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Eliot's Critique of Darwinism

I

Darwin's theory of natural selection was the most explosive idea to emerge in the modern era. Not only did it undermine fundamentally such powerful justifications for religious belief as the argument from design, but secular or humanist alternatives to religion were equally threatened since the human species was no longer privileged and was the product of a struggle for existence that not only had no ethical dimension but also such a dimension would have been positively disadvantageous in that struggle. Also concepts of order that shape human thought and perception such as purpose or proportionality in the relation between cause and effect were called into question by Darwinian theory. Darwinism was of course roundly condemned from many different points of view and that continues, but most of the attacks on it have been along the lines that it could not be true because if it were life would be meaningless or there would be no justification for morality.¹ Even defenders of it, such as Social Darwinists, could do so only by projecting teleology onto the theory and rejecting the idea that chance played a significant role in which species survive, the 'fittest' being identified with the best and so deserving to thrive in the struggle for existence.

Although it is well known that George Eliot read Darwin's *Origin of Species* almost as soon as it was published, it has been claimed that Darwinism was not a major influence on her mind and work. Morse Peckham writes that 'there is no indication that the *Origin* disturbed Tennyson ... or Newman, or George Eliot'.² W. J. Harvey argues that Darwin had little effect on her: 'If *The Origin of Species* had by itself any effect on her creative imagination, it cannot have been much greater than that of the recapitulation theory – the effect of sharpening and pointing a few specific images.' He thinks Herbert Spencer a more important influence: 'All the external evidence, in fact, points to Spencer rather than Darwin as the prime intellectual influence concerning ideas on Evolution.'³ In contrast I shall argue not only that Darwinism plays a significant role in her fiction but that she is possibly Darwinism's most cogent and intellectually sophisticated critic. Her critique is of especial interest because, while clearly aware that the theory could be interpreted in socially and ethically subversive ways, she had no serious doubt about its validity in scientific terms, so that unlike virtually all commentators on Darwinism in the Victorian period her critique of it does not attack or condemn Darwin's theory in itself.

Although Eliot's letter to Barbara Bodichon on Darwin has often been quoted, it is worth quoting again because it tells one so much about her attitude to natural selection:

We have been reading Darwin's book on the 'Origin of Species' just now: it makes an epoch, as the expression of his thorough adhesion, after long years of study, to the Doctrine of Development – and not the adhesion of an anonym like the author of the 'Vestiges', but of a long-celebrated naturalist. The book is ill-written and sadly wanting in illustrative facts – of which he has collected a vast number, but reserves them for a future book of which this smaller one is the avant-courier. This will prevent the work from becoming popular, as the 'Vestiges' did, but it will have a great effect in the scientific world, causing a thorough and open discussion of a question about which people have hitherto felt timid. So the world gets on step by step towards brave clearness and honesty! But to me the Development theory and all other explanations of processes by which things came to be, produce a feeble impression compared with the mystery that lies under the processes.⁴

The tone of this letter indicates neither surprise nor enthusiasm. Eliot was obviously familiar with Robert Chambers' *Vestiges of the Natural History of Creation* and would almost certainly have read Spencer's article of 1852, 'The Development Hypothesis', published in *The Leader*, which had suggested that species were not immutable. Though there is no indication that she had any doubts about Darwin's theory, her criticism of his style and arrangement of facts may suggest a lack of positive response, but it should be noted that T. H. Huxley, Darwin's main defender and supporter, also criticized its organization.⁵ The reference to mystery need not be taken to mean that she did not really grasp the implications of the theory or preferred a metaphysical interpretation of evolution but rather as a sign that she believed that any human explanation of evolution cannot in itself explain the mystery of existence. But that this should be her immediate response again reinforces the impression that she was not an enthusiast or an advocate of the theory, like Huxley, but neither is there any indication that was she an opponent of it.

There are not a great many explicit references to Darwin and natural selection in her writings, but those there are all suggest acceptance but a distrust of the implications that could and were being drawn from it, especially as applied to the human realm. In a letter to publisher George Smith she remarks that 'natural selection is not always good, and depends (see Darwin) on many caprices of very foolish animals' (*Letters*, IV, 377). A passage in *Daniel Deronda* applies natural selection to the choice of marriage partner:

It was impossible to be jealous of Juliet Fenn, a girl as middling as mid-day market in everything but her archery and her plainness, in which last she was noticeably like her father: underhung and with receding brow resembling that of the more intelligent fishes. (Surely, considering the importance which is given to such an accident in female offspring, marriageable men, or what the new English calls 'intending bridegrooms,' should look at themselves dispassionately in the

glass, since their natural selection of a mate prettier than themselves is not certain to bar the effect of their own ugliness.)⁶

This passage suggests Eliot understood Darwin well enough but allows her narrator to view natural selection in an ironical spirit.

The clearest indication of a critical perspective on the implications of natural selection is to be found in a chapter of *Impressions of Theophrastus Such* called 'Shadows of the Coming Race'. This chapter attacks the view of the narrator's friend Trost that machines will soon be able to do a great deal of the work of human beings. The narrator objects:

Am I already in the shadow of the Coming Race? and will the creatures who are to transcend and finally supersede us be steely organisms, giving out the effluvia of the laboratory, and performing with infallible exactness more than everything that we have performed with a slovenly approximateness and self-defeating inaccuracy?⁷

Looking forward to an era of automation, the narrator argues that if machines can take over some of humanity's functions, there is no reason why they should not take over all if they were designed to be without humanity's disadvantages. Machines might ultimately become self-reproductive and thus, by natural selection, supplant human beings:

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. (*ITS*, 141)

Human beings will have no call to use their energies since machines will do everything, and so

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. (*ITS*, 141)

Thus by natural selection humanity will eventually disappear leaving only machines:

Thus the feebler race, whose corporeal adjustments happened to be accompanied by a maniacal consciousness which imagined itself moving its mover, will have vanished, as all less adapted existences do before the fittest – *i.e.*, the existence composed of the most persistent groups of movements and the most capable of incorporating new groups in harmonious relation. Who – if our consciousness is, as I have been given to understand, a mere stumbling of our organisms on their way to unconscious perfection – who shall say that those fittest existences will not be found along the track of what we call inorganic combinations ... Thus the 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. (*ITS*, 141–2)

The conception of evolution which underlies this vision, one perhaps more appreciated by a modern reader than by a Victorian, is Darwinian and not metaphysical. It shows how Eliot's mind transcends the limitations of her own era and conceptualizes scientific possibilities in the future that have been much discussed and debated in recent decades. Eliot accepts Darwin's view that there is no purpose or necessary progress in evolution: it is simply a matter of adapting best to the world in order to survive and reproduce. She also accepts that the process of natural selection could eliminate humanity as a species and human values from the world. The fittest are not the best, but only those best able to adapt. If natural selection could be applied by analogy to the social medium, and human beings began to think of society in such terms, might not the 'worst' prove more capable of adapting and surviving than the 'best'? This is, I think, a question posed when Darwinism is most obviously an implied presence in her fiction, and it is probably what most disquieted her about the possible consequences of Darwinism. Though the theory may be valid in scientific terms, it could have damaging social applications and effects, and this is apparent in the critique of characters in several of her novels who try to live their lives in implicitly Darwinian terms.

One can find further support for the view that Eliot understood and was affected by Darwin in examining the views of her partner G. H. Lewes on the subject. Evolution was a subject which interested him greatly and his views were respected by Darwin himself. It is extremely likely that Eliot would have agreed with Lewes on the scientific aspect of evolutionary theory and also with his views on its moral and social implications. Lewes wrote four articles in 1868 for the *Fortnightly Review* entitled 'Mr Darwin's Hypotheses' which show him to be a strong supporter of the scientific validity of natural selection.

The great value of Darwin's theory is, he says, that it more than anything else has established the monist world view of science. He begins his first article with the words "'The Origin of Species" made an epoch', echoing Eliot's view.⁸ For him the theory of natural selection shattered all previous metaphysical formulations: it 'gave a sudden illumination to the old doctrine of Evolution, by substituting a precise and verifiable conception for the vague or metaphysical conceptions which were current'.⁹ He warns, however, that it should be treated as a hypothesis, to be used provisionally as a means of grouping together previously unexplained facts, but should not be adopted as a final explanation. He attacks all metaphysical and vitalist interpretations of evolution and interestingly criticizes Spencer for his Lamarckian view that functions can originate structure. Lewes accepts the Darwinian view that the function of any organ is dependent on its structure.

From the point of view of anyone interested in Eliot's novels, his third essay on Darwin is most important because of its discussion of the relationship between organism and medium:

But we have only one half of the great problem of life, when we have the Organism; and it is to this half that the chief researches have been devoted, the other falling

into neglect. What is the other? The medium in which the Organism lives. Every individual object, organic and inorganic, is the sum of two factors: first, the relation of its constituent molecules to each other; secondly, the relation of its substance to all surrounding objects. Its properties, as an object or an organism, are the resultant of its constituent molecules, and of its adaptation to external conditions. Organisms are the resultants of a peculiar group of forces, exhibiting a peculiar group of phenomena. Viewing these in the abstract, we may say there are three regulative laws of life: (1) The *Lex Formationis* – the so-called *nisus formationus* or 'organising force'; (2) The *Lex Adaptionis*, or adaptive tendency; (3) The *Lex Hereditatis*, or tendency to reproduce both the original form and its acquired modifications. We have always to consider the organising force in relation to all surrounding forces – a relation succinctly expressed in the word Adaptation ... the Organism only preserves its individuality by synchronising its forces with the forces which environ it.¹⁰

Lewes remarks elsewhere, 'a Monad is an organism; a Cell is an organism; a Plant is an organism; a Man is an organism'.¹¹ Lewes's discussion of the relationship between organism and medium helps one understand why Eliot strives to recreate the medium of her characters in such detail: 'It is the habit of my imagination to strive after as full a vision of the medium in which a character moves as of the character itself' (*Letters*, IV, 97) and elucidates her comment in *Felix Holt* that 'there is no private life which has not been determined by a wider public life'.¹² Lewes defines the medium as 'the sum of the relations which the organism maintains with external agencies'.¹³ He recognized, however, that there were essential differences between a man's relationship to his social medium and an animal's relationship to its natural medium despite the apparent similarities between the two, as I shall discuss later.

But it did seem on the surface that this evolutionary model could be used to describe the human individual's relationship to his or her social environment, and this disquieted many in the Victorian period and beyond. Darwin had after all formulated his theory from an analogy between Malthus's model of society and nature. Lewes says that '[u]nless the organism can adapt itself to the new External Medium by the readjustment of its Internal Medium, it perishes'.¹⁴ Would it not be logical and justifiable for human individuals to see their relationship to society as one of struggle and adaptation in an effort to survive and thrive at any cost? Lewes's summary of Darwinism brings out the possible social dangers of seeing analogies between a non-human organism's relationship to nature and the individual's relationship to his or her social medium:

We have seen that Life, and all the forms of Life, result from the relation of the Organism and the Medium. Mr Darwin has shown how this relation can only be maintained through an incessant struggle. First, the Organism has to struggle against all those external forces which are unfavourable to its constitution, when their motions do not synchronise with its motions; in this struggle it succeeds by adapting itself to them, that is, by adjusting its motions to theirs. Next it has to struggle with other organisms, to eat or be eaten by them. Thirdly, it has to struggle

with rivals, and surpass them in securing the means for the preservation of its substance and the propagation of its kind. Contending against such manifold and ever-present forces of destruction, it is clear that every slight superiority which the Organism may develop will tend to bring it more and more into synchronism with external forces, cosmical and organic, and thus will be secured the 'survival of the fittest', as Mr Spencer happily phrases it.¹⁵

If it was believed that such an account also applied to human beings in society, then it is plain why Eliot would have explored in her fiction the implications that could be drawn from natural selection. Might it not lead many people to believe that those who devoted themselves entirely to self-interest would adapt better to changes in their environment than those who adhered to firm moral values? Would the latter not find it more difficult to adjust to social change and to compete in the struggle for existence? Also, if people came to believe that moral conduct had no transcendent basis and was a purely human code having no ultimate authority, another idea Darwinism could be used to support, why should they allow it to act as a restraint on their self-interest? If such ideas became a part of people's moral and social thinking, then society might become increasingly 'Darwinian': a place of struggle and competition among self-interested individuals who were prepared to adapt in any way necessary to ensure their own advantage and survival.

