

Impact of the Fundamental Tension between Poetic Craft and the Scientific Principles which Lucretius Introduces in *De Rerum Natura*

In his didactic position, Lucretius employs the mellifluous character of poetry to elaborate upon the structure of the universe; his “dulcet strains” assimilate scientific observations, philosophical ponderings and logical analysis to stimulate the audience. Addressing subjects as diverse as the composition of matter, the structure of the universe, and the motivations of the spirit, he aims to enlighten the audience and to destroy their superstitions. The abstract nature of his subjects, obscure to the listener, is made more enjoyable through poetic verse. However, the poetic device of an invocation to the gods contradicts his materialistic teachings, thus introducing a tension in *De Rerum Natura*; Lucretius attempts to incorporate the conventional invocation of deities into a poem in which he argues that the gods are not responsible for creating objects or occasioning events. This fundamental tension between the science being taught and poetic convention presents a challenge not only to Lucretius, but also to the audience; the audience must judge whether Lucretius was successful in the amalgamation of the poetic and scientific genres essential to the poem. From a purely scientific standpoint, the invocation served to weaken the argument by presenting a potential contradiction within Lucretius’ philosophy; however, from a broader perspective, one recognizing Lucretius as an instructor and a poet as well as a scientist, the invocation illustrates Lucretius’ craft in manipulating the audience to gain their attention.

As Lines 921-951 in Book 1, illustrates, Lucretius intentionally presented his argument in the mode of poetry. Recognizing the conceptual difficulty of the material and the unique character of the thought, he selected a literary form and style of presentation with a lyric basis. The song-like nature of his presentation was intended to trick the audience to attend to the subject matter. For example, in his analogy to a sick child drinking wormwood because of the honey on the cup's edge, Lucretius said, "They are tricked but not trapped, for the treatment restores them to health. In the same way our doctrine often seems unpalatable to those who have not handled it, and the masses shrink from it. That is why I have tried to administer my philosophy to you in dulcet strains of poetry, to touch it with the sweet honey of the Muses" (1.c940-947).

After his analogy to the draught for a sick child, Lucretius points out that the child is "tricked not trapped;" thus, he implies that the audience too is not trapped. Though deceived by the poetic presentation, they have listened to his argument, the audience is not trapped into agreeing with Lucretius. His intent is to stimulate their thought on the structure of the universe. While Lucretius firmly believes in the principles and ideas which he teaches, he does not necessarily expect the audience to understand or agree with his argument. Rather, his emphasis focuses around expanding the mind and diversifying ones thoughts. He says, "My object has been to engage your mind with my verses while you gain insight into the nature of the universe and the pattern of its architecture" (1.c947-951). Thus, his goal is to enlighten the audience. Since enlightenment does not result from blind agreement, but from thoughtful understanding and assent, Lucretius prides himself in exciting men's minds to ponder these topics: "This is my reward for teaching on these lofty topics, for struggling to loose men's minds from the tight knots of

superstition and shedding on dark material the bright beams of my song that irradiate everything with the sparkle of the Muses” (1.c930-937). In the above quote, Lucretius emphasizes his role as a teacher who values thought and logic, and he exercises poetic language. But, he is not a poet whose primary motivation is to entertain the audience; Lucretius, recognizing that poetry provides a means to more effectively reach his audience, employs the craft of a poet.

In addition to fulfilling the roles of teacher and of poet, Lucretius operates as a scientist by combining observations of the natural world with thought-experiments and logic. Though Lucretius’ methods of argumentation fall short of modern scientific procedure, they constituted a scientific method when *De Rerum Natura* was composed in the first century before Christ. On abstract topics, such as the formation of the universe, Lucretius relies heavily on reasoning and philosophy to prove his argument; to enforce his claims he correlates his propositions to easily made observations of the world. For example, his theory for the formation of the world states that atoms “have experienced every variety of movement and conjunction till they have fallen into the particular pattern by which this world of ours is constituted” (1.c1026-1029). Then, he proposes that the atoms remain in the configuration once they have been “set going in the appropriate motions” (1.c.1030-1031). Finally he asserts that there are atoms continually replenishing the world from the “infinite space” to counter the loss of atoms. This last contention is supported by his observation that “animals deprived of food waste away through loss of body” and extrapolation from this observation that “everything must decay as soon as its supply of matter goes astray and is cut off” (1.c1037-1041).

