The Return to Darwin in the Contemporary British Novel: An Evolutionary Response to Postmodernism and Social Constructivism

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

by

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Abstract:

Arguably, the impact of Darwinism on the novel is an indispensable part of the study of English literature. However, with regard to such literary study there is an ongoing aversion towards approaching Darwin outside the confines of his contemporaneous Victorian setting. This thesis explores what remains an extremely under-represented area of current scholarship; namely, the active status of Darwinism as an influence upon contemporary novelists. To address this gap, this study starts by conducting textual and comparative analyses of a representative selection of contemporary British novels, a literary field that, since 1990, has featured significant authors who have found in Darwin a source of intellectual and literary inspiration. The aim is to argue that Darwin's classic texts, and more recent incarnations of his theory such as Sociobiology, are deployed as a materialist discourse, used to subvert various problematic assumptions in the declining Postmodernist philosophy, the previously dominant theoretical paradigm. For novelists including Ian McEwan, A.S. Byatt and Jenny Diski, Darwinism provides the tools to define human nature in an oppositional manner to the Social Constructivism which reduces the human to a blank slate ready for society's dictation. A universal human nature can be seen manifested in biological phenomena including competition, altruism, reproduction and aggression. The treacherous territory of biological determinism is still present, yet the desire to experiment is carried forward by McEwan in *Enduring Love* and *Saturday* into the realm of challenging traditional religion. In a more nuanced manner, Jim Crace's *Being Dead* manages to create a wholly naturalistic narrative of death. Finally, reinstating alterative meta-narratives is a practice that comes fully into its own in contemporary renditions of history. Byatt's Neo-Victorian novels, *Possession* and *Morpho Eugenia*, exhibit faith in knowing the past as if it were an evolutionary process of accumulated changes. Moreover, Diski's serio-ironic *Monkey's Uncle* is focused on how the present is haunted by the past in the form of immortal DNA coils. This study analyses the texts in a manner suggesting a paradigm shift in literary scholarship, where Darwin is no longer seen as simply an ideological threat. As the sciences continue to become more hermeneutically enigmatic, and as literature seems embedded in an elitist Postmodernist trajectory, there is now huge democratic potential in the New Darwinian Novel which invites the everyman of today to participate in the controversies of both disciplines.

Acknowledgements

Firstly, I would like to express my sincere gratitude to my principal supervisor, Professor Philip Tew for his continuous guidance and support of my research and writing. I have always benefited from his suburb mentoring, his immense knowledge, his sincere motivation and his infinite patience, especially in the years when my academic and personal life was cruelly tested by the unfortunate hardships of war in my homeland.

Also I am extremely grateful to my second supervisor, Dr Nick Hubble, Dr Wendy Knepper and Dr Jago Morrison for their insightful and edifying comments on my research topic. Their generous and positive feedback has been instrumental in raising my confidence and my ability to develop my original approach to my topic.

Finally, I reserve my deepest gratitude to my father, my mother and my brothers and sisters, who have been endowed with the miraculous patience and the strength of will to survive the genocidal war waged against the people of Syria since 2012. I will always remember how they managed to put aside their own suffering so that they can shelter me against the grim news of their daily lives and encourage me to pursue my academic and personal goals in life even when I found myself in exile away from those in my homeland that I loved and missed so very much.

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Chapter One: Introduction: Darwin, Darwinism, History and Literature

1.1 Darwin's Place in History:

It was a traditional truth once universally acknowledged, and perhaps still is, at least implicitly, that a human society in possession of surplus food and resources must be in want of a good story of its origins and future. History and narrative seem to have always been universal human pursuits. Since the earliest known cultures, all kinds of stories have circulated, telling the fortunes and miseries of individuals and nations. What is common to all these chronicles is that their authenticity is often a suspect. It is customary for people to tell their stories in ways that best suit them either individually or, more importantly, , collectively. As Walter Benjamin famously declared in the "Theses on the Philosophy of History", the past is owned by the victorious conquers, whose stories "are called cultural treasures, and a historical materialist views them with cautious detachment." (256). Also, in historical materialism, there are milestones, revolutionary moments where "the clocks in towers were being fired on simultaneously", the progression of time is arrested and the ruler's hegemony is challenged (262). Although this present study does not subscribe to all the tenets of historical materialism, it acknowledges that Benjamin's plea to approach one's subject "with cautious detachment" is indeed an essential principle for any academic investigation seeking to achieve a high degree of objective and reliable analysis.

In this regard, to invoke the term 'milestones' or 'revolutions' risks entering the realm of the cliché, but no other words can better describe the 24th of November 1859, the originary date for this present study. What had been steadily progressing revisions of biology in England was crowned on that winter day by the publication of Charles Darwin's masterpiece: *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life.* This was indeed a revolution in biology as well as in culture at large. Although various propositions about biological evolution had been slowly gaining momentum for quite a while prior to 1859,[1] Darwin's

[1] These include the poetry of Darwin's grandfather, Erasmus Darwin, in *The Botanic Garden* (1791); the French naturalist J. B. Lamarck's *Philosophie Zoologique* (1809); Sir Charles Lyell's *Principles of Geology* (1830–1833) and Robert Chambers's *Vestiges of the Natural History of Creation* (1844). Moreover, in philosophy Herbert Spencer was attempting to formulate a grand theory of evolution for all structures in the universe.

masterpiece is the one that finally produced what Thomas Kuhn calls a “paradigm shift” (85). In biology, the tables were turned in 1859, yet the serious ramifications of the event reverberated in almost the entire spectrum of knowledge from the sciences to the humanities. Darwinism has exerted tremendous influences on many disciplines including philosophy, history, politics, theology, anthropology and, of course, literature.

Darwin is still significant in scientific endeavours, influencing the articulation of contemporary ideas, for as Amanda Rees comments, unlike many other precursory voices “Darwin’s shade is treated very differently, retaining a place at the heart of the discussions of today’s biologists, both in their public discourse and in their private disputations” (445). Equally, in part drawing on such views, a matter discussed at length below, the present study argues that the embers of the Darwinian revolution are still ablaze in the background of views expressed in or used to create the contemporary literary scene, smouldering under the ashes of failed rhetoric and defunct philosophical postures, thus providing the sparks for an emerging paradigm shift in the novel. Darwinism provides the contemporary British novelist with the theoretical tools needed to confront some of the excesses of the Postmodernist doctrine in literature by redefining conceptions of human nature and culture. This act of deploying biological science as an alternative standard of structuring human experience is not only subverting theoretical and philosophical positions but it is also transforming and reinvigorating the very nature of the novel as a literary product. And this is unsurprising, for “the significance of Charles Darwin stretches far beyond the field of Darwin studies and has implications for many more areas of public life, and this despite the fact that the field of evolutionary studies has changed beyond recognition in the years since Darwin’s death” (Rees, 445-6).

To embark on such a ‘revolutionary’ reading exercise, one needs to start with a brief retrospective account of the key developments which have led to the present state of affairs. To begin with, the impact on biology can be summarised in the title of T. Dobzhansky’s classical article: “Nothing in Biology Makes Sense Except in the Light of Evolution”. Indeed *On the Origin of Species* presented the first complete theory which explains the complexity of life on Earth and biological diversity through empirical observations and verifiable laws without the need for faith-based arguments such as mythology or conventional religious narratives. Put very briefly, the various species of plants and animals are neither separate creations nor immutable categories. Species have

slowly evolved from other ancestral species and continue to do so by means of natural selection— a process that results from two fundamental facts about life on earth. First, individual members of a species are not uniform in character; variations of all types and measure can be observed in the physical and mental constitution of all offspring. Secondly, due to unlimited increases in the number of offspring coupled with limited food and resources, all organisms have to engage in a struggle for life. The resulting process is defined by Darwin as follows:

> Owing to this struggle for life, any variation, however slight and from whatever cause proceeding, if it be in any degree profitable to an individual of any species, in its infinitely complex relations to other organic beings and to external nature, will tend to the preservation of that individual, and will generally be inherited by its offspring. The offspring, also, will thus have a better chance of surviving, for, of the many individuals of any species which are periodically born, but a small number can survive. I have called this principle, by which each slight variation, if useful, is preserved, by the term of Natural Selection. (1859, 64).

Therefore, evolutionary change is a slow process where the fittest traits propagate, through inheritance, and the inferior one become extinct across multiple generations until the character of the species is changed.[2] Obviously, the Darwinian paradigm, though providing solutions to many conundrums in biology, has proved quite problematic to some men of religion and philosophers since it cancelled the need for teleological or divine narratives of creation. Probably the most disconcerting aspect of Darwin's achievement is the shattering blow it has dealt to humankind's anthropocentric spirit, as Sigmund Freud subtly puts it:

> Man is not a being different from animals or superior to them; he himself is of animal descent, being more closely related to some species and more distantly to others. The acquisitions he has subsequently made have not succeeded in effacing

[2] Natural selection should not be confused with Lamarckism, a rival theory dating back to 1809 when the French naturalist J. B. Lamarck insisted, erroneously, in his *Philosophie Zoologique* that evolutionary change takes place within the lifetime of a single individual in the course of its adaptation to its environment. (Bowler, 11; Amigoni, 2007, 101; and Glendening, 47)

> the evidences, both in his physical structure and in his mental dispositions, of his parity with them. This was the second, the *biological* blow to human narcissism (1955, 139-41, emphasis in original).

Freud then lists his own discoveries as the third blow, the *psychological* one, which can be summarised in one statement; "*the ego is not master in its own house*" (1955, 141-3, emphasis in original). Such an account of the demise of human pride at the hands of biology and psychology is quite reminiscent of the out-of-fashion narratives of scientific progress or positivism. For our purposes, however, Freud's remarks identify the major aspect of Darwinism which has been influencing British, as well as world literature, especially the novel, since 1859; namely, designating the "human" as an exclusively material/biological existence without *special* divinity or any metaphysical essences.

1.2 Darwin and the Novel:

There is indeed an intimate relationship between Darwinism and the British novel. Literature curricula testify to this fact; seminars and lectures on topics such as "the struggle for life" or "naturalism in the novel" are not uncommon in English departments worldwide. This is only logical since both Darwinism and literature share a common interest in human nature; however, the affinities are not limited to thematic and philosophical concerns. They include style and language, and the influences are mutual. Creative and literary writing played a crucial role in shaping both Darwin's theories and the language he fashioned to articulate them, as Gillian Beer illustrates in her seminal study, *Darwin's Plots*.[3] Unlike our modern times, in the 1850s the language of science was not exclusive to the experts and was fairly accessible to the general readership; moreover, scientists routinely relied on resources from literature, history and philosophy to fortify their arguments (Beer, 4-5). In Darwin's case, these include some of the greatest classics of English literature. For instance, *The Poetical Works of John Milton* offered Darwin profound imaginative horizons at the time when he was most actively formulating his theses, i.e. during the *Beagle* voyage. Milton's *Comus* inspired Darwin to modify Malthus's austere views by considering the high rates of reproduction in nature as a positive instrument of change and creativity since they provide natural selection with

[3] Such is her eminence and influence Beer was awarded an honour in 1998, made Dame Commander of the Order of the British Empire.

more variations to work with. The original Malthusian view only saw in nature's profusion a threat to man's resources and survival (*ibid*, 29-30).

There are always prospects of intellectual rewards in researching Darwin's influence on literature and vice versa, but one genre stands out in this regard; the novel, for which Darwin expressed immense passion. Writing in his autobiography, he affirms:

> Up to the age of thirty, or beyond it, poetry of many kinds, such as the works of Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley, gave me great pleasure, and even as a schoolboy I took intense delight in Shakespeare, especially in the historical plays. I have also said that formerly pictures gave me considerable, and music, very great delight. But now for many years I cannot endure to read a line of poetry: I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me. I have also almost lost my taste for pictures and music. […] On the other hand, novels, which are works of the imagination, though not of a very high order, have been for years a wonderful relief and pleasure to me, and I often bless all novelists. A surprising number have been read aloud to me, and I like all if moderately good, and if they do not end unhappily— against which a law ought to be passed. A novel, according to my taste, does not come into the first class unless it contains some person whom one can thoroughly love, and if a pretty woman all the better. (1908, 50-51).

There can be many reasons why Charles Darwin lost his youthful enthusiasm for drama and music. Tastes and lifestyles do change as people grow older, and the thirtieth jubilee is indeed a memorable life milestone. Yet one may hazard a guess and suggest that the shift of taste from poetry, drama and music towards the novel is a shift from the lyrical towards the narrative. In his thirties, working on the notes and the blueprint of his own narrative of the origin of species, Darwin would naturally be attracted to the major literary narratives of his age. Though the genre did not match his 'elite' Victorian expectations of what constitutes 'high art', he became a connoisseur of the form. Writing to his friend J. D. Hooker, Darwin affirms, "I did not enjoy "The Mill on the Floss" as much as you, but from what you say we will read it again. Do you know "Silas Marner"? it is a charming

little story; if you run short, and like to have it, we could send it by post" (1887, 40). Moreover, his preference for a happy ending is worth noting, for it may signify his desire to find mental relief from the troublesome world of "struggle for life", in the make-believe world of the novel. This piece of autobiographical writing reveals a great deal of Darwin's life and personality. Despite his serious scientific work on nature, and despite some family tragedies such as the death of his infant daughter, Darwin never seems to have tired of the pleasures to be found in this world; a unique sense of humour and light-hearted language punctuates his writing,[4] such as his preference for a "pretty woman" to be the novel's protagonist.

Charles Darwin's passion for contemporary fiction has been affirmed by his son in the same autobiography quoted above, and it seems he had transformed the reading experience into a family event where his wife and children would partake in the entertainment:

> In the evening — that is, after he had read as much as his strength would allow, and before the reading aloud began — he would often lie on the sofa and listen to my mother playing the piano […] The regular readings, which I have mentioned, continued for so many years, enabled him to get through a great deal of the lighter kind of literature. He was extremely fond of novels, and I remember well the way in which he would anticipate the pleasure of having a novel read to him as he lay down or lighted his cigarette. He took a vivid interest both in plot and characters, and would on no account know beforehand how a story finished; he considered looking at the end of a novel as a feminine vice. He could not enjoy any story with a tragical end; for this reason he did not keenly appreciate George Eliot, though he often spoke, warmly in praise of *Silas Marner*. Walter Scott, Miss Austen and Mrs. Gaskell were read and re-read till they could be read no more. He had two or three books in hand at the same time—a novel and perhaps a biography and a book of travels. He did not often read out-of-the-way or old standard books, but generally kept to the books of the day obtained from a circulating library
>
> His literary tastes and opinions were not on a level with the rest of his mind. He himself, though he was clear as to what he thought good, considered that in

[4] Darwin's language and style of writing are explored further in section 1.7 of this present chapter.

> matters of literary tastes he was quite outside the pale, and often spoke of what those within it liked and disliked, as if they formed a class to which he had no claim to belong. (77-8)

One cannot help but draw a sort of 'hasty' comparison between the Darwins' evenings of reading and music with the contemporary family's movie night. It is indeed striking to our modern sensibility to describe the works of Jane Austen, Walter Scott and Elizabeth Gaskell as "the lighter kind of literature", but it must be borne in mind that these were the years when the novel had not yet established itself as the dominant literary form. Darwin had not simply accepted the perceived notions of the literary canon; rather, his mind was quite open to reading "books of the day", despite what art critics would say. His son tells us, "In all matters of art he was inclined to laugh at professed critics and say that their opinions were formed by fashion." (*ibid*, 78). Darwin's literary taste was not informed by the desire to follow fashion or reverence of the canon; it was simply his passion for plot and characters, and his prophetic appreciation of the prominence of the novel form.

It is indeed crucial, and slightly challenging, to determine the degree of detachment one should adopt when examining the interplay between Darwin's writing and literature. Careful historicism is needed in this regard. On the one hand, what was light literature then has now become the heart of the literary canon. On the other hand, Darwin's own writing always seem to occupy their own para-temporal sphere, carrying their influence to our present moment, despite being the product of the 19th century context. The difficulty in this regard is illustrated in works of literary criticism, such as Beer's *Darwin's Plots,* where the tendency to historicise Darwin's texts as products of their time can eclipse the scale of his influence on literature. For instance, in her preface to the second edition Beer argues that *The Descent of Man* is not appealing to a contemporary readership and is steeped in Victorian culture and its now-outdated attitudes (xxiv). This assertion is valid with regard to the language, some ideological assumptions and the scientific method; however, it falls short of registering Darwin's increasing popularity and influence since Beer's study was first published in 1983. In the last two decades, the list of bestselling novels which have embraced evolutionary theory is steadily growing and includes the works of authors of various styles and ideological persuasions, including but not limited to, Ian McEwan, A. S. Byatt, Jim Crace and Jenny Diski.

There is both the Victorian and the “timeless” or the “constant” in Darwin’s works and discourse. His insights into universal concerns such as altruism, emotions, religion and history will constantly be of interest to literature and the novel, for they lie at the heart of what it means to be human. What changes, though, is the way they are received by different generations of novelists. Therefore, a more accurate way of historicising Darwinism should shift focus to its reception and the various responses it generated and continues to generate. A detailed analysis of all the stages of Darwin’s reception in literature can be immensely enlightening, yet it is unfortunately beyond the scope of this present study. Therefore, what follows is a brief survey of the major Victorian responses, intended as a starting point for understanding how and why the relationship between Darwinism and the novel has recently been transformed.

1.3 Darwin Among the Victorians:

To begin with, literary scholarship abounds in studies of the relationship between the Victorian novel and evolution. What distinguishes this field of study is that for the Victorians, Darwin’s ideas, and evolution in general, often led to negative and pessimistic associations such as an agonised apprehension of the vastness of natural history and intimations of a dark future for humankind and civilisation. The underlying reasons for these phenomena are certainly numerous and intricate, but they are not all intrinsic to Darwin’s ideas themselves. Darwin’s model of nature is highly complex and at times confusing, but it is certainly not conclusively ‘bleak’. “The struggle for existence” did portray a menacing side of nature in which predation, death and extinction are inevitable, key forces. However, Darwin insists that he is using the term in “a large and metaphorical sense” which takes account of the dependency of organisms on each other and the ability to produce offspring (1859, 65). He also recognises a more egalitarian and motherly face to nature; its natural selection, unlike man’s artificial selection of domesticated animals, modifies a species for its own exclusive benefit and well-being (1859, 82-3).[5] Perhaps the Victorians were generally inclined to be pessimistic about Darwinism because of the influence of the intellectual context in which it was born. For instance, biological evolution was obviously quite a subversive idea for both the religious establishment and the traditional discipline of biology it sanctioned. Moreover, some of the texts that

[5] Similarly, “sexual selection”, the process of competition for mates, involves both aggressive adoptions such as jaws in carnivorous animals and “peaceful” ones such as songs in birds. (1879, 87)

circulated during Darwin's times were quite alarmist indeed. These include one of his resources, Thomas Malthus's "Essay on the Principle of Population" (1798), which offered an austere assessment of population increase at a time when metropolitan centres were growing bigger than ever before. Malthus's essay was criticised by Frederick Engels in his *Deutsch-Französische Jahrbücher* journal as "the crudest, most barbarous theory that ever existed, a system of despair which struck down all those beautiful phrases about philanthropy and world citizenship." (1844). Furthermore, one of Darwin's contemporaries, the philosopher Herbert Spencer, published a version of evolution called the "synthetic philosophy", which has been always interpreted, rightly or wrongly, as overtly deterministic and politically malign.[6]

The Victorian novel, even prior to the publication of *The Origin*, expressed various suspicions towards the discoveries of natural history. Charles Dickens's masterpiece *Bleak House* offers one of the most representative and iconic examples. The novel opens with the following elegant but *bleak* portrayal of the city of London:

> London. Michaelmas term lately over, and the Lord Chancellor sitting in Lincoln's Inn Hall. Implacable November weather. As much mud in the streets as if the waters had but newly retired from the face of the earth, and it would not be wonderful to meet a Megalosaurus, forty feet long or so, waddling like an elephantine lizard up Holborn Hill. Smoke lowering down from chimney-pots, making a soft black drizzle, with flakes of soot in it as big as full-grown snowflakes—gone into mourning, one might imagine, for the death of the sun. (48)

[6] Peter Bowler offers quite a balanced survey of Herbert Spencer's ideas in this regard, insisting that Spencer, like Darwin, would strongly disapprove of the austere and biologically deterministic stance reviewers have come to see in his work. Spencer, who coined the term 'survival of the fittest' "was also an exponent of an extreme laissez-faire individualism, seeing the struggle between individuals jockeying for position as the driving force of social progress". His theory resonated well with the American captains of the industry in the late 1800s, thus earning him the bad reputation of supporting ruthless individualistic politics. He opposed Socialism on the basis that "state support for the poor would encourage them to be idle", fearing that a state-funded welfare system would permit an ever greater number of "unfit" people to survive and breed, thereby undermining social progress. However, Spencer's belief in "free enterprise" was motivated by Lamarckian biology where competition would encourage individuals to improve themselves. His point was not to eradicate the unfit but encourage all individuals to strive to become fitter. (301).

Written in 1852, this passage in *Bleak House* predates *On the Origin of Species*, but it still reflects the growing interest in fossil discoveries and evolutionary hypotheses in the early 1850s.[7] In this regard, Dickens's description of an "elephantine lizard" is quite significant because it attributes a sense of 'aesthetic deficiency' to the fossil discoveries rather than celebrating their heuristic potential. Furthermore, the passage has a strong prophetic tone indeed, predicting the commotion and controversy to come in 1859. It is as if suggesting that the discoveries of natural history would not bring happy news but rather an apocalyptic destruction of civilisation. Both time and space in the passage magically metamorphose in a swift manner that tortures the imagination. When the muddy streets and the smoke-filled air of Victorian London can so easily become a metaphor for a primordial landscape fit for "an elephantine lizard", the space we know as the city suddenly crumbles away.[8] Temporally as well, the present moment vanishes, is washed away by the biblical waters of creation, which has just receded to reveal not a paradise intended for Adam and Eve, but the land of "Megalosaurus". Instead of progressing and reaching the familiar future apocalypse, time moves with dizzying speed backwards towards a prehistoric apocalypse where humankind has no role to play: neither saved nor damned, simply non-existent. The vastly ancient past oppressively usurps the present.

A similar experimentation with time frames can be seen in Thomas Hardy's A *Pair of Blue Eyes*. Published in 1873, Hardy's novel was now the product of culture where Darwin's theory had achieved the status of a 'paradigm shift' in biology and science. Much has been written about *A Pair of Blue Eyes* in this regard, especially the following scene where Hardy's protagonist, Knight, encounters a fossil that unexpectedly springs to life in a manner similar to Dickens's Megalosaurus:

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[7] In 1844, Robert Chamber anonymously published his *Vestiges of the Natural History of Creation*, which was one of the first books to popularise notions of the mutability and development of species (Bowler, 98-9). Also by 1846 Darwin had published his Beagle monographs, entitled *Journal of Researches into the Natural History and Geology of the Various Countries Visited by H.M.S. Beagle*, and various other works which gained him considerable fame and respect within the scientific community (*ibid*, 149-50).

[8] The image of the Megalosaurus coming back to life may have been inspired by some of the scientific debates of the period. In the first volume of *Principles of Geology*, Sir Charles Lyell entertained the notion that extinct, prehistoric monsters like dinosaurs might again roam the earth. Lyell did not clearly specify the process in which this might happen, but he maintained that the forests which had been inhabited by dinosaurs might cover the Earth again if the geological conditions reverted to what they had been during previous eras. (Rudwick, 515)

> By one of those familiar conjunctions of things wherewith the inanimate world baits the mind of man when he pauses in moments of suspense, opposite Knight's eyes was an imbedded fossil, standing forth in low relief from the rock. It was a creature with eyes. The eyes, dead and turned to stone, were even now regarding him. It was one of the early crustaceans called Trilobites. Separated by millions of years in their lives, Knight and this underling seemed to have met in their death. (200)

A Trilobite, at least in terms of size, is less formidable than a Megalosaurus, yet the tone of Hardy's scene, and the fossil in it, are certainly no less malignant than Dickens's. The eyes are haunting and "regarding" Knight. Hardy's narrative talent and mastery of the English language has facilitated a reproduction of the uncanny feeling of looking at fossilised eyes; they are simultaneously made of stone, dead, but alive in their effect on the psyche.[9] In fact, their stoniness attracts more attention and inspires greater awe than when they were flesh and blood because eyes are not supposed to be made of stone. There is here a sort of reversal of the Medusa myth; the eyes of the creature are themselves turned into stone, yet they still immobilised the onlooker, even if briefly.

But of course, the fossil here also stands for the vastly ancient time when it lived. Therefore, what actually haunts the protagonist is a Darwinian model of history; these millions of years which defy human comprehension were often a source of tyranny and disturbance for Hardy (Beer, 236). Few seconds later, Knight fails to grasp the infinity of time separating the present moment from the fossil's heyday, and he ends up in a dazed stream of consciousness, where the movement of time becomes remarkably condensed and uncanny:

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[9] For examples of visual representations of "fossilised eyes" please refer to Appendix III which shows photographs of specimen published by the Natural History Museum, London. Appendix III-A shows a trilobite specimen which is approximately 460 million years old (Edgecombe). The eyes could be similar to what charmed Hardy's protagonist. Appendix III-B shows a more iconic example of fossilised eyes; the skull of the first ichthyosaur ever to be found. According to the museum website, this specimen was found by Joseph Anning, the brother of English palaeontologist Mary Anning, in 1810, and the following year Mary herself found segments of the neck. Appendices III-C, III-D and III-E show examples of ammonites; C and D are from Monmouth Beach and Lyme Regis respectively, while E is an artist's impression. The 'artful' hand of nature is unmistakable in such fossilised formations; they are indeed a source of inspiration and awe for the onlooker. These images are provided in this study as para-textual examples of fossils whose value has now reached the level of national cultural artefacts, as evidenced by their continued prominence in the museum's public exhibitions as well as its online educational materials.

> Time closed up like a fan before him. He saw himself at one extremity of the years, face to face with the beginning and all the intermediate centuries simultaneously. *Fierce men*, clothed in the hides of beasts, and carrying, for defence and attack, huge clubs and pointed spears, rose from the rock, like the phantoms before the doomed Macbeth. They lived in hollows, woods, and mud huts— perhaps in caves of the neighbouring rocks. Behind them stood an earlier band. No man was there. Huge *elephantine forms*, the mastodon, the hippopotamus, the tapir, antelopes of monstrous size, the megatherium, and the mylodon— all, for the moment, in juxtaposition. Further back, and overlapped by these, were perched huge-billed birds and swinish creatures as large as horses. *Still more shadowy were the sinister crocodilian outlines*—alligators and other uncouth shapes, culminating in *the colossal lizard, the iguanodon.* Folded behind were dragon forms and clouds of flying reptiles: still underneath were fishy beings of lower development; and so on, *till the lifetime scenes of the fossil confronting him were a present and modern condition of things*.
>
> These images passed before Knight's inner eye *in less than half a minute*, and he was again considering the actual present. (200-1, emphases added)

In a matter of seconds, the whole history of life on earth is displayed, almost cinematically, before Knight’s eyes. What is most troubling is the sheer dominance of predators, from all classes of the Animal Kingdom, in Knight’s hallucinatory vision of natural history: fierce *homo sapiens* with clubs, elephantine forms, crocodilian outlines and finally a colossal lizard. The prehistoric past which becomes “a present and modern condition of things” is predatory and threatening. Consequently, like Dickens before him, Hardy received the new knowledge of geological time and biological evolution with a heightened degree of apprehension and pessimism.

Therefore, it can be argued that in the Victorian novel, the consciousness of time was severely disrupted by Darwin’s theories and the discoveries of his contemporary naturalists. In the place of the comforting belief in a theological timeframe that starts and ends with the Garden of Eden, there was now the necessity to face up to an immensely elongated natural history whose beginning requires neither human nor divine interference and is dominated by monsters like the Megalosaurus or the trilobites. As for the future of

the human race, the visions were equally bleak. The fear of extinction is a recurrent theme in many literary texts of the era. An excellent example can be found in Samuel Butler's *Erewhon*. Published anonymously in 1872, Butler's novel postulates that manmade machines can evolve artificial intelligence through a Darwinian selection process and eventually supplant humans as the dominant species on Earth. The fact that the novelist George Eliot reiterated in 1879 such fears of mass extinction testifies to the popularity of these narratives of extinction in the late 19th century. In her essay, "Shadows of the Coming Race", Eliot warns that natural selection will not be on our side once our machines have become sophisticated enough to be capable of wilful self-replication:

> This last stage having been reached, either by man's contrivance or as an unforeseen result, one sees that the process of natural selection must drive men altogether out of the field; for they will long before have begun to sink into the miserable condition of those unhappy characters in fable who, having demons or djinns at their beck, and being obliged to supply them with work, found too much of everything done in too short a time. […] Under such uncomfortable circumstances our race will have diminished with the diminishing call on their energies, and by the time that the self-repairing and reproducing machines arise, all but a few of the rare inventors, calculators, and speculators will have become pale, pulpy, and cretinous from fatty or other degeneration, and behold around them a scanty hydrocephalous offspring. As to the breed of the ingenious and intellectual, their nervous systems will at last have been overwrought in following the molecular revelations of the immensely more powerful unconscious race, and they will naturally, as the less energetic combinations of movement, subside like the flame of a candle in the sunlight. Thus the feebler race, whose corporeal adjustments happened to be accompanied with a maniacal consciousness which imagined itself moving its mover, will have vanished, as all less adapted existences do before the fittest. (119)

What George Eliot laments most in this essay is not just the extinction of the human race but also the possibility that its non-organic conquerors may retain a disfigured resemblance to human nature and culture:

> Thus this planet may be filled with beings who will be blind and deaf as the inmost rock, yet will execute changes as delicate and complicated as those of human language and all the intricate web of what we call its effects, without sensitive impression, without sensitive impulse: there may be, let us say, mute orations, mute rhapsodies, mute discussions, and no consciousness there even to enjoy the silence. (120)

Language and discourse may survive in a cold steely form which lacks the emotional warmth of human speech. A mere two decades had passed since the publication of *On the Origin of Species* when novelists were already worrying about the fate of human nature. Moreover, the contemporaneity of Eliot's essay, i.e. its foreshadowing of our own notions of artificial intelligence, further proves that Darwinism functions as if it were a timeless discourse rather than a doctrine for the late 19th century; its repercussions and implications do indeed span the ages.

The nightmarish visions of the future took various forms. Besides total extinction, there was the fear of biological degeneration, i.e. the possibility of humankind devolving back to its animal ancestry. The publication of Darwin's *The Descent of Man* in 1871 may have exacerbated those concerns by bringing humans closer to the higher mammals, despite the book's many egalitarian propositions such as putting forward the concept of altruism as a means of survival or suggesting that all human races constitute one single species.[10] In this regard as well, the pessimistic interpretations of Darwinism have to do with the general concerns of society, as John Glendening maintains in his survey of the novels published towards the end of the nineteenth century. Uncertainty in the sustainability of social stability and progress came from many quarters. There was the challenge posed by emerging forms of political activism such as feminism and socialism. Britain was also losing international influence to rival states. In addition, in science the concept of entropy seemed to imply that degeneration in the form of loss of energy was a cosmic fact (24).

This form of literary pessimism seems to have persisted till the final years of the 19th century. Fears of biological degeneration are nowhere more painfully and vividly

[10] Darwin states, "Those naturalists, on the other hand, who admit the principle of evolution, and this is now admitted by the majority of rising men, will feel no doubt that all the races of man are descended from a single primitive stock" (1879, 205).

articulated than in H. G. Wells's pioneering science fiction novels, starting with *The Time Machine* (1895). Arriving in the future, the time traveller reaches a disturbing realisation. "It seemed to me that I had happened upon humanity upon the wane. The ruddy sunset set me thinking of the sunset of mankind." (61). It soon dawns on him that humankind had devolved into two distinct species, losing almost all human traits: the effable Eloi are kept as livestock by the ape-like race of Morlocks. Later in Wells's career, in *The Island of Doctor Moreau* (1896), a renegade scientist operating a secret lab in an uncharted island attempts to accelerate evolution by performing vivisection on animals with the aim of 'evolving' highly rational human beings freed from the constrictions of their animal ancestry. His experiments fail miserably, producing only semi-human, disfigured creatures. Glendening designates such a collapse of the human-animal dichotomy as one of the many cognitive confusions that evolutionary theory generated in late Victorian fiction. The confusion is dramatized in the encounter between the protagonist Prendick and the leopard-man, one of Doctor Moreau's most predatory creations, in a setting akin to that of Darwin's "entangled bank". The leopard-man not only possesses both human and animal traits but also serves as a symbol for Prendick's own animal nature (54).

The novel also dramatizes the scientific debates on evolution in which Wells was heavily involved. As Glendening illustrates, Wells was initially in favour of Lamarckism— a rival to Darwinism which maintained that an organism strives to adapt to its environment by developing bodily modifications during its lifetime which are then passed on to its offspring. This theory corresponded with Wells's belief in education as a force for social progress; however, he had to abandon it when neo-Darwinists in the 1880s proved that acquired characteristics cannot be inherited. This "triumph" of natural selection produced in Wells a sense of "a qualified pessimism", giving rise to his concept of "Bio-Optimism": his warning that the human race is too optimistic about its biological future, and is ultimately not immune to either extinction or regression to earlier stages of development (Glendening, 47-8). In Wells's novel, this shift of ideas is reflected in the character of Doctor Moreau, who can be viewed as "a hazy evolutionary allegory", combining the two contending perspectives, according to Glendening. On the one hand, Moreau's project has the same negative characteristics as natural selection: struggle, suffering and death. On the other hand, it is Lamarckian since it is a directed process whose goal is to encourage the rapid evolution of superior human beings. Moreau's

eventual failure may also signify Wells's own questioning of the applicability of evolutionary theory to issues such as improving the human race (49-50).

Published at a time when the British anti-vivisection movement had been gaining much support, *The Island of Doctor Moreau* clearly invites a reassessment of the role of science in society, suggesting that it can be used for both evil and emancipatory ends. In other words, Moreau as a mad scientist may be emblematic of the overall cruelty in scientific rationality and experimentation (Brantlinger, 375). Indeed, the novel can serve as "a cautionary tale": Darwinism has entangled the human condition in a web of uncertainties, but people's ignorance of the theory further exacerbates the confusions they find in it (Glendening, 61).

1.4 Darwinism Now:

It cannot be the case that all Victorian novelistic renditions of Darwin's theory focused on a pessimistic worldview. At the risk of seeming to be painting with a broad brush, this present survey has focused on the pessimistic receptions in order to highlight the aversion towards approaching Darwinism in the years to come, i.e. after the late 19th century. The majority of scholarly research in this area is focused on the late Victorian era and the early twentieth century . The assumption seems to be that Darwin is most visible and relevant among his contemporary novelists, but it could also be the desire to avoid later versions of Darwinism, especially in terms of the early and mid-twentieth century controversies regarding his theory of the struggle for life. The theory of "Social Darwinism", which became popular through the writings of the philosopher Herbert Spencer, sanctioned ruthless competition for resources and the elimination of the less fit individuals and human groups as necessary consequences of natural selection. Ameliorating the struggle for life by helping the poor and the weak hinders the selection of better-adapted individuals and hence the advancement of society (Glendening, 19; Bowler, 297 and 301; Dennett, 393; Stevens and Price, 276). This was coupled with Eugenics— Sir Francis Galton's theory that the human race needs to improve itself by selective, rigorous breeding where those of inferior traits are banned from having children and those deemed strong and clever are encouraged to have more offspring (Bowler, 257 and Beck, 198). Needless to say, the ethical problems in these political and philosophical endeavours seems to have engendered great aversion in contemporary literary theory towards approaching Darwinism in general. Jonathan Greenberg points to a 2006 study by

Anne Stevens and Jay Williams in "the prominent journal of theory *Critical Inquiry* [which] reveals that while Marx, Nietzsche, and Freud vie for position with Derrida, Lacan, and Foucault among the journal's most frequently footnoted thinkers, Darwin is, apparently, nowhere to be found." (93). Furthermore, David Amigoni attributes the situation to concerns over biological reductionism: "This tendency to neo-Darwinian reductionism has perhaps pushed many scholars away from a Whiggish present in which the gene dominates, and towards the more varied scientific tapestry of the past. For literary scholars who have explored the literature and science relation, they have focused on it in historically contextual terms." (2008, 4). These concerns, of reductionism and ethical testing on humans, are shared even within disciplines that are inherently Darwinian such as evolutionary psychology (Joseph Carroll, 189).

Consequently, what remains seriously underrepresented in literary scholarship is an investigation of the contemporary literary revivals of Darwinism, especially in the last two decades. A careful study of this unique phenomenon can shed light on the development and achievements of the contemporary British novel in the Post-Cold War epoch, and it can contribute illuminating insights into the question of the uneasy relationship between the two cultures: the sciences and the humanities. One always has to start with the simple and obvious questions: why Darwin now, how different his reception is and what more can be said about Darwinism that the Victorians did not say. Nowadays Darwinism is popular in the realm of the novel because of internal, literary necessities as well as external, context-related factors. Its recent revival has to do with the theoretical and philosophical debates of the last two decades. Theory-based criticism, which has dominated the academy for years, is now on the decline. This is happening on two levels. First, while they have greatly advanced literary scholarship in the past, Poststructuralism and deconstruction seem to have been exhausted nowadays; their view of language –a free interplay of signifiers where meaning is either endlessly deferred or manipulated by hegemonic power discourses– has started to become troubling and constrictive for many literary critics. In this regard, Postmodernism "has itself come to represent an increasingly vexed issue rather than acting as an instrument by which the vexed nature of knowledge can be critiqued" (Tew, 2007, 20). Secondly, the social-constructivist models of human nature have over-emphasised the role of nurture, rejecting any human essence, to the point of virtual dehumanisation, as shall be illustrated shortly. Postmodernist relativity and

Constructivist malleability have become a burden on literature. The time is now ripe for an alternative paradigm, one that does not do away with the achievements of theory but that restores a much-needed sense of structure and certainty to the study and production of literature. Darwinism is the prime candidate.

The hermeneutic powers of Darwinian theory which fascinated the Victorian novelists is now exerting its magic on their contemporary heirs. However, in contrast to the general pessimism which colours many of the Victorian responses, Darwinism is enjoying an optimistic revival and is informing quite an ambitious enterprise. Darwinism is now informing a theoretical and philosophical framework which is used by the contemporary novelist to revise and subvert the Postmodernist doctrine, especially its Poststructuralist and Social Constructivist excesses, by redefining human nature and culture. As mentioned above, the recourse to biological science as an alternative paradigm of structuring experience is not only subverting long-held philosophical positions but is also transforming the very nature of the novel as a genre category and as a literary product. In other words, the return to Darwinism for thematic concerns is at the same time producing creative experiments in stylistic, linguistic and narrative techniques.

In this regard, Darwinism is appealing because of two essential qualities, as this present study aims to illustrate. Firstly, as a scientific theory, it works by means of *consilience*. The term "consilience" was first defined in 1840 by William Whewell in his book *The Philosophy of the Inductive Sciences*: "The Consilience of Inductions takes place when an Induction, obtained from one class of facts, coincides with an Induction obtained from another different class." (Qtd in E. O. Wilson, 1998, 8-9). Thus, Darwinism offers the sense of 'holistic' interpretation of experience from different vantage points, as opposed to the uncertainty and indeterminacy inherent to Postmodernist theory. *The Origin of Species* and *the Descent of Man*, which started by a consilience of facts and observations from areas as varied as the fossil record, animal breeding, botany, embryology, anatomy, etc., have continued to receive confirmation by the findings of modern-day genetics as well as all recent paleontological discoveries.

Secondly, the return to Darwinism is in many ways a movement towards embracing materialism in general. Theorising human nature and behaviour on the basis of biological underpinnings can counter the emphasis on shifting textual and cultural conditions in much of Postmodernist theory. For example, in *The Social Construction of Reality* (1966),

Peter Berger and Thomas Luckmann have voiced what can be described as one of the most extremely constructivist claims of early Postmodernism:

> the human organism manifests an immense *plasticity* in its response to the environmental forces at work on it. This is particularly clear when one observes the *flexibility* of man's biological constitution as it is subjected to a variety of socio-cultural determinations [...] Humanness is socio-culturally *variable*. In other words, there is no human nature in the sense of a biologically fixed substratum determining the variability of socio-cultural formations [...] While it is possible to say that man has a nature, it is more significant to say that man constructs his own nature, or more simply, that man produces himself. (66-7, emphases added)

Faced with such sweeping claims, it is only natural for the novelist, whose mission in life is centred on human nature, to seek to find alternatives. Berger and Luckmann place extraordinary focus on the plasticity, flexibility and variability of human nature to the extent it becomes difficult to negotiate their theoretical claims on their own turf. If human nature is so plastic, why would anyone bother describing it, and why would anyone have such an ephemeral nature in the first place? In the space of one page, the Social Constructivists are willing to cross out human biology and crown man his own creator. Therefore, it is only befitting to return to biology to address such excesses. Indeed, Darwinism holds the egalitarian promise of finding a unifying paradigm for the various aspects of human knowledge.

This emerging movement has its parallel in the field of literary criticism. It is now possible to talk about a "Darwinian humanism", as John Glendening calls it, where the pioneering work of the American critic Joseph Carroll has met considerable success in formulating a paradigm for literary theory based on Darwinian science (7). Yet what endows the Darwinian revival with its *raison d'être* and enormous subversive potential is certainly the contributions of novelists through both creative and critical writing. For instance, in many of her interviews and novels, A. S. Byatt exhibits a growing discontent with the assumptions of mainstream literary theory, especially feminist literary theory, accusing it of becoming "a kind of a programme", harbouring a restrictive agenda

(2010).[11] Ian McEwan expresses similar reservations about Poststructuralist and Constructivist postures in his essay "Literature, Science and Human Nature", complaining that they erroneously reduced the human being to an indeterminate blank slate on which culture alone can inscribe anything (2001, 14-6).

Men and women of letters have often contributed quite innovative critical insights, and starting from the twentieth century, this has become a more recurrent practice as evidenced by the works of Virginia Woolf and T. S. Eliot among others. However, the role of creative writers in society and culture remains immensely different from that of the literary critics. Although an aversion to Poststructuralism is a shared affinity, the Darwinian revival among the contemporary novelists is a much broader and more complex phenomenon than its parallel in literary criticism. While in the latter the focus is mainly interpretative and exegetical, in the former Darwinism both provides the material for understanding humanity and also reconfigures the very modes of creative expression and narration utilised by the novelist.

As mentioned above, the current popularity of Darwinism may be attributed to cultural factors as well as literary and critical debates. Looking at the 1990s and 2000s, evolution has been a topical issue in both popular culture and the academy due to the recent scientific discoveries in genetics and palaeontology. For example, the news of the success of the Human Genome Project in mapping the human genes in 2004 has reached near and far and has inspired hopes of finding cures for hereditary diseases such as Diabetes and Alzheimer (Fridovich-Keil). Moreover, in the US, teaching evolution in schools has been a source of topical controversy for quite a while. The skirmishes between the two camps of the evolutionists and the creationists, which started with "The Scopes Trial" of 1925 (Israel, 161), have been reigniting throughout much of the twentieth century, until quite recently, in 2005, a federal court ruled that teaching intelligent design was unconstitutional (Jones) in what later became known as "The Dover Trails". Furthermore, the proliferation of popular science writing has contributed to the contemporary public interest in Darwinism. Non-specialist readers owe a great deal to writers such as Michael Ruse, Matt Ridley, Steven Pinker and Richard Dawkins for "translating" complex scientific research into accessible and entertaining prose. These include seminal works such as *The Diversity of Life* (1992) by E. O. Wilson, *The Red*

[11] See Byatt's interview with Paula Marantz Cohen, quoted in Chapter Four of this present study.

Queen: Sex and the Evolution of Human Nature (1993) by Matt Ridley and *The Language Instinct* (1994) by Steven Pinker, to name a few. Many popular science books have been converted into TV documentaries, thus enabling wider dissemination of scientific ideas.[12]

1.5 Methodology and Conceptual Model of Analysis:

The contemporary Darwinian revival is a trend that spans two whole decades: the 1990s and the 2000s. Therefore, due to obvious limitations of scope, the present study is highly selective, focusing on the most representative primary texts. Unlike literary movements such as the English Romanticism, for example, there are very few rivalries, couplings or direct collaborations among the contemporary novelists who turned to Darwinism. It is mostly individual endeavours by authors from the various corners of today's literary scene. Thus, research in this area will necessarily be tracing implicit analogies and affinities. The best methodology is an exercise in close reading with a comparative edge. Rather than reading each author separately, in this study various texts are read alongside each other in order to bring to light shared thematic and theoretical concerns informed by Darwinism. Moreover, this methodology may shed light on the ways in which Darwinism has changed the very form of the contemporary novel in areas such as the growing affinities between the language of the novel, on the one hand, and Darwin's classical works as well as popular science writing, on the other hand.

In terms of the conceptual model of analysis, it is necessarily a versatile hybrid of various theoretical tools, designed to approach the different aspects of the literary text but ultimately allowing the text to speak for itself rather than encapsulating it within a specific interpretation. This conceptual model benefits primarily from Darwin's classical arguments in addition to the more contemporary work of Sociobiologists such as E. O. Wilson and David Sloan Wilson, whose works aim to extend the scope of Darwinian evolution into the field of sociology, as discussed in Chapter Two of this study. There are also various references to Richard Dawkins's theory of the selfish gene (1976) as well as the critical insights by Ian McEwan and A. S. Byatt. Moreover, the present analysis refers to the pioneering work of literary critics such as Gillian Beer and David Amigoni. Finally, Postmodernist theory is referred to in order to define some of its social and philosophical

[12] This was evident in the extensive UK media coverage in 2009, the bicentenary of Darwin's birthday, and the TV shows included titles such as "The Genius of Charles Darwin" by Richard Dawkins and "Charles Darwin and the Tree of Life" by David Attenborough.

positions which are problematised and subverted in the novels included in this study. These include direct and indirect references to the works of Roland Barthes, Jean-Francois Lyotard, Fredric Jameson and others.

