

**SOOTHSAYING SONG THRUSHES AND LIFE-GIVING SNAILS:  
MOTIFS IN A.S.BYATT'S *BABEL TOWER* AND *A WHISTLING WOMAN***

JENNIFER ANNE JOHNSON\*  
*University of Málaga*

**ABSTRACT.** *Thrushes and snails are scattered throughout the pages of A .S. Byatt's Babel Tower and A Whistling Woman, functioning as motifs that link the main narrative with its intertexts, thematically and symbolically. Although the thrush appears to be a predatory creature, it links a line of soothsayers and helpers created by Byatt herself as well as others in the works of Robert Browning, J.R.R. Tolkien and Thomas Hardy. The snail is a complex figure, associated with myths of life and death as well as with scientific research into neuroscience, environmental studies and DNA, the basis for all life. As a result it serves to bridge the two cultures of the literary and scientific worlds in the second half of Byatt's tetralogy.*

*Keywords:* A. S. Byatt, contemporary British fiction, song thrush and snails, intertextuality, fiction and science.

---

\* Correspondence should be sent to: Jennifer Anne Johnson. I.E.S. Almenara, C/Francisco Labao s/n. 29200 Vélez - Málaga. Spain. Email: jajasp.johnson@gmail.com

**LA CANCIÓN PROFÉTICA DE LOS TORDOS Y LOS  
CARACOLES QUE DAN LA VIDA: MOTIVOS EN *BABEL  
TOWER* Y *A WHISTLING WOMAN***

**RESUMEN.** *Las novelas Babel Tower y A Whistling Woman, de la autora británica A.S. Byatt, están llenas de referencias a los tordos y los caracoles. Funcionan como motivos que relacionan la narrativa principal con sus intertextos de manera temática y simbólica. Aunque a primera vista el tordo parece ser un ave depredatoria, emerge aquí como eslabón que une una serie de figuras que ayudan y que dicen la verdad. Algunas de estas figuras son creaciones de Byatt, además de otras de Robert Browning, J.R.R.Tolkien y Thomas Hardy. El caracol es un ser complejo, asociado con los mitos de la muerte y la vida a la vez que con la investigación científica en los campos de la neurociencia, los estudios ambientales y el ADN, la base de vida. Por lo tanto, sirve para vincular las dos culturas de los mundos de la literatura y la ciencia en la segunda mitad de la tetralogía de Byatt.*

*Palabras clave:* A. S. Byatt, novela inglesa contemporánea, tordos y caracoles, intertextualidad, ficción y ciencia.

*Received 18 April 2010*

*Revised version accepted 30 July 2010*

## 1. INTRODUCTION

A.S. Byatt's novel *Babel Tower* (1996), the third in her quartet, opens with a vivid portrait of a thrush beside his anvil. The anvil is where he smashes a hapless snail before eating it, appreciatively it seems, and then bursting into song. The image of a thrush cracking a vulnerable snail on a stone in order to prise out the tender flesh might, at first sight, suggest symbolism related to the random nature of accident and death, the harsh cruelty of nature in particular or of all life in general. This approach could resonate with comments such as Henry Smee's in "The Changeling", from Byatt's *Sugar & Other Stories* when this character observes that "The world is more terrible than most people ever let themselves imagine. Isn't it?" (Byatt 1987: 155). But although this observation does indeed reflect an underlying awareness of the randomness of human destiny in Byatt's fiction, this interpretation falls short when we read the complex mesh of references to thrushes and snails throughout *Babel Tower* and the concluding novel of the quartet, *A Whistling Woman* (2002). The song thrush is connected with a line of wise thrushes in literature, while the snail functions both on a literary level as a symbol of life and, in a scientific sense, as a means of studying genetics and neuroscience.

Byatt's interest in natural history is clear to see in her fiction and in her critical work. The novella "Morpho Eugenia" (1992) uses insects as metaphors and also as an important element of the plot, intertwined with a tissue of intertextual references which Byatt discusses in *On Histories and Stories* (2000).<sup>1</sup> In *Possession* (1990), the Victorian poet Randolph Henry Ash displays a voracious desire for all types of knowledge, "Ash had been interested in everything. Arab astronomy and African transport systems [...] ectoplasm and solar mythology, the last meals of mastodons and the true nature of manna" (Byatt 1990: 28). This is a trait which, inevitably, he shares with Byatt herself. Her range of interests and references is enormous and covers both arts and sciences. In *A Whistling Woman* she uses peacocks and bower birds both as objects of scientific research and as metaphors, while her ornithological interests are also displayed in her collaboration with the photographer Victor Schrager for whose *Bird Hand Book* (2001) she wrote the texts.

