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Darwin's Monsters: Evolution, Science, and the Gothic in Christian Alvar't's *Pandorum*

ABSTRACT

This article analyses Gothic tropes in the science fiction film *Pandorum* (2009, dir. Christian Alvar't), through the lens of such concepts as evolution and science, which are presented in the film as inherently monstrous. Key to the analysis is the notion of the return of the repressed (or abjected) past which invades the future, disrupting biological, social, and moral borders of the human. This Gothic return, facilitated by advanced science and technology, turns the future into a site of humanity's confrontation with their animal instincts, highlighting the fragility of our civilisation and proving our subjection to evolutionary processes.

Keywords: Gothic, Darwinism, evolution, science, monstrosity

In his essay for *A Companion to Science Fiction* (2005), Fred Botting comments on the frequent interplay of the Gothic and science fiction in the following way:

The conjunction of two hybrid genres composed from diverse literary and mythical precursors breeds monstrosities: strange beings and disturbing other – and underworlds lurk at the limits of modern knowledge. Despite so many Gothic science fiction mutations, it is strange the genres should cross at all. Gothic writing conventionally deals in supernatural occurrences and figures, looking back, in its architectural and cultural settings, to superstitious and barbaric “dark” ages without the enlightened reason and empirical technique so important in science fiction's imaginings of human progress. Gothic fiction, for all its wanderings in desolate landscapes and invocations of diabolical forces, never strays far from home, playing upon the anxieties of its uncertain present. In looking forward to change, science fiction also projects figures of fear. In the crossings of two generic monsters, monstrosity returns from the past and arrives from the future. As long as it is not “predictable,” “calculable,” or “programmable,” “the future is necessarily monstrous” (Botting, 2005, p. 111).

The above passage well communicates the preoccupations of this article, which analyses Christian Alvar't's science fiction horror film *Pandorum* (2009) as

a Gothic text in which the concepts of evolution and science are informed with the idea of monstrosity. First, the article puts the monstrous in the context of the Gothic's relationship with the past, which revisits the present like a ghost haunting our sense of civilised humanity and modern rationality. Second, it examines the manner in which the film locates the monstrous in the future, when technological progress and science unexpectedly breed horrors of the social and biological kind.

In *Pandorum* the past and future monstrosities are brought together in a Darwinian twist. In the year 2174, the spaceship *Elysium*, carrying 60,000 colonists from the overpopulated Earth, is sent to the newly discovered planet Tanis. We witness the awakening of Corporal Bower and Lieutenant Payton from hyper-sleep to take over their watch. The *Elysium*, however, is dark and silent, its systems unstable and malfunctioning due to the discharge of the main reactor. As Bower sets out on a reconnaissance, he learns that the ship is inhabited by an unknown form of life – predatory humanoids who prey on human flesh. Bower and his two allies, the geneticist Nadia and the hunter Manh, struggle through the bowels of the ship raided by the savage gangs, in the attempt to reach and restart the reactor. As the film progresses, the three characters discover that the beasts have evolved from the passengers who were woken up too early from hyper-sleep. As the molecular structure of the colonists had been enhanced with an enzyme fostering adaptation to new conditions on Tanis, those woken up before their time have instead adapted to the environment of the ship, turning into monsters devouring its human cargo.

In her book *The Gothic Body: Sexuality, materialism, and degeneration at the fin de siècle* (2004), Kelly Hurley writes that the Gothic “has been theorized as an instrumental genre, reemerging cyclically, at periods of cultural stress, to negotiate the anxieties that accompany social and epistemological transformations and crises” (Hurley, 2004, p. 5). Similarly, Fred Botting notes:

Gothic representations are a product of cultural anxieties about the nature of human identity, the stability of cultural formations, and processes of change. As a result the representations are influenced by the cultures that produce them: evil is located in the past or the future, whether it be aristocratic excess for an eighteenth-century bourgeoisie or genetic experimentation for a late twentieth-century consumer culture. (Botting, 2002, p. 280)

