REMARKABLE CREATURES: FICTIONALISING THE ROLE OF WOMEN IN THE ADVANCEMENT OF EARLY-NINETEENTH-CENTURY SCIENCE

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"If it can't happen in fiction, surely it won't happen in life" (Chevalier 210)

Foreword

Contrary to what one might think, my encounter with these "remarkable creatures" was due neither to the success of the novel ("a *Sunday Times*' bestseller"), nor to the visibility of its author (Tracy Chevalier) and much less to the recent film version (*Ammonite*, starring Kate Winslet and Saoirse Ronan),¹ but rather to my interest

¹ Although the action of the film begins after the end of the plot of Tracy Chevalier's novel and the portrayal of Lyme and especially that of Mary Anning are excellent, the romantic relationship between Mary (already a mature woman) and a young woman who has been sent by her husband to Lyme for the sea air, due to her symptoms of melancholy, is highly improbable, and the fruit of a desire to introduce a homosexual relationship into the film between two characters portrayed by well-known actresses. It should be noted that this is not the first film about Mary Anning. A short film by Natashia Maddox entitled *Mary Anning*,

in a particular kind of literary form, the historical novel. In one of the case studies included in Narrative Strategies in the Reconstruction of History (2018), I found an analysis of gender reconstruction in the historical novel Remarkable Creatures, which focussed upon the fact that the characters in the story, Mary Anning (1799-1847) and Elizabeth Philpot (1780-1857) had merely served as an excuse for the author to make their fictional lives much more interesting than they actually were, conferring upon them an importance that they never had, nor indeed could have aspired to in English society during the first decades of the nineteenth century. Thus, in this article, from the point of view of the fictionalisation of Science in Literature, I would like to discuss how the practice of palaeontology and geological studies is represented in British historical fiction of our own times, through two female characters, who were contemporaries of Jane Austen. After a few considerations of a general nature regarding the construction of the contemporary historical novel and some observations concerning the true state of paleontological and geological studies in the first decades of the nineteenth century I will move on to deal with the way the choice of these two areas of Earth Science fulfilled the author's objectives.

1. Historical Fiction Today

As well as providing entertainment, the principal aim of the nineteenth-century historical novel, according to Sir Walter Scott's model, was to instruct the reader about the principal events and the leading figures of History, whilst respecting certain clearly defined rules, a concept which, nowadays, no longer applies. For a start, today's historical novelists tend to give voice to those who, for one reason or another, were silenced by History, such as women unknown to the general public, like those in the novel I am dealing with now, endeavouring, in this way, to promote a critical reflection on pressing issues such as the status of women, through the fictionalisation of History.

produced for Channel 4 in 2017, does greater justice to a figure who is considered today as the "Mother of Palaeontology".

The notion of History, itself, is being redefined by contemporary novelists and critics such as A.S. Byatt, who considers that historiography does not restrict itself to what allegedly took place or what historians tell us but is rather a "moving tapestry", an expanding, complex narrative or a set of narrative strategies, to which the authors of historical novels confer more importance than to the story itself.² How, then, should "historical fiction" or the historical novel be defined today?

Gillian Polack, in *History and Fiction* (2016), proposes four key factors which should be observed by a writer of historical fiction: research, interpretation, responsibility and transparency, all of which can be found in Tracy Chevalier's novel. In effect, the narrative provides evidence of the author's thorough historical research into both the status of women and the study of Earth Sciences in early nineteenth-century England, based on the work of a number of different experts, as Chevalier recognises in her "Postscript" (346-350).³ Given the author's aims, her interpretation of the gathered data and the description of the characters is carried out within the limits of credibility, revealing, in this fictional recreation, both responsibility and transparency, particularly in the listing of consulted sources at the end of the book.

This new historical fiction or neo-fiction is clearly distinct from the post-modern novel, as it relies upon the narrative, verisimilitude and a new approach to realism, not the realism of the eighteen hundreds, but rather a strategy of confronting the real which embraces fresh possibilities, namely the introduction of post-modern aesthetic features, which in *Remarkable Creatures* is manifested by a two-voiced discourse. The narrative develops through the voice of Mary Anning, displaying all the signs of a working-class woman, and that of Elizabeth Philpot, the other main character.