Darwin himself helped to promote such ideas by his view that humanity was not essentially different from the lower animals, which he did not develop until *The Descent of Man* in 1871 but which was a clear implication of the *Origin*,¹⁶ and also by the blow he inflicted on traditional world views by his theory. Spencer similarly encouraged the notion that society could be thought of in evolutionary terms. In fact, any examination of the literature on Darwinism shows that many Victorians, both scientists and non-scientists, were ready to apply natural selection and the struggle for existence to human society. For example, Ernst Haeckel, one of the foremost defenders of Darwin, clearly applied the struggle for existence to human beings: 'This great competition for the necessities of life goes on everywhere and at all times, among human beings and animals as well as among plants ... You need only cast a glance at human society, where this competition exists everywhere, and in all the different branches of human activity.'¹⁷ James Sully, a friend of Lewes and Eliot, expresses a similar view: 'It is, no doubt, true that even in the most advanced communities natural selection still plays a certain part. Thus all competition between individuals for wealth, public position, fame, &c., illustrates this principle.'¹⁸ Alfred Russel Wallace, joint discoverer of the theory of natural selection, took a gloomy view of the social effect of natural selection: 'Among civilised nations at the present day it does not seem possible for natural selection to act in any way so as to secure the permanent advancement of morality and intelligence.'¹⁹ Huxley in his Romanes lecture was also worried by the social implications of natural selection. Society could

only progress, he said, if 'ruthless self-assertion' were restrained and if 'the gladiatorial theory of existence' were repudiated. He relates 'the fanatical individualism of our time [to] attempts to apply the analogy of cosmic nature to society'.²⁰

One of the most interesting books written on the consequences of Darwinism, a book read by Darwin himself and which he recommended to Wallace,²¹ is *The Creed of Science* by William Graham, published in 1881. Graham's view that Darwinism could lead to the emergence of nihilistic self-seekers is close to Eliot's own view as reflected in her fiction, as I shall go on to discuss. He draws the following implications from the struggle for existence:

Why should we follow disinterested principles against our clear self-interest, the first of obligations, on the evolution theory of life as a ceaseless competitive fight? It is not open to the evolutionists, as it was to the benevolence moralists, to say we follow them because we derive greater pleasure and satisfaction from them. And when a collision arises, such as must constantly happen, between the self-asserting and the self-forgetting impulses, between our supposed interest and conscience, why may we not deny the authority of Conscience, that can only show such questionable credentials of her claims to rule as a mere inherited tendency amounts to? For this fact of inherited tendency is all that Darwin and Spencer give us on which to found the right of conscience to be ruler of our actions.²²

He goes on to argue that if virtue is only the result of convention, the selfish man can easily rationalize it away when it conflicts with his self-interest. If evolutionary thinking becomes generally accepted the result will be '[a] deluge of immorality and moral materialism as bad as immorality' which will eventually destroy society.

These social and moral implications of Darwinism were the more disturbing to many Victorians since Darwinism also inflicted the greatest ever blow on the deep-seated anthropocentric idea that there was order and purpose in the universe. In contrast to all previous religious and moral systems, Darwin's world, it could be argued, seemed to consist only of blind chance, struggle and adaptation. Darwinism could then easily be used to support the view that there was no moral order in the world which urged human beings to accept a morality that transcended self-interest. Haeckel strongly proclaimed that Darwin's theory destroyed all basis for belief in a moral order: 'the "moral ordering of the world" is evidently a beautiful poem which is proved to be false by the actual facts ... It exists neither in nature nor in human life ... The terrible and ceaseless "Struggle for Existence" gives the real impulse to the blind course of the world.'²³ He dismisses notions of order and purpose and a creator as 'childish anthropomorphism'.²⁴ Some Victorians found the emphasis on chance in Darwin intolerable: 'That this ordered Cosmos is not from necessity or chance, is almost a self-evident fact ... Is it by chance that light and heat cause plants to carry on their wonderful operations?'²⁵ Even Wallace was unable to accept the lack of purpose. The world and the universe, he wrote, 'are as they

are, firstly, for the development of life culminating in man; secondly, as a vast school-house for the higher education of the human race in preparation for the enduring spiritual life to which it is destined'.²⁶ He hoped that this doctrine would appeal 'to all who accept the view that the universe is not a chance product'. William Graham in *The Creed of Science* thought that the substitution of chance for purpose and design would have disastrous effects. If Darwin is right, all theism is worthless, and even worse, 'it was chance that stumbled upon every living thing, as well as that unique thing, the human consciousness, with all its wonderful content – Art, Science, Morality'.²⁷ But he goes on to say that this cannot be accepted, as the belief in order and purpose is a need of the mind.

The application of natural selection and the struggle for existence by analogy to society and to the social and moral life of humanity, and the blow the theory inflicted on the notion of design and purpose in the universe, were probably the two most serious implications of Darwinism for many Victorians, though one should point out perhaps that most people were able to reconcile evolution with concepts of order that were consoling, such as Spencer's translation of natural selection into the concept of 'survival of the fittest', and identifying the 'fittest' with the best. It is very probable that Eliot accepted some of Darwin's conclusions before the *Origin* appeared, such as the transmutation of species and that humanity was the product of an evolutionary process, and Feuerbach had already shattered for her anthropocentric world views. But Darwin made the dangerous implications of such ideas much clearer, not just to a few intellectuals but to anyone who cared to read his book and draw a few simple conclusions, the kind of conclusions drawn by Graham, for example:

[T]hese facts of competition and chance ... bring home to the individual in the thick of the competitive and pitiless struggle, the fact and the reminder that life is still, in spite of our moral progress, in a real and most serious sense, a struggle of each for himself, and a struggle not merely against his competing fellows, but also against the threatening chapter of contingencies from within and without.²⁸

Eliot's fiction anticipates such conclusions being drawn from Darwinism, and I shall try to show that it was an important concern of her novels to explore and offer a critique of the kind of calculating and amoral individualism to which such thinking could lead. But before focusing on Darwinism in her fiction one needs to consider further the basic grounds of her critique: though there may be some analogies between human beings' relationship to their social environment and non-human organisms' relationship to their natural environment, it was invalid to see the relationship between the human individual and society in terms of struggle and adaptation, principally because there were crucial differences between a social and a natural environment which created a fundamental dissociation between human consciousness and animal consciousness, transforming totally the nature of the human individual's relationship to society and other human beings.

II

That this was the attitude to Darwinism that emerges in Eliot's fiction is supported by considering Lewes's detailed critique of social applications of Darwinism in his book, *The Study of Psychology*, the fourth volume of his *Problems of Life and Mind*. Eliot was integrally involved with its production, assembling it from Lewes's notes after his death. Not only is it almost certain she agreed generally with his views on the subject but also revised his text in the light of her own thinking.

Lewes criticizes how Darwin applies the theory of evolution to humanity. He emphasizes that human beings are social animals, and this fact makes humanity utterly different from the natural animals, so that any comparison between humans and animals cannot leave this out of account:

Biology furnishes both method and data in the elucidation of the relations of the organism and the external medium; and so far as Animal Psychology is concerned this is enough. But Human Psychology has a wider reach, includes another important factor, the influence of the social medium. This is not simply an addition, like that of a new sense which is the source of new modes of Feeling; it is a factor which permeates the whole composition of the mind. All the problems become complicated by it. In relation to Nature, man is animal; in relation to Culture, he is social ... Culture transforms Nature physically and morally ... The organism adjusts itself to the external medium; it creates, and is in turn modified by, the social medium, for Society is the product of human feelings, and its existence is *pari passu* developed with the feelings which in turn it modifies and enlarges at each stage.²⁹

Thus biology can never be used on its own to understand humanity; sociology must be taken into account. In Lewes's view Darwin is not sufficiently aware of this.

In a section entitled 'Differences of Animal and Human' Lewes takes issue with Darwin. In *The Descent of Man* Darwin had said that there was no fundamental difference between humanity and the higher animals in mental faculties, but Lewes thinks Darwin fails to distinguish between 'functions' and 'evolved faculties'. By function he means the native endowment of an organ; by faculty he means 'its acquired variation of activity'.³⁰ Though humans may be similar to the higher animals in terms of organic functions, in faculties there is scarcely any comparison. The acquirement of the faculty of language by human beings has totally transformed their animal functions. Both an ape and a man have hands, 'but the ape's faculties are not a fiftieth part of those performed by the hand of man'.³¹ In the same section Lewes goes on to make the following important distinction between human beings and animals:

Animals have egoistic impulses; they have scarcely any sympathetic altruistic impulses beyond the sexual and the parental. They manifest a certain tenderness towards young and small animals (probably a derivation of the parental instinct), but this tenderness vanishes in the presence of any egoistic impulse.³²

He contrasts the behaviour of a baboon and a human mother. In the case of human responses, language allows the human mother to transform a maternal instinct into a maternal sentiment because it can communicate the results of the experience of others to those who have not personally experienced them, whereas the baboon or any animal only has its personal experience. Thus a human mother can appreciate the claims of offspring in general, not just her own. She can have an 'intellectual appreciation of the claims of the helpless' which is denied to a baboon. Lewes goes on to say that

[t]he law of animal action is Individualism; its motto is 'Each for himself against all'. The ideal of human action is Altruism; its motto is 'Each *with* others, all for each'.³³

Though animals may be incapable of humanity's most degraded acts, they can have no virtues:

It is true that animals have no virtues; for Virtue is the suppression of our egoistic impulses to promote the welfare of others; and animals are incapable of this conception. Their instincts lead directly to actions, never to ideas. Hence, while they share with man the sexual instinct they know nothing of Love.³⁴

It is the influence of the social medium which is responsible for the basic difference between the psychology of human beings and that of animals, though Lewes admits that in all other respects humanity is similar: 'to the three great factors Organism, External Medium, and Heredity, which it has in common with Animal Psychology, it adds a fourth, namely, relation to a Social Medium.'³⁵ He goes on to state more fully his disagreement with Darwin's view that there is no essential difference between human beings and animals in their mental faculties, stressing the crucial role played by language:

I hold, indeed, that the mental *faculties* of man are developed out of mental *functions* which animals share with man; but these faculties, when developed, constitute as broad a line of demarcation, a barrier as impassable, as that between the vertebrate and invertebrate structure. The moral and higher intellectual functions of man can no more be explained by reference to the animal functions alone than the flight of birds can be explained by the creeping of reptiles, though both are reducible to mechanical and physiological principles. Just as birds have wings, man has Language ... Language enables man's intelligence and passions to acquire their peculiar characters of Intellect and Sentiment. And Language is a social product of a quite peculiar kind. (Emphasis in original)

He emphasizes the difference between human and animal society:

In the so-called animal societies, there is apparently nothing beyond an aggregation of individuals, with some division of employments; there is no subordination or co-ordination – only co-operation; no power invested in individuals and classes; no command and obedience; no relinquishment of personal claims; above all, they have developed nothing like the Family as the social unit, and Tradition as the social experience.³⁶

