

BASC1001 Superconcept Essay
Evolution and Literature

Since the publication of Darwin's *On the Origin of Species* in 1859, evolutionary concepts have had a profound influence on the entire academic landscape. On the one hand, such concepts are increasingly transcending the boundaries of biology and are being applied in a variety of disciplines such as economics, psychology, and the humanities. On the other hand, while evolutionists have written extensively on issues pertaining to religion and philosophy, constructivist ideas of knowledge and culture dominated much of postmodernism in the 20th century, therefore suppressing scientific approaches (which are founded on a consistent objective reality) to the arts (Czarnecki). Recent trends however have revealed new ways of integrating evolutionary principles with literature that may prove promising in further enlightening our understanding of human nature.

To outline Darwin's theory, evolution refers to the idea that inherited characteristics of biological populations evolve through natural selection over generations. Variation of the given organism is therefore essential for such evolution to occur, to ensure differential fitness between organisms (those with an advantage in the level of fitness are more likely to survive and reproduce, preserving the beneficial traits), and heredity of traits from parent to child in reproduction is key to ensure the adaptation of the population to suit its environment over time. One way of applying evolution to the field of literature is to utilise the main principles of Darwinian evolution as an analogy to the historical development of literature.

On some level this analogy works. Indeed, "the more closely literary history is studied, the less inclined shall we be to insist on a sudden and arbitrary line of demarcation between the old epoch and the new" (Gosse), suggesting the characteristics of literary works may have developed iteratively. The Hollywood narrative commonly featured in today's popular novels of reuniting lovers over the course of adventures which were designed to prove their love and value can be seen as a descendant of the plot framework in the northern European epic traditions (influenced by ancient Greek aesthetics), in which the basic 'trait' of adventure is reproduced in following literary works, thus carried on throughout history with variations such as the Arthurian romance, which became fashionable during the late 12th century, or the religious variation during the Renaissance in which God presents the knight with quests. There was also an extensive study in the University of Michigan, the Genre Evolution Project, which attempted to study the evolution of

science fiction in the 20th century with the logic that “cultural creations evolve in the same way as do biological organisms...that succeed or fail according to their fitness to their environment” (Rabkin and Simon). In this study they studied a range of science fiction works using quantitative methods, and reprints of the same story indicated a story’s cultural “fitness”. Their results revealed that the most successful stories that under the topic of ‘medicine’ dealt with a society in which the character of the physician(s) is powerful to the extent that society is fearful of him/her—this would be the ‘trait’ that gave the work its advantage in its level of fitness.

Yet many argue that using evolution as a metaphorical framework is a theoretical assertion that “does not appear to be the result of empirical inquiry or reasoned causal analysis. It is an imaginative inspiration supported only by emphatic affirmation” (Carroll). Critics of such analogists attack the equating of genes and literary elements. First of all, ideas do not mutate randomly. Rather, they are designed, possibly depending on how the literature will be received by its readers (Pinker). Additionally, while genes are self-replicating, cultural units are reproduced only if they stimulate a response in a human mind. The flaw in the “causal analysis” referred to by Carroll is that applying evolutionary theory as a metaphor ignores the essential causal mechanisms behind the production of literary elements, which encompass an interactive process between psychological dispositions and the external environment. Simply paralleling cultural changes and biological evolution takes the human mind out of the equation entirely, and inevitably the metaphor falls apart, without illuminating significant knowledge on literature or human nature.

Perhaps a more effective way of incorporating evolutionary theory into the field of literature are the notions put forth by a branch of literary criticism known as literary Darwinism, in which evolutionary psychology is applied to the study of literary texts. While classic evolutionary theory refers to the alterations in the physiology of organisms, evolutionary psychology suggests that the human mind has also been shaped over generations to adapt to the changing environment, that our emotions and cognitive mechanisms are a result of natural selection. That our brains are a system that has evolved to solve problems our ancestors faced during our species’ history suggest that human beings now possess intrinsic emotional/cognitive responses to certain concepts, for instance, we feel disgust at the thought of eating dung—this improves our chances of survival as eating dung increases our likelihood of catching a disease (Cosmides and Tooby). The key to literary Darwinism is the idea that all literature is an artefact of the adapted mind, therefore reflective of our cognitive behavioural system, and thus is susceptible to a Darwinian analysis

(Carroll).

Literary Darwinists believe that a biological approach to literary studies can result in noteworthy understandings of character, plot, themes, and other elements. The issue with the schools of literary study that dominates the field such as postmodernism, feminism and so forth is that they perceive culture and behaviour as products of arbitrary social conditioning, which is completely inconsistent with the accumulating knowledge in other academic fields that demonstrate cross-culturally universal characteristics of human psychology and cognition (Gotchall). Essentially, a Darwinian criticism of a literary work allows us “conscious theoretical access to the elemental forces that have impelled all human beings throughout time and that have fundamentally informed the observations and reflections of all writers and all readers” (Carroll), without succumbing to reduced and false conceptions of human nature that often preoccupies other schools of literary criticisms. This is valuable in that new interpretations can be erected on a range of different literary works and traditions, including classic novels, erotica, folk tales, as well as foreign literature. Though traditional literary critics may find the view of the arts as a product of evolution too reductionist, in that the arts are too complex to be categorized in such a way, it is in fact the opposite – as D.S. Wilson, a leading figure in literary Darwinism, said in an interview, “We're not talking about reducing...we're talking about adding deep history, deep genetic history, to art criticism.” (Max). It should be clarified that while it is central in Literary Darwinism that authors implicitly appeal to a universal human nature to an extent, this does not mean critics should view human nature as a set of laws governing how characters should behave, but rather as a frame of reference within which one can derive meaning in the characters’ actions, as well as the author’s individual identities and their own cognitive structures (Pinker).

Joseph Carroll, also a leading figure in the field of literary Darwinian studies, has demonstrated such an approach with the classic novel *Pride and Prejudice*. He identifies the key operative feature of human nature in the novel as mate selection, in particular the notion that women desire wealth and status in men while men desire youth and beauty in women. Most importantly he approaches the novel in terms of the central tension between the primal needs to acquire resources and to reproduce, and the wants of the characters’ individual cognitive system to recognise the values of excellence in character and mind (Carroll).

Literary Darwinism also aspires to determine the ultimate reasons of why humans create and consume literature, which would be valuable knowledge to expand

our understanding of human nature—the adaptive function of the arts is a popular notion among literary Darwinists. If one identifies the mind (aka. the cognitive behavioural system) as a complex feature of human nature, integrated in us in a way that is comparable to other evolved behavioural features such as the mate selection system (which arouses desire and fulfils it in coupling), and the parenting system (which arouses concern for offspring and fulfils it in successful rearing), it can be argued that the cognitive behavioural system arouses a need for conceptual and imaginative order due to our inevitably active mental life, which can be fulfilled through the construction of mental models or maps that provide an outlet or guide for behavioural patterns—religion and the arts satisfy such a demand (Boyd, Carroll).

All academic disciplines are ultimately in the search for knowledge to understand humanity. While Darwinian literary scholars certainly do not insist all literary criticisms should be limited to an evolutionary approach, the integration of the field of literary studies with the rest of the existing and consistent knowledge on the characteristics of human psychology by perceiving literary works with an evolutionary lens would bring us another step closer to revealing the workings of human nature.

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