On the other hand, Tracy Chevalier tends to perceive the process of (re)construction of the past in a recuperative rather than revisionist way, at the same time as proposing new ways of looking at the women of yesteryear and revealing an inclination to focus

² Cf. Terenas 2019.

⁴ Outstanding amongst these is a brief biographical sketch of May Anning, by Hugh Torrens, as well as several studies in the fields of Geology and Palaeontology, especially those concerning the discovery of the first dinosaurs.

on situations in which her female characters are confronted by unfamiliar experiences, which find a parallel in our own day.

Whilst adopting a recuperative and feminist viewpoint, mainly through her focus on the previously untold stories of women who are little-known today, Chevalier establishes an intrinsic dialogue with Science, more specifically with Palaeontology and Geology, so that it would be opportune, at this juncture, to recall the "state of the art" in these two disciplinary areas at the beginning of the nineteenth century, which leads me to the second part of this article.

2. Geology and Palaeontology in the Early Decades of the Nineteenth Century

The action of the novel takes place, essentially, between 1804 and 1825, a period in which the study of the Earth, its origins, nature and transformation were fashionable in scientific circles, not just in England but all over Europe, as was the study of fossils, to provide evidence of the geological past of the planet. It was a time in which gigantic skeletons began to be discovered which had no relation to creatures previously seen or described, and though revealing certain similarities to fish or reptiles, they were of a size which greatly exceeded anything known to Man. They were given the name Saurians and were thought to be similar to the creatures shown in the following illustration:



Fig.1 – Jurassic Marine Animals

This was also the time in which the works of the following authors were beginning to have a great impact on the Earth Sciences: Jean-Baptiste de Lamarck (1744-1829) – *Philosophie zoologique* (1809) –; Georges Cuvier (1769-1832) – *Le reigne animal distribué d'aprés son organisation* (1816-1829) –; William Buckland (1784-1856) – *Reliquiae Diluvianae* (1823); – William Whewell (1794-1866) – *Astronomy and General Physics Considered with Reference to Natural Theology* (1833); Louis-Constant Prévost (1787-1856) – *Traité de géographie physique* (1836); – and Charles Lyell (1797-1875) – *Principles of Geology* (1830-1833), amongst many others.⁴

It was at about this time that the age of the Earth was beginning to be questioned, or rather the estimate of around six thousand years made by Bishop James Ussher (1581-1656) – a figure who is mentioned on numerous occasions in the book (110, 122-123, 214 e 294) –, as well as the literal interpretation of the biblical chapter "Genesis", in particular the time attributed to the creation of the World – seven days – which began to appear manifestly insufficient in view of the existence in the distant past of now-extinct species. Elizabeth Philpot, a student of the work of Georges Cuvier,⁵ found it difficult to find an explanation for herself and for others:

(...) the fossils I was finding were so puzzling and filled me with questions I wanted to air. Ammonites, for instance, the most visible and striking of the fossils found at Lyme: what exactly were they? (...) It was very peculiar that I could find so many fossils of them on the beach, and yet not see them alive. This did not seem to bother others, however. (...) "How can you be so fond of mere stones?" a new friend [of] Margaret (...) once asked. "They're not just stones," I tried to explain. "They are bodies that have become stone, of creatures that lived long ago. When one finds them, that is the first time they have been seen for thousands of years." "How horrible!" she cried, and turned to listen to Margaret play (42).

⁵ Cf. Furtado 2012. A celebrated French naturalist and zoologist of the first half of the nineteenth century, Georges Cuvier has sometimes been termed the "Father of Palaeontology". A prominent figure in his day in Natural History research, Cuvier compared fossils with living animals and established comparative anatomy as a method of acquiring further knowledge of living beings. Miss Philpot's "bible" may well have been *Tableau élémentaire de l'histoire naturelle des animaux* (1797-1798), *Leçons d'anatomie comparée* (1800-1805) or *Le Règne animal* (1817).