The literary texts are approached within three areas of comparative analysis, two of which have to do with the thematic and theoretical concerns of defining human nature and culture, and the third is concerned with the impact on the novel's language. Firstly, for the "Darwinian conceptions of human nature", the text selection includes three key books by the novelist Ian McEwan. In *Enduring Love* and *The Innocent*, the literary representation of a universal human nature is achieved in the manner of characterisation, for instance, while in *Saturday* the focus is on the "struggle for life" and war. Similar thematic concerns can be found in A. S. Byatt's pioneering novel *Possession*, which shares with McEwan's *Enduring Love* the interest in the "timeless", evolutionary basis of love and altruism. This aspect of Darwinism is further complicated but explored in a more balanced manner when the comparisons shift to the work of the novelist Jenny Diski in *Monkey's Uncle*. Exploring human nature forms the bulk of Chapter Two of the present study.

The second major area of analysis is "the evolutionary concepts of human culture". The contentions here largely correspond with the insights of Sociobiology, which in the words of its founder, E. O. Wilson, focuses on "the biological basis of all social behaviour" (1975, 4). Human culture is universal in most of its core aspects because it has its roots in the biological existence of *Homo Sapiens*. This will form the material for Chapters Three and Four of this present study. Chapter three deals with what can be described as the most controversial Darwinian topic; namely, its implications for the conventional religious narrative. The representative literary texts include Ian McEwan's *Saturday* and *Enduring Love* as well as Jim Crace's *Being Dead*. The "atheism" of these texts is heavily influenced by Darwin's writing as well as the more recent sociobiological and psychological perspectives on the emergence and success of apocalypse-based religious narratives. *Being Dead* challenges the monopoly of traditional religion over one of the most sensitive and problematic phenomenon of human life; namely, death. "In contrast to what Crace regards as the spiritually bankrupt and fantastical narratives of salvation offered by religious beliefs, it is from the quotidian, the observable, the prosaic and relentless mechanisms of nature that Crace establishes his neo-Darwinistic and yet curiously optimistic view of finitude" (Tew, 2006, 135). The second aspect of human

culture where Darwinism can exert its 'hermeneutic' power is history and biography, which is the focus of Chapter Four of this study. As mentioned above, narratives of the past and humankind's relationship to time have been constantly subjected to distortions, manipulations by the power structures of society or infused with romanticised conceptions. Literary theory, especially the New Historicist movement, has been acutely aware of this fact, and sometimes too sceptical of achieving any objective version of the past to the point of becoming "anti-historical" (Greenblatt, 1). A Darwinian perspective on history, on the other hand, offers a confident approach to unearthing the past while acknowledging the difficulty of such an endeavour. The focus is on an archaeological inquiry where various fragments of evidence, even in the fossil record, can fill the gaps in a historical narrative, and then a consilience of evidence can further reinforce the findings. This methodology is exemplified in Byatt's *Possession* and *Morpho Eugenia* as well as in Diski's *Monkey's Uncle*. In this regard, John Fowles's *The French Lieutenant's Woman* serves as a precursory text which is included in the present analysis as an indispensable source of influence, especially on Byatt. Chapter Four highlights the tensions between the prevailing sense of "uncertainty" in Postmodernist theory and the practice of historiography and biography.

1.6 Demarcating Terminology:

Several key terms need to be clearly defined and demarcated before engaging in any close reading of the literary texts. This is a necessary step to avoid confused and fallacious conclusions. First of all, throughout the present study the term "Darwinism" refers to (A) Darwin's classical theory of biological evolution through the processes of natural and sexual selections as well as (B) the more recent scientific disciplines such as Evolutionary Psychology and Sociobiology, which include non-genetic and cultural evolution. In this way Darwinism is used as an "umbrella term" covering a wide array of theories and research, but this usage is dictated by the fact that the development of this area of science is continual and, more specifically, consilient; present research findings continue to consolidate Darwin's classical texts. Besides, his classical texts are themselves multidisciplinary; for instance, they involve plenty of "sociological reference" because they heavily rely on behaviour in addition to anatomy and heredity in describing species (Beer, 91). Therefore, even when contemporary novels are directly influenced by

The Origin of Species or *The Descent of Man*, the influence of Sociobiology cannot be entirely overlooked.[13]

Another necessary modification of terminology is to establish a distinction between what is postmodernist and what is postmodern. As far as this present study is concerned, "Postmodernism" is strictly used to refer to theoretical and philosophical positions including: the social-constructivist models of human nature and culture; "the Standard Social Science Model"; Poststructuralism in literary theory, especially its models of language and history; and the works of philosophers who contributed to the general tendency of "uncertainty" and contingency in postmodernism such as Jean-Francois Lyotard and Fredric Jameson. The term "Postmodern", on the other hand, is used in its stylistic and "temporal" senses. It refers to the style of much contemporary fiction without necessarily implying full subscription to Postmodernist theoretical attitudes. This is especially the case in Byatt's and Diski's novels, which incorporate some reflexive and self-referential language, pastiche, parody and hybridity, but they challenge many aspects of today's literary theory.

Defining terminology for a research study into Darwin's impact on literature would inevitably address the negative legacy of Social Darwinism and Eugenics. Such biologically deterministic perspectives, as mentioned above, may account for the general aversion towards evolution among literature scholars. However, this present study does not partake in such hyper-sensitivity and is willing to accept Darwin's theory as an a-moral scientific discourse whose immense value cannot be eclipsed by what can be described as ideologically and economically motivated appropriations of Darwin, and indeed of Spencer's philosophy, as illustrated by Peter Bowler among other researchers (301). Demystifying the Social Darwinist dogma lies beyond the scope of this present study.[14] Sufficed to say that in its insistence on a cruel struggle for survival, it seems to

[13] Other theories of evolution certainly feature in this study as their contributions have ultimately fed into Darwinism. These include the work of Jean-Baptiste Lamarck, Alfred Russel Wallace, Herbert Spencer, Charles Lyell and many other Victorian and contemporary intellectuals and scientists.

[14] It must be mentioned in this regard that the desire to dissociate Darwin's theory from Spencer's and Galton's work should not go as far as eclipsing the political potential of the theory itself. As Jeff Wallace affirms, Social Darwinism as "a process of tailoring and appropriation" had quite wide political use. Spencer's synthetic philosophy and its enormous influence in late-nineteenth century Britain and America, Galton's eugenics and the extension of this science into pre-war British policies and propaganda, or Thatcherite and Reaganite free-market liberalism in the 1980s, all benefited from naturalisations which could be derived from the theories, and even the name, of Darwin". Wallace rightly warns that discrediting the term "Social Darwinism" should not mask "the explicit incorporation of natural science into all kinds of value system within our cultures." (14).

overlook Darwin's extensive emphasis on altruism and sympathy, especially in *The Descent of Man*, as discussed at length in Chapters Two and Three of this study. Also, in the wake of the publication of *The Origin*, Darwin's friend T. H. Huxley warned that struggle for life in human society is governed by human ethical processes rather than being totally predatory (31). It must be pointed out here that this problem of misreading Darwin can largely be an outcome of his 'creative' writing. As Gillian Beer points out: "It is the element of obscurity, of metaphors whose peripheries remain undescribed, which made *The Origin of Species* so incendiary– and which allowed it to be appropriated by thinkers of so many diverse political persuasions." (92). Fortunately, biological determinism is a pitfall which the contemporary revivals of Darwinism have managed to avoid to a large degree, as shall be demonstrated in the rest of this study. Whether in the world of the novel, in Socio-biology or in literary theory, Darwinian evolution is referred to either for creative inspiration or for *understanding* human nature and culture rather than assigning moral values to certain practices or *prescribing* guidelines for action. The emphasis is always on Darwin's complex and entangled picture of life in all its contradictions. Inherent to nature are ruthless forces such as suffering, death and extinction but they never cancel out pleasure and happiness as evidenced by, for instance, the amorous ways of attracting mates, be they colourful feathers, melodious songs or pleasing scents.

1.7 The Impact on Genre, Language and Style:

The interest in Darwinism has not only intensified themes and theoretical concerns, it has also greatly altered forms and techniques in the contemporary British novel. It is now possible to talk about "The New Darwinist Novel". Certainly, such generic classification is hard to demarcate, for in literature a clear-cut classification is almost impossible to achieve. Yet, one can map out several defining features shared among most contemporary novels that are influenced by Darwinism. Firstly, despite having differing narrative styles, the novels considered in this study all incorporate science and academic concerns. This can be most clearly seen in the choice of characters. In *Being Dead*, the protagonists are both zoologists; in *Saturday*, a successful brain surgeon; in *Enduring Love*, a popular science writer; in *Monkey's Uncle*, an aging laboratory technician and in *Morpho Eugenia* and *Possession*, a Victorian amateur naturalist. The same is true of other novels which are

not explored in this study, such as Byatt's *The Biographer's Tale* (2000) whose protagonist is a young academic.

Secondly, the language of the novel is perhaps the area that witnessed the most significant metamorphosis as a result of the interest in Darwinism. Various scientific discourses and terminologies have been incorporated, and in this regard McEwan's *Saturday* features as a strikingly ambitious experiment. Consider the following description of the hereditary disease Huntington: "If a parent has it, you have a fifty-fifty chance of going down too. Chromosome four. The misfortune lies within a single gene, in an excessive repeat of a single sequence – CAG." (93). The language gets more technical as we go into the operating theatre with the protagonist Henry Perowne: "Male, in his twenties, fell downstairs about three hours ago. He was drowsy in casualty, with a Glasgow Coma Score of thirteen dropping to eleven. Skull lacerations, no other injury recorded. Normal C-spine X-ray." (248-9). The language reveals quite extensive research conducted by McEwan while writing the novel. In fact, he lists four medical doctors in the Acknowledgements page at the end of *Saturday*. Such specialist language, when fused into the narrative, contributes to reinforcing the interest in its Darwinian themes. The proof is in the frequency with which it appears in the novels. Novelists have even created fictionalised scientific works such as the fabricated medical journal article at the end *Enduring Love* (233-43). Jim Crace also admits that in writing *Being Dead* he has invented the scientific details and the creatures in the scenes of decomposition (2000a).[15]

A contributing factor to this experimentation with language is the mutual influences between the contemporary British novel, on the one hand, and popular science writing, on the other. Again, Ian McEwan exemplifies the affinities in this regard; he is a regular contributor to the Edge Foundation online magazine as is his friend, the renowned science writer, Richard Dawkins. The influence here can be seen in the act of borrowing from popular science "heuristic" tools and concepts such as "the theory of mind", as illustrated in Chapter Two of this study. However, the most visible influence in terms of language is,

[15] Additionally, science fiction as a broad genre has gained growing importance within the Darwinian literary revival. This is an inevitable development, following the early achievements of pioneers of the stature of H. G. Wells. Yet, what is different nowadays is the way Darwinism is blurring the generic barriers between science fiction and other contemporary novel genres. For instance, the Sociobiological perspective on human nature becomes a common thematic concern. This is the case in Stephen Baxter's novel *Evolution*, which portrays several scenarios of human evolution both on Earth and in extra-terrestrial settings, but it adheres to the concept of the "universality" of human nature and its intrinsic altruism. History is another common area of interest; in a similar way to Byatt's *Possession*, Baxter's *Evolution* and *Times Ships* both stress notions of the continuity of history and archaeological status of biography writing.

in fact, the style of writing adopted by Charles Darwin himself in the various books, letters and autobiography he wrote. The affinities in this regard can be summarised in reliance on the anecdotal, the playful and the metaphoric in a language that is appealing and accessible to the general non-specialist reader. For example, the following passage from his *Journal of Researches*[16] can be read as a source of intertextuality concerning the language of naturalist description in the novels considered in this study:

> The next day I attempted to penetrate some way into the country. Tierra del Fuego may be described as a mountainous land, partly submerged in the sea, so that deep inlets and bays occupy the place where valleys should exist […] Finding it nearly hopeless to push my way through the wood, I followed the course of a mountain torrent. At first, from the waterfalls and number of dead trees, *I could hardly crawl* along; but the bed of the stream soon became a little more open, from the floods having swept the sides. I continued slowly to advance for an hour along the broken and rocky banks, and was *amply repaid by the grandeur of the scene*. […] I followed the watercourse till I came to a spot where a great slip had cleared a straight space down the mountain side. By this road I ascended to a considerable elevation, and obtained a good view of the surrounding woods. (209-10, emphasis added)

The remarkable beauty of this journal by Darwin stems from his vivid description of both the landscape, Tierra del Fuego, and the process of scientific observation and discovery. It is an anecdote with slow moving tempo, he "could hardly crawl along", but suddenly there is the shift towards a heightened sense of awe and discovery when he finds a clearing in the vegetation. The young Darwin, the naturalist on his early *Beagle* expedition, is now "amply repaid by the grandeur of the scene". This anecdotal description of naturalist fieldtrips is mirrored by John Fowles in *The French Lieutenant's Woman* in the late 1960s and is revisited by Byatt in *Possession*. In both cases, the Darwinian touch is maintained in the language that describes the protagonist's exploration

[16] The full journal entry "DECEMBER 17th, 1832." is provided in Appendix I of this study as an example of the various aspects of Darwin's language and novelistic style of writing, especially the fluidity of his narratives as evidenced in the journal entries.

of the natural world. Consider the following description of a fieldtrip by Charles Smithson in Fowles's novel:

> he began to search among the beds of flint along the course of the stream for his tests. He found a pretty fragment of fossil scallop, but the sea urchins eluded him. Gradually he moved through the trees to the west, bending, carefully quartering the ground with his eyes, moving on a few paces, then repeating the same procedure. Now and then he would turn over a likely-looking flint with the end of his ashplant. […] He therefore pushed up through the strands of bramble— the path was seldom used— to the little green plateau.
>
> It opened out very agreeably, like a tiny alpine meadow. The white scuts of three or four rabbits explained why the turf was so short. Charles stood in the sunlight […] And there, below him, he saw a figure. For one terrible moment he thought he had stumbled on a corpse. But it was a woman asleep. (73)

The sleeping woman Smithson comes upon at the bottom of the slope was Sarah Woodruff, the mysterious young lady with whom he slowly falls in love. In a way, he was *amply rewarded* by happening upon this woman at end of this fieldtrip. Like Darwin's piece, the tempo of the language is slow, Smithson is gradually and carefully surveying the landscape for natural specimen until suddenly, as a sort of revelation, he discovers a clearing in the vegetation where he can stand in the sunlight and take sweeping view of the surroundings.

Similar naturalistic impulses can be seen in the language of *Possession* by A. S. Byatt. The naturalist here is the fictional Victorian poet Randolph Henry Ash, who "spent long hours poring over rockpools, deep and shallow, on the north side of the Brigg. He could be seen stirring the phosphorescent matter in them with his ashplant, and diligently collecting it in buckets, taking it home to study such microscopic animalcules as *Noctilucae* and Naked-eye *Medusae*" (251). In manner similar to *The French Lieutenant's Woman*, the language in *Possession* is riddled with Victorian naturalist terms such as the "Noctilucae" and the "Medusae". Yet, Byatt's text differs from Fowles's in the implicit attitudes it expresses regarding the actual adaptive function of language in human society. *Possession* highlights the intimate relationship between the origin of language and the

human need for authoring and deciphering stories. The two main characters of the novel, Maud and Roland, embark on an academic and detective quest to understand the relationship between two fictional Victorian poets Randolph Ash and Christabel LaMotte. At the height of their investigative work, Maud tells Roland, "I feel taken over by this. I want to *know* what happened […] It isn't professional greed. It's something more primitive.", to which Roland retorts, "Narrative curiosity" (238, emphasis in original). A narrative is captivating because it is, largely, the retelling of a secret or a series of secrets. This human urge to consume narratives is equated with biological needs in an epigraph by Ash which ushers in the approaching end of the novel: "We are driven / By endings as by hunger. We *must know* / How it comes out, the shape o' the whole, the thread" (476, emphasis in original). The literary world in the novel thrives on secrecy. Ash's and Christabel's poetry and correspondence would not have invited as much literary and historical interpretation had it not been for their secret liaison.

In fact, the whole plot of *Possession* relies on the initial secret which Roland divulged only to Maud, i.e. his discovery of Ash's letters in the library. Secrets, obviously, need language to be preserved and imparted, and the literary language, the metaphoric and the figurative, seem to be their best vehicle. Roland and Maud found more love letters hidden inside a doll in Christabel's room when Maud could associate the doll with one of the poems: "Dolly keeps a Secret / Safer than a Friend […] Dolly ever sleepless / Watches above / The shreds and relics / Of our lost Love" (82-3). Here is a secret transported throughout the decades, via a figure of speech, a personification. No wonder then that Maud felt that "Literary critics make natural detectives" (237). This triangular relationship of language, secrecy and the narrative is indeed informed by an ardently evolutionary perspective on human nature, summed up by Ash: "We are driven / By endings as by hunger" (476). Yet, this approach to human nature is not unique to Byatt's work, as illustrated in Chapter Two of this present study. Various evolutionary and 'primordial' motifs overlap in the works of different novelists despite differences in style and ideological commitments. A similar but slightly crude reiteration on the function of language occurs in Ian McEwan's *The Innocent* (1990), which starts with its protagonist, Leonard Marnham, receiving the following lecture from his new boss, Bob Glass, a CIA operative in Berlin:

> You know what the best course I ever took at college was? Biology. We studied evolution […] It helped me choose my career. For thousands, no millions of years we had these huge brains, the neocortex, right? But we didn't speak to each other […] We lived in packs. So there was no need for language. If there was a leopard coming, there was no point in saying, 'Hey man, what's coming down the track? A leopard!' Everyone could see it, everyone was jumping up and down and screaming, trying to scare it off. But what happens when someone goes off on his own for a moment's privacy? When he sees a leopard coming, he knows something the others don't. And he knows they don't know. He has something they don't, he has a *secret*, and this is the beginning of his individuality, of his consciousness. If he wants to share his secret and run down the track to warn the other guys, then he's going to need to invent language. From there grows the possibility of culture. Or he can hang back and hope the leopard will take out the leadership that's been giving him a hard time. A secret plan, that means more individuation, more consciousness […] Secrecy made us possible," (37-8 emphasis in original).

The speaker here is no biologist; Bob Glass's reasoning on secrecy does sound too convenient to be accurate, especially coming from a secret agent working of the front lines of the Cold War. But that is exactly the point. Induction through adaption is one recurring motif in the novels considered here. Language, like all other human organs, must have had an adaptive advantage to have been preserved till this day by natural selection.

There are plenty of examples where the contemporary novel benefits from the language and style of writing employed by Charles Darwin and later evolutionary biologists. And it is not always a matter of intertextuality or pastiche; some novelists have infused retrospective and political commentary into their re-writing of Darwin. This is the case in Jenny Diski's masterpiece *Monkey's Uncle*. Diski takes her literary text out of its comfort zone and into more politically didactic and topical writing. The protagonist, Charlotte, is a genetics lab technician who is struggling with the loss of her daughter as well as the collapse of her political ideals. She undergoes a trouble-laden journey into mental illness which culminates in a failed suicide attempt. During her stay at a

psychiatric ward, Charlotte experiences various hallucinatory visions or daydreams of her presumed ancestor, Robert FitzRoy, Captain of *The Beagle*. The various dimensions of Charlotte's hypothetical relation to Robert FitzRoy are explored in Chapters Three and Four of this study. This present chapter is concerned with the one specific daydream where she narrates the well-known story of FitzRoy's attempt to 'civilise' and Christen some of the natives he met in Tierra del Fuego. The actual historical accounts of the story are readily available, and it is quite probable that Diski has referred to Darwin's version of events in *Journal of Researches*, due to the various affinities with her text. This is a special case of intertextuality, for Darwin's text is quite narrative and 'novelistic' in its adherence to using generally accessible language, clear and rounded characterisation as well as maintaining some sort of complex plot. For example, in the entry entitled "DECEMBER 17th, 1832" Darwin recalls, almost in a flashback, "I have not as yet noticed the Fuegians whom we had on board. During the former voyage of the Adventure and Beagle in 1826 to 1830, Captain Fitz Roy seized on a party of natives, as hostages" (301). Diski's re-writing of this same story adopts Darwin's style in terms of the use of subtly comic and light-hearted language as well as the use of anthropomorphic images of animals which suggests man's evolutionary origins. For example, consider the following heartfelt description by Darwin of one of the natives, Jemmy:

> I was often a little sea-sick, and he used to come to me and say in a plaintive voice, Poor, poor fellow! but the notion, after his aquatic life, of a man being sea-sick, was too ludicrous, and he was generally obliged to turn on one side to hide a smile or laugh, and then he would repeat his Poor, poor fellow! [...] Jemmy was short, thick, and fat, but vain of his personal appearance; *he used always to wear gloves*, his hair was neatly cut, *and he was distressed if his well-polished shoes were dirtied*. He was fond of admiring himself in a looking glass (207, emphasis added).

Darwin was hyper-sensitive to children's naughtiness and the peculiarities of teenage years, even when they come from a nation so foreign to his own at the time, and he has no objections to reporting some inconsequentially personal instances of human behaviour in a serious book on biology. His light-hearted language here is copied by Diski but for quite different purposes; to use comic and sardonic tones in order to inspire reader's response

and involvement in approaching the imperialist undercurrents of the story. In Diski's version, the Christian minister actually disapproved of the teenager's naughty behaviour and attention to his attire, and in a manner of a scout instructor, expected him to behave more maturely:

> He loved his starched, high collar, and was never, not even when it was appropriate, to be seen without immaculate white gloves. The Reverend Matthews even suggested that Jemmy was a little too concerned with matters sartorial in the manner in which he would stop whatever he was doing to wipe the slightest spot of mud or dust from the shoes he so loved to see shining beneath him. (113).

A teenager's exaggerated attention to his or her appearance seems to be a universal and timeless human behaviour which Darwin delights in reporting. But Diski introduces the character of Reverend Matthews to function as a social and religious censor, an imperialist agent seeking to uproot the free-spirited indigenous boy and to assimilate him into the religion of the empire, an act which, obviously, demands discipline. The language remains playful and mundane, but the implication is that one should not forgot the politically-charged atmosphere in which FitzRoy's experiments on humans took place. Highlighting the questionable ethicality of the experiment, the narrator says, "It was, in his [FitzRoy's] imagination, to be the story of the Garden of Eden all over again. They would tame the wilderness and make a garden with the seeds they would take with them, and grow delightful things to eat such as cabbages and carrots." (113-4). Obviously, cabbages and carrots, albeit good for health, are not exactly the milk and honey of the Garden of Eden, nor are they the "delightful things" which European colonisers actually strove to cultivate, such as wine grapes. It does not take much exercise of the imagination to see that Diski is using language which is very critical of the Victorian imperialist enterprise; the product of FitzRory's human experiments will never be a paradise.

As mentioned in section 1.6 on this chapter, by Darwinism this study is also referring to the influence of all recent incarnations of the theory including, but not limited to, Sociobiology and evolutionary psychology, which can be seen operating across the selection of novels in this study. In Diski's *Monkey's Uncle*, for instance, on the level of

the narrative which takes place in Charlotte's troubled imagination the language sometimes shares implicit affinities with popular science writing. Charlotte's companion, the anthropomorphised orang-utan Jenny, makes subtle references to the gene-centred theory of altruism espoused by the renowned biologist William D. Hamilton (1964, 1-3) and popularised by Richard Dawkins in his book *The Selfish Gene* (1976). When she introduces herself, Jenny asserts that all her relatives have the same name, Jenny, because they can "recognise each other by a variety of other means […] we tell one from another by *their qualities*." Suggesting that members of her species simply have the biological predisposition to recognise their kin, Jenny adds that they see "What runs through and out of their veins". When quizzed further by Charlotte about this magical ability to recognise one's bloodline, Jenny calls it a "sixth sense" and implies that humans are evolutionary underdeveloped in this regard (35-7, emphasis added). Using strikingly similar metaphorical language, in *The Selfish Gene* Dawkins provides a Sociobiological explanation for such 'superhuman' abilities as Jenny's: "It is theoretically possible that a gene could arise which conferred an externally visible 'label', say a pale skin, or a green beard, or anything conspicuous, and also a tendency to be specially nice to bearers of that conspicuous label." According to Dawkins, "genes might 'recognize' their copies in other individuals", and this is why "altruism by parents towards their young is so common" (2006, 89-90). Apart from a hypothetical visible 'label', the absence of a concrete description of the ways in which genes can communicate across the bodies of separate organisms leaves much to the imagination; not only has Dawkins personified the genes but he seems to endow them with mysterious communication abilities not too dissimilar to telepathy.

Consequently, the modern incarnations of Darwinian theory, especially in the area of popular science writing, incorporates much of what can be described as literary and figurative language.[17] Dawkins's anthropomorphised genes are not too far removed from Diski's anthropomorphic ape. Indeed, both narratives use a language of magical metaphors which is reminiscent of Lewis Carroll's *Alice's Adventures in Wonderland*, which is the subject of a slight pastiche in *Monkey's Uncle*, especially as the narrative delves into the 'wonderland' of the protagonist's subconscious where Jenny lives. It is

[17] Metaphorical language is indeed a dominant feature of *The Selfish Gene*. In fact, right from the preface, Dawkins invites his readers to treat his topic as if it were science fiction. "Cliché or not, 'stranger than fiction' expresses exactly how I feel about the truth. We are survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes." (2006, xxi).

interesting to note that such linguistic influences are a two-way street; biologists have borrowed metaphors and symbols from literature as had Charles Darwin done a century earlier. For instance, in 1973 the American evolutionary biologist Leigh Van Valen borrowed the character of the Red Queen from Carroll's *Through the Looking-Glass* to describe the hypothesis that species should continually evolve and proliferate simply to survive while locked in an arms race against other equally evolving species in environments which are also constantly changing (16-7). Therefore, like the Red Queen in Carroll's story, the net result for the species is nearly staying put. The Red Queen tells Alice, "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" (Lewis Carroll, 145). The fact that the biologists are intentionally borrowing literary language is evidenced by Van Valen remark once he has described his red queen hypothesis: "There may be other sufficient explanations that I have not been imaginative enough to see" (19). The recourse to the imaginative and the literary in evolutionary theory is indeed a unique aspect that makes it an ideal companion for literary narratives seeking to bridge the gap between the sciences and the humanities.

Human nature is certainly the most important arena in this interdisciplinary venture. The next chapter aims to uncover the common strategies employed by the contemporary novelists to re-define and re-appropriate what it means to be human.

Chapter Two: Evolutionary Human Nature

2.1 The Sociobiological Paradigm of the Human:

Defining human nature is an existential riddle which has troubled *Homo Sapiens* ever since they became the locus of a self-aware consciousness. Indeed, thousands of religious myths and narratives have attempted to pinpoint humanity's *raison d'être*. In a more rational manner, philosophy has undertaken the same challenge ever since the early days of Greek antiquity. And of course, immortal works of arts and literature have been inspired by the question of what it means to be human. This enquiry is certainly at the heart of the theory of evolution. As Darwin states in *The Origin of Species*: "No complex instinct can possibly be produced through natural selection, except by the slow and gradual accumulation of numerous, slight, yet profitable, variations" (191). Not only has the process of evolution given human beings their current bodily constitution, but it also has gradually shaped instincts, emotions and mental faculties starting from primitive mammalian origins. This is indeed a highly contentious debate, especially in the literary realm. As John Dewey queries, "Why is there repulsion when the high achievements of fine art are brought into common life, the life that we share with all living creatures?' (20).[18] One may presume that this enquiry might have taken a smoother path within the realm of the natural sciences, given their high degree of empiricism and detachment. However, nothing is further from the truth; human nature remains the subject of an unresolved debate among the very scientists who have tackled the topic. Accusations of bias are common, particularly political bias towards a conservative agenda as well as leftist persuasions. For example, in *Not in Our Genes* (1984) neuroscientist Steven Rose, with Richard Lewontin and Leon Kamin, criticised the recent incarnations of Darwinian approaches to human nature and culture, especially the works of Sociobiology by E. O. Wilson and Richard Dawkins's concept of the Selfish Gene, describing the latter as "the most reductionist of Sociobiologists" (262). Dawkins responded by accusing Rose, *et al.* of prioritising ideology over truth in their attacks (1985, 59).

[18] Dewey also comments, "Darwin's book entitled "Expression of Emotion" —more accurately their discharge— is full of examples of what happens when an emotion is simply an organic state let loose on the environment in direct overt action. When complete release is postponed and is arrived at finally through a succession of ordered periods of accumulation and conservation, marked off into intervals by the recurrent pauses of balance, the manifestation of emotion becomes true expression, acquiring esthetic quality—and only then" (155-6).

The present chapter starts by focusing on this curiously contentious debate as it finds its way into the contemporary literary scene. As mentioned in Chapter One, the 1990s and the 2000s witnessed a spectacular proliferation of popular science books on Darwinism and human evolution. The contemporary English novelist was not oblivious to this publishing insurgency, and especially of the highly polarised debates it stirred regarding the origins of human nature. After all, this is the humanities where often opinion or preference structures thought and belief and where human nature is a central concern. The popular science writer Matt Ridley would go as far as claiming triumphantly that the two cultures chasm is now being bridged by many novelists who have realised "that there is more mystery and imaginative space in quantum mechanics and deep geological time than there ever was in folk tales and creation myths" (Ridley, 2009, xi).

To illustrate this interaction between popular science writing and the contemporary novel, this chapter engages in a close reading of a carefully selected group of texts by three acclaimed British novelists: Ian McEwan in *Enduring Love* (1997) and *Saturday* (2005), A. S. Byatt in *Possession* (1990) as well as Jenny Diski in *Monkey's Uncle* (1994). The cornerstone of this survey is to argue that the novelists have subscribed to the major New Darwinist claims on human nature despite the aversions and reservations voiced by many intellectuals in the literary field. For Byatt and Diski, the Darwinian narratives, old and new, offered a magical reservoir for creative inspiration, while for McEwan, the fascination with Darwin slowly metamorphosed into an inclination towards biological determinism as well as conservative politics.

Darwinism, like other scientific discourses, has been interpreted and appropriated differently by different readers. In order to understand the literary appropriations, it is vital to start with a brief illustration of both the classical and the contemporary Darwinian theories on human nature. Also, it must be noted that all the texts considered in this present analysis blend psychology with social interaction in their approaches to human nature. From the start, Charles Darwin speculated that the mental faculties have evolved, asserting in *The Descent of Man* (1871) that "there is no fundamental difference between man and the higher mammals in their mental faculties"; rather, it is possible to observe in nature "numberless gradations" where the human mind is the last and most complex (86). The same applies to instincts such as "self-preservation" and "sexual love" (87). Darwin's

later works carried on in the same vein, asserting the evolution of the ensemble of mental facilities, social instincts and psychological drives we call human nature.[19]

It is a well-known fact that Darwin's ideas on human evolution were met by resounding rejection from many individuals, including some of his associates, who found them threatening to established discourses including the Biblical story of creation. Fast-forward to the present, Darwinism continues to stir storms of disapproval. In the late 1970s, the controversial theories put forward by W. D. Hamilton and Edward O. Wilson began to form the foundations of Sociobiology. Wilson's definition of his new discipline is quite indicative. "Sociobiology is defined as the systematic study of the biological basis of all social behavior […] the discipline is also concerned with the social behavior of early man and the adaptive features of organization in the more primitive contemporary human societies." (1975, 4). Later works by Wilson, Hamilton and others have carried on in the same vein until today, albeit with a less "directive" tone and with "a renewed fascination with variability" (Beer, XXI).

These renewed attempts to relate human nature and social interactions to their biological basis have also met a cascade of fierce criticisms. On the scientific front, the accusations have lately been summed in Steven and Hilary Rose's edited volume *Alas Poor Darwin* (2001) to include the promotion of genetic determinism, unfalsifiable hypotheses and malevolent political or moral ideas (3-6). Likewise, scholars of the humanities and social sciences shared the suspicion that a reactionary political agenda operates within the notion that human nature can be partly hardwired (Greenberg, 93), and that it promotes Western white patriarchy (Michelson, 87). These reservations do have some grounds and are quite valid; however, they are in essence a political debate where one is free to take either a conservative or a liberal stance. That is why the discipline of literary criticism is now suffering, to the oblivion of many practitioners, a real crisis. Literary critics are effectively holding back the progress of their own discipline if they continue to snub Darwin at a time when many creative writers have already welcomed the recent expansion of his theory into the social sciences. The artists have indeed usurped the critics' domain, and "many novelists are increasingly responding to postmodernism and

[19] Merely a year after the publication of *The Descent*, Darwin finished writing *The Expression of the Emotions in Man and Animals* (1872), which further elaborates this intimate connection between human nature and its biological roots. It meticulously records a tremendous body of observations and experiments to argue that the expressions of elementary emotions such as fear, happiness and jealousy can be seen as adaptations to physiological needs and communal living– adaptations which have evolved in a distinctively mammalian manner.

challenging its self-determining features" (Tew, 2007, 10). Responding to the controversies of today's evolutionary psychology, while retaining the discursive influence of Darwin's writings, McEwan, Byatt and Diski have embarked on quite an ambitious enterprise in a treacherous territory. Applying Darwinian insights onto human affairs inevitably leads to a serious moral conundrum. On one hand, there are valid concerns regarding the use of Darwinism to justify the suffering of the weak or aggression. This is the ideology of "Social Darwinism", as illustrated in Chapter One of this study, but the most horrifying example in this regard may be the Nazis' use of evolutionary science to justify their human eugenics programmes. This policy led to the enforced sterilisation of over 400,000 persons (Proctor, 108) and the involuntary euthanasia of over 70,000 hospital and asylum patients (Friedlander, 109), in a bid to preserve the presumed racial fitness of their state.

On the other hand, viewing human affairs through the prism of Darwinism can reveal a benevolent outlook to life. To say that human nature has evolved means that it is universal and shared by all humankind, which is a central motif in McEwan's works as shall be illustrated shortly. Biology provides a human bond that transcends all forms of divisive politics; it has evolved partly through altruism and co-operation among members of the species *Homo Sapien*s.

As this chapter will attempt to illustrate, the universality of the Darwinian perspective on human nature has been utilised in the novels to subvert the domineering uncertainties and indeterminacies of their postmodernist context. In this regard, Ian McEwan makes a notable contribution to a recent volume entitled *The Literary Animal* where a number of renowned literary scholars and evolutionary scientists proclaim together, in a language fit for a manifesto, that the time is ripe to bridge the gap between science and the humanities. In this book, his essay "Literature, Science and Human Nature" starts by asserting that ever since the social constructivist approach dominated the social sciences, it has erroneously reduced the human being to an indeterminate blank slate on which culture alone can inscribe anything (2001, 14-6). Eager to escape this model of infinite ephemeral forms of human nature, the novels promote the Darwinian perspective as a viable alternative, offering a great a degree of tangibility as well as a material understanding of the human being.

It must be noted that this departure towards materiality has varied manifestations in the novels studied here. As outlined above, the grim side of Darwinism has unfortunately

crept into Ian McEwan's novels. His experiments which started by a call for a universal and egalitarian human nature in *The Innocent* (1990) and *Enduring Love* (1997) has ended up entangled with a fundamentally conservative justification of aggression and war in *Saturday* (2005). A. S. Byatt, on the other hand, has managed to navigate away from such implications. A close reading of Byatt's *Possession* (1990) reveals that romantic love is centred on a material basis, being an advanced form of evolutionary altruism. In this regard, Byatt's involvement with Darwinism seems to be largely inspired by Darwin's classical texts, specifically his narratives of magical transformation and his re-writing of mythical relics – a quality of his writing which has been analysed at length by Gillian Beer in *Darwin's Plots* (2009). This Darwinian materiality pervasively inhabits Byatt's texts, producing a carnival of sensuous pleasures, colours, sights and sounds.

2.2 Ian McEwan: From Universalism to Tribalism:

If the various revivals of Darwinism in the contemporary British novel are to become an established literary movement, it will find its spokesperson in the novelist Ian McEwan. His keen interest in Darwinism and evolutionary theory not only influences many of his novels but also seems to be a kind of personal ideology frequently confessed in his non-fiction writing and public statements. Perhaps the most telling example of these is his lecture "End of the World Blues" (2007) where McEwan declares his belief that Darwinian evolution is not only the best elucidation of the diversity of life but can also be an alternative creation myth perfectly capable of replacing monotheistic religions (360). This ideological conviction of his can be traced to the late 1980s. According to Daniel Zalewski, writing in *The New Yorker* magazine, McEwan and his friend Ray Dolan embarked on an incessant study of evolutionary theory to "shake off" some "post-hippie junk". They engaged in heated debates, read Darwin's biographies and even visited Down House in Kent. Soon after, McEwan started corresponding with the renowned evolutionary biologist Richard Dawkins (Zalewski, 2009).[20]

In his fiction, McEwan's engagement with Darwinism is at its most extensive and explicit in *Enduring Love* (1997). Drawing on Darwin's *The Expressions of the Emotions*

[20] This exchange, Zalewski tells us, had a profound impact on the novelist's life because it drove a wedge between him and his first wife Penny Allen, who was following a more "spiritual" personal ideology in the form of New Age beliefs. The couple divorced in 1995, allowing the novelist "to become radically more scientific than any one of us", according to his friend Galen Strawson (Zalewski, 2009). It is no wonder then that *Enduring Love* (1997) came out two years after this crucial juncture in the novelist's personal life.

in Man and Animals (1872) as well as the more contemporary works of evolutionary biologist E. O. Wilson, the novel subscribes to the belief that human nature is the refined product of an evolutionary process and is now largely hardwired in the collective DNA of the race. Wilson, whom McEwan calls his "own particular intellectual hero" (1998b) and whose books are listed in the acknowledgements at the end of *Enduring Love*, states that "the brain exists because it promotes the survival and multiplication of the genes that direct its assembly. The human mind is a device for survival and reproduction, and reason is just one of its various techniques." (1978, 2). This audacious view resonates throughout *Enduring Love.*

Such a key thematic concern in the novel is developed through a series of interconnected references and narratorial musings which require an exercise in close reading to disentangle. To begin with, the narrative line starts with the protagonist, Joe Rose, recollecting a tragic accident that took place during a picnic with his wife Clarissa in the Chiltern Hills, an area of outstanding natural beauty outside London.[21] Joe joined several strangers trying to rescue a boy and his grandfather who had lost control of their hot air balloon and were now drifting dangerously towards powerlines. The team of rescuers managed to get hold of the balloon's basket momentarily, but then in the commotion, all lost their grip except for one man, John Logan, who later fell from a considerable height and met his death. While reflecting on his involvement in the accident, Joe Rose, who has not yet revealed that he is a science journalist, attempts to rationalise the rescuers' failure and their distress as the result of the limitations imposed on human nature by evolution:

[21] A brief summary of the plot is useful at this point: *Enduring Love* is largely the story of Joe Rose, a science journalist living in London. His personal ordeal starts in the aftermath of the balloon accident when one of the rescuers, Jed Parry, develops an abnormal love for him. Jed is a religious recluse who starts stalking Joe persistently. When they meet in front of Joe's flat, Jed keeps pleading with Joe, who is an atheist, to accept their love and God into his heart. It soon becomes clear that Jed's irrational protestations are a symptom of mental illness, which Joe eventually diagnoses as de Clérambault's syndrome, a type of delusional disorder where the affected person believes that another person is in love with him or her. As Jed's intrusions become unbearable, Joe loses the support of his wife Clarissa; she is suspicious of Jed's existence since she has never seen him. The couple's relationship is destabilising. Joe turns to the police, but they are unsupportive too. Later on, during Clarissa's birthday dinner at a London restaurant, a politician sitting at the next table, Colin Tapp, is shot by hitmen. Joe is sure he was the intended target, but the police do not believe him. Therefore, for protection, he obtains a gun illegally. Then Jed rings him to say that he has Clarissa captive in the flat. Joe gets back home quickly and ends the confrontation by shooting Jed's in the elbow. Jed is taken to hospital, and the police do not prosecute Joe. Towards the end of the novel, Joe meets John Logan's widow. Clarissa is present too, but there are still difficulties between them. In the appendices of the novel, it is indirectly stated that Clarissa and Joe are reconciled, while Jed is incarcerated in a secure institution, and his delusional infatuation still going strong.

> We never had that comfort, for there was a deeper *covenant*, ancient and automatic, written in our nature. *Cooperation*— the basis of our earliest hunting successes, the force behind our evolving capacity for language, the glue of our social cohesion. Our misery in the aftermath was proof that we knew we had failed ourselves. But letting go was in our nature too. *Selfishness* is also written on our hearts. This is our mammalian conflict: what to give to the others and what to keep for yourself. Treading that line, keeping the others in check and being kept in check by them, is what we call morality. Hanging a few feet above the Chilterns escarpment, our crew enacted morality's ancient, irresolvable dilemma: us, or me. (14-5, emphases added)

This passage is probably the most brilliant encounter between Darwinism and the contemporary fiction, for it captures in a scandalously casual tone and a highly recapitulated language a major equivocation in Darwinism: the uneasy coexistence of selfishness and altruism. Nature is of course a-moral; organisms simply seek survival by any strategies available. These strategies are morally contradictory only when viewed through a human ethical prism. The alpha principle of evolution is selfishness and self-preservation. It is a universal instinct that requires no further explanation beyond the fact that it is an immediate result of the struggle for life. The beta principle, altruism and cooperation, is quite different; it is secondary to selfishness, appearing subsequently when some species became social.

Therefore, McEwan's choice of words and syntax here is quite precise; co-operation generally started as a "covenant" – a collective custom, an accepted habit perhaps – and then it became "automatic" and "written in our nature". This is precisely the process which Darwin suggested for the emergence of the instincts in *The Origin of Species*: "Several cases also, could be given, of *occasional and strange habits* in certain species, which might, if advantageous to the *species*, give rise, through natural selection, to quite *new instincts*." (190-93, emphasis added).[22] Altruistic cooperation is indeed a "strange" habit and instinct in evolutionary terms because, by definition, the altruistic individual

[22] Although Darwin does not discuss human instincts unequivocally in *The Origin of Species*, the book includes implicit clues of his belief that "Man" may have domesticated himself to adapt to social living in a manner similar to other social species. For instance, the highly anthropomorphic language that he used to describe slavery and division of labour in ants (200-3) can be one hint of his views on humans in this regard, which he later explicitly stated in *The Descent of Man.*

who is ready to sacrifice his or her wellbeing is more vulnerable to extinction than the selfish ones (Sober, 216). The answer to this paradox was first provided by Charles Darwin himself. [23] In *The Descent of Man,* he attributes altruism to evolution at the group level, stating that when tribes are in competition, the fittest tribe would be the one that has the largest number of individuals willing to cooperate and protect each other. The altruism is further enhanced by becoming a *covenant* when "each man would soon learn that if he aided his fellow-men, he would commonly receive aid in return." (155-6). On the Chiltern Hills, Joe's tribe has failed the test and broken the evolutionary covenant.

Certainly, one is justified in finding Joe's views problematic, as they seem to reduce the entire human morality to the uneasy coexistence of the basic drives of cooperation and survivalism. This seems to be an unavoidable conundrum in the Darwinian perspective. Charles Darwin himself had to accommodate those two contraries, saying that he used "the term Struggle for Existence in a large and metaphorical sense, including dependence of one being on another" (1859, 50). In *Enduring Love* and other works by McEwan, the concept of evolutionary human nature has to oscillate between these two poles of altruism and selfishness, and thus it always seems to combine both *good* and *evil* dimensions as far as conventional morality is concerned.[24]

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[23] There are various ongoing debates among the Darwinists who attempted to explain the paradoxical existence of altruistic behaviour alongside fierce competition for survival. The general agreement seems to be that there are no purely selfless altruistic acts; subconsciously, the altruistic individual always expects survival benefits in return for his or her altruism. However, the level at which altruism occurs is subject to disagreement, leading to two different views that can be illustrated as follows:

I- The dominant view seems to be that altruism increases the fitness of a group of individuals in its competition for resources with other groups in the same environment. As mentioned above, this is the view originally adopted by Darwin, adding that in human society altruism is accompanied with the expectation of future reciprocation. In the late 1970s, E. O. Wilson incorporated this group selection theory into his Sociobiological model, as outlined in this present chapter. Later, it was revived by David Sloan Wilson and Elliott Sober (1994) with a greater focus on the egalitarian notion that cooperation among members of a group is generally beneficial for survival.

II- The second view on altruism can be described as more "cynical" because it negates any role for group welfare and insists that altruism is exclusively the business of individual genes. This is the view adopted by William D. Hamilton (1964) and popularised by Richard Dawkins in *The Selfish Gene*. Using highly metaphorical language, Dawkins explains that a gene would enhance its survival chances if it programmed the organism where it resides to be altruistic towards other organisms that carries replicas of itself. To do so, it is possible for this gene to endow the body with an "externally visible 'label'" as well as the tendency to assist other bodies that exhibit this label (88-9). Thus, collective welfare is rendered a mirage in a world where all individuals are merely oblivious carriers of selfish genes.

