



SOCIAL SCIENCES & HUMANITIES

Journal homepage: <http://www.pertanika.upm.edu.my/>

Maggot Therapy and Monstrosity: The Grotesque in Margaret Atwood's *The Year of the Flood*

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ABSTRACT

Speculative fiction is able to foresee the changes of the environment and social strata via imitation of future society (Gough, 2003; Otto, 2012). With the same intention, Margaret Atwood makes use of an alternative natural medication, maggot therapy, as an important recuperative method to cure physical lesions and injuries in *The Year of the Flood* (2009). Historically, although once a common practice among healers of antiquity, maggot therapy has since been discarded from medical context, partly due to its carnivorous and parasitic nature. The present paper intends to discuss the implication of this kind of natural therapy and its sense of monstrosity and grotesqueness as presented in Atwood's novel. In using this therapy as motif, the novel illustrates the grotesque through exaggeration and gory and monstrous features, which lead not only the characters but also the readers to experience disorientation due to the unfamiliar state of savagery. With a focus on relevant theories of the grotesque, the study aims to highlight how the monstrosity inherent in maggot therapy renders the grotesque in this novel, that is, by juxtaposing savagery and culture and evoking repulsion and attraction.

Keywords: Grotesque, Margaret Atwood, maggot therapy, uncanny, monstrous

ARTICLE INFO

Article history:

Received: 03 April 2017

Accepted: 30 November 2017

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INTRODUCTION

Margaret Atwood, the speculative Canadian author and poet, has published works in a wide range of genres like the gothic, dystopian, apocalypse, postmodern and

historical (Cooke, 2004; Howells, 2006). She is well-known for conveying new perspectives of current issues, such as the environment and humanitarian rights (Cooke, 2004). Nathalie Cooke (2004, p.11) and Coral Ann Howell (2005, pp. 161-175) have asserted that Atwood's dystopian and apocalyptic speculative novels like *The Surfacing* (1972), *The Handmaid's Tale* (1985), *Oryx and Crake* (2003), *The Year of the Flood* (2009) and *MaddAddam* (2013), illustrate the effects of social mistreatment and environmental destruction on humanity. The *MaddAddam* trilogy entails speculations of a despairing future society, social exploitation and an uncertain future set in a post-apocalypse world of abusive scientific developments (Cooke, 2004; Dunlap, 2013; Howells, 2006). In addition to the terror of environmental pollution and human exploitation, Galbreath (2010, pp. 28-39), Mosca (2013, pp. 38-52) and McKeever (2014, pp. 57-80) highlighted the posthuman features of the scientific products, such as modern medications and genetically-spliced animals, in the *MaddAddam* trilogy.

Atwood refers to genetic bioengineering in *Oryx and Crake* (2003), a modern scientific innovation that creates hybrid animals and cloned humans to form an ideal society. *The Year of the Flood* points out the uses of alternative medication for remedying current medical treatments. Elizabeth Faure (2015) stated that anthropocentric principles like creating hybrid animals and human overpopulation has led to environmental destruction as a result of the manipulation

and exploitation of nature using scientific developments and technology (pp. 8-14). In *Oryx and Crake* (2003), it is suggested that the environmental condition can be stabilised if the characters developed an "ecocentric attitude" and realised the importance and connection between humans and nature in the natural ecosystem (Faure, 2015, pp. 24-26). In *The Year of the Flood*, Atwood's depiction of ecocentric perspectives of preserving nature with natural resources or normalising natural reproduction is embellished with use of the grotesque through the depiction of natural remedies such as maggot therapy (Faure, 2015, pp. 15-24).

