

## A Certain Convocation of Politic Worms

[Steven Connor](#)

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### Living on Death

There are very many different styles of disposing of the dead, but there are very few human groups who are able to tolerate the spectacle of the open and visible decomposition of corpses. Indeed, many human groups are united in their apprehension that to undergo such a fate is a dishonouring that goes even beyond death, in both senses of beyond, in that it survives death, and that it is even worse than death. Being hung in chains meant having your corpse displayed while it rotted after death. The most celebrated victim of these judicial arrangements was Captain William Kidd, who was hanged for piracy at Execution Dock in Wapping on 23 May 1701. According to custom, his corpse was left hanging until three tides had washed over it, and then subsequently hung in chains at Tilbury Point, where it would be visible for all seamen entering London to see; Kidd's dilapidated body was a beacon for twenty years. Sophocles's *Antigone* depends upon the same principle that the visible decomposition of the dead is the greatest imaginable dishonour, as Antigone defies Creon's edict that her rebel brother Polyneices should be left unburied.

Funerary practices seem designed to construct death as a sudden and irreversible change of state, from bodily to spiritual, from living to dead. It may be seen as the most extreme form of the ambivalence that Wilfred Bion believed was the greatest challenge to thought, prompting us to split or decompose ambivalence – good/bad, present/absent, living/dead, something/nothing – into simple and absolute dichotomies.

But the death of the body is not a cessation, but the inauguration of thriving new lines of biological and biochemical business. The outward and visible sign of this vigorous new activity is the appearance, through spontaneous generation, as it has seemed to many people, of worms and maggots. Officers of the flesh's corruption, worms are also the agents of its awakening into teeming life, which is why worms so readily turn to sermon.

Man is himself frequently reduced to the elementary condition of a worm, imagined as a mere alimentary tube, feebly creeping over the earth. The Babylonian Talmud identifies the passage of man through life with the transition from one kind of worm-like existence to another: ‘Said R. Elazar b. Jacob: He is a worm while living, and a maggot when dead. What is meant by “a worm while living”? the vermin that infest him; “and a maggot when dead” applies to those that are bred from him after his death (*New Edition of the Babylonian Talmud* 1918, 71). John Donne’s little poem ‘Of Man’ articulates the traditional Christian association between humanity and the worm:

Man's at his birth a poor small red worm sprawling,  
A silly slimy creature brought forth brawling;  
Man's at his death a pale worm in a sheet,  
Wherein worms breed, worms feed, meat for worms meet. (Donne 1662,  
13)

Pope declared similarly that:

Whate'er we think, whate'er we see,  
All Human Race are Worms

*Man*, is a very Worm by Birth,  
Proud Reptile, vile and vain,  
A-while he crawls upon the Earth,  
Then shrinks to Earth again. (Pope 1716, 24-5)

The worm is the body’s consumer, the enemy of its integrity. But it is also its writhing double, the body cloaked in seething plethora, a pullulating second skin of corruption, that, however it may boil and shimmers, somehow holds its shape. As Job cries out ‘My flesh is clothed with worms and clods of dust; My skin closeth up, and breaketh out afresh’. Worms are the very form of Job’s death-in-life, a consumption that will not let him go, because he has taken its form and it has taken his: ‘my soul chooseth strangling, And death rather than these my bones... I loathe my life; I would not live always...How long wilt thou not look away from me, Nor let me alone till I swallow down my spittle?’

The worms that undo the body in death can therefore become in mortuary fantasy a kind of preservation, the agents of a perversely prolonged consumption, as in the ghost who speaks to his lover in the ballad ‘Sweet William’s Ghost’: ‘My bed it is full low, I say,/ Down among the hongerey

worms I sleep.’ The misanthropic Bosola in Webster’s *Duchess of Malfi* similarly sees corruption as a permanent presence rather than a prospect:

Though we are eaten up of lice and worms,  
 And though continually we bear about us  
 A rotten and dead body, we delight  
 To hide it in rich tissue: all our fear,  
 Nay, all our terror, is, lest our physician  
 Should put us in the ground to be made sweet. (II.1)

The horror of the worm is that, unlike us, it requires no absolute certification of death to go about its business. The flies which lay the eggs which hatch into larvae are happy with any decaying or necrotic tissue, whether from a full-blown corpse, a gangrenous limb or just an open wound. When the larvae of flies colonise living tissue, it is known as myiasis, a term first coined by R.W. Hope in 1840 (Hope 1840, 258). In 1921, W.S. Patton proposed a division of myiasis into three types that are often still referred to today. First of all, there is obligatory myiasis, which is limited to a small number of species the larvae of which are found only in living tissues. Semispecific myiasis is characteristic of flies which, though normally breeding in dead animal bodies, will also occasionally lay their eggs in the diseased or necrotic tissues of living animals. Finally, there is accidental myiasis, which is seen, for example, in the occasional cases of houseflies who accidentally infest wounds (Patton 1921).