In the same manner, the Gothic in *Pandorum* is employed to interrogate several pressing issues of our age – overpopulation, the draining of the planet's natural resources, and the pollution and destruction of the natural environment. It also reflects current social anxieties concerning medical experiments aimed at enhancing human beings, which have been frequently voiced by “dystopic” posthumanists (see Sharon, 2014, pp. 21-24). However, while capitalising on contemporary cultural fears, *Pandorum* in many ways looks back to the nineteenth century and its philosophical, scientific, and literary legacy. The film toys with the ideas of

Thomas Malthus, Charles Darwin, and Friedrich Nietzsche, presenting the notion of the posthuman as being invariably suffused with old nineteenth-century fears of devolution and the moral decline of man. It also echoes the Gothic themes of monstrous transformation, barbarism, and retrogression, inspired by the social and biological sciences of the age, which were explored in R. L. Stevenson's *Strange Case of Dr Jekyll and Mr Hyde* (1886), or H. G. Wells's *The Time Machine* (1895) and *The Island of Doctor Moreau* (1896). In this way, *Pandorum* shows both the present and the future of humanity as haunted by old Darwinian demons – “the bestial within the human,” which is the source of “primal patterns of instinct and motivation threaten[ing] the humanity of the human species” (Botting, 1995, p. 8).

Commenting on the *fin-de-siècle* anxieties connected with the rise of Darwinian sciences, Hurley writes:

The Gothic also mapped out alternate trajectories of evolution than the one set forth by Darwin, imagining monstrous modifications of known species, or the emergence of horrific new ones, in accordance with the logics of specific ecosystems. Whereas the Darwinian narrative was a non-telic one, governed by natural processes that worked in no particular direction and towards no particular end, the nineteenth-century imagination was preoccupied with the prospect of the reversal of evolution, insofar as this was understood as a synonym for “progress”. (Hurley, 2004, p. 10)

Accordingly, within the realm of the filmic imagination, the beastly hominids of *Pandorum*, who supplant humans at the top of the food chain, are both our heirs in the evolutionary scheme and our returned ancestors from time out of mind. Shown as people's successor in the future, the new man has slipped back to the prehistoric savagery of his own species: tribal organisation, cannibalism, lack of verbal communication, which are complemented with predator's skills and lack of morality. As the barbarous past materialises on *Elysium*, the spaceship becomes a Gothic space where humankind lapses into monstrosity, bringing to the fore the perennial questions about the nature of humanity and activating our latent post-Darwinian fears of returning to a state of inhumanity.

In its detectable references to the theory of evolution, *Pandorum* extrapolates into science fiction setting the concerns about overpopulation and food shortage which date back to Thomas Robert Malthus's *An Essay on the Principle of Population* (1798), a work which avowedly had a tremendous influence on Darwin's ideas expounded later in *The Origin of Species* (Barlow, 1958, p. 120; Browne, 2006, pp. 43-44). In his essay, Malthus famously states that population, when not limited by such checks as “moral restraint, vice, and misery” (Malthus, 1958, p. 14), grows “in a geometrical ratio” (p. 8), whereas the means of subsistence only “in an arithmetical ratio” (p. 10). While bringing intense suffering to humankind, the constant imbalance of population and subsistence also works as a stimulus for human activity and competition to ensure the means of survival. When translated

into Darwinian terms, the shortage of food results in “a war in nature, a struggle for existence,” as a result of which the weakest forms perish, while the strongest, healthiest, and best adapted remain alive and reproduce (Browne, 2006, p. 44).

In Alvar's film, the Malthusian checks on population are shown as inoperative. The beginning sequences alternate the information about the achievements of humanity in the field of space exploration (landing on the Moon, the launch of the Kepler Telescope, the discovery of the Earth-like planet Tanis) with the reports of the dramatic overcrowding of Earth and the destruction of man's habitat. In 2153 the world population is 24.34 billion, suffering from “food and water shortages.” Twenty years later, as we learn from the last title card, the year in which *Elysium* is launched, “the battle for Earth's limited resources reaches its boiling point,” which implies ferocious struggle for survival and presages the planet's apocalypse.

