to, that inside a fully commodified system, moral clarity itself starts to look like a privilege not everyone can afford.

Haraway's (1991) critique of technoscience is useful here: scientific and economic institutions often claim the status of neutral improvement precisely so they can avoid responsibility for what that improvement actually costs someone else. The pigoon project fits this pattern exactly. Marketed as producing "foolproof" replacement organs, framed entirely as medical benevolence, it obscures a simpler fact, that living animals are bred from birth for the sole purpose of being harvested. The moral weight of that arrangement is never entirely absent from the text, but it is consistently pushed aside, treated as sentiment unbecoming of serious science.

The BlyssPluss pill takes this same logic to its furthest point. Sold as a treatment offering better sex and protection from disease, it secretly carries a sterilising agent meant to end human reproduction ahead of Crake's planned replacement of the species. Its public face, all consumer benefit and improved wellbeing, shows just how easily the language of progress can be turned into a weapon against the very public it claims to serve. Because ethical scrutiny had already been pushed out of the culture of scientific development long before Crake arrived on the scene, he is able to exploit an almost unguarded public trust with very little resistance.

Crake himself is where this false covenant finally lands. His certainty that biology can correct what he sees as design flaws in the species, jealousy, aggression, destructive desire, rests on an unshaken faith that scientific intervention is, by definition, good. That faith is what allows him to carry out an act of species-level violence and experience it, within his own logic, as an act of care rather than domination. The most dangerous ethical failures, Atwood seems to suggest, are not always driven by malice. Sometimes they come from a worldview so thoroughly convinced of its own technical rationality that moral deliberation simply stops registering as necessary.

It helps to notice how Crake talks about his own project, at least in the fragments Jimmy remembers. He speaks less like someone plotting an atrocity and more like an engineer explaining a fix, calm, methodical, faintly bored by the ethical objections he anticipates and does not bother refuting. This register is itself part of the novel's argument. Atwood is less interested in Crake's psychology than in the culture that produced a person capable of that particular tone, one in which catastrophic decisions can be discussed in the same flat, procedural language once reserved for burning infected animals or redesigning a pig.

Something similar is at work in the media culture surrounding Jimmy and Crake's adolescence, which the novel treats as another quiet rehearsal for this same flatness. As boys, they spend long stretches online consuming graphic violence and real suffering presented as entertainment, and Atwood frames this not as background detail but as something that actively shapes the ethical sensibilities of the very people who will later hold enormous scientific power. Read through Haraway's (1991) framework, this saturation represents a failure of situated knowledge: rather than fostering any accountable relationship to the suffering it depicts, the spectacle abstracts it into content, stripped of the particularity that would otherwise demand a response. Crake's later capacity to plan and carry out a species-ending pandemic without visible remorse reads rather differently against this backdrop; he has, in effect, been trained since boyhood to treat catastrophic suffering as something to be processed intellectually rather than felt, and none of this arrives as a single decisive corruption so much as an accumulation, an hour here, a video there, until Jimmy can barely remember a version of himself untouched by it.

4.4 The Hubris of Control: Science, Nature, and Its Limits

Beyond exposing the false moral bargain at the heart of its scientific culture, the novel also questions science's assumed authority over nature, disease, and human behaviour more

broadly. The scientific establishment in *Oryx and Crake* operates on the assumption that life can be managed and improved more or less without limit; Atwood keeps showing, patiently and repeatedly, how precarious that assumption actually is. The harder the institutions push for control over biological systems, treating their own knowledge as though it were complete and final, the less predictable, and the more dangerous, the results become.

Viral outbreaks make this pattern especially clear. Facilities try to contain engineered viruses through further bioengineering, and the viruses keep coming back anyway, forcing the same extreme responses, mass incineration among them, again and again. Whatever the sophistication of the available technology, actual control turns out to be crude and reactive rather than masterful. Disease is suppressed, not eliminated, which is a small but telling gap between what the science claims about itself and what actually happens inside a living system.