3. Fictionalisations of a Fossil Collector and a Fossil Hunter

During the nineteenth century it was perfectly acceptable and indeed desirable for a spinster to collect plants, insects, or shells. As Hippolyte Taine (1828-1893) remarked in his account of his journey to England, published under the title *Notes sur l'Angleterre* (1872), unlike futile French women, English women and particularly those who were unmarried had a strong inclination towards "things of nature" and devoted themselves to learning "natural history, botany, mineralogy and geology". According to Taine, they often travelled to the countryside or the seashore in search of minerals and plants to add to their own collections (1883, 45). However, the French philosopher makes no reference to collections of fossils nor to the fact that some women discovered them and removed them from the rocks.

In fact, whereas plants, shells or butterflies might have been appropriate specimens for a lady's taste, there was nothing in a fossil which ought to attract her interest, all the more so as the strength of a man was required to remove them from their rocky resting places. The two women in History and fiction were, therefore, exceptions to the rule and perhaps for this reason their work was underestimated by the scientists of their time. Be that as it may, it was for precisely this reason that Tracy Chevalier made them the leading characters of her novel.

The three unmarried sisters, Elizabeth, Margaret and Louise Philpot, not being known for their looks, were sent to live at Lyme Regis after the death of their parents and upon the marriage of their elder brother, John, heir to the fine town house in London where they had always lived. I quote the words of Elizabeth on the unhappy event: "In bed that night I wept, as I suspected my sisters did as well, for our London lives as we know them were over. Once our brother married there would be neither the place nor the money for us all to live at Red Lion Square." (15).

Elizabeth Philpot collected the fossils of fish, a hobby which was incomprehensible even to her sisters, especially Margaret, who continued to keep her hopes alive of finding a husband. To Elizabeth, as an unmarried woman, fossil-collecting gave a sense of purpose to her life, as she, herself, recognises: "I grew certain that fossils were to be my passion. For I had to find passion: I was twenty-five years old, unlikely ever to marry, and in need of a hobby to fill my days. It is too tedious to be a lady sometimes." (26)

In Lyme, a seaside resort situated on the south-east coast of England (Fig. 2), the three spinsters set up house at Morley Cottage, "a lady's home, the size of a lady's character and expectations". (24). It was then that Elizabeth met the diminutive and somewhat peculiar Mary Anning, of only eleven years of age, who contributed to the meagre income of her family by collecting small fossils on the rocks along the seashore ("curies" as she called them), later to be cleaned and carefully prepared to be put on sale on a stall pitched in front of her house.



Fig.2 – Lyme Regis

Elizabeth began to accompany her on her fossil hunts, exchanging her bookish knowledge for Mary's empirical know-how, in a relationship which brought mutual benefit:

Soon Mary had found her way into our lives, cleaning fossils for me, (...) [and] accompanied me to the beach when I went out hunting for fossils (...). I was more at ease when she was with me, for I worried about the tide cutting me off. Mary had no fear of that, for she had a natural feel for the tides that I never really learned. (...) While I consulted tide tables in our almanac before going out on the beach, Mary always knew what the tide was doing. (...) she taught me many things: how the sea sorts stones of similar sizes into bands along the shore, and which band you might find what fossils in; how to spot vertical cracks in the cliff face the warn of a possible landslip; [and]where to access the cliff walks we could use if the tide cut us off. (38).

When Mary discovers the first fossil of a hitherto-unknown animal, Elizabeth recognises the importance of the find taking into account its size and the outline of the skeleton, the head and the jaws, and offers to pay for some men to take on the heavy job of removing the specimen from the rock and carrying it home to be cleaned and prepared by Mary (Fig.3). Note Elizabeth's reaction when she sees the enormous fossil on Mary's working table:



Fig.3 – Mary Anning's Ichthyosaurus (discovered in 1810-11)

I looked for a long time in silence, circling the table to inspect the skull from every angle. It was still entrapped in stone, and would need much attention from Mary's blades, needles and brushes – and a good bit of hammering too. (...) "I've brought you Cuvier as a guide, though I am not sure how much it will help." I opened the book to the page with the drawing of a crocodile. I had studied it earlier, but now, standing next to the skull with the picture in hand, it was clear to me that this could be no crocodile – or not a species we were aware of. (97-98).