Lewes then discusses the differences between humans and animals with regard to morality. He accepts that animal emotions may constitute 'a rudimentary moral sense', but they must be socially developed before they can become ideas of what is right and wrong. Though he admits that some people are only barely susceptible to the social transformation of this animal moral sense, the development of human society based on language has nevertheless created a moral consciousness in human beings which makes humans utterly different from the animals. He goes on to account for the basic moral differences between humanity and animals:

Thus while man, in his moral beginnings, has a marked kinship with the animals, whose life, like his own, is regulated by desires and intelligence, he stands apart in the attainment of moral conceptions and of organised ethical tendencies, which are correctly called moral intuitions. These latter form a justification for the *a priori* intuitional doctrine; but its explanation lies in the principles of experience. We have intuitions of Right and Wrong in so far as we have intuitions of certain consequences; but these must have been learned in our own experience or transmitted from the experience of others. Some writers who are disposed to exaggerate the action of Heredity believe that certain specific experiences of social utility in the race become organised in descendants, and are thus transmitted as instincts. With the demonstrated wonders of heredity before us, it is rash to fix limits to the specific determinations it may include; but the evidence in this direction is obscured by the indubitable transmission through language and other social institutions.³⁷

Lewes is, then, very reluctant to go beyond empiricism to any doctrine of innate moral ideas to account for humanity's moral differences from the animals. The fact that human beings live in human society and possess language adequately explains these differences.

Lewes's discussion is particularly interesting since he is a strong supporter of Darwin's theory and accepts almost all of his basic ideas. The only fundamental disagreement is Lewes's emphasis on the importance of the social medium and language on humanity's development. But this gave him the basis for rejecting completely the applications of Darwinism to society that I have already discussed, such as those by William Graham. Human beings as social and language animals could not think of themselves in isolation from others and devote himself utterly to individual self-interest. It may be natural for animals to lead lives of complete individualism and to find nature a struggle for existence, but this had very little application to human beings and their relationship to society. It was thus invalid to use Darwinism to support the view that society was a struggle among individuals with the fittest surviving and as a justification for leading a life of amoral self-interest. Nor was it valid to argue that by undermining metaphysical or religious beliefs Darwinism had destroyed the basis of moral values, since morality was a natural social product which could be justified in purely human terms.³⁸

It seems almost certain that Eliot would have been in agreement with Lewes in his criticism of Darwin. For her, as for him, the importance of the social medium was fundamental, and any attempt to compare human beings and animals which failed to take adequate account of this must have seemed simplistic. In a review of Lewes's *Problems of Life and Mind* in *Mind* in 1881, the reviewer remarked, 'On the whole it will perhaps be just to credit Lewes with the doctrine of the dependence of the Human Mind upon the Social Medium as his signal and crowning discovery.'³⁹ It is very probable that Eliot influenced this aspect of Lewes's thought, but in any case she would almost certainly have agreed with him on the importance of social influences in shaping the human mind, and it was this which enabled both of them to accept Darwin's theory but to oppose and reject the implications many other Victorians drew from it.

III

Is Eliot's position on Darwinism a significant part of her fiction? I shall argue that it is. In particular, the figure of the amoral individualist who recurs to a greater or lesser extent from *Silas Marner* onwards has strong Darwinian connotations. This figure can be seen clearly in *Felix Holt*, a novel in which the Darwinian resonances are especially strong, the most clearly Darwinian character being the somewhat ironically named Christian.

Christian is a cold, calculating, isolated individual who is determined to serve his own interests at all times. The Darwinian aspect of his character is exemplified in his willingness to adapt himself to any set of circumstances so that he can exploit each situation that arises for his own advantage. But the novel shows that despite all his calculation and his willingness to make any adjustment to safeguard himself, he cannot always be master of events:

The fact was that Mr Christian, who had been remarkable through life for that power of adapting himself to circumstances which enables a man to fall safely on all-fours in the most hurried expulsions and escapes, was not exempt from bodily suffering – a circumstance to which there is no known way of adapting one's self so as to be perfectly comfortable under it, or to push it off on to other people's shoulders. (*FH*, 120)

The language of this passage alludes to Darwinian thinking in its emphasis on 'adapting to circumstances' which causes Christian to fall on all fours like an animal. The somewhat cumbersome plot development by which Christian must take opium for a bodily ailment, falls asleep and then has his pocket cut off by Scales while carrying an important letter does have a thematic significance. Christian thinks he can exploit chance and circumstance for his own purposes, and he is successful in doing this most of the time, but he cannot adapt himself to

every situation and the sheer unpredictability of events cannot be calculated on. Even in its own terms a life devoted to complete self-interest is not always successful. When events go against men like Christian who gamble on being master of every situation and who rely on deception to give them an advantage over others, they are extremely vulnerable.

Christian is the exemplification of Darwinian man as described in Graham's *The Creed of Science*, one who implicitly poses the question, 'Why should we follow disinterested principles against our clear self-interest ... on the evolution theory of life as a ceaseless competitive fight?':

Christian, having early exhausted the more impulsive delights of life, had become a sober calculator; and he had made up his mind that, for a man who had long ago run through his own money, servitude in a great family was the best kind of retirement after that of a pensioner; but if a better chance offered, a person of talent must not let it slip through his fingers. He held various ends of threads, but there was danger in pulling at them too impatiently. (*FH*, 208)

He is prepared to adapt himself to any set of circumstances for his own advantage, being eager to exploit chance in his own interest and living a life of calculation which takes no account of moral conduct. He can be masterful or servile depending on which seems necessary in the circumstances. To his employer he is servile, but to Mr Lyon he behaves masterfully. He believes he can live without ties, without acknowledging his past or the consequences of his actions. He has even adopted another man's identity for his own advantage.

But *Felix Holt* shows that this 'Darwinian' form of life is humanly quite untenable. The attempt to live it requires that he keep his motives and feelings hidden from everyone, for to reveal himself to anyone would leave him vulnerable. He must therefore choose isolation and alienation. A life devoted to total individualistic self-seeking cannot be lived openly in human society, for he cannot help being conscious of how others will judge his motives and actions. It must be secret and hidden. It is an 'unnatural' human life. Though devotion to individual self-interest at all times may be 'natural' for an animal, it is unnatural in human society where people cannot think of themselves in isolation from others since language and thought are necessarily shared and create an intrinsic connection between self and other. Although Christian also believes the past has no connection with his present self, the novel suggests that 'a man can never separate himself from his past history', as the epigraph to Chapter 21 puts it. This is true in two senses: when others find out about Christian's past this leads them to judge him in a certain way, and he is affected by this; it is also impossible for him to stop thinking of his life as a continuity.

Christian's individualism also involves a struggle with other individualists, and this has particular Darwinian implications. Jermyn and Johnson are as devoted to self-interest as he is, and this leads to a struggle taking place between

them. Jermyn is confident that he can get the better of his adversaries, but the following analogy with chess is used to describe the nature of his position:

Fancy what a game at chess would be if all the chessmen had passions and intellects, more or less small and cunning; if you were not only uncertain about your adversary's men, but a little uncertain also about your own; if your knight could shuffle himself on to a new square by the sly; if your bishop, in disgust at your castling, could wheedle your pawns out of their places; and if your pawns, hating you because they are pawns, could make away from their appointed posts that you might get checkmate on a sudden. You might be the longest-headed of deductive reasoners, and yet you might be beaten by your own pawns. You would be especially likely to be beaten, if you depended arrogantly on your mathematical imagination, and regarded your passionate pieces with contempt.

Yet this imaginary chess is easy compared with the game a man has to play against his fellow-men with other fellow-men as his instruments. He thinks himself sagacious, perhaps, because he trusts no bond except that of self-interest; but the only self-interest he can safely rely on is what seems to be such to the mind he would use or govern. Can he ever be sure of knowing this? (*FH*, 236)

The self-interested individualism of men like Jermyn, Christian and Johnson makes the social medium resemble a Darwinian world of competition and struggle, but there is no security for the human individual who leads this form of life, as the above passage shows. It can function successfully only if other people lead ordered, moral lives while the individualist is prepared to deceive and exploit them for his own advantage. But when others are as self-interested as he himself and he must struggle against them, he can never be secure or free from fear. Eliot is suggesting that it is humanly intolerable to have to sustain such a mental state at all times.

Jermyn, like Christian, is a character with Darwinian associations. His animalistic qualities, the 'savage side' (*FH*, 98) of his nature is much emphasized. The imagery used to describe him has evolutionary implications. Christian says of him, 'He's as sleek as a rat, and has as vicious a tooth. I know the sort of vermin well enough. I've helped to fatten one or two' (*FH*, 182). This image is continued in a later passage concerning him: 'But though a man may be willing to escape through a sewer, a sewer with an outlet into the dry air is not always at hand' (*FH*, 331). As Harold Transome puts pressure on him and he is close to ruin, he is prepared to resort to any means or any adaptation in order to survive. A passage used to describe him when he has no longer any room to manoeuvre is particularly Darwinian:

A doomed animal, with every issue earthed up except that where its enemy stands, must, if it has teeth and fierceness, try its one chance without delay. And a man may reach a point in his life in which his impulses are not to be distinguished from those of a hunted brute by any capability of scruples. Our selfishness is so robust and many-clutching, that, well encouraged, it easily devours all sustenance away from our poor little scruples. (*FH*, 380)

Eliot is not denying or rejecting the idea that human beings have anything in common with the lower animals, quite the contrary. The main difference,

however, between humans and animals is, as Lewes argued, that human consciousness has been transformed by socialization and the acquisition of language. But in a pre-social condition a human being is little different from an animal. This is most clearly seen by considering the most single-minded egotist in the novel, Harold Transome's young son, Harry. He has been brought up virtually deprived of social influences, with the result that his animal qualities are almost untransformed. How close he is to being an animal is shown in the following passage, describing his meeting with Esther:

This creature, with the soft broad brown cheeks, low forehead, great black eyes, tiny well-defined nose, fierce biting tricks towards every person and thing he disliked, and insistence on entirely occupying those he liked, was a human specimen such as Esther had never seen before, and she seemed to be equally original in Harry's experience. At first sight her light complexion and her blue gown, probably also her sunny smile and her hands stretched out towards him, seemed to make a show for him as of a new sort of bird: he threw himself backward against his 'Gappa', as he called old Mr Transome, and stared at this new-corner with all the gravity of a wild animal ... Seeing that Esther bore having her hair pulled down quite merrily, and that she was willing to be harnessed and beaten, the old man began to confide in her, in his feeble, smiling, and rather jerking fashion, Harry's remarkable feats: how he had one day, when Gappa was asleep, unpinned a whole drawerful of beetles, to see if they would fly away; then, disgusted with their stupidity, was about to throw them all on the ground and stamp on them, when Dominic came in and rescued these valuable specimens; also, how he had subtly watched Mrs Transome at the cabinet where she kept her medicines, and, when she had left it for a little while without locking it, had gone to the drawers and scattered half the contents on the floor. But what old Mr Transome thought the most wonderful proof of an almost preternatural cleverness was, that Harry would hardly ever talk, but preferred making inarticulate noises, or combining syllables after a method of his own. (*FH*, 316–17)

Harry's rejection of the defining human attribute of language makes his animality apparent. Extreme individualists like Jermyn or Christian are tending towards this pre-social condition of animal egoism. Their behaviour implies a repudiation of the social aspect of human life and a wish to return to a purely animal form of life.

Jermyn and Christian are not the only characters in Eliot's fiction in whom one can see the influence of Darwinism shaping her conception. Her most detailed and psychologically subtle characterization of an individualist of the Christian type is Tito in *Romola*, and Lapidoth in *Daniel Deronda* is perhaps the most degraded example of the same type of character. The major critique of all of these characters is that in attempting to lead lives of almost animal-like egoism, in being prepared to employ any means to exploit circumstances and to make any adaptation to their environment which suits their own purposes, they ignore the fact that such a form of life is unnatural for human beings as social animals. Human consciousness has been transformed by social influences so that a human being cannot think of himself or herself in isolation from others or from society. A totally individualistic life can only be lived by the rejection

of a human identity. Eliot's critique may have drawn on Aristotle's *Politics*, which argues that since all people are born into the 'polis' or a community and since the 'polis' ultimately exists for the sake of the 'good life', the ethical is a necessary part of what it means to be human.

One significant effect of Darwinism on Eliot's novels is thus to develop her preoccupation with human egotism and to place it within a cultural context. The very fact that egotism is a significant theme in her fiction before the publication of the *Origin* would have made her even more aware than her contemporaries of the social and moral dangers of Darwinism's potential use as a justification for naked egotism and the pursuit of self-interest. Although she did not need Darwin to affirm humanity's animal origins or to conclude that people were inherently egotistic, a theory with a scientific basis that could be seen as justifying and validating egotism and selfish behaviour could clearly be socially dangerous. However, unlike commentators such as Graham, Eliot does not draw totally negative and pessimistic conclusions from Darwinian ideas. Her fiction suggests that, since human beings are social animals whose consciousness has been transformed by language and social influences, they are capable not merely of transcending this animal egotism but of sublimating it. Characters such as Felix Holt or Mr Lyon are not less basically egotistic than the likes of Christian, Jermyn or Tito, but because of their ethical sense they are able, most of the time at least, to sublimate their egotistic drives or exercise renunciation. For Eliot the danger of applying Darwinism simplistically to human beings and society is that it could provide philosophic support for an ideology that had no place for sublimation or renunciation. A comment by Lewes shows that he (and Eliot) found Darwinism in itself no threat to ethical values: 'All the animal Impulses become blended with human Emotions. In the process of evolution, starting from the merely animal appetite of sexuality, we arrive at the purest and most far-reaching tenderness.'⁴⁰ Even if human beings are innately egotistic and subject to animal impulses, the animalistic side of human's nature can be transformed or overcome through the influence of a purely human consciousness.

Darwinian issues are evident also in *Middlemarch*. One recalls Henry James's comment: '*Middlemarch* is too often an echo of Messrs Darwin and Huxley.'⁴¹ The influence of Darwinism is probably most clearly present in the imagery of the novel, particularly in relation to Lydgate: 'Lydgate was much worried, and conscious of new elements in his life as noxious to him as an inlet of mud to a creature that has been used to breathe and bathe and dart after its illuminated prey in the clearest of waters.'⁴² A comparison between Dorothea and Lydgate in terms of egotism raises questions similar to those discussed above in relation to *Felix Holt*. The difference between them is not that she possesses less basic egoism but that she is much more capable than he is of sublimation and renunciation. When her ego is put under the greatest stress as a result of being snubbed by Casaubon after he has consulted Lydgate about his health, she is able to overcome the egotistic desire to hurt him because she realizes this would

be an action false to her whole self which is both social and natural; the desire to hurt him is an animal impulse which belongs to the moment and can be consciously resisted. But Lydgate tends to succumb to such egotistic impulses. His passion for Laure is the obvious example: 'He knew that this was like the sudden impulse of a madman – incongruous even with his habitual foibles. No matter! It was the one thing which he was resolved to do' (*M*, 150). He is also inclined to adapt himself to circumstances when this favours his narrow self-interest in a way which would be impossible for Dorothea. He votes for Tyke along with Bulstrode when all his better feelings urge him to support Farebrother. When his money troubles increase and Rosamond's stronger will is gradually dominating him, the pressure on him to adapt in any way necessary to survive becomes great. His former idealism crumbles and he takes the view that 'chance has an empire which reduces choice to a fool's illusion' (*M*, 651). He had earlier been determined not to accept money from Bulstrode, but as his difficulties increase this determination collapses and he adapts to circumstances, gratefully accepting without adequately taking into account Bulstrode's motives. The contrast with Ladislaw who rejects Bulstrode's money is clear.

Characters like Dorothea and Ladislaw have an idea of themselves present to their consciousness which enables them to resist animal impulses or the pressure to adapt easily to any situation for the sake of self-interest. Though Lydgate is not as 'Darwinian' as characters like Jermyn or Christian and possesses some idealistic qualities, he has insufficient control over his egotism. It is even suggested that his scientific work is basically motivated by a desire for power. Animal egotism, then, tends to predominate in Lydgate and makes him subject to impulses of the moment and influences him to compromise for self-interest when circumstances go against him.

It is in *Daniel Deronda* that we find possibly Eliot's most Darwinian character. Lapidoth is a man utterly dominated by his own interests and prepared to adapt himself to any set of circumstances if it would prove profitable. This quality is linked with gambling in the novel, and of course the emphasis on chance in the survival of species in Darwin implied that the whole evolutionary process could be compared to gambling. Lapidoth is an actor and a compulsive gambler who continually thinks in terms of chance: 'I came to England with no prospect, but the chance of finding you' (*DD*, 632), and in Mordecai's home 'He began with the intention of awaiting some really good chance, such as an opening for getting a considerable sum from Deronda' (*DD*, 675). In him gambling is taken to the ultimate extreme:

The gambling appetite is more absolutely dominant than bodily hunger, which can be neutralized by an emotional or intellectual excitation; but the passion for watching chances – the habitual suspensive poise of the mind in actual or imaginary play – nullifies the susceptibility to other excitation. In its final, imperious stage, it seems the unjoyous dissipation of demons, seeking diversion on the burning marl of perdition. (*DD*, 662)

Lapidoth is prepared to adapt himself to any situation without being restricted by any moral scruples whatsoever. Even the thought of confronting Mordecai and knowing that his past acts towards his family will be condemned does not disturb him: 'Lapidoth had some sense of what was being prepared for him in his son's mind, but he was beginning to adjust himself to the situation and find a point of view that would give him a cool superiority to any attempt at humiliating him' (*DD*, 664), for 'his imagination [was] more wrought on by the chances of his getting something into his pocket with safety and without exertion, than by the threat of a private humiliation' (*DD*, 663). The intensity of Mordecai's condemnation does, however, take him by surprise, but even his apparent emotional breakdown is partly the assumption of another role to adjust to a difficult situation: 'and yet, strangely, while this hysterical crying was an inevitable reaction in him under the stress of his son's words, it was also a conscious resource in a difficulty' (*DD*, 665). Lapidoth does not seem to possess a human identity at all. Only self-interest and the need to survive at all costs motivate his actions. All else is secondary. He has virtually ceased to be human and lives only at an animal level of consciousness.

Darwinian associations are also a factor in Gwendolen Harleth's characterization. She too loves to gamble and to play roles, but unlike Lapidoth she retains a human identity even though this is sustained by guilt and neurosis. At first she is quite confident she can exploit chance for her own advantage: 'for being satisfied with her own chances, she felt kindly towards everybody and was satisfied with the universe' (*DD*, 85). She had been 'conscious that she held in her hands a life full of favourable chances which her cleverness and spirit would enable her to make the best of' (*DD*, 378). But when her family loses its capital she finds, like Lydgate, that the world is less malleable than she thought. She finds herself being forced to adapt to her environment to survive. She thought marriage to Grandcourt would have been a way out, but the truth about his past is a blow: 'A splendid marriage which presented itself within reach had shown a hideous flaw. The chances of roulette had not adjusted themselves to her claims' (*DD*, 201). Klesmer then destroys her hope that she could be a success as a singer. The pressures being exerted on her seem akin to those exerted on an organism placed in an alien environment and struggling to adapt. Mr Gascoigne thinks that she will adjust to the situation by marrying: 'Gwendolen was going to adapt herself to circumstances like a girl of good sense' (*DD*, 229).

As she finds less and less room to manoeuvre, pressures on her to marry Grandcourt increase. It is interesting that her eventual acceptance of him is not an act of will at all. Having been used always to act on impulse or from self-interest, she cannot exert her will to make the moral choice of refusing him: 'She could not let him go: that negative was a clutch' (*DD*, 257). Instead of being capable of a human decision to resist egotistic desires and external forces, she succumbs like an animal to pressure of circumstances. Although Eliot believes that human beings can be true to some idea or belief that can

be the focus for desire and impulse and so triumph over animal egotism, Gwendolen does not possess self-transcending ideals and her acceptance of Grandcourt after her promise to Mrs Glasher alienates her from her deepest feelings. But the psychological consequences of this that are so mentally and emotionally shattering for her indicate that unlike Lapidoth animal egotism does not virtually eradicate the human side of the self.

Gwendolen's relationship to Grandcourt also possesses an evolutionary aspect. He is compared to a 'sleepy-eyed animal on the watch for prey' (DD, 353). His 'delight in dominating' (DD, 289), derived from animal egotism, is much emphasized in the novel. A comment by Lewes on animal behaviour seems relevant to him:

The animal must destroy or else it could not feed. A rival threatening to take some of this food rouses Anger, the emotion of a thwarted impulse. The thwarted sexual impulse calls out the same feeling. Derived from this will be in the higher imaginative animals the love of Domination: the desire to make others afraid of, or subservient to us.⁴³

This passage from Lewes helps to define the sexual sadism underlying Grandcourt's relationship with Gwendolen. He is also an aristocrat, but one who no longer has a social function. In the past his dominating qualities might have found a viable social expression – it is said that he might have won a reputation 'if he had been sent to govern a difficult colony' (DD, 507) – but deprived of that they have degenerated into sadism.

This allusion to the Governor Eyre scandal perhaps denotes an awareness that sublimations of animal egotism and the desire to dominate can become perverted or distorted so that they can lead to and provide justifications for tyranny or oppression and thus have far worse consequences than succumbing to a purely animal impulse. The novels suggest that sublimations are not without risk and need to be open to critique; for example, Savonarola's idealism in *Romola* is seriously flawed, as Romola eventually recognizes, as is to a much greater degree that of the prior in *The Spanish Gypsy*, a committed inquisitor who feels justified in committing mass murder. Even the apparently positively presented idealism of Felix Holt and Mordecai is viewed with some ambiguity. Felix in trying to direct a drunken crowd out of harm's way is indirectly responsible for the death of a policeman and also for creating a worse situation than existed originally since he provides an opportunity for 'the multitudinous small wickednesses of small selfish ends' to issue 'in widely-shared mischief that might yet be hideous' (FH, 269). Conventional readings of Mordecai tend to see him and his optimistic proto-Zionist idealism as being presented in an unambiguously positive light. But, as I shall discuss later, the novel suggests that Mordecai as idealist is naïve about the dark side of human nature and that prophets and visionaries are 'in dangerous company' (DD, 436) with fanatics and mad people as well as with the likes of Copernicus and

Galileo. It may be fortunate that Mordecai's idealism is going to be carried forward by the more knowing Deronda. Darwinism, by apparently proving that the human species was descended from lower animals, also gave great impetus to pessimistic interpretations of human nature as one can see from its influence on neo-Gothic texts such as *Dr Jekyll and Mr Hyde* and *Dracula*. The epigraph to *Daniel Deronda* with its portentous first line, 'Let thy chief terror be of thine own soul', suggests there are links between *Daniel Deronda* and such texts. Though, as I have argued, Eliot subjects Darwinism as applied to the human situation to serious critique, she does not deny that the darker messages that can be drawn from it have credibility or that higher ideals that refuse to acknowledge and thus fail to confront those darker messages may be more dangerous than giving way to animal impulse.