Before proceeding further with this discussion of Atwood's novel, it would be helpful to look at the definition and historical context of maggot therapy as a form of biotherapy to identify the grotesqueness of the therapy's healing process. Biotherapy is defined as an alternative medical therapy that utilises animals, insects and other forms of life and their products like maggots, leeches, fresh-water fish, parasitic worms, bacteria and bee venom and animal-assisted therapy to treat human sickness (Grassberger et al., 2013, p. 2). Maggot therapy was first used by the Australian Aborigines and Mayan tribes in Central America to heal physical injuries (Fleischmann et al., 2004, pp. 14-25; Gottrup & Jørgensen, 2011, p. 291). Medical practitioners began to monitor and experiment with the uses of maggots to cure physical lesions and "diabetic foot" during the Napoleonic era, the American Civil War and the First World War (Fleischmann

et al., 2004, pp. 14–25; Sherman et al., 2013, pp. 6–7; Sherman, 2009, p. 337; Gottrup & Jørgensen, 2011, p. 291). After antibiotics were introduced in the 1940s, clinicians removed maggot therapy from medical practice (Sherman, 2009, p. 337). Nevertheless, the therapy re-emerged and was legally accepted as safe and reasonable with the use of “living therapeutic animals” that could effectively aid in the treatment of “pressure ulcers” and “wounds scheduled for surgery or amputation” (Fleischmann et al., 2004, pp. 14–25; Sherman et al., 2013, p. 7). This therapy is able to remove dead skin, infections and excretes from the injuries. Sherman (2009) explained that scientists conducted “therapeutic myiasis” by “containing the maggots within special dressings that prevent[ed] them from leaving unescorted” (Sherman, 2009, p. 337). Maggot therapy required the breeding and monitoring of sterilised fly larvae in the laboratory. Therapists would feed the maggots with human tissue before using them in a dressing on a patient. Maggot therapy involved three stages of healing, debridement, disinfection and healing (Choudhary et al., 2016, p. 403).

Despite positive feedback to the re-emergence of the therapy, a number of studies also pointed to its setbacks. Zimmer (August 1993) and Strickland (March 2009) reported that the therapy did not aid practitioners in saving the patients’ lives (Zimmer, 1993, par. 11; Strickland, 2009, par. 1). In earlier years, as claimed by Zimmer (August 1993), the therapy caused uneasiness and nausea in patients (Zimmer,

1993). He concluded that the therapy turned out to be costly and less effective and induced more excruciating pain in the patient (Strickland, 2009). In addition, other effects such as hearing loss, vomiting, abdominal pain and loss of appetite would affect the patient as a result of the parasitic relationship with the maggots (Ramana, 2012, p. 2). Many clinical experiments were done to improve the patients’ bandages as well as the time of the healing process (Hirschler, 2009).

METHOD

Conceptual Framework of the Grotesque and Monstrous

The grotesque engages with distortions to natural order and with the merging of human, animal and plant features resulting in outlandish, fantastical and extravagant depictions in artistic expression ranging from painting and architecture to music and literature. While the phenomenon dates back to ancient cave art, critical studies of the grotesque enjoyed relatively low reception in 18th century literary theory and criticism until the second half of the 20th century. Among the many major voices since the mid-20th century onwards are scholars the like of Wolfgang Kayser (1963), Mikhail Bakhtin (1984), Arthur Clayborough (1965), Frances K. Barasch (1971), Philip Thomson (1972), Geoffrey Galt Harpham (1982), Chao Shun-Liang (2010), Justin D. Edwards and Rune Graulund (2013) have contributed to theory concerning the grotesque from different perspectives.

Kayser (1963) defined the grotesque as the inability to differentiate between the normal and the abnormal features of flora and fauna, geometric shape and humans (pp. 181-185). The denunciation of normal things or images is labelled as “ridiculous, distorted and unnatural” (Clayborough, 1965, p. 6). These descriptions can be also associated with “[the] socially reprehensible, the excessive, the preposterous” (Clayborough, 1965, p. 6) or as “a repulsive image and an indeterminable world” (Barasch, 1971, p. 164). The definition of the grotesque was further developed by Philip Thomson (1972) based on elements such as “disharmony”, “the comic and the terrifying”, “extravagance and exaggeration” and “abnormality”, all of which create the “unresolved clash of incompatibles in work and response” (Thomson, 1972, pp. 20–27). As Thomson proposed, abnormality occurs when the “amusement at a divergence from the normal turns to fear of the unfamiliar and the unknown” as a denunciation of the “reality” and “normality” (Thomson, 1972, p. 24).