Lucretius repeatedly argues against the superstitions of men. One of his goals is to dispel baseless myths through the demonstration of scientific thought applied to the explanation of natural phenomena. For example, he speaks to Memmius and the other audience of the power of prophets, who are able to impact men's lives so significantly since the men lack a defense. These prophets conjure phantoms and stories; men fall victim to belief in these tales for fear of eternal punishment since they do not understand the nature of the spirit after death. Thus Lucretius seeks to answer such questions on the spirit as "Is it born, or is it implanted in us at birth? Does it perish with us, dissolved by death, or does it visit the murky depths and the dreary sloughs of the Underworld?" (1.c112-115).

In addition to dispelling the power of prophets, Lucretius endeavors to account for natural phenomena, such as echoes, with scientific reasoning as opposed to mythological reasoning. The first principle that Lucretius asserts, "Nothing is ever created by divine power out of nothing," (1.c149) begins to address the position of the gods in governing events. Though Lucretius does not argue against the existence of the gods, and in fact repeatedly invokes the Muses and Venus in the poem, he does strive to dispel their attribution to a cause for many phenomena. "Accordingly, when we have seen that nothing can be created out of nothing, we shall then have a clearer picture of the path ahead, the problem of how things are created and occasioned without the aid of gods" (1.c155-159).

While Lucretius appears to argue against the power of the gods, he invokes their power, hence introducing confusion in the text. Though Lucretius never denies divine influence, he relegates the deities' power to augmenting that which already exists.

Moreover, his materialistic arguments and reasoning produce an atmosphere supportive of denying divine existence; if, in the poem, Lucretius had not called upon the gods, the audience might readily conclude that he did not believe in their existence. In addition, Lucretius fails to provide reasoning for the existence of divine power or to unite divine power with his materialistic arguments. This lack of argument surrounding the capacity of deities contrasts starkly with the method of comprehensive logic which Lucretius routinely employs. Thus, from a scientific perspective, the invocation of divine power serves to weaken Lucretius' arguments by providing an apparent contraction and by omitting the reasoning crucial to Lucretius' method.

However, Lucretius' function extends beyond that of a scientist; he is poet and instructor as well. Examination of Lucretius' divine invocations as a poetic device reveals Lucretius' skill as a poet. With this broader perspective on Lucretius' roles, one can assume that the opening invocation to Venus was incorporated to entice the audience. The opening invocation conformed to poetic convention of the time period, thus supporting the poetic nature of Lucretius' presentation. Moreover the diction and figurative language paint a lucid picture for the audience; when calling to Venus, Lucretius says, "Through you all living creatures are conceived and come forth to look upon the sunlight. Before you the winds flee, and at your coming the clouds forsake the sky. For you the inventive earth flings up sweet flowers. For you the ocean levels laugh, the sky is calmed and glows with diffused radiance" (1.c5-9). Since wind blowing, clouds traversing the sky, plants growing and the ocean levels varying are easily observable phenomena, the audience can comprehend and imagine them. Lucretius begins by depicting events with which the audience can readily identify, though he aims to

enlighten the audience on a number of abstract and alien ideas. The reference to common phenomena entices the audiences' attention and stimulates their minds; thus, Lucretius uses the opening invocation as physicians use honey to entice sick children to drink wormwood: "Physicians, when they wish to treat children with a nasty dose of wormwood, first smear the rim of the cup with the sweet yellow fluid of honey" (1.c936-938). Having been lured by poetic craft, the audience attends to Lucretius' explanation of his philosophy.

As an instructor who employed poetic craft to more effectively educate his audience, Lucretius' incorporation of an invocation to deities attests to his skill as both a poet and an instructor. However, the invocation reduces the logical and scientific credibility of Lucretius' arguments since divine influence counters the materialistic aspect of the philosophy being taught. Moreover, Lucretius, digressing from the reason and logic characteristic of his method, fails to elaborate upon the function of the gods within his philosophy and to defend their existence. Thus, Lucretius' success or failure in his amalgamation of the poetic and scientific genres essential to *De Rerum Natura* depends upon the perspective from which one examines the text. While from a primarily scientific standpoint the poetic craft of invoking the gods served to detract from Lucretius' poem, from a broader perspective of Lucretius serving as scientist, instructor and poet, the invocation emphasizes Lucretius' cleverness.