One example of an obligatory myiasis is provided by the botfly, perhaps from Gaelic *botus*, or belly-worm, or *boiteag*, maggot, different species of which develop by feeding on the flesh of horses and other animals. After arranging for delivery to its host by stowing away as an egg on a bloodsucking mosquito, *Dermatobia hominis* digs a burrow in the flesh of birds and mammals, including, as its name suggests, humans. Like many such maggots, it employs grapnel-like hooks to embed itself in its host’s flesh, meaning that any attempt to dislodge it only binds it more tightly in place, or, even worse, tears it apart, leaving some of the body inside to encourage infection. The good news about the maggot, probably the only good news, is that it secures its feeding position by secreting an antibiotic which protects it and its food supply from fungus and bacteria, so that its wounds do not tend to become infected. One effective treatment for infestation by the botfly maggot involves placing a piece of raw meat over the wound. Since it breathes air, the suffocating maggot will eventually leave its host and burrow through the meat in search of air. If one can bear to leave the larva to its own devices, it will also in time drop out spontaneously once it has matured, and burrow into the earth, ready for its pupation. Adrian Forsyth

(1999) has written a vivid account of a biologist friend of his who decided to tolerate the presence of a botfly maggot in his scalp for the insights it would give him into the operations of symbiosis.

Perhaps the most terrifying and dangerous creature of this kind is the screw-worm, the fly of which lays its eggs on open wounds in living animals. The millimetre-long maggots, which hatch after about 12 hours, attach themselves to the wound with sharp mouth hooks, where they feed for about five days, destroying tissue and agonisingly enlarging the wound, before dropping to the ground to form the pupal stage. In the meantime, however, the liquids they produce to assist their feeding will very likely have attracted more flies of the same species who lay further batches of eggs. Serious secondary infections can result from these huge infestations, leading in many cases to death. Humans are not immune from the visitations of screw-worm, as is indicated by the name given to the New World version of the insect by Charles Coquerel, a French physician who in 1858 described its devastating effects on prisoners in the penal colony of Devil's Island in 1858: he called it *Cochliomyia hominivorax*, where hominivorax means 'man-eater'. Infestation of noses, eyes, ears and mouth can be fatal if left untreated; 55 human cases were recorded in an outbreak of screw-worm in Texas in 1935 (James 1947, 63-5).

There are reports of maggot-like infestations of humans from early times, the most dramatic being the horrifying phthiriasis, or 'lousy disease', in which human beings die in terrible, stinking torment, as a result of insects multiplying in tumours under the skin. The disease was thought to be caused by spontaneous generation of insects from infected blood, hence its reputation as a divine punishment for wickedness. Herodotus records of the queen Pheretima, who had taken terrible revenge upon the people of Barca after they had murdered her son, that 'she died a horrible death, her body seething with worms while she was still alive' (Herodotus 2003, 4.205, 310). The tyrant Sulla was said to have died of the lousy disease, as was Herod the Great. Lactantius goes into great detail about the death suffered by the persecuting Emperor Galerius, in whom a malignant ulcer forming 'in his secret parts' spread throughout his body:

Now *Worms* began to breed within him. The *Smell* that came from him was so noysom, that it was felt not only all over the *Palace*, but in the very *City* likewise; and the Passages of his *Urine* and *Excrements* were now mixed, all the *Membranes* being corroded that separated them. He was eat up by *Vermine*, and the whole Mass of his Body turned into an universal Rottenesse... Some living *Animals*, and others that were boild, were

applied to the Putrified parts, to try if the heat would draw out the *Vermine*: and this indeed opened as it were a vast *Hive* of them: yet a second Imposthumation discovered yet a much greater *Swarm*, so that his *Guts* seemed to dissolve all into *Worms*. (Lactantius 1687, 129-30)

Later writers began to doubt these stories, which seem to have been invented to satisfy a human desire to believe in the bodies of the wicked producing their own corruption in the form of endogenous infestation. The fact that so many monarchs have had attributed to them such loathsome deaths also suggests the power of the inversive symbolism, in which the mighty are laid low by the actions of the minuscule (Africa 1982). Some of the alleged sufferers from lousy disease may have been victims of acute scabies or pediculosis. Given the tendency to conflate mites, lice and worms, some of the more dramatic cases may also have been cases of myiasis of open wounds (Bondeson 1997, 51-71).