And then when she sees the second one:



Fig.4 – Mary Anning's Plesiosaurus (discovered in 1823)

(...) the creature (...) was an impressive, eighteen-foot monster unlike anything we had ever heard of. (...) It was not just the huge eyes, the long smooth snout and even teeth. It also had paddles rather than legs, and its torso was an elongated barrel woven of ribs along a strong spine. It ended in a long tail, with a kink partway along vertebrae. It made me think a bit of a dolphin, of a turtle, or a lizard, and yet none of these was quite right. (...) it was the body of a creature that no longer existed in the world. (114).

In fact, the first specimen was of an ichthyosaurus, a species of marine reptile of the Jurassic era, unknown until then, which would be bought and exhibited in the Natural History section of the British Museum, with the name of its purchaser attached to it. Up to this point, as improbable as it might seem, Fiction goes hand in hand with the History of Science in England. But Tracy Chevalier wanted to give her characters greater importance in their own day, as recognition of their contribution to the advancement of Science only came much later.

What then were the strategies employed by the author to magnify the role played by these two women in the England of the first decades of the nineteenth century? The answer lies in the way they are portrayed, as well as the secondary characters. Let us begin with the way Elizabeth Philpot is portrayed (Fig.5). From the start Elizabeth cultivates a close relationship with some of the better-known geologists of the day, particularly William Buckland,⁶ Henry de la Beche⁷ and even Charles Lyell.⁸ Although her collection was known to the first two and she corresponded with both, the degree of proximity she is given in the novel to these leading figures in the History of Science cannot totally correspond to reality. It is worth recalling that women were not permitted to frequent the circles in which such men freely moved: gentleman's clubs, private auctions, the Universities of Oxford and Cambridge and, of course, the Geological Society.

⁶The work of the Anglican clergyman William Buckland, Professor of Theology at Oxford and a well-known scientific writer, is one of the best examples of the continuing predominance of Natural Theology and it would still be studied at Universities until the final years of the century. Buckland argued that these unknown species had lived before the Biblical flood and had disappeared as a result of it, Man having been created some time afterwards. In this way Buckland encouraged the study of Geology in the academic world, whilst making it acceptable to the Church of England to which he belonged.

⁷ The British geologist and palaeontologist Sir Henry Thomas De la Beche (1796-1855), was the first director of the Geological Survey of Great Britain, a pioneering institution in survey methods, and also the first Chairman of the Palaeontological Society. During his childhood De la Beche lived with his mother for a time in Lyme Regis, where he became friends with Mary Anning and began to take an interest in palaeontology. He later followed a military career, returning to London, at the end of the Napoleonic Wars, to become a keen fossil-hunter, illustrator and member of the Geological Society. De La Beche collaborated with William Conybeare (1787-1857) in an important article on the anatomy of the ichthyosaur and the plesiosaur found by Mary Anning. Outstanding amongst the principal studies he published during the period under study were *Geological Notes* (1830), *Sections and Views of Geological Phenomena* (1830) and *Geological Manual* (1831).

⁸ Charles Lyell, a student of Buckland's, postulated a new theory, uniformatism, which was counter to his teacher's ideas. One of the great popularisers of Geology in Britain, Lyell published a three-volume treatise entitled *Principles of Geology* in which he argued that the alterations to the Earth's crust were not the work of colossal catastrophes but rather to causes which continued to operate in an identical fashion in the nineteenth century, such as water and wind erosion, earthquakes or volcanic activity. Such processes operated in a uniform way, not continuously but in long-lasting cycles. As far as living beings were concerned and the transformations that they underwent Lyell rejected the theories of Lamarck and evolutionism. In his view the first species had been created immutable and susceptible only to small variations, some of them having become extinct, and others appeared to replace them.



Fig.5 – Elizabeth Philpot (1780-1857)

However, Elizabeth manages to intimidate a collector, with whom Mary Anning has become enamoured and to whom she gives all her finds, obliging him to recognise in public that Mary was responsible for the discovery of all the fossils (including a second ichthyosaurus) which he had acquired. Note the way Elizabeth confronts him publicly accusing him of fraud in one of the wings of the British Museum, something which was highly improbable in early nineteenth-century English Society:

"You may think you found all of those (...) fragments (...), but it was Mary who directed you to them. (...) You are no hunter. You are a gatherer, a collector. There is a difference. You didn't find the ichthyosaurus. Mary did, and dropped her hammer by it so that you would pick it up (...). I saw you. It is her ichthyosaurus, and you have taken it from her. I am ashamed of you. (...) Did you pay her for any of the specimens? (...) you must understand that you have robbed (...) Mary and her reputation.