According to MacArthur, “the need to procreate and maintain the ancestral lineage of a patriarchal society,” which remains a major theme in early Gothic fiction, has assumed an apocalyptic dimension in Gothic science fiction, translating into the need to ensure the continuity of the human species which is faced with its own inability to reproduce (MacArthur, 2015, p. 61).¹ The 60,000 people heading for Tanis are humanity's only hope of survival. We learn that they underwent obligatory fertility tests to guarantee that the new colony would grow. “We were meant to go on,” Nadia comforts Bower, “and we were meant to survive.” At the same time, the ship is a repository of earthly life in more than a merely anthropological sense. It contains a modern version of Noah's Ark – a laboratory filled with embryos of terrestrial fauna and flora.² This tabernacle of the terrestrial biosphere, however, whose samples were collected for five years by Nadia's team, relies on advanced technology and the energy provided by the now discharged ship's reactor.

¹ According to Botting, Gothic narratives teem with “parentless children [...], roaming wild and gloomy landscapes without protection or property, often without a secure sense of themselves that comes with a proper name and position” (2002, p. 284). In *Pandorum*, the disinheritance of the characters takes place on a larger, cosmic and evolutionary, scale. The travelling humanity is separated from their planet and culture in double respect – the Earth, from which they departed years ago, has perished in a cosmic cataclysm, which underscores the detachment of the surviving humans from their anthropological, planetary, cultural, and moral points of reference. Their ties with the parent world are severed, they are the progeny of an extinct species, themselves on the verge of extinction under the attack of the newly evolved creatures.

² The meaning of the biblical metaphor of Noah's Ark used by Nadia is not lost on the audience. The plant and animal species preserved in the laboratory (not live pairs, as in the Book of Genesis, but more technologically viable embryos) together with “a handful” of the chosen people on board are saved from the violence and corruption (also in an environmental sense) which finally consume the earth and its inhabitants. However, when humankind on the *Elysium* degenerates into monsters, the evil is wiped clean by the sea of Tanis, which breaks into the sunken ship in the approximation of the biblical Flood.

Pointing out the dubious role of science in the Gothic since the nineteenth century, Botting notes:

From *Frankenstein* onwards scientific discovery is as much a threat as it is a promise. In H. G. Wells's *The Island of Dr. Moreau* (1896) the biologist's attempt to accelerate evolution according to Darwinian principles only causes rapid regression to bestial states and unleashes a reversion to savagery and a host of horrible hybrid creatures. The hi-tech worlds of computer games – linking instinctual energies and powerful machines (rather than natural or supernatural forces) – participate in this narrative of ruin. The future is anxiously perceived as another place of destruction and decay, as ruined as the Gothic past. Social and corporeal disintegration awaits in postindustrial devastation, in genetic experimentation, in alien and mutant forms of life and death (Botting, 2002, p. 279).

In *Pandorum*, similarly, science, in its two facets as astronautics and biochemistry, is shown as a source of Gothic horrors which, against the intentions of the creators, may precipitate the death of humanity instead of ensuring its rebirth. Owing to astronautics, humans are sent through deep space, which causes them to develop pandorum (an orbital dysfunctional syndrome [ODS]), and leads to cosmic catastrophes, like that of the *Eden*, whose five thousand sleeping passengers were launched into space by one insane officer. Owing to biochemistry, part of the crew undergoes mutation into man-devouring monsters as a result of a synthetic enzyme called accelerator, supplied through the feeding tubes of the hyper-bunks in order to speed up the passengers' adaptation to Tanis and thus aid their evolution.