But infestation with maggots can have more benign effects. Dominique-Jean Larrey, the medical officer of Napoleon's Egyptian campaign, recalled how effective maggots could be in clearing wounds of infected or dead tissue:

When they were suffering from the suppuration of their wounds, these injured men were troubled by the worms or larvae of the blue fly, which is common in this climate. These insects, which appeared in a few hours, developed with such speed that, from one day to the next, they had grown to the size of a small pen nib; this was terrifying for our soldiers, despite all the reassurance we tried to offer them. They could only be convinced by experience that, far from being bad for their wounds, these insects in fact accelerated the process of scar-formation, by shortening the work of nature. (Larrey 1829, I.51-2)

This recalls older stories of Mayan Indians who exposed beef blood to the sun in order to produce maggots which were then applied to wounds to help them heal. G.K. Dunbar reported that when he was a boy, probably during the 1920s, he saw that among the Ngemba aboriginal people of New South Wales 'the blow-fly larva was employed to cleanse a wound which suppurated and became more or less gangrenous', adding 'Apparently this was an ancient practice' (Dunbar 1944, 177). John Forney Zacharias, a Confederate physician during the American Civil War, used maggots to help clean out gangrenous flesh from wounds, and William Baer noticed similar effects among the soldiers in his care during the First World War, and went on to use blowfly maggots to treat the lesions caused by osteomyelitis (Root-Bernstein 1999, 21, 22).

The difficulty was that there are only a few species of fly that will feed exclusively on diseased or necrotic tissue. The most common species employed were varieties of blowfly: *Lucilia sericata*, *Lucilia illustris* and *Phormia regina*. Infestation of wounds by other species of fly-larvae is extremely dangerous, and, if maggots are to be used in any other than the desperate circumstances of the battlefield, it is important to ensure that they are bred under sterile conditions. There was great interest in the possibilities of maggot therapy during the 1930s, but it fell away with the development of antibiotics from the 1940s onwards. However, the increasing resistance of many organisms to antibiotics in recent years has rekindled an interest in the surrogate surgery that maggots can perform. As well as consuming diseased or dead flesh, maggots may secrete therapeutic agents such as urea and ammonium bicarbonate. Even patients who can adjust to the idea of these busy little helpers being set to work on them may nevertheless find the continuous wriggling extremely hard to bear. But even this may have a benefit, in that it can encourage exudation of fluids which help to flush bacteria from the wound (Lane and Crosskey 1993, 459).

### Joy of the Worm

There is ambivalence towards worms and maggots in many different cultures. Among early twentieth-century Inuits, maggots (*qitirulliq*) were usually feared and dreaded, but could also under other circumstances be prized, as for example in the story of a woman who adopts a larva as her son, and feeds it on the blood from her armpit, or the milk from her breasts (Laugrand and Oosten 2010, 15). Allowing the flesh of one's arm to be eaten by maggots could be thought of among Inuits as preparation for becoming an *angakkuq*, or shaman, and boots would be filled with maggots and insects who, by gnawing the flesh from the feet would confer speedy lightness of foot (Laugrand and Oosten 2010, 16)

This ambivalence is enacted in particular in the attitudes of children, who are not born feeling what is often regarded as the instinctive disgust in which they are carefully coached. A children's song like 'The Worm Song', which exists in many different versions, beautifully and tellingly balances relish and disgust:

Nobody loves me, everybody hates me  
 Think I'll go and eat worms  
 Long ones, short ones, fat ones, thin ones  
 See how they wriggle and squirm

Bite their heads off, pull their tails off,  
 Throw their skins away.  
 Nobody knows how much I grows  
 On worms three times a day.