Colonel Birch frowned. "What would you have me to do, Miss Philpot?"

"Give her back what she found – at least the ichthyosaurus. (...) (218-221).

Birch does not return the specimen, which is sold at auction to Cuvier, but as Elizabeth succeeds in entering a private salon, frequented only by men, (equally improbable in the real world), in which Mary's fossils are being sold at high prices, Birch not only feels obliged to return the money to the Annings, but also to recognise that the discoveries had been made by Mary:

Colonel Birch kept his eyes on my face, as if to calm me [and said]:

"What I did not tell you before (...) is that it was (...) Mary Anning who discovered (...) the specimens that make up my collection, including the fine ichthyosaurus just sold. She is (...) the most remarkable young woman I have had the privilege to meet in the fossil world. (...)" (235-236).

When William Buckland recognises that another fossil discovered by Mary belongs to a new species, which he names the plesiosaur, Elizabeth realises that Mary would, once again, be excluded from the meetings at which the experts would discuss and write about the creature. Elizabeth then decides to travel alone to London, with the aim of finding a way into these restricted chambers, to assure that, in fairness, when the plesiosaur is presented to the Geological Society, the name of her friend is at least mentioned.

Her elder brother tries to dissuade her, reminding her sensibly that "they would not let her in, for she was a lady, and their charter does not allow it." "Even if they let you in [he said to Elizabeth] they would not listen to you. (...) They will not discuss Mary. She is only the hunter". (290-291) But Elizabeth does not give up and accompanied by her eldest nephew, she succeeds in convincing the doorman of the Geological Society to summon William Buckland, who, though unable to allow her to enter the room of scientists to whom the plesiosaur was to be presented for the first time, decides to hide her in a kind of closet where Elizabeth can witness the proceedings without being seen.

The exaggeration of Elizabeth's courage, together with the closeness of her relationship with Buckland, allows the fictional character to confirm that the members of the Geological Society acknowledge that the discovery was of a previously-unknown creature and that the person responsible for this extraordinary find was Mary Anning of Lyme. Elizabeth clearly hears the speaker's words of gratitude and recognition: "I should just like to express my thanks to Miss Anning, (...) who discovered and extracted this magnificent specimen. (...) You will be amazed and delighted by this ground-breaking discovery". (308)

I would now like to look more closely at the portrayal of Mary Anning. In figure 4 we can see a painting made a few years after her death at the side of a photo of Kate Winslet playing the role of Mary in the movie *Ammonite*:



Fig.4 – Mary Anning (c. 1850)/Kate Winslet (2020)

Mary, who had begun to take an interest in fossils from an early age on her walks along the seashore, is described in the novel in the following way: "Mary Anning leads with her eyes. That was clear even (...) when she was a girl (...), and she has a fossil hunter's tendency always to be looking for something (...)". (13)

Mary Anning's gender, social class and religion (Congregationalist and dissenter) were unsurmountable obstacles to her membership of the British Scientific community which was dominated by erudite, upper-class male Anglicans. However, Mary receives correspondence from the greatest geologists of her day, including Buckland, De La Beche and König,⁹ who are anxious to meet her, consult her or purchase fossils:

She [Mary] (...) received letters, from William Buckland asking after a specimen, or Henry De La Beche (...) who wanted something from [her] (...). Anning was

¹⁰ The German naturalist Charles Dietrich Eberhard König (1774-1851) moved to England around the year 1800 to organise Queen Charlotte's collections. He was later invited to work at the British Museum and in 1813 or thereabouts, he was appointed to be the head of the geology and mineralogy sections, having devoted special attention to the mineral and fossil collections. He remained in the post until his sudden death in 1851.

even corresponding with Charles Konig at the British Museum, who had bought Mary's first ichthyosaurus (...) and was interested in buying others. All of these letters continued to arrive (...) (201).