In an article published in *Nature* in 2005, A. S. Byatt wrote about her interest in science as a fascinating source of ideas and new ways of looking at the world. She also described her delight on discovering that there was a link between snails, their name in Latin, the shape of their shells and the double helix of DNA. Moreover, all this could be incorporated into her writing:

I realized, one idle morning, that a snail in Latin is *belix*. And a snail's shell is in the form of a spiral. Later, I discovered that there were two species of snail, *Helix hortensis* and *Helix nemoralis* (the snails of the garden and the grove) that could be fitted into both my paradise garden imagery and my realist scientific tale. (Byatt 2005)

She uses the names and descriptions of these two species of snails on the opening page of *Babel Tower*, referring also to broken alphabets, Greek letters, runes and "C and T, A and G" (Byatt 1996: 1). This brief reference to the four letters of the DNA code hints at a scientific message in what appears to be a literary text, a word picture. In *A.S. Byatt and the Heliotropic Imagination*, Jane Campbell points out that the snail shells can even be seen as a text, given that the scientists who Frederica Potter meets in the novel "can read the snails' DNA on their shells" (Campbell 2004: 233). From the first page, science and literature are intertwined in references to thrushes and snails. Surprisingly, this first page is not the only beginning. There are another three, each of which also opens with the words "It might begin." Richard Todd has explored the significance of these in the structure of the novel.

*Babel Tower* offers three openings that correspond to the three main strands of the story, prefaced by a fourth that provides a kind of continuo. These alternate

---

1. Two of the articles in this book, "Ancestors" and "True Stories and Facts in Fiction" are relevant.

beginnings are of organic importance to both the book's form and content, for they initiate an interwoven, or braided structure. That structure can be figured as a helix or spiral of arbitrary length which, when imagined vertically, assists in our understanding of the book's title. (Todd 1997: 63)

We soon realize that the motifs of thrushes and snails haunt the three main story lines (which do not correspond exactly to the three openings) as well as the continuo. Firstly, in the principal narrative, which recounts Frederica Potter's struggles to lead an independent life in the 60s, there are many references to the world of science in which both thrushes and snails are linked with scientific research and concern for the environment. Secondly, an acquaintance of Frederica's has written a novel entitled *Babbletower*, a gruesomely dark dystopia that has two characters named after the song thrush as well as references to the symbolic use of snails in festivals. In addition, images of snail shells are sprinkled throughout *Babel Tower* in order to mark the beginning and end of each section of *Babbletower*. Thirdly, a woman friend of Frederica's is in the process of telling a children's tale that has a thrush within it as well as a character named after the song thrush.

Jane Campbell has a concise summary of some of the clustering snail and thrush motifs in *Babel Tower* (2004: 232-33), but a few pages later asks "Is there significance in Dol Throstle's being named for the predatory thrush, when she, as a member of the travelling company in Agatha's story, is a benign and helpful figure?" (2004: 236). A closer look at the characters named after thrushes, and the literary connotations of the thrush, reveals that they do not represent a predatory presence, but rather belong to a line of soothsayers and guides that lead us to the truth.

## 2. THE THRUSH AS SOOTHSAYER AND GUIDE

As we know, the opening scene of *Babel Tower* describes a thrush, apparently outside the main narrative, but the fourth beginning to the novel introduces us to another one among the characters of Jude Mason's as yet unfinished book, *Babbletower*. Here, "a small band of free spirits" (Byatt 1996: 10) flee the French Terror and seek to set up a Utopian community without the usual constraints imposed by conventional society. One member of this group is "an older man, who called himself *Turdus Cantor*" (Byatt 1996: 12). Some readers may be disconcerted by what Celia Wallhead calls "the farcical name of 'The Singing Turd' (1997: 134), but Campbell points out that "in spite of its scatological suggestiveness [this] is the Latin name of the song thrush" (2004: 233). Indeed, *Turdus* is the Latin for thrush and a Cantor is a singer, so clearly Byatt intends us to understand this reference, but it is intriguing to note that the true Latin name for the song thrush is *Turdus*