[24] Professor Philip Tew kindly drew my attention to Elliott Sober's *The Nature of Selection* (1993) which encapsulates this observation of mine in one concise yet expressive sentence: "For the moment, the phenomenon of *altruism* must be a central puzzle for the Darwinian paradigm" (216, emphasis in original). Sober notes that Darwin eventually incorporated the principle of altruism, alongside natural selection, as a method of group selection in *The Descent of Man*. (*ibid*, 216). This evolutionary puzzle, however, does not

McEwan has spent plenty of time and energy focusing on what he perceived to be the positive and egalitarian dimensions of evolutionary human nature. For example, he exalts them unequivocally in his essay aptly entitled "Literature, Science and Human Nature" where he outlines Darwin's classical theories, stating that the expressions of emotions are universal throughout the world since the different human races have a single ancestor (10). The egalitarian and anti-racist stance of Darwin's theory here is indeed appealing, and McEwan takes the argument further, suggesting that "behind the notion of a commonly held stock of emotion lies that of a universal human nature." (10). Then, he relates the whole argument to literature. "It would not be possible to read and enjoy literature from a time remote from our own, or form a culture that was profoundly different from our own, unless we shared some common emotional ground, some deep reservoir of assumptions, with the writer." (11). These views explain a great deal of McEwan's narrative strategies and authorial choices. For him, "literature does not define human nature so much as exemplify it." (12). Indeed, this sort of exemplification is common in his writing. For example, in several of his novels, there is a curiously recurrent "tableau" of a protagonist arriving in an airport or train station and becoming mesmerised by the universality of humanity. Consider the following indicative passage from chapter one of *Enduring Love*:

> The Boston flight had only just landed and I guessed I had a half-hour wait. If one ever wanted proof of Darwin's contention that the many expressions of emotion in humans are universal, genetically inscribed, then a few minutes by the arrivals gate in Heathrow's Terminal Four should suffice. I saw the same joy, the same uncontrollable smile, in the faces of a Nigerian earth mama, a thin-lipped Scottish granny, and a pale, correct Japanese businessman as they wheeled their trolleys in and recognized a figure in the expectant crowd. Observing human variety can give pleasure, but so too can human sameness. I kept hearing the same sighing sound on a downward note, often breathed through a name as two people pressed forward to go into their embrace. (4)

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seem to have been solved yet, as evidenced in the existence of two positions on the evolution of altruism; the group-based and the gene-based approaches outlined in the previous footnote. Moreover, the same puzzle has fuelled notorious feuds on the contemporary Darwinist scene between proponents of the two different approaches, E. O. Wilson and Richard Dawkins. This "biological warfare" flared up as recently as 2014 after a BBC interview with E. O. Wilson (Johnston, 2014).

The similarity between this passage from a novel published in 1997 and McEwan's essay which is copyrighted 2001, is unmistakable; the commitment to a 'genetically inscribed' human nature is a project that has been thought out over many years.[25] In fact, it can be seen as early on in his career as *The Innocent* (1990) where a similar tableau of a protagonist contemplating "human sameness" and universality occurs at the onset of the novel. Leonard Marnham arrives in Berlin full of apprehension at the thought of working with foreigners. Yet, he gradually manages to integrate into his new multinational milieu, and the integration process starts with him observing the Germans' drinking habits in a restaurant where he has his first meal in the city:

> As he drank he became aware of the conversation of three men at a table behind him […] At first he heard only the seamless, enfolded intricacies of vowels and syllables, the compelling broken rhythms, the delayed fruition of German sentences. But by the time he had downed his third beer his German had begun to improve and he was discerning single words whose meanings were apparent after a moment's thought. (6)

It is certainly interesting to note that many of McEwan's protagonists travel to foreign lands or deal with foreigners,[26] and perhaps this authorial choice is intended to exemplify the universality of human nature. As Leonard is listening to the clamour of the German party, his rudimentary knowledge of their language may have helped him understand the men. However, what he can truly understand is the "vowels and syllables" and "the compelling broken rhythms"; he is in fact tuning to a paralinguistic dimension as he is witnessing a basic human act of socialising; the vocal pitches and intonations that can be shared and uttered throughout the human race. Indeed, the topic of the foreign conversation soon turns out to be stereotypical male bravado and the horrors of warfare:

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[25] It is must be noted here that McEwan, like many champions of Darwinism, is careful not to overstate the importance of genetics at the expense of culture. In the same essay, he stresses that "Our ways of managing our emotions, our attitudes to them, and the way we describe them are learned and differ from culture to culture." (10). However, this attempt to balance nature with nurture and avoid genetic determinism proves quite difficult and almost illusory, as this chapter illustrates.

[26] The same can be said of *Atonement*, *Black Dogs* and, to a certain extent, *Saturday*.

> The conversation gathered pace again. It was clear that it was driven by competitive boasting. To falter was to be swept aside. Interruptions were brutal; each voice was more violently insistent, swaggering with finer instances, than its predecessor. Their consciences set free by a beer twice as strong as English ale and served in something not much smaller than pint pots, these men were revealing when they should have been cringing in horror. They were shouting their bloody deeds all over the bar. *Mit meinen blossen Händen!* With my own hands! Each man bludgeoned his way into anecdote, until his companions were ready to cut him down. There were bullying asides, growls of venomous assent. (7)

Apart from the German phrase "*Mit meinen blossen Händen!*", all the noises in this tableau are universally human, albeit male and violent. Without seeing the three men sitting behind him, Leonard could relate to them because he can relate to the common swagger of male voices released from inhibition by alcohol and fencing for control of the conversation.[27] Moreover, Leonard was creating a mental image of the men behind him by tapping into an innate experience of human nature, or in this specific example of universal male bravado. The fact that "They were older, frailer than he had imagined" (7) offers proof of his and our shared notions of how tough war veterans ought to look, a stereotypical view of typologies of behaviour.

Therefore, universality is a key dimension of McEwan's notion of evolutionary human nature, and there are numerous examples of this common emotional ground in his fiction.[28] To take part in this universality, the individual needs to have the mental ability

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[27] As customary in McEwan's fiction, there is here an element of the autobiographical. The novelist himself was not a stranger to this drunken round-the-table male chatter. As Daniel Zalewski reveals, "In the seventies, Amis presided over the "Friday lunch," a weekly gathering at a restaurant in Bloomsbury. McEwan and Hitchens were among the regulars. Fuelled by alcohol, the men peacocked for hours, competitively spinning variants on clichés such as "cruising for a bruising."" (Zalewski, 2009).

[28] One is tempted to argue that this fascination with the universality of the human experience has led to a tendency towards generalised characterisation, producing what can be described as heavily allegorical protagonists. For instance, Joe Rose in *Enduring Love*, despite all McEwan's efforts to individuate him, emerges as the spokesperson of the rationalistic outlook to life. He is indeed the Everyman of science when juxtaposed with his wife Clarissa, an allegorical representative of the arts and humanities. The same can be said of Bernard and June Tremaine in *Black Dogs*, representing materialism versus spiritualism respectively (Spark, 209). Throughout history, the allegorical has been used by many authors, especially prophets and politicians, who sought to impart their prophetic visions to humanity at large, and McEwan is no exception, as the next chapter of this present study illustrates. His allegorical characters engage in dramas of conflicting worldviews where science, specifically Darwinism, is given the upper hand.

to comprehend and envisage other people's states of mind. In cognitive psychology, as McEwan explains in his essay, this ability is called "Theory of Mind", which is our "automatic understanding of what it means to be someone else", and without which "we would find it virtually impossible to form and sustain relationships, read expressions or intentions, or perceive how we ourselves are understood" (5).[29] This is one more scientific concept that McEwan applies extensively and successfully to the world of *Enduring Love*. Immediately after the balloon accident, Joe is involved in a series of dramatic confrontations with his antagonist, Jed Parry. During these encounters, as Susan Green argues, both Joe and Jed have to rely on their naturally imperfect theory of mind. Both misread each other's facial expressions starting from their first encounter. While Joe assumed that the "fractional widening" of Jed's blue eyes signified respect, the eyes were in fact gleaming with the first sparks of a delusional love. Similarly, Jed mistook every gesture by Joe as proof of his obsessive love (447). Moreover, the novel's ultimate success in espousing the concept of a universally shared human nature lies in its ability to entangle the readers in these very mind-reading exercises. As Susan Green argues, "McEwan's use of first-person narration and concentrated focalization invite the reader to occasionally question the reliability of the narrator, thereby constructing a conspicuous perspectival slant to the discourse which challenges the reader to work hard." (442). This is especially the case when Joe's wife, Clarissa, suggests that Jed is the figment of his imagination since no one else has met Jed. Consequently, the readers have to exercise their theory of mind skills in order to assess their narrator's sanity in light of Clarissa's rather plausible accusations (*ibid*, 452). Indeed, if Joe had imagined Jed's existence, *Enduring Love* would have been a totally different novel. These doubts in the narrator and the narrative persist till the concluding part when Jed's presence is positively confirmed when he confronts Clarissa and takes her hostage in her flat.

There is definitely a positive egalitarian edge to the concept that all people are equal in their basic human nature. However, *Enduring Love* and other novels by McEwan do

[29] It is worth noting that in cognitive psychology, the phrase "Theory of Mind" may have been coined as early as 1978 by David Premack and Guy Woodruff in their study of primates where they define it as follows; "In saying that an individual has a theory of mind, we mean that the individual imputes mental states to himself and to others (either to conspecifics or to other species as well). A system of inferences of this kind is properly viewed as a theory, first, because such states are not directly observable, and second, because the system can be used to make predictions, specifically about the behaviour of other organisms." (515).

not always paint a rosy picture; as mentioned above, the concept of evolutionary human nature also incorporates what can be described as negative elements or disquieting tendencies. These are demonstrated by the tension between Joe's and Clarissa's views on this topic. Shortly after his second meeting with Jed, Joe returns to his musings on human nature:

> The postwar consensus, the Standard Social Science model, was falling apart […] We do not arrive in this world as blank sheets, or as all-purpose learning devices. Nor are we the 'products' of our environment […] We evolved, like every other creature on earth. We come into this world with limitations and capacities, all of them genetically prescribed. Many of our features, our foot shape, our eye colour are fixed, and others, like our social and sexual behaviour and our language learning, await the life we live to take their course. But the course is not infinitely variable. We have a nature. (69-70)

At this juncture in the novel, Joe Rose can indeed be considered his creator's mouthpiece. His words are almost identical to McEwan's rebuttal of social constructivism in his essay (2001, 14-6). For him, human nature is universal because it is now largely hardwired into the genome which all *Homo Sapiens* share. People are born with genes which contribute to determining their social behaviour as well as their physiology. Consequently, the Standard Social Science model is flawed; the individual is not solely a construct of its society which can be continually improved by education.

The danger of this view lies in its proximity to biological determinism. To say that the course of the individual's life is "not infinitely variable" implies a clear limitation on freedom and variety in human experiences. This tyranny of the genes may be unpalatable to many freethinkers, but it is particularly problematic for the humanities which naturally thrive on exploring and experimenting with the human experience. That is why Clarissa, as a literary scholar, is vehemently opposed to Joe's essentialist and deterministic outlook. In the same narratorial monologue, Joe tells us of a specific conversation with his wife during which their views appear markedly irreconcilable:

> the infant smile is one social signal that is particularly easy to isolate and study. It appears in !Kung San babies of the Kalahari at the same time as it does in American children of Manhattan's Upper West Side, and it has the same effect. In Edward O. Wilson's cool phrase, it 'triggers a more abundant share of parental love and affection'. Then he goes on, 'In the terminology of the zoologist, it is a social releaser, an inborn and relatively invariant signal that mediates a basic social relationship.' (70)

Joe's stream of consciousness here swiftly shifts towards a more documentary and journalistic language to the extent that he directly quotes the founder of Sociobiology, E. O. Wilson. And McEwan's choice of the infant smile example is particularly suited to stirring debates because it reduces the individual's first act of love and kindness to a merely automatic action triggered by some genetic mechanism. It is no wonder then that these "cool phrases" have troubled Clarissa. For her, this essentialist approach has "got us trapped in our genes", and at the same time "some larger meaning was lost […] The truth of that smile was in the eye and heart of the parent, and in the unfolding love that only had meaning through time." (70). In other words, Clarissa's concern is that the zoologist's approach has explained away all the intangible and transcendental dimensions of the love between mother and infant.

Ironically, E. O. Wilson himself had actually anticipated such reactions to his theory in the same book quoted in the novel. In the opening chapter of *On Human Nature*, he acknowledges that his biological perspective entails, among other existential dilemmas, "the rapid dissolution of transcendental goals towards which societies can organize their energies." (4). He also adds that "If human behaviour can be reduced and determined to any considerable degree by the laws of biology, then mankind might appear to be less than unique and to that extent dehumanized. Few social scientists and scholars in the humanities are prepared to enter such a conspiracy" (13). Whether Wilson has managed to dispel his detractors' concerns lies beyond the scope of this present study. What matters for our purposes is that the disquieting dimensions of his discipline have been explored at various levels in *Enduring Love*. Besides Joe's direct reference to the loss of transcendental values like love or the potential for determinism and dehumanisation, the novel indirectly dramatizes one of the bleakest insights of *On Human Nature*; namely, its cynical views on altruism. Put briefly, Wilson implies that the individual's preparedness

to sacrifice for the welfare of others is ultimately a self-serving survival strategy. He argues that human altruism is to a considerable degree "hard-core altruism", meaning that the individual has a biological imperative to sacrifice one's welfare if necessary to save his or her closest relatives because this ensures the survival of some copies of their shared genes at the expense of others. At the same time, Wilson incorporates the classical Darwinian concept of "the covenant" outlined above; human beings practice "soft-core altruism" which is the tendency to help others because we have the expectation of future reciprocation from society at large (155-6). This formula can explain much of Joe's personal anguish in the aftermath of John Logan's death while saving the child in the balloon. Firstly, Joe cannot conveniently comprehend Logan's sacrifice in terms of his strictly Darwinian worldview; it is simply not hard-core altruism because the child he was saving was not his own. Unlike the grandfather of the child, Logan did not have what Joe calls "genetic investment" in this matter (19). At the same time, he was overwhelmed with guilt because he may have been the first in the rescue party to let go of the balloon causing Logan to drift away and then fall to his death. From the start, Joe says, "I'm not prepared to accept that it was me." (14) because he does not want to be accused of breaking the human covenant of cooperation and altruism. This form of guilt corresponds to Wilson's paradigm as outlined above. The human being is subject to "hard-core altruism" directed towards the closest genetic relatives, but this tendency needs to be balanced with "soft-core altruism" directed towards society at large and operating by the promise of reciprocation. "The predicted result is a melange of ambivalence, deceit, and guilt that continuously troubles the individual mind" (Wilson, 159). This is, to a large extent, the same kind of guilt which consumes Joe after the accident.

Moreover, in this paradigm of human altruism, Joe is subject to what Wilson calls "the enforcement of reciprocation. The cheat, the turncoat, the apostate, and the traitor are objects of universal hatred." (162). This explains why Joe visited Logan's widow and his sudden realisation at the gate of her front garden that "I had come to explain, to establish my guiltlessness, my innocence of his death." (107). Because Logan's family are the supposed recipients of the social reciprocation of Logan's altruism, they are uniquely placed to absolve Joe of all guilt in this matter.

Enduring Love can be described as a novel of ideas which balances different outlooks to life rather than endorsing or preaching. As James Mellard rightly points out,

while the novel exhibits strong affinities with the new Darwinism, it does not recommend "any hard evolutionary theory" (24), relying on traditional psychoanalysis rather than "brain science" to construct the main catalyst of the action; namely, the de Clérambault's syndrome (16-7). All these questions of the roles of nature and nurture or selfishness and altruism fade into the background later on in McEwan's career. In 2005, *Saturday* shifts the emphasis explicitly towards a largely genetic model of human nature. This view is allegorised in the character of its protagonist, Henry Perowne, whose career in neurosurgery is based on the principle that the individual brain determines the character and nature of its owner. Right from the start of the narrative, Perowne's stream of consciousness reveals that he sees people as "hot little biological engines with bipedal skills suited to any terrain, endowed with innumerable branching neural networks sunk deep in a knob of bone casing, buried fibres, warm filaments with their invisible glow of consciousness" (13). The language of description here is pregnant with faith in the durability of the human being and, in a manner akin to science fiction, intimates an efficient futuristic race. Perhaps the inspiration for this view comes from McEwan's friend, Richard Dawkins, who expressed a similar proposition in his bestseller *The Selfish Gene* (1976). The book starts by insisting that it should be read "as though it were science fiction", and goes on to assert that "We are survival machines— robot vehicles blindly programmed to preserve the selfish molecules known as genes." (2006, xxi). The fittest genes are the ones which have directed the assembly of the best organic bodies, i.e. the genes that "are skilled in the art of controlling embryonic development" (*ibid*, 23). Dawkins' views also share with McEwan's the celebration of the durability of the living organic matter, pointing out "the potential near-immortality of a gene" (*ibid*, 35). However, in both cases, what is being described remains a disturbingly dehumanizing picture, an outlook to life which renders the human into a biological automaton. This, in a nutshell, is *Saturday's* unique outlook on human nature.

It is not an exaggeration to say that this novel is mostly the story of Henry Perowne, wrought in a Woolfian fashion in one day within a single area of central London, Fitzroy Square. The timeframe, Saturday, 15 February 2003, is the day when London witnessed one of the largest demonstrations ever in the history of the country in protest of the proposed invasion of Iraq, yet the narrative is largely focused on Perowne's own actions on that day and his rigorous attempts to ignore the protesters' anti-war message. This present chapter argues that Perowne's ambivalence towards the war is partly caused by an

ideological inclination to regard the biological struggle for life and the survival of the fittest as omnipotent principles which inexorably shape human affairs. In other words, *Saturday's* worldview corresponds to the ensemble of political attitudes and evolutionary arguments that are loosely grouped under the umbrella term of 'Social Darwinism'. As mentioned in Chapter One of this present study, since the mid-19th century, Social Darwinists have been interested in the direct application of the various theories of evolution onto human affairs, thereby justifying morally problematic phenomena such as aggression, colonialism and eugenics. In the world of *Saturday*, some form of Social Darwinism is dramatized in the volatile encounters between Perowne and his antagonist, Baxter, which take place against the backdrop of a grander act of aggression; namely, the Iraq War of 2003.

The two fights with Baxter are indeed key turning points in the narrative which brilliantly tie up several Darwinian sub-textual motifs. The first takes place as Perowne attempts to drive to his squash match through the blocked streets of London. His car collides with Baxter's, leading to a dangerous altercation which Perowne manages to escape by mentally manipulating his attackers. The dominant motif in this scene is the primitiveness of the fight itself. The men are archetypal males engaging in a physical fight which is portrayed in animalistic terms. As Perowne starts to size up his enemies, one of them turns over a shorn off wing mirror "the way one might *a dead animal*. One of the others, a tall young man with the long mournful face of *a horse*, picks it up, cradling it in both hands […] they turn their faces towards Perowne simultaneously, with abrupt curiosity, like *deer disturbed in a forest*" (84, emphases added). Faced with these savage and predatory looks, Perowne considers self-defence, thinking "he'll be wise to protect his testicles", but he immediately recalls that he has not engaged in "a hand-to-hand fight since he was eight" (88). At this early stage in the fight, as the pages of the novel reeks of testosterone, Perowne admits his inability to win a physical fight. Soon he receives a blow to the sternum, and is cornered by Baxter's henchmen.

Obviously, the physical discrepancies between the two men have to do with their chosen professions and social class, but even class may be biologically determined or vice versa. In *The Descent of Man*, Darwin refers to evidence suggesting "that the hands of English labours are at birth larger than those of the gentry." (51). However, in the same classic treaties on evolution, Darwin asserts that physical prowess is not the only advantage that males utilise to survive; highly developed "sensory or locomotive organs"

can also be advantageous (244). This is precisely Perowne's case. His alternative survival weapon is his keen brain and scientific knowledge. Fuelled by "a modest rise in his adrenaline level" (90), he makes a swift diagnosis of the onset of the Huntington's disease in Baxter, and he uses this knowledge to embarrass him and to deflect the attack. The early symptoms of this degenerative illness include:

> poor self-control, emotional lability, explosive temper, suggestive of reduced levels of GABA among the appropriate binding sites on striatal neurons. This in turn is bound to imply the diminished presence of two enzymes in the striatum and lateral pallidum – glutamic acid decarboxylase and choline acetyltransferase. There is much in human affairs that can be accounted for at the level of the complex molecule. Who could ever reckon up the damage done to love and friendship and all hopes of happiness by a surfeit or depletion of this or that neurotransmitter? (91)

This is indeed the most daring attempt in McEwan's career to pin down human nature to its material and biological roots. One cannot help but feel impressed by the author's research for *Saturday* which pinpoints this neurological illness to help him promote his belief in a Darwinian human nature. It is perhaps difficult for the general readership, which is not necessarily versed in neurology, to challenge this passage as it links the decline of "glutamic acid decarboxylase" to the undoing of the human mind. This use of illness as a case study is not a unique manoeuvre to McEwan. Almost all evolutionists, starting with Charles Darwin himself, have suggested that neurological and mental illnesses can be a chasm through which one can peer into the evolutionary structure of the human being. Providing an alternative to direct experimentation on humans, these degenerative ailments resemble a self-deconstructing process in which the complex human structures reveal how their cogs and parts were assembled in a long process of slow evolutionary change. The best example in this regard comes from *The Decent of Man* where Darwin refers to cases of microcephaly as evidence of human evolution. "Their skulls are smaller, and the convolutions of the brain are less complex than in normal men." (54). This physiological arrest of development corresponds to primitive and animalistic mental abilities and behavioural patterns:

> Their intelligence, and most of their mental faculties, are extremely feeble. They cannot acquire the power of speech […] Idiots also resemble the lower animals in some other respects; thus several cases are recorded of their carefully smelling every mouthful of food before eating it […] The simple brain of a microcephalous idiot, in as far as it resembles that of an ape, may in this sense be said to offer a case of reversion. (54-5)

There are clear affinities between the Darwinian classical text and McEwan's writing in *Saturday* and, to a lesser degree, *Enduring Love*. Both antagonists, Baxter and Jed Parry, are patients who are used as a case study. In addition, the physiological dimension determines human nature. What is new in *Saturday* is the celebration of the biological determinism implied in this logic. Soon after diagnosing Baxter's illness, Perowne's stream of consciousness elaborates on its genetic mechanisms:

> If a parent has it, you have a fifty-fifty chance of going down too. Chromosome four. The misfortune lies within a single gene, in an excessive repeat of a single sequence - CAG. Here's *biological determinism in its purest form*. More than forty repeats of that one little codon, and you're doomed. Your future is fixed and easily foretold. (93, emphases added)

It should also be mentioned that Baxter's genetic disease further reinforces the Darwinian character of the first fight scene. The outcome of this male skirmish is the vanquishing of the combatant who is less fit genetically speaking. The winner, Perowne, and later his nuclear family, survive Baxter's attacks because the Perownes are the fittest. Nothing can be more Darwinistic than this allegorical encounter. The antagonist's weakness is revealed by its ulterior originator; the faulty gene. Perowne, again in a primeval rush to arms, immediately picks on this specific weakness in order to deal Baxter a vanquishing blow. He tells him, "Your father had it. Now you've got it too." (94). Of course, the intention is to shatter the antagonist's concentration and confidence by divulging his personal secret loudly. Perowne knew too well that the thugs' leader would be desperate to hide his physical deficiency from his henchmen. "The shameless blackmail works" (95), Baxter's predatory posture is broken, and his "vaguely ape-like features are

softened" (97). As Baxter half-heartedly discusses the illness and cures with Perowne, he discovers that his men have deserted him. Perowne eventually takes advantage of Baxter's confusion to slip into his car and drive away. In this encounter, Perowne becomes the embodiment of rational Western civilisation which is able to contain and circumvent the chaotic terror represented by Baxter.

The influence of evolutionary theory on this scene is not limited to explicit references to genetics and biology, but it implicitly colours the moral dimensions of the fight. In nature, the struggle for existence is a-moral; organisms deploy their fittest weapons in total oblivion to any human moral sense. Likewise, Perowne's personal war with Baxter is characterised by extreme moral ambivalence. He breached doctor-patient confidentiality when he revealed Baxter's illness, and he manipulated the ill man by an overly optimistic talk of future cures. This possible violation of a moral code is further complicated in the narrative by its implications for the role of science as a discourse, according to David Amigoni:

> Perowne offers his expert diagnosis, and it turns the situation, exploiting, not the metaphysical, but indeed *the magical* thinking that hovers below the metaphysical justification of the patient-doctor relationship, and which continues to haunt the legitimating strategies of modern science: 'They are together … in a world not of the medical, but of the magical. When you are diseased, it is unwise to abuse the shaman' (2008, 9, emphasis and ellipsis in original).

The sense of relativity in the scene is indeed overpowering. On the one hand, here is the man of science, Perowne, abusing his science in such a way as to reveal its magical "legitimating strategies"; the shaman is certainly not the sort of rational Enlightenment hero that Perowne models himself after. On the other hand, while Perowne's weapons and counterattack are morally unacceptable, in this specific encounter, they seem to have been the only way for him to survive being set upon by three thugs.

In fact, Darwinists have always struggled to identify a morally appropriate relationship between their theory and human conflicts. On the one hand, some have insisted on separating Darwinism from social considerations. As early as 1893, T. H. Huxley maintained that "since law and morals are restraints upon the struggle for

existence between men in society, the ethical process is in opposition to the principle of the cosmic process [of evolution], and tends to the suppression of the qualities best fitted for success in that struggle." (31). On the other hand, even Charles Darwin himself has accepted that the struggle for existence operates among the different human races (1879, 22), but he actively refrained from politically inspired calls to intervene in this struggle by means of eugenics, for instance (Moore and Desmond, liii). Unfortunately, *Saturday* does not heed these demarcations and exhibits a sort of fundamentalist enthusiasm for evolution that brings it closer to a Social Darwinist outlook. This is indeed the case when it comes to Perowne's ambivalence towards the morality of the Iraq War.[30] His rationale is highly reminiscent of the philosopher Herbert Spencer, who condoned the struggle for survival because it spurred self-improvement (Bowler, 301-2). Perowne believes the imminent war is going to have positive outcomes, as he declares when grilled by his daughter, Daisy: "The invasion's going to happen, and militarily it is bound to succeed. It'll be the end of Saddam and one of the most odious regimes ever known, and I'll be glad." (189) In other words, the acceptance of war in the novel can be a form of *Spencerian* enthusiasm for the struggle for life; war and all human conflicts are seen as mere manifestations of the evolutionary struggle which will naturally and inevitably take place.

There always has been a strong affinity between Social Darwinism and war. In 1894, the Victorian sociologist Benjamin Kidd stressed that:

> The Anglo-Saxon has exterminated the less developed peoples with which he has come into competition […] not necessarily indeed by fierce and cruel wars of extermination, but through the operation of laws not less deadly and even more certain in their result. The weaker races disappear before the stronger through the effects of mere contact. (46)

[30] It must be noted that all these thematic concerns are woven into the narrative in quite intricate and subtle ways. For example, in a single moment in the narrative, Perowne's personal war with Baxter starts with the car accident which takes place at the very same moment when his stream of consciousness shifts to his constant apprehensions of global terrorism (81), and it proceeds against the background clamour of the war protestors. Therefore, a textual reading of *Saturday* can become a highly *deconstructive* reading as is the case in this present analysis.

Such outdated views had implicitly justified the wars of colonialism by suggesting that the fate of the "weaker races" is already sealed because of the operation of the laws of biology. Similar racial divides exist in *Saturday* but in a milder form that is more akin to tribalism, and there is indeed a departure from the egalitarian notions of a universal human nature witnessed in earlier works such as *Enduring Love*. While shopping for fish for his family feast, Perowne complains that our age is characterised by an "expanding circle of moral sympathy. Not only distant peoples are our brothers and sisters, but foxes too, and laboratory mice, and now the fish" (127). But he knows of a "trick" to transgress the common bonds of biology; "The trick, as always, the key to human success and domination, is to be selective in your mercies" (127) towards others. This is by far the most cynical line of thought in *Saturday*; in essence, it means to turn a blind eye to human predation and aggression. Once again, McEwan's inspiration here could be Richard Dawkins's hard-line theory of biological altruism which is heavily based on the role of selfishness in the struggle for survival (2006, 4-6). Writing in the mid-1970s, Dawkins notes that "Recently there has been a reaction against racialism and patriotism, and a tendency to substitute the whole human species as the object of our fellow feeling." (9). However, for Dawkins, "This humanist broadening of the target of our altruism" (9) is misguided because altruism is merely the result of one gene trying "to assist replicas of itself that are sitting in other bodies." (*ibid*, 88). Similarly, the protagonist of *Saturday* often fails to extend his sympathy outside the circle of kinship. Despite all the concerns he expressed for Saddam's victims, Perowne ends up being economical with his mercies when he justifies the war to his daughter, exclaiming "How about a short war, the UN doesn't fall apart, no famine, no refugees […] *and fewer deaths than Saddam causes his own people in an average year*?" (187, emphasis added).

If the war means collateral damage inflicted on the Iraqi people, so be it. His selective mercies are sufficient only for his own tribe; his small world in 2003 is constantly haunted by the shadowy terrorists "who would like to kill him and his family and friends to make a point." (81). Ironically, this threat against the Perowne tribe is eventually materialised in the narrative, albeit with few adjustments. The family is attacked by the mentally deranged Baxter who wanted *to make a point*, to avenge himself after his humiliation earlier in the day.

In the second fight, Baxter and an accomplice storm the Perowne family home and take his wife captive threatening to slash her neck with a knife. This second fight is again

full of evolutionary allegories and symbolisms. Perowne is on the verge of losing the struggle for life because of his inexperience in the archetypal male fighting. Like Joe Rose in *Enduring Love*, his physiology starts to falter when he plans a counterattack with household items as improvised weapons.[31] "A strong urge to urinate keeps nudging between his thoughts […] his heart rate accelerates so swiftly that he feels giddy, weak, unreliable." (213). Moreover, when he resorts to the weapon he used earlier, i.e. trickery informed by medical knowledge, he fails to manipulate the attacker. Baxter's attention turns to the daughter, Daisy, and in a voyeuristic mood swing, he orders her to strip naked. This act of sexual criminality has an archetypal evolutionary significance too. As Charles Darwin puts it, "The law of battle for the possession of the female appears to prevail throughout the whole great class of mammals" (1879, 618). Such undercurrent connotations in the scene are further highlighted by the fact that Daisy was pregnant. The protection of females against conquest by outsider males is ultimately the protection of one's progeny and, by extension, of one's survival via their genetic material. The moment Perowne sees the "compact swell of her belly" (218), his genetic investment in the fight suddenly soars.

As Perowne stands helpless, the events take an unexpected turn. Baxter orders the naked Daisy to read a poem from her collection. This bizarre plot twist proves to be lifesaving for the Perownes. Daisy recites Mathew Arnold's "Dover Beach", and the poem precipitates enough euphoria in the mentally-unstable attacker that he eventually believes Perowne's tricks.[32] As he follows Perowne upstairs to see some non-existent information of a cure, Baxter is thrown down the stairs by Perowne and his son Theo, thus ending his attack and leaving him unconscious and injured. The authorities are informed and Baxter is taken to hospital.

It is not too hard to see why Baxter would suddenly be so tamed by poetry. As David Amigoni illustrates, Baxter's behaviour is emblematic of the nature of the gene itself.

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[31] In *Enduring Love*, when Joe Rose practices shooting in the forest, he experiences a similar physiological reaction: "My legs were weak, and my bowels had gone watery. It was a constant and conscious effort as I walked on the crackling dry leaves beneath the beeches to keep my anal sphincter tight." (206). Mundane bodily functions represent the biological dimension of human confrontations which is always close at hand in McEwan's fiction, but these two examples also serve to convey the male protagonists' sexual insecurity, as illustrated below in this chapter.

[32] McEwan's choice of the poem "Dover Beach" adds further depth and authentic appeal to the narrative at this point. A poem highlighting the melancholic retreat of the "Sea of Faith" in the modern age mirrors in a highly metaphorical way the receding mental faculties of Baxter and the hopelessness involved in this process.

"Baxter's faulty gene becomes both a 'switch', and receptor, for the appreciation of poetry, or literature as culture's flagship. Something that 'begins' in genetics, or the intransitive domain of ontological necessity, contributes powerfully to the transitive domain of literary and cultural activity." (2008, 10). In other words, here is another moment in the novel where McEwan explores the relationship between literature and science as well as the bridges he has often sought to establish between the two. Yet, as Amigoni maintains, the specificities of the literary are retained. The movement between the two domains is carried out "contingently, relatively: that Baxter and Perowne 'hear' such different versions of the poem suggests that there is no universal genetic 'programme' underwriting literary apprehension as some reductive modes of neo-Darwinian have been inclined to argue." (*ibid*, 10). Indeed, the Darwinian modes in *Saturday* do not affect its view of the role of literature but are mostly targeted towards questions of human nature and aggression.

The scenes of both encounters with Baxter can be stripped down to their primeval and evolutionary skeletons, rendering them allegories of the struggle for life. The weapons which ultimately won the struggle are Perowne's scientific knowledge and Daisy's poetry recital. It must be noted that these are, furthermore, the most significant autobiographical elements in *Saturday*. Science, literature and the relationship between the two are a major pursuit for Ian McEwan, as has been illustrated extensively in this chapter and the next of the present study. Besides this central preoccupation with science, McEwan shares other autobiographical elements with Henry Perowne, as he admits in an interview with David Lynn: "I gave him my house; I gave him little bits of my children, of my wife." (2007b, 39). Of course, it can be a reductive critique to focus on autobiographical elements; the work of art is the property of an interpretive community which is larger than simply the author's intentions. Yet, the affinities between McEwan and his protagonist can shed light on the volatile and allegorical character of Baxter in quite unexpected ways. When asked about the significance of Baxter as an alternative form of home-grown terrorism, McEwan accepted this view of the antagonist (*ibid*, 39).

In fact, the political allegory here can be extended to say that Baxter is indeed a metaphor for Iraq. In 2003, both Baxter and the Iraqi regime were secretive, unstable and unpredictable entities, both had little to lose in their final stages of degeneration and both were perceived to possess formidable arsenals. When Perowne found himself in a position

to save Baxter's life in the hospital, having just injured him in the second fight, Perowne was partly putting right the damages he inflicted on him in the previous skirmish. This is a similar situation to the argument that the 2003 invasion was a chance to "put right" the mistakes of the earlier 1991 Gulf War, as Perowne tells his daughter (187). In fact, even the language used to describe the final surgery in the novel is suggestive of a country being invaded. "they can see the crack in the bone […] it looks like an earthquake fissure seen from the air, or a crack in a dry riverbed." (251). Baxter is transformed into a topography being surveyed by aerial reconnaissance. Later on in the surgery, as Perowne looks at the brain, "He can easily convince himself that it's familiar territory, a kind of homeland, with its low hills and enfolded valleys." (254). One must keep in mind when encountering these metaphors that they can be easily reversed; indeed, politicians have always personified their theatres of war in statements such as "surgical military strikes", and the rhetoric over the 2003 war was no exception.[33]

Whether in the evolutionary sense or the political sense, Baxter's allegorical character serves as a tool to normalise the 2003 Iraq War as one manifestation of the struggle for life. In this way, the author's excessive enthusiasm for Darwinian theory forces him to see it everywhere in human affairs. This sort of biological fundamentalism has definitely infected McEwan's writing. In the interview with David Lynn, he stresses that "there's something very contaminating about aggressive and irrational behavior. In the second World War, for example, the allies had to become genocidal in themselves" (2007b, 39). The logic here is largely Social Darwinist; when faced by war, human beings will fail to maintain their human empathy and descend into the murderous, animalistic struggle for existence. Of course, history is full of examples to the contrary, where warring men rose above the bestial and settled their differences in rational and ethically human manners. Empathy should be counted as an integral part of human nature; however, Perowne does not seem to accept its unconditional form. Towards the end of the novel, when Perowne's father-in-law, Grammaticus, expresses some sympathy for Baxter,

[33] US military and security historians have often celebrated what they perceived as the success of "surgical air strikes" ever since their modern use in the 1991 Gulf crisis. According to Richard H. Shultz, Jr., "Vital civilian and military leadership centers, military equipment, and infrastructure across the width and depth of Iraq and Kuwait were struck with devastating effects. Command bunkers, aircraft shelters, and other protected targets were penetrated and destroyed with surgical accuracy." (187). To this triumphalist assessment, Ross Gelbspan adds that "The extraordinary measures taken to avoid indiscriminate bombing of civilian areas were well worth the risk to pilots, compared to the long-range benefit in the eyes of the public. Those relatively surgical bombing raids, moreover, stood in sharp contrast to the indiscriminate Scud attacks on Israeli apartment buildings and Saudi neighborhoods." (295).

Perowne feels he "is undergoing a shift in sympathies […] What weakness, what delusional folly, to permit yourself sympathy towards a man, sick or not, who invades your house like this." (230). This inability to understand empathy in its absolute form and to extend it to a foe certainly echoes McEwan's views on the contamination of evil. Both seem to take it for granted that one needs to be "selective in your mercies" at all times due to omnipotent evolutionary and survival mechanisms.

Saturday ends when Perowne is finally able to restore his control and power over his small world after winning the war with Baxter. He is again in bed, half asleep next to his wife and feeling that "he's a king, he's vast, accommodating, immune," (269). This moment of power is remarkably conflated with sex. Even the celebratory language here becomes highly phallic: "He feels his body, the size of a continent, stretching away from him down the bed […] This is where he marks the end of his day." (269-70). The plot of the novel takes a very traditional form; the denouement marks a resolution of many climactic tensions in the plot, including the protagonist's masculine anxieties. In the beginning, we encountered Perowne inspecting his middle-age body in "the full-length bathroom mirror", reassuring himself that "He is not done yet […] Only on his pubes are the first scattered coils of silver." (20). Later on, he is troubled by his own fidelity to his wife and lack of "adventures with young women" (40). And of course, the encounters with Baxter have proved his inability to win a fight physically. One may wonder whether Perowne's middle age anxieties are part of the reasons why he is inclined to support the war. In Daisy words, those "who aren't against this crappy war are all over forty" (191). Insecurity may prompt some men to aggression, but this is an enquiry that lies beyond the scope of this current study. In the end, Perowne has managed to repel the sexual predation which targeted his family, and he proved himself an alpha male worthy of his mating rights.

The stream of consciousness in *Saturday* concludes with a *tour de force* that reiterates the novel's political alignment. "It can't just be *class or opportunities* […] Some of the worst wrecks have been privately educated. Perowne, the professional reductionist, can't help thinking it's down to invisible folds and kinks of character, written in code, at the level of molecules." (272, emphasis added). Perowne's outlook on human nature has very little to do with nurture or one's social upbringing. His is an unashamedly reductionist and biologically deterministic ideology which is always dismissive of

egalitarian politics. “No amount of social justice will cure or disperse this enfeebled army haunting the public places of every town.” (272). As Tim Gauthier rightly points out, Perowne persistently fails to reflect on whether he has contributed to the social and economic inequalities that engendered this ‘enfeebled army’ of Baxters and the homeless around Fitzroy Square. He is content in his privileged upper-middle-class life, and his only concern is to preserve his world as it is— to see it through this current era of terror and uncertainty (12). In sum, one may be justified to conclude that Perowne shares with the American Neo-Conservative camp more than just their enthusiasm for the Iraq War; he shares some of their political conservatism.

2.3 A. S. Byatt: The Aesthetics of Material Human Nature:

A. S. Byatt’s involvement with Darwinism is of a markedly different calibre to what is witnessed in all the other contemporary novelists reviewed in this present study. Unlike McEwan’s writing, Byatt’s conception of human nature seems to eschew explicit political connotations and to shift the focus to more immediate literary concerns; namely, the tendency towards narrativisation imbedded in evolutionary theory itself. It has often been remarked that the late Victorian scientists used anecdotes and similar devices to make sure their writing was accessible to the general readership.[34] Gillian Beer in *Darwin’s Plots* asserts that “Because of its preoccupation with time and with change evolutionary theory has inherent affinities with the problems and processes of narrative.” (5). It is after all the grand narrative of the diversity of life on earth. Darwin’s argument is a highly literary narrative. It cannot be fully empirical because, as Beer highlights, it is “a form of imaginative history. It cannot be experimentally demonstrated sufficiently in any present moment. So it is closer to narrative than to drama.” (6). Like Beer, Byatt is fully aware of this unique quality of Darwin’s theory, and she utilises it in crafting the plots of *Possession: A Romance* (1990) and *Morpho Eugenia* (1992).

To critique a novel such as *Possession* is to engage in an exercise of meta-criticism. The two protagonists, Roland Michell and Maud Bailey, are themselves literary scholars actively researching the liaison between two fictional Victorian poets, Randolph Henry Ash and Christabel LaMotte, by sifting through their works for clues of the illicit love.

[34] McEwan’s protagonist, Joe Rose, refers to this very aspect of the Darwinian text when he attempts to write an article on how “Darwin’s generation was the last to permit itself the luxury of storytelling” (1998a, 41). However, he abandons this idea, and McEwan does not explore it as extensively as Byatt does in *Possession* and *Morpho Eugenia.*

There is some form of circularity and novelistic reflexivity in *Possession*, yet the novel does not succumb to what its narrator calls a "self-referring, self-reflexive, inturned postmodernist mirror-game" (421). Throughout the different strands of the plot, the presence of key Darwinian motifs acts as a magnetic field which pins down all the shrapnel of the postmodernist explosions of life, re-assembling a more coherent picture of what it means to be human.

Byatt's novel subverts the Social Constructivist approach which views the human as the malleable product of its cultural milieu. The early pioneers of Constructivism, Peter L. Berger and Thomas Luckmann, assert that society is the source of all forms of reality, subjective and objective, where individuals start life equipped only with a vague tendency towards socialising, while the rest of their being is acquired in a process of socialisation that involves learning and internalising what society dictates in terms their roles in it (149-51). *Possession*, on the other hand, stresses that the human being is also a product of nature, equipped with inborn instincts and universal drives which contribute to mapping out his or her trajectory in life.

These biological motifs emerge straight from the beginning of the protagonists' journey. Though oblivious to the fact, Maud and Roland became physically attracted to each other after an awkward encounter at Seal Court— Christabel's Victorian residence and the current home of Maud's relatives. They were invited to stay the night due to heavy snow. When Maud said good night to Roland and went to take a shower, "There was an *automatic* wariness in her look which he found *offensive*." (146, emphasis added). As the air of intimacy increases towards the late hours of the day, it also leads to a mildly violent friction between them, automatically and unintentionally. When Roland wanted to check if Maud had finished her ablutions, he strangely opted to spy through the keyhole, putting himself straight in her exit path:

> [Roland] put his eye to the huge keyhole which glinted at him and disconcertingly vanished as the door swung back and he smelled wet, freshness, steam in cold air. She nearly fell over him there; she put out a hand to steady herself on his shoulder and he threw up a hand and clasped a narrow haunch under the silk of the kimono. (147)

The sudden loss of decorum at this moment is not merely incidental; it is the threshold where the primeval male/female instincts enter and dominate the encounter. The senses are heightened. The pair touch each other, albeit unintentionally, in bodily parts that have been conventionally associated with fertility and sexual attraction; his shoulder and her haunch. Charles Darwin has meticulously surveyed these secondary sexual characteristics in *The Descent of Man*. For example, he asserts that the male "broader shoulders […] have been preserved or even augmented during the long ages of man's savagery, by the success of the strongest and boldest men, both in the general struggle for life and in their contests for wives" (628). Sexual selection operates in a similar manner on the female body, augmenting, for example, the haunch area in ways that are "greatly admired by the men" instinctively (645). Roland's and Maud's senses quickly respond to these instincts of sexual attraction. Roland could smell the wet air. His eyes could feast on her hair which is now "running all over her shoulders and neck, swinging across her face". The scent of hair might have pheromone-like properties, inducing arousal in Roland. Such pheromones, which have been observed in many mammals, were also discovered in human sweat (Kaminski, *et al.*, 694). Therefore, the physiological element of the attraction is present from the start of the relationship; it is a "*kick galvanic*" or an "electric shock […] His body knew perfectly well that she felt it." (147, emphasis in original).

The biological reality of human nature is further stressed by Byatt's narrator on the very next page. When Roland has the bathroom to himself, this intimate manmade space is slowly transformed into a naturalistic setting:

> The basin and the lavatory […] entranced Roland […] Both were glazed and fired over a riotous abundance of English flowers whose tangled and rambling clusters and little intense patches seemed wholly random and natural […] a bank in reverse, resembling Titania's if not Charles Darwin's tangled bank. (148)

The Darwinian "tangled bank" engulfs the text of the novel, assuming various forms but always referring to the biological origins of life, human nature included. While here it is a glazed floral pattern appearing right after a moment of physiological attraction to the opposite sex, several decades earlier, Ash's generation saw it everywhere in nature. He is one of many Victorian gentlemen who became amateur naturalists and avid collectors of biological specimens in the aftermath of the publication of *The Origin of Species* in 1859,

as Roland explains to Maud (212). *Possession* manages to make an important historical distinction in this regard. For the Victorians, the topical interest in Darwinism could become a practical outdoor hobby, whereas for Byatt's contemporary audiences, it is an established discourse which is acquiring renewed interest largely through popular science writing and mass media. Once again, there is an element of postmodernist circularity at play here in *Possession*; a literary scholar, Roland, is researching a poet's engagement with Darwinism in a novel which is, in turn, utilising Darwinism to subvert Postmodernist and constructivist claims.

One of these manifestations of the "tangled bank" occurs in Ash's naturalistic excursions in the village of Whitby in North Yorkshire, where he observed "*ancient ammonite worms find new lives as polished brooches*" at the hands of the jet craftsmen. Witnessing the rebirth of tangled "*ancient coils of long-dead snail-things*" has set Ash on journey of both literary and naturalist exploration of "*the persistent shape-shifting life of things long-dead but not vanished.*" (256, italics in original). In other words, the interest in Darwinism has prompted the man of letters to celebrate in his literature the resilience of biological life forms, humans included, despite the outward appearance of change.