Acknowledging the monstrous potential implicit in science, Bower suggests at one point that the hunters may have originated in Nadia's laboratory, created by scientists. It turns out, however, that they were created by Corporal Gallo, who throughout the film impersonates Lieutenant Payton on Bower's watch. Gallo – a perfect example of the perennial Gothic themes of doubleness, insanity, and split personality – corroborates MacArthur's observation that Gothic science fiction "has its roots buried firmly within the concept of man as ultimate monster" (MacArthur, 2015, p. 79). Gallo appears to be a reversed incarnation of Dr Moreau, fashioning men into beasts, and sciences of our age like biochemistry and genetics facilitate his goal, just as vivisection serves Moreau's perverse plans. Instead of inflicting physical pain, Gallo, who subscribes to the idea of evolution as natural selection and the survival of the fittest, inflicts Malthusian suffering on his victims – lack of food, in combination with pandorum, works as a stimulus to a new alimentary practice, cannibalism, devoid of fear or remorse. He tells Bower:

[I]magine yourself without the chains of morality. [...] It's ultimate freedom. [...] Let go and on the other side of it is divine clarity. Purity. Enlightenment. [...] You have to let go of your petty concept of reality. That's just baggage from the old world. And we both know that didn't work out very well now, did it? They fucked up our planet. Life eats life. [...] This ship is a seed from which we can create a new world. A new world. A natural

state. Raw, beautiful, perfect. I am offering you the kingdom. And all that is holding you back is your own fear. (*Pandorum*)

According to Russell West, beside incest, cannibalism is a central taboo in European culture. It is “an alimentary taboo” as understood by Lévi-Strauss, “figur[ing] as a trigger of disgust,” and thus it can be considered a central site of abjection in Kristeva’s understanding (West, 2007, p. 235). As “a revolting practice,” notes further West (2017), “cannibalism is contiguous with several of the principle domains of abjection-disgust, namely, food, waste products, and above all, the human corpse as ‘abject’ par excellence” (pp. 236-237). The horror connected with the displacement of man and the disruption of evolutionary hierarchies is duly evoked in *Pandorum* through the film’s preoccupation with food and feeding habits, with the *homo sapiens* changing their position from the consumer to the consumed, and becoming a corpse – “the most sickening of wastes”, “the utmost of abjection,” marked by the complete dissolution of the self (Kristeva, 1982, pp. 3-4). In *Pandorum* beasts eat humans (mutants feeding on the crew just as Wells’s subterranean troglotaunal Morlocks feed on the Eloi), beasts eat beasts (mutants eating their own kind), and humans eat other humans (Leland, a cook, eating other passengers).

As Botting notes, “Gothic and science fiction share a fascination with the ruination of the species and the monstrous dissolution of the imaginary integrity of the human body” (Botting, 2005, p. 119). Furthermore,

[h]orror and science precipitate the extremes of life beyond the securities of modern knowledge and culture. Bodies are repeatedly invaded, penetrated, dissected, slashed, possessed, snatched, manipulated, and controlled in the horrors that link Gothic and science fictions (Botting, 2005, p. 120).

By the same token, in *Pandorum*, in the new evolutionary order, the human body can be eaten, chewed into, slashed, torn, and, as inedible remains, discarded into a skeleton dump. Just as animals on Earth, the humans on Elysium are at the mercy of their habitat; they need to run for their lives, take cover, or conceal their human scent so as not to be devoured.

The above observations evoke the concept of the border which, as Barbara Creed claims while elaborating on Kristeva’s theory of abjection, is fundamental to the development of the monstrous in horror films:

[T]hat which crosses or threatens to cross the ‘border’ is abject. Although the specific nature of the border changes from film to film, the function of the monstrous remains the same – to bring about an encounter between the symbolic order and that which threatens its stability (Creed, 1993, pp 10-11)³.