*philomelos*. As the author is known to have a mind which she calls “naturally inclusive” (Reynolds and Noakes 2004: 11) she is unlikely to be unaware of this or of the implications of the story of Philomela who, according to Ovid, was shut up in a tower after being raped by her brother-in-law. He also cut out her tongue to prevent her telling the story of her suffering, but she managed to escape after sending her sister a tapestry that revealed the truth. There are resonances here with the outermost narrative, that of Frederica who has found herself hidden away in the country, deprived of her individual voice and identity and subject to violent abuse by her husband. However, Philomela’s salient trait is her determination to resist tyranny and to tell the truth. A study of the character Turdus Cantor soon reveals that he is one of only three men in the community of *Babbletower* who resist the dominance of their leader Culvert. When Culvert suggests innovations that the reader sees may lead to further manipulation and degradation for the members of the community, it is usually Turdus Cantor who asks pertinent questions about his intentions. Soon after their arrival at the Utopian community, La Tour Bruyade, Culvert argues in favour of communal story-telling:

And as the narrators become more skilled and trusting, and as the listeners become more subtle in questioning and probing, so shall the stories become more and more truthful, as hidden things, shameful things, shameful secrets, desires repressed with violence in the harsh old days, are brought out into a clear, and reasonable, friendly and accepting light and warmth. (Byatt 1996: 65)

His suggestion is met with enthusiasm, but it is Turdus Cantor who queries the advisability of this proposal, asking if it “did not smack in some way of the confessional practices of the old Church, and might not be, as the confessional had been, manipulated by unscrupulous men to instill fear and obedience in the weak” (Byatt 1996: 66). Throughout the novel, Turdus Cantor’s comments serve to reveal the underlying purpose of Culvert’s proposals and actions. When Cantor is given the role of Logos in the New Year festival, he points out that he can no longer sing sweetly as required, as his old voice is cracked (Byatt 1996: 264), and so he has to play pan-pipes instead, but his role as Logos, the word or reason, alerts us to his soothsaying role in the story of *Babbletower*. Moreover, the last page of both this novel within a novel and of *Babel Tower* itself gives him the final word, “Let us go away from here’ said Turdus Cantor” (Byatt 1996: 617), as the three friends, the only survivors of La Tour Bruyade and Culvert’s experiment, walk away from the ruins, looking back on a scene that recalls the snail shells around the thrush’s anvil on the opening page, although this time the creatures devoured were human beings, not snails. Turdus Cantor’s role in *Babbletower* as a speaker of necessary truths, contrasted with the roles of other characters, is emphasized in a comment by the author of the novel, Jude Mason, who objects to an analysis of his work by

a “cold philosopher” because she discourses on the philosophy that underlies the story without ever referring to the characters, so that in this objectionable article about his book “[n]owhere does Culvert *do* or Samson Origen *think* or Turdus Cantor *speak*” (Byatt 1996: 416).

Cantor is not the only character in *Babbletower* who is named after the song thrush. The woman who Culvert perceives as being in opposition to his projects, mainly due to her concern that his plans for communal childcare will destroy the bond between mothers and their children (which is indeed his intention), is called Mavis, an English dialect word, derived from the Old French *mauwis*, for the song thrush. Like Turdus Cantor, she resists some of Culvert’s plans and asks him questions that help to reveal the path that the community is following under his guidance. She is a maternal woman who craves the nurturing role that has been made obsolescent in this new world of Culvert’s. She realizes that she and her husband will be hated for keeping themselves apart from the licentious, frenetic pleasures of the rest of the group because they prefer their monogamous relationship, but she cannot persuade her husband to “entertain” other lovers. He points out that “it would be a blow against freedom of desire to indulge in variety for fear of social disapproval. For such conventional prescription of behavior is what we fled” (Byatt 1996: 206). However, Mavis is right in feeling uneasy about their position within the community, because “Culvert had marked her as his opposer” (Byatt 1996: 205), and he soon contrives her destruction.

The reader discovers that Culvert is not only irritated by her opposition but also disgusted by the sight of her breasts gushing with milk as she suckles her baby. “He felt a desire, as he saw her placidly feeding her child, to run at her with his hands, or even a weapon, to pierce or bruise those assertive rounds, to mix hot blood with the pallid milk, to slice, to sever...” (Byatt 1996: 207). The narrator observes at this point that Culvert did not analyse his feelings about this maternal figure and why he wished to hurt her, but the repulsion that the Lady Mavis inspires in him guides the reader toward a realization that this man, so obsessed with sex, is in fact a woman-hater. Later he meets, but does not at first recognize (although she calls him “my nurseling”), an old crone in a scene that replicates the scene from the tale of Sleeping Beauty when the princess pricks her finger on a spindle in a tower. The old woman instructs him as to the nature of snails and their role in the Feast of Misrule at New Year. Then, when he fails to heed her advice and stop fiddling with her distaff (ancient symbol of womanhood) he pricks himself, and she sucks his bloodied finger. At that point, he is suddenly overwhelmed by a sensuous memory of his infancy, when the crone had been his wet-nurse:

And as his blood ran into the wet saliva and apple-juice on her tongue he remembered everything, his nose up against the warm bag of her breast, the scent

of her milk, his little fists kneading her like sweet pastry, the hot swaddling bands between his legs. And tears ran down his cheeks, for the onward flow of time, for the crumpling and drying of flesh and blood, for the singularity of a man shut in his skin as time sucked the marrow from his bones. (Byatt 1996: 263)

Clearly, we are meant to understand that Culvert had been deprived of contact with his mother during infancy, put out to wet-nurse as was the custom at that time in France.<sup>2</sup> This theme of the separation of mothers from their children, often because they are sent to boarding school, is pervasive in *Babel Tower* and this text within a text, *Babbletower*, is attributed to Jude Mason, who suffered from sexual abuse and bullying at boarding school. The subject of such abuse emerges in other parts of the quartet, as well as in various works by A.S. Byatt such as “The Changeling” (1987) and *The Children’s Book* (2009).

The truthful, sincere and non-manipulative Lady Mavis is destroyed by Culvert. First, her children are targeted by bullies in the communal children’s dormitory. The youngest, a girl ironically called Felicitas, is reduced to a drooling idiot, and her older brother Florian tells his mother how this came about. She refuses to understand that evil can flourish amongst children and lets the aggressors know that she is aware of their responsibility, although she is not vengeful and has no intention of seeking punishment for them. However, the bullies *are* vengeful, and Florian soon disappears. Mavis comes to understand that it was her own ingenuous intervention that led to his death, and commits suicide in the hope that her death will, somehow, remove the blood-lust that has invaded the community, although she is well aware that there is no god to be propitiated by her sacrifice. Her young daughter has already been described in terms of a snail, “she often lay curled like a desperate snail in its shell” (Byatt 1996: 269), and now Mavis herself becomes another snail-like victim as she crashes headlong from the parapet, rejecting her avian nature and willing her own destruction:

So the Lady Mavis came down like a great bird, swaying in her skirts amongst the child’s raucous cries and her own singing. But when she saw the treetops, where she might alight like a bird, or break her fall, she made various ungainly movements with her body, twisting and turning, and managed to project herself head-first [...] And her head hit a sharp rock, like a snail dropped by a thrush, and burst apart [...] (Byatt 1996: 275)

---

2. According to Lawrence Stone, by the second half of the eighteenth century England was unusual in advancing the practice of breast-feeding and abandoning the use of wet-nurses. “The use of rural wet-nurses was more or less universal among all but the lowest classes in the towns and cities of eighteenth and early nineteenth-century France, causing a very high rate of infant mortality. The practice seems to have died out in France only in the late nineteenth century and in Germany only in the twentieth, to be replaced in many cases by bottle-feeding” (Stone 1977: 273).

Culvert's reaction to the Lady Mavis and his rejection of her femaleness as manifested in her maternal role draws attention to his hatred of women, appearances to the contrary. By the end of the book, it is revealed that he has devised an ingeniously cruel instrument of sexual torture with which to put to death his original female partner, Lady Roseace, and that this murder had always been in his mind, even before their arrival at La Tour Bruyade. However the reader has been prepared for this revelation by Culvert's earlier treatment of the Lady Mavis. Culvert chooses to destroy each of these women in a way which is appropriate to the female roles that they fulfill. Because the Lady Mavis lives through her motherhood, he deprives her of her children. Roseace has been his lover, so when he tires of her (and she no longer trusts him) he kills her through her sex. This cruelty is dimly reflected in the outer narrative, which describes Frederica's relationship with her husband Nigel, who was also sent away from his mother, to boarding school. He treats his wife violently and is found to have a secret store of sadistic pornography. From our reading of Culvert's reactions to the Lady Mavis and the crone in the tower, we might conclude that Nigel's inability to have a mature sexual relationship between equals is the product of his early separation from his mother.

