

Herman Melville's Condescending Attitude Toward Science as Revealed in Moby Dick

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Science, in its purest form, is based upon logic and logical processes. This poses a problem: Ishmael discovers that life is an ambiguous, amorphous phantom, totally illogical in every respect. How then could Ishmael believe and put faith in this “science” when the life in which he is living is tossed about in a tumultuous sea of illogic? This is the dilemma that Ishmael and, more generally mankind, faces with the rising of every sun. Herman Melville views scientists as inhuman, debased things with no real perspective on life. They dabble in crude, physical manifestations of the world, entirely neglecting the metaphysical. As much as scientists may endeavor, they will never really accomplish anything important, and what they do achieve is menial and mundane. Through Ishmael, Melville reveals his anti-logic, anti-science attitudes.

Melville had very little faith in his fellow man, and a world that was continuously becoming more industrialized and more scientific:

“Though I wrote the Gospels in this century, I should die in the gutter,” Melville wrote Hawthorne in 1851. Five years later, on the verge of a nervous breakdown, Melville journeyed to the Holy Land in search of spiritual healing as well as physical and mental health. His travels through the labyrinth of biblical history convinced him that Man could not build the City of God on this earth; he must find the Promised Land in his own heart. (Robertson-Lorant 539)

Melville increasingly denounced science and the ability to ascertain truth through logical and scientific means; he knew, and Ishmael discovers throughout the course of Moby Dick, that life is truly ambiguous: the only truth lies in one’s self. He was so adamant in this view that he

nearly broke down due to his need of spiritual healing. His pessimism ate through his sanity; his lack of faith bore into his soul.

“Thus speak of the whale, the great Cuvier, and John Hunter, and Lesson, those lights of zoology and anatomy [O]f real knowledge there be little . . .” (Melville 137). In “Cetology,” Melville launches into his own arduous dissertation regarding the science, nomenclature, and classification of whales. True to his vision of science, Melville writes this chapter in a precise, dry and stark tone, revealing his deploring view of their trivial undertakings:

Many are the men . . . who have at large or in little, written of the whale Sir Thomas Browne; Gesner; Ray; Linnaeus; Rondeletius; Willoughby; Green; Artedi; Sibbald; Brisson; Marten; Lacepede; Bonneterre; Desmarest; Baron Cuvier; Frederick Cuvier; John Hunter; Owen; Scoresby; Beale; Bennett; J. Ross Browne; the Author of Miriam Coffin; Olmstead; and the Rev. T. Cheever. (138)

Melville expatiates on a multitudinous list of scientists, later elaborating on their worldly accomplishments, but staying away from any other facet of these people, these *objects*. To Melville, the use of science is strictly for the gathering of information, and even then, it often goes awry. Nowhere does he indicate that any of these men are truly enlightened, and at no time does he elucidate that they have reached any divine epiphany or spiritual apotheosis in their scholarly endeavors. Quite the opposite; he regards their work as humdrum and unavailing. In regards to the truth, the essence of life for which Ishmael is in constant search, man alone cannot divine this for himself. Science is certainly no means to this end. Ishmael states: “I hereupon offer my own poor endeavors. I promise nothing complete; because any human thing supposed to be complete, must for that very reason infallibly be faulty” (139). This clearly states Ishmael’s, or Melville’s, attitude toward science

But how now, Ishmael? How is it, that you, a mere oarsman in the fishery, pretend to know aught about the subterranean parts of the whale? Did erudite Stubb, mounted upon your capstan, deliver

lectures on the anatomy of the Cetacea Explain thyself, Ishmael A veritable witness have you hitherto been, Ishmael; but have a care how you seize the privilege of Jonah alone; the privilege of discoursing upon the joists and beams . . . of Leviathan. (426)

In saying this, Ishmael basically states that no one has the right of science; no one can delve into unknown matters and hope to absolutely pronounce truth. Man must take care how he seizes the privilege of God, whereupon God would know all of the intricacies of the ambiguous meaning of life. It is not our place to try to ascertain God's knowledge, and this is exemplified when Ishmael encounters the Arcturion Shaman: "'How now!' they shouted; 'Dar'st thou measure this our god! That's for us.' 'Aye priests--well, how long do ye make him, then?' But hereupon a fierce contest rose among them, concerning feet and inches . . ." (428).

In "The Gam," Melville deftly deals with matters of science and the naiveté of scientists.

They truly are not in touch with the real world:

. . . [W]hat is a *Gam*? You might wear out your index-finger running up and down the columns of dictionaries, and never find the word. Dr. Johnson never attained to that erudition; Noah Webster's ark does not hold it. Nevertheless, this same expressive word has now for many years been in constant use among some fifteen thousand true-born Yankees. (238)

The real men, the whalemens, they know these words and phrases; they know of things that science and history have not documented and cannot even begin to seek. These sailors, the "true-born Yankees", swim within the sea of truth which barely laps upon the ragged shores of science.