For an adult listener, the song testifies to a fantasy exchange between passive and aggressive eating – eating the thing that eats you. This comes to the fore even more plainly in an American variant of a song originally collected by the Opies, which, in its original version begins ‘Whenever you see the hearse go by/And think to yourself that you're gonna die,/Be merry, my friends, be merry’, and ends ‘Your eyes fall in and your hair falls out,/And your brains come tumbling down your snout,/Be merry, my friends, be merry’ (Opie 1959, 33). The more recent variant, sung by a third-grader in a school in Kalamazoo, goes further, in imagining the state of death as a giggly-grisly kind of autophagy:

The worms crawl in, the worms crawl out.  
 The worms play pinochle on your snout.  
 They eat your eyes, they eat your nose,  
 They eat the jelly between your toes.  
 A big green worm with rolling eyes  
 Crawls in your stomach and out your eyes.  
 Your stomach turns a slimy green,  
 And pus pours out like whipping cream.  
 You spread it on a slice of bread.  
 And that's what you eat when you are dead. (Bat-Ami 1992, 33)

The phallic associations of the worm, and its associations with itch and tickling mean that there is a sexual titillation in worms too, Pope writes:

That *Woman* is a Worm we find,  
 E'er since our Gran'am's Evil:  
 She first convers'd with her own kind,  
 That Ancient Worm, the *Devil*.

But whether Man, or He, God knows,  
*Fecundified* her Belly,  
 With that pure Stuff from whence we rose,  
 The Genial *Vermicelli*. (Pope)

The entry of the worm into the flesh of the body is often thought of as a sexual penetration. It may be true that in the ‘fine and private place’ of the grave in Andrew Marvell’s ‘To His Coy Mistress’, ‘none...do there embrace’ (Marvell 2007, 83), but the grave is not, for all that, entirely chaste; for there, ‘worms shall try that long preserved virginity/And your quaint honour turn to dust’ (Marvell 2007, 82-3). Quaint means proud, but Middle English *queynte* also meant vulva or vagina. Brilliantly, Marvell flips us back to the act of mock honour that has begun the poem, in which he says that, if there were only world enough and time, he would spin out his courtship centuries-long, by lavishing praise on every part of his mistress’s body. Read retrospectively in the sudden prospect Marvell offers of the vulva nibbled and nuzzled by worms, the poetic foreplay becomes a decomposition, the delaying suddenly an image of decaying:

My vegetable love should grow  
 Vaster than empires, and more slow.  
 An hundred years should go to praise  
 Thine eyes, and on thy forehead gaze.  
 Two hundred to adore each breast:  
 But thirty thousand to the rest  
 An age at least to every part  
 And the last age should show your heart (Marvell 2007, 81-2)

The logic of the *carpe diem* is to get the lover to recoil from the prospect of the decay of the body and to embrace love and life; but there is an interior, alternative, necrotic logic that extends desire into the grave, making it the very persistence of living desire.

This kind of quibble lies behind the words of the Clown who delivers to Cleopatra the asp that she will use to kill herself, by applying it to her breast – ‘the baby at my breast/That sucks the burse asleep’. The Clown equivocates about the question of whether he has indeed brought ‘the pretty worm of Nilus/That kills and pains not’ (Shakespeare 1994, 317-18).

I heard of one of them no longer than yesterday: a very honest woman, but something given to lye; as a woman should not do, but in the way of honesty: how she died of the biting of it, what pain she felt, - Truly, she makes a very good report of the worm: But he that will believe all that they say, shall never be saved by half that they do. But this is most fallible, the worm’s an odd worm. (Shakespeare 1994, 318)



His parting words ‘I wish you joy of the worm’ (Shakespeare 1994, 318) are a product of his and the worm’s niggling, wriggling quibbles.

## Head Worms

The point of burial is to allow the work of decomposition to go on unobserved, in, rather than on camera. And yet, human beings are indeed much preoccupied possessed by worms, as though to preempt their posthumous occupation with and of us. Worms are, perhaps, uniquely, on the borderline between the actual and the mythical. Human beings have indeed frequently been subject to infestation by many different kinds of parasitic worms, which has encouraged or been accompanied by mental infestation, by imaginary worms. The idea and the actuality wriggle together. Face in Jonson’s *The Alchemist* says, ‘you must eate no cheese, NAB, it breeds melancholy: And that same melancholy breeds wormes’ (Jonson 1968, III.iv.107-8, p. 78). Many ailments have been ascribed to the malign effects of worms, for example the many peoples in different times and places who have seen toothache as due to the gnawing influence of toothworms. This belief is first recorded as early as 1200 BC in an Egyptian papyrus, in which an official stationed far from home complains that ‘the worm gnaweth at his teeth’ (Townsend 1944, 37), and the belief is entertained in China, Madagascar, America, Europe, the Middle East and many other places. There are different accounts of the origin of these worms. One Swabian story explains that ‘A toothworm... originates from *bits of besom* which stuck in the *teeth* of a *furious* old woman after she had swept the sea, and had twirled the broom over her head. The bits of besom of course allude to the black spots in decayed teeth, the mention of teeth indicates the habitat of the toothworm, while the epithet ‘furious’ applied to the old woman points to violent attacks of toothache’ (Abercromby 1892, 322). The belief in the existence of the toothworm only began to fade in Europe in the eighteenth century.