The third character who is named after a song thrush is the one mentioned by Jane Campbell, Dol Throstle (from the Old English name for the bird). She is indeed a benign and helpful figure but, as we have seen, in this she follows the nature of the song thrush in Byatt's novel as represented by Turdus Cantor and the Lady Mavis. Dol Throstle is the cook's maid who accompanies Prince Artagall and Mark, his page on their Tolkienesque journey in *Flight North*. This is a children's story which is being narrated by Agatha Mond (the woman that Frederica shares a house with) throughout *Babel Tower* and into *A Whistling Woman*. Dol is no Philomela-like character, but she does exert a guiding influence on the two boys and is the one who first gives Artagall the idea of fleeing north to find refuge from spies and assassins with his father's legendary cousin, Hamraskar Kveld-Ulf. Later he confesses that he is no longer sure, saying "doubtfully that maybe the Northern Kingdom was only legend. Dol had spoken of it with certainty when she hid him in the laundry-cart, but the certainty had diminished with the rough journey" (Byatt 2002: 6). However, Dol Throstle has told the truth and guided him well and, after many dangerous adventures, they reach this sanctuary.

On the way, she befriends an old woman called Throgga, who warns her that the villagers mean to harm Dol and her companions. Throgga also tells Dol tales about the "Bale Fire", giving her valuable information which helps save the travelers by enabling them to help the resentful, suspicious villagers light their sodden firewood and so celebrate the Winter Solstice. In general, Dol Throstle's part is that of a valuable companion who gives good advice and tries to protect her fellow travelers from some of the dangers that lie in wait for them.



So, why should A.S. Byatt use song thrushes as part of a private mythology that draws our attention to characters who tell the truth and provide hope, rather than stressing the predatory aspect of the snail-smashing bird? There are literary clues that illuminate the role of Byatt's thrushes through some of her intertextual references. In *Flight North*, by the time of the Bale Fire, the companions have "acquired an ancient, draggled Thrush, who speaks when he chooses, which is not often" (Byatt 1996: 394). One moment when he chooses to speak is to warn the travellers of the dangers that lie ahead of them in the form of some hybrid bird-women known as the Whistlers. "No one has seen the Whistlers and lived,' said the thrush. 'Indeed, even to hear them is fatal" (Byatt 2002: 247).

This is yet another thrush, and one who, physically, is reminiscent of Thomas Hardy's "Darkling Thrush": "An aged thrush, frail, gaunt, and small,/ In blast-beruffled plume," who "Had chosen thus to fling his soul/ Upon the growing gloom." (1900). Hardy, reluctantly, reads hope for the dawning twentieth century in the bedraggled thrush's joyful song, despite the bleak surroundings. Apart from the physical resemblance between Hardy's and Byatt's birds, and the fact that this is one of the two most famous literary thrushes that Byatt's readers are likely to associate with her characters, Hardy's poetry has already been used in the tetralogy. At the end of *Still Life* (1985), when the members of the Potter family are reeling after the death of Frederic's sister, Stephanie, their father seeks some comfort in Hardy's poem "Hereditry", published in 1917, a reflection on how the dead live on in the features of their descendants and other family members. Significantly, this is a topic explored through the scientific discourse of genetics in the last two volumes of the quartet.

The other most famous literary thrush sings in Robert Browning's "Home Thoughts from Abroad" (1835). Browning was one of Byatt's sources for Randolph Henry Ash in *Possession*,<sup>3</sup> and her admiration for the Victorian poet, is obvious:

He is one of the very greatest English poets, and his greatness has never been fully acknowledged or described, in part at least because his prolific writing and his huge and idiosyncratic erudition make him hard to come to terms with all at once, and in part because he is difficult to docket in terms of the usual literary discussions of Victorian poetry. (Byatt 1991: 29)

Byatt has often referred to Browning, whose life and poetry have influenced her for decades, so his "wise thrush [who] sings each song twice over,/ Lest you

---

3. "The literary giant of his day, *Randolph Ash* is a cross between Browning and Tennyson, with bits of Wordsworth, Arnold, Morris, Ruskin and Carlyle. His imaginary poetry is Browningsque no only in style but in subject as well" (Kelly 1996: 81).

think he never could recapture / The first fine careless rapture!" is a probable intertextual reference which hints at the wisdom of the song thrush.

In *Babel Tower*, one of Byatt's many intertextual references is to J.R.R. Tolkien's *The Hobbit* (1937) in which a wise thrush plays a vital part in the downfall of the dragon and the triumph of Bilbo Baggins and his friends. He helps the travellers gain access to the dragon's lair and later guides a man of Dale who, being one of the old race of men from that area, can understand his speech, and shows him how to kill the dragon. Later, the dwarfs and Bilbo are told that thrushes are good and friendly and that they may trust the thrush's account of events (Tolkien 1937: 54, 178, 192, 209, 216). *Babel Tower* contains many intertexts that that the author has written herself and included in the novel, such as *Babbletower*, and *Flight North*, together with several fragments of Frederica Potter's Burroughs-influenced book, *Laminations*. Of necessity, this last contains fragments of many works of poetry and prose, fact and fiction, written by other authors as well as Byatt. However, one book that is quoted at some length, the only literary work that Frederica's husband, Nigel, is ever shown to have enjoyed, is *The Hobbit*. When Frederica reads it to their young son, Nigel declares that "it's my absolutely favourite book, *The Hobbit*" (Byatt 1996: 34). This is the first time that Nigel enters the novel, and the only occasion on which we see the small family enjoying a harmonious moment together. Byatt has spoken about the influence of Tolkien on the 60s in the UK,<sup>4</sup> and we may assume that Tolkien's thrush has contributed to her personal associations for the song thrush. In each of Byatt's thrush-related characters, the bird has positive connotations that are generally associated with wisdom, guidance, truthfulness and foresight.

### 3. LIFE-GIVING SNAILS IN LITERATURE AND SCIENCE

The connection between song thrushes and snails is established on the opening page of *Babel Tower*, with the portrait of the thrush on his anvil or altar, while the symbolic significance of snails is revealed in the inner text *Babbletower*, when Culvert meets the crone in the tower. She describes how the Feast of Misrule used to be celebrated at the turn of the year. Each festive dish involved eating snails, some of them roasted alive in their shells, for there is "spirit life in snails [because] men say they go between us and those who sleep under the earth" (Byatt 1996:

---

4. On her web page: <http://www.asbyatt.com>, Byatt comments on the ubiquity and significance of Tolkien's fiction in the sixties, saying "I found, rather to my surprise, when I began to think about "the sixties" coolly and at a distance, that there were two equal powers ruling the landscape of our imaginations, the *Hobbit* and the Marquis de Sade".

262). She explains that they are creatures of both the night and the day, they travel between the dead and the living, neither fish nor flesh nor fowl, and so they are “magical, as things undecided are magical, because they are not fixed”. As part of the Feast, after the snails have been “sucked from their hiding place” little lamps are made of their dead shells. The image of a snail, vulnerable despite being curled up within its shell, is used several times throughout *Babel Tower*, as we have seen with reference to the Lady Mavis and her children. However, snails are not only emblems of vulnerability. Their association with life makes them appropriate in the description of sex between Frederica and John Ottokar. “On an impulse she touches his sex, the two balls hanging loose and separate in the cool bag of skin. The penis shrinks like a soft curled snail, and then swings out blindly, a lumbering and supple serpent becoming a rod or a branch” (Byatt 1996: 360).

*Babel Tower* and *A Whistling Woman* contain and hint at many stories in a polyvocal style, but the main narrative belongs to the Potter family, of whom Frederica is the nearest to a protagonist in a large cast. This narrative interweaves her story with several other narrative threads, one of which is associated with scientific research in the areas of genetics and neuroscience. The link is through Frederica’s younger brother, Marcus, a mathematician whose friend, Jacqueline is a biologist doing a Ph.D. which involves monitoring colonies of snails, studying “the genetic changes in their populations, which can be read in the varied bands on the creatures’ shells” (Byatt 1996: 53). Jacqueline has become passionately interested in the new science of ecological studies and gives Marcus a copy of Rachel Carson’s *Silent Spring* (1963), a seminal work that revealed the disastrous consequences of indiscriminate use of the new pesticides which worked their way into the habitat and also into the food chain of birds. On the moors where Marcus lives, the resulting drop in thrush population is an unknown variable in the future of the snail population in Jacqueline’s study. A fellow researcher, Lysgaard-Peacock, explains how the link between snails and thrushes helps their work on genetics and natural selection:

[W]e look for changes in snails with changes in the environment. Some are pink, some are yellow and there is evidence that unbanded snails are more numerous in beechwoods, and striped snails in hedgerows where they may be disguised from thrushes. We came here because there is a thrush’s anvil here where we collect the broken shells – as you see- and count the numbers, and their changes in pattern. (Byatt 1996: 356)

Later, Jacqueline becomes interested in the use of snails’ large neurons as a means of studying the chemistry of memory (Byatt 2002: 52-3), so snails are connected with two areas of research, both fundamental for our understanding of what it means to be human: genetics and neuroscience, as well as with research into humankind’s destruction of the planet through our poisoning of ecosystems.

In *A Whistling Woman*, the relevance of snails and thrushes is further developed in the main narrative, as Jacqueline and the other scientist continue to monitor the snails, both the living specimens and the dead, whose shells they find by examining the areas around song thrushes' anvils. This research is carried out on an isolated farm, involving them in a case of domestic violence and later on in the growth of a strange, isolated cult, so that the scientific work becomes an increasingly integral part of the plot in the last book of the quartet. The significance of snails in the tetralogy becomes clear in the *Nature* article referred to earlier, in which Byatt comments on her meeting with Steve Jones (a scientist who has become very well-known in Britain as a result of his television appearances), whose help she acknowledges in *A Whistling Woman*.

By pure luck I met Steve Jones, an evolutionary biologist at University College London [...]. I discovered that Steve was the world expert on what had [...] been renamed *Cepaea hortensis* and *Cepaea nemoralis*. He had been studying the genetics of the external spiral of colours on the shells of snails [...]. I later asked Steve if he could see any connection at all between snails and work on neurons in the brain, on memory: he said that snails had giant neurons which made them peculiarly apt for this kind of experiment. I had an imagined woman scientist whom I needed to move from snail genetics to neuroscience. Curiosity is a profound drive in both novelists and scientists. I took great pleasure in learning about snails. (Byatt 2005: 295)

Snail shells are part of mathematical enigmas too. The mathematician, Marcus, is fascinated by the Fibonacci spiral, exemplified in natural phenomena such as fir cones and some snail shells, which "became closer and closer to the ratio of the Golden Section as the series progressed. As though 0.618034 was a mystical constant in the geometry of life" (Byatt 2002: 67). This observation highlights the link between snails and all other types of life, as well as recalling the observation, made by Frederica's lover, John Ottokar, that God was "to be seen in mathematics. God is mathematics, the form that is in everything" (Byatt 2002: 64). Byatt has stated her belief that the Fibonacci spiral is "an example of a platonic order – a sense that an invisible mathematical order informed all our physical accidental world. My fearful mathematician at the end of the third novel moves from studying the computer as a brain to studying this spiral. This is for him a kind of paradisaal completeness" (Byatt 2005: 295).

The opening page of *Babel Tower* refers to the beauty of the thrush's song, whose "limited lovely notes [...] give us such pleasure" (Byatt 1996: 1), while snails are delightful too. The mathematical elegance inherent in their spiral shells implies beauty, and the snails in the early morning mist are described in loving detail that lingers on their colours and shapes as they slide over turf and stone walls:

[T]heir dove-grey translucent bodies glistening with their own secretions, their fine horns wavering before them, testing the air, peering quietly around. Their

shells were variegated and lovely, some a delicate lemon, some a deep rose, some a greenish soot-black, some striped boldly in dark spirals on buff, some with creamy spirals on rose, some with a single band of dark on gold, some like ghosts, greyish-white coiled on chalk-white. (Byatt 2002: 17)

This colourful description recalls others by Byatt, about snakes in *The Game* (1967) and “A Lamia in the Cévennes” (1995) and reminds us that there is beauty in unexpected places. Snails are thus connected with science, literature, sex, legends and beauty as well as symbolizing the fragility of life in the face of inevitable violence, either on the thrush’s anvil or due to the cruelty of men. In death, snails are associated with stones, which also recur throughout *Babel Tower* and *A Whistling Woman*, but their principal resonance is with life, both symbolically and through their use for scientists who work in two of the most significant areas of modern research: genetics and neuroscience. The study of science implies the search for truth, and the link between these snails and their predator, the song thrush, leads us to characters who speak the truth and are not the violent dealers of death one might expect from the portrait of a thrush on the opening page of *Babel Tower*.

#### 4. CONCLUSION

In *Babel Tower*, the use of thrushes as a motif guides our understanding of characters who speak the truth and who are to be trusted, thereby also linking three layers of tales within tales in this novel: *Babel Tower*, *Babbletower* and *Flight North*. This perception of how Byatt uses thrushes has been overlooked by critics who have only seen the bird as a menacing predator and who fail to understand why Byatt has named several of her “good” characters after such an apparently unsavoury creature.

The figure of the thrush is used to establish intertextual connections with thrushes in the works of three other writers whose writing resonates through Byatt’s fictional and critical publications: Robert Browning, Thomas Hardy and J. R. R. Tolkien. Through the Latin name for the song-thrush there is also an association with Ovid’s tale of Philomela.