Life is constantly "shape-shifting".[35] Metamorphosis is not only an essential component of Darwin's theory, which he used to oppose the creationist belief in the immutability of species, but it is also a complex stylistic device in his grand narrative. As Gillian Beer illustrates, Darwin utilised the concept on two levels. We can easily observe remarkable transformations in the life of an individual creature, such as a caterpillar metamorphosing into a butterfly. By analogy, a species may metamorphose, i.e. evolve, into another, albeit on a much slower time scale and by means of natural selection. However, as Beer asserts, many readers have missed the analogy and confused the two levels, especially in the much-cited passage[36] on whale evolution (97-8). *Possession*, on

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[35] Appendices III-C, III-D and III-E provide visual examples of the ammonites, and the way their exotic shapes, such as the "death assemblage" fossil, can themselves be considered works of art. Appendix II is a drawing by the German biologist Ernst Haeckel (1904) which illustrates the multifaceted character of late Victorian science which incorporated elements of visual art and the narrative.

[36] In the first edition of *The Origin of Species*, the passage reads as follows:

> In North America the black bear was seen by Hearne swimming for hours with widely open mouth, thus catching, like a whale, insects in the water. Even in so extreme a case as this, if the supply of insects were constant, and if better adapted competitors did not already exist in the country, I can see no difficulty in a race of bears being rendered, by natural selection, more and more aquatic in

the other hand, seems to deliberately play on this confusion. For Ash, all life is a "*persistent*" biological entity, a 'grand caterpillar' *par excellence*, which has been metamorphosing and "*shape-shifting*" into the many different species known to this world since the beginning of time. Humankind is merely a part of this 'unitarian' cosmic process.

While Darwin's texts borrow the device of metamorphosis from earlier myths and fairy tales (Beer, 97), Byatt's Neo-Victorian novel curiously moves in the opposite direction; Ash and Christabel re-write fairy tales and myths in order to embed into them Darwinian and evolutionary motifs. This is the case in Ash's "Swammerdam", for example. The poem is about the Dutch biologist Jan Swammerdam (1637–1680), whose scientific quest to discover the origins of life eventually conflicted with his religious beliefs. In his final hours, Swammerdam reminisces on his work in biology:

> It seemed to me that the true anatomy
>
> Began not in the human heart and hand
>
> But in the simpler tissues, primal forms,
>
> Of tiny things that crept or coiled or flew. (205)

Byatt's poet inserts the theory of evolution into Swammerdam's scientific career. The community of descent among different species, including *Homo Sapiens*, is evidenced by the very anatomy of their bodies. From simple primeval forms to the human heart, it is all a magical story of metamorphosis whose chapters are unfolding right in front of the scientist's "courageous mind" (203). Moreover, on his quest, Swammerdam reached the same conclusions through embryology. No matter how strange life forms are, they remain "kin to me, or so I thought, when young. / For all seemed fashioned from the self-same stuff, / Mythic gold yolk and glassy albumen" (206). The gist of the poem is the materiality of life. Whether the primal tissue or the gold yolk, all can trace its origins to matter or what he calls "Prima Materia" (207). Consequently, the metaphysical seemed ever more redundant for Swammerdam: "It was one step, I say, to displace Man / From the just centre of the sum of things— / But quite another step to strike at God" (209).

their structure and habits, with larger and larger mouths, till a creature was produced as monstrous as a whale. (196).

Hence, Swammerdam's misery lies in his inability to reconcile biological metamorphosis with his conventional religious beliefs.

The second epic poem by Ash does not suffer such religious tensions. *Ragnarök* is a re-writing of the Nordic creation myth which expresses Ash's amateur interest in evolution and species metamorphosis. When the Norse gods Odin, Honir, and Loki created the first man and woman, Ask and Embla, the act of creation began at the primeval beaches of the world. "Two senseless forms, on the wet shore o'the world / Lay at the tide's edge, and were water-lapped," (240). Like Darwin's theory, the Nordic creation myth replaces the Garden of Eden with the world's primeval seas. Ash adds to the myth other Darwinian dimensions by suggesting that the creation is a process of metamorphosis rather than the instant acts of the god of Genesis. At the first step, the Nordic Adam and Eve were "senseless forms". Later, the gods will animate them, each of the gods contributing one aspect or more of the living human body. However, in their initial state, the two "senseless forms" are not entirely dead, "but *nourishing* / A kind of *quickening* shrunk back to the core / Of all the woody circles of their trunks." (240, emphasis added). Life exists at their core in the form of a foetal quickening awaiting its full formation; it is a vegetative state. In other words, their initial creation resembles what we now know about the suspended life status of chromosomes and the DNA. Although they are practically inanimate, being chemical compounds, their circles and codes enjoy one crucial life process; the ability to reproduce autonomously. Of course, it is not entirely anachronistic to conduct such a reading of Neo-Victorian naturalistic poetry. Byatt asserts that Ash's generation was aware of the relativity in distinguishing between inanimate organic chemicals and living tissues. Ash "did various precise experiments to prove that writhings which might be thought to be responses to pain in various primitive organisms in fact took place after death— long after his own dissection of the creature's heart and digestive system." (248). Not only can dead tissue produce movement, but it can also grow into "new creature" as in the case of "polyps" or "the tentacles of hydra" which Ash cut off into pieces (249). One cannot help but feel the presence of a special kind of magic in all these reported experiments, which is analogous to the fascination with the nature of the DNA among Byatt's contemporary readers. In fact, Byatt's choice of fossil, the "*ancient coils"* of ammonites (256), is quite suggestive of this analogy because their shape bears significant resemblance to the coils of DNA molecules. In a similar manner, the contemporary science writer Richard Dawkins has captured this magical nature of the

DNA in the metaphorical term "immortal coils" which he used as a title for his chapter on this very topic in *The Selfish Gene* (21).

This motif of magical metamorphosis recurs in another Neo-Victorian poem in *Possession*. "The Fairy Melusine" by Christabel LaMotte starts by questioning the true nature of fairies:

> And in the air, says the brave Monk, there fly
> Things, Beings, Creatures, never seen by us
> But very potent in their wandering world,
> Crossing our heavy paths from time to time, (291)

While the explicit reference here is to fairies such as Melusine, a 'naturalistic' reading like the one above is possible. The implied referent is the inanimate stuff of life, be it the DNA molecules or the tiny hydra tentacles. These share with fairies their illusiveness to the human eye, their ability to wander all around us freely, their potency and their suspended and provisional state of existence: "neither damn'd nor blessed, simply tossed \ Eternally between the solid earth \ And Heav'n's closed golden gate" (291). Most importantly, both entities are "simply volatile" (291), thus subject to mutations. The Fairy Melusine, whose lower torso changes into a "water-serpent" (267), was one of these "shape-changers", metamorphosing in accordance with the movement of the sun, the stars and other cosmic bodies; "in dreamlight, or twilight or no light" (292). Similarly, the DNA molecule is subject to mutation and metamorphosis under the influence of physical phenomena such as radiation and cosmic rays (Muller, 490).

The multiple biological motifs in *Possession* add unique dimensions to our understanding of human nature. Firstly, as Ash tells Christabel, metamorphosis is "our way of showing, in riddles, that we know we are part of the animal world" (280). Writing about it releases, therapeutically, the subconscious knowledge of the brute within. Secondly, because human beings are part and parcel of the complex web of metamorphoses in the natural world, their growth and development are partly determined by biology. This approach is in direct opposition to Social Constructivism, as highlighted

above. This is especially the case when Byatt's characters discuss the role of language in human life. The main contention in this regard is that humankind's language, as every other adaption in the species, is a product of the material world.[37] For instance, Ash's poetry is inspired by "new sights and discoveries" or the fossilised "ammonite worms" he saw on his naturalist excursions in Yorkshire (256). But the poet knows that language is ultimately imperfect. Writing to his wife about the same excursions, Ash asserts:

> *I cannot describe the air to you. It is like no other air. Our language was not designed to distinguish differences in air; it runs the risk of a meaningless lyricism or inexact metaphors* […] Thin air, *as Shakespeare said, the air of vanishing things and refinements beyond apprehension by our senses*. (263, emphasis in original)

In other words, our language is not always "capable of 'making present' a variety of objects that are spatially, temporally and socially absent from the 'here and now', contrary to what Social Constructivism would have us believe (Berger and Luckmann, 54). Its presumed transcendence as well as its "symbolic representations that appear to tower over the reality of everyday life" (*ibid*, 55) can indeed falter and degrade into mere vocalisations that are devoid of meaning. Simply speaking, the words required for a truly 'high definition' representation of the world may not exist. Ash's choice of the natural phenomenon "air" is quite befitting. The material universal can be as fluid and fluctuating as air, whereas language is a system produced by somewhat rigid human senses and faculties that have limited comprehension of the "refinements" surrounding them.

Byatt is able to stress this conception by making sure that her contemporary characters struggle with the same linguistic snares and "inexact metaphors" described by Ash. While Maud was taking notes for her research on metaphors, she slowly realised that her own notes were themselves slippery metaphors: "Body was a metaphor. She had written 'experience' twice, which was ugly. 'Event' was possibly a metaphor, too." (230).

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[37] It must be noted that this present chapter is not dealing with the language and style of writing that Byatt used in *Possession*; it is rather analysing the concept of language in general and its role in human life and culture. Obviously, in terms of the language used, genre and style, *Possession* is a postmodern literary text; it is extremely hybrid. Besides the omniscient narrator, there are poems, extensive epistolary language, autobiography and even a passage from Charles Lyell's *Principles of Geology* (458). Further analysis of the Darwinian influence on Byatt's use of language is covered in section 1.7 of this present study.

Ronald felt similar uncertainties and confusion while reading Ash's "The Garden of Proserpina". He "heard the language moving around, weaving its own patterns, beyond the reach of any single human, writer or reader." (472). However, this was only a projection of his own internal fears as his life was undergoing its own metamorphosis. Once he came to accept that he would have a new life and would move out of his "dripping cave" of a flat, the patterns he heard became those of "a voice he didn't yet know, but which was his own." (474-5). This fluid human dominion over language is actually highlighted in the very same poem he was reading. Ash revisits the Biblical story of creation, omitting the part where God teaches Adam the names of animals and objects: "The first men named this place and named the world. / They made the words for it: garden and tree". Language is not a metaphysical entity; it is human and has emerged in a primordial setting, having a structuralist character with one-to-one, signifier/signified relationships. "The things *were* what they named and made them." (464, emphasis in original). Yet, as Darwin warns in the *Origins,* "Natural selection will not produce absolute perfection", (184). In the poem, the progenitors of humankind later "mixed the names and made a metaphor / Or truth, or visible truth, apples of gold." (464). With metaphors comes relativity, and they seem to acquire a kind of illusive independence, enclosed in the mythical garden of creation, as the poem suggests. However, Ash is quick to remind us that even in such a state, language remains a human product rather than an autonomous instrument: "We see it and we make it, oh my dear. / People the place with creatures of our mind, / With lamias and dryads, mélusines" (265). Christabel expresses the same view when advising her cousin on writing. An author needs to be "experimenting constantly with language, as a great artist may experience with clay or oils until the medium becomes second nature, to be moulded however the artist may desire" (335). In *Possession* the human is never the offspring of language; on the contrary, language is its speaker's malleable canvass.

Although *Possession* privileges the human being and celebrates its materiality, it does not aim to take a position on the issue of biological determinism as seen in other novels in this present study. Ash's question in the epigraph to chapter fifteen, "Are we automata / Or Angel-kin?" (273) is left purposefully unanswered, which is quite a useful strategy by Byatt to avoid digressing into some of the politically treacherous terrains of evolutionary theory. Unlike McEwan's *Saturday*, *Possession* manages to steer away from

the rigid implications of biological determinism by focusing on the dynamism and potential for metamorphosis inherent in nature. Moreover, even when steeped into archetypal biological behaviours, Byatt's characters, especially Christabel LaMotte, are distinctly individuated and never left to become fully allegorical evolutionary automata.

Therefore, there is very little of the selfishness/altruism dichotomy in the novel; rather, the focus is on the romantic love between Ash and Christabel which is highly unique to the couple. Christabel is hardly the typical woman in her sexual life story. In a middle-class, Victorian setting, and despite her love for Ash, there are hazy intimations of a lesbian relationship between her and a friend called Blanche Glover. In fact, the ambiguity in this regard serves to further individuate Christabel's character. It endows her with her own lifestyle which is so private and unique and would not be fully exposed by Byatt in her novel even though the novelist uses an omniscient narrator. Furthermore, Christabel was a virgin on her first night in bed with Ash, and she managed to hide it from him. It is remarkable how Ash, an older married man, could only discover her secret the next morning when "washing, he found traces of blood on his thighs […] He stood, sponge in hand, and puzzled over her. Such delicate skills, such informed desire, and yet a virgin." A woman who could hide her first time and suppress the pain of losing virginity is indeed a unique human female. Her sexual metamorphosis, as Ash realised in the bath, mirrors the "Melusina's prohibition" (284-5); the man is allowed into her life, but she manages to preserve some of the secrecy of her body.

Consequently, this manner of characterisation places Byatt's novel in a middle-ground position vis-à-vis the nature-nurture debate. On the one hand, sexuality is portrayed in an individualistic manner, reminiscent of the Social Constructivist approach which insists "Every culture has a distinctive sexual configuration, with its own specialized patterns of sexual conduct […] they are the product of man's own socio-cultural formations rather than of a biologically fixed human nature." (Berger and Luckmann, 67). Christabel transgressed the sexual configurations of her Victorian society by sleeping with Ash, yet she had to submit to them when she abandoned her bastard child for adoption. On the other hand, sexuality is portrayed as a universal biological phenomenon. This is the case in the scenes where Ash and Christabel consummate their love relationship. Here is where the distinctly individuated characterisation ends and a grand allegory begins. Just like the scene of the physical attraction between Roland and Maud at the beginning of the novel, Ash's and Christabel's nights together are described

in terms that are allegorical of courtship and mating in nature. When "she exacted her pleasure from him […] with short animal cries", Ash felt her slipping through his hands like liquid:

> as though she was waves of *the sea* rising all round him. How many, many men have had that thought, he told himself, in how many, many places, how many climates, how many rooms and cabins and caves, all supposing themselves swimmers in *salt seas*, with the waves rising, all supposing themselves — no, knowing themselves — *unique*. (283, emphasis added).

The image of an undifferentiated sea suddenly engulfs the intercourse scene in such a pervasive way as to render it an allegory of human evolution and reproduction. To begin with, the sea is the genesis of the Darwinian creation myth (Beer, 7); the oceans were the 'primordial soup' where life has started evolving. Such collectiveness is soon emphasised by reference to the "many men" who have performed the same copulation act. Moreover, when the narrator mentions the saltiness of the water in which all men are swimmers, the allegory assumes a unique philological aspect. It becomes an allegory of male sperms *swimming* and racing in the *salty* secretions of the female reproductive tract in order to reach the egg and become the *unique* sperm that can fertilise it. Therefore, it is to this evolutionary imperative that Ash's "life had been leading him, it was all tending to this act, in this place, to this woman, white in the dark, to this moving and slippery silence" (283-4). The narrator's connotations themselves become highly slippery on different levels. The phrase "white in the dark" can be read as an elaboration of the same allegorical language, denoting the white seminal fluid entering the dark caverns beyond the cervix. The allegory is confirmed and reiterated when Ash later "imagined he heard the sea" but realised that it was Christabel; "that she was weeping silently beside him." Also, he repeats to her the same assertion that "This is where I have always been coming to. Since my time began." (284).

The craftsmanship of Byatt's narrative here is indeed unmatched. The evolutionary allegory which starts in the couple's bed is soon expanded and extended onto the natural world when they visit a place called Boggle Hole in Yorkshire. For Ash, it was a fine day that "had put him in mind of the youth of the Creation." In such a mood, the couple come across the most iconic of primeval creatures fossilised in the rocks; "the regularly rippled

rounds of the colonies of ammonites that lay coiled in its substance." Then, the focus of the metaphorical language slowly shifts towards female roundedness. "Her bright pale head, with its circling braids, seemed to repeat those forms" (286). In Ash's stream of consciousness, the affinity between the coiled ammonites and Christabel's female curves is that these two beings are an emblem of the continuity of life throughout the vast evolutionary time:

> he saw her waist, just where it narrowed, before the skirts spread. [...] He thought of her momentarily as an hour-glass, containing time, which was caught in her like a thread of sand, of stone, of specks of life, of things that had lived and would live. (287)

It is only natural that now his attention is shifting to her slim waist. It is the location of his "speck of life", his youth of creation which later would live.[38] Her "hour-glass" waist is now his most valuable container because "She held his time, she contained his past and his future". She is now entrusted with his genetic material, his progeny which would outlive him and thus be his future. And just as the narrator wraps up the allegorical scene, he mischievously inserts into Ash's stream of consciousness a thought that further reinforces the biological materiality of the human experience. "He remembered an odd linguistic fact— the word for waist in Italian is *vita*, is life—and this must be, he thought, to do with the navel, which is where our separate lives cast off' (287). Obviously, one may interpret this fact slightly differently; the Italians conflated "life" and "waist" because life is conceived inside a female waist. In other words, it is not an "odd" fact at all; as it has been stressed in many junctures in *Possession*, human language naturally emerges from the material world. Its metaphors are constantly moulded by its human creators in order to capture the world they inhabit.

[38] Generally speaking, the human male is concerned with the waist size of his female partner. According to Matt Ridley, several studies have confirmed this preference in men for narrower female waists and broader hips. The most probable reason has to do with the difficulty of human birth due to the large brain size in human offspring, hence the need for a bigger pelvis to allow safe birth. The man who chooses the woman with the broadest hips and narrowest waist has a higher chance of having children and passing both his and his female mate's genes on to the next generation (1994, 291-3). As this scene in *Possession* draws to its end, several natural objects seem to function as sort symbolic reference to the roundedness of fertile female bodies as well as pregnancy. For instance, Christabel collects many different types of "round stone", some as heavy as "ordnance balls", and she insists on carrying them herself, telling Ash, "I can carry my own burdens, I must." (287).

2.4 Jenny Diski: The Need for Ideological Moderation:

In this discussion of human nature, Jenny Diski's *Monkey's Uncle* firmly stands in the middle ground between biological determinism and social constructivism. The various references to Darwinian evolution are counter-balanced by the social factors that contribute to shaping the characters' life paths. Whether in the case of the protagonist Charlotte Fitzroy, or her possible ancestor, Captain of the *Beagle* Robert FitzRoy, or even her entrepreneurial son, Julian, the individual's life story is simply a complex interplay of nature and nurture. In fact, denying this delicate balance dangerously disturbs one's comprehension of one's self as dramatized in the personal anguish experienced by both Robert FitzRoy and Charlotte.

Monkey's Uncle starts with Charlotte being attended to by her GP after suffering a nervous breakdown. Right from the opening of the novel, the narrator stresses that understanding the workings of human nature is largely "a matter of doctrine" (1). Her breakdown may be understood as the recent trauma of her daughter's death or, as a dogmatically Freudian observer would put it, a culmination of neurosis that started taking root in childhood (1). This relativity of perception is, in a nutshell, the message of *Monkey's Uncle*.

Prior to the nervous breakdown, the heroine's discovery of lost ancestry acts as the catalyst of the action in the novel. Charlotte's mental health may have started to deteriorate when her daughter died or when her pan-socialist ideals appeared to collapse towards the end of the Cold War, but her descent into inanity definitely accelerated when she came across a book entitled *FitzRoy of the Beagle* in a London bookshop, which she assumed to reveal her relation to the celebrated Robert FitzRoy. Soon she becomes obsessed with his suicide, assuming that she had inherited this mortal tendency. After a brief visit to the London Zoo, spent mostly in contemplation of an orangutan's anthropomorphic glance, Charlotte has a nervous breakdown in her front garden. Subsequently, the novel explores the fringes of sanity; Charlotte experiences a fragmentation of herself into two different entities. One part of her goes on a journey into some netherworld of the imagination, where she confronts the failings of her intellectual heroes; Marx, Freud and Darwin. This encounter is written as a stylistic pastiche of *Alice's Adventures in Wonderland*, where Charlotte is accompanied by a highly

anthropomorphised and outspoken orangutan called Jenny.[39] Meanwhile, the Charlotte who is sent to a mental hospital is making slow recovery, experiencing visions of Robert FitzRoy's life, secretly discarding her pills and eventually falling in love with her homosexual therapist, Matthew. As she manages to convince everyone she has recovered, she is discharged. However, her semi-deluded belief that she comes from a long line of suicides overcomes her and she makes a failed attempt on her life towards the end of the novel.

Charlotte's obsession with her heredity is further reinforced by her career and personal beliefs. She is a genetics technician at a lab in London and a former leftist feminist activist. Consequently, there is some sort of the politically allegorical where her character combines two contradictory discourses; the role of genes in determining human life, on the one hand, and the feminist belief in societal pressures on gender, on the other hand. The allegory extends to her son Julian, who becomes a ruthless capitalist with a crude 'Don Juan' approach to his women despite Charlotte's attempt to bring him up in line with her egalitarian values.

To appreciate how the two discourses are balanced in the world of the novel, one needs to closely follow the development of the plot. The novel foregrounds its Darwinist motifs quite clearly and explicitly. First of all, besides the fact that the protagonist is portrayed as a possible descendant of the captain of *The Beagle*, Robert FitzRoy, Charlotte's journey into insanity starts by rehearsing a famous incident in Darwin's life, his encounter with the orangutan in the London zoo. Like Darwin, Charlotte is mesmerised by the creature's brooding facial expressions.[40] "It was a curious quality resignation, of bewildered suffering that struck Charlotte." She is perhaps projecting her own internal suffering onto the creature when she says she saw in its eyes "A mixture of deadness and pain" (9). This may well encapsulate the suffering of biological predestination. Charlotte's father had committed suicide, and now that she has learned

[39] For Charlotte to be guided by an ape into the world of her own imagination is a narrative device that carries immense symbolic significance in a novel concerned with Darwinism. It is the best exemplification of the brute within; the boundaries between man and ape are obviously not what they used to be before Charles Darwin. Man is indeed "monkey's uncle".

[40] According to The Zoological Society of London, Darwin saw their orangutan Jenny at the London Zoo on 28 March 1838, which left a great impact on him due to the similarities she shared with children (Palmer, 2008). Later on, Darwin wrote in his notebook: "Let man visit Ourang-outang in domestication, hear its expressive whine, see its intelligence when spoken; as if it understood every word said— see its affection.— to those it knew.— see its passion & rage, sulkiness, & very actions of despair" (Darwin, 2008, 264).

about FitzRoy, she is dreading a similar gloomy ending. “Everything was there in the bloodline: random chance, historical necessity, personal history and destiny; living inside her, bouncing together in her blood like bingo balls.” (14). The tyranny of the genes is further reinforced by the role of chance. The individual is thus dispossessed of his or her destiny. Even though Charlotte took up a career in genetics and political activism in order to decipher “the very particular mystery, of who and what she was”, clearly the answers eluded her; “Biology teased her, and then ran, giggling, for cover.” Similarly, the answers were lacking on the political front. When she attempts to “Trace the larger scale and look at the grand sweep of political forces that made individual confusion an irrelevance […] only sorrow had resulted.” (14-5).

Therefore, while biological factors are considered key to understanding human nature, the novel continually casts doubts on the notion of biological determinism by suggesting that any such determinism largely exists among those who personally choose to overstate heredity. This bias is exemplified in Charlotte’s daydreams of her presumed ancestor. Robert FitzRoy, who is portrayed as a man consumed by the conviction that he is biologically predestined to commit suicide. The first of these visions by Charlotte concludes with a pathetic fallacy of sorts: “And now, in the seas off Valparaíso, a shameful death was riding the waves towards FitzRoy and it was, he knew, as ineluctable, and almost as impersonal, as the weight of those waves which now crashed mercilessly, though without rancour, against the ship in his command.” (30). Although the hallucinatory vision acknowledges that the waves are impersonal, later visions of FitzRoy gradually reveal his projection of personal fears and disappointments onto nature, his own human nature, to be precise. When his life project, weather forecasting, ran into trouble, he refused to admit the facts. “He was, simply, not doing what he had been appointed to do, but something of his own devising which was of doubtful scientific provenance. Fitzroy was unmoved by the criticism, at least in the sense that he refused to change his ways, knowing himself to be right.” (162). Consequently, while Charlotte’s and Fitzroy’s suicidal genes cannot be verified scientifically, it is narratively apparent that they inherited a stubborn character which refuses to accept major life traumas, opting instead to neurotically obsess with illusions of an impending doom.

That biology alone does not provide adequate conclusions on human nature is best illustrated in the character of Charlotte’s son, Julian. In the novel he is the locus of an intense dramatic tension between nature and nurture which Charlotte tried to manage but

failed. Despite her efforts to raise Julian in line with her socialist and feminist ideals, he grew up hating his mother's politics. In a slightly caricaturistic fashion, Julian is the political antithesis of his mother; a Thatcherite who loathed social welfare (66). That is why Charlotte was not on good terms with her son, and her rationale for the development of his character heavily relies on her work with genetics:

> It had been her son who had caused her to question one of her most fundamental beliefs: that people were the way they were as a result of their environment [...] Almost from the moment he was born there had been something about him that was *him*, something recognisable which continued throughout his childhood and was there, plain to see now he was an adult. Not his politics, of course, not his devotion to material well-being and contempt for those who were less fortunate; but something that allowed him to be what he was. (67-8, emphasis in original).

In a manner reminiscent of McEwan's peculiar analysis of the infants' smile in *Enduring Love*, Diski's Darwinian motifs are deliberately pitted against the conventional social constructivist approach. The mother attributes her son's ruthless capitalist politics to some biologically hardwired quality in his character which she has 'felt' since he was a child. Although this argument contradicts her socialist politics, Charlotte's acceptance of it must be prompted by her career as a researcher at a genetics lab. Indeed, Charlotte the scientists strives to be objective by using highly cautious language, denying a causal link between people's political views and their genes as well as acknowledging her role in her son's upbringing:

> Of course, she knew his politics and social attitudes were a reaction to Charlotte's own, and yet there was more than that. Before he could even say the word 'politics', before he could walk, before the word 'Mother' fell contemptuously from his lips. There was a quality, a streak of something that made Charlotte uneasy. Not a streak of conservatism, not a congenital right-wingedness, obviously, but something harsh, something brash (68).

Charlotte's carefully poised reasoning seems to tip towards absolving Julian's childhood environment, i.e. herself, of the responsibility for what he turned out to be when she finally specifies this mysterious quality as "an innate inability to empathise with anyone or anything" (68). Such examples of genetic determinism are incorporated throughout the novel, albeit in a cautious and inquisitive manner rather than being an endorsement. For example, Charlotte resorts to Sociobiology once more to explain her emotionally detached relationship with her mother, Annie:

> Long before the sociobiologists went into print, Charlotte came up with the notion that it was the genes, and not the people who carried them, which were the motive force of existence. Annie's genes (not Annie herself – no more than a vehicle for her genes) demanded that Charlotte be nurtured so that she should maintain their existence. This accounted for maternal concern well enough and did not require emotional bonds as a necessity. Guilt – her mother's and her own – disappeared as absurdly irrelevant in this picture of the world. (149).

This is precisely a genetic reading of altruism; attributing parental care to the parents' 'subconscious' desire to protect their genetic investment. Pioneered by the renowned biologist William D. Hamilton,[41] this concept was later popularised by his disciple Richard Dawkins in *The Selfish Gene*. When Annie is referred to as a mere "vehicle for her genes", Diski's narrator is reiterating, almost verbatim, Dawkins's assertion that "We are survival machines— robot vehicles blindly programmed to preserve the selfish molecules known as genes." (xxi). The narrator also shares Dawkins's readily accessible metaphorical language, especially its personification of the genes as selfish, demanding agents.

However, there is no clear advocation of this gene-based approach. On the contrary, it is being indirectly interrogated. For the young Charlotte to be able to discover a concept that took scientists a lifetime to perfect is a curious improbability which undermines both

[41] In 1964, Hamilton published one of the first articles in this field, entitled "The Genetical Evolution of Social Behaviour. I", in which he asserts that "In certain circumstances an individual may leave more adult offspring by expending care and materials on its offspring already born than reserving them for its own survival and further fecundity. A gene causing its possessor to give parental care will then leave more replica genes in the next generation than an allele having the opposite tendency." (1).

Diski's narrative and the theory to which it refers. The narrator is suggesting that the Hamilton-Dawkins model is not only reductive but also at the same time dangerously seductive. In this specific case, "Long before the sociobiologists went into print", the simplicity of the model has provided the heroine an escapist attitude rather than helping her to face the complex realities of a dysfunctional family, rendering her world "Reduced, yet understandable." (152).

Consequently, what Diski is doing in *Monkey's Uncle* is to try to adopt a relatively neutral stance vis-à-vis the nurture-nature debate. Towards the middle of the novel, as Charlotte is obsessively worrying about her genetic inheritance,[42] a stormy, emotional encounter with her son brings to the forefront the non-biological factors that have also shaped the characters' paths in life. While visiting Charlotte in her psychiatric hospital, Julian briefly voices his repressed anger and disappointment at his mother's emotional neglect and unorthodox parenthood which precipitated the hardening of his personality:

> You went to demos and political meetings. Evenings, weekends. You dashed in and out as if saving the world wasn't just more important than your kids, but more interesting, too. Do you remember when you got into the Women's Movement? You used to lecture me on what was wrong with me because I was male. Yes, I know you called it "explaining" and teaching, but what you were really doing was telling me I was a piece of shit [...] I turned away from you, and everything you were, Mother, because I was *dying* of misery. And I *like* what I am. I like being successful. I like being a rich young man with a portable telephone, instead of being an unwanted little boy standing outside a feminist bookshop. (138, emphasis in original)

The balance in this novel of ideas is now tipped towards the nurture side of the debate. Rather than being the exclusive rendering of some innate biological reality, Julian's political ideals are largely informed by his disappointment with his mother's. Yet at the same time, the novel is explicitly criticising blind adherence to ideology. Whether it is

[42] This obsession reaches its peak when Charlotte starts analysing samples of her own blood as soon as she returns to her work in the laboratory, looking for the gene responsible for suicidal tendencies. Nonetheless, the novel maintains its distance from biological determinism by stating that her convictions in this regard are held "irrationally rather than scientifically" because nobody has so far managed to fully decipher the language of the DNA in such way as to give any answers to her mortifying questions (175-6).

Charlotte's "feminist" teachings to her son or her investigation into her genetic inheritance, overzealous pursuit of dogma is bound to backfire. A more balanced approach to human nature is indeed lacking.

Since the publication of Diski's novel, moderation has been often called for in order to avoid such dogmatic extremes. For instance, in the aforementioned treaties *The Literary Animal*, Ian McEwan provides an example which is strikingly similar to Diski's portrayal of Julian's childhood. Social constructivism can be seen at its most extreme in child-care handbooks, according to McEwan, such as the assertion by behaviourist John Watson in 1928 that he could train any healthy child "to become any kind of specialist I might select— doctor, lawyer, merchant chief, and yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors." (15). Straight after McEwan's essay in *The Literary Animal,* biologist David Sloan Wilson responds to excesses by proposing a middle ground between social constructivism and evolutionary theory that benefits both disciplines. Wilson starts by pointing out that genetic determinism has been greatly exaggerated. "No organism is so simple that it is instructed by its genes to "do x." Even bacteria and protozoa are genetically endowed with a set of if-then rules of the form "do x in situation 1," "do y in situation 2" and so on." (23). In other words, organisms have evolved to accommodate varying situations imposed by their environments. This "adaptive behavioral flexibility" (23) can be one route through which human culture, as an environment, can gain purchase on human nature. On the other hand, "learning and cultural change are themselves evolutionary in the sense that alternative behaviors are created and selected according to certain criteria." (26). Consequently, Wilson has uncovered what seems to be suppressed analogies between social constructivism and evolutionary theory. The two forces coexist in such a way that "when the pace of environmental change becomes too fast and the number of challenges too great, genetically fixed if-then rules break down and must be supplemented by rapid nongenetic evolutionary processes that generate and select new solutions to current problems." (27). In the world of Diski's novel, the protagonist's downfall is largely caused by her inability to reach this middle ground. Charlotte fails to reconcile her two primary life pursuits, feminism and genetics, or even approach them

with moderation. However, her literary creator, Jenny Diski,[43] seems to be well aware of the need for ideological moderation in the study of human nature. By dramatizing the clash between interpretations of nature and nurture in the lives of the characters and its disastrous repercussions, Diski's exercises a dominant but subtle authorial intervention in her novel of ideas. This is best illustrated towards the end of the novel when Charlotte's attempted suicide fails due to her "amazing powers of survival". According to the emergency doctor, "No one who had taken so many pills and not been found for so long, should have stayed alive." (209). This is Diski's subtle way of subverting her heroine's overexaggerated trust in biology; the attempted suicide cannot be simply triggered by faulty genes when those same genes have helped Charlotte fight for her life. It must be simply her own delusional fixations.

In *Monkey's Uncle*, Diski's ultimate message is that genes are not everything for human nature, nor is culture. An intellectual middle ground is vital because no grand narrative or unifying theory has ever managed to make sense of the human condition on its own. The collapse of grand narratives, which is taken to be a trademark of Charlotte's postmodern world, as theorised by the French philosopher Jean-François Lyotard in the late 1970s, is in fact an ahistorical occurrence that has been plaguing humankind since time immemorial, as exemplified in the character of Robert FitzRoy. His doubts in his religion mirror Charlotte's disappointment at the loss of hope in state Socialism at the end of the Cold War. As she is recovering in the mental hospital, Charlotte expresses her disappointment with the discourses she has long admired.

> What I think is that Marx and Freud have had us by the throat for most of the twentieth century, and the truth is, *they just weren't good enough* […] they left great going holes which their followers filled up with shit. And now the shit's hit the fan, and we're left with no real, serious structure to think with. (64, emphasis in original).

At the heart of Charlotte's anguish is the loss of terms of reference. Like Robert FitzRoy, she is experiencing an existential sort of mental crisis because without her defunct grand

[43] It may be relevant to mention here that Jenny Diski herself seems to have a good insight into the scientific debates on human nature. In an Interview with *Bomb* literary magazine, she mentions that she once enrolled as a mature university student on anthropology course with a significant emphasis on the evolutionary approach (45).

narratives, all is left is the void, an endless spiritual and humanistic void. And to add insult to injury, the same pain extends to her professional life in genetics, which is underpinned by Darwin's evolutionary theory. She tells her therapist Mathew that Darwin's work was "As full of holes as your socks probably are. Gaps in the fossil records. Carbon dating definitely doubtful. Look what Herbert Spencer managed to do with Darwin." (64). Of course, these are the words of a disillusioned believer. In reality, what Charlotte, or even Herbert Spencer, does with Darwin is "a matter of doctrine" (1), as Diski's narrator puts it. In fact, Diski uses a symbolic pastiche to highlight this flawed malleability of discourses and grand narratives. She uses the following quotation from *Alice's Adventures in Wonderland* as an epigraph for chapter 9 right before Charlotte's troubled psyche becomes the scene for a major clash among the three intellectuals:

> Alice began to get rather sleepy, and went on saying to herself, in a dreamy sort of way, 'Do cats eat bats? Do cats eat bats?' and sometimes, 'Do bats eat cats?' for, you see, as she couldn't answer either question, it didn't much matter which way she put it. (126)

There will always be questions that cannot be answered in our lives. In Charlotte's 'wonderland', she imagines her three intellectual heroes, Marx, Darwin and Freud, quibbling about the incomplete answers they have given to the questions of the human condition. The accusations they exchange, of elitism and incoherence, reflect Charlotte's doubts in the grand narratives of her time. However, in the world of the novel, her worries are not entirely justified; in fact, her world is shaped by Darwin, Marx and Freud. She benefits from the 'Freudian' talking therapy as delivered by Mathew and she utilises Darwinian science in her career to earn a living. In a way, this is Diski's attempt to highlight the need for ideological moderation and openness to others in a world where no one discipline can have all the answers.

In sum, to take any one-side view of human nature is simply a dogmatic distortion rather than a realistic representation. In this sense, Diski's novel is unique in its ability to represent the major political connotations of Darwinism yet retain a highly neutral stance by incorporating various alternative outlooks to human life. While McEwan's *Saturday*

may be politically conservative, and Byatt’s *Possession* apolitical, Diski’s *Monkey’s Uncle* can be regarded as a decidedly politically centrist text.

The next chapter of this study will move from the human subject to its cultural productions, focusing on the area of human life that has been most directly impacted by Darwin’s theory of evolution; namely, the religious narratives of creation.

Chapter Three: Religion, Atheism and Darwinism in the Contemporary Novel

3.1 The Collapse of Teleology:

Since the publication of *The Origin of Species*, the relationship between evolutionary science and the various forms of traditional religious belief has always been dominated by tension and hostility. The principle of natural selection, where species evolve gradually through the selection of the genetic mutations and variations which prove useful for surviving the pressures of a given environment, renders obsolete divine and teleological narratives of creation. In fact, Darwin's mentors, William Whewell and Adam Sedgwick, flatly dismissed his theory when they realised how it annulled the need for an omnipotent being who creates in miraculous acts fully-developed species with intelligently designed physical traits, while other figures of the religious and scientific establishments attempted to forward a flimsy combination of evolution and teleology where God guides the process to favour variations beneficial to the creation of man (Ruse, 248-9). However, such dismissive and poorly reconciliatory responses, which continue to be voiced until this day, could not arrest the development of Darwin's theory and the spread of its implications. At least from a biological and a materialist perspective, Darwinism has finally exposed humankind's sense of superiority over all forms of life as merely an anthropocentric illusion. Darwin himself knew the gravity of such implications, and he once confided to his friend, J. D. Hooker, that proposing the mutability of species was "like confessing a murder" (Charles and Francis Darwin, 1908, 174).

That Darwinism has singlehandedly put an end to natural theology is certainly not the case. Since the start of the scientific revolution in post-Renaissance Europe, advancements in areas such as physics, medicine and astronomy had also contributed to setting the sciences free from the dominance of the religious establishment.[44] Therefore,

[44] It must be pointed out here that prior to the publication of the *Origin*, other propositions on biological evolution had circulated in Britain and Europe and had caused outrage within the religious establishment. These included, for example, *Philosophie Zoologique* by the French naturalist Jean-Baptiste Lamarck and *Vestiges of the Natural History of Creation* by the Scottish journalist Robert Chamber. Obviously Darwin's theory has superseded such earlier models because of the immense body of evidence it managed to provide, proving far more difficult to dismiss. Moreover, as Michael Ruse explains in his historical survey, *The Darwinian Revolution*, the theory was published at a time when the conservatives in the Church, including Darwin's mentors, were facing a form of internal dissidence led by various Anglican bishops who were calling for a more liberal interpretation to replace the literal readings of Old Testament stories such as the story of creation and Noah's Flood. (Ruse, 239-40)

Darwinism can be viewed as one of the final nails in the coffin of a religious worldview designed to shore up humanity against any existential terrors or spiritual void by portraying an easily comprehensible universe with a benign and just creator. This is certainly an issue that touches the life of every individual, and so it is only natural that it became a major preoccupation for some of the most distinguished novelists working in the English language. As it might have been predicted, many late Victorian and Modern novels generally exhibited a negative and repulsive reaction to the Darwinian implications on traditional religious faith. Probably one of the best illustrative examples can be seen in the works of the English novelist Thomas Hardy. It has often been remarked that Darwin's influence on Hardy resulted in a pessimistic worldview where the individual is at the mercy of natural laws, such as chance, which are indifferent to human needs (Beer, 222). In novels like *A Pair of Blue Eyes*, there is a kind of remorse at the loss of the biblical timeframe of creation, which is certainly more reassuring and comprehensible for the human consciousness than the infinite aeons of evolutionary and geological time. As Gillian Beer succinctly puts it: "The absolute gap between our finite capacities and the infinite time and space of the universe burdens Hardy's texts with a sense of malfunction and apprehension. There is a collapse of congruity between the human and the objects of human knowledge and human emotion" (237).

Other Victorian writers attempted to domesticate Darwin's theory by reinstating some anthropocentric elements into the picture of the cosmos it portrayed. For instance, Samuel Butler's *Erewhon*, which is one of the earliest science fiction novels to deal with evolutionary themes, suggests that machines would gradually develop into conscious reproducing beings. However, Butler strongly disapproved of the role of chance in natural selection; that useful mutations in species occurred by accident meant for him the absence of intelligence in nature. Instead, organisms must be evolving by their will to utilise the best variations and mutations. In other words, Butler espoused teleological and Lamarckian evolution, a motif which can also be seen in his other novel *The Way of All Flesh* (Henkin, 100-2).

At the dawn of the twentieth century, Darwinism continued to feed into various visions of a godless universe. This is nowhere more clearly present than in the fiction of Joseph Conrad, especially in classics such as *Heart of Darkness*. Perhaps because Conrad is an atheist who could not truly accept the loss of God as "an affirmative principle, a premise for meaning", his fiction abounds with depictions of nature as jungles that offer

no guidance for humanity to survive. It is a nature which is dominated by the negative elements of Darwinism: death and degeneration (Glendening, 137-8). For instance, in *An Outcast of the Islands*, death seems to have replaced God as a creative agent: the decomposition of organic matter provides some of the chemical elements on which new life depends (*ibid*, 143).

These are just few examples of the early literary reception of Darwinism in relation to religion. They reflect, to a great extent, subjective attitudes, focusing on a single conclusion: if Darwin is right, then humanity occupies an absurdist universe that has lost all sense of providential protection. It is unfortunately beyond the scope of this present chapter to dwell in detail on all the different Victorian perceptions in this regard, but the three examples quoted above can help to show, by contrast, the greater optimism and vivacity with which Darwin is nowadays read and interpreted. Rather than passively surrendering humanity to a spiritual void, many English novels are engaged in an active experimentation with all the existential implications of Darwinism, utilising the recent expansion of the theory into disciplines such as Sociology and Psychology while at the same time retaining an almost invisible discursive influence of the writings of Darwin himself. This chapter will consider the intricate ways in which these issues of religiosity, faith or its apparent absence and the Darwinian advantage of such beliefs are treated in a representative selection of contemporary British novels written by two of the most prominent novelists concerned directly with such issues over the last two decades: Ian McEwan and Jim Crace.

To begin with, this emerging trend in fiction celebrates the fact that conventional narratives of creation have been rendered invalid by our scientific knowledge of the evolution of life. In other words, the novels considered here can be described as “atheist novels” but only in a provisional and qualified sense of the word. Engaging with the underlining evolutionary reasons for the existence of the religious practice among *Homo Sapiens*, many atheist novels have faced quite a paradoxical conclusion. Religion is not just a cultural phenomenon but rather a partly genetically ingrained adaptation which is almost impossible to discard. As early as *The Descent of Man*, Charles Darwin himself suspected this fact. Correlating evidence from the customs of diverse primitive societies, he noted that “the belief in unseen or spiritual agencies” is universal among humankind and may have originated from basic mental faculties like dreams combined with the effects of instincts like the fear of the elements (116-8). Religious beliefs can be

compared to instincts in that they produce automatic behaviours and are "followed independently of reason" (146).

Like many philosophers and scientists of late modernity, Darwin is obviously an initiator of a discourse; therefore, his classical paradigms are seamlessly embedded in the interpretative practices as well as the imaginative language of contemporary literature. This is particularly evident in McEwan's *Enduring Love* and Crace's *Being Dead*, especially in terms of his insights into the role of the instinct in human behaviour. However, the more direct channel of influence in this regard is actually the contemporary research in the area of Sociobiology. In one of the founding texts of the discipline, *On Human Nature*, the American zoologist E. O. Wilson attributes the prevalence of a given religion to the biological advantages it confers on the human group where it flourishes: "Religious practices that consistently enhance survival and procreation of the practitioners will propagate the physiological controls that favor acquisition of the practices during single lifetimes. The genes that prescribe the controls will also be favored." (177). Wilson focuses mainly on competition among human groups, specifically war. His hypothesis implies that within a victorious group there is a high frequency of genes which predispose individuals to acquire the very same qualities of conformity and "unthinking submission to the communal" which are encouraged by religious practice (*ibid*, 184-5). Religion may have been genetically grafted into humanity through its unremitting engagement in warfare.[45]

Consequently, the contemporary novels which deal with these insights had to resolve this major paradox: how can an individual be an atheist, or a Darwinist for that matter,

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[45] As mentioned in the previous two chapters of this study, E. O. Wilson's early work was not well-received by the community of contemporary literary criticism. There is indeed a strong aversion to references to Darwin because they are perceived to undermine the critic's "investments in historicising and relativizing cultural norms" and "to justify reactionary views on race, class, and gender" (Greenberg, 93). The contention of this chapter, as well as the rest of the present thesis, is that these fears are significantly exaggerated. First of all, it is true that E. O. Wilson's *On Human Nature* is reminiscent of Social Darwinism due to its emphasis on the survival of the fittest in a military struggle, but this book is a product of its own times, written in the late 1970s when the Cold War still posed fears of a nuclear Armageddon. In contrast, later Darwinian investigations into religious phenomena are considerably less militaristic. For example, in his seminal study, *Darwin's Cathedral*, the American biologist D. S. Wilson shifts the emphasis from survival through conquest to the adaptive benefits of communal living, and he lists several examples such as the water temple system of Bali, which enables famers to collectively manage natural resources (131-2) or the Houston Korean Church, a religious community which provides emotional support and chances of employment for newly-arrived Korean immigrants (165-6). Second, reductionism is not necessarily the dominating principle in Sociobiology. For instance, E. O. Wilson's later work is marked by "a renewed fascination with variability" (Beer, xxi). Not all encounters between creative writing and Darwinian theory have yielded reductive outlooks, as is illustrated in Chapter Two regarding Jenny Diski's writing. Therefore, it is the position of this present study to bypass the current aversions towards Darwinism.

when he or she bears the burden of an innate predisposition to have a faith. The solution offered is quite remarkably pragmatic. These novels suggest various alternative mythological elements or philosophical substitutes in order to accommodate this human predilection and to fill the gap left over by the demise of traditional apocalyptic religions. For Ian McEwan, the alternative is simply romantic love. For Jim Crace, it is a sort of pantheistic appreciation of nature where man can escape the torturing finality of death by achieving unity with the natural landscape.