What can be asserted as unanimously affirmed by various studies is that the grotesque builds on the notion of outlandish, bizarre and frenzied fantasy to prevent from dealing with social conditions or to stand against them through cultural contexts and metaphors (Chao, 2010; Harpham, 1982). Ewa Kuryluk believed that the grotesque was essentially a subculture, an anti-world, that confronted the dominant culture (1987, p. 3). In this manner, culture and the grotesque have a normative relationship since culture “defines the norms and the grotesque is by

essence an opposition to norms” (Harpham, 1982; Moghadam, 2013, p. 19). In *The Year of the Flood*, Atwood creates an anti-world of a natural environment that stands up to modern scientific developments and is by no means devoid of the grotesque. As already mentioned, the present article discusses the grotesque in this novel through a focus on maggot therapy as an epitome of monstrosity that helps to render the essence of the grotesque in creating incompatibility and evoking contradictory emotions.

The concept of the monstrous was pioneered by Aristotle in Part 8 of his *Physics, Book II* to refer to mistaken creation without a “purposive effort” (as cited in McKeon, 1941, par. 5). Aristotle exemplified the idea of monstrosity in the image of a hybrid creature that merged human and ox to capture the absurdity and ridiculousness of the monstrous features generated. In fact, monstrosity, which mostly involves hybridity, is a defining feature of the grotesque. In *The Philosophy of Horror or Paradoxes of the Heart* (1990), Noël Carroll defined a monster as “a being in violation of the natural order” unnaturally produced by modern science or “scientific knowledge” (p. 40). Edwards and Graulund (2013) also characterised monstrous as the characteristic of ‘unnatural combinations of animal species’ and ‘monstrous creatures with grotesque humanoid features’ (pp. 36–37). It is noteworthy, however, that monstrosity is not simply synonymous with the grotesque, but can become a defining feature of the mode by contributing to the contradictory effect the grotesque is capable of achieving.

As Bakhtin (1984) reminded, monstrosity like other characteristics of the grotesque such as obscurity and excessiveness, is not a guarantee of greatness *per se* (p. 127). In fact, monstrosity enters into the realm of the grotesque when the corporeal combination transcends the material state of being and conceptually gives rise to contradictory emotions, producing a Frankenstein effect.

RESULTS AND DISCUSSION

The Year of the Flood

The Year of the Flood narrates the life of a group called God's Gardeners, a religious cult that preserves the balance of the ecosystem through ecocentric behaviour like the practice of recycling and reusing supplies, producing natural healing potions and abiding with the theological lifestyle. Due to their love for nature, they choose to reuse products such as clothes and accessories. This cult despises the science and modernity introduced by a company named CorseCorps, which uses genetic bioengineering and modern technology to produce hybrid animals and modern medication. Repulsed by the corporation's immoral ethics, God's Gardeners isolate themselves from modern corporations and stay among the underprivileged of society, the pleeblands. They protest against SecretBurger for disreputably producing meat burgers, which are made from human and animal proteins. Their early predictions about a pandemic plague make them realise how scientific knowledge deforms the physical nature of the environment. As a result, they practise radical vegetarian

consumption to avoid the consumption of protein-enriched carnivorous food.

Maggots and Monstrosity: The Grotesque in Margaret Atwood's *The Year of the Flood*

Margaret Atwood's novel portrays maggot therapy as a type of biotherapy or alternative medication practised by God's Gardeners. Toby, a character in the novel, and Pilar, an expert in alternative medicine, claim that this therapy is the earliest recuperative method before scientists and medical practitioners introduced antibiotics. After the emergence of antibiotics, maggot therapy, according to them, was "discarded out as out of date along with leeches and bleeding" (Atwood, 2009, p. 107). However, as described by Pilar, the therapy is reintroduced by the physicians "during the First World War" (Atwood, 2009, pp. 107-108) as maggots are able to heal the soldiers' physical injuries more effectively, compared with antibiotics (Atwood, 2009, pp. 107-108):

"...but during the First World War the doctors had noticed that soldiers' wound healed much faster if maggots were present . . . the helpful creatures eat the decaying flesh, they killed necrotic bacteria, and thus were great help in preventing gangrene" (pp. 107-108).