Snails are significant symbolically in the tales within the novel *Babel Tower* and thematically as part of the scientific discourse in both this and in the last volume of the tetralogy, *A Whistling Woman*. The disciplines of genetics and neuroscience are explored throughout the second half of the quartet, and in both of these areas snails are involved, in the former through the study of the markings on their shells and in the latter due to their large neurons, which render them exceptionally useful for experiments. As a result, the symbolic and scientific levels of Byatt’s narratives are associated through the figure of the snail.

Both thrushes and snails contributed to what was a new area of scientific and political controversy in the 1960s, that of ecological studies and the growing awareness of environmental issues. We have seen that one of Byatt's intertextual references is to Rachel Carson's *Silent Spring*, a seminal work in this area. The quartet is a work of historical fiction, although it is about relatively recent history, and the awareness of this issue in these novels highlights the shift in our attitudes since the mid-twentieth century. Concern for the environment and interest in the scientific research associated with it also arise in other work of Byatt's, such as *The Biographer's Tale* (2000), in which the narrator evolves from being a postmodern literary theorist to working as an amateur assistant to a bee taxonomist who researches palaeoecology. Even in these circumstances, the scientific discourse at the end of the book is intertwined with references to poetry, from Ovid to Sidney to Tennyson. In literature and in science Byatt has found discourses which are fruitful in their intermingling, and this interdisciplinary dialogue is exemplified in *Babel Tower* and *A Whistling Woman* by her use of the thrush and the snail.

## REFERENCES

- Browning, R. 2000 (1845). "Home Thoughts from Abroad". *The Norton Anthology of English Literature*. Ed. M. H. Abrams. New York. W. W. Norton & Company. 1358.
- Byatt, A. S. 1967. *The Game*. London: Chatto & Windus.
- Byatt, A. S. 1986 (1985). *Still Life*. Harmondsworth: Penguin.
- Byatt, A. S. 1993 (1991) *Passions of the Mind*. London: Vintage.
- Byatt, A. S. 1995 (1987). "The Changeling". *Sugar & Other Stories*. London: Vintage. 147-160.
- Byatt, A. S. 1995 (1992). "Morpho Eugenia". *Angels and Insects*. London: Vintage. 3-160.
- Byatt, A. S. 1997 (1996). *Babel Tower*. London: Vintage.
- Byatt, A. S. 1998 (1995). "A Lamia in the Cévennes". *Elementals, Stories of Fire and Ice*. London: Vintage. 79-111.
- Byatt, A. S. 2000. *The Biographer's Tale*. London: Chatto & Windus.
- Byatt, A. S. 2001 (2000). *On Histories and Stories Selected Essays*. London: Vintage.
- Byatt, A. S. 2003 (2002). *A Whistling Woman*. London: Vintage.
- Byatt, A. S. 2005. "Fiction informed by science". *Nature* 434 (March): 294-297.
- Byatt, A. S. 2009. *The Children's Book*. London: Chatto and Windus.
- Campbell, J. 2004. *A. S. Byatt and the Heliotropic Imagination*. Ontario: Wilfrid Laurier UP.

- Hardy, T. (1900) "Darkling Thrush." *The Norton Anthology of English Literature*. Ed. M. H. Abrams. New York: W. W. Norton & Company. 1937.
- Kelly, K. C. 1996. *A. S. Byatt*. New York: Twayne Publishers.
- Reynolds, M. and J. Noakes. 2004. "Interview with A. S. Byatt". *A. S. Byatt The Essential Guide*. London: Vintage. 11-32.
- Schrager, V. and A. S. Byatt. 2001. *Bird Hand Book*. New York: Watson-Guption Publications.
- Stone, L.1979 (1977). *The Family, Sex and Marriage in England 1500-1800*. Reading: Pelican Books.
- Todd, R. 1997. *A. S. Byatt*. Plymouth, U.K.: Northcote House Publishers Ltd.
- Tolkien, J. R. R. 1975 (1937). *The Hobbit or There and Back Again*. London: Unwin Paperbacks.
- Wallhead, C. 1997. "The Un-Utopian Babelic Falleness of Language: A. S. Byatt's *Babel Tower*". *Dreams and Realities. Versions of Utopia in English Fiction from Dickens to Byatt*. Annette Gomis van Hetteren and Miguel Martínez López, eds. Almería: Servicio de Publicaciones de la Universidad de Almería. 1333-1350.