In the novel, Mary Anning even receives a reply to a letter accompanied by a drawing of her latest discovery, the plesiosaur, from Paris, from the famous French geologist Georges Cuvier. Although Cuvier doubted the authenticity of the fossil, suggesting that Mary had joined together parts of different animals, Mary was totally convinced that it was a new species, hitherto unknown, even to the great expert Cuvier (280-281).

Mary was also visited and consulted by some of the great names of Science of the time including Buckland, Lyell and even the French expert Constant Prévost.¹⁰ Buckland travels to Lyme to talk to her about her discoveries and asks to accompany her on her walks along the seashore and across the rocks at Lyme Bay. The close friendship, and above all, the measure of intimacy between the already famous Oxford geologist, member of the Geological Society, and the working-class girl, places Mary on a level of social parity which would have been virtually impossible at the time:

Mr Buckland got down from his horse and stumbled across the pebbles. "I heard you found a monster, and I've come all the way from Oxford to see it," he declared, his eyes already scanning the landslip. "I cancelled my lectures just to come early". (...) He [Mr Buckland] entertained me with stories of his travels to the Continent (...), and with his antics at Oxford. He begun talking to me about things we'd found over the years that didn't seem to belong to the ichie: verteberries wider and chunkier, paddle bones flatter than they should be. One day he showed me a verteberry with a piece of rib that was attached lower than on an ichie's verteberry. "Do you know, Mary, I think there may be another creature out there," he said. "(...) Wouldn't that be something, to find another of God's creatures?" For a moment my mind went clear, and I almost said "Yes, I think so too. I been wondering about a new monster for years." (147, 240).

Accompanied by Constant Prévost, Charles Lyell also pays Mary a visit, and expresses great interest in her work, asking to examine the specimens she has collected. In the

¹¹ The French geologist Louis-Constant Prévost (1787-1856) collaborated closely with Charles Lyell, whose theory he subscribed to, was one of the founders of the Société Géologique de France (1830) and Professor of Geology at the Sorbonne. Amongst his best-known works is *De la Chronologie des terrains et du synchronisme des formations* (1845).

fictional account of this meeting, Mary is completely at ease in her conversations with the eminent geologists who accompany her, listen carefully to her explanations and learn from them:

The next two days I was busy with Mr Lyell and Monsieur Prévost, taking them upon beach to show them where the beasts had come from and teach them how to find other curies. Neither had the eye (...). [I]n front of them I found yet another itchie (...). With my hammer I chipped off slices of rock to expose the eye, the vertebrae and ribs. I confess it were a pleasure to wield my hammer and bring the creature into sight before their eyes. "Miss Anning, you are truly a conjurer!" Mr Lyell exclaimed. Monsieur Prévost too was impressed (...). The men wanted to see more (...) (334).

Both Buckland and Elizabeth (who belongs to a much loftier social class than the Annings) unequivocally recognise Mary's huge contribution to the advancement of Science, especially as far as the extinction of the species was concerned, long before Darwin's far-reaching conclusions, as Elizabeth clearly affirms:

(...) she [Mary] was contributing to a new way of thinking about the world. (...) [She discovered] a creature that had never been seen before, that did not exist any longer, but was extinct (...). Such a phenomenon made people think that perhaps the world is changing, however slowly, rather than being a constant, as had previously thought. (293).

A third narrative device consists of the construction of several male secondary characters such as Lord Henley¹¹ or Colonel Birch,¹² who also collect fossils, not because they have a genuine interest in them but due to the fact it enhances their cultural status, makes them appear worldly and intelligent and is a profitable pursuit:

There are several people I have met throughout my life whom I have regarded with disdain, but none has angered me more than Henry Hoste Henley. (...) He had a collection of fossils too (...) [but] [he] knew nothing about (...) [them] other

¹² Henry Hoste Henley (?-1833) purchased the first ichthyosaur discovered by Mary Anning. The specimen would later become part of the collection of William Buckley who endowed it to the Natural History Museum in London. In 1819 the collection was sold to the British Museum, where it can still be found today.

¹³ Lt. Col. Thomas James Birch (1768-1829) dabbled in the fossil world, buying and selling fossils merely for profit.

than that they were collectible and made him appear worldly and intelligent. (43, 89).