After being acknowledged by the medical officers, these flesh-eating insects are utilised by humans and regulated by science into an act of normalcy; the maggots are ironically transformed from predatory

animals into alternative recuperative agents for the benefit of mankind. As stated by Edwards and Graulund (2013), scientific knowledge regulates the entire abnormal phenomenon into normality (p. 32). In other words, the medical field has normalised and shaped the maggots' monstrous nature into a helpful means to save humans' wounds and sickness by eradicating decayed skin. Interestingly, Atwood further distorts the predatory nature of maggots in her novel. While historically, medical practitioners fed the maggots human tissue, God's Gardeners in the novel feed them "ground meat" (Atwood, 2009, p. 107). Based on observation, Toby is taught to develop the maggots by tying ground meat using "a bundle of strings, which is hung at the edge of the rooftop" (Atwood, 2009, p. 107). As the maggots are hatched on the meat, they feed on the ground meat, drawn to its rotting stench "...because where there was rotting flesh, maggots were sure to follow" (Atwood, 2009, p. 107).

The change from being parasitic in nature to being helpful bio-surgeons renders a unique form of the uncanny to the grotesque in *The Year of the Flood*. Drawing from Freud's discussion of *unheimliche* (Freud, 1919/1953, p. 219), Edwards and Graulund (2013, p.146) explain uncanny as "the experience of seeing something that is simultaneously familiar and unfamiliar," evoking "an emotive response . . . that arises out of the cognitive dissonance of the paradoxical nature of being repulsed by and attracted to that which is both

familiar and peculiar". The uncanny nature of such a healing process is highlighted by the characters' unfamiliarity towards maggot therapy and their mixed response to its being used in this way by God's Gardeners. Notwithstanding the savage and gruesome nature of the carnivorous instinct of maggots, Pilar and other God's Gardeners accept maggot therapy as part of their medical practices. Pilar says that the maggots provide both a "pleasant sensation" but also "pain and bleeding" (Atwood, 2009, p. 108). This indicates that if the therapy is not carefully monitored by Toby, Katuro and Nuala, the outcome can indeed be savage:

"The maggots created a pleasant sensation," said Pilar – a gentle nibbling, as of minnows – but they needed to be watched carefully, because if they ran out of decay and began to invade the living flesh they would be pain and bleeding. Otherwise, the wound would heal cleanly. (p. 108)

That God's Gardeners have trained the bio-surgeons into being predatory machines with the aim of healing human wounds shows the transition of the natural world into the "uncanny realm of mystery through its experience of disorientation, bewilderment, confusion and bafflement" as well as "new combinations and strange instabilities in a given semiotic system' that surpass the conventional oppositions of . . . cultural/savagery" (Edwards & Graulund, 2013, p. 6). As a result, there arises a great tension

of the uncanny; the borderline between the binary opposition between culture and savagery is surpassed as maggot therapy is perceived as a culturally green practice by Toby and his fellow God's Gardeners.

The encounter with the therapy and the various responses of the characters, especially those of Zeb, Ren and Toby, evoke the contradictory emotions typical of a portrayal of the grotesque. Throughout the novel, Zeb undergoes healing processes using maggot therapy, which requires a long monitoring time in order to decrease severe maggot infestation. From the perspective of the grotesque, the maggots are exaggerated as monstrous beings that invade living flesh and form hybridity with the human. In this portrayal, the maggots are perceived as the predator and the human body as the meat on which they feed. When the maggots begin to feed on Zeb's wounds, Pilar warns both Katuru and Toby to monitor the maggots "[t]wenty-hours a day" in order to prevent them from devouring other parts of Zeb's skin (Atwood, 2009, pp. 107–108). Toby and the other Gardeners monitor the maggots day and night for several days to ensure Zeb does not experience fever or develop gangrene. Toby also adds "some Poppy into his Willow tea" as well as checks Zeb's wounds (Atwood, 2009, p. 109). After three days, Zeb's wounds are healed completely; the maggots have done their job without having devoured any of the healthy skin. In response to Nuala's expression of disgust towards the maggots, Zeb jokes that he would eat the maggots like fried "[l]and

shrimp" if they crawl on his living skin (Atwood, 2009, p. 108):

"Or in case I start to eat them," said Zeb. "Land shrimp. Same body plan. Very nice fried. Great source of lipids." He was keeping up a good front, but his voice was weak . . . Nuala bustled in to take over from Toby. . . . "Oh dear, I hate those maggots! Here, let me prop you up! Can't we raise the screening? We need a breeze through She was twittering. . . . Pilar took the night watches: she didn't sleep much at night. . . . Nuala volunteered for the mornings. Toby took over during the afternoons. She checked the maggots every hour. Zeb has no temperature and no fresh blood. (pp. 108-110)

Zeb's joke is indeed macabre, drawing humour out of the grotesque. He treats the pain as food and says the maggots, resembling "land shrimp" might be a "[g]reat source of lipids." He uses macabre humour to manage the unresolved conflict between fascination and repugnance towards having maggots crawling on his skin. On another occasion, Toby attempts to cure Ren without feeling disgusted by the little maggots. She asks Ren to close her eyes and not to move her leg. Although Toby herself is not fond of the maggots, she assures Ren that the maggots are her friends and able to heal her injured legs:

"This will tickle," she tells Ren. "But they'll make you better. Try not to

move your leg.” “What are they?” . . .
“They’re your friends,” says Toby. “But
you don’t need to look” (p. 360)

Ren succumbs to fever and pain due to the three-day treatment. Toby has to monitor the therapy thoroughly in order to prevent the maggots from invading Ren’s living skin. As she knows the maggots are “photophobic,” she carries Ren “up to stairs to the roof” and “drives them into the deepest corners of the wounds” (Atwood, 2009, p. 361). Although the maggots’ nibbling proves torturous, it eventually improves Ren’s condition and her appetite picks up. Like Zeb, Toby develops mixed feelings of disgust and fear towards maggot therapy. When Pilar passes the ground meat to Toby, she tries to tolerate the smell of rotting flesh (Atwood, 2009, p. 107). She has also given up the eating of meat after taking the ‘Vegivows’ pledge (Atwood, 2009, p. 33). She then recalls the awful taste of the meat (Atwood, 2009, p. 132):

“I had a faint memory of meat-eating, back at the Helth-Weyzer Compound. But the Gardeners were very much against it except in times of crisis, so the idea of putting a chink of bloody muscle and gristle into mouth and pushing down inside my throat was nauseating” (p. 132).

It is rather abnormal to have a vegetarian feeding ground meat to maggots; the implication is that Toby is returning to her earlier meat-eating days (Atwood, 2009, p.

33). In Toby’s point of view, meat-eating is an abnormal norm among God’s Gardeners. However, maggot therapy triggers her repressed memories of eating meat when she worked in SecretBurgers (Atwood, 2009, p. 33). It can be implied that, despite her fear and disgust, this recollection hints at a repressed desire for meat and therefore, an inexplicable sense of attraction towards the maggots, who may eat meat, by extension.