Crake's own project is this same overreach carried to its logical extreme. He believes that adjusting human biology can remove jealousy, aggression, and sexual competition, and with them, social conflict as a whole. The Crakers are engineered accordingly, stripped of art, religion, and complicated emotional attachment. And yet even this carefully designed creation slips its maker's intentions: Snowman notices small, unscripted behavioural shifts among the Crakers almost from the beginning, evidence that Crake's confidence in total biological control was never as complete as he believed. Even engineered nature, it seems, resists total design.

This resistance is not framed in the novel as hopeful. Atwood does not suggest that nature's refusal to be fully controlled will somehow rescue anyone; if anything, the opposite is true, since it is precisely the unpredictability of the systems Crake thought he had mastered that makes the post-apocalyptic world so unlivable for the one human survivor left to witness it. Control that turns out to be partial is, in some ways, more dangerous than no control at all, because it produces the confidence to act on a planetary scale without the accuracy needed to predict what that action will actually do.

The post-apocalyptic setting extends the point further still. After civilisation collapses, the pigoons and other engineered creatures roam free, adapting on their own terms, ecosystems reorganise themselves, and the physical remains of an advanced technological age deteriorate faster than anyone might have expected. Snowman's isolation amid this wreckage carries its own irony: a scientific age that once claimed dominion over nature turns out to be almost beside the point in the world that comes after it. The old technology scattered across the landscape looks less like a monument to triumph than a record of failure. Atwood's point, made without much fanfare, is that mistaking technological prowess for moral insight tends to produce exactly the opposite of security.

4.5 Crake's Redesign of Humanity as the Culmination of Ethical Failure

A final piece of the novel's argument, closely tied to Crake's project, concerns love and desire, both of which he treats as biochemical events rather than relationships carrying any ethical weight. If jealousy and attachment are simply neurochemistry, then exploiting desire, through the BlyssPluss pill or through Oryx's earlier life in an exploitative industry, can be rationalised as a natural consequence of biology rather than confronted as a wrong requiring some kind of redress. Jimmy's own inability to hold a stable relationship together for long says something about the cost of growing up inside a culture that has learned to talk about intimacy mainly in the vocabulary of drives and transactions, and yet Atwood keeps returning to his genuine, if often clumsy, attachments, which suggests the novel is not fully persuaded by Crake's reductionism even as it shows the forces pushing every character toward it.

The creation of the Crakers, and the engineered pandemic that clears the way for them, is where the novel's argument about scientific responsibility finally arrives. Crake frames his

project, at least to himself, as the removal of humanity's most self-destructive traits. From any vantage point outside his own head, it is closer to an act of unprecedented violence, carried out without consent, oversight, or any form of accountability.

In Haraway's (1991) terms, Crake's failure is above all a failure of relation: he treats the beings he engineers, the Crakers he builds and the humanity he erases, as objects of design rather than as anything he owes an ongoing obligation to. His position inside the scientific hierarchy is essentially unquestioned, which lets him make a decision affecting the entire species without anything resembling consultation or restraint. His technical mastery is complete. His sense of accountability to what that mastery touches are, by comparison, almost nonexistent.

There is a bitter irony in what he actually produces. The Crakers, freed from jealousy and aggression, are also stripped of art, memory, and cultural complexity, the very things the novel treats as inseparable from a life worth calling human, or worth calling anything at all. Atwood does not let Crake's intervention pass as a real solution; instead, she shows the poverty of a vision of moral improvement pursued through genetic redesign rather than through the slower, harder work of cultivated responsibility. What Crake achieves is not the end of humanity's capacity for harm. It is the end of humanity's capacity for the kind of complicated relationship, artistic, emotional, ethical, that might once have made responsible use of technological power even imaginable.

4.6 Snowman as Ethical Witness

Jimmy, surviving as Snowman, is caught between the pre-apocalyptic world of corporate science and the post-human world Crake has built in its place. His memories return in fragments, often triggered by sensory detail, a house once remembered as "full of many different foods cooking" (Atwood, 2003, p. 110), and this fragmentary quality suggests that Atwood locates whatever is left of ethical responsibility precisely in memory and narrative, the very things corporate science and Crake's engineering both treated as expendable.

