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Science and Difference

“The Effect of Christianity on Informing the Teleological Aspect of Lamarckian Evolution”

## **Introduction**

By the age of enlightenment, Christian philosophy had developed a robust worldview and theological framework that had major influence on western civilization. The biological and natural sciences were, under the Christian worldview, the teleological study of the omniscient wisdom of God in creation and the natural order; those who did science, did so by subjecting natural revelation to the purposes made manifest by God’s special revelation. According to the cultural mandate, science and the humanities served the purpose of bringing all things under the heavens into subjection to Christ and his kingdom. By the time of the enlightenment, thinkers continued to question not just the claims of the Church, but also the elements of religion itself. As the God of the Bible was evicted from society, a new, western, secular worldview, distinct from the secularism of the classical era was born. Tarnas (1993) notes, “Just as the evolving Christian understanding did not fully divorce itself from its Hellenic predecessor but, on the contrary, employed and integrated many of the latter’s essential elements, so too did the modern secular world view—often less consciously—retain essential elements from Christianity” (p. 321). As a result, answers that were once provided by the claims of scripture were no longer, consciously, accepted. The enlightenment had removed the Bible as the overarching, authoritative source of knowledge and set out to replace it with a neutral form of rationalism and empiricism. A new, secular reformation, which had maintained many of the Christian presuppositions, had begun.

The questions of origins and of purpose, which were once defined by scripture, were now under examination. Because worldviews are presupposed, communicated and informed by culture, the process of developing a new worldview would be slow and would span many centuries to come. By examining the primary sources of evolutionary thought, especially those prior to Darwin's "Origin of the Species," we can observe this new worldview in crisis. There is no disagreement concerning the teleological nature of Lamarckian evolution. What may not be readily apparent, however, is the degree to which the Christian worldview had worked to inform even the scientists who had opposed the assumptions of Christianity itself. It is my belief that the pre-Darwinian evolutionists, as demonstrated by Lamarck, had actually been informed by the worldview they were working to eradicate from the sciences. The neutrality of their observations and interpretations were only a myth that they had paid lip service to. As such, Lamarck had disseminated the non-materialistic elements of the worldview he had opposed. He sought empirical answers concerning the question of origins, but implicated the teleological answers expected of design; this, in assuming purpose, affected the ethical conclusions drawn in the beginning of the modern era of science and difference. It should be sufficient to show this in three steps. First, I will show that Lamarck was operating under the spirit of enlightenment empiricism. He had the goal of convincing the reader against special revelation, creation and its ensuing worldview. Secondly, I will show that he still maintained the Christian concept that the cosmos was working according to a particular goal, order and plan. Even the naturalistic causes proposed by Lamarck serve as a means towards an end rather than the mechanically neutral process he supposes them to be. Thirdly, I will show, in conclusion, how

maintaining the Christian presuppositions of order and purpose, while rejecting the specifically Christian God, served as a platform for the unethical expression of race and inequality.

### **Lamarck Rejects the Notion of Special Creation**

The notion of special creation, at the time Lamarck proposed his thesis, consisted of several doctrines. Special creation insisted that the species existing today were the same species that had existed upon initial creation; in other words, the species had not changed since creation. Additionally, special creation maintained that the species had a purpose in God's created order and were, as such, immutable. Lamarck, in the spirit of the enlightenment, had sought to reject this theory and convince his readers likewise. In context of discussing these doctrines, specifically the uniform supposition of the species, he states, "It is just this allegation that I propose to attack" (Appleman, 2001, p. 46). In this remark, Lamarck was attacking the core doctrine held by proponents of special creation. We see this theme in several portions of his "Zoological Philosophy." He had made the case that his theory was based on empirical evidence. Having criticized Bonnet for not proving his theory by facts, Lamarck later stated concerning his own theory, "Nothing of all this can be considered as hypothesis or private opinion; on the contrary, they are truths which, in order to be made clear, only require attention and the observation of facts" (*ibid.*, p. 45). Lamarck was neither interested in religious conviction nor personal interpretation; he wanted facts that could be clearly demonstrated in evidence. In this sense, Lamarck had not allowed the possibility for the God of Christianity to be the source of origins. He had adamantly rejected the notion of special creation.

## Lamarck Implies Teleological Purpose

In having rejected God as the answer to origins, Lamarck sets out a peculiar interest in his thesis; he desires to answer the problem concerning the conditions necessary to life. While defending his desire to inquire on the subject, he points out the importance of discovering a solution to this problem. It is, according to Lamarck, “not only for our knowledge of zoology and botany, but also for the history of the world” (*Ibid.*, p. 45). To the casual observer, this statement may seem to be a very innocent inquiry concerning the neutral sort of history that answers the question, “what happened?” However, as we know, history is never told by a neutral observer; it is always communicated with interpretation. History according to the Christian worldview has a specific goal and purpose. The Christian worldview had sought to interpret history from a teleological perspective; all history was part of God’s unfolding plan in creation and redemption. We see this interpretation in the division of our Gregorian calendar into BC, Before Christ, and AD, Anno Domini. Lamarck was not only attempting to bring a neutral, naturalistic philosophy to science, but to history as well. Instead, Lamarck proposes one teleological goal instead of the other. He did not embody the purely neutral observer he had hoped to be. We shall see that history interpreted by Lamarckian evolution had a particular goal in mind: complexity, the perfection of species and ultimately the perfect human race, as purported by his compatriots in the wake of neo-Lamarckianism.

Lamarck’s understanding of evolution was unique. He had proposed that all things were evolving towards a particular end. In his understanding, had the conditions of nature been the same everywhere, all organisms would evolve similarly throughout all species. He had made the case concerning aquatic animals. It was obvious to him that had aquatic animals been raised

under the same conditions, depth, climate and water, then the types of animals found in the water would have evolved in the same way, everywhere. According to Lamarck, the reason why we see variation is due to the differing conditions provided by the environment. In describing this, he notes, “If the factor which is incessantly working towards complicating organization were the only one which had any influence on the shape and organs of animals, the growing complexity of organization would everywhere be very regular” (*ibid.*, p. 46). In other words, Lamarck had made the argument that had the environmental factors been normalized, only one factor would be incessantly working towards complicating organization. This begs the question, what is this factor that would, given a normalized environment, work to produce the same, regular race and species everywhere? Lamarck’s teleological argument for evolutionary strands moving along a predictable path towards the goal of more and more complexity of the same, predetermined kind has more in common with proponents of natural theology than it does with the sort of empirical, material science he claims to be doing. Teleology, according to the ancient, atomist Greek secularists, is mutually incompatible with the concept of materialism (Berryman, 2008). The atomist natural philosophy of the secular classicists eschewed teleological explanation. In Lamarck’s exploration of the question of origins, he maintains the teleological concerns of purpose; this would be something we would expect from a theist observing the input and overarching hand of God. The teleological argument he made was not an observation of fact, it was a personal interpretation informed by the parental, Christian worldview that had implied purpose. According to Gillispie, as cited by Gould (2002), “Life is purely physical phenomenon in Lamarck, and it is only because science has left behind his conception of the physical that he has been systematically misunderstood and assimilated to a

theistic or vitalistic tradition which in fact he held in abhorrence.” (p. 173). Lamarck believed that he himself had assumed a purely materialistic cause of creation, yet his teleological approach seems to be informed by the special purpose and plan of the particularly Christian worldview.

Lamarck did propose a set of mechanistic laws that he suspected worked in this process of organisms moving from lesser and lesser simplicity towards complexity. The first law stated that the continual use or disuse of an organ, as dictated by environmental causes, contributed either to the development of that organ, or its complete annihilation. The second law established that the modifications of organs were preserved by reproduction and transferred to new individuals. Part of these processes, or laws, apart from the teleological aspect of Lamarckian evolution are what his admirers had appreciated. The idea that the environment worked in some way to effect change in a species, and the idea that these traits were passed down through generations were some of the ideas shared by Darwin. However, Darwin’s conclusion was particularly different; he had rejected the notion of environmental determinism which maintained that a peculiar climate, food and soil would act to determine a particular species. Darwin recognized that variation existed even amongst species that shared the same environment. While Lamarck attempts to describe a particular, mechanistic means of evolution, it must be noted that the purely physical mechanisms he espouses are a means towards a predetermined end. Lamarck had paid lip service to the empirical nature of our existence, yet had provided a theory that presupposed a meta-physical plan and design.

## **Lamarck's Teleology in the History of Science and Difference**

Many people in the history of evolutionary thought had, in an attempt to discover the calculus of biology, also attached the teleological principles of purpose to their theories and findings. This teleological approach most often resulted in concepts of superiority and the unethical considerations of racism. It was the symbiosis of two worldviews that had made up the new, western, secular worldview. The Christian worldview had provided the teleological suppositions, and the revival of the ancient Greek classics provided the atheistic secular suppositions. By maintaining the purposeful, orderly and teleological nature of creation as it existed in the Christian worldview and rejecting the God who had dictated those purposes, men and women were left to themselves to determine what this purpose should be. Without the commandments and biblical suppositions acting as a restraint on evil, humanity saw some of its worst. Lamarck's teleology had justified the concept of race. The development of the perfect race of human, as determined by environmental factors, had opened the door to declare the Caucasian as the crown jewel of creation rather than, as in Christianity, the whole of humanity itself. As such, the beginning acceptance of evolutionary thought in a distinctly Christian heritage resulted in the justification of the atrocities of imperialism and racial slavery within the past few centuries. This can be noted in contrast to the purely economical and military slavery that was accepted prior to enlightenment thought.

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