And the following disparaging comment is made regarding Col. Birch:

Colonel Birch was to stay for several weeks to build up his collection (...). [But] I discovered (...) he did not find fossils himself. He did not keep his eyes on the ground as Mary and I did, but (...) reached out and picked up what we were looking at before we had time to do so ourselves. (...) [his] amateurism appalled me. Like Lord Henley (...), he was a collector rather than a hunter, buying his knowledge rather than seeking it with his own eyes and hands (188-190).

The depreciation and even ridicularisation of these male characters is, therefore, one more of Chevalier's strategies to underline the merits of the two women, who, by way of contrast, are passionate about fossils and devote their lives to fossil hunting and collecting.

Final Thoughts

What then is the true contribution of this novel, this fictionalisation of History, at the meeting point between Science and Literature? From the outset it makes the work of fossil hunter and collector extremely attractive and even feminine.

By placing the lives of these two women in the context of the development of Palaeontology and Geology in the first decades of the nineteenth century, the novel transports the reader to Science Museums and to the Geological Society and takes him/her into auctions of recently-discovered specimens or into private chambers where lectures are given to invited audiences about the fossils of hitherto-unknown animals.

Furthermore, the novel leads the reader to discover the lives of two women, contemporaries of Jane Austen,¹³ who made a significant contribution to the

¹⁴ As a matter of curiosity, Jane Austen visited Lyme in 1804, and was mentioned by Elizabeth Philpot, with reference to books about young unmarried women who were looking for husbands, which her sister Margaret enjoyed so much:"This was the sort of situation that she [Margaret] read about in the novels she favoured by authors such as Miss Jane Austen (...), but I did not read fiction and could not be persuaded to try it. (...) We Philpot sisters were

advancement of Palaeontology, and who were not duly recognised in their own time. Today there is a museum in Lyme Regis with Elizabeth Philpot's private collection, Mary Anning's saurian fossils can be seen at the Natural History Museum, in London, duly identified with the name of their discoverer, and the house where Mary Anning lived now bears a plaque with her name. But, in truth of fact, what made them known to the world, was the novel *Remarkable Creatures*. Remarkable indeed.

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the very embodiment of that frayed life. I did not need novels to remind me of what I had missed. (208). "

Lyme is described as follows in the eleventh chapter of the novel *Persuasion:* "as there is nothing to admire in the buildings themselves, the remarkable situation of the town, the principal street almost hurrying into the water, the walk to the Cobb, skirting round the pleasant little bay, which, in the season, is animated with bathing machines and company; the Cobb itself, the old wonders and new improvements, with the very beautiful line of cliffs stretching out to the east of the town, are what the stranger's eye will seek; and a very strange stranger it must be, who does not see charms in the immediate environs of Lyme, to make him wish to know it better. (Austen 1995, 64.

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NOTA BIOGRÁFICA

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ABSTRACT:

From the point of view of the fictionalisation of Science in Literature and the contribution of women to the development of Science, the article discusses how the practice of palaeontology

and geological studies is represented in British historical fiction of our own times, through two female characters, who were contemporaries of Jane Austen. After a few considerations of a general nature regarding the construction of the contemporary historical novel and some observations concerning the true state of paleontological and geological studies in the first decades of the nineteenth century the article will move on to deal with the way the choice of these two areas of Earth Science fulfilled the author's objectives.

KEYWORDS:

Women, Earth Science, Historical Novel, Early-Nineteenth Century Britain

RESUMO:

Do ponto de vista da ficcionalização da ciência na literatura e do contributo das mulheres para o desenvolvimento científico, o artigo discute a forma como a prática da paleontologia e os estudos geológicos são representados, através de duas personagens femininas, contemporâneas de Jane Austen, na ficção histórica britânica da actualidade. Após algumas considerações gerais sobre a construção do romance histórico na contemporaneidade, bem como sobre a real condição dos estudos em paleontologia e geologia nas primeiras décadas do século XIX, o artigo centrar-se-á na análise do modo como a escolha destas duas áreas das Ciências da Terra, serviram os propósitos da autora.

PALAVAS-CHAVE:

Mulheres, Ciências da Terra, Romance Histórico, Grã-Bretanha, Primórdios do Século XIX