This literary enterprise may seem self-defeating and tautologically circular: replacing an old set of mythologies with another is not exactly atheism. In fact, a similar criticism has been levelled at the prominent atheist intellectuals who contributed immensely to the cultural context of the novels referred to above, including Richard Dawkins and Daniel Dennett. They were accused of "mythologizing their own non-belief" (Bradley and Tate, 8) in a narrative which is reminiscent of "Comtean scientific positivism", implying that humanity has gradually liberated itself from the trappings of old apocalyptic religions and attained the ideals of freedom and scientific progress (*ibid*, 7). Such criticisms should be acknowledged; there is a certain lack of novelty here. Yet the matter is different in the world of the novel. Mythologizing is not an entirely tragic flaw; on the contrary, this trait acquires substantial subversive potential against the dominant Postmodernist framework of contemporary culture. The alternative "mythologies" in the novels of McEwan and Crace actually represent attempts at reinstating the role of meta-narratives in human society. Disbelief in all forms of meta or grand narratives is one the earliest assumptions of Postmodernist theory as formalised by Jean-François Lyotard who stated in 1979: "Simplifying to the extreme, I define *postmodern* as incredulity toward metanarratives. This incredulity is undoubtedly a product of progress in the sciences: but that progress in turn presupposes it. To the obsolescence of the metanarrative apparatus of legitimation corresponds, most notably, the crisis of metaphysical philosophy and of the university institution which in the past relied on it." (xxiv, emphasis in original). While in Lyotard's work, science is the destroyer of metanarratives, in McEwan's novels, science becomes the originator of such narratives. This subversive reversal of assumptions may be the novelist's most ambitious enterprise yet; to be a modern prophet reinstating the narrative's "great hero, its great dangers, its great voyages, its great goal" which Lyotard

declared lost (*ibid*). It can be true that some grand narratives like monotheistic religions are doomed, but the human dependency on such narratives may never fade away.[46]

3.2 McEwan's Alternative Myths in *Enduring Love*:

As mentioned in the previous chapter, McEwan's keen interest in science and Darwinism is evident in almost all his novels and non-fictional writing, but it is at its best in *Enduring Love* (1997). Besides its various accomplishments, this novel is often cited as the most expansive, if somewhat controversial, literary experiment with the New Darwinian paradigms outlined above, specifically the contributions of E. O. Wilson. The novel, however, does not merely test Wilson's hypotheses; it expands on them by planting the seeds of its own alternative mythological system.

Throughout *Enduring Love*, the influence of Darwinism is clearly evident, especially in the collision of the two main characters; Jed Parry and Joe Rose. Having failed to secure a teaching job in his area of academic research, theoretical physics, Joe turned to popular science writing. His first book, one on dinosaurs, was inspired by a brief visit to the Natural History Museum, where he was struck by the commoners' ignorance of the evolutionary timetable of life on earth (76-7). In fact, Joe is an amateur Darwinist but of the extremely rationalist type. The initial chapters of the novel are full of his dispassionate and rigidly scientific logic, which often sounds at odds with the views of his wife Clarissa, the literature professor who holds more emotion-oriented outlook to life. This peculiar characteristic of Joe emerges right from the start of the novel in his recollection of the balloon accident, as outlined in chapter two of this present study.

During the couple's picnic in The Chiltern Hills, Joe joins a group of strangers in helping to rescue a boy trapped in a helium balloon which is drifting at the mercy of the winds. It must be pointed out here that this opening scene of the novel is highly charged with multiple symbolisms, making it an ideal prelude to a novel dealing with both evolutionary and religious themes. On the one hand, this is an accident that took place on a green plane in the English countryside, not the city of London where the main characters live. The narrator describes it as a peaceful realm which is totally antithetical to the urban space:

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[46] Although the novels considered here subscribe to the Darwinian emphasis on the possible genetic predisposition to religious belief, the matter is not wholly surrendered to the power of the genes; mankind's ability to formulate narratives on its own existence is also admitted to have a role to play, as illustrated below.

> We went through College Wood toward Pishill, stopping to admire the new greenery on the beeches. Each leaf seemed to glow with an internal light. We talked about the purity of this color, the beech leaf in spring, and how looking at it cleared the mind. As we walked into the wood the wind began to get up and the branches creaked like rusted machinery. We knew this route well. This was surely the finest landscape within an hour of central London. I loved the pitch and roll of the fields and their scatterings of chalk and flint, and the paths that dipped across them to sink into the darkness of the beech stands, certain neglected, badly drained valleys where thick iridescent mosses covered the rotting tree trunks and where you occasionally glimpsed a muntjak blundering through the undergrowth. (5-6).

Yet, despite the idyllic natural beauty of the scene, this is also the place where the band of men repeatedly failed to wrench the balloon away from the clutches of the wind. Therefore, it is a primeval scene, reminiscent of the conditions of a primitive humankind struggling against the elements on a tropical savannah.

On the other hand, there is an implicit biblical reference in the spatial metaphor of the falling balloon. While the boy is eventually saved, one of the men, John Logan, was the last to let go of the ropes and fell to his death. This is a vertical fall which disturbed an idyllic, prelapsarian existence, symbolised by the couple's summer picnics, and later instigated a collective sense of guilt among all the people involved. Joe's narration of this event focuses on the first type of symbolism only, and there is indeed an eerie feel to the way in which he coolly reflects on it using Darwinian logic and terminology. In his view, the death of Doctor Logan led to great sadness and guilt for himself and the other men because:

> there was a deeper covenant, ancient and automatic, written in our nature. Co-operation- the basis of our earliest hunting successes, the force behind our evolving capacity for language, the glue of our social cohesion. Our misery in the aftermath was proof that we knew we had failed ourselves. But letting go was in our nature too. Selfishness is also written on our hearts. This is our mammalian conflict – what to give to the others, and what to keep for yourself. (14)

It is of course common sense that the phenomenon of death is at the heart of all systems of religious beliefs. Joe himself acknowledges that "However scientifically informed we count ourselves to be, fear and awe still surprise us in the presence of the dead.", and hence there is the need to invent the concept of the soul (23). Yet, Joe does not have a religious faith upon which to fall back. Instead, the whole matter becomes some sort of miniature monograph on human nature. As Jonathan Greenberg points out, Joe is here relying on his Darwinian worldview to relieve the accident of "its moral freight" and safely explain it in his rationalistic terms (101). However, this form of psychological release proves to be only temporary and quite inadequate as shall be illustrated below.

Enduring Love presents a contemporary analysis of the difficulties that humanity has faced in attempting to "domesticate" itself, i.e. in adapting to social living by reconciling altruistic instincts with the selfishness of survival. Religion is probably the most complex cultural practice which attempts to accommodate these contradictory forces but often fails to. According to Rodney Stark and William Bainbridge, "thousands of religions are born and die without notice because they never attract more than a few members. (1985, qtd in David S. Wilson, 2002, 82). This malfunction happens at a micro level in the world of *Enduring Love*. After the balloon accident, a sort of naturalistic experiment ensues when the atheist Joe Rose stumbles into the path of the mentally unstable, religious recluse Jed Parry. Both men seem maladapted to survive the dangerous revelations and illusions to which their self-aware consciousness is prone. Traditional religion is either non-functional, as in Joe's case, or can easily augment mental illness as in Parry's case.

Because of his illness, De Clérambault syndrome, Parry is convinced that Joe loves him but is denying this fact in public, so he starts stalking Joe, persistently demanding that the latter explicitly reciprocate the supposed love. He also claims that his affections are partly motivated by a selfless mission to save Joe's soul and bring him back to God.[47] At first sight, Parry's fervent protestations of faith and his amiable evangelical pursuits appear almost as a caricature of the behaviour of excessively pious men and women. However, this is only deceptively so, and Parry has a more complex role in the world of the novel. In the portrayal of this special character, the novel mirrors once again Darwin's

[47] Parry in this sense is an excellent example of a character where two major thematic concerns of the novel meet and interlock: the pathology of love and the role of religious faith.

classical methodology. In *The Descent of Man*, Darwin's favourite method of explaining the origins of different mental faculties is to study the cases of their malfunction, as in mental illness or retardation, because malfunction reveals their primitive and elemental building blocks (1879, 54-5). In Parry's case, religion is revealed to be the pursuit of selfish interests, his desire to possess Joe, disguised by a veneer of altruism in the form of saving a human soul. In addition, as his delusions intensify, a latent tendency to justify violence finally comes to the surface at the end of the novel when he holds Clarissa hostage in her flat. [48]

As the labyrinth narrative of *Enduring Love* gradually unfolds, the protagonist as well exhibits a troubled state of mind, though far less severe than that of Parry. In Joe it is a mild case of paranoia, and possibly schizophrenia, but it is mixed with an acute identity crisis. So, his rigid rationalism and "absolute atheism" starts to falter in the course of this bizarre encounter with Jed Parry which almost destroys his marriage to Clarissa. After the balloon accident, Clarissa never saw Parry, and when Joe becomes too frantically obsessed with his stalker, Clarissa assumes that Parry does not really exist; that he is simply a figment of Joe's troubled imagination in the aftermath of Logan's death. In fact, for the largest part of the novel, Clarissa's concerns seem quite justified. Parry exclusively meets and talks to Joe. More baffling still is the fact that both share similar first names: *Joe* Rose and *Jed* Parry, and both engage in reading and research to understand the dilemma of their unwanted relationship. It is only at the end of the novel, when Parry takes Clarissa hostage, that his existence is finally substantiated. Up until that point the reader is excused for suspecting that Jed Parry is a delusional projection of the protagonist.

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[48] It must be added that McEwan's novels have the general tendency to attribute religiosity to mental illness. In *Saturday*, the protagonist states that "The primitive thinking of the supernaturally inclined amounts to what his psychiatric colleagues call a problem […] such reasoning belongs on a spectrum at whose far end, rearing like an abandoned temple, lies psychosis." (17). Such a deterministic generalisation is further reinforced by a Darwinian and genetic analysis of the antagonist's incurable neurological disorder (93), as has been illustrated in Chapter Two of this present study. Inevitability, McEwan's approach is diametrically opposed to the Social Constructivist analysis of the same areas of human life. Peter L. Berger and Thomas Luckmann stress that "If the psychiatrist has any sensitivity to the socio-cultural context of psychological conditions he will also arrive at different diagnoses of the individual who converses with the dead, depending on whether such an individual comes from, say, New York City or from rural Haiti." This view is the opposite extreme on the topic since it foregrounds the role of society in creating reality at the expense of the material side of the human being: "To put it more sharply, psychological status is relative to the social definitions of reality in general and is itself socially defined." (*ibid*, 196). As this present study attempts to illustrate, what is desperately lacking in McEwan's novels is a middle ground between such constructivist relativity and the Darwinian universality.

On one level, this mystery of Jed Parry certainly adds some sort of detective-story element to the novel, generating a great deal of suspense regarding Parry's, as well as Joe's, true nature. The religious man, Parry, can very well be an alter ego of the protagonist or some manifestation of schizophrenia. In this sense, Joe's dilemma is an internal struggle, and thus the novel becomes an allegory of a man of science who is struggling to get rid of a residual religious faith which does not stand up to his rationalist worldview. In fact, in their first encounter after the accident Parry's protestations do sound as if voiced privately by Joe himself:

> But I know that the Christ is within you. At some level you know it too. That's why you fight it so hard with your education and reason and logic and this detached way you have of talking, as if you're not part of anything at all. (66).

If these statements were an internal monologue by Joe, naturally they would be a part of his psyche which he desires to repress and control, and this is indeed what Jed expresses next: "You pretend you don't know what I'm talking about, perhaps because you want to hurt me and dominate me, but the fact is I come bearing gifts." (66). Moreover, the voices of the two men are further intermingled in Joe's description of his feelings during the "conversation":

> It was as if I had fallen through a crack in *my own existence*, down into another life, another set of sexual preferences, another past history and future […] *The language Parry was using set off responses in me*, *old emotional sub-routines*. It took an act of will to dismiss the sense that I owed this man, that I was being unreasonable in holding something back. (67, emphases added)

If Parry represents merely a voice inside Joe's head, a latent desire to have a religious faith, it is only natural that it will later question the legitimacy of his scientific writing which informs his atheism. In his second letter, Parry pinpoints two major flaws in Joe's articles. Firstly, his excessive rationalism makes him unable to understand the nature of faith and its role in people's lives:

> Well, who cares about the carbon dating of the Turin Shroud? Do you think people changed their minds about their beliefs when they heard that it was a Medieval hoax? Do you think faith could depend upon a length of rotting cloth? […] Somewhere in among your protestations about God is a plea to be rescued from the traps of your own logic. (134-5)

Parry's point of view here is almost identical to Clarissa's disapproval of the excessive materialism in the New Darwinian paradigms on human nature which Joe subscribes to. In an earlier conversion, when Joe defends E. O. Wilson's theory on the possible genetic basis of all aspects of human behaviour, including the infant's smile, Clarissa's responds by saying that "It was rationalism gone berserk […] What a zoologist had to say about a baby's smile could be of no real interest. The truth of that smile was in the eye and heart of the parent" (70). In other words, Parry's voice again emerges as a reverberation of previous conversations in Joe's life. Yet the most revealing statement Parry makes is when he pinpoints the second major flaw in Joe's scientific articles:

> It's all shopping. You buy it all, you're a cheerleader for it, an adman hired to talk up other people's stuff. In four years' journalism, not a word about the real things like love and faith. (137).

When the first of Parry's letters arrives, Clarissa hints that the handwriting is similar to Joe's, and here in this letter there is more 'evidence' to back her suspicions, as well as the reader's, that Parry is an alter ego of the protagonist. The sentence above is actually a reiteration of Joe's own self-loathing and dissatisfaction with his science journalism career, which he expresses repeatedly in the novel.[49] Because he is always writing about other scientists' ideas and not producing his own research, Joe feels a "sense of failure in a science, of being parasitic and marginal" (99). He cannot claim to belong to the community of scientists he admires. Consequently, this is a severe identity crisis, and in fact it is the most important aspect of Joe's character for understanding his dilemma as a Darwinist atheist in the light of the Sociobiological hypotheses outline above.

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[49] Parry's ability to delve into Joe's psyche has been highlighted by many critics. For instance, Rhiannon Davies concedes that "Whatever Parry's mental problems, his analysis of Joe seems astonishingly sane and very accurate" (74).

An atheist like Joe may cast down religious faith, but he is bound to yearn for the psychological benefits of that very religious faith he has abandoned. One of the most important of these privileges is a reliable sense of identity. “In the midst of the chaotic and potentially disorienting experience each person undergoes daily, religion classifies him, provides him with unquestioned membership in a group claiming great powers, and by this means gives him a driving purpose in life compatible with his self-interest.” (E. O. Wilson, 1978, 188). This is precisely what Joe lacks in *Enduring Love*. The irony for Joe, moreover, is that even if he could join a community of scientists, that would do little to provide him with “a driving purpose in life” compared with the degree of certainty offered by a conventional religious belief. This is actually the paradoxical nature of “scientific materialism” as described by E. O. Wilson and other Darwinists. Scientific materialism can challenge traditional religion by explaining its cultural and genetic basis, but it will never be an “alternative mythology”, regardless of its heroic narrative and heuristic powers. It remains spiritually weak because it “denies immortality to the individual and divine privilege to the society” (*ibid*, 192-3).

As the protagonist sinks deeper into the predicament represented by Parry and as he slowly realises that his atheist worldview is no longer reliable, the novel evokes a counterbalancing force that Joe can rely on in order to alleviate his existential worries regarding identity and purpose in life. This force is actually romantic love, specifically conventional love narratives that offer a measure of salvation and immortality for the lovers. This is one thread of the novel’s entangled web of motifs, and as such it requires a close reading of the text to be disentangled. From the beginning and even before the estrangement, Joe endows his love for Clarissa with clear spiritual and transcendental qualities. In fact, he was able to find some comfort after the traumatic experience of Logan’s death in making love to his wife:

> The world would narrow and deepen, our voice would sink into the warmth of our bodies, the conversation became associative and unpredictable [...] Like a moment in a recurring dream, these spacious, innocent moments were forgotten until we were back inside them. When we were our lives returned to the essentials and began again [...] So, there we were, this again, and it was *deliverance*. The

> darkness beyond the gloom of the bedroom was infinite and cold as death. We were *a point of warmth in the vastness*. (33-4, emphases added).

In this brilliantly written passage, there is very little of the sensuous. Sexual love here is transformed into a ritualised experience, “a moment in a recurring dream”. It is spiritually therapeutic, especially after witnessing death, because it re-affirms life by returning to “the essentials” and ushering in a new beginning. It also is a transcendental experience, delivering humankind from an infinite and cold universe into a warm and definite point of existence. Obviously, this description is not very different from the functions of many conventional religious beliefs.

Throughout the novel, love is portrayed as a spiritual refuge. This can be seen even in the protagonist’s “alter ego”, Jed Parry, who shares Joe’s attitude to love in proclaiming that it has transcendental qualities. In one of his earlier letters, he confirms that:

> Love has given me new eyes, I see with such clarity, in such detail the grain of the old wooden posts, every separate blade of grass on the wet lawn below, the little tickly black legs of the ladybird walking across my hand a minute ago. Everything I see I want to touch and stroke. At last I’m awake. I feel so alive, so alert with love. (96)

Parry here is describing a moment of awakening where the senses indulge in absorbing the beauty of the cosmos. His serene attentiveness to “every separate blade of grass on the wet lawn below” is quite suggestive of the poetry of the American transcendentalist poet, Walt Whitman, especially his “Song of Myself” (1855). However, this brief instance of intertextuality is not representative of Parry’s troubled state of mind. The harmony with nature and the sense of inner enlightenment are transient flickers of light in the darkness of his overwhelming self-destructive illusions. This is in fact another instance of characterisation which serves to develop the novel’s thematic concerns. Although it resembles Joe’s love for Clarissa, Parry’s De Clérambault syndrome, as Joe later realises, is a “distorting mirror that reflected and parodied a brighter world of lovers whose reckless abandon to their cause was sane” (128). Which is to say that the core of Parry’s problem is his seriously ill-conceived parody of love. In fact, many reviewers have noted

the proliferation of such personal narratives in the novel. For instance, Martin Randall contends that all the characters in *Enduring Love* attempt to perceive both the external world and themselves through their own narrative viewpoint. However, narratives are vulnerable to what Joe calls 'unreliable perception', and Parry's is an extreme case of these dangers of narrative unreliability (57).

So, the novel makes it clear that to enjoy love as a redemptive spiritual refuge, one must guard it against the distorted constructions of reality people tend to make. In two instances, these unreliable perceptions have damaged the characters' experiences with love. Doctor Logan's widow becomes fully convinced of her deceased husband's infidelity when she finds a stranger's scarf in his car. Joe as well briefly suspects that his wife is indifferent to his suffering because she is having an affair with a postgraduate student, and he stealthily searches through her appointment book to find evidence to feed his paranoiac illusions. The formula offered to overcome this problem is surprisingly traditional. As a result of Joe's attempts to reverse the damages done by the characters' ill-conceived versions of events, the various love stories in the novel begin to assume the framework of a conventional romantic narrative where the reunion of two heterosexual lovers is the desired so-called "happy ending".[50] The suggestion here is that whether in divine books or in any alternative systems of belief, the narrative form cannot be dispensed with as a means of regulating human emotions.

Therefore, at the end of *Enduring Love*, traditional happy endings seem to proliferate. Joe is reunited with Clarissa as can be clearly inferred from Appendix 1 in the novel. Despite the fact that this reunion happens beyond the main storyline, it is in effect a triumph for monogamous, heterosexual love brought about by the male protagonist, whose masculinity was subjected to some form of threat represented by the unwanted homosexual love of Parry.[51] Appendix 1 in the novel also mentions that the couple

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[50] Authoritative and canonical narratives, as opposed to personalised narratives, gain considerable importance towards the end of the novel. For instance, although Joe relies on his scientific knowledge to predict Parry's violent tendencies and save Clarissa from harm, he actually starts the process of reconciliation by resorting to literary narratives. The birthday present he buys for her, the first edition of Keats's *Poems*, is an obvious attempt to win her back by evoking her ideal love story; namely, Keats' letters to his fiancée, Fanny Brawne. In fact, these letters fit well with the novel's sanctification of love. Keats himself wrote in one of them, "Love is my religion". Besides, they symbolise love which has achieved immortality. As Clarissa puts it, Keats's last unsent letter expressed a 'cry of undying love not touched by despair' (221).

[51] As in *Saturday*, McEwan's male protagonists often need to defend their heterosexual masculinity. There may be many underlying reasons for this phenomenon, but they unfortunately lie beyond the scope of the present study.

managed to adopt children, thus completing the structure of a traditional patriarchal family, though not in a strictly genetic manner. Parry's love, on the other hand, is only treated as a psychotic menace which is finally safely incarcerated, and his homosexuality is denied a serious exploration.

Moreover, *Enduring Love* ends with another equally redemptive moment, which also reinstates normality to the second love relationship in the novel. In an idyllic natural greenery which mirrors the initial peacefulness prior to the balloon accident, Joe arranges a gathering where Mrs. Logan meets the lady she wrongly assumed to be her husband's mistress as well as the actual lover. Her unfounded suspicions about her husband's infidelity are thus quelled. John Logan's name is eventually cleared and his love for his wife reaffirmed. Like Joe's and Clarissa's, it is an *enduring love* that empowers the individual in the struggle for life and outlives death itself.

3.3 Evolution as a Creation Myth in McEwan's *Saturday*:

It is difficult to pass a final judgement on whether McEwan's use of Darwinism in *Enduring Love* has managed to avoid the stigma of being aligned with any specific ideological tendency or form of biological determinism. On the one hand, the alternative to traditional religion which McEwan espouses is inspired by an egalitarian and benign aspect of Darwinism. It is the universal phenomenon of romantic love, which has often been associated with kinship altruism in *Homo Sapiens*. Love greatly boosts reproductive success since it binds both parents into the activity of rearing offspring. Moreover, it is true that according to the theory, all human beings may be genetically predisposed to crave for some sort of religious faith, but a degree of free choice is assured in the novel because a "grand narrative" of love can generate a virtually infinite number of personal love stories. On the other hand, some aspects of characterisation and the narrative in *Enduring Love* are certainly more conventional and conservative than the celebration of love and altruism can be. For instance, the narrative resembles the traditional detective story where the male protagonist saves the day and restores order at the denouement. Such stories have often been criticised for justifying the status quo of bourgeois capitalism; the genre reliefs the socio-political context of any responsibility for crimes by intimating that they are the sins of few morally corrupt individuals (Bennett and Royle, 174). Indeed, Parry's crimes are solely viewed as his own with little consideration of whatever role his

social and economic milieu played in his downfall. Besides, as mentioned above, the love narrative which eventually re-anchored Joe's world after his struggle with religion is largely a conventional one which conforms to the cultural norms of monogamy and heterosexuality.

This sort of "ideological" ambiguity that marked McEwan's interest in Darwinism during the late 1990s has largely disappeared in the aftermath of the September 11 terrorist attacks. A shift towards more conservatism in the uses of the theory can be seen in both his creative and critical writing. In an eerie analogy to the fundamentalism of the group that carried out the attacks, McEwan response was a return to the bare essentials of Darwinism. Love, which had been the anchor of his 'humanistic' commitment, is no longer his answer to humankind's existential woes. It is replaced by scientific materialism, embodied specifically by the theory of natural selection. In 2007, McEwan finally declared this new position in a lecture he delivered at Stanford University, aptly entitled "End of the World Blues":

> Scientific methods, scepticism or rationality in general has yet to find an overarching narrative of sufficient power, simplicity and wide appeal to compete with the old stories that give meaning to people's lives. *Natural selection* is a powerful elegant and economic explicator of life on earth in all its diversity and perhaps it contains the seeds of a rival creation myth that would have *the added power of being true* but it awaits its inspired synthesiser, its poet, its Milton. (360, emphasis added)

This highly charged statement by McEwan bears all the zealous determination worthy of a new religious prophecy. To specifically describe evolutionary theory as "a rival creation myth", not just an alternative one, certainly implies a militant and uncompromising desire to replace "the old stories" which lack the "power of being true". This defiant and overbearing attitude in McEwan's proclamation may actually derive from the earlier success of his own literary experiment with these religious themes; namely, his novel *Saturday* (2005). In fact, the protagonist of *Saturday*, Henry Perowne, proclaims unequivocally the same controversial prophecy. In a conversation with his daughter, Daisy, Perowne says that if he were asked to create a new religion,

> he'd make use of *evolution*. *What better creation myth?* An unimaginable sweep of time, numberless generations spawning by infinitesimal steps complex living beauty out of inert matter, driven on by the blind furies of random mutation, natural selection and environmental change, with the tragedy of forms continually dying, and lately the wonder of minds emerging and with them morality, love, art, cities – and the unprecedented bonus of this story happening to be *demonstrably true*. (56, emphases added)

The fact that the "End of World Blues" lecture echoes, almost verbatim, Perowne's words two years after the publication of *Saturday* suggests that McEwan's shift towards a more hard-line position on evolution was a carefully considered move rather than simply a hasty reaction to the cataclysmic events of September 11. Yet his formula for a rival mythology remains very audacious to say the least.[52] For instance, it retains some of the tragic flaws of the conventional religions it aims to replace. His repeated assertions that evolution "would have the added power of being true" (2007a, 360) or "demonstrably true" (2005, 56) actually mirrors the same self-righteousness which religions, as institutions of power, have always employed to monopolise truth and control the masses.

In the world of *Saturday*, this domineering attitude translates into a relentlessly triumphalist celebration of science and rationality, specifically in the way they are embodied by the character of its protagonist. In contrast to the science journalist Joe Rose in *Enduring Love*, Henry Perowne is a man of science *par excellence*, a successful neurosurgeon. Moreover, rather than thrusting Darwinism into a clash of different worldviews held by various characters, *Saturday* is almost exclusively the success story of Perowne's Darwinist outlook to life. The very backbone of its narrative is in fact a sub-textual dramatization of the primeval struggle for life, underling the violent events in the protagonist's day, as illustrated in Chapter Two of this present study.

In other words, the allegorical is once again heavily present in McEwan's fiction. Perowne's victory over his own Darwinian rivals becomes, at one level, an allegory of

[52] Even E. O. Wilson, the founder of Sociobiology, has avoided such a venture, stressing that while scientific materialism can challenge traditional religion it will never be an "alternative mythology". Despite its heroic narrative and heuristic powers, it remains spiritually weak because it "denies immortality to the individual and divine privilege to the society" (E. O. Wilson, 192-3).

how the human race has won against all the evolutionary challenges by utilising its reservoir of accumulated scientific knowledge. Of course, the debates regarding the Iraq War, especially the American neoconservative claim that it is part of “the War on Terror”, are a major thematic concern of the novel, but these too are dominated by the protagonist’s views on science and religion.[53] Therefore, one of the best ways of understanding *Saturday* is to start by deconstructing the character of the protagonist, subjecting it to a close reading exercise and using a Darwinistic interpretation.

Firstly, Perowne’s atheism ties strongly with his rationalistic and inquisitive approach to life. At a very young age, he started to question the existence of “the kindly child-loving God” after the Aberfan disaster in which one hundred and sixteen schoolchildren died because of a mudslide (31). While many people feel that traditional belief in the supernatural can gloss over such random cruelty in the universe, Perowne fully dismisses this “primitive thinking”, insisting that it “belongs on a spectrum at whose far end, rearing like an abandoned temple, lies psychosis” (17). So, in analogous manner to the portrayal of Jed Parry in *Enduring Love*, McEwan’s fiction once again derisively relates religiosity to mental illness, or the malfunctioning of rational faculties. Right from the start, the narrator of *Saturday* portrays a clear-cut dichotomy of religion vs. rationality, and in the case of Perowne, it is an extreme form of rationality.

Secondly, Perowne’s skills, actions and decisions are constantly endorsed by McEwan’s narrator. Not only has McEwan chosen for his protagonist a profession where there is usually no room for the slightest of mistakes, but he has also portrayed him as an exceptionally successful neurosurgeon. For example, on the day before that Saturday, Perowne “was able to perform major surgery in one theatre, supervise a senior registrar in another, and perform minor procedures in a third.” (7). There is, as the narrator says, “a superhuman capacity, more like a craving, for work” which nourishes Perowne’s achievements (11). It is true that some illnesses, such as his mother’s Alzheimer’s, still defy neurosurgeons, but the remedies they can now deliver are always described very positively as “a miracle of human ingenuity” (44). Consequently, whenever he is at work utilising his scientific knowledge, Henry Perowne is characterised in terms befitting a demigod who is aware of his own perfection. He “cannot deny the egotistical joy in his

[53] Please refer to Chapter Two of this thesis for a comprehensive analysis of the way in which *Saturday* discusses the war from an evolutionary perspective as an unavoidable manifestation of the struggle for survival.

own skills, or the pleasure he still takes in the relief of the relatives when he comes down from the operating room like a god, an angel with the glad tidings life, not death." (23).

This celebration of men of science is not limited to the level of narration. Several spatial metaphors also serve to deify the protagonist's human rationality and to endow it with a metaphysical dimension. At various junctures in the narrative, when the narrator delves into Perowne's mind to reveal his unique outlook to life, Perowne assumes the role of an aloof overseer of the world. For example, he is often on a high plateau, his bedroom window, admiring his city below and its ecological perfection or indeed "watching over" passers-by such as the two nurses going home, "supervising their progress with the remote possessiveness of a god" (13). It must be noted that these carefully wrought metaphors are often flawed by the narrator's patronising tendency to reveal his intentions, specifically in using the word 'god' to describe Perowne, thus denying the readers the pleasure of deciphering the complex symbolism in the text. Fortunately, this is not the case for the opening scene of *Saturday*, which is the most symbolic of these "window scenes":

> Some hours before dawn Henry Perowne, a neurosurgeon, wakes to find himself already in motion, pushing back the covers from a sitting position, and then *rising* to his feet. *It's not clear to him when exactly he became conscious*, nor does it seem relevant. He's never done such a thing before, but he isn't alarmed or even faintly surprised, for the movement is easy, and pleasurable in his limbs, and his back and legs feel unusually strong. He stands there, *naked* by the bed [...] He has no idea what he's doing out of bed: he has no need to relieve himself, nor is he disturbed by a dream or some element of the day before, or even by the state of the world. (3, emphases added)

At one level, the protagonist's nakedness, as Philip Tew rightly maintains, "conveys mankind's vulnerability" (2007, 200). However, if read in the light of this character's heroic qualities, nakedness at this moment of awakening may also allude to a prelapsarian state of existence, a closeness to perfection, of being created in the image of God. In fact, the various physiological functions of Perowne's body in this scene depict a uniquely allegorical moment of creation. Of course, there are many logical reasons why Perowne would suddenly wake up; for instance, his sleep disruption may well be the result of his

hectic lifestyle as an important member of the medical service.[54] But at this point, the mystery of the cause should be maintained in order to perfect the metaphorical significance of the scene. The protagonist, who literally has just existed on the pages of the novel, emerges through a moment of magical awaking, an epiphany of sorts. "It's as if, standing there in the darkness, he's materialised out of nothing, fully formed, unencumbered." (3). His awakening thus resembles the creative acts of omnipotent gods, but such an omnipotence is totally absent; instead the emphasis is on the physiological process in which Perowne comes to consciousness. He is suddenly aware of himself moving, but not knowing "when exactly he became conscious", he rises to his feet, he is enjoying this experience as if it were a novelty, and he is naked. Consequently, the combination of physiology with the references to creation portrays an archetypal metaphor of the elusive 'moment' when self-aware human rationality spontaneously and slowly rose out of lower life forms, with origins in inorganic matter such as the air, by virtue of the invisible power of natural selection.

This is in fact the beginning of the allegory where Perowne symbolises the triumph of human rationality and the pursuit of scientific knowledge. It is, moreover, the birth moment of a human demigod. As mentioned above, the narrator constantly highlights the superhuman strength and self-assertive egotism of Perowne. This relentless tendency in the narrative is further intensified when the allegory proceeds to the phase of the struggle for life. After dawn, Perowne decides to pursue his own plans for the day regardless of the demonstrations blocking the roads outside. His selfish pursuit of his needs in this tough environment propels him twice into near fatal encounters with a thug called Baxter. In the first encounter, the car accident provides Baxter and his henchmen with an ideal opportunity to extort money from Perowne for the damage done to their car. When Perowne refuses to give them anything, they proceed to assault him. Aggression, as Philip Tew argues, is a common trait in the contemporary British novel with "personal relations in turmoil, the incommensurability of one's fate" (2007, 203). Indeed, this unexpected car accident disrupts the fluidity of Perowne's stream of consciousness and later plunges his family into great turmoil.

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[54] In fact, there is ample evidence in the novel to suggest that the cause of Perowne's alertness is purely psychological. Contrary to what the narrator says, he is disturbed by the state of the world, and he is obsessed with news bulletins and their continuous speculations of an imminent terrorist attack. This is a recurrent motif in *Saturday*, which highlights the role which the global media has played spreading a "culture of fear" in the wake of September, 11.

Yet in this regard, *Saturday* is not merely responding to the cultural uncertainties of this present moment in history. Violence in this encounter is more primeval and certainly heavily allegorical. The scuffle soon becomes as a Darwinistic struggle where Perowne proves more adapted to survive the fight than Baxter is, especially at a biological level, as illustrated in Chapter Two of this study. Perowne's keen observational skills and rational faculties helps him diagnose the onset of Huntington's Disease, an incurable neurodegenerative genetic disorder. To be able to make a medical diagnosis in such a situation certainly shows exceptional mental strength, but what happens next is even more miraculous. The attackers are defeated by the use of scientific knowledge as a weapon. When Perowne unscrupulously embarrasses Baxter by shouting "Your father had it. Now you've got it too" (94), Baxter gets perplexed, his men desert him and the conflict is thus defused.

The allegorical dimension in this encounter surely is too obvious to be neglected or missed. As illustrated in the preceding chapter of this present study, in the wars of nature, those males who use cunning and intelligence as weapons will certainly survive and prevail over individuals who carry a faulty gene in their cells like Baxter does. Yet, a further close reading of the scene here reveals more sub-textual meanings, especially in terms of the use of science as an alternative mythology. As expected of an atheist like Perowne, his stream of consciousness does not follow the path of frantic prayers or superstitions during his calamity. Rather, he finds comfort and confidence in thinking in terms of his medical profession. Diagnosing the problem in Baxter's right hand actually "soothes him, even as he feels the shoulders of both men pressing lightly through his fleece. *Perversely*, he no longer believes himself to be in any great danger" (90, emphasis added). Once again, McEwan's patronising narrator attempts to guide the reader's judgement; to a certain degree, it is *perverse* to find solace at such moments of danger by simply exercising rational faculties and totally suppressing human emotions of fear.

There are indeed many striking similarities between Perowne's worldview and the various forms of conventional religion.[55] In addition to self-righteousness, his alternative

[55] One may add to these similarities a tendency to ritualise, especially in the way the novel portrays Perowne's career. He has his own rituals of conducting operations in the theatre, which include, for example, listening to certain pieces of Classical music. This tendency dominates the narration especially towards the end of the novel where Baxter's emergency operation is described in a highly technical language, with terminology in Latin which can be as spellbinding for the layman as the Latin or Hebrew rituals of the Judeo-Christian traditions. Moreover, it must also be noted that the scientific discipline of neurosurgery, like traditional religious institutions, is a patriarchal hierarchy, and Perowne is too aware of

mythology suffers the same inclination towards apocalyptic destruction and sectarianism inherent to monotheism and other systems of belief, even though he is fully aware of the danger of these two traits. For example, for a very brief moment during a musical performance by his son, Perowne manages to envision the hazards of the intense human attachment to visions of paradise:

> There are these rare moments when musicians together touch something sweeter than they've ever found before in rehearsals or performance, beyond the merely collaborative or technically proficient, when their expression becomes as easy and graceful as friendship or love. This is when they give us a glimpse of what we might be, of our best selves, and of *an impossible world* in which you give everything you have to others, but lose nothing of yourself. Out in the real world there exist detailed plans, visionary projects for peaceable realms, all conflicts resolved, happiness for everyone, for ever – *mirages for which people are prepared to die and kill. Christ's kingdom on earth, the workers' paradise, the ideal Islamic state.* But only in music, and only on rare occasions, does the curtain actually lift on this dream of community, and it's tantalisingly conjured, before fading away with the last notes [...] Henry last heard it for himself at the Wigmore Hall, a Utopian community briefly realised in the Schubert Octet, when the wind players with little leaning, shrugging movements of their bodies, wafted their notes across the stage at the string section who sent them back sweetened. (171-2, emphasis added)

What McEwan's narrator is describing here is a commonplace experience; music is enjoyable partly because of a perceived 'spiritual' dimension. The harmony of sounds and rhythms can instigate feelings of inner peace which, at a certain heightened degree, can be interpreted by some individuals as a vision of paradise. Perowne is painfully aware that, as a human being, he too is prone to such utopian cravings. There is some sort of muted unease in his stream of consciousness here because for him, these visions are actually "mirages for which people are prepared to die and kill". Once again the protagonist of *Saturday* adopts the same opinions which his creator, Ian McEwan, later expressed in the

this fact and seems to be at ease with it. Neurosurgery in *Saturday* is exclusively a male domain where every surgeon seems to have had a mentor who helped him get initiated into the practice.

"End of World Blues" lecture. Both warn against the apocalyptic and utopian aspirations of the three main monotheistic religions.[56] They can lead to the total destruction of humankind because of the specific order of their creation narratives. The dénouement, a promise of salvation for a divinely elected religious group, only comes after a climax of global war during which members of rival religious groups are either converted or cast in hell (2007a, 352-3). That is why, as McEwan contends, human history is abundant in stories and events demonstrating "the dangerous tendency among prophetic believers to bring on the cataclysm that they think will lead to a form of paradise on earth." (*ibid*, 362).

McEwan's lecture actually sounds as a passionate plea to halt this medieval self-destructive drive by devising a new grand narrative inspired by "the scientific method" (360). Yet, in *Saturday*, his atheist protagonist fails to heed such warnings and partakes in the very same apocalyptic mania which McEwan seeks to abolish. Perowne entertains his own vision of a "paradisiacal" destination for the scientific enquiry into the human mind, and it is expressed in highly heroic terms towards the end of the novel:

> Could it ever be explained, how matter becomes conscious? He can't begin to imagine a satisfactory account, but he knows it will come, the secret will be revealed - over decades, *as long as the scientists and the institutions remain in place*, the explanations will refine themselves into an *irrefutable* truth about consciousness. *It's already happening*, the work is being done in laboratories not far from this theatre, and the journey will be completed, Henry's certain of it. *That's the only kind of faith he has*. *There's grandeur in this view of life*. (255, emphases added).

The secular paradise intimated here is the awaited moment when the scientific method unlocks, once and for all, the most enigmatic secret of life; namely, human consciousness. For Perowne, such a scientific breakthrough will come as a form of salvation since it will relieve humanity of its constant search for meaning by offering complete and *irrefutable*

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[56] Also, both the lecture and *Saturday* include Marxism in the category of apocalyptic religion. Quoting Norman Cohn's *The Pursuit of the Millennium*, McEwan subscribes to the view that Soviet Marxism retained some form of the belief in an ultimate Armageddon that would annihilate agents of evil, represented in this case by the Bourgeoisie who will be defeated by the Proletariat in order to make way for the classless society– the workers' paradise (2007, 353-5).

knowledge of its self-aware existence. It is tempting to say that this view is somehow at odds with the very spirit of the scientific method because his extreme certainty curtails scientific enquiry and proscribe a desired result rather than leaving all the possibilities open for investigations. In other words, his vision is a kind of blind faith – "the only kind of faith he has". He appeals to Darwin's scientific authority at end of the passage by quoting his memorable motto from *The Origin of Species*: "There's grandeur in this view of life", but this manoeuvre does not really help to disguise the analogies with apocalyptic faith. For instance, his vision certainly involves some sort of final confrontation. Deciphering the secrets of self-aware consciousness will annul the human need to constantly re-invent the concept of the soul, and will thus annihilate rival belief systems and signify a final victory for his own form of mythology. Moreover, Perowne, unlike the camp of traditional religion, would not actively seek to bring about his paradise simply because "It's already happening, the work is being done in laboratories not far from this theatre." His apocalypse has already started, and all he needs to do is to defend his mythology against the other camp which is seeking to destroy it. Everything will be fine "As long as the scientists and the institutions remain in place".

That is why in *Saturday*, the conflict with traditional religion takes place on a quite grander scale than the encounters we see in *Enduring Love*. Perowne's life may have been threatened by Baxter, but his real dread is what he perceives to be a sudden and violent resurgence of medieval religious paradigms; namely, the global phenomenon of Islamist terrorism. This phenomenon, which is certainly a threat to anyone, is even more worrying for Perowne because his fears of it assume a pseudo-sectarian shape; it is the fanatically religious versus the extremely materialist. His reflection on the current state of the world is limited to these two camps. There is no middle ground. His supposedly robust and detached rationalism is unable to comprehend and analyse the phenomenon of terrorism. This malfunctioning of rationality becomes highly acute when Perowne attempts to reflect on the true nature of his fear of terrorists:

> There are people around the planet, well-connected and organised, who would like *to kill him and his family and friends* to make a point [...] Is he so frightened that he can't face the fact? The assertions and the questions don't spell themselves out. He experiences them more as a mental shrug followed by an interrogative pulse. *This is the pre-verbal language that linguists call mentalese.* Hardly a language,

> more a matrix of shifting patterns, consolidating and compressing meaning in fractions of a second, and blending it inseparably with its distinctive emotional hue, which itself is rather like a colour. A sickly yellow. (81, emphases added).

His fear thus belongs to the sphere of the pre-linguistic, the pre-rational and even the pre-human. There is a sort of Darwinistic and primeval air to it, but it is, more specifically, a tribal feeling. These "well-connected and organised" people, a tribe in effect, is preparing "to kill him, his family and friend", i.e. to conquer his tribe. Perowne is indeed "so frightened that he can't face the fact". That is why, in his stream of consciousness, he cannot afford the luxury of time to try to understand or contemplate any of the possible political, historic or economic origins of the phenomenon of global terrorism. Several reviewers have complained of Perowne's one-sided and solipsistic view of the world, that of the middle-class Westerner. For instance, Tim Gauthier points out that his unwillingness to consider his involvement in the economic injustice that generates threats such as Baxter's is magnified by these very threats, thus precluding any attempts to empathise with the other. Therefore, "the novel captures the polarities at work in any navigation of the post-9/11 world." (10). Urgency and alarm are the order of the day. His apocalypse has already started; "He lives in different times - because the newspapers say so doesn't mean it isn't true." (276). In the world of *Saturday*, the terrorists should remain shadowy figures, possibly subhuman or genetically inferior like Baxter who has "vaguely ape-like features" (97). Perowne tribalistic fears of extinction blinds his rationality and he cannot see them as anything but an inexplicable existential threat to his tribe.

It is now a widely acknowledge fact that in the wake of 9/11, these same primeval and tribal fears were unscrupulously exploited by the Bush administration, to justify 'pre-emptive' wars, employing at the same time a carefully-worded religious rhetoric which appeals to the devoutly Christian segments of the American people. Even before becoming president, George W. Bush, innocently or cynically, manipulated religious rhetoric, and he is reported to have told a Texan evangelist, "[I] feel like God wants me to run for president. I can't explain it, but I sense my country is going to need me. Something is going to happen, and, at that time, my country is going to need me. I know it won't be easy, on me or my family, but God wants me to do it." (Mansfield, 109). It seems that the Bush's administration is indeed consuming the "opiate of the masses", to use Marx's famous phrase, and not just distributing it through the media. They seem to

believe they are in a sectarian conflict. After the mini-apocalypse of 2001, in the form of Bush's election to the presidency, one of his military appointees, Lieutenant-General William G Boykin, was quoted as saying to a Muslim Somali warlord, "Well you know what I knew, that my God was bigger than his. I knew that my God was a real God, and his was an idol." (BBC News, 2003). It is certainly fascinating that in *Saturday*, Perowne, a Darwinist and an atheist, would be entrapped in this same media-driven, sectarian war mongering. As illustrated at length in the previous chapter of this thesis, Perowne is in the pro-war camp regardless of the moral ambivalence he expresses towards the 2003 war.

Therefore, his own brand of atheism meshes well with the American Neo-Conservative ideology. For both, the Iraq War is necessary in order to prevail over rival belief systems and to usher in their own imagined utopias. It is in fact easy to detect the affinity between *Saturday* and the conservative pro-war camp of 2003, especially when McEwan's narrator, in his remarkably revelatory fashion, declares that the solution to the current affairs of the world is to preserve the economic status quo and fight religious extremism with a crude form of capitalism. "It isn't rationalism that will overcome the religious zealots, but ordinary shopping and all that it entails – jobs for a start, and peace, and some commitment to realisable pleasures, the promise of appetites sated in this world, not the next. Rather shop than pray." (126). It is worth noting that President Bush Junior in a 2006 news conference encouraged the American people to "go shopping" in order to strengthen the economy and face the challenges of the "war on terror". Such analogy in approach is hardly a coincidence.

In conclusion, at the levels of characterisation, narration and language, *Saturday* uses Darwinism to advance politically conservative beliefs. McEwan's enterprise of promoting natural selection to the level of a rival creation myth is not exactly a radical shift of paradigms; on the contrary, it ends up generating the same tragic flaws of conventional religions. His narrator relentlessly endorses the protagonist's worldview and actions in an oppressively self-righteous manner. Moreover, the use of science as a weapon is normalised as an adaptive tool in the wars of nature. Furthermore, Perowne's alternative materialist mythology fails to rise above the sectarian confrontations and apocalyptic logic typical of monotheism.

It is both ironic and highly metaphorical that the threat posed by the rival camp of religion is materialised as an aeroplane falling from the sky. The Russian Cargo plane in *Saturday* is the perfect metaphor for a projectile which "the various jealous sky-Gods", as

McEwan calls them (2007, 360), would fire down at his materialist and earthbound paradise. Until the end of the *Saturday*, Perowne's apocalyptic and alarmist line of thinking never relents, ending with a statement of doom: "Here they are again, totalitarians in different form, still scattered and weak, but growing, and angry, and thirsty for another mass killing" (277).

3.4 Jim Crace's *Being Dead*: Reclaiming the Zone of the Dead:

Jim Crace's approach to the relationship between Darwinism and traditional religious belief is considerably similar to McEwan's treatment of the topic. Crace has always exhibited a keen interest in natural history (2000a). Also, he seems to share with McEwan the same tendency to link religiosity to the malfunctioning of mental faculties. In an interview he gave in 2000, Crace contends that "some people have a biological predilection for believing in God and other people don't. Interestingly, the God gene is very closely associated with that front part of the brain where epileptic fits are triggered." (2000b, 48). Moreover, both novelists are self-proclaimed atheists who believe that some form of alternative humanist/scientific "mythology" should be devised in order to compensate for the much-welcomed decline of current world religions.

However, the atheistic outlook of Crace's writing is far more sharply defined and unequivocally pronounced than what we encounter in *Enduring Love* and *Saturday*. This is especially the case of Crace's award-winning novel *Being Dead* (1999), a book which boldly challenges religion's monopoly over the most existentially torturing phenomenon in human life; namely, death. It is of course common sense that the world's various religious narratives are largely an expression of the human fear of death. To believe in an eternal afterlife is in effect to deny that every human being will eventually cease to exist. Crace's *Being Dead* starts by emphatically rejecting such metaphysical renderings of death, and proceeds to secularise it through celebrating the very materiality of this biological phenomenon. Without the religious view, death should not have to be a terrifying finality; rather, it is a moment of return to nature, a brief transformation after which the human body integrates into an ecological unity with the elements of the landscape from which it had originally emerged. There is indeed grandeur and serenity in the mundane facts of dying which can be embraced and appreciated.

There are in fact both personal and philosophical reasons underlying Crace's experimentation with the meaning of death. In his interview with Minna Proctor, Crace declares that the novel was partly inspired by his frustration with his family's "old-fashioned, socialist atheism" which did not provide him with "an invisible means of support" after his father passed away (2000b, 46-7). The solution he proposed in this regard is strikingly similar to McEwan's:

> My great concern, and perhaps the reason *Being Dead* was written, was that if the great religions of the world atrophy- which they seem to be doing to some extent- then we cannot afford to have a world in which there is no mechanism for fear and wonder and awe and transcendence, simply because atheism did not bother with that in the past. If scientific logic were to have its way and everybody stopped believing in God, then we would have to find some other form of mysticism to take the place of a belief in God. Because that kind of transcendence, that kind of mysticism is our Trojan horse for glorifying the fact of existence, for wondering at the diversity of the natural world. (47-8).

Like Ian McEwan, Jim Crace assumes a sort of prophetic responsibility as he witnesses the decline of conventional religion; he regrets the fact that modern-day atheists have not yet tackled the human need for a mystical alternative. Even in the absence of religion as we know it today, humanity will continue to have a unique propensity for "fear and wonder and awe and transcendence". Certainly, these faculties become acutely vigorous when loved ones pass away, hence the need for some kind of secularised celebration of death, a way to embrace it as one aspect of "the diversity of the natural world".

Being Dead is Crace's own attempt to fill this gap in contemporary atheistic thought. The novel starts with the murder of its two main characters. Joseph and Celice, two happily married zoologists who get brutally killed by a homeless man while making love on the very same beach where they first consummated their relationship thirty years ago. In an interview with Philip Tew, Crace reveals that the couple's death is based on an actual murder that took place in Pembrokeshire, Wales, where a couple from Oxfordshire,

Peter and Gwenda Dixon, were attacked in 1989 (2006, 135).[57] Tew's research into this contextual element remarkably reveals that the reality was more shocking and brutal than the fiction. When the body of Peter Dixon was found, his hands had been tied up behind his back (*ibid*, 153).

In the novel, what follows is a vivid and highly aestheticized portrayal of the slow decomposition of the couple's semi-naked corpses while hidden among the sand dunes for six days.[58] Sparing its reader none of the gruesome details, *Being Dead* is indeed unapologetically frank about its difficult thematic concerns. This may be alienating for readers and could risk the novel's ability to promote its alternative views, especially that it also lacks an outspoken central character. In a manner befitting an atheist book, there is no "demigod" protagonist, such as Henry Perowne in *Saturday*, who would dominate the world of the novel and feel confident in his or her ability to change it. Therefore, the best critical approach to the novel seems to be one that focuses on other literary devices, specifically the well-crafted narrative which Crace constructs in order to achieve the challenging task of secularising death. It is a highly captivating narrative by virtue of its complex structure, varying tempo and voyeuristic impulses in which the reader becomes an explicit accomplice.

In terms of structure, the novel alternates between past and present. On the one hand, a flashback narration retells the couples' last day and their life stories. On the other hand, the present events include the successive stages of their biological decomposition as well as the daughter's search for the missing couple. There are, therefore, two timeframes and

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[57] The attacker eluded justice until May 2011. He was also convicted of the killing of brother and sister Richard and Helen Thomas earlier in 1985, as well as of separate charges of rape, sexual assault and attempted robbery (BBC News, 2011).

[58] A summary of the couple's life story can be quite useful at this stage. Joseph and Celice first meet as PhD students undertaking marine research assignments in the area of Baritone Bay, which is in fact a fictional place. They stayed together with three more students in an old "study house" owned by their research institute. At first, Celice was not impressed by Joseph's character and actions, but after hearing him sing and noticing that he was spying on her, she becomes attracted to him. Then, the two make love among the sand dunes of the bay after a clumsy flirtation attempt by Joseph. On their return from this escapade, they find that their study house has totally burnt down, and one of their comrades, Festa has died in the fire. We learn from the narrative that Joseph and Celice got employed by their research institute, and they have one daughter, Syl, who left the house at a relatively young age. On their thirtieth anniversary, Joseph plans a visit to the same spot in the dunes where they first made love, attempting to bring back some youthful lustre into their married life. In the dunes, they are brutally murdered by a homeless man, and their bodies are left there to rot for six days. Their disappearance was first noticed by Joseph's secretary. She calls the daughter Syl, who in turn starts looking for them in hospitals and the city morgue. The novel ends with two scenes from two different strands of the narrative: in the first the couple are waking up at 6.10am of that fateful day, and in the other scene there is the removal of the dead bodies by the police.

four fundamentally discrete, but often interlacing, narrative strands.[59] The one which covers the couple's past is described as "a quivering of sorts" (4). According to the narrator, this is a strikingly unorthodox "funeral ritual" where, instead of maintaining solemn silence, the mourners would literally shake the deceased's house with loud grieving noises:

> The mourners, women first, would come as soon as it was dark to start their venerations, weeping till their shoulders shook, tapping on the floorboards with their boots and sticks [...] At midnight, when the men arrived, all the guests would stand to form a circle round the bed. They'd grip the mattress and the bedboards, a shoal of hands, to *quiver* the murdered couple, winnowing and shaking out their wrongdoings so that they'd enter heaven unopposed. (2-3, emphasis in original).

It may seem strange for an atheist literary text to make use of such rituals, but it must be pointed out that quivering has never actually existed; it is one of the various fictitious myths which Crace invented to suit his purposes (Crace, 2000a). In this specific example, the quivering scene actually serves to establish some sort of narrative authority. The "polyphony" of voices in the mourning crowd certainly commands attention and is more captivating than having a conventional 'monophonic' eulogy for Joseph and Celice. There is also a sense of sorcery and the occult in the tableau of "a shoal of hands, to *quiver* the murdered couple", which reinforces the hypnotic powers of the scene.

Yet, there is more immediate and practical reasons for this storytelling "bluff". After the mourning crowd have exhausted their voices, they "would reminisce about the dead, starting with the hearsay of the couple's final, bludgeoned breath" and then they would recall the deceased's life in a flashback until "With practiced timing, the *quiverings* for the murdered couple would end at daybreak." (3-4, emphasis in original). This is exactly the blueprint of the narrative in *Being Dead*. It is perhaps the only way to tell the couple's

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[59] A brief survey of the novel can reveal its extremely tangled and overlapping structure. Chapters 1, 3 and 5 introduce the dead bodies. Chapter 2 is about the "quivering" ritual. Then suddenly Chapter 5 presents an account of the murder, and as such it starts the narrative strand which retells the couple's last day in a reverse chronological order in chapters 8, 11, 19, 21 and 25. Chapters 4, 7, 10, 14, 17 and 22 are all an account of Joseph and Celice's lives and courtship. Two strands of the narrative intersect in chapter 19 when the couple revisit the site of the burnt study house at noon of their last day. Chapters 6, 8, 9, 12 and 13 charter the decomposition of the dead bodies. Finally, Syl's part of the story is covered in chapters 12, 15, 16, 18, 20, 23 and 24.

life story because, as Crace himself explains, Joseph and Celice are dead from the start and have no future; conjuring up a “narrative of comfort” out of their death had to be done retrospectively (2000a).

However, the case can be argued conversely. The lack of human agency at the level of characterisation may have been consciously intended to foreground the narrative itself. It is the impersonal act of narration, rather than any identification with a spokesperson for the author, which can protract human interest in a topic as daunting as eternal mortality. This is at least Crace’s own view in this regard: “Everybody has good cause to want a narrative of comfort that will make sense of this strange universe.” In other words, human beings are predisposed to trust well-contrived stories which “don’t have to be true to be powerful” (2000b, 46). In fact, many reviewers of *Being Dead* have thus succumbed to the seductiveness of its narrative and assumed that quivering was a real Victorian practice (Birch, 1999). Readers as well have often debated online the origins of myths in the novel, such as “Mondazy’s Fish”, which are also fictitious.[60] Crace’s authorial choices and views could not have been more ironically and lavishly justified. In fact, Crace himself has outlined his use of the narrative to express “the thesis for the book”. In the aforementioned interview with Philip Tew, he maintains that the progress of each of the timeframes brings the other towards more “optimistic points”, such as witnessing Joseph and Celice in their bed or the reconciliation with the daughter. These “optimisms” cluster at the end of the novel, and thus the author’s thesis is delivered (Tew, 138).

Moreover, it can be argued that this side-lining of the human agency, which has both immediate reasons and implicit consequences for the final message of the text, is perhaps inspired by the most prominent source of influence on Crace’s writing; namely, Charles Darwin’s *On the Origin of Species*. In his ‘grand narrative’ of natural history, Darwin deliberately refrained from discussing the evolution of humankind, stating in his private correspondences that he simply wanted to avoid the prejudice of the religious and the scientific establishments (Beer, 54). Yet, as the case is in any discourse, and especially in the ones that use highly literary language like that of *The Origin of Species*, the most controversial of ideas are sometimes best expressed and defended when they are not expressed at all. According to Gillian Beer, omitting man from the text has served to

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[60] See the following two web pages for examples on this debate among the general readership:
< http://www.jim-crace.com/highlights.htm>
< https://groups.google.com/forum/#!msg/alt.usage.english/bwyWUiEQzR4/YWsv1KukSWoJ>

undermine the religious belief in "man as the crowning achievement of the natural and supernatural order", i.e. his diplomatic manoeuvre actually further promoted the controversial conclusions of his theory (54).

Darwin's influence permeates the whole of *Being Dead*. To further intensify the complexity of the narrative, its different strands are heavily infused with various Darwinian paradigms and motifs which are integrated with the main thematic concerns towards the end of the novel. This influence is quite subtle, producing what can be described as a 'scientifically' allegorical story. From the start of the quivering, Joseph and Celice's last moments are rendered highly metaphorical of humankind's prehistoric battles for survival by the impulsive savagery and the mundane motives of their murder. Firstly, the setting is naturalistic, the sand dunes, rather than any manmade, urban space. Secondly, the weapon is very technologically primitive; a simple piece of granite. Thirdly, the murderer is a deranged homeless man who behaves as a savage, but he is not driven by motiveless hate like many present-day killers are. He was simply after whatever useful items and lunches the picnicking couple might have. His actions constitute a horrific crime in the standards of civilised society, but in terms of animalistic survival instincts, he was hunting for sustenance and resources. This point is particularly stressed by the narrator: "Anything of theirs would be better than anything of his, that was certain. Even the laces from their shoes." (27). A weak elderly couple provided his best prey.

Moreover, in terms of the general plot of the novel, this unnamed murderer seems dispensable and almost textually redundant; the couple could have been killed by any natural agent such as drowning for instance. Yet, the Darwinian allegory in this scene is further elaborated by his presence as a human predator, since according to *The Origin of Species*, the struggle for life "almost invariably will be most severe between the individuals of the same species, for they frequent the same districts, require the same food, and are exposed to the same dangers" (76). Furthermore, from an evolutionary perspective, the prey was rendered more vulnerable for attack by the lovemaking. In the words of Joe Rose in *Enduring Love*, "selection over time must have proved that reproductive success was best served by undivided attention. Better to allow the occasional couple to be eaten mid-rapture than dilute by one jot a vigorous procreational urge." (McEwan, 1998a, 161).

Procreation, or the competition for mating partners, is in fact another Darwinian motif which recurs throughout the quivering, and it is also used to relate Syl's story to the

other strands of the narrative. In their youth, Joseph and Celice's courtship conforms to the general outline of Darwin's classical theory of sexual selection, which, it must be admitted, assigns a more proactive role to males than females. In *The Origin of Species*, sexual selection is defined as the outcome of "a struggle between the males for possession of the females; the result is not death to the unsuccessful competitor, but few or no offspring [...] in many cases, victory will depend not on general vigour, but on having special weapons, confined to the male sex" (86-7). In his later writing, particularly in *The Descent of Man*, Darwin starts to concede a less passive role for females in the process of sexual selection; "the female, though comparatively passive, generally exerts some choice and accepts one male in preference to others. Or she may accept, as appearances would sometimes lead us to believe, not the male which is the most attractive to her, but the one which is the least distasteful. The exertion of some choice on the part of the female seems almost as general a law as the eagerness of the male." (257).

Curiously, in the novel Celice's proactive "mannish strategy for finding partners" (21-2), i.e. her ability to physically flirt with men, does not work. She could not conquer any of the young male students she met in the study house. She lost to the more sexually available "truck-girls" of that small town by Baritone Bay (25). She could only passively choose the 'least distasteful male' in the group, the short and socially inept Joseph because his "singing undermined the other men" (15).

It seems that the laws of heredity are fully respected in *Being Dead*. In a characterisation manoeuvre that links two narrative strands, Celice's daughter, Syl, exhibits the same sort of cavalier sexual instincts witnessed in the mother. While looking for her missing parents, she sleeps with a taxi driver called Geo in her parents' house, and in a symbolic reference to the mother-daughter shared genes, Syl puts on Celice's nightdress on that night (126-7). Her actions, it must be said, were not entirely instinctual; she used sex as a biological displacement of stress. "The urgency had gone out of the search for her parents [...] Anxiety had been unsexed." (126). In any case, Syl's promiscuity does not secure her a mating partner, and like her mother, she soon feels repulsed by the man she preyed on.

In *Being Dead*, the emphasis on sexual selection, which is a biological phenomenon, seems to outweigh any discussion of love as a cultural construct. Especially in Celice's case, love is largely a physical affair. She was actually masturbating when she was first attracted to Joseph's singing voice coming from the next

room in the study house. “His voice dipped and peaked as Celice herself dipped and peaked in her warm bag.” (50-1). There is little of the romantic in both their courtship and their later married life. The emphasis is predominantly on sensuality, and the significance of this narrative choice can only be understood in light of its relationship to the novel’s main theme, i.e. death. Of course, from the start of the narrative, in both of its timeframes, sex and death seem to be at an incredibly close proximity. Joseph’s life ended with his hand firmly holding his wife’s *naked* leg. Also, immediately after the start of the couple’s relationship, Festa, the other woman in this group of students, is killed in a fire that consumed the entire study house. Furthermore, their daughter Syl had her own sensual escapades while she was looking into her parents’ disappearance.

In fact, both thematic concerns, sex and death, are concurrently and alternately discussed in a peculiar fashion that strips them of any cultural or spiritual significance and projects them as material and biological functions of the human body. For instance, in the study house, Celice’s response to Joseph’s clumsy flirtations was the female behaviour typical of most sexual courtships in the Animal Kingdom; she passively put her body on display. “Joseph was enlightened on how her body looked […] Her shoulders and her modest breasts. Her squabby hips. Her virtues and her blemishes.” (113). Likewise, her death was a purely biological occurrence, and the narrative relentlessly foregrounds its materiality. There is “the sudden loss of oxygen and glucose” and “the ruptured chemistry of her cortex”. Yet, the language is not entirely documentary or rigidly scientific. In this crucial scene, certain body parts are personified. “Her heart and lungs were frenzy-feeding on the short supply of blood, until, quite suddenly, they failed. They had abandoned her”. Other parts are turned into a war topography: “There were still battles to be fought but these would be *post mortem*, the soundless, inert wars of chemicals contesting for her trenches and her bastions amid the debris of exploded cells. Calcium and water usurped the place of blood and oxygen”. The body remains the only actor in this death scene. The sole brief reference to Celice’s consciousness, her “passion, memory and will”, transforms it into one of the various liquids and liquefied materials that are spilled “on to her scarf, her jacket and the grass.” (7).

Obviously, such a symmetrical approach to the two main thematic concerns enhances the coherence of the narrative as it oscillates between two different timeframes. In fact, coherence is further enhanced by a thread of voyeuristic impulses which permeates the novel’s representations of death and sex. For the novel to exist as a work of fiction, both

the narrator and the reader have to transgress the privacy of the couple, especially when reporting the present condition of their decomposing bodies. The narrator's invasive reporting often deliberately implicates the readers in its voyeurism. For instance, when describing the first group of flies which scavenged Celice's body, the narrator starts with a sort of euphemism: "Some flies [...] settled in the hair between her legs", but soon the reader's reassured sensibility is shocked by more blatant language: "or at the tuck of her anus, but found few pickings." (39). Whether dead or alive, the human body and sexuality never escape the inquisitive eyes of the narrator. As Philip Tew rightly points out, the uncomfortable quality of this section of the narrative, and the voyeurism it precipitates, are "only balanced by the complementary nature of the narrative strands being juxtaposed and interrelated thematically." (139). This aspect of Crace's fiction has been succinctly termed by Stephen Palmer as a "narrative scavenging of the death of his principal characters" which he deliberately allows in order to make way for the novel's "version of eternity" (52 and 61). [61] Similarly, an almost perverse sense of voyeurism dominates the couple's courtship in the other timeframe of the narrative, the quivering. Celice was actually not in the same room when she first admired Joseph singing; she was eavesdropping. Joseph too was twice spying on her as she woke up on the veranda of the study house. Both knew of and seemed to enjoy each other's voyeuristic attraction.

Yet, this symmetrical approach, by virtue of its focus on the material dimension, aids Crace's attempt to wrench death away from the hands of spirituality and conventional religious belief. Both sex and death are thus pinned down to the human biological life span, and both are firmly enclosed within the Darwinian understanding of life. This is the conclusion that Celice herself reaches as she reflects on the incident that killed Festa:

> Where there is sex, then there is death. They are the dark co-ordinates of one straight line. Grief is death eroticized. And sex is only shuffling off this mortal coil before its time to plummet to the post-coital afterlife. (149).

Celice's thoughts here are, obviously, emotionally disturbing, and clearly influenced by a heightened sense of grief, but biologically they are mere facts. As a zoologist, she knew

[61] It must be noted that although Palmer draws attention to "the instability and indeterminacy of the aesthetic mode" which the novel exploits, he seems to limit its "version of eternity" to the memory of the dead couple (52 and 61), failing to recognise the more materialist immortality which *Being Dead* also proposes, as shall be argued below.

too well that sex is the conceiving of a new life which ultimately ends in death. Once again Crace's narration takes on a Darwinian flavour. The interplay between procreation and death is one of the main engines that drive the argument of *The Origin of Species*. "A struggle for existence inevitably follows from the high rate at which all organic beings tend to increase. Every being, which during its natural lifetime produces several eggs or seeds, must suffer destruction during some period of its life, and during some season or occasional year, otherwise, on the principle of geometrical increase, its numbers would quickly become so inordinately great that no country could support the product." (76).

Thus, the duality is a given, biologically speaking. On the scale of an individual life span, Festa's for example, procreation and death are "the dark co-ordinates of one straight line". But on the scale of ecology, the production of life and its destruction are intertwined into a never-ceasing cycle. When the couple returned to the burnt study house on their last day, Celice was surprised to find that it has not remained the pyre she imagined it to be; all sorts of plant life have sprung up from the ashes. It is simply the cycle of the natural world. This is the philosophical thrust of *Being Dead*, and it is best expressed by Crace's fictional mythologist, Mondazy:

> 'Our books of life do not have an end. Fresh chapters are produced though we are dead. Our pages never terminate. But, given time, the papers yellows, then turns green. The vellum flesh becomes the leaf.' (154)

When death signals the end of consciousness, biology carries on "though we are dead". Decomposition is just a transformation. Flesh breaks down into its organic components, which in turn become the food that nourishes the beautiful leaves of plants, and this cycle never ceases to repeat itself. This kind of neo-Darwinistic transformation is mirrored in the narrative strand which retells the decomposition of the corpses:

> Viewed from closer up, there were colours and motifs on Joseph and Celice that Fish could never leave. A dazzling filigree of pine-brown surface veins, which gave an aborescent pattern to the skin. The *blossoming of blisters*, their flaring red corollas and yellow ovaries like *rock roses* [...] His body was a *vegetable*, skin and pulp and fibre. *His bones were wood*. Soon, if no one came to help, the maggots

> would dismantle him. Then his body could only be gathered up by trowels and out in plastic bags. (108-9, emphases added).

Crace's fictional mythologist, Mondazy, is doubly affirmed in the decomposition narrative strand. The transformation in the cycle of life, which cuts across both the Animal and the Vegetable Kingdoms, has already started to happen to Joseph's body. Blister blossoms like roses, and bone 'become' wood but in due time of course. In Crace's description, the speed with which Joseph's organic being descends into other life forms conveys a sense of magic-realism, and as such, it is meant to highlight the transcendence of the natural world and its ecological self-containment.

In fact, what the narrator laments most is the removal of the couple's corpses, which is a manmade intrusion upon the cycle of life. "Joseph and Celice would have turned to landscape, given time [...] the residues of Joseph and Celice's lives would have been tossed and tumbled in the dunes to nourish and renew themselves in different forms." (207-8). Certainly, as Crace himself concedes, this is not the best form of eternity for Jospeh and Celice, personally speaking. Yet, "There is hope for the universe. There is a future for the universe" (2000b, 49). Humanity at large can be part of that future even at a material and organic level. In other words, this is *a measure of* immortality which can only be enjoyed and embraced as one of the wonders of the natural world. *Being Dead* manages to grant the antidote for death which humanity has always craved; namely, incorporating our brief existence into the larger scheme of the cosmos.

In conclusion, perhaps the greatest achievement of *Being Dead* is its extremely functional hybridity, i.e. its ability to combine and utilise a host of narrative devices, myths and discourses in order to expand its thematic concerns. In this postmodernist blend, Darwinism is the major component. It saturates the subtext of the novel with various motifs such as the struggle for survival, sexual selection and organismic metamorphosis among others. The mixture also incorporates both real and invented myths and archetypal images. On the one hand, for instance, the reference to the couple's love as "a period of grace after death" (2000b, 48) is certainly an archetypal and over-tried motif. Within the immediate context of *Being Dead*, according to John Banville, this motif may have been suggested by "Philip Larkin's great poem "An Arundel Tomb," in which the poet, contemplating the stone statues of an earl and his countess lying on their tomb, notices "with a sharp tender shock" that the husband is holding the wife's hand." Also, the

six days of decomposition incorporate an obvious but inverted reference to the biblical creation of the heaven and the earth in six days. Moreover, leaving the two dead bodies unburied and exposed to the natural elements is in fact the funeral practice of excarnation which recurs in various primitive religions.

On the other hand, Crace freely invented his own mythical ideas, as mentioned above, which include the quivering of the dead and his enigmatic mythologist, Mondazy. Therefore, although Jim Crace shares with McEwan the same tendency of recycling and reconfiguring earlier myths and grand narrative in order to create an alternative "mythology", his approach is more vibrant and multifaceted. That is why his "narrative of comfort" in *Being Dead* can be both atheistic and on par with the religious story. Like all holy books, it is an enchanting mosaic of exotic scenes and interlacing narrative strands. Yet, it has no central character acting as a god. All of these narrative components in *Being Dead* are properly integrated and united around one dimension of existence; namely, the materiality of life and death, which is the only dimension we are sure exists.

The next chapter will expand the scope of analysis by considering history and historiography as one more crucial aspect of human culture that continues to be reconfigured by the influence of Darwinism.

Chapter Four: Darwinian Time and Historiography in the Neo-Victorian Novel

4.1 Darwin and the Expansion of Time:

Any exploration of Darwin and Darwinism is eventually bound to touch upon the issue of history, for classics such as *On the Origin of Species* and *The Descent of Man* are in large part attempts to charter the path of human evolution across eons of time, and hence are historically oriented in a broad sense. Since the early days of the theory, Charles Darwin stressed the importance of the passage of time for the emergence of new species from old ones: “The number of intermediate and transitional links, between all living and extinct species, must have been inconceivably great.”, existing during “incomprehensively vast” periods of geological time. For such an element of his theory, Darwin is in debt to Sir Charles Lyell’s work *Principles of Geology* (1859, 251-2). Moreover, Lyell has provided the inspiration for Darwin’s methodology, as he maintains:

> For my part, following out Lyell’s metaphor, I look at the natural geological record, as a *history of the world* imperfectly kept, and written in a changing dialect; of *this history* we possess the last volume alone, relating only to two or three countries. Of this volume, only here and there a short chapter has been preserved; and of each page, only here and there a few lines. Each word of the slowly-changing language, in which the history is supposed to be written, being more or less different in the interrupted succession of chapters, may represent the apparently abruptly changed forms of life, entombed in our consecutive, but widely separated formations. (275-6, emphases added).

Given the fact that the theory is focused on a ‘material’ past, i.e. fossilised extinct species which have been intermittently preserved in natural rock formations, the Darwinist’s historical enquiry is no slight undertaking. It is the ceaseless quest to meticulously collect, assemble and re-construct the imperfect fragments of a vast past. In this sense, this passage may well serve as an epigraph of this present chapter, for it conjures up a mission

to decipher history which has captivated all Darwinian enthusiasts, biologists and novelists alike, since the late Victorian era to the present day.[62]

On the contemporary literary scene, a specific 'breed' of the Neo-Victorian British novel has been particularly apt at incorporating Darwinian attitudes to history. Starting with John Fowles' *The French Lieutenant's Woman* as a precursory text, this chapter explores the theme of discovering the past in three contemporary novels: *Possession* and *Morpho Eugenia* by A. S. Byatt as well as Jenny Diski's *Monkey's Uncle*.

There have been various attempts to define the genre of the Neo-Victorian novel, but specific genre classifications have often proved futile efforts in literature due to the natural fluidity of art. That is why this chapter utilises a widely inclusive definition offered by Dana Sheller, who states that this genre can be read "as at once characteristic of postmodernism and imbued with a historicity reminiscent of the nineteenth-century novel." (538). This hybridism is certainly the case in the works of Fowles, Byatt and Diski. Moreover, in this representative selection, one encounters an unconventional form of historiography. On the one hand, all personal and social stories are treated as if they were a fossil record merely waiting to be organised in order to yield what is perceived to be an objective sequence of events. On the other hand, this Darwinian approach admits that certain disruptive forces, such as chance and unexpected sexual behaviour, can upstage, even displace, people's stories of themselves and render them obsolete.

4.2 History and Meta-History in *The French Lieutenant's Woman*:

By referring to these two elements of Darwinian theory, the fossil record and chance, this chapter proposes that the Neo-Victorian novel has borrowed from Darwinism what is needed to construct a literary or a metaphorical approach to history rather than a strictly empirical one.[63] In this regard, John Fowles's *The French Lieutenant's Woman* is a

[62] Some would regard any such history as a complex enquiry rather than a traditional one; the impulse to account for complex processes underpins Darwin's approach. For Jeff Wallace "Darwin in the *Origin* effectively problematised the relationship between human knowledge and the material world, and sought to deconstruct the essentialism underpinning the metaphysics of Western culture." (6).

[63] In fact, to extend the concept of biological evolution onto individual and cultural phenomena requires plenty of tweaks to the original theory, which renders the task closer to a metaphorical appropriation than an empirical expansion. For example, the most important difference between the two types of evolutionary processes, as highlighted by the biologist David Sloan Wilson, is the fixity of results. "Learning and cultural evolution adapt organisms to their environment quickly, while genetic evolution is so slow that its products are essentially *fixed* over the time scales that matter most in contemporary human affairs." (2005, 34, emphasis added). Culture and history may evolve, but they can more easily revert to previous states than the

pioneering book, setting the scene for later novels to carry on and develop such an approach in a very similar vein. This is one of the earliest postmodernist British novels to experiment with a narrator who is essentially a persona of the author.[64] John Fowles is present throughout most of the text, implicitly or explicitly, even appearing towards the end as a bearded gentleman on the same train as the protagonist, Charles Smithson. His unique intervention helps to set in motion his enquiry into the Victorian era. Commenting on his process, Fowles asserts, "You are not trying to write something one of the Victorian novelists forgot to write; but perhaps something one of them failed to write. And: Remember the etymology of the word. A novel is something new. It must have relevance to the writer's now" (1969b, 138). This reflexive strategy engages the reader very specifically in what Michelle Buchberger describes as "a vertiginous overturning of all narratival expectations in *The French Lieutenant's Woman*, which uses abrupt intrusions directly into the text and multiple endings, despite seeming to adhere to traditional Victorian narrative conventions. This parallels the central character's seeming adherence to conventional modes of behaviour only as a way of engineering a drastic escape from them" (167). Additionally, however, one other aspect of this "newness" is a reappraisal of our modern ways of reading the past. To begin with, the novel relies heavily on the rich tradition of the "amateur naturalist", the upper-middle class gentleman who has more financial resources than necessarily scientific education and can afford to spend his time combing the seashores and quarries to collect fossilised remains of living and extinct organisms. The protagonist, Smithson, is one of those industrious collectors, and the setting, the town of Lyme Regis, is abundant in a type of rock whose "highly fossiliferous nature and its mobility make it a Mecca for the British palaeontologist. These last hundred years or more the commonest animal on its shores has been man– wielding a geologist's hammer." (Fowles, 1969a, 50). The species of the amateur naturalist, Fowles tells his reader, is obsessed with details and artefacts as reflected in his elaborate outdoor

products of genetic evolutions which are fixed materially in DNA molecules. History does repeat itself. Therefore, one must pay careful attention to these subtle differences when reading the different types of Darwinism in Fowles's novel in order to avoid stretching the theory onto areas of the novel where it does not belong, as illustrated below in this present chapter.

[64] During the 1960s American writers were also producing metafictional, self-reflexive fiction in novels such as Kurt Vonnegut's *Slaughterhouse-Five* (1969), John Barth's *Lost in the Funhouse* (1968), and Thomas Pynchon's *The Crying of Lot 49* (1966). Fowles' use of Darwin renders his novel radically challenging in quite different ways by centring on the impact of the external forces of nature within the historical moment.

clothes and rucksack filled with "a heavy array of hammers, wrappings, notebooks, pillboxes, adzes and heaven knows what else." (51). But one should not sneer at this eccentric obsession:

> because it was men not unlike Charles, and as overdressed and overequipped as he was that day, who laid the foundations of all our modern science. Their folly in that direction was no more than a symptom of their seriousness in a much more important one. They sensed that current accounts of the world were inadequate; that they had allowed their windows on reality to become smeared by convention, religion, social stagnation; they knew, in short, that they had things to discover, and that the discovery was of the utmost importance to the future of man. (52).

The implicit humour of the heavy clothing and array of equipment establishes a narrative distance and irony, but its tone is not ultimately dismissive. It serves to remind the reader of the very different cultural mores and practices which are yet foundational to our own knowledge. Moreover, such aspects would be, by implication, so familiar to Darwin, thus subtly reinforcing the affiliative connections. Obviously, Fowles enjoys the privilege of hindsight as he is living the very future foreseen by the Victorians, so he can assess their achievements, particularly in the area of readjusting inadequate accounts of the world, where Darwinism became a major player. His commentary on the Victorians and his admiration of their eccentric preparedness for whatever comes their way, a view he shares with other intellectuals of the 1960s,[65] soon metamorphose into a sort of identification. The author himself becomes a collector, obsessively assembling minute details of his

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[65] For instance, Lionel Stevenson states that as far as the Victorian novelists are concerned, the winds of change had been gathering pace well before the arrival of Darwin's theory and slowly setting the scene:

> The most pervasive idea which paved the way to acceptance of the evolutionary concept was an acute awareness of the ever-increasing tempo of social change. As they looked back over the preceding half-century the novelists perceived the vast transformation that had occurred in the structure of society and in the accepted pattern of ideas; and they felt that even more drastic changes were certain to ensue. Their view was unlike the naive doctrine of perfectibility that had been held by the radical novelists at the end of the eighteenth century, who believed that universal human welfare could be achieved by the overthrow of the established system of law and economics and the substitution of an intelligently planned utopia. (30)

It was not exactly a renaissance nor was it a naïve revolution but rather the feeling that the time was ripe for a reconfiguration of conventional patterns of thought slowly but surely incorporating Darwin's novel tree of life.

Victorian hero's life and career and then constructing his own account. Moreover, Fowles makes sure the reader is also involved in the act of digging for historical details, as shall be illustrated shortly.

Fowles is always exercising his privileged retrospective gaze on Darwinism's contribution to world history. For example, to defend the protagonist's lack of scientific specialisation, he states that Darwin's work, "*The Origin of Species* is a triumph of generalization, not specialization; and even if you could prove to me that the latter would have been better for Charles [Smithson] the ungifted scientist, I should still maintain the former was better for Charles the human being." (53). There is no point in restricting the human at the expense of the scientific since no discipline is *purely* scientific and objective. Science is sometimes subject to manipulation by the society where it exits. Writing a century after the publication of Darwin's theory, Fowles knew its hermeneutical powers have often been subjectively appropriated to legitimise existing human social relations. Charles Smithson "saw in the strata an immensely reassuring orderliness in existence. He might perhaps have seen a very contemporary social symbolism in the way these grey-blue ledges were crumbling" (54). Nature seems to confirm his Victorian passion for order in society, and the layers of the rock start to resemble, in his imagination, the rigid social classes or "a kind of edificiality of time, in which inexorable laws (therefore beneficently divine, for who could argue that order was not the highest human good?) very conveniently arranged themselves for the survival of the fittest and best" (54). Obviously, Charles Smithson happens to be among those *fittest* in this Victorian social structure which he has legitimised, rightly or wrongly, by his amateur knowledge of Darwinism.

There is no doubt that this is a historical commentary by Fowles, and it implicitly extends beyond the area of fossils and naturalist collections, for science has always been used to legitimise manmade class and social structures till this day. Examples are abundant, and in the aftermath of Darwinism, the theory of Eugenics by Francis Galton is perhaps the worst offender. David Amigoni documents a crucial and desperate misuse of "biographical material" by Galton:

> it is appropriated as 'data' for actuarial, eugenic purposes– for example, Charles Darwin's comment on his father from the autobiography, and repeated in the *DNB* [*The Dictionary of National Biography*] entry by Francis Darwin, that he was 'the

> wisest man I ever knew'– is presented as evidence of a heritable trait, rather than being cast in the literary dialect of sympathy building, veneration and identification that it so clearly is. (2010, 12).

Galton's misuse of the material is similar to Smithson's thought on the geological strata; both are projecting their personal beliefs onto what should be an empirical activity. It is a posture tilting towards the subjective.[66] In this sense, Fowles's literary writing starts to resemble acts of historical inquiry. The affinities between literature and historiography here become a sphere of common knowledge shared with the contemporary readers who can see through Smithson's subjective and self-serving insights, thus they serve to strengthen the readers' trust in the author-narrator.

The contemporaneity of Fowles's historical commentary and its tacit alliance with its readership is further exemplified in the novel when his protagonist links the human to the scientific, but this time de-legitimising social norms. James Aubrey captures something of the seriousness of Fowles' fiction, commenting that "he saw himself foremost as a serious writer, even as a philosopher who happened to be entertaining as he wrote his characters into extreme moral dilemmas" (1). Such extremity seems to define Sarah Woodruff, Charles's lover. While their Victorian society would condemn Sarah for having extramarital affairs, he would not simply attribute her fate to personal choices made by her alone. His Darwinism's "deepest implications lay in the direction of determinism and behaviorism, that is, towards philosophies that reduce morality to a hypocrisy and duty to a straw hut in a hurricane." (119). She is what she is partly because of her genetic inheritance. She cannot be personally condemned for failing to observe a certain form of morality since all humans have limited free will after all. Obviously, this reasoning has not entirely absolved Sarah of guilt, but it is at least a more accommodating approach than the Victorian judgment. Moreover, it shows that genetic determinism, and science in general, can be used both to legitimise and debunk questionable human practices. The fact that it is cited by oppressive social actors should not deter from conducting Darwinian investigations into human nature and society.

[66] Such ideological abuses of science are not limited to Darwinism. Peter Bowler explains, "The idea that struggle spurred individual self-improvement had distinctly Lamarckian overtones, and many who welcomed the concept that the elimination of "unfit" races occurred as a part of evolution did not believe that the original racial differences were created by natural selection." (297).

At this point in the novel, the reader is indirectly involved in writing the history because Fowles's statements, which do not hide their contemporaneous assessment of Victorian Darwinism, invite the question of whether they are accurate. In other words, to say that Smithson's Darwinian beliefs led him to question free will is a statement that requires verification, perhaps by referring to what Victorian intellectuals, and indeed amateur naturalists, have said about the topic. Such questioning of the novel's historical statements becomes an integral part of the reading experience, which Fowles has encouraged by, for example, intermittently undermining the narrator's authority. At a different point in the novel, the same Charles Smithson who is now contemplating Darwin's impact on free will, is described as someone who "called himself a Darwinist, and yet he had not really understood Darwin." (50).[67] The reader is left to decide which Smithson is the true Victorian Darwinist, and the contradiction is certainly not a coincidence. Consequently, Fowles's novel is somehow a "writerly" text, to borrow Roland Barthes's words, in which "the reader [is] no longer a consumer, but a producer of the text." (4). This is, obviously, a prominent Postmodern characteristic; the novel draws attention to its status as a fiction rather than forcing its omniscient narration on the reader.

Despite man's ceaseless efforts to document his story, past and present, history in the Darwinian perspective is often under the hegemonic control of quite an unexpected force which can swiftly disrupt and alter the course of events. This force is chance which manifests itself in two ways. Random genetic mutations occur by chance and, when accumulated over time, can lead to drastic changes in the character of the species. Chance is also the order of the day in sexual reproduction. There is no telling which egg is united with which sperm. In the world of the novel, this is represented by the unexpected sexual behaviours which not only reverse the fortunes of the characters, by virtue of altering family structures and inheritance plans, but also change their attitude towards themselves and their partners. Midway through the novel, Charles learns that his uncle, Sir Roberts, has suddenly decided to marry a widow called Mrs. Tomkin. Thus, Charles has now lost

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[67] Buchberger situates Charles' crisis in the lack of faith engendered by his evolutionary beliefs:

> After his sole sexual encounter with Sarah, Charles's identity becomes fractured beyond all repair or denial. He storms from the hotel room and to a church where he is horrified by his inability to talk to God. His agnosticism, a necessary consequence of his belief in Darwin and Lyall, has severed this path towards this form of abdication of responsibility for the choices that confront him. […] Charles realizes that his life up to this point has been inauthentic, devoid of freedom. He has been fossilized; an apt metaphor that reflects his imprisonment in the time he inhabits (187-8).

the certainty of his inheritance because now his uncle could have a son to whom he could pass on his title and estate. Charles's would-be father-in-law, Mr Freeman, offers him executive-level employment in the family business as an alternative source of income, but of course this was no option for an aristocrat like Charles. "He saw now it was an insult, a contempt for his class, that had prompted the suggestion. Freeman must know he could never go into business, play the shopkeeper." (283). In an instant, Charles's life history is turned upside-down. This was brought about by chance, and now he is not sure what to do or even who he is anymore. He cannot reject this employment offer "when all his wealth was to come from that very source? And here we come near the real germ of Charles's discontent: this feeling that he was now the bought husband, his in-law's puppet" (283).

It must be stressed again that this identity crisis, though precepted by chance, is an element of a metaphorical and literary appropriation of Darwinism and should not be treated as if it were an empirical case study. Unfortunately, this seems to be a frequent pitfall in current scholarship dealing with Darwinism. For instance, Eva Mokry Pohler writes an elaborate analysis of the allegorical status of Charles's character, being a representative of the dying breed of the landed gentry. However, her analysis is undermined by the fact that she freely interprets all details and actions through the lens of evolution. She interprets Charles's "unexpected whims", such as his decision to suddenly "confront the dark figure standing mysteriously" at the Cobb (70) as a manifestation of the randomness that directs evolution. It is true that this whimsical action propels him into a relationship with Sarah, it remains simply an individual action and is of little allegorical value in this instance of history. A better example of the allegorical role of chance in historical evolution would be his loss of inheritance because this is a life-changing, unexpected event which is both external to his human agency and not specific to one individual in his social context as falling in love with Sarah is.

A similar confusion regarding the scope of Darwinian evolution exists in Tony E. Jackson's reading of the novel which praises Fowles's ability to integrate Victorian as well as modern Darwinian motifs but then makes an extraordinary claim that "we clearly see Charles undergo a kind of evolution— a change from a Victorian to a twentieth-century sense brought about by the manipulation of Sarah." (226). Evolution does not occur within the life span of a single individual or under the effect of a single catalyst or mutation. Both genetic and cultural evolutionary processes take several generations to bear fruit. Charles's personal history can be approached from an evolutionary perspective,

but Charles on his own cannot be said to represent a form of cultural evolution, from a Victorian to a twentieth-century mindset. Charles's character can be allegorical in that it represents a certain social class or the Victorian amateur naturalist, but it cannot be an allegory of an evolutionary process which requires multiple generations.[68]

Smithson's identity crisis is later followed by an emotional one concerning his affair with Sarah Woodruff. In one of the possible endings for the novel, as suggested by Fowles, Charles finds Sarah in Exeter, where they consummate their love affair. The following morning, he discovers blood stains on his undergarments and was shocked to realise that Sarah was a virgin. "His head whirling, stunned, yet now in a desperate haste, he pulled on his clothes […] She had not given herself to Varguennes [the French lieutenant]. She had lied. All her conduct, all her motives in Lyme Regis had been based on a lie" (341). Obviously, as a lover, Charles feels betrayed by Sarah's lies and he is unable to understand why she played the role of the outcast woman. He suspects that she has lied to him in order to seduce him, perhaps for the purpose of blackmail. Sarah is unable to explain herself, merely repeating that she loves him but they cannot live together. Once again, Charles's personal history is subjected to chance and the laws of sexual behaviour, which operate at a subconscious level beyond the realms of careful planning and story making.

The last element to be discussed in a Darwinian paradigm of history is the future. Nothing of the future can be precisely known except that *it is a movement towards better adaptation and survival*. "Nowhere does Darwin give a glimpse of future forms: and rightly so, since it is fundamental to his argument that they are unforeseeable, produced out of too many variables to be plotted in advance" (Beer, xix). Fowles captures this aspect of the theory and represents it in his experimentation with different possible endings for the novel. This narrative strategy allows greater reader's involvement, inviting the reader to assess the events and the possible endings, but in a larger metaphorical sense, the multiplicity stresses the unknowability of the future. This Darwinian principle is elegantly summarised in the epigraph of the last chapter of the novel, quoted from *The Ambidextrous Universe* (1967) by Martin Gardner: "Evolution is simply the process by

[68] In fact, such misreading of Darwinism, which exhibits hastily drawn conclusions and analogies between novel and theory, may have to do with the literary critics' frantic attempt to dispel any accusations of Social Darwinism by refusing the actual grand significations of Darwinism and 'bending' the theory to fit small-scale individual lives, as illustrated in Chapter One of this present study.

which chance (the random mutations in the nucleic acid helix caused by natural radiation) cooperates with natural law to create living forms better and better adapted to survive." (440). However, the alternative endings are not examples of the sort of Postmodernist contingency described by Tony Jackson (237) or "the contingency of history" as Eva Pohler puts it (60). In other words, while the novel exhibits various postmodern traits, as illustrated above, its reference to Darwinian evolution cannot be described as postmodernist.[69] In fact, Darwinian evolution in general does not incorporate an absolute form of contingency; the future is unknown yet it belongs to the fittest. There is the *certainty* that the outcomes of natural selection are going to be beneficial to the species and its members; otherwise, they become extinct. This is an integral part of the theory from its inception. In *The Origin of Species*, Darwin stresses that "natural selection is daily and hourly scrutinising, throughout the world, every variation, even the slightest; rejecting that which is bad, preserving and adding up all that is good; silently and insensibly working, whenever and wherever opportunity offers, at the improvement of each organic being in relation to its organic and inorganic conditions of life." (83). In this sense, the three endings, though all plausible, are not "equally plausible" as Pohler contends (60). The first and the second endings, in a metaphorically evolutionary sense, are more plausible since they include confirmed progeny. In the first, Smithson surrenders to the biological imperative to sustain himself and procreate with Ernestina; "They begat what shall it be— let us say seven children." (325). In the second, the child, Lalage, is the product of his affair with Sarah, which revives hope in living together and possibly having more children. The third ending, however, is the least desirable in a Darwinian sense although it is the most dramatic and perhaps the most compatible with Smithson's and Sarah's characters. A child is present when Smithson storms out of Sarah's residence, but

[69] It seems to be a recurring practice in current literary scholarship to superimpose dominant forms of literary theory onto Darwinism when exploring its influence on contemporary literature. Without regard to compatibility with the spirit of Darwin's theory, Tony Jackson cites a peculiar model of "evolutionary contingency" by Stephen Gould which has been criticised, Jackson admits, by prominent Darwinists including Richard Dawkins and Daniel Dennett as a misappropriation of the theory (241). Similarly, Katherine Tarbox freely blends a version of gender feminism with evolutionary psychology, disregarding the basic contradictions between the two as elaborated in this present chapter. Such misinterpretations, I would argue, are symptomatic of an extreme reluctance in the discipline of literary criticism to accept Darwinism for what it is. It seems that for some academics, Darwinism, much like a bitter medicine or an exotic alcoholic beverage, needs to be diluted with the 'pleasant' cocktail of conventional theory in order to be palatable. Their concerns, as attested in their writing, are fuelled by neurotic fears of being accused of harbouring Social Darwinist views or archaic attitudes on race, class and gender, which seems to be an easy accusation to make despite its seriousness unfortunately.

it is not confirmed whether it is his or hers. Therefore, extinction still looms large over their heads.

4.3 The Archetypal Character of the Amateur Naturalist:

Fowles's novel has paved the way for a special preoccupation with Darwinian models of history which can be seen currently evolving in Neo-Victorian and contemporary fiction at large. *The French Lieutenant's Woman* is pioneering in this regard since many later novelists have experimented in their fiction in a similar manner to its unique thematic concerns and narrative ordering. The list includes prominent names such as Ian McEwan and Jenny Diski, but the novelist who has responded directly to Fowles is A. S. Byatt.[70] In *Possession* she reintroduces the character of the Victorian amateur naturalist. Its male co-protagonist, Roland, is not exactly an amateur in his field, yet he is not a fully-fledged academic professional. On the other hand, the fictional poet Randolph Henry Ash, is certainly an amateur naturalist whose hobby is described in a truly 'Fowlesian' fashion. The intertextuality regarding *The French Lieutenant's Woman* is quite evident in Ash's fictional biography written by one of the characters; the American critic Mortimer Cropper:

> On a bright June morning in 1859 the Filey bathing-women might have noticed a solitary figure striding firmly along the lone and level sands towards the Brigg, armed with the *impedimenta* of his new hobby: landing-net, flat basket, geologist's hammer, cold chisel, oyster-knife, paper-knife, chemists' phials and squat bottles and various mean-looking lengths of wire for stabbing, and probing. (246-7, emphasis in original).

Byatt seems quite keen to portray almost a mirror image of Fowles's Charles Smithson, yet she has managed to expand on his historiographical approach to the human subject. The intertextuality here conforms to Julia Kristeva's definition of the term. It is "the transposition of elements from existent systems into new signifying relations […] it introduces a new way of reading which destroys the linearity of the text. Each intertextual

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[70] According to Kate Kellaway, Byatt confirmed that Fowles's Victorian romance "partly provoked" her to embark on writing her own (Qtd in Fletcher, 26).

reference is the occasion for an alternative" (Qtd. in Allan, 113). Byatt's deployment of Fowles's characterisation falls within the remits of the 'Kristevan' model in the sense that it has been expanded and more boldly articulately. The amateur naturalist is Victorian in that he maintains the Victorian reverence for precision tools and eccentric conventions. Like Charles Smithson, Ash's tool box is so elaborate that it is effectively an *impedimenta* for a walk on the sands and slops of the geological site. Ash is even more obsessed with DIY equipment than Charles is; "He had even designed his own specimen box, made to be water-tight even in the post, an elegant lacquered metal case containing a close-fitting glass inner vessel, in which tiny creatures might be hermetically sealed in their own atmosphere." (247).

This obsession with details also extends to the contemporary novelist, who, as Fowles has done, implicates the readers in this sort of archaeological analysis of history by inserting subtle enigmas in what is quite a vivid image of the past. For example, in the passage above, the reference to the precise date of "June 1859" serves to arouse readers' curiosity because it casually sets the timeframe but does not mention the significance of the year. Readers who know that 1859 is the year when Darwin published *On The Origin of Species* must pause and ask whether Ash, and other amateur naturalists, knew about this milestone in biology. In fact, Ash took up his hobby *prior* to the publication of the *Origin* which took place later that year, in November. It then becomes the reader's mission to research further and discover the role these amateur naturalists played in providing Darwin with the incomprehensibly large amount of data, specimen and even anecdotes to include in his book.[71] Even those readers who do not know when Darwin

[71] Part of the attraction of Darwin's writing for the public, non-specialist readership has to do with these anecdotes written in a warm and friendly fashion. Examples in *The Origin* are abundant, and these blend seamlessly into the arguments of the book. Consider the following anecdotal evidence regarding plants:

> But whether or not the adaptation be generally very close, we have evidence, in the case of some few plants, of their becoming, to a certain extent, naturally habituated to different temperatures, or becoming acclimatised: thus the pines and rhododendrons, raised from seed collected by Dr. Hooker from trees growing at different heights on the Himalaya, were found in this country to possess different constitutional powers of resisting cold. Mr. Thwaites informs me that he has observed similar facts in Ceylon, and analogous observations have been made by Mr. H. C. Watson on European species of plants brought from the Azores to England. (132-3)

Anecdotes from travellers and field naturalists, used as scientific evidence, are not necessarily limited to Darwin's style of writing and may have been employed by many writers. Yet Darwin's extensive use of them, throughout his career, carries a personal touch that steps out of the strictly academic and borders on the popular journalistic writing including humour and even what can be described, to a modern sensibility, as mild 'voyeurism', as can be illustrated in the following example from *The Descent of Man* regarding the issue of sexual selection in humankind:

published his theory may be tempted to ask why this fictional biography has not elaborated on the date it mentions.

Therefore, Byatt's novel is a "writerly" text in a similar manner to Fowles's novel. Indeed, the extensive reflexivity of *Possession* renders its reader an accomplice in the act of obsessively digging for historical details, sifting through metaphorical fossils, as performed by both the amateur naturalist and the novelist herself. A sense of interpretative and narrative circularity engulfs the experience of reading *Possession*. On the one hand, Ash is a man of letters who turns to natural sciences for inspiration, leading to his "natural" poems. On the other hand, Byatt, who invented Ash, also turns to Darwinism, producing a novel that exhibits a high degree of faith in the knowability of the past. Moreover, like in Fowles's novel, the obsession with recovering details of the past in *Possession* is similar to the new historicist practice of "thick descriptions" in its focus on contextualising those details,[72] yet it does not deny the universality of certain human behaviours due to their common biological basis. Consequently, Byatt's novel has the unique status of being a stylistically postmodern text which does not fully subscribe to the philosophical postmodernist concerns with uncertainty and contingency. Reviewers and scholars have often noted that *Possession* is marked by a unique departure from Postmodernism, yet they rarely attribute this manoeuvre to its roots in Darwinian paradigms. For example, Lisa Fletcher rightly identifies that "the sheer volume of material (or evidence) [of the Victorian characters] she presents us with in *Possession* contributes to the sense that the past her Victorian lovers inhabit is much more than a

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> It is well known that with many Hottentot women the posterior part of the body projects in a wonderful manner; they are steatopygous; and Sir Andrew Smith is certain that this peculiarity is greatly admired by the men. He once saw a woman who was considered a beauty, and she was so immensely developed behind, that when seated on level ground she could not rise, and had to push herself along until she came to a slope. Some of the women in various negro tribes have the same peculiarity; and, according to Burton, the 'Somal men are said to choose their wives by ranging them in a line, and by picking her out who projects farthest a tergo. Nothing can be more hateful to a negro than the opposite form.' (645-6)

The language may seem politically incorrect to a contemporary sensibility, especially with regard to its "humorously" euphemistic treatment of the female body. Not only is it the product of a different century, when words naturally had different connotations to today's English, but also this passage will always be ethically controversial since it represents an experiment or an observation on humans.

[72] The term "thick descriptions" was first coined by philosopher Gilbert Ryle and then expanded by anthropologist Clifford Geertz to mean descriptions of human behaviours that focus on contextualisation in order to render these behaviours comprehensible to outsiders. Geertz uses it to describe ethnography which starts by "establishing rapport, selecting informants, transcribing texts, taking genealogies, mapping fields, keeping a diary", and then moves on to contextualising elements of culture (6-14).

papery postmodern conceit." (28). In fact, the past in the Darwinian paradigm cannot be a postmodern experiment or a form of contingency because it is knowable; it is almost a material presence, traceable through fossil records and strands of DNA. Fletcher's essay suggests that Byatt's portrayal of the past is intended to "to strike a more satisfying balance between 'realism' and 'experiment' than she felt Fowles did in *The French Lieutenant's Woman*" (28), which is a valid assumption, except that it is a biological form of realism on many junctures of the text.

The novelist herself provides a strong case for such an approach to history. In her essay "True Stories and the Facts in Fiction", she identifies an odd situation in the current cultural scene: "As writers of fiction become preoccupied with truthfulness and accuracy, writers of literary history and literary criticism seem to have taken on many of the rhetorical postures and attitudes of imaginative licence which once went with the artfulness of art." (2000, 98). This paradox has produced texts, fictive and critical, with questionable and unsupported readings of the past. For example, in one of the works of literary criticism Byatt has reviewed, *Romanticism, Writing and Sexual Difference* by Mary Jacobus, the author takes extensive liberty with William Wordsworth's biography to the point of suggesting "that the paradigmatic narrative she is discussing requires the death of Wordsworth's mother, whether or not it happened in fact" (99). Quoting the following sentence from Jacobus, Byatt rightly doubts whether it can be valid as either an opinion, a historical fact or even a joke: "Wordsworth's mother really did die early. But Rousseau's Emile suggests that if she were not already dead, she would have to be killed off; that autobiography comes into being on the basis of a missing mother." (98). Consequently, Byatt's response has been to try and reinstate some sort of equilibrium into the two dimensions of writing, the critical and the creative. On the one hand, she states that, "it is changes in the rhetoric of criticism that lead me to write commentary more and more overtly in an exploratory, and 'authorial' first person". On the other hand, she affirms that "My instinct as a writer of fiction has been to explore and defend the unfashionable Victorian third-person narrator– who is not, as John Fowles claimed, playing at being God, but merely the writer, telling what can be told about the world of the fiction." (102).

There is perhaps a sense of 'literary conservativism', or even a reactionary impulse, in her insistence on restoring past traditions and techniques. It has even been argued that

Possession emerges as "a fairly straightforward heterosexual romance" with an "entirely conventional" approach to the past (Fletcher, 29). Other reviewers of Byatt's works have adopted the opposite stance, insisting on seeing her Neo-Victorian novels as a form of Postmodernist "historiographic metafiction" where the past can be only "re-imagined" with a contemporary gaze and "is impossible to capture" (Primorac, 222). In fact, both attitudes can be justified only when combined; Byatt's approach to historical fiction is both heterogenous and contingent, conventional and contemporary, because it is Postmodern and Darwinian. The Darwin-Byatt interaction has produced a Neo-Victorian narrative which is both confident in its biological facts and comfortable in its skin as a creative work of art, open to readings and interpretations.

In Byatt's 'writerly' text, the reader is furnished with plenty of interpretative moments that encourage quite a novel approach to history. For example, Mortimer Cropper boasted of his ability to offer Ash's letters the best home in his university's Stant Collection where "they will be preserved forever in the finest conditions and purified air, controlled temperature and limited access, only to accredited scholars" (97). Historiography starts to resemble a biology laboratory. Cropper himself is the descendant of a family obsessed with collecting historical artefacts. Their home is "is full of beautiful and strange things collected by my grandfather and great-grandfather, all of them museum pieces […] We had a fine mahogany music-stand that was built for Jefferson […] We had a striking-clock, presented by Lafayette to Benjamin Franklin" (99). This urge to collect artefacts is integral to the sort of biography Cropper is famous for. His work relies on items as bizarre as "a few of Ash's hair" (106), and the implicit suggestion here is that history can be written as if it were a fossil record being assembled by an evolutionary biologist; every bit helps to reconstruct the past no matter how obscure it may seem. The metaphor here is enhanced further by the subtle fact that Ash's hair is after all a biological item as well as a historical artefact.

The affinities between Byatt's Ash and Fowles's Smithson extend to their love lives. Like Charles, Ash had an illicit love relationship with the poetess Christabel LaMotte, producing a child out of wedlock. The similarities are not a parody, but a special kind of intertextuality that Byatt seems to employ in order to preserve and expand upon the Darwinian themes Fowles introduced in the character of the amateur naturalist. Like

Fowles, she stresses the role of chance in evolutionary history, and it is represented in two twists of the plot. The first is when Ash realises that his lover was a virgin after making love to her. “In the morning, washing, he found traces of blood on his thighs […] He stood, sponge in hand, and puzzled over her. Such delicate skills, such informed desire, and yet a virgin.” (284-5). The debt to Fowles cannot be ignored here. It is true that this discovery did not immediately damage the relationship between Ash and LaMotte, but it certainly changed the course of history in terms of Ash’s family tree, by creating a new branch in the web of relations which leads all the way down the ages to Maud Bailey, the contemporary critic who is researching Ash’s life and letters with Roland.

This is the second major twist in the plot and it takes place towards the end of the novel when all the contemporary literary scholars descend on Ash’s grave in order to dig out a box buried with him, containing more letters and objects which have not been seen before. The symbolism here is imbedded in the box which becomes a ‘missing link’ in Ash’s history which must be literally dug out of the ground the same way a fossil is handled. “They dug. They threw up an increasing mound, a mixture of clay and flints, chopped ends of roots, small bones of vole and bird, stones, sifted pebbles.” (493). In the same manner that the discovery of a fossil may change the history of a certain species, this box eventually changes Ash’s biography and family tree. Inside the box, there is a photo of Ash’s and Christabel’s daughter, whom Maud recognises as her great-great-great-grandmother (503). The box in Ash’s grave has altered not only his story but also the story of the historian investigating it. In an evolutionary approach, reconstructing the past will always change us, for every new branch added to the tree of life will indirectly serve to expand the story of the human branch on that very same tree.

A. S. Byatt returns to the character of the amateur naturalist in her next work after *Possession*. In *Morpho Eugenia*, a novella published together with *The Conjugal Angel* in one book entitled *Angels and Insects*, Byatt provides the most elaborate analysis yet of this Victorian hobbyist, which is more critical than her previous novel. The protagonist of *Morpho Eugenia* is a naturalist by the name of William Adamson. He had spent most of his adult years in the Amazon river valley studying insects, he was recently made destitute by a shipwreck and he is now living as a guest of one of the aristocratic amateur naturalists to whom he used to send exotic specimen. At his host’s house, Harald Alabaster, his simple story gradually gains layers of complexity until both reader and

protagonist are buried in a hill of innuendoes and half-truths. Harald offers to employ William as the resident naturalist in his estate. A conservatory and a laboratory are set up for him to do his work, and he later falls in love with one of the Alabaster's daughters, Eugenia. He gets married to her, but then he feels trapped in the house of Alabasters, where he feels he is losing his career and purpose in life.

Adamson tries to lose himself in his work, and collaborates with Matilda Crompton, a governess at the Alabaster's, in teaching the younger children. Matilda, who is often called by the name Matty, invites Adamson to go with her and the children on nature walks where they can benefit from his knowledge of insects. Adamson's marriage proves quite conventional with few children, but the Alabaster household has quite a nasty surprise for him. Towards the end of the novel, Adamson happens upon his wife having an incestuous intercourse with her snobbish half-brother, Edgar. It was in fact Matty Crompton who arranged for him to catch the incestuous siblings in the act. She could see that he has become the prisoner of the Alabasters, and she wanted to set him free. Indeed, William Adamson, despite his shock and distress, starts a new chapter of his life. He leaves Eugenia to her guilt, setting off on a naturalist adventure to the tropics with his new lover, Matty.

Byatt expands the story of the Victorian collector of naturalist specimen by complicating the element of class and wealth. While the conventional amateur naturalist, Harald Alabaster, is an aristocrat, William Adamson is not. He is the son of a tradesman, a butcher. In a process of "inheritance with modification", William put his father's skills to good use in his chosen career, "skinning, and mounting, and preserving specimens of birds and beasts and insects." (9). Unlike the aristocrat, who simply did not bother about enrolling at University, William's lack of specialised education in the field may have to do with his economic conditions. Largely self-taught from common books such as "Loudon's *Encyclopaedia of Plants*", William had his first break when he was offered a sort of apprenticeship with Alfred Wallace, who "was planning an expedition to the Amazons in search of undiscovered creatures." (10-1). The mention of Wallace, as well as the precise dates of William's Amazon trip (1859–1849), not only helps to historicise and contextualise this character, but it is also the beginning of quite a subtle historical

commentary by Byatt on the Darwin-Wallace's affair and the role of class in science in general, during the 19th century and now.[73]

William is not any Victorian naturalist; he represents the industrious *fieldworker*, like Wallace, who supplied England with a constant torrent of fossils, natural specimen and even anecdotes of primitive tribes, which helped the privileged elite at home, including Charles Darwin himself, to conduct their research.[74] This is the 'neo' in this Neo-Victorian novel. In *Morpho Eugenia,* Byatt focuses on the economics of this 19th phenomenon with a contemporary consciousness that aims to redress the unjust semi-obscurity which befell naturalists like Alfred Wallace. The protagonist, much like Roland in the world of *Possession*, is an underdog in need of patronage.[75] And it comes with a touch of humiliation; his wealthy benefactor was aware of his own lack of expertise. Alabaster tells him when offering employment:

> Now I have in my outhouses – I am ashamed to admit it – crate upon crate I have enthusiastically purchased, from Mr Wallace […] There is something very wrong, Mr Adamson in plundering the Earth of her beauties and curiosities and then not

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[73] This trait of the hero is highlighted by Byatt herself: "I decided quite early to make my hero an Amazon explorer from the lower middle classes like Wallace and Bates and Spruce." (2000, 117).

[74] Jenny Diski has made a similar mild criticism of Charles Darwin in *Monkey Uncle*. While her protagonist undergoes a hallucinatory trip into madness, the Karl Marx of her dreams tells Darwin accusingly, "But even with your advantage over most of your class, you chose to spend most of your time belly-aching in bed about your upset stomach and let others do the augmenting for you […] left all the revolutionary work to his friends" (132).

[75] Adamson's precarious position in society is vividly analysed by Antonija Primorac, who refers to a quasi-historicist approach in order to contextualise what it meant to be a professional scientist in Victorian England:

> The professionals had an uncertain position within the Victorian novel – they either 'had come to replace the clergymen as a source of moral counsel and disinterested advice" (one part of William's relation to Harald Alabaster) or they were "something of a servant" (the other part of William and Harald's relationship) (Kucich, 2002:231). Adamson therefore inhabits the no-man's land between servanthood and the position of equality within the family, which in is normally taken by a governess or the dependent woman in the nineteenth-century novel (by characters like Jane Eyre or Fanny Price). (226)

These are obviously the troubles that accompany the entry of new roles and functions into society at a time of epochal change. In this case, the troubles are financial in nature; the scientist is earning a living in a society which had only recently started to move away from absolute feudalism. Yet, in a feat of Darwinian survival, Adamson survives the hardships.

making use of them for what alone justifies depredations – the promotion of useful knowledge, of human wonder (17).

His words describe a wasteful phenomenon which seems to have troubled quite few intellectuals and idealists of the era. For instance, one is reminded of William Wordsworth's famous lines: "Sweet is the lore which Nature brings; \ Our meddling intellect \ Mis-shapes the beauteous forms of things:— \ We murder to dissect." (136). From this point in the novel, William Adamson and Matty, the middle class, are the only ones who exert any meaningful effort to promote useful knowledge. The aristocrats, unlike Smithson, are portrayed as merely fanciful amateurs. For example, describing an "elegant arrangement of the Lepidoptera" made by Eugenia, Alabaster says, "I fear it is not done upon quite scientific principles, but it has the intricacy of a rose windows made of living forms, and does show forth the extraordinary brilliance and *beauty* of the insect creation […] Eugenia says she got the idea from silk knots in embroidery" (15, emphasis in original). The target of this implicit critique is not exactly the upper classes, but actually the history which seems to eschew the contributions of naturalists like William Adamson or indeed, Alfred Wallace. Vindicating Adamson and re-writing his history require an exploration of his difficult economic conditions, which is brilliantly achieved in the novel. His marriage to Eugenia starts with the disturbingly 'reassuring' statement by his bride-to-be, "I do not need to marry a fortune […] I have one of my own […] My father is a kind man […] He believes you are a man of great intellectual gifts which he thinks are very valuable *as land and rent and things*. He has said so to me." (55, emphasis added). Although Eugenia seems to have genuine feelings for Adamson, her courtship speech could not escape some aspects in the discourse of her class. Since Adamson has neither wealth nor nobility, his "intellectual gifts" may be commodified to justify his entry into the noble blood line.

However, such commodification of knowledge did not seem to sit well with Eugenia's brother, Edgar, who clearly resents the possibility that his noble family blood will now be tainted by a tradesman's son. Few days before the wedding, Edgar could not contain his hatred and in a drunken brawl, he shouted at Adamson, "You are underbred, Sir, you are no good match for my sister. There is bad blood in you, vulgar blood." Byatt's superb fiction manages to reproduce a Victorian brawl both in the gentlemanly language and even the class attitudes on both sides. In fact, Adamson's response is more

shocking, in its conformity to class discourse, than Edgar's impropriety: "I do not accept either 'bad' or 'vulgar'. I *am* aware that I am no good match […] Your father and Eugenia have done me the great kindness of overlooking that. I hope you may come to accept their decision" (62, emphasis in original). Adamson may be trying to contain the situation and avoid a physical confrontation, yet his words now reveal his resignation to his social fate, for the time being. Edgar, on the other hand, persists in his snobbish attitude till the end. In fact, his insistence on the purity of the family blood translates, in Darwinian terms, into interbreeding. His and his sister's incest, a biological and social sin, ironically fulfils his elitist desire to exclude the tradesman's blood from his aristocratic family. Adamson is almost sure he is not the father of Eugenia's children.

The Alabasters' behaviour remains a mystery. Historically, there has been cases of deliberate incest in royal families, such as some Pharaohs of Ancient Egypt, but biologically it cannot be explained in the limited knowledge they had at the time. In a way, Eugena has behaved like the butterfly named after her, Morpho Eugenia, which flies directly into naked flame and meets its death.

Consequently, the dimensions of wealth and class are quite crucial to Byatt's Neo-Victorian history of the 'forgotten' naturalist. And it is only when Adamson and his female counterpart, Matty, achieve financial independence by publishing their books that they managed to carry out their own scientific research. Towards the end of the novel, William Adamson is both vindicated and set free from the clutches of the Alabasters with the help of Matty. She sets in motion a plan of action: "I have a Banker's Draft from Mr George Smith that should be more than sufficient-and a letter from Mr Stevens offering to negotiate the sales of specimens as before-and a letter from a Captain Papagay, who sails from Liverpool for Rio in a month's time. He has two berths free." (156). Now the naturalists can pursue their passion, both scientific and personal, freely. Byatt's re-writing of the amateur's naturalist's story is certainly laden with meanings. As John Barrell rightly points out, it is "urgently didactic, with a striking, and strikingly single-minded, drive to deliver a message – the need to believe in the freedom of the will in an apparently deterministic universe, for example" (1992). The universe is deterministic partly because it is the product of Darwinian evolution. Transgression against certain biological taboos, such as incest, is punished severally, but by biology not by the gods. Yet determinism can be broken and freedom attained on an economic level.

In addition to strength, perseverance and the ability to surmount career difficulties, Byatt's revised version of the amateur naturalist exhibits greater intellectual and philosophical insight into his science than his predecessors ever had. For instance, Adamson is able to coolly defend his lack of faith in conventional religion when discussing the matter with Sir Harald Alabaster. The protagonist's expansive intellect is also exemplified by the lengthy insights he shared with Matty with regard to the social insects such as ants. We see them in the forest conducting the usual business of empirical observations and experiments but also drawing quite profound conclusions about ants and humans. There is, however, more than meets the eye in Adamson's and Matty's exchanges, for the scientific claims they explore are both contemporary as well as Victorian.

The first elaborate reference to the unique status of the social insects comes early on in the novel when, in the forest, Adamson expresses his deep interest in the species of slave-making ants, "Formica Sanguinea", describing how "They invade the nests of the Wood Ants, and steal their cocoons, which they rear with their own, so they become Sanguinea workers […] They resemble human societies in that, as in many things." (38). This opens up a series of recurrent motifs in the novel; namely, the anthropomorphising of animals by biologists and by Darwinists, which is explored in the novel at the level of language, as discussed in chapter one of this present study. There is of course a sense of the Sociobiological in saying that ants resemble human societies, because the opposite could also be true; human societies are essentially large colonies like ant nests. While Adamson exhibits some uncertainty with regard to such statements, Matty emerges as the scientist who would prefer not to mix biology with sociology and maintain empirical boundaries. She responds to Adamson in a tellingly "neutral tone", "Maybe they are all perfectly content in their stations" (38), i.e. we should not impose our anthropocentric views on them. Such a neutral and objective approach resembles the attitudes of Clarissa in McEwan's *Enduring Love*, despite the time distance between the two characters. In fact, the discussion of the ants in *Morpho Eugenia* incorporates several contemporary biological and Darwinian theories which may not have existed in the late 19th century. Sociobiology is of course a relatively new discipline, but it has its roots in the anthropocentric language that Darwin himself used to describe ants. In one of his experiments, he describes their battles in quite human terms:

> Another day my attention was struck by about a score of the slave-makers haunting the same spot, and evidently not in search of food; they approached and were vigorously repulsed by an independent community of the slave species (F. fusca); sometimes as many as three of these ants clinging to the legs of the slave-making F. sanguinea. The latter ruthlessly killed their small opponents, and carried their dead bodies as food to their nest, twenty-nine yards distant; but they were prevented from getting any pupae to rear as slaves. (1859, 201).

Clearly, Darwin's language, utilising terms such as "haunting", "independent community" or "ruthlessly killed" carries a certain ethical human judgment; the slaves are courageous independent community which puts up a good fight till the death, and only the unborn younglings naturally fail to fight and are taken into slavery. The anthropomorphic drama is further highlighted by Darwin's language when he describes the Formica Sanguinea as "*tyrants*, who perhaps fancied that, after all, they had been victorious in their late combat." (201, emphasis added).

There is always the temptation to draw moral judgements and social analogies from Darwinism. Yet the most 'contemporary' statement we hear from Adamson has to do with the unique division of labour within the ant nest. During the same naturalist excursion, he tells Matty, "I ask myself, are these little creatures, who run up and down, and carry, and feed each other lovingly, and bite enemies – are they truly individuals – or are they like the cells in our body, all parts of one whole, all directed by some mind – the Spirit of the Nest" (40, emphasis added). Adamson's reasoning here encapsulates in one metaphor a scientific hypothesis that spans the decades from his time till this day; namely, the "superorganism". To extend the concept of the physical body onto larger organisations such as the ant nest, or indeed human society, was first suggested in 1785 by the Scottish geologist James Hutton, who "compared the global cycling of water with the blood circulation of an animal." (Lovelock, xviii). The concept of the superorganism is mostly a modern as well as a postmodern concept. For instance, in 1979, James Lovelock published the Gaia Hypothesis which states that "we may find ourselves and all other living things to be parts and partners of a vast being who in her entirety has the power to maintain our planet as a fit and comfortable habitat for life." (1). Other examples of

superorganism proliferate till this day,[76] but the one which seems closest to the thoughts of Byatt's protagonist is the discussion of the beehive by the renowned biologist Richard Dawkins, who discusses the matter at length in *The Selfish Gene* (1976):

> Information is shared so efficiently by chemical signals and by the famous 'dance' of the bees that the community behaves almost as if it were a unit with a nervous system and sense organs of its own. Foreign intruders are recognized and repelled with something of the selectivity of a body's immune reaction system. The rather high temperature inside a beehive is regulated nearly as precisely as that of the human body, even though an individual bee is not a 'warm blooded' animal. Finally and most importantly, the analogy extends to reproduction. The majority of individuals in a social insect colony are sterile workers. The 'germ line' —the line of immortal gene continuity— flows through the bodies of a minority of individuals, the reproductives. These are the analogues of our own reproductive cells in our testes and ovaries. The sterile workers are the analogy of our liver, muscle, and nerve cells. (171-2).

The contemporaneity of the superorganism hypothesis, and its roots in Victorian geology and philosophy, has to do with its affinity to Sociobiology as well as to certain undesirable forms of Social Darwinism. Matty expresses this concern. She plays the mouthpiece of Byatt, asking Adamson, "And do you go on, Mr Adamson, to ask *that* question about human societies?" (40, emphasis in original). His response reflects some knowledge of Adam Smith's concept of the "division of labour",[77] and Byatt mentions

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[76] For example, E. O. Wilson and Bert Hölldobler published in 2009 an extensive study of the lives of social insects entitled *The Superorganism: the Beauty, Elegance, and Strangeness of Insect Societies*. Also recently, in 2015, Thomas A. O'Shea-Wheller, *et al.* published a peer reviewed study into the defence mechanisms of superorganisms, focusing on ant swarms as the case study.

[77] In 1776, Adam Smith states, "The greatest improvements in the productive powers of labour, and the greater part of the skill, dexterity, and judgment, with which it is anywhere directed, or applied, seem to have been the effects of the division of labour." (3). So he described the concept as he witnessed it in certain workshops of England, and the examples he provided match Adamson's metaphors because they portray a machine-like arrangement of workers who, simultaneously, appear similar to an ant nest or a beehive. Consider the following example of the pin makers:

> But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straights it; a third cuts it; a fourth points it; a fifth

that she used “the economic allusion to Adam Smith” in different points in the plot (2000, 119), but it still has quite a contemporary ring to it: “It is tempting. I come from the North of England, where the scientific mill owners and the mine owners would like to make men into smoothly gliding parts of a giant machine.” (40). In this manner, A. S. Byatt has distinguished her Neo-Victorian amateur naturalist from all incarnations of this literary archetype by equipping him with the intellect and knowledge, though not necessarily the academic education, to discuss some of the most challenging philosophical implications of Darwinism and biology in general. William Adamson is certainly more versed in this regard than Ash or Smithson. Moreover, in *Morpho Eugenia*, Byatt provides her protagonist with a very intelligent woman who the foresight to rein in any Social Darwinist trends in his thinking. Detecting a false conclusion, Matty warns Adamson that “The will of the mill owners is not the spirit of the Nest.” (40). Nature cannot always provide the answers to social questions. These are indeed contemporary, if not timeless, considerations. Early reviews of this novella have unfortunately missed this aspect of its Neo-Victorianism. For instance, John Barrell contends that the moral of the story “depends to a large extent on the reconstructed language and context of Victorian religious anxiety, so that the more pressing the message, the less it seems to press upon us. These Victorian novellas of ideas are resolutely novellas of Victorian ideas” (18). But such mistaken reviews actually reflect Byatt’s great craftsmanship. Her ability to render authentic Victorian settings, mannerisms and concerns in the novel can easily mask the subtext of universal as well as contemporary Darwinian concerns. *Morpho Eugenia* is not limited to “the Victorian religious anxiety”. The Victorian in this Neo-Victorian novel is largely a vehicle to convey overarching Darwinian motifs as well as reconfigured and contemporary attitudes towards history. Literary scholars were soon alerted to this creative and intellectual potential in Byatt’s work. As June Sturrock succinctly puts it, “the novella is concerned with human knowledge and understanding, *past and present*, of the natural world. Through the interaction of these different kinds of knowledge Byatt frees herself to explore both the intellectual potential and the limitations of reasoning by analogy.” (93-4). The amateur naturalist in *Morpho Eugenia* and his companion Matty exhibit quite ‘maturely’ contemporary consciousness of Darwinism when they warn

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grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands (3).

against such limitations of reasoning as anthropocentricism, “we must not put ourselves in the centre of things unless we could truly perceive we *were* there.” (57) or false analogies with the natural world; “Men are not ants.” (100).

The emerging relationship between Adamson and Matty plays a key role in enhancing the character of the amateur naturalist. In a novel full of slippery analogies, Matty serves as a sort of antithesis to Eugenia. Unlike the aristocratic heroine, Matty works to earn her living. She is, moreover, inclined towards serious intellectual and scientific pursuits, whereas Eugenia and the women in her class are focused on more trivial matters such as parties, gossip, gastronomy and the pleasures of the flesh. “Matilda is a new force, the intellectual New Woman who is neither tied down by her position in society, nor her gender.” (Primorac, 232). She is indeed the catalyst for further naturalist research and writing. Therefore, when Adamson elopes with her and takes her with him to the Amazon, he has cast aside the expectations of Victorian society and has embraced a progressive and virtually Modern lifestyle rather than succumb to his misfortunes (Primorac, 232). A. S. Byatt has indeed managed to revitalise the historical character of the amateur naturalist, endowing him with superior intellect, aspirational personality and growing social non-conformity. Consequently, despite his inability to access social prestige or academic specialisation, William Adamson is surely one of the many pioneers who, in Fowles's words, “sensed that current accounts of the world were inadequate” (52) and set about changing them. By extension of the overall Darwinian themes which informs *Morpho Eugenia*, Adamson has managed to *survive* the struggle for life.

The amateur naturalist appears in different guises in other contemporary novels. For instance, in McEwan's *Enduring Love*, he is the popular science writer, Joe Rose. Not strictly an amateur, but still Joe is not the scientist either. He complains that “all the ideas I deal in are other people's. I simply collate and digest their research and deliver it up to the general reader. People say I have a talent for clarity. I can spin a decent narrative out of the stumblings, backtrackings, and random successes that lie behind most scientific breakthroughs.” (75). These sorts of career difficulties, which are absent for Charles Smithson and Ash, are shared with one of the major characters in Diski's *Monkey's Uncle*, Captain of the *Beagle* Robert FitzRoy. Diski portrays him as one of the pioneers of weather forecasting, but he still lacked the proper scientific background in the field. “He was dabbing in his *forecasting*. He was, simply, not doing what he had been appointed to

do, but something of his own devising which was of doubtful scientific provenance.” (162, emphasis in original). In other words, he approached his career as if it were a hobby. Consequently, what Fowles introduced in the late 1960s has transformed in the early 1990s into a sort of archetypal character. Amateurship seems to be a stable guest of the Darwinian hall of fame, and perhaps an asset to the theory, for it endows it with a significant democratic appeal.

4.4 The Past Inhabits the Present:

The novels considered in this present chapter are obviously postmodern novels exhibiting various stylistic traits such as reflexivity, intertextuality and hyper-textuality. However, they certainly do not subscribe to all the philosophical and theoretical aspects of Postmodernism, especially when it comes to perceptions of time and the history of humankind. There is indeed a pressing need to clarify this crucial distinction because of the many regrettable mis-readings of Darwinism in both Fowles and Byatt. The contemporary novelists have sought a *novel* heuristic value in Darwinian theory, yet contemporary academia insists on falling back on its comfort zone of mainstream literary theory when reading these pioneering novelists, thus failing to pinpoint the unique cultural and philosophical explorations conducted in their novels. In Byatt’s case, such mis-readings seem to come from the same feminist quarters that she herself has identified as harbouring an ideological programme or agenda which is ultimately harmful to women’s writing.[78] For example, in “Desire for Syzygy in the Novels of A. S. Byatt”, Katherine Tarbox provides an extensive textual survey of male and female characters in *Possession* yet fails to make any really convincing conclusions because she bases her

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[78] Byatt clearly states her stance on current feminist literary theory in an interview with Paula Marantz Cohen from the Drexel Institute (2010):

> I think literary feminism has had bad effect on women’s writing. I think it had good effect on study in many ways and feminism has had a very good effect on our lives. But […] when I began to write, the great novelists were women. There was Muriel Spark. There was Iris Murdoch. There was – and we didn’t know at the time who great she was – Penelope Fitzgerald. There was Doris Lessing. They were equal with the men and they were talked about equally. You had William Golding, Anthony Burges […] And then when we got feminism, women become much more consciously [*sic*] to write about women, and the men became very flamboyant! And we got Martin Amis and Ian McEwan, and the women went rather quiet and withdrew somehow. And I wouldn’t have expected this to happen, but I observed it happening […] it is literary feminism; there was so much theorising about writing by women; it became a niche. And it became a kind of programme; you know, there were things you had to do, things you could say and things you shouldn’t say. And it wasn’t just writing.

entire essay on a subtle misreading of evolutionary psychology. Consider the following passage from the introduction of her essay:

> The syzygetic psyches of our first parents evolved for survival in a harsh world, and *each sex owned a full palette* of always available 'agonic' and 'hedonic' energies which have now, as then, the status of instinct. Agonic instinct drives us to compete, achieve status, reason, follow goals and manage conflict; this instinct Byatt names 'force' (p. 51). Hedonic instinct compels us to bond, care, feel, nurture, imagine, intuit and sense – an instinct Byatt symbolises through blood and sparks. In effect, all children are born as Ask and Embla, each of whom is psychically hermaphroditic, but culture splits them into boys and girls, who must repress entire sectors of their birthright energies, provoking the devastating consequences of denying instinct's insistence that it be somehow lived in the world. (178, emphasis added).

Tarbox starts by correctly identifying a Darwinian influence on Byatt's novel, and she refers to a seminal study entitled *Evolutionary Psychiatry* by Anthony Stevens and John Price for a theoretical paradigm with which to approach *Possession*. She freely infuses into that paradigm the 1970s discipline of "Gender feminism" (Tarbox, 177), thus proposing a mysterious primal state– the "syzygetic psyche" which is both male and female, combining "'agonic' and 'hedonic' energies". Tarbox proceeds to argue that Byatt's mythical characters are seeking to shake off the culturally imposed gender divides and allow their true hermaphroditic instincts full release. The presumption here seems to be that once cultural fitters are broken, equality and liberty would be achieved in due course. The intentions may be egalitarian; however, the logic of the analysis is entirely ill-founded. In fact, nowhere in the original work by Stevens and Price do we see this "syzygetic psyche" as a bisexual state. Moreover, they do not suggest that "'agonic' and 'hedonic' energies" are male and female respectively. In fact, the section where they introduce these two concepts is almost exclusively focused on males. Having identified the "agonic" instinct with conflict, they quote the term "hedonic" state where:

> male chimpanzees indulge in a form of display that is not threatening at all and does not demand the submission of a subordinate. Rather it is a form of social solicitation, which, Chance noted, results in affiliative behaviour 'in which there is a continuing interaction between individuals, such as grooming, play, sexual or mothering behaviour with the displayer.' […] The agonic mode is characteristic of hierarchically organized societies where individuals are concerned with warding off threats to their status and inhibiting overt expressions of aggressive conflict; while the hedonic mode is associated with affiliative behaviour in more egalitarian social organizations where agonic tensions are absent. (49).

Essentially this is an evolutionary discussion of how alpha males compete for higher ranks in primate society by a variety of strategies, violent and peaceful, agonic and hedonic. The males can exhibit "sexual or mothering behaviour" towards each other. However, this does not mean they want to behave like females, nor does it mean they are bisexual; they do it to simply to avoid killing each other in the ongoing competition for rank.[79]

To superimpose the theory of "gender feminism" on evolutionary psychology in this manner shows a complete ignorance, if not disregard, of the basics of evolution. In the Darwinian context males and female are genetically and biologically different. In subsequent evolutionary theory, distinct sex chromosomes are identified as determining sex whether one likes it or not. In fact, evolutionary psychology is more likely to theorise that this genetic differentiation is accompanied by a gender division of labour throughout thousands of years of human evolution. No Darwinist would be able to see how Tarbox could have arrived at her conclusions in this essay on Byatt. One is tempted to agree with Blackadder in *Possession* when he accuses some critics of knowing "what there is to find before they've seen it" (31). The thrust of the essay might be well-intended, with its liberal views, but in the final analysis the use of theories remains somewhat misguided and even confused.

[79] This sexual and mothering display by male primates who are heterosexual is certainly bizarre, but then humans themselves have invented similar practices. Victor Davis Hanson maintains that in ancient Greece, soldiers were advised to lay with men on the assumption that homosexual sex increases strength and morale (124). Surely many heterosexual men accepted this practice in ancient Greek, for it is impossible that all their soldiers were homosexual.

Besides the issue of reading gender roles in the contemporary novel, current literary scholarship seems to struggle with the human role and relationship to time. Time is one of the greatest problematics for the Postmodernist movement. This is evidenced, for instance, by the great acclaim that was showered on Francis Fukuyama's *The End of History and the Last Man* (1992) with its assertions that human history, after the collapse of the Soviet Union, has reached its final stage of development embodied in Western liberal democracy. The appeal of such prophetic declarations seems to lie in the urge to escape what is perceived as tyrannical time. On the individual level, the human subject is perceived to be imprisoned in a normative temporality, an unstoppable progression from past to present to a future. The human being is eternally anticipating a future, or striving to achieve a better future, one where life stories are only personalised by force and perseverance. In this regard, queer theory provides one of the most passionate cases of the need to interrogate normative temporality. Kate Haffey, citing the work of queer theorist Eve Sedgwick, identifies two infamous instances where time is ruptured in the English novel. Firstly, the pseudo-lesbian kiss between Mrs. Dalloway and Sally Seton represents a "queer moment" which is "a moment that has lyric properties and yet continues beyond its proper placement in time […] Clarissa's memories of Sally not only represent a glitch in a forward-moving temporality, but also a moment that is 'counter to or separate from' the normative narratives or histories of female development." (143). The implication is that such moments can be liberating and subversive vis-à-vis what is socially and conventionally expected in a female life story. The second instance of time rupture occurs in Michael Cunningham's *The Hours* (1998), according to Haffey, where these subversive queer moments "represent a particular and perhaps peculiar relation to futurity. They represent times in the characters' lives when the future was unknowable, when they stepped outside the normal narratives of their lives and into a space of the unknown." (150).

The question of time is handled radically differently in Darwinian Neo-Victorian novels. History is no longer a repressive normality but rather a domain full of exciting possibilities. When looking into the evolution of a species or the life stages of an organism, there is progression, but it is not a rigid, accelerating movement because the past continues to inhabit the present, literally, in the form of DNA molecules, replicating themselves throughout the ages. Moreover, the future is not pre-set. No one knows what course of evolution a species may take, and no one can tell what traits they can pass to

their children. The only certainty is that evolution, over several generation, will tend to favour adaptability and the welfare of the species. Moreover, on the individual level, some genetic features are switched on and expressed only later in life by mechanisms still partially unknown. Consequently, if the human being places his or her trust in Darwinism, he or she will have the certainty that the biological future cannot be fully demarcated. Once released from the wait for a 'messianic' future, one can focus one's energies on living and enjoying the present moment, while maintaining natural links with the genealogical past.

A. S. Byatt has managed to capture the peaceful versatility of this model of time in the elegant and concise metaphor of the "shaping-shifting forms" in *Possession*. As mentioned in Chapter Two, Ash recognised the potential embodied in the beautiful fossils; "*the persistent shape-shifting life of things long-dead but not vanished.*" (256, emphasis in original). Evolutionary time is both in constant flux, with species evolving or disappearing, but it is also *wholesome* in the sense that the past does not entirely disappear even when it is fossilised.

In Jenny Diski's *Monkey's Uncle*, the same model of evolutionary time is brilliantly illustrated in the dramatic suicide attempts of the heroine. To begin with, Charlotte's story is one of doubtful family genealogy. After she came across a book entitled *FitzRoy of the Beagle* in a London bookshop, she assumed she was a descendent of the celebrated Robert FitzRoy. Charlotte's discovery of a possible ancestor plays a strikingly similar role in the narrative as Maud's discovery of her ancestry in *Possession*. It is a major catalyst and a plot twist as well as a Darwinian motif *par excellence*. The discovery of an uncouth and uncanny ancestor is both an enlightening and disturbing experience. Gillian Beer explains:

> In Darwinian myth, the history of man is of a difficult and extensive family network which takes in barnacles as well as bears, an extended family which will never permit the aspiring climber – man – quite to forget his lowly origins. One of the most disquieting aspects of Darwinian theory was that it muddied descent, and brought into question the privileged 'purity' of the 'great family' (57).

Charlotte's discovery increases the intensity of her suicidal thoughts, almost having a 'reverse-placebo' effect, since FitzRoy is the decedent of a family with a history of suicides. She justifies her fears of inheriting this mortal trait though her Darwinian and scientific training, but fails to grasp its proper mechanisms. It must be remembered that "inheritance form the 'hidden bond' which knits all nature past and present together" is beyond human control; "Variations in nature are not within the control of will; they are random and unwilled and may happen to advantage or disadvantage an individual and his progeny in any particular environment" (Beer, 196). Charlotte does not accept the necessary randomness in Darwinian genealogy and insists on her biological predestination to suicide until she is proven wrong by her own genes. When she actually attempts suicide, her genes prove to be non-suicidal genes after all. Her body simply refused to die; in the words of the emergency doctor, "No one who had taken so many pills and not been found for so long, should have stayed alive", and the matter was a mystery simply because "science had not yet identified the component which explained the connection between body and mind" (209-10). In other words, while Charlotte's past inhabits her present, while her past lives on with her in the form of genes, hallucinations or even her surname, her future is *not* pre-known. Although her future is genetically determined, it is not known to anyone. To her surprise and ours, the physiological expression of her genes was survivalist rather than solely suicidal. Although the theory incorporates genetic determinism, the probabilities are not entirely known. Even in the most pessimistic of cases, suicide, there is hope in our genes.

Consequently, *Monkey's Uncle* utilises a Darwin-inspired conception of time within the structure of the narrative. Charlotte's recurrent flashbacks and daydreams of her possible ancestor, Robert FitzRoy, serve as a constant reminder that the past still inhabits the present. The past is embedded in our very cells where we carry it on every present moment. Other literary devices serve to highlight this principle, such as for example, the pearl-seed which Charlotte has received from her father. It becomes a symbol for her genetic inheritance or even the family DNA, especially at the end of the novel when she sends it to her son in a letter. The symbolism is cemented by Charlotte's language: "My father – your grandfather – gave it to me when I was small. He said it was like me. I should have passed it on to you a long time ago. But I forgot about it. It's the nearest thing we have to a family heirloom. Certainly, it's the most precious thing I have to give to

you." (257). Indeed, it symbolises the most precious thing a mother can give her son; half of his biological blueprint compiled from hers, which, in turn, carries half of her father's.

However, it must be noted that Diski's novel does not limit the discussion of history to purely narrative strategies. *Monkey's Uncle* differs from the rest of the novels considered in this selection in that its Darwinian paradigm of time is used to interrogate one of the philosophical tenants of Postmodernism; namely, the assumption that our age is marked by collapse of some grand narratives of human civilisation. This was one of the earliest assumptions of Postmodernist theory as formalised by Jean-François Lyotard in 1979:

> Simplifying to the extreme, I define *postmodern* as incredulity toward metanarratives. This incredulity is undoubtedly a product of progress in the sciences: but that progress in turn presupposes it. To the obsolescence of the metanarrative apparatus of legitimation corresponds, most notably, the crisis of metaphysical philosophy and of the university institution which in the past relied on it. The narrative function is losing its functors, its great hero, its great dangers, its great voyages, its great goal. (xxiv, emphasis in original).

By grand narrative or metanarratives, Lyotard is referring to philosophies of the world such as religion, Enlightenment ideals or Communism which have been used to explain the human condition, but are now, in late 1970s, becoming obsolete due to the progress of science. For the purposes of this chapter, the word "now" is a keyword. Lyotard's concept is incorporated in one way or another in almost all the novels considered in this study, yet the disagreement has to do with the specific moment when incredibility vis-à-vis "the great hero" or "the great goal" has arrived. *Monkey's Uncle* is quite vocal in this regard, suggesting that the demise of utopian narratives is not necessary a Postmodernist phenomenon but rather a stable of the human condition which has been happening since the emergence of culture. This contention is illustrated in the brilliant analogy between Charlotte's disillusionment with state socialism and FitzRoy's loss of religious faith. On the one hand, living in the early 1990s, Charlotte witnesses the collapse of her political ideals with the fall of the Berlin Wall:

> as she watched the hordes passing through Checkpoint Charlie, she knew she was witnessing the final death rattle of Marxism, and *for her it meant the end of hope. She felt the remnants of hope flowing out of her like menstrual blood; unstoppable*. And she began while she watched, to mourn. It wasn't Marxist ideology of any particular variety she mourned, since her politics were, in truth more felt than cerebral, but the end of the possibility of *idealism*. (63, emphasis added)

Charlotte cannot be described, ideologically, as a committed Communist or even a Marxist. She is more of an idealist; a Utopian individual who happened to be a Socialist. The fall of the Berlin Wall was for her the fall of a Utopian dream and the loss of hope in a grand narrative of civilisation which was supposed to end in social and economic justice for all of people who work to earn their living. The metaphor of hope bleeding out her as if it were "menstrual blood" is laden with meanings. On one level, it is a reminder of the overall biological and Darwinian subcurrents in the novel. Menstrual blood is an anti-climax in a biological sense, for it is the end of a human egg which was not fertilised. Rather than offering the optimism of conception and birth, the era in which Jenny's lives is sterile. On another level, it is a very subtle foreshadowing the blood she is going to spill later when she attempts to commit suicide. The fact she was aware of her the Utopian quality of dreams is highlighted in what the narrator says next:

> *Socialism* was not, in itself, to blame for its own demise. People were corruptible and *they* had corrupted the idea. It seemed that living political systems and ideals were unable to coexist. She didn't regret the failure of the political system of the East. It had already, long since, been tampered with by individuals hungry for power and privilege. But it had dragged the principles of justice and equality, the *essence* of socialism, down with it. (63, emphasis in original).

To err is human. But this proverbial saying would do little to console Charlotte. She acknowledges the ills of the Communist regimes and indirectly mentions their swift transformation into autocratic dictatorships. Her disillusionment with the human race still does not dispel her dream to see a metanarrative of social justice coming into light. She is

certainly aware of the corruption inherent in human nature but cannot accept it or pragmatically manoeuvre her idealistic thinking around it. One is tempted to say that this specific streak in Charlotte's character, idealism, should have been tampered by her scientific training because as a Darwinist and a geneticist, she should know that human nature incorporates the quest for "power and privilege". As mentioned above in this present chapter, the contest for rank among alpha males is a typical primate phenomenon. It may not be agreeable that politicians unscrupulously partake in this "animal" contest, but then it exists at a fixed DNA level despite all idealist and utopian aspirations. Consequently, the dissociation in Charlotte's character between idealism and empiricism may be counted as another catalyst for her suicide attempt.

The other side of the coin is Robert FitzRoy's existential anguish at the receding tide of religious faith. Diski portrays a powerful encounter between the Captain of the Beagle and Charles Darwin which magically occurs inside Charlotte's disturbed mind. The two Victorian gentlemen were walking in the Galapagos Islands over the very shoreline which can be taken as proof of Lyell's theory of "old earth" geology. That the earth is much older than what Genesis states proves too problematic to FitzRoy:

> it seemed to me that the earth – the universe – itself had become *unreliable* . . . no, not become: must always have been quite different from the certain image I had of it in my own mind. It was as if I, and perhaps everyone else, might be seeing a phantom which had never really existed […] what I understood was that there is no *absolute* certainty. And such a degradation of confidence in what one knows in one area, means one can never be *entirely* confident about anything. (77, emphasis added).

Whether this encounter actually took place or not and whether FitzRoy said those words remain 'academic' questions and beyond the scope of this present study. Obviously, there is an invitation for the reader to assume the historian's task and investigate the accuracy of those remarkable words and events; the novel seems to intentionally omit any clues in this regard such as precise dates or the historical sources for Charlotte's hallucinations. In any case, all indications seem to suggest that this is a fictional encounter. Diski seems to extend the Postmodernist zeitgeist onto the Victorians' cultural context. Exercising her privileged retrospective gaze, Diski suggests that FitzRoy's existential and religious

doubts are essentially an identical form of Postmodernist uncertainty. As far as the human condition is concerned, there is no *absolute* certainty and one cannot be *entirely* confident about anything. Despite the humans' capacity for the production of knowledge and their self-aware consciousness, they remain at the mercy of random mutations and evolution by natural selection like all other animals. Consequently, Like Charlotte, who is mortally wounded by the crumbling of her favourite grand narrative, Robert FitzRoy is driven mad by the collapse of the Genesis narrative of creation.

Therefore, the human race is perhaps doomed to producing such flawed grand narratives regarding their place in the universe. There is a Darwinian significance here; the dreams of Utopia in Charlotte's case, or eternal salvation in FitzRoy's case, are simply an expression of a human maladaptation; being self-aware carries with it existential fears and questions. Consequently, in *Monkey's Uncle* the past inhabits the present in many forms including this inherited existential questioning. The Darwinian paradigm of time is further highlighted by both characters expressing their fears of the future. Charlotte "wept also for the future" (63) because unlike Charles Darwin in the novel she did not have the "gift" to dismiss those "self-lacerating fears" (78) which would later help him formulate his theory. The future of evolution does seek the benefits of the species, but it is not pre-known, it cannot be *absolutely* certain.

It must be noted that Diski's novel shares with *Possession* and the *French Lieutenant's Woman* similar Postmodern stylistic and generic features which have been successfully blended with its Darwinian paradigm of time and thematic concerns. *Monkey's Uncle* exhibits a great degree of reflexivity and hyper-textuality. For instance, in one of Charlotte's daydreams, an actual incident in Captain FitzRoy's naval career is retold in quite a 'revisionist' manner. FitzRoy captured some native men and children in Tierra del Fuego with the intention of "civilising them" by teaching them English and Christening them. When he presents the children in front of the King and Queen of England, FitzRoy's language conveys a sense of colonial and Euro-centric logic:

> They have been admirable pupils, and seem to have taken to the civilising benefits of Christianity as if they had indeed been waiting for it. It proves to me, though I hardly need proof, that the Lord is everywhere, and speaks to all hearts if they are allowed to listen. (112).

In her attempt to represent FitzRoy's history, Diski seems to use a transparently cliché language to depict the imperialist spirit which inspired some Victorian explorers. Phrases such as "the civilising benefits of Christianity" are repeated throughout the narration, and Biblical imagery is incorporated in hypertextual but sarcastic manner. "Jemmy Button, would grow the tree of knowledge for them [the Fuegians], like God's gardener, and help them understand Christ's message that they must wear clothes, and speak English, and learn the Bible off by heart" (114). The sarcasm in the language is too obvious to require any further elucidation, yet Diski adds another sarcastic comment on FitzRoy's doomed imperialist experiment. This comes from the point of view of one of the natives, York: "Why sit on hard seats in uncomfortable clothes in this dark light-defying room, when you could be lazing in a tropical sun feeling the heat warm your genitals as you daydreamed the feats of athletic and sexual prowess you would soon perform?" (115). Diski is certainly playing fluid language games here. Of course she is not writing actual history and she has the liberty to mould her novel as necessary to her purposes. The playfulness of the language stresses that it is a construct; it is drawing attention to its nature as a fiction, or rather a fictionalised account of history. The effect of this style of writing is that it barely disguises its author, and once the novelist is present in the novel, she seems to be directly addressing the reader, though with soapbox-like posture, satirising the hypocrisy of Victorian religious piety.

However, amid the light-hearted criticism of the Victorians, there is a direct and serious message to the contemporary reader who is weary of Darwinism. This Victorian gentleman, who is very religious, is effectively practicing the doctrine of Social Darwinism without accepting Darwinian evolution. "FitzRoy, who believed not at all in the transformation of species, believed fervently in the transformation of degrees of men." (112). One does not have to be a Darwinist in order to be Eurocentric or to believe in the presumed superiority of one group of people over another. It is a matter of creed and ideology for which science should not be solely blamed. "He saw no lack of logic in this. God's purpose was always unknown." (112). Ironically, this civilising enterprise, which is motivated by blind belief in one's creed, ends in a disaster which mirrors one of the narratives of that very same creed. When sent back to their homeland, one of the two young men, York, turns against the other, Jemmy, and blunders the trappings of his newly acquired civilization, such as the clothes and china. This form of primitive violence

clearly invokes an analogy with the Biblical story of the first dispute on earth: Cain and Able.

Another effect of Diski's Postmodernist style of writing is to encourage the reader's involvement in the act of approaching history. In this way, her novel, like Byatt's and Fowles, can be said to be a 'writerly' text. This is achieved by what seems to be a deliberate attempt to portray the Victorian imperialist explorer in an oppressively stereotypical manner, thus inviting the question whether FitzRoy was actually such a naïve religious zealot believing in his ability to convert the natives. Obviously, the answer may never be found, yet the invitation to question history persists throughout the narration of Jemmy's and York's story. And the sources of the story are readily available; accounts of it were written by both FitzRoy and Darwin. Though Diski does not specify her historical sources, Darwin's account in *The Voyage of the Beagle* seems to be the most likely source. First of all, both texts share a tendency towards using playful and light-hearted language in various juncture of the narration, as illustrated in Chapter One of this present study. Secondly, several affinities may be detected in both portrayals of the characters of the natives. Consider the following description of the natives by Darwin:

> York Minster was a full-grown, short, thick, powerful man: *his disposition was reserved, taciturn, morose, and when excited violently passionate*; his affections were very strong towards a few friends on board; his intellect good. Jemmy Button was a universal favourite, *but likewise passionate*; the expression of his face at once showed his nice disposition. He was merry and often laughed, and was remarkably sympathetic with any one in pain […] Lastly, Fuegia Basket was a nice, modest, *reserved* young girl, with a rather pleasing but sometimes *sullen* expression (301-2, emphasis added).

Darwin does not mention why these individuals, despite differences in age and sex, were all the same "sullen", "reserved" or "passionate". The experience of captivity is the most obvious reason, for no human being would happily accept being plucked out of his hometown and taken forcibly to a foreign country. There can be many reasons why Charles Darwin suppressed this fact in his narration. Perhaps he did not want to distract from the science of this experiment by referring to the ethical questions. Moreover, being

no stranger to controversy, especially when it comes to the question of slavery,[80] Darwin perhaps did not want to challenge politically the practices of his Victorian fellow citizens at this juncture. He opted instead to highlight the common humanity he and his people share with the natives, by closely describing their sad expressions, their sympathy "with any one in pain" or other universally human traits such as Jemmy's admirable "patriotic disposition" towards his tribe (301). His use of terms such as "savages", which may not necessarily have had derogatory connotations in his time as it does now, is counterbalanced by the cheerful humanity he shared with them.

Diski, on the other hand, directly politicises the story and cuts through the Victorian 'hypocrisy'.[81] In her version, York "wondered gloomily why the Lord's infinite mercy did not extend to putting His chosen people, inhabitants of God's own country, in a warmer climate. He hated England, always grey and damp" (114-5). Again, the language is transparent in the sense that it is so directly political that it reveals the contemporary consciousness behind it. In other words, it is a historical commentary, such as when her narrator says of York: "They thought him *sullen* (a word whose meaning he had taken trouble to find out) Yes, it was the right word. He did not smile as easily as Jemmy" (115,

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[80] James Moore and Adrian Desmond provide a concise but illuminating account of the origin of Darwin's public opposition to slavery. In a kind of family genealogy, they state that:

> Darwin took in abolitionism with his Wedgwood mother's milk. Among anti-slavery families, the Unitarian Wedgwoods and freethinking Darwins stood prominent. They joined forces around 1790, when the potter Josiah Wedgwood I cast the famous cameo 'Am I not a man and a brother?' and his poetic friend Erasmus Darwin described its 'poor fetter'd SLAVE on bended knee/From Britain's sons imploring to be free' in his masterpiece *The Botanic Garden*. The 'fetter'd slave' became a fashionable icon, copied on hair pins and snuff boxes. The families grew closer after Darwin's son Robert married Susannah, Wedgwood's eldest daughter, and six grandchildren were born. Raised in Shrewsbury, Charles Darwin and his siblings half-lived with their eight cousins in Staffordshire, the children of Josiah Wedgwood II. Here abolition became a family obsession, a world of anti-slavery petitions, Pamphlets and societies. Josiah, elected a Whig MP in 1832, supported Lord Grey's reforming ministry, which finally abolished slavery throughout the Empire in 1833. (xvii)

[81] Frankness is a quality of Diski's writing which still awaits its due assessment in contemporary literary scholarship. This is not limited to *Monkey's Uncle*. According to *The Guardian* review by Robert Hanks, since her debut novel *Nothing Natural* (1986), "you can see some of Diski's distinguishing marks: a lovely sentence-by-sentence clarity, and an absence of embarrassment – something particularly noticeable in her memoirs." The reason suggested by Hanks raises quite significant questions regarding the 'Englishness' of the contemporary English and British novel: "Perhaps she is unembarrassed because she lacks those crippling English class sensitivities – her parents were the children of East End Jews who'd emigrated from Russia and Poland, the first generation born in England, and she says 'I never knew where I was exactly. I knew where everyone else was exactly, but I was sort of Jewish and English.'" Whether her straightforward style has to do with her multicultural heritage remains to be investigated, and it is certainly quite a *functional* style to use when interrogating or re-writing history as the case is in *Monkey's Uncle*.

emphasis added). 'Sullen' is indeed the keyword to the comparison here between Diski and Darwin. She herself may have had to take the trouble to look up the word. For any contemporary reader of Darwin, "sullen" is word that stands out in the text of his journal as possibly having archaic Victorian connotations. In sum, Diski, like Darwin, is acutely sensitive to the historical suffering of the native captives, but unlike him, she is directly and almost transparently vocal about it.

In conclusion, Darwin's influence on the contemporary novel's approach to history can be summarised as a willingness to engage in a process of enquiry not too dissimilar to his own as well as the strategy of converting the evolutionary concepts of time into metaphorical models within which the characters are placed. This influence is thus translated into a recurring portrayal of the amateur naturalist collector and a transposition of the past vis-à-vis the present. In this regard, the influence is more akin to epistemological re-adjustments than being mere issues of vision, as Katelin Krieg rightly points out:

> Vision and epistemology – seeing and knowing – were tightly linked in the Victorian period […] Ruskin and Darwin both engage with the natural world, which anyone can see. The problem was not that their audiences could not see flowers, rocks, trees, and animals, but rather that they were not looking at them in the right way. Looking implies both the will of the subject and a particular perspective: looking at implies looking from. (709-10).

Darwin's lasting impact is one of epistemological revolution which has reached all areas of culture including the world of the novel. It is a revolution in the perception of nearly everything human which is still reverberating today. Darwin is "ultimately concerned with knowledge culled from observational practices" (*ibid*, 710), which is exactly what some contemporary novelists do when it comes to knowledge of history. Byatt's description of her research for *Morpho Eugenia* demonstrate an observational practice indeed. "I read. Ants, bees, Amazon travels, Darwin, books about Victorian servant life, butterflies and moths – *resisting, rather than searching out useful metaphors*, but nevertheless finding certain recurring patterns." (2000, 117, emphasis added). In a semi-

Postmodernist circularity, when the observational practice is redirected onto reading the Darwinian text itself, its metaphors, which happen to be abundant, need to be 'resisted' in order not to limit one's use of Darwin's language to the ornamental side, the vision, and to reach its epistemological and hermeneutic level. The need to approach Darwin in this manner is essential; otherwise, one risks making a reductive error: "some literary critics have tended to approach the *Origin* as a conceptual node, exploring the influence of the concepts of natural and sexual selection on the literary and artistic imagination." (Krieg, 711). There is more than the literary imagination in Darwin's influence on the novel. *The Origin of Species* has an "epistemic significance" and it is "a rational exchange between author and audience" (*ibid*, 711). In our case, the audience is the novelist, who, as Krieg's analysis concludes, enjoys a privileged relationship with Darwin. "This alignment between author and audience is not an empty rhetorical platitude meant to assuage readers' egos. Rather, Darwin recognizes that by definition, the human perspective that takes empirical reality literally is inadequate because it only reveals partial truths." (719).

As has been illustrated in this chapter, the outcome of this interaction with the Darwinian text is a sharpening of the epistemic perception of history which does not confirm to established Postmodernist attitudes. The literary is there, and the theory of evolution can be a good source of imaginative inspirations and metaphors. However, the metaphors have indeed been resisted by Byatt and Diski in order to delve into the exceptionally powerful epistemic zone of Darwinism.

Conclusion

To research the manifold manifestations of Darwinism within the contemporary British novel scene is necessarily an encyclopaedic undertaking, for it entails uncovering illusive links among four of the main human intellectual pursuits; the scientific, the political, the religious and the literary. Firstly, this present study incorporates an extensive and varied collection of contemporary and Victorian Darwinian paradigms which have been appropriated by the novelists. Starting with Darwin's own preproposals, one finds in the contemporary novel various renditions as well as re-orderings of concepts such as the universality of human nature, the theory of mind, the unresolvable conundrum of reconciling selfish and altruist drives, the biological underpinnings of love and the propensity to have blind faith in narratives.

Taking inspiration from Darwin's *The Expressions of the Emotions in Man and Animals* (1872), Ian McEwan sets off to defend what can be an egalitarian belief in the shared experience of human nature as a phenomenon that has a single biological origin worldwide. In Darwin's words, those who believe in evolution "will feel no doubt that all the races of man are descended from a single primitive stock" (1879, 205). Such a universalising impulse permeates several of the novelist's works, both in creative and critical writing. McEwan, as well as Jenny Diski and A. S. Byatt, also show keen interest in the recent incarnations of Darwinism, interrogating and experimenting with the Sociobiological claims of E. O. Wilson and their impact on Social Constructivist theory. When *Enduring Love* incorporates direct quotations from Wilson's theory on the genetic basis of the infants' smile, the novelist is indeed looking for trouble and not just trying to stir the still waters of the humanities. It is his call to arms; it is high time that literary scholars, like Clarissa in the novel, faced up to what Darwinism implies for human nature.

However, as this survey highlights, the scientific is often tarnished by the political or the ideologically biased. Written against the background of war and religious extremism, McEwan's next Darwinist novel, *Saturday*, is marked by a hardened adherence to Darwinism, bringing him closer to a genetically deterministic outlook on human nature. This hard-line stance, which complements the protagonist's form of atheism, also happens to concur with the political camp that saw in the 2003 Iraq War a necessary response to

the religious extremism coming from the east. A marriage of convenience is consummated towards the end of *Saturday* between right wing pro-war conservativism and biological determinism, culminating in the protagonist's final anti-socialist statement: "No amount of social justice will cure or disperse this enfeebled army haunting the public places of every town." (272).

Certainly, the presence of Darwinism in the contemporary novel is not simply a matter of thematic concerns. The internal processes of creative writing are infinitely complex and ephemerally malleable, so when a discourse like Darwinism is thrown among the novel's moving cogs, the resulting sound and fury can never be predicted. Besides the authorial interventions and the allegorical characterisation in McEwan's novels of ideas, sub-textual Darwinian currents can be read in their plots, especially in the violent encounters between his protagonists and the *men* who represent primeval chaos and the brute within; namely, Baxter in *Saturday* and Jed Parry in *Enduring Love*. Masculinity in both cases reverts to its biological roots in the struggle for life.

In this regard, the imaginative potentials of Darwinism are, arguably, best rendered by A. S. Byatt in *Possession* and *Morpho Eugenia*. In her complex and multi-layered narrative, the banal biological kernel of romantic love is implicitly and gracefully represented, especially in the intimate scene between the two lovers in *Possession*. The physiological element of the attraction between Roland and Maud is present from the start of the relationship; it is a "*kick galvanic*" or an "electric shock […] His body knew perfectly well that she felt it" (147, emphasis in original). It is his body, not his heart and certainly not his conscious mind, that is the focus of attention at this point in the narrative. Moreover, Byatt excels at incorporating images and metaphors of Darwinian metamorphosis into her work, within its various textual elements including the poetic, the epistolary and the biographical. Butterflies metamorphose, species metamorphose when they evolve, but the grandest act of metamorphosis is fossilisation, as Randolph Ash realises in the novel; the fossilised "ammonite worms" become a symbol for "the persistent shape-shifting life of things long-dead but not vanished." (256, emphasis in original).

In exploring evolutionary human nature, this present study makes a U-turn to the political when reading Jenny Diski's *Monkey's Uncle*, a text that forcefully installs a middle ground between the extremes of biological determinism and social constructivism. The novel opens up by warning of dogmatic interference with science, but then proceeds

to flatter the ears of diehard Darwinists with the words of a geneticist believing her son to have an inborn cold-hearted quality, “something harsh, something brash” (68) that made him what he is. Those who read these lines with satisfaction and a sort of populist fever for evolution, are soon dealt a cold-hearted wake-up blow by the novel when Charlotte’s son confronts his mother, and us readers, with the truth; he has become who he is because of her unusual childcare and her attempt to spoon feed him her leftist politics.

What units these literary renditions and experimentations with Darwinism is a subtle act of resistance. The genetic and evolutionary paradigms used by McEwan, Byatt, Diski and Crace are pitted against the hegemony of certain stands in the Postmodernist pantheon which insist on an oppressively contingent definition of the human categories of class, race and gender, thereby creating their own holy trinity which should never be mixed with the profane reality of the genes. As mentioned in Chapter One of this study, the act of deploying biology as an alternative model of structuring human experience is not only subverting theoretical and philosophical positions but it is also transforming and reinvigorating the very nature of the novel as a literary product. The effects on the language of the novel include both influences from Darwin’s own works as well as the heroic language of popular science writing. For example, affinities are best observed, in both forms of writing, in the recourse to figures of speech and imagery suggestive of science fiction. When McEwan’s protagonist describes people as “hot little biological engines with bipedal skills suited to any terrain, endowed with innumerable branching neural networks sunk deep in a knob of bone casing, buried fibres, warm filaments with their invisible glow of consciousness” (2006, 13), and when Richard Dawkins describes his readers as “survival machines— robot vehicles blindly programmed to preserve the selfish molecules known as genes.” (2006, xxi), the time is ripe to explore the relationships between such mechanistic metaphors and the genre of science fiction. This is especially the case with science fiction novels that actually share with McEwan and Dawkins their Darwinian beliefs. Such inquiry is unfortunately beyond the scope of the present study. Future scholarship can certainly uncover quite illuminating connections by exploring novels such as Stephen Baxter’s *Evolution* (2003) and *Times Ships* (1995). The possibilities include, but not limited to, affinities with popular science writing, avant-garde experimentation with the human subject as well as revisiting Victorian and early modern evolutionary motifs. Similar explorations await in relation to other controversial and vastly Darwinian novels such as Will Self’s *Great Ape* (1997), Jim Crace’s *Harvest*

(2013) and Kazuo Ishiguro's *Never Let Me Go* (2005). Furthermore, literary scholarship can benefit immensely from a historical and genre-based investigation into Charles Darwin's personal preference for the novel form, and his reading practices, as highlighted in Chapter One of this study. The starting point can be the question whether his preference for *Salis Marner* over *The Mill on the Floss* (1887, 40) has had any effects on George Eliot's or other novelists' careers. It must be borne in mind that his letter to J. D. Hooker is the equivalent of modern-day social media posts and reviews. A review by a public figure of Darwin's status is likely to have been observed keenly by the producers of art. Indeed, he may have been part of a process of 'natural selection' where the desired characters are preserved over the course of several novel publications and are then passed to us in a cultural evolutionary process whose fruits are now deeply imbedded under the skin of the novel passing our attention undetected.

Moreover, this present study has highlighted the need to return to textual analysis. The literary text needs to be allowed to speak for itself. As Byatt maintains, "it is changes in the rhetoric of criticism that lead me to write commentary more and more overtly in an exploratory, and 'authorial' first person" (2000, 102). This need not be viewed as a return to traditional methodologies of the past; in fact, it can be a call to remove the theoretical 'emperor's clothes' and conduct literary criticism starting with tangible entities, the literary texts themselves. It is in this *exploratory* spirit that the current study was conducted, keeping a keen eye on textual analysis. It is indeed possible to escape what the narrator of *Possession* calls a "self-referring, self-reflexive, inturned postmodernist mirror-game" (421).

When it comes to the ever-changing literary scene, this study of Darwinism aims to contribute to opening new critical frontiers and dismantling disciplinary barriers to knowledge. It is indeed regrettable that Charles Darwin is often met with aversion in the discipline of literary theory and often relegated to historical criticism. There can be many reasons for this sort of avoidance, such as concerns over biological reductionism (Amigoni, 2008, 4) or ethical concerns (Greenberg, 93). In this regard, this present study aims to address the imbalance described by Amigoni and to contribute to the much-needed exegetical efforts as his "literary perspective on the gene" in his essay quoted here. In fact, such a critical aspiration gains much momentum from the subversive energies of the very novelists explored in this study. Within the context of Postmodernist

contingency and merely few years after Lyotard's declared the collapse of grand narratives, Ian McEwan and A. S. Byatt express and experiment with their own grand narratives. For McEwan, atheism can be wedded to a myth of creation inspired by evolutionary theory. As illustrated in Chapter Three, this new myth or meta-narrative only "awaits its inspired synthesiser, its poet, its Milton." (McEwan, 2007, 360). As for Jim Crace, the challenge is even easier to address; the religious narrative, especially of the world of death, can be clinched back from the hands of conventional religion and given a new naturalistic and Darwinian attire.

To many ears, to say that Postmodernism is on the decline sounds as a statement of the obvious. Yet because of this very reason, this is a golden moment for a return to the theory of natural selection, for its history, incidentally, illustrates the shifting of the zeitgeist. It dethroned teleological and religious accounts of creation which dominated the world until the late 1850s. Moreover, as in Diski's *Monkey's Uncles*, natural selection explains the periodical collapse of meta-narratives; it is purely cultural extinction. Whether it is Charlotte's belief in state Socialism or her ancestor's, FitzRoy's, belief in state religion, cultural extinction is the fate of the narrative that becomes unfit. This fear of extinction, rightly or wrongly, is what promotes McEwan's protagonist to hold on to his atheistic Darwinism against the perceived threat of some form of excessive, genocidal religiosity in *Saturday*; for Henry Perowne it is indeed time to read "Dover Beach" and reflect on the receding sea of faith. But a true Darwinist would not be thus troubled, for he or she knows that the collapse of grand narratives, including the current form of Darwinism, is not impossible. It is after all the survival of the fittest.

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Appendices

I- Charles Darwin. From *Journal Of Researches,*

Into The Natural History And Geology Of The Countries Visited During The Voyage Of H. M. S. Beagle Round The World, Under The Command Of Capt. Fitz Roy.

DECEMBER 17th, 1832.- Having now finished with Patagonia and the Falkland Islands, I will describe our first arrival in Tierra del Fuego. A little after noon we doubled Cape St. Diego, and entered the famous strait of Le Maire. We kept close to the Fuegian shore, but the outline of the rugged, inhospitable Statenland was visible amidst the clouds. In the afternoon we anchored in the Bay of Good Success. While entering we were saluted in a manner becoming the inhabitants of this savage land. A group of Fuegians partly concealed by the entangled forest, were perched on a wild point overhanging the sea; and as we passed by, they sprang up and waving their tattered cloaks sent forth a loud and sonorous shout. The savages followed the ship, and just before dark we saw their fire, and again heard their wild cry. The harbour consists of a fine piece of water half surrounded by low rounded mountains of clay-slate, which are covered to the waters edge by one dense gloomy forest. A single glance at the landscape was sufficient to show me how widely different it was from anything I had ever beheld. At night it blew a gale of wind, and heavy squalls from the mountains swept past us. It would have been a bad time out at sea, and we, as well as others, may call this Good Success Bay.

In the morning the Captain sent a party to communicate with the Fuegians. When we came within hail, one of the four natives who were present advanced to receive us, and began to shout most vehemently, wishing to direct us where to land. When we were on shore the party looked rather alarmed, but continued talking and making gestures with great rapidity. It was without exception the most curious and interesting spectacle I ever beheld: I could not have believed how wide was the difference between savage and civilized man: it is greater than between a wild and domesticated animal, inasmuch as in man there is a greater power of improvement. The chief spokesman was old, and appeared to be the head of the family; the three others were powerful young men, about six feet high. The women and children had been sent away. These Fuegians are a very different race from the stunted, miserable wretches farther westward; and they seem closely allied to the famous Patagonians of the Strait of Magellan. Their only garment consists of a mantle made of guanaco skin, with the wool outside: this they wear just thrown over their

shoulders, leaving their persons as often exposed as covered. Their skin is of a dirty coppery-red colour. The old man had a fillet of white feathers tied round his head, which partly confined his black, coarse, and entangled hair. His face was crossed by two broad transverse bars; one, painted bright red, reached from ear to ear and included the upper lip; the other, white like chalk, extended above and parallel to the first, so that even his eyelids were thus coloured. The other two men were ornamented by streaks of black powder, made of charcoal. The party altogether closely resembled the devils which come on the stage in plays like Der Freischutz.

Their very attitudes were abject, and the expression of their countenances distrustful, surprised, and startled. After we had presented them with some scarlet cloth, which they immediately tied round their necks, they became good friends. This was shown by the old man patting our breasts, and making a chuckling kind of noise, as people do when feeding chickens. I walked with the old man, and this demonstration of friendship was repeated several times; it was concluded by three hard slaps, which were given me on the breast and back at the same time. He then bared his bosom for me to return the compliment, which being done, he seemed highly pleased. The language of these people, according to our notions, scarcely deserves to be called articulate. Captain Cook has compared it to a man clearing his throat, but certainly no European ever cleared his throat with so many hoarse, guttural, and clicking sounds.

They are excellent mimics: as often as we coughed or yawned, or made any odd motion, they immediately imitated us. Some of our party began to squint and look awry; but one of the young Fuegians (whose whole face was painted black, excepting a white band across his eyes) succeeded in making far more hideous grimaces. They could repeat with perfect correctness each word in any sentence we addressed them, and they remembered such words for some time. Yet we Europeans all know how difficult it is to distinguish apart the sounds in a foreign language. Which of us, for instance, could follow an American Indian through a sentence of more than three words? All savages appear to possess, to an uncommon degree, this power of mimicry. I was told, almost in the same words, of the same ludicrous habit among the Caffres; the Australians, likewise, have long been notorious for being able to imitate and describe the gait of any man, so that he may be recognized. How can this faculty be explained? is it a consequence of the more

practised habits of perception and keener senses, common to all men in a savage state, as compared with those long civilized?

When a song was struck up by our party, I thought the Fuegians would have fallen down with astonishment. With equal surprise they viewed our dancing; but one of the young men, when asked, had no objection to a little waltzing. Little accustomed to Europeans as they appeared to be, yet they knew and dreaded our fire-arms; nothing would tempt them to take a gun in their hands. They begged for knives, calling them by the Spanish word cuchilla. They explained also what they wanted, by acting as if they had a piece of blubber in their mouth, and then pretending to cut instead of tear it.

I have not as yet noticed the Fuegians whom we had on board. During the former voyage of the Adventure and Beagle in 1826 to 1830, Captain Fitz Roy seized on a party of natives, as hostages for the loss of a boat, which had been stolen, to the great jeopardy of a party employed on the survey; and some of these natives, as well as a child whom he bought for a pearl-button, he took with him to England, determining to educate them and instruct them in religion at his own expense. To settle these natives in their own country, was one chief inducement to Captain Fitz Roy to undertake our present voyage; and before the Admiralty had resolved to send out this expedition, Captain Fitz Roy had generously chartered a vessel, and would himself have taken them back. The natives were accompanied by a missionary, R. Matthews; of whom and of the natives, Captain Fitz Roy had published a full and excellent account. Two men, one of whom died in England of the small-pox, a boy and a little girl, were originally taken; and we had now on board, York Minster, Jemmy Button (whose name expresses his purchase money), and Fuegia Basket. York Minster was a full-grown, short, thick, powerful man: his disposition was reserved, taciturn, morose, and when excited violently passionate; his affections were very strong towards a few friends on board; his intellect good. Jemmy Button was a universal favourite, but likewise passionate; the expression of his face at once showed his nice disposition. He was merry and often laughed, and was remarkably sympathetic with any one in pain: when the water was rough, I was often a little sea-sick, and he used to come to me and say in a plaintive voice, Poor, poor fellow! but the notion, after his aquatic life, of a man being sea-sick, was too ludicrous, and he was generally obliged to turn on one side to hide a smile or laugh, and then he would repeat his Poor, poor fellow! He was of a patriotic disposition; and he liked to praise his own tribe and country, in which he truly said there were plenty of trees, and he abused all the other tribes: he stoutly

declared that there was no Devil in his land. Jemmy was short, thick, and fat, but vain of his personal appearance; he used always to wear gloves, his hair was neatly cut, and he was distressed if his well-polished shoes were dirtied. He was fond of admiring himself in a looking glass; and a merry-faced little Indian boy from the Rio Negro, whom we had for some months on board, soon perceived this, and used to mock him: Jemmy, who was always rather jealous of the attention paid to this little boy, did not at all like this, and used to say, with rather a contemptuous twist of his head, Too much skylark. It seems yet wonderful to me, when I think over all his many good qualities, that he should have been of the same race, and doubtless partaken of the same character, with the miserable, degraded savages whom we first met here. Lastly, Fuegia Basket was a nice, modest, reserved young girl, with a rather pleasing but sometimes sullen expression, and very quick in learning anything, especially languages. This she showed in picking up some Portuguese and Spanish, when left on shore for only a short time at Rio de Janeiro and Monte Video, and in her knowledge of English. York Minster was very jealous of any attention paid to her; for it was clear he determined to marry her as soon as they were settled on shore.

Although all three could both speak and understand a good deal of English, it was singularly difficult to obtain much information from them, concerning the habits of their countrymen; this was partly owing to their apparent difficulty knows how seldom one can get an answer even to so simple a question as whether a thing is black or white; the idea of black or white seems alternately to fill their minds. So it was with these Fuegians, and hence it was generally impossible to find out, by cross-questioning, whether one had rightly understood anything which they had asserted. Their sight was remarkably acute; it is well known that sailors, from long practice, can make out a distant object much better than a landsman; but both York and Jemmy were much superior to any sailor on board: several times they have declared what some distant object has been, and though doubted by every one, they have proved right, when it has been examined through a telescope. They were quite conscious of this power; and Jemmy, when he had any little quarrel with the officer on watch, would say, Me see ship, me no tell.

It was interesting to watch the conduct of the savages, when we landed, towards Jemmy Button: they immediately perceived the difference between him and ourselves, and held much conversation one with another on the subject. The old man addressed a long harangue to Jemmy, which it seems was to invite him to stay with them. But Jemmy

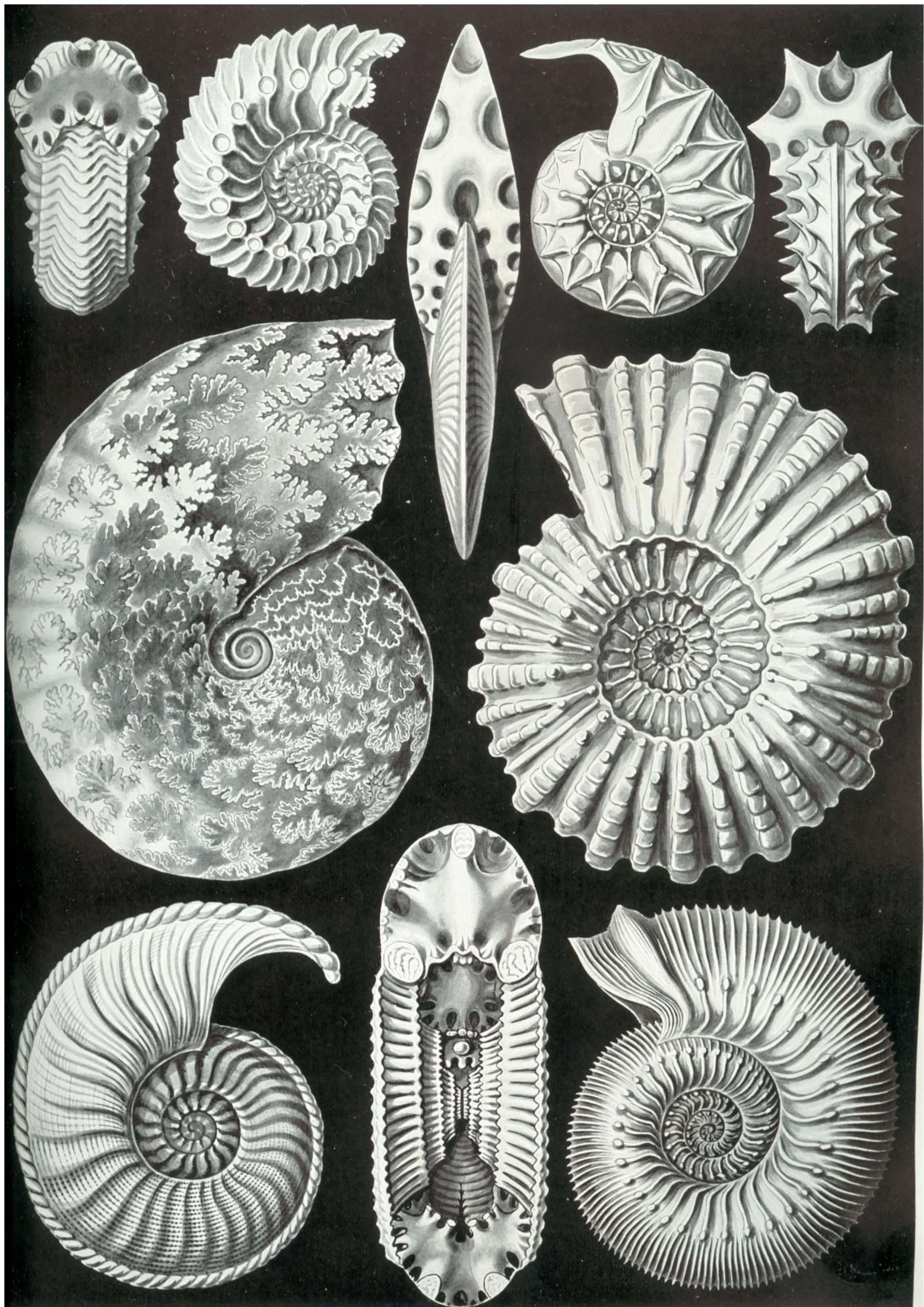
understood very little of their language, and was, moreover, thoroughly ashamed of his countrymen. When York Minster afterwards came on shore, they noticed him in the same way, and told him he ought to shave; yet he had not twenty dwarf hairs on his face, whilst we all wore our untrimmed beards. They examined the colour of his skin, and compared it with ours. One of our arms being bared, they expressed the liveliest surprise and admiration at its whiteness, just in the same way in which I have seen the ourang-outang do at the Zoological Gardens. We thought that they mistook two or three of the officers, who were rather shorter and fairer, though adorned with large beards, for the ladies of our party. The tallest amongst the Fuegians was evidently much pleased at his height being noticed. When placed back to back with the tallest of the boats crew, he tried his best to edge on higher ground, and to stand on tiptoe. He opened his mouth to show his teeth, and turned his face for a side view; and all this was done with such alacrity, that I dare say he thought himself the handsomest man in Tierra del Fuego. After our first feeling of grave astonishment was over, nothing could be more ludicrous than the odd mixture of surprise and imitation which these savages every moment exhibited.

The next day I attempted to penetrate some way into the country. Tierra del Fuego may be described as a mountainous land, partly submerged in the sea, so that deep inlets and bays occupy the place where valleys should exist. The mountain sides, except on the exposed western coast, are covered from the waters edge upwards by one great forest. The trees reach to an elevation of between 1000 and 1500 feet, and are succeeded by a band of peat, with minute alpine plants; and his again is succeeded by the line of perpetual snow, which, according to Captain King, in the Strait of Magellan descends to between 3000 and 4000 feet. To find an acre of level land in any part of the country is most rare. I recollect only one little flat piece near Port Famine, and another of rather larger extent near Goeree Road. In both places, and everywhere else, the surface is covered by a thick bed of swampy peat. Even within the forest, the ground is concealed by a mass of slowly putrefying vegetable matter, which, from being soaked with water, yields to the foot.

Finding it nearly hopeless to push my way through the wood, I followed the course of a mountain torrent. At first, from the waterfalls and number of dead trees, I could hardly crawl along; but the bed of the stream soon became a little more open, from the floods having swept the sides. I continued slowly to advance for an hour along the broken and rocky banks, and was amply repaid by the grandeur of the scene. The gloomy depth of the ravine well accorded with the universal signs of violence. On every side were lying

irregular masses of rock and torn-up trees; other trees, though still erect, were decayed to the heart and ready to fall. The entangled mass of the thriving and the fallen reminded me of the forests within the tropics- yet there was a difference: for in these still solitudes, Death, instead of Life, seemed the predominant spirit. I followed the watercourse till I came to a spot where a great slip had cleared a straight space down the mountain side. By this road I ascended to a considerable elevation, and obtained a good view of the surrounding woods. The trees all belong to one kind, the Fagus betuloides; for the number of the other species of Fagus and of the Winters Bark, is quite inconsiderable. This beech keeps its leaves throughout the year; but its foliage is of a peculiar brownish-green colour, with a tinge of yellow. As the whole landscape is thus coloured, it has a sombre, dull appearance; nor is it often enlivened by the rays of the sun.

II- Ernst Haeckel. “plate 44: Ammonitida”



III- *From* The Natural History Museum (London):

A- "Ordovician trilobite *Ogygiocarella* from Wales"

B- "Skull of the ichthyosaur *Temnodontosaurus platydon*, the first ever discovered."

C- “Slabs of the ammonite pavement from Monmouth Beach, Dorset” (rotated 90 degrees for clarity)

D- “Ammonite 'death assemblage',” a common fossil found in Lyme Regis (rotated 90 degrees for clarity)

E- “An artist's impression of a living ammonite”