Snowman's habit of storytelling, taken up almost against his will for the Crakers, extends this idea. Crake wanted narrative complexity engineered out of the species, believing it tangled up with humanity's destructiveness; Snowman rebuilds narrative anyway, in the wreckage of everything Crake destroyed, because he does not seem to know how not to. His disorientation is not only psychological; it is the cost of having been raised inside institutions that never once asked him to be morally accountable for anything. Without that training, he is left afterward with nothing but guilt, confusion, and the compulsion to keep telling the story anyway, which turns out to be its own kind of answer.

There is something almost stubborn in this. Snowman has no institution left to answer to, no supervisor, no shareholders, no family dinner table to soften bad news into a joke. And yet he keeps narrating, keeps trying to explain the Crakers' origins to them in terms they can hold onto, even when the explanations he offers are half invented and clearly inadequate to what actually happened. Read against Haraway's account of relational accountability, Snowman is the one figure in the novel who takes on a responsibility nobody assigned him and nothing obliges him to carry. It costs him a great deal, his sanity is visibly fraying by the novel's end, but Atwood seems to suggest that this cost is close to the only honest response left available once every institutional safeguard has already failed.

It is tempting to read Snowman's fraying sanity as simple tragedy, the last man standing, undone by loss. But his condition is also, in a narrower sense, evidence: proof that a person raised without any practice in moral accountability has no ready framework for absorbing a catastrophe of this size once it finally arrives. Where Crake had engineered the Crakers to feel nothing that might complicate a decision, Snowman is left feeling everything at once, with no

institution, no procedure, and no colleague to help him sort it into something bearable. That imbalance, an engineered species incapable of grief set against a lone human incapable of anything else, is close to the novel's final image of what an ethics of entanglement looks like when it arrives decades too late.

4. CONCLUSION

Oryx and Crake treat scientific responsibility as something that has to be practised continually, not assumed, and the novel is precise about what happens when that practice lapses. Read through Haraway's (1991) cyborg theory, and grounded in the novel's own language, from the clinical vocabulary of the pigoon project to the marketing behind the BlyssPluss pill, the text builds one cumulative argument: technology is never ethically self-justifying, and its consequences depend on whether the people who deploy it stay answerable to whatever it affects. The Compounds, the biosecurity culture built on fear, and finally Crake's decision to end the species in order to improve it are not separate failures but stages of the same one, and that continuity is the novel's real warning, now sharpened by genetic engineering and artificial intelligence: who is answerable for what science makes possible, and what happens when nobody is.

References

- Atwood, M. (2003). *Oryx and Crake*. Toronto, Canada: McClelland & Stewart.
- Bouson, J. B. (2011). *Margaret Atwood: The Robber Bride, The Blind Assassin, Oryx and Crake*. London, England: Bloomsbury.
- Campbell, E. (2013). Rewriting Frankenstein: Atwood's *Oryx and Crake* as a critique of technoscientific rationalism. *Studies in Canadian Literature*, 38(2), 120–137.
- DeLoughrey, E. M. (2019). *Allegories of the Anthropocene*. Durham, NC: Duke University Press.
- Gomel, E. (2012). Science fiction, bioethics, and the posthuman in *Oryx and Crake*. *Literature and Medicine*, 31(2), 327–347.
- Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century. In *Simians, cyborgs, and women: The reinvention of nature* (pp. 149–181). New York, NY: Routledge.
- Howells, C. A. (2005). Margaret Atwood's dystopian visions. In C. A. Howells (Ed.), *The Cambridge companion to Margaret Atwood* (pp. 161–175). Cambridge, England: Cambridge University Press.
- Howells, C. A. (2006). *Margaret Atwood*. Basingstoke, England: Palgrave Macmillan.
- Huxley, A. (1932). *Brave New World*. London, England: Chatto & Windus.
- Moss, M. (2010). Nature as culture: Ecocritical readings of *Oryx and Crake*. *Canadian Review of Comparative Literature*, 37(3), 297–314.
- Orwell, G. (1949). *Nineteen Eighty-Four*. London, England: Secker & Warburg.