"Of the Monstrous Pictures of Whales" details Melville's attitude toward the piteous attempts of artists and scientists to capture the true picture of the leviathans -- life's ambiguity:

I shall ere long paint to you as well as one can without canvas, something like the true form of the whale It may be worth while, therefore, previously to advert to those curious imaginary portraits of him which even down to the present day confidently challenge the faith of the landsman It may be that the primal

source of all those pictorial delusions will be found among the oldest Hindoo, Egyptian, and Grecian sculptures. For ever since those inventive but unscrupulous times . . . something of the same sort of license [has] prevailed, not only in most popular pictures of the whale, but in many scientific presentations of him. (258-259)

Melville has no faith in the ability of scientists to accurately portray the whale. He condemns their efforts; they are “unscrupulous” and inaccurate; they spring from ancient lore and false religion:

. . . [G]o to the old Galleries, and look now at a great Christian painter’s portrait of this fish; for he succeeds no better than the antediluvian Hindoo. It is Guido’s picture of Perseus rescuing Andromeda from the sea-monster Where did Guido get the model of such a strange creature as that? (259)
[Then] . . . in 1825, Bernard Germain, Count de Lacepde, a great naturalist, published a scientific systemized whale book, wherein are several pictures of the different species of the Leviathan. All these are not only incorrect, but the picture of the Mysticetus or Greenland Whale . . . even Scoresby, a long experienced man as touching that species, declares not to have its counterpart in nature. (261)

To Ishmael, the great scientific journals have it wrong. They cannot hope to accurately and scientifically portray the whale; it simply cannot be done:

[But neither] are the most conscientious compilations of Natural History for the benefit of the young and tender, free from the same heinousness of mistake I do not wish to seem inelegant, but this unsightly whale looks much like an amputated sow; and, as for the narwhale, one glimpse at it is enough to amaze one, that in this nineteenth century such a hippogriff could be palmed for genuine upon any intelligent public of schoolboys. (260)

Life never ceases its ambiguity and hardship, and:

. . . [f]or all these reasons, then, any way you may look at it, you must needs conclude that the great Leviathan is that one creature in the world which must remain unpainted to the last [Therefore], there is no earthly way of finding out precisely what the whale really looks like . . . [and] it seems to me you had best not be too fastidious in your curiosity touching this Leviathan. (262)

Through Ishmael, Melville dictates the idea:

. . . that however baby man may brag of his science and skill, and however much, in a flattering future, that science and skill may augment; yet for ever and for ever, to the crack of doom, the sea will insult and murder him, and pulverize the stateliest, stiffest frigate he can make [M]an has lost that sense of the full awfulness of the sea (270)

Man has lost that sense of the full awfulness of truth -- the *genuine* truth. Not the fabricated truths of science and logic. Melville renounces the impertinent theories of scientists, saying that:

. . . some old naturalists have maintained that all creatures of the land are of their kind in the sea . . . [but] where, for example, does the ocean furnish any fish that in disposition answers to the sagacious kindness of the dog? The accursed shark alone can in any generic respect be said to bear comparative analogy to him. (269)

He believes their ideas to be downright ridiculous. Melville truly despises their attempts, so much so that he must check himself so as to not dive too deeply into the wounds he tore in the flesh of science. He writes:

In connexion with the monstrous pictures of whales, I am strongly tempted here to enter upon those still more monstrous stories of them which are to be found in certain books, both ancient and modern, especially in Pliny, Purchas, Hackluyt, Harris, Cuvier, &c. But I pass that matter by. (263)

Ishmael sees no benefits of science. Even the inventions of great men do not appeal to Ishmael's interest. Contrarily, he thinks them useless:

[I]f [the sperm whale's] eyes were broad as the lens of Herschel's great telescope; and his ears capacious as the porches of cathedrals; would that make him any longer of sight, or sharper of hearing? Not at all.--Why then do you try to "enlarge" your mind? Subtilize it. (321)

Why try and learn of science? Do not waste your time, Oh man! Reach for the knowledge that is infinitely more sublime.

In "The Prairie," Melville declares that "[p]hysiognomy, like every other human science, is but a passing fable" (335). Later in the book, as Melville goes into depth discussing the spout of the whale, he again lambastes science when remarking that ". . . I do not think I shall err; though I may possibly use some superfluous scientific words" (355). He regards science as being far beyond what is required or sufficient; it is an unnecessary, corrupting aspect of the polluted society of man.

There is a horror in life. Man is growing; he makes machines that churn with smoke and smut; he builds weapons that kill his fellows by the hundