

# Teaching of Hate: The Influence of Biological Evolution on Modern Literature

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## ABSTRACT

*A survey of literature to determine the influence of the theory of evolution on modern literature as a whole was completed. Many well-known examples of literature which have been accepted as having literary merit were evaluated. As an extremely wide variety of literature is available, the focus was on the more well-known works by leading authors, avoiding obscure, lesser known and purely escapist literature. It was concluded that evolution has had a pronounced effect on popular literature, influencing it to stress values in a decidedly different direction than literature in the past.*

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## INTRODUCTION

Literature is a form of human expression that is typically used to discuss contemporary concerns and teach values and attitudes. The word **literature** is derived from the Latin *littera* which refers to the letters in the alphabet. Literature can be either oral or written, although the term usually refers to the latter form. Most literature focuses upon humans and sometimes animals, is socially redeeming and has a profound, vivid **emotional impact**. Thus, the Oxford Dictionary says that literature is ‘*writings whose value lies in the beauty of form or emotional effect.*’ A key difference between literature and most other writing is that the former is read for pleasure and produces an emotional response, a quality almost all connoisseurs of literature seek. The theme of a literary work could be some moral concern or to teach the reader something about life. Although the borderline between literature and non-literature is not always clear for the reason that much literature is highly informative, stories which are primarily escapist, trite, or lack profundity, and writings which are primarily informative, such as technical and scholarly works, are usually not classified as literature.<sup>1</sup>

A principal advantage of literature is that it reveals much about humans and the nature of social problems — and often what can be done about them — in such a way that we desire to read it. A work of literature often has far

more of an impact on the reader, drives the point home much more vividly, and is often more effective in doing so than almost any other medium. A major purpose of literature in general is that it offers a less painful and more effective way to learn about life and its problems. Actually all literature proper is didactic, but it says something about life in a way that has far more impact than a psychology text. Using literature to communicate insight about important social issues is as old as writing; the earliest human writings on most subjects, even science, were literary in style and form. Historically, the division between what is literature and what is an academic tome is far less sharp than it is today. A major theme of most early literature was around the observer and his or her thoughts. The story was first, and the fact that one can learn a great deal from the story was often important, but secondary. Literature was probably the first and major non-oral source of insight about almost every topic. Many works which are more philosophy than history are today classified as literature — the **Dialogues of Plato** is a good example. This fourth century BC work about philosophy displays enormous narrative skill and high quality prose.

## THE CONTENT OF LITERATURE

Although the subject matter of literature is as wide as the human experience itself, it is all influenced by and conveys human experience, thought, values, goals, mor-

als and folkways that existed at the time it is written. It also openly reflects many of the stereotypes and archetypes of a people, and is not uncommonly written to **react** to some stereotype or problem of a society. Literature typically predicts, and often leads, social reformations. It also virtually always trails them. **Mein Kampf**, **Uncle Tom's Cabin**, **A Mind That Found Itself** and **Hull House** are all good examples of the profound influence that literature has had on society, both for good and evil.

As the **Encyclopedia Britannica** states, '*Literature, like all other human activities, necessarily reflects current social and economic conditions*'.<sup>2</sup> Literature also has a definite relationship with all of the other arts, including drama, plays and motion pictures. The influence of literature is for this reason not confined to stuffy libraries, but has a powerful influence on society as a whole. By this means, scientific discoveries and the general conclusions of scientists, can effectively filter down into the wider society. Much science knowledge is conveyed through fiction and is also the subject of many movies. Good examples include the highly successful **Star Wars** series, **Star Trek**, and **E.T.**

Literature is also prominently influenced by the general beliefs of a culture. In Western civilization, the predominant world view from the birth of Christ until the late 1800s was Christian and that which was derived from it. It was believed that God had created the world and everything in it, and this creation was for a specific purpose. Mankind's goal was to understand this purpose and live within it. Aside from local temporal rules, only one law existed which all humans must obey, and it was subdivided into two types, **divine** (God's law) and **natural** law. They were both from and by God, but one related to the physical world, the other to the spiritual world.

The Darwinian revolution brought a new comprehensive world view which was dramatically different from the beliefs that it replaced. It affected especially the hard sciences, but also all other academic areas. The new view taught that **mankind and the animals and even the plants were not created, but were the product of natural law, much time, and many chance factors**. It is fortuitous that we even exist, and **the only 'purpose' of life is the purpose that we create for it in our own mind**. In short, life has no purpose aside from that which we give it. The universe as we know it is the result of chance and the blind outworking of a series of events which were precipitated by the big bang.<sup>3</sup> Eventually, the sun will burn out, taking the earth with it, **and the millions of forms of life that evolved here will be forever destroyed unless we can colonize another planet soon**. This world view may be pessimistic, **but if it is true, is it not productive to take refuge in the illusion and fantasy of religion?**<sup>4</sup> This new world view is in many ways the polar opposite of the theological world view accepted by Western civilization until about the middle 1800s.<sup>5</sup>

While many hypothesize that we exist by some type of

naturalistic evolution called **syntropy** which is directed by innate forces and the natural outworking of natural law, most scientists do not accept this possibility.<sup>6</sup> As Proctor stated,

*'The impact of Darwin's theory was enormous. Scholars in both Europe and America, excited by the prospect of founding a science of man on biological principles, began to apply the principles of natural selection to the science and ethics of human society.'*<sup>7</sup>

Although opinions differed widely over just how Darwin's theory was to be applied to society, this drastic change in the predominant Western world view opened up a radically new window for literature.

Biological evolution by the late middle 1800s became accepted by a relatively high percentage of educated persons, and much of the literature is written by the educated classes. For this reason, one would expect that the evolutionary presuppositions, including the evolutionary view of the universe and *Homo sapiens*, would reflect itself in a large percent of the newer literary works. Herbert Spencer, regarded as the founder of the **Functionalist School of Psychology**, worked tirelessly propagating the view that mankind evolved from ape-like ancestors physically as well as mentally.<sup>8</sup> Spencer was not an unknown, but was internationally famous, having '*great influence on nineteenth century thinking*'.<sup>9</sup> His conclusion as to origins — that mankind was not created *ex nihilo* in the image of God in the Garden of Eden, but rather had an animal ancestry — was a belief which created a major new literary theme. Thousands of works, such as Robert Louis Stevenson's famous **Dr Jekyll and Mr Hyde**, were produced which reflected this new world view.<sup>10</sup> In the Dr Jekyll story, the primitive humanoid Mr Hyde was produced by a drug which caused the kind doctor's 'other side', his hidden animal past which resides in us all, to surface and wreak havoc on his victims.

Evolution has radically changed the way we look at not only ourselves, but also our society. This new world view taught that, just as the biological organism evolves from natural law, social systems likewise evolve into increasingly better entities. An 'unfit' social system will either die, be overthrown, or its population will conclude that it simply does not work and will consciously change it. The application of this ideal of biology to sociology was so consistent that this world view was called **social Darwinism**. Social progress, the adherents of this view concluded, **depended** upon the application of the natural law called natural selection. Conversely, they also believed that forcing societal structures which were not working to continue by government decree or by political force works against natural law and will eventually lead to disaster.

Herbert Spencer was also a major popularizer of the idea of individualism and *laissez-faire* capitalism. He concluded that the economic-political system which was openly based squarely on Darwinism was superior. *Laissez-faire* capitalism, he believed, allows the system to destroy

the weak, permitting the strong to survive and control, and by this process society as a whole can most effectively progress. Many of his contemporaries, such as Karl Pearson, were very concerned about the 'outcome of the Darwinian struggle' for society, concluding that the results of this 'law' was the 'ascendancy of the finest nation'. In their view, the best candidate was national socialism because under it society as a unit was stronger.<sup>11</sup> Spencer argued for this theory in one of the most influential of all social Darwinist works, **The Study of Sociology**. This best seller concluded that biological natural selection is intricately tied up with the survival and evolution of **all** societies. As an example of this law, Spencer states

*'... war has the effect of exterminating the weaker societies, and of weeding out the weaker members of the stronger societies, and thus in both ways furthering the development of those valuable powers, bodily and mentally, which war brings into play ... so long as all adult males have to bear arms, the average result is that those of most strength and quickness survive, while the feebler and slower are slain.'*<sup>12</sup>

An example of a negative trend in many societies is to send to war only the 'best grown and healthiest, leaving behind the physically inferior to propagate the race'. Spencer was no minor historical person, but is considered one of the founders of the science of sociology — a field that has had an enormous amount of influence in developing and modifying social policy. His books sold well, and he is still widely quoted in social science textbooks today. His works also had an enormous influence on his generation of literature and much of that written since.

## THE THEME OF LITERATURE UP TO 1800

A survey of Western literature up to the middle 1800s reveals that the vast majority contained religious or quasi religious themes.<sup>13</sup> Variations of **The Prodigal Son** story were favourites, although many examples were often disguised. One of the best selling books of all time, **Pilgrim's Progress**, has an overt religious theme — a worldly man finds religion, and learns that only therein can eternal happiness be achieved. The rise of Darwinian evolution saw a clear change in this literature theme: not only were far fewer books religious, but the type of theme and the specific values that were extolled changed drastically in most other books. The new theme, either openly or covertly, became the struggle of the strong, often the good against the weak. Pure strength, a new unfeeling manliness plus a selfish virility, were now all openly valued. A major form of literary genre today is a variation of this theme known as a 'rags to riches' story. Even true stories that highlight this possibility — such as Abraham Lincoln, Andrew Carnegie and Henry Ford — are still very popular today. They are readable, rewarding, and inspirational, and thus much extant literature is on this theme.

From Darwin's time forward, the theme in literature

became not only the struggle of the fit (and the hero was often obviously more fit), but the glorifying of virile men who were successful with both women and life by aggressively conquering them by brains and brawn, and whatever else they could exploit to do so. Rarely did these new heroes have hints of physical or mental handicaps and they often despised those who did. All handicaps were denigrated as evidence of weakness or inferiority. Those with them were less valuable as persons; very few novels and successful works of literature of any type featured a handicapped or less than physically perfect person.<sup>14</sup> Even shortness of physical stature is not esteemed in our heroes; virtually all are male, tall, well-built, strong, young and in abnormally good health.<sup>15</sup>

Wright concludes that people with disabilities most often appear in the media primarily in a disabled person's role, such as to collect money for charity, or to attempt to teach us a lesson.<sup>16</sup> She argues that persons with disabilities should appear in the media in such a way that their disabilities are largely ignored. This will convey that they are in most ways ordinary, living normal lives by their example, and it will show this, not by verbally touting this claim, but by example. She claims that her research located not a single character on television having a disability who is featured simply as 'another person'. If a person with a disability is shown on television, there is often much discussion about it and the story typically at least partially revolves around, not the person, but the disability. The only exception that comes to mind is Raymond Burr's role as a wheelchair detective.

Especially in film, how many heroes are anything less than a perfect specimen of a human being? Not only perfect, but an **ideal** specimen, taller than average, and rarely displaying mental weakness (except possibly in the romance area, which is a major part of the super hero role). They are as a whole presented as evolutionarily superior in the sense that Darwin pictured a 'fitter' human, and they prove it by their powerful, aggressive, quick-thinking behaviour.

Probably the best example of this is the enormous success of the so-called super heroes, Batman, Superman, Dick Tracy, and the like. Although the comic book genre is a popular rendition of this new super hero, many books, from the enormously successful James Bond to **Star Wars** and even the Hardy Boys, emphasize this theme. Potential or real heroes who have obvious physical weaknesses from small stature to minor flaws, even as minor as wearing a hearing aid, are rare. How many superheroes, even middle-aged ones, wear eye spectacles? The alter ego of Superman, Clark Kent, sports glasses but is also a mild-mannered wimp, representing the weak 'other side' of superman.

A review of the early Christian literature such as the ante-Nicene and post-Nicene fathers, illustrates the contrast.<sup>17</sup> Staniforth notes that historically, Christian writings — which was most of the western world's literature — had a genuinely pastoral concern, stressing helping

people over ideas and practice over dogma.<sup>18</sup>

### AN ILLUSTRATION OF THIS CHANGE

The survival of the fittest theme is far more prominent in the stories **since** the 1850s, and the survival of the **most devout and humble** is far more common in earlier literature. **The Canterbury Tales** for example (written by Geoffrey Chaucer who died in 1400) is far more oriented towards religious values than most post-1850 works. In most of his 'tales' religion plays a predominant, if not the central role, in the story. In the second tale, Cecilia is pictured as a devout Christian girl whose quiet, humble and meek way was extremely successful in converting others. When her husband's brother, Tiburtius, came to their house, he was soon converted and baptized. The government soon heard about the many conversions attributed to Cecilia, and consequently she and her converts were imprisoned. Their humility and vibrant suffering in silence was so impressive, though, that it converted the jailer and his whole family. For meekly suffering and refusing to make a pretence of being biologically and psychologically superior by engaging in the actions that the king required, such as making sacrifices to the pagan gods, they all lost their lives.

When Cecilia's husband Valerian and his brother Tiburtius were beheaded, the jailer saw angels carrying their souls to heaven — and the experience was so moving to those that saw this that many more were converted. In other words, **they refused to respond powerfully to their environment and overcome it by force but, true to their conversion, respond in a way that is the opposite of natural selection and consequently they all died, but in death eventually triumphed.** Cecilia, tried before the prefect Almachius, refused to deny Christ. Consequently, she was sentenced to die in a bath of red flames. With God's help, Cecilia survived the flames. Then the executioner tried to sever her neck — but three hits failed to kill her, and the law forbade a fourth try. She lived three days thereafter, during which time she continued to preach. When she died, her body was buried among the saints, and her house in Rome because the Church of St Cecilia.

Instead of overpowering her environment, she willingly allowed it to overtake her. Many easy escapes existed for her; by simply denying Christ and performing some act (which to her would be meaningless since she did not believe in the pagan gods anyway) she could have been free. She also could have escaped by the heroism typically displayed in modern literature — such as by tricking the authorities, or masterminding a plot with her friends to kill the emperor, or by tricking the guards, or some other ingenious method — after all, this is fictional literature. Instead, she openly let the obviously evil but more powerful Rome triumph against her — and weakly accepted her fate, but triumphed in the end.

Numerous examples could be used to illustrate the conclusion that a common theme of most modern post-1850 literature is exactly the opposite of much pre-1850 literature. The new view of Darwin was reflected dramatically in works such as the *Beach of Falesa*, a Robert Louis Stevenson story set on a South Sea island. The work was actually written on a South Sea island when Stevenson was seeking a better climate for his health. The characters fit well to the new view of the world brought about by Darwin. The natives were primitive, superstitious and gullible. The traders were crude, treacherous, and unscrupulous, which they had to be in order to survive in their business. The missionaries were enthusiastic and endeavoured to help, but their zeal was misguided because they held to their own brand of superstition which probably did them more harm than good. The hero named Wiltshire is a tough, courageous man, with a basic decency that stood in marked contrast to those around him. Wiltshire did not passively accept the environment, but dynamically showed his physical and mental superiority and aggressively triumphed against it.

The bad guy, Case, manipulated the gullible and primitive but kindly natives by setting up various pseudo devils. Wiltshire was determined to destroy these by dynamite so as to show the natives that these gods had no power. Case somehow learned this and followed him. Wiltshire hurriedly lit the fuse and the explosion detonated the statues and images. One burning image fell close to the place where he and his wife sought to hide themselves, and as they rushed to extinguish this light, Case got a glimpse of them and fired his gun. The bullet struck Wiltshire in the leg, and our hero fell. His native wife ran to help, and she too was hit. Wiltshire, realizing that Case would likely come up to him to determine if he was dead, pretended to be, and he held on to his knife, ready to show that he was superior even when seriously wounded. When Case came within reach, Wiltshire grabbed his ankle, threw him down, and fatally stabbed him. Even when badly wounded, Wiltshire was superior to Case. Case died, and both Wiltshire and his wife recovered and settled down to a profitable business. The fittest had not only survived, but eventually prospered.

The Darwinian world view is even expressed in poetry. English novelist Thomas Hardy (1840–1928) in his poem *Hap* reflects on his loss of his orthodox Christian faith. In the poem, he concludes that it is better to become the subject of scorn by a known but vengeful god than be the subject of natural selection. He concludes that God is the chance force that operates in a world that we can neither understand nor control except in a small way. The struggle of humans against the forces of nature, chance and personal suffering are prominent in many of Hardy's novels and poems. He develops a less pessimistic philosophy in his *Pliant to Man*, concluding, according to Vanderpool, that a better way is *'an honest recognition that aid will not come from gods — who are human*

creations —but through loving kindness shared with friends.’<sup>19</sup>

Writer Algernon Charles Swinburne (1837–1909) even believed that humans had become slaves due to the moral limitations and conventions of Christianity. He concluded that Darwinian evolution was our liberator which permitted mankind’s mind to roam freely and build a society based on the laws of nature, not the shackles of myth.<sup>20</sup> His **Memory of Charles Baudelaire** leaves the reader totally without hope after he forcefully argued against both an eternal purpose and plan, and anything beyond a short life on Earth.

### DARWIN’S THEORY AND THE NEW SOCIETY

That Darwin’s work brought about a revolution in society was recognized as early as in the late 1800s. T. H. Huxley in an essay in his book **Darwiniana**, originally published in 1871, concluded that the **Origin of Species** ‘has worked as complete a revolution in biology as the *Principia* did in astronomy — and it has done so because, in the words of Helmholtz, it contains “essentially new creative thought”.’<sup>21</sup>

One of the better documented studies of the impact of evolution on our world view, and thus our society, is **The Death of Adam; Evolution and Its Impact On Western Thought** by John C. Greene. As an historian, Greene’s purpose was simply to describe the ‘*tremendous revolution in human thought*’ which took place in the interval between John Ray’s **The Wisdom of God Manifest in the Works of the Creation** (1691) and Charles Darwin’s **Origin of Species**<sup>22</sup> and **Descent of Man**.<sup>23</sup> Although the focus of this work is on how the dominant world view in science shifted from a creationist to a naturalistic perspective, he also covers the implications of this new world view on society, including on our view of ourselves as reflected in the psychology, sociology and literature fields.

Showing the relationship between the acceptance of evolution and these changes in literature discussed here does not deny that numerous other factors were also likely important. We are here examining **only one factor** which has influenced the trends of literature of today, much of which, many feel, teaches undesirable values and attitudes. This clear contrast is obvious if the works of Shakespeare are contrasted with the works of, say Stephen King. The weakness of many of Shakespeare’s heroes was sometimes highlighted as their strength, and was not always the cause of their downfall. Often the purpose was to show that the strong and powerful were wrong and evil, and that the good were the victims of the powerful — as the theme of **Romeo and Juliet** illustrates. Some that were strong in the Darwinian sense were shown to be weak in a very important way. The handicapped, misfits, and others were often pictured more favourably in most western literature — most of which was overtly Christian — than they are in much literature today.<sup>24</sup>

Often, especially up to the 1980s, the handicapped were put in a role which was intended to denigrate, stereotype, criticize, make fun of, or otherwise in some way demean these less than superman persons. Not only does a conspicuous lack of handicapped persons exist in fictional literature, but there is also a scarcity of normal individuals with normal weaknesses in hero roles. Male characters in modern literature are often fearless to the extreme, displaying superhuman abilities in all life areas. They also lack emotion and human sensitivity, except possibly when romancing women. Even then their humanity is not real, but is often part of a ploy to satisfy their ego or sex drive, and often both. This is quite in contrast to the literature of history which featured far fewer super heroes and far more heroes who triumph in weakness; a good example is Don Quixote.

Examples of the Superman-Rambo character often seen in literature are the enormously popular novels of Jack London: his **Call of the Wild** novel is a good example. The principal character, Buck, a ‘Rambo’ dog was the undisputed leader in the group of dogs in which he was raised. In the story, he was purchased by two French Canadians, men who were fair but also harsh, just as natural selection is fair (the strong are **consistently** favoured) but also harsh (and this favouring is a must for progress). The harshness of nature is also vividly emphasized: the dogs, people and weather in Alaska were all merciless. When one of the dogs lost a fight with another one, it was torn to pieces in a totally heartless way. When Buck was hungry he ‘stole’ food, and the weaker dogs were destroyed in fair but ruthless struggles in which the most fit triumphed. Buck soon developed an enemy — a dog called Spitz who was the lead dog in the pack that pulled the sled. After a power play, Buck proved his superiority by killing Spitz. After that, Buck refused to be harnessed until he was given the lead position — he had proved his superiority and when finally put in the top spot, he became the best lead dog the men ever had. He was the strongest and fittest, and the other dogs knew this, and thus obeyed him.

The theory of evolution figures prominently in this story of nature and the wild. The most direct reference is when Buck dreamed about his ‘past’, he saw a ‘*hairy man who hunted with a club*’, and heard the howling of the wolves in the background (this was the **call of the wild**). In this dream he even made friends with the wolves, the animals who were ‘*his evolutionary ancestors*’. The Americans and Canadians were pictured as civilized, but the Superman-caveman complex still dominated them. In contrast, many of the Indians were shown as a clearly primitive race.

Magill concludes that many of Jack London’s literary productions openly reflected the ideas of social Darwinist writers, including Herbert Spencer and Frederick Nietzsche.<sup>25</sup> Magill also noted that London **loved** exalting both the superman hero and violence, both of which are

reflected 'in the very titles of some of his later books', such as **The Strength of the Strong** and **The Abysmal Brute**.<sup>26</sup> London became very wealthy from his books, which bought him an enormous ranch and fantastic yachts. He also openly bragged about his many affairs with young Hollywood starlets. On November 22, 1916, at the young age of forty, he committed suicide at his Santa Rosa (California) ranch.

His work contrasts greatly with the early style, such as John Bunyan's **The Pilgrim's Progress**. As Magill notes, Bunyan's literature is typical of much of that produced in the seventeenth century.<sup>27</sup> His books show 'that he is a man of one book, the Bible'. In **The Pilgrim's Progress**, Bunyan fuses the language and landscape of the Scriptures and the scenes of his own native English countryside into a successful unity. Magill notes that the book is 'less fascinating now than it once was' for the reason that we today have

*'lost the habit of allegorical thinking; it is a habit that Bunyan found in the Scriptures, and one, moreover, which had been normal in the Middle Ages. With Bunyan, it is not the surface reality that counts; it is Truth, both spiritual and eternal.'*<sup>28</sup>

**The Pilgrim's Progress** is not about a superhuman who kills his enemies, or out-tricks his adversaries, or even uses shrewd business practices to win fame and fortune in the world of commerce. It is about a very religious man named Christian who spent much time studying the Bible and believed in its message implicitly.

In his journey, Christian came across different characters who taught him a specific lesson in life, such as Obstinate who managed to distract Christian to the extent that he fell into a bog. Christian was no superman, and could not get out by himself. Fortunately, outside help soon came along and aided him out of the sticky mire. Much of the story was about his growth in knowledge and understanding of the pitfalls of life's journey, and how to ensure that one stays on the narrow road. For example, he met Interpreter and learned from him the meaning of many Christian mysteries. He was shown how Christ accepted the suffering inflicted on him by others around him, and did not try to out-scheme either them or the Roman judicial system. Christ as a man did not out-strength his captors, nor did he even try. While being led off to his crucifixion, Peter took his sword and began the fight to free Christ from his captors. In the struggle, Peter struck a guard, cutting off his ear. Christ, instead of joining in the fight for his freedom against his unjust conviction on false charges (blasphemy) actually rebuked Peter. Christ then explained to Peter that a person who uses the sword will perish by the sword. Christ even healed the ear of the soldier. Christian, upon learning the meaning of this story, realized that the weak but godly survive and the strong but corrupt perish. When Christ was executed, it seemed on the surface that the evil but powerful Roman Empire had triumphed. But Christ was

resurrected on the third day, ultimately triumphing over both Rome and history. History now judges Christ as the Saviour and Rome as the persecutor.

After this lesson, Christian resumed his journey. He soon met four virgins — Discretion, Prudence, Piety and Charity. These four women had a markedly positive impression on Christian, helping him to realize the importance of certain traits. Christian, a somewhat scared, fearful, and timid individual, then experienced various events that helped him to become less afraid and less fearful, and also to realize that his own lack of strength would prove God's supreme strength. The various individuals that he meets are crucial to help him deal with his 'weaknesses', all of which are common, but in the end he traversed the mountain and was greeted by shining angels who led him through the gates of Heaven. This was his reward for meekly accepting his suffering, and for steadfastly pushing ahead in a path of faithful progress in life.

In contrast, the super hero of today may not always prosper, but when he does succeed he usually does it by using his brawn and brain to prevail over the environment, often in unethical ways. The super hero is usually the 'good' guy, often formally connected with the police or a detective agency, and is identified as the 'proper' winner. His survival and success, though, is often **only** because of his might and his ability to overcome his adversaries by any means possible, ethical or not. Winning the struggle by brute force or will, and proving one's might, is clearly the theme of a large proportion of modern literature.

Many writers were very open about their beliefs regarding natural selection and Darwinian evolution. George Bernard Shaw in the preface to his **Man and Superman** openly stated,

*'Being cowards, we defeat natural selection under the cover of philanthropy: being sluggards, we neglect artificial selection under cover of delicacy and morality.'*

**Man and Superman**, originally published in 1903, is not the only work in which Shaw brazenly pushed this philosophy. He admitted that he used drama as a device, 'a trick' in his words, to convey to the public his social, political and economic philosophy. In Shaw's most philosophical play, **Man and Superman**, although primarily about the war between the sexes, the survival of the fittest theme is prominent. Tanner, a social philosopher and a principal character of the play, represents 'the good man' yet is unsuccessful in defending his chastity from, among other things, a scheming female who is his intellectual inferior, but over whom by his superior instinct he prevails. Tanner represents the cultivation of the intellect — the idea that only by dispassionately exercising the intellect can men discover their purpose in nature and fulfill it. Tanner also represents man's unceasing creative urge bestowed upon him by evolution to improve the world as well as himself. This theme was developed further in many of Shaw's plays, especially **Back to**

**Methuselah.**

Women, however, represent **passion** and the desire to propagate. If man surrenders to a woman, he subjugates himself to her, in essence losing the war. By marrying Ann, Tanner says that the life force triumphs because it is evolutionarily superior. Man, even a superman, thus must abandon the pursuit of his own goals to save woman and help her to achieve her evolution-given goal of perpetuating the race. Many critics regard this as one of Shaw's most important plays. Its theme is central to his philosophy, and clearly reflects his evolutionary world view.

In 1925, Shaw was awarded the Nobel Prize for literature as a reward for his social reformer efforts. Many of his works were openly political or religious, such as **The Intelligent Woman's Guide to Socialism and Capitalism** and **The Adventures of the Black Girl in Her Search for God**. He knew that his intellectual ideas would likely alienate his audience, and that his '*serious thoughts and provocative ideas*' could be effectively communicated **only** if the audience is also entertained. For this reason, his ideas were strategically presented in dialectically dramatic form. Although often considered a radical — in 1909 Shaw was investigated by the government censors and his plays were declared to be '*conscientiously immoral*' — a summary of his work shows that he was primarily trying to help society keep what he felt was the best of the past, but also move forward to a socialist state. His influence today is world wide, his plays are still performed, and most of his books are still in print. Incredibly prolific in his long life (he died at the age of 94 on November 2, 1950) the standard edition of his works comes to thirty-six volumes.

Shaw's **Superman**, although the product of Darwinian evolution, has less of a stereotypical view of just what this **superman** was than many of his other works. He even stated in the preface to **Man and Superman** that '*to cut humanity up into small cliques, and effectively limit the selection of the individual to his own clique, is to postpone the superman for eons, if not forever.*' Shaw was also not shy about openly supporting eugenics: in a 1910 speech he wrote that a eugenically superior woman should not be discouraged from becoming a mother, even if she cannot find a husband. He believed that since many of the eugenically superior men were already married, the single women should avoid '*eugenically disadvantageous marriages*' and consequently should mate with eugenically superior men, even if they were married.

### THE PRE-DARWIN LITERATURE: AN ASSESSMENT

Much of the early pre-Darwinian western literature was overtly Christian and would today be regarded as sickly sentimental, and clearly pusillanimous. With few exceptions, the literature focused on or glamorized persons who are extremely idealistic in patience, mildness,

and long suffering compared to today. The heroes were at times so close to perfect in the so-called traditional virtues that they would be considered boring today, if not prissy. About the only militaristic Rambo type of bravery was displayed in religious wars and conflicts, such as illustrated by **Barnaby Rudge** by Charles Dickens, first published in 1841.

Some of the novels which were written in the early 1800s contain many elements which were more typical of later literature. Part of the reason is because many earlier novels became popular only later when tastes changed, and are still with us primarily because they contain modern themes and styles. A good example would be **Barry Lyndon** by William Thackeray. Secondly, even though the Darwinian revolution is often said to have occurred in the middle 1800s, theories of evolution were actually accepted by many biologists, including Darwin's own grandfather, in the very early 1800s. Thus, although the publication of the **Origin of Species** in 1859 was an important turning point, the influence of evolution was felt long before this. Many historians have concluded that the first convincing documented argument for biological evolution is found in the works by Erasmus Darwin (1731–1802) which were completed at the end of the eighteenth century. King-Hele claims that Erasmus Darwin had believed evolution since about 1771, and the elder Darwin first expounded the idea in Section 39 of his book **Zoonomia**.<sup>29</sup> He taught both natural and sexual selection, concluding that the more powerful, more adapted and stronger animals were more likely to survive and reproduce. In his writings '*after 1794, statements of the principles of natural selection and theories of evolution came fairly thick and fast*'.<sup>30</sup> Further, Erasmus Darwin's books were also clearly important in **popularizing** the view of natural selection. His **Zoonomia** was enormously successful, and went through three editions in its first year in print.

Another earlier prominent researcher that predated Darwin in supporting evolution was Lamarck. Although his theory of the inheritance of acquired characteristics is discredited today, he was a highly competent biologist and produced many important science works. Unfortunately, he is remembered more for his mistaken notion of the cause and source of evolution than for his many other contributions. Aside from Jean B. Lamarck and Erasmus Darwin, probably the best known pre-Darwinian evolutionist was the British physician William C. Wells who died in 1817. He read a paper on evolution before the World Society in April of 1813, and in 1818 published an essay which discussed the theory in some depth.

Malthus' 1798. essay on population was also an important work. Both Darwin and Wallace acknowledged that the '*struggle for existence*' concept, from which they both derived the theory of natural selection, came partly from this source. Malthus did not openly teach natural selection, but convincingly argued that both human and

animal populations tended to grow far faster than most sources of food could increase, and consequently many animals would die of starvation. The next step was to determine **which ones** would not survive: Darwin's answer was the weaker animals who were less able to prevail against the competition. One fallacy of Malthus' work is that he ignored the many natural means that nature uses to check population growth. An example is, as the number of animals in a certain area increases, the overcrowding reduces fecundity to ensure that the population per square mile is fairly consistent, often **below** the level that the food supply is able to support.

### CRIMINAL ANTHROPOLOGY

Haller concluded that the late 1800s was a '*generation that eagerly read Darwin and applied evolution to politics, theology, ethics, anthropology, and many other fields*'.<sup>31</sup> The concepts of evolution especially influenced the field of criminology, producing a new science called **criminal anthropology**. This field concluded that

*'a murderer was an atavistic (evolutionary throw-back) beast whose behavior could no more be changed than its atypical brain, and that a pauper's dependency was as incorrigible as his deformed jaw and teeth'.*

The field of criminal anthropology had as a goal to, in the name of science, '*banish sentimental faith and reform and prescribe that those failures were inherited and incurable, and should be forbidden to propagate*'.<sup>32</sup> In the criminal anthropology field, blatant use of social Darwinism went to the extremes, reminiscent of the Nazis. Jack London, in many of his popular novels, and Frank Morris in such works as **McTeague** and **Vancouver and the Brute** employed atavism and evolutionary degeneration to explain human nature. McTeague's father in the novel **McTeague** was a crazed atavistic alcoholic, his mother was a drudge. He himself also exhibited definite atavistic stigmas (*'his head was square cut, angular; the jaw salient, like that of a carnivora'*). Haller concludes that the criminal anthropology science had a profound influence on American literature, especially that involving crime and related issues. They had 'proved' criminals were persons that had biologically regressed to animals, and were often not just non-human, but both anti-human and evil in almost all ways. Most were believed to be sociopaths, when in actuality few were.

### LAMARCKIAN EVOLUTION

One of the more striking examples of how uncritically writers used science theories was that many openly taught Lamarckian biology, an evolution theory which is now totally discredited. Jean Lamarck's theory of acquired characteristics teaches that evolution occurs by an animal's individual efforts becoming incorporated into the

germ plasma and consequently passed on to its offspring. Writers also commonly talk about 'less need' existing for some structure, resulting in it and its adjacent parts shrinking in size from generation to generation. A simple example is, if a person develops a skill, that achievement will be passed on to the children that one bore after developing the skill. Likewise, if a person improves their health, or develops certain muscles, this improvement will also be passed on to their future offspring. Evolution thus occurs by individual effort or need. A common example is where people endeavoured to develop a *universal consciousness*, which is a high level of morality that their children can biologically inherit.

Another example is evolution resulting from our changed diet. It is reasoned that meat today is tenderer and foods are generally less harsh today, therefore less chewing is necessary. Consequently, the jaw muscles in humans are exercised far less today, and there is also far less need for a large jaw. It is erroneously concluded from this that our jaw size has historically slowly shrunk from disuse in an inherited sense.

Many biologists once accepted this Lamarckian evolution theory, and even Darwin concluded that it was valid. Some biologists have touted the theory as late as in the 1920s and 1930s. The idea is so discredited today that a series of recent studies done by a European researcher which indicated that certain characteristics may be acquired and become part of the inheritance published in Nature resulted in a storm of protest. Nature embarrassingly printed numerous pieces to justify why they had published the original article. Many scientists felt that Nature was grossly irresponsible in publishing research which cannot be true. Nature acknowledged that the results were likely not valid, but felt that the proper methodology to refute the ideas was to present the research to the scientific community for their scrutiny. They concluded that, if the article had met the proper canons of research procedure, it should be published for further evaluation. The results may have been valid, Nature argued, but for reasons other than Lamarckian evolution.

In spite of the scientific agreement about Lamarckian evolution being invalid, a large number of lay evolutionists today accept the idea of acquired characteristics, and many of them likely picked up this idea from popular literature. In addition, many writers who have virtually no training in the biological sciences are forced to discuss or interact with these ideas in their writings. Thus, literature can be an important means of miseducation.<sup>33</sup> Much, but certainly not all, literature was effected by evolution:

*'Expressing a firm belief in God as a supernatural personal being who loves and cares for his world and especially for his children [some writers such as] Baker, Cooke, Roe and Elliot discovered a God not in or equal to the universe, but transcending it, though not indifferent to, or even completely separate from it,*

indeed constantly present in it. In these respects the God of these novelists is the God of Orthodox Evangelical American Protestantism and was not affected by evolutionary theory. But for other popular novelists this traditional view of God was substantially modified by the theory of evolution. As American theologians and preachers came to adapt evolutionary principles to religion, they argued that God was not, as the sentimentalists maintained, a personal being, nor, as Deism maintained, the creator of a universe ordered by laws and sustained by its own inherent properties . . .<sup>34</sup>

### DRAWING SOME CONCLUSIONS

Both literature and the public reading interests were changed by the new world view influenced by Darwin. If the western works written before the 1700s were published today as new books, most would be marketing disasters. Even historical novels, although they supposedly took place hundreds of years ago, tend to feature the modern super hero theme. Writers today are influenced by past writing successes, and what is successful is to some degree influenced by those individuals who are in a position to judge. The book of the month club and book review organisations tend to be extremely important in affecting a book's likely success.

The total cause and effect situation is not our focus here, only the fact that clear changes in popular western literature have occurred since Darwin, and that much of this change is due to the world view revolution caused by science. Future literature trends will also likewise be affected by scientific advancements. Already books that deal with, or at least include as part of the story, gene manipulation therapy and related advancements, are becoming very popular. In the novel of the future, persons with technological know-how may be more apt to become heroes as opposed to those who are super evolved physically, as already tends to be true of much contemporary popular literature.

Literature has an enormous potential for good, but likewise has an enormous potential for harm. A major educating element in America and most societies is literature. Many of us learn much, especially about psychology, human behaviour, and even biology and science from literature. Novels are sold in multi-million editions and this is a major source of entertainment in the United States, and most other countries.

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