Worms are at the centre of the understanding of diseases, perhaps just because worms oscillate between the visible and invisible: in William Blake’s poem ‘The Sick Rose’, it is ‘the invisible worm/That flies in the night’ that ‘Has found out thy bed/Of crimson joy/And his dark secret love/Does thy life destroy’. The Vedic literature of India, especially the *Atharvaveda*, a collection of hymns, charms and magical remedies dating from about 1000 BCE, is full of knowledge about *krími*, worms. Worms were thought to come in many different colours – black red, dark-brown and white – and varieties – some equipped with poison sacs, others with three heads and three horns (Zysk

1985, 64). The evidence of the incantations in the *Atharvaveda* suggests that these worms were dealt with by means of symbolic ritual, rather than by any physical means of removal, in which a number of worms were crushed on a stone slab, with the accompaniment of the following chant:

With that which is Indra's great stone-slab, the crusher of every worm, I grind together the worms as the *kbálva*-grains [are ground] with an [ordinary] stone-slab.

I have crushed the seen and the unseen ones; I have also crushed the *kururu*. With the charm, we grind up all the *algáandu* and *sáliina* [types of] worms.

With the great weapon, I kill the *algándus*. [Both] the burned [and] the unburned have become powerless. With the charm, I overpower [both] the remaining [and] the unremaining ones, so that not one of the worms may be left.

With the charm, we grind up the worms: [the one] in the entrails, in the head and in the ribs, [as well as] the *avaskavá* and the *vyadhvará* worms.

I kill that entire race of worms: those which are in the mountains, in the forests, in the plants, in the domestic animals, in the waters [and] those which have entered our body. (Zysk 1985, 68-9)

In England, madness or intemperate fancy were proverbially attributed to the internal operation of maggots, a word which, up until the end of the nineteenth century, referred not just to insect larvae, but also to unpredictable fancies. To be governed by a maggot is to be in the grip of an uncontrollable obsession or delusion; to be 'maggot-pated' is to teem with such fantastical whims or caprices; and to do something 'when the maggot bites', is to be driven to it by an urgent, irrational impulse. The speaker in Robert Lloyd's 1762 poem 'Genius, Envy and Time' reassures Genius that he need take no account of transient reactions born of envy, which will subside into 'Mere excremental maggots, bred/In poet's topsy-turvy head,/Born like a momentary fly,/To flutter, buzz about, and die' (Lloyd 1762, I, 51).

The biting of the maggot of whim or madness was often associated with the effects of ungoverned reading. The extravagant fantasies of Don Quixote drew

the following judgement from Edward Ward in his English rendering of Cervantes's tale:

Idle-Tales, adorned with Wit,  
And hurtful Books with cunning writ,  
In shallow Brains strange Maggots breed,  
And make Men Act the things they read (Cervantes 1711-12, I.188).

Novelists were blamed for spreading infestations of fancy, too. William Cowper concludes a passage of fierce derision directed at the inflammatory powers of novelists by wishing that 'a verse had power, and could command/Far, far away these fleshflies of the land,/Who fasten without mercy on the fair,/And suck, and leave a craving maggot there' (Cowper 1835-7, 8.155). The correlative itch to write also had something of the maggot in it. Samuel Wesley published in 1685 a book of poems entitled *Maggots: Or, Poems on Several Subjects, Never Before Handled*, which opens with the lines 'The Maggot Bites, I must begin:/Muse! pray be civil! Enter in!/Ransack my addled pate with Care/And muster all the Maggots there!' (Wesley 1685, 1).

Perhaps the area in which worms and the wormlike capacities of thoughts about worms come together is in the forms of what is nowadays often called delusional parasitosis. Sufferers experience sensations of itching, biting, or crawling under the skin (a sensation similar to that sometimes described as 'formication' a swarming as of ants), and become convinced that they have been infested by lice, mites or worms. Typically, they scratch obsessively, and collect small specks and fibres from their skin, which they present to physicians, classically in a matchbox, with the claim that they are the causes of their discomfort (repeated analyses have failed hitherto to find any convincing evidence of any infectious agents). In 2001, Mary Leitao of Pittsburgh, who was convinced that her 2-year old son had an infestation of this kind (obsessions, like worms, readily move across and between bodies), set up the Morgellons Research Foundation, to press for medical investigation of the condition. She took the name from a reference she found in a text by Sir Thomas Browne, which refers to an 'Endemial Distemper of little Children in *Languedock*, called the *Morgellons*, wherein they critically break out with harsh Hairs on their Backs' (Elkan 2007, 46; Browne 1690, 5-6; Kellett 1935). There is little doubt among dermatologists that the victims of this condition are suffering from a 'maggot' in the archaic sense of an uncontrollable obsession, though few deny the intensity of the anxiety and discomfort it brings. Some of the discussions on the Morgellon's Disease website forum, from sufferers who believe they may have worms in their brain, indicate how tenacious these ideas are. Responding

to the suggestion from 'Goldenrain' that the worm might lay its eggs in the ear and thereby gain access to the brain, 'Dove' responded:

When I clean the inside of my ears they go behind the ear or the back of my neck. I wonder if "ring around the collar" is the black dust rubbing off. What do you think? The nose is also a conduit to the brain. I have cleaned my nose out with a Q-tip and found the little buggers, fibers and black specs. I have learned that the eyes, ears, nose and throat are connected. This is just a guess, but, if one avenue is cleaned they may venture to another. Not sure where it leads, but, the belly button is a place they like to hibernate. It is only a guess, but, maybe they are trying to dull perceptions, i.e. kill gut feelings. Q-tips and peroxide followed with Oregano oil. Detox patches work on the head, you just have to use them without the tape. I have pulled loads of goo from several locations on my head and behind the ear. This really helps to clear brain fog. If they go in, they can go out. They also do not like the hair dryer. ('Worms in Brain and Elsewhere' 2008)

The rhyme between the form of the obsession and its content is striking. In that they have indeed been invaded by a sort of cognitive virus, a meme of thought that reorganises their intellectual and affective systems in a way that ensures its self-replication, it appears that they are indeed infested, though with the idea rather than the actuality of the worm. But then all human beings have been, to some degree or other, if not physically occupied, then imaginatively preoccupied by vermicular thoughts of worms. The worm is a distinguished member of the class of what I have called *thinking things*, things about which we think that become images of our thinking itself.

### **Continually Recurrent**

Worms are, of course, reminders of time, synecdoches of our inevitable end. It is precisely the predictability of their attentions that allows forensic entomologists, drawing on the work of institutions like the Arizona body farm, which exposes corpses in the open air in order to observe and record in detail the sequence of their physical and biochemical changes, to determine precisely the time of death of murder and accident victims, and the subsequent conditions in which they have been kept. Worms are busy clocks, that tick off perfect time. They enact and emblematises the linear, the inevitable, the irreversible.

And yet they also seem like undoers of the fabric of time, associated as they are with reversing the work of nature. It was not until the famous experiments of Francesco Redi, which showed that worms are not bred spontaneously from decaying matter, but hatch from eggs laid by flies, that the doctrine of the spontaneous generation of worms itself slowly began to decay (Redi 1688). Showing that worms too obeyed the law that everything has its origin in something else, meant that they could be returned to the order of successive and consequential time. And yet, worms seem to retain their connection with reversal, undoing and the nonsuccessive, with a time that goes backwards as well as forwards. Maggots are not acephalic, though they have often appeared so.

Worms, which were thought by Aristotle to be imperfect, and capable of procreation, have seemed to many to resist being put to productive use. This is what makes the measures described in Francis Bacon's *New Atlantis* seem so utopian:

We find means to make commixtures and copulations of different kinds; which have produced many new kinds, and them not barren, as the general opinion is. We make a number of kinds of serpents, worms, flies, fishes, of putrefaction; whereof, some are advanced (in effect) to be perfect creatures, like beasts or birds; and have sexes, and do propagate. Neither do we this by chance, but we know beforehand, of what matter and commixture what kind of those creatures will arise...We have also places for breed and generation of those kinds of worms and flies which are of special use; such as are with you your silk-worms and bees.

Along with silkworm, earthworms are the great exceptions to the worm symbolic economy, precisely in that they have such obvious economic functions. Darwin was among the first to point to the extraordinarily important role that earthworms have in tilling and ploughing the earth. Their circulation, not of humans, but of the humus from which they derive their name, means that they both undermine and preserve:

Archaeologists ought to be grateful to worms, as they protect and preserve for an indefinitely long period every object, not liable to decay, which is dropped on the surface of the land, by burying it beneath their castings. Thus, also, many elegant and curious pavements and other ancient remains have been preserved; though no doubt the worms have in these cases been largely aided by earth washed and blown from the adjoining land, especially when cultivated. The old tessellated pavements

have, however, often suffered from having subsided unequally from being unequally undermined by the worms. Even old massive walls may be undermined and subside; and no building is, in this respect, safe, unless the foundations lie 6 or 7 feet below the surface, at a depth at which worms cannot work. It is probable that many monoliths and some old walls have fallen down from having been undermined by worms (Darwin 1883, 311-12).