After a haemorrhagic plague invades humanity in the novel, maggot therapy becomes the only medical treatment that can treat deep wounds and injuries. Due to the lack of proteins in the post-apocalyptic setting, Toby has to collect maggots from the carcasses of the hybrid pigeons, a species of pig generated by cultivating hybrid cells containing pig and human DNA. Although she is aware of the maggots’ carnivorous instinct, she seems shocked to see the minnows of maggots infesting a dead pigeon. She compares the infestations of the maggots in the dead pigeon to a funeral procession that reeks of rotting flesh: “But pigs? Usually they’d just eat a dead pig. . . . But they haven’t been eating this one. Could the pigs have been having a funeral? Could they be bringing memorial bouquets? She finds this idea truly frightening” (p. 328)

In addition, she imagines herself being infested by maggots. This can be associated with the macabre since she perceives the infestation of maggots as gruesome and terrifying. Due to the horrible stench, she is forced to pull up her dress to cover her nose so that she can step over the carcass (Atwood, 2009, p. 328). She reacts with

revulsion and fear as she picks up a stick to stab at the carcass. Toby's fear and disgust towards the carnivorous maggots that she tries to repress through humour, joking that "the twirling white maggots" are just "land shrimps" so that she can bring herself to collect them, is revealed in this incident (Atwood, 2009, p. 328):

The smell of decaying flesh is rank: it's hard to keep from gagging. She lifts a fold of her top-toe, clamps it over her nose. With the other hand she pokes at the dead boar with her stick: maggots boil forth. . . . Just think of them as land shrimps. . . . Same body plan. "You're up to this," she tells herself. She has to set down the rifle and the mop handle in order to do the next part. She scoops up the twirling white maggots with the spoon and transfers them to the plastic snap-on. She drops some; her hands are shaking. (p. 328)

Her feeling of disgust is intensified as she struggles to collect the maggots for medical purposes. The description of how she tries to collect these carnivorous larvae renders a ghastly effect to her actions as her hands tremble in fear when she is dissecting the pigoon's carcass and when she tries to gather the worms into her plastic bag, highlighting the maggots as monstrous beings. The idea of perceiving the maggots as land shrimps helps Toby to repress her abhorrence and distress towards the maggots and increase her familiarity and acceptance of their natural instincts (Atwood, 2009, p. 328).

CONCLUSION

The grotesquerie of maggot therapy, as captured in *The Year of the Flood*, is normalised by God's Gardeners as part of their cultural practices. While recognising the nature of maggots as meat-eaters and parasites, the Gardeners accept them as therapeutic animals. This highlights the binary opposition of culture and savagery as the benchmark of the 'uncanny grotesque'. Further features of the grotesque are seen in the focal image of maggots feeding on human wounds; this reinforces hybridity, monstrosity, distortion and contradictory emotions.

The juxtaposition of maggots and therapy capture the characters' fear and disgust as well as their fascination at the same time with the phenomenon of maggot therapy. Nuala's subtle disgust towards maggots is placed side by side with Zeb's macabre jokes about the use of the creatures to heal him to portray a sense of the unresolved clash between fascination with and repugnance towards the revolting creatures and the work they have been enlisted to do. Toby's disgust is apparent in her very first exposure to maggot therapy as well as later, when she collects maggots from the pigoon's carcass. If she does not show her revulsion, it is only because she has learnt to repress the smell of rotting meat in order to carry out the therapy. After a hemorrhagic plague invades humanity, her fear and disgust towards the maggots is evident when she sees how the maggots have infested the pigoon's carcass. She has to force herself to imagine them as the more

acceptable land shrimp in order to collect them. This can indicate both her revulsion as well as subconscious attraction to meat.

The characters seem confused as to whether the maggots are helpful bio-surgeons or gruesome monsters. This confusion can be seen as an attempt to normalise savagery as a cultural practice, and it raises the spectre of the grotesque. Bakhtin's emphasis on the material side of human existence, the "grotesque realism" of physical body and the celebration of its degrading as well as regenerating effects (1965/1984, pp.18–19), is the acceptance of the grotesque realities of man's material life. It is perhaps a way of coming to terms with the "problematic nature of existence" and man's imperfect earthly life (Thomson, 1972, p. 11). That the maggots are both healing and monstrous, that they both feed on flesh and help to heal it, that humans and nonhumans are brought together in weird subhuman combinations involves inevitability and irresolvability. This is part and parcel of the grotesque nature of existence, "the awareness of the impossibility of awareness," to borrow a phrase from Edwards and Graulund (p. 142).

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