³ Creed (1993, pp. 12-13) argues that in horror films the semiotic (which Kristeva links with the pre-verbal phase of toilet training and “a primal mapping of the body” effected under “maternal

Therefore the monstrous in the horror movie arises from the confrontation between human and inhuman, man and beast, the normal and the supernatural, good and evil, etc. (p. 11). "Most horror films," continues Creed,

also construct a border between what Kristeva refers to as 'the clean and proper body' and the abject body, or the body which has lost its form and integrity. The fully symbolic body must bear no indication of its debt to nature (p. 11)

Following this reasoning, the hunters in their *abhuman*⁴ shape represent an abject body. Though originating in the human, they epitomise that which has been jettisoned by human society over centuries of biological and linguistic development and acculturation. Interestingly, they are initially treated as aliens, not us. When Payton asks Bower over the radio about "these other guys," Bower answers trembling with fear: "Guys? Those weren't 'guys,' they were hunting. [...] They didn't seem human," thus denying the creature he has just seen any affinity with his own kind. Hunched on all fours, sniffing for prey, pale, with black mouth and a plume of bone-like blades around his neck, the savage may at first seem a completely different form of life. However, over the course of the film, we become increasingly aware of the disturbing similarity between the remnants of the crew and those who feast on their flesh. The new man inspires our horror because he bears so much resemblance to us – his anthropomorphic shape has not yet disappeared, his piercing eyes and grimace-twisted lips are uncannily similar to our own. So much so that Bower's companion Manh refrains from killing a savage child. His misguided scruples cost the hunter his life: the deceptively human creature turns out to be a ruthless predator like the rest of his kind, and slashes Manh's throat the moment he lowers his guard.⁵

authority") finds its expression in the revolting images of bodily waste – blood, vomit, excrement, etc. The semiotic in horror films is typically connected with the monstrous feminine. Thus it endangers the wholeness and purity of the subject constituted in relation to the symbolic ("the law of the father"), which represents the acquisition of language and social norms, and represses the authority of the maternal figure (pp. 13-14).

⁴ The term *abhuman*, invented by William Hope Hodgson, refers to "the horrifying, liminal, disintegrating or metamorphosing body which expresses *fin-de-siècle* anxieties over evolution and degeneration" (Wasson & Alder, 2011, p. 13). See also Hurley (2004, pp. 3-4).

⁵ In *Pandorum* the horrors of the abject are also forwarded by the images connected with birth and foetal life, paying (un)intended homage to Ridley Scott's *Alien* (1978) and its sequels. Apart from the theme of confrontation between the human crew of a spaceship and the biologically superior predatory species, *Pandorum* seems to imitate *Alien* in its aesthetics, which is reminiscent of the biomechanical designs of H. R. Giger in the *Alien* films. As in *Alien*, the visualisation of the ship in *Pandorum* suggests its connection with the figure of the parthenogenetic archaic mother, who is "sole origin of all life" (Creed, 1994, p. 18). The cryopods in both films make birth possible without the agency of the opposite sex, offering "a primal fantasy in which the human subject is born fully developed," and the ship, appearing in the capacity of the mother, is "sole parent and sole

The amoral mutants are a product of a world in which, as Gallo says, God is dead and with him all laws and conventional morality. The line rings with Nietzsche's nihilistic philosophy, which was a product of the last decades of the nineteenth century, when it became increasingly obvious that the social Darwinist concept of the survival of the fittest governed contemporary social and international politics (Wilson, 1999, p. 282). In the twentieth century, a combination of eugenic theories (which arose from Darwinism) and the Nietzschean concepts of the superman and the morality of masters and slaves, grafted on the doctrine of national socialism, led to the savagery of World War II, evoked in *Pandorum* through sparse but meaningful glimpses. When Bower watches an advertisement of the trip to Tanis on a large outdoor screen on Earth, we can see the Brandenburg Gate rising behind him against the cityscape. Moreover, the passengers of *Elysium* have tattoos on their forearms denoting their function on the ship as well as their future function on Tanis (e.g. officers, engineers, farmers), which brings uncomfortable associations with the Nazi concentration camps, and underscores not only the crew's hierarchies but also their impending victimisation (needless to mention the accelerator enzyme given experimentally to the passengers, which leads to the emergence of the *Übermenschen*). The past is therefore a site and reminder of monstrosity in man – monstrous ideologies invented by monstrous leaders playing gods and dicing with human lives, just as Gallo ruthlessly toys with the lives of the awakened passengers.

In conclusion, in *Pandorum* our (pre)historic past returns to haunt us in the era of space travel, showing that even technological future is not free from the

life-support" (p. 18). However, in *Pandorum*, as opposed to *Alien*, this technological birth is far from clean and painless (cf. Creed, 1994, p. 18). Each hibernated member of the crew on the *Elysium* is fixed to the back wall of the pod like a foetus connected to the placenta in the uterus and fed externally by a system of tubes. Waking up from hyper-sleep is a terrifying experience, brutal and dramatic like birth itself: the sleepers, covered with sticky mucous substance, cry while leaving the pods as if they were newborns delivered by the ship, without memory and self-awareness. Also, the ventilation tunnels through which Bower crawls out of the bridge at the beginning of the film are tight and full of cables which resemble ducts and muscles of some gigantic creature, and the corporal's progress through their moving mass is like being squeezed down the uterine channel. This image of the ship as a living being is again reminiscent of the *Alien* cycle, in which the organic substance produced by the aliens and covering the corridors of ships and stations gives the impression of life and often *comes* to life with the crawling predators (cf. Creed, 1994, p. 18). The imagery of the dark and cavernous *Elysium*, which houses man-eating monsters, is connected with fluids evoking the "abject" secretions of the female body: dripping water, fog, moisture, and green sticky mould on the walls close to the reactor compartment, which has become the ship's monstrous womb. The hominids crowd around the nuclear core, multiplying, sleeping together in a mass of limbs, crawling and writhing like a nest of maggots. Last but not least, the final scene in which the ship ejects the remaining cryopods to the surface of the sea resembles birth, as the sleeping "infants" leave the mother's hostile and impure body while it is being consumed by the untainted sea of Tanis (cf. Creed, 1994, p. 19 on *Alien*).

demons of our latent bestiality. The combined themes of evolution, eugenics, inhuman experiments on people, and the misguided appropriation of Darwinism which results in the creation of a master race through the horrors of retrogression and suffering – all of the above highlight man's monstrous potential. According to Joseph D. Andriano (1999, p. xi), “[w]hether repressed id, shadow, animus, anima, instinct, or impulse from the reptile brain; whether oppressed race or extirpated species, the uncanny monster is the familiar Self disguised as the alien Other”. The monster, Adriano further argues, functions as a trope along the lines of metaphor and metonymy. In the former case, it represents some human trait, transforming animal into human (and vice versa). In the latter case, “the monster is represented in contiguity with the human, in juxtaposition,” putting “animal and human side by side” (p. xiv). Considered from this perspective, the mutants in *Pandorum* metaphorically represent the barbarous in the homo sapiens, bringing to the fore the latent violence and thirst for blood brewing beneath the veneer of our civilised selves. Metonymically, being at once a more evolved and a more retrogressive form of the *homo sapiens*, they stand for the animal placed alongside the human, reminding us of our beastly heritage and making us aware that evolution as a process is far from completion.

Ultimately, *Pandorum*, in the vein of the traditional Gothic, brings the “restoration of order” and the “return to all things normal and acceptable” (MacArthur, 2015, p. 15), as the surviving passengers emerge from the sea to consciousness and the light of day, leaving their monstrous progeny on the sunken spaceship. However, as MacArthur points out, in the Gothic the repressed always returns, with a force impossible to control (p. 16). The last we see of the new colony is the end card “Tanis year one, population 1213...”. The suspension points suggest that this is not the end: the colony will grow and one day Tanis may be visited by the same Darwinian horrors as Earth and the *Elysium*. The reactor of the spaceship, losing its power and in need of rebooting, is an apt metaphor of the dying world of man, our world. Through its Gothic tropes and imagery of horror, *Pandorum*, like Corporal Bower, delivers shock to the system: wake up, humankind, it seems to say, rise above your biological limitations, stop fighting, treat your planet with respect. Escape from the demons which are produced when reason is asleep.

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