At one point, Darwin uses the example of worms to rebut the suggestion frequently made against evolutionary science, that there simply cannot have been enough time for evolution of such complex forms and systems to have taken place. Replying to one of the readers of his work on worms, who had doubted his conclusions, Darwin described it as ‘an instance of that inability to sum up the effects of a continually recurrent cause’ (Darwin 1883, 6). Worms indeed turn, turn things over, overturn. As such, they become an image of time itself, a kind of chronic crucible, which inches things forward only through its churning, back and forth, making, unmaking, doing, undoing.

There is a paradoxical economy in the maggot, in that it is the agent of a depletion, which manifests itself as a foul, teeming opulence, as for example in Ambrose Bierce’s poem ‘Sires and Sons’:

Wild wanton Luxury lays waste the land  
 With difficulty tilled by Thrift’s hard hand!  
 Then dies the State! – and, in its carcass found,  
 The millionaires all maggot-like abound (Bierce 1909, 4.249)

This means that worms and maggots can easily become emblematic of lies, rumours and other such suspicious forms of self-breeding:

Forth wend the lies with maggot life endowed,  
 And multiply with such amazing speed,  
 Man's whole life from the cradle to the grave  
 Is plagued by winged ones, or lies that crawl. (Woolner 1881, 151)

That the worm should present itself in such a multiplicity of forms is perhaps appropriate, since it is the very opposite of identity, or, not even that, since it is an opposite that will not stay in its place as our opposite. The worm does the work of decomposition, but, its capacity to mediate between things, it also swirls them together. Dylan Thomas’s poem ‘The force that through the green fuse drives the flower’ is a poem that forces together opposites of all kinds,

recomposing in painful, poignant ambivalence the things that we are inclined to decompose into opposites. Each of the stanzas ends with a statement of the impossibility of uttering this paradoxical truth of the copresence of opposites, the poem itself concluding

And I am dumb to tell the lover's tomb  
How at my sheet goes the same crooked worm (Thomas 1979, 77)

The sheet is the winding sheet of the lover in the tomb, which makes the worm the puny writing finger and the sexual worm of the penis.

This is something like the lesson that Hamlet offers to teach Claudius, after he has killed Polonius. Hamlet explains that Polonius is 'at supper', though not in the sense that might be thought:

Not where he eats, but where he is eaten: a certain convocation of politic worms are e'en at him. Your worm is your only emperor for diet: we fat all creatures else to fat us, and we fat ourselves for maggots: your fat king and your lean beggar is but variable service, two dishes, but to one table: that's the end...A man may fish with the worm that hath eat of a king, and eat of the fish that hath fed of that worm... a king may go a progress through the guts of a beggar. (*Hamlet* IV.iii)

The worm is indeed, not so much an invocation of death, as a convocation, a calling together of ideas and values that we would prefer to keep distinct, ideas and values that almost mean distinctness itself. Hamlet's worms enact a radically egalitarian politics of the body that dissolve the imperious authority of the body politic.

## References

Abercromby, John (1892). 'An Analysis of Certain Finnish Origins.' *Folklore*, 3, 308-36

Africa, Thomas (1982). 'Worms and the Death of Kings: A Cautionary Note on Disease and History.' *Classical Antiquity*, 1, 1-17.

Bat-Ami, Miriam (1992). 'The Worm Song.' *Children's Literature Association Quarterly*, 17, 31-36.

Bierce, Ambrose (1909). *Collected Works*. 12 Vols. New York and Washington: Neale Publishing Co.

Bondeson, Jan (1997). *A Cabinet of Medical Curiosities*. London and New York: I.B. Tauris.

Browne, Sir Thomas (1690). *A Letter To A Friend, Upon Occasion of the Death of his Intimate Friend*. London: for Charles Brome.

Cervantes, Miguel de (1711-12). *The Life and Notable Adventures of That Renown'd Knight, Don Quixote De la Mancha, Merrily Translated Into Hudibrastick Verse*. Trans. Edward Ward. 2 Vols. London: for T. Norris, etc.

Cowper, William (1835-7). *The Works of William Cowper*. Ed. Robert Southey, 15 Vols. London: Baldwin and Cradock.

Darwin, Charles (1883). *The Formation of Vegetable Mould, Through the Action of Worms With Observations on Their Habits*. London: John Murray.

Donne, John (1662). *Donne's Satyr*. London: by R.W. for M. Wright.

Dunbar, G.K (1944). 'Notes on the Ngemba Tribe of Western New South Wales (Concluded)', *Mankind*, 3, 172-80.

Elkan, Daniel (2007). 'Morgellons Disease: The Itch That Won't Be Scratched.' *New Scientist*, 2621 (12 September), 46-9.

Forsyth, Adrian (1999) 'Jerry's Botfly.' In *Insect Lives: Stories of Mystery and Romance From a Hidden World*, ed. Erich Hoyt and Ted Schultz (Cambridge, Mass.: Harvard University Press), pp. 253-8.

Herodotus (2003). *The Histories*. Trans. Aubrey de Selincourt. Rev. John Marincola. London: Penguin.

Hope, R.W. (1840). 'On Insects and Their Larvae Occasionally Found in the Human Body.' *Transactions of the Royal Entomological Society of London*, 2, 256-71.

James, Maurice T. (1947). *The Flies That Cause Myiasis in Man*. Washington: US Government Printing Office.



Jonson, Ben (1968). *The Alchemist*. Ed. S. Musgrove. Edinburgh: Oliver & Boyd.

Kellett, C.E. (1935). Sir Thomas Browne and the Disease Called "The Morgellons". *Annals of Medical History*, NS, 7, 467-79.

Lactantius (1687). *A Relation of the Death of the Primitive Persecutors*. Trans. Gilbert Burnet. Amsterdam: for J.S.

Lane, Richard P. and Roger W. Crosskey, eds. (1993). *Medical Insects and Arachnids*. London: Chapman and Hall.

Larrey, D.J. (1829). *Clinique chirurgicale, exercé particulièrement dans les camps et les hopitaux [sic] militaires, depuis 1792 jusqu'en 1829*. Paris and Montpellier: chez Gabon.

Laugrand, Frédéric and Jarich Oosten (2010). 'Qupirruit: Insects and Worms in Inuit Traditions.' *Arctic Anthropology*, 47, 1-21.

Lloyd, Robert (1762). *Poetical Works*. 2 Vols. London: for T. Evans.

Marvell, Andrew (2007). *Poems*. Ed Nigel Smith. London: Pearson.

*New Edition of The Babylonian Talmud: Tracts Aboth, Derech Eretz-Rabba, Eretz-Zuta, and Baba Kama* (1918). Ed. and trans. Michael L. Rodkinson. Vol VIII. Boston: Talmud Society.

Opie, Iona, and Peter Opie (1959). *The Lore and Language of Schoolchildren*. Oxford: Clarendon.

Patton, W.S (1921). 'Notes on the Myiasis-Producing Diptera of Man and Animals.' *Bulletin of Entomological Research*, 12, 239-61.

Pope, Alexander (1716). 'To the Ingenious Mr. MOORE, Author of the Celebrated Worm-Powder.' In *Court Poems, Part II* (London: for J. Roberts, 1716), pp. 24-8.

Redi, Francesco (1688). *Esperienze intorno alla generazione degl'insetti*. Florence: Stamperia di P. Matini.

Root-Bernstein, Robert and Michèle (1999). *Honey, Mud, Maggots, and Other Medical Marvels*. London: Macmillan.

Shakespeare, William (1994). *Antony and Cleopatra*. Ed. Michael Neill. Oxford: Oxford University Press.

Thomas, Dylan (1979). *The Poems*. Ed. Daniel Jones. London: J.M. Dent.

Townend, B. R. (1944). 'The Story of the Tooth-worm.' *Bulletin of the History of Medicine*, 15, 37-58.

Wesley, Samuel (1685). *Maggots: Or, Poems on Several Subjects, Never Before Handled*. London: John Dunton.

Woolner, Thomas (1881). *Pygmalion*. London: Macmillan.

'Worms in Brain and Elsewhere.' (2008). Online at <http://www.morgellons-disease-research.com/Morgellons-Message-Board/parasites/4424-worms-brain-elsewhere.html>

Zysk, Kenneth G. (1985). 'Religious Healing in the Veda: With Translations of Medical Hymns From the Rgveda and the Atharvaveda and Renderings From the Corresponding Ritual Texts.' *Transactions of the American Philosophical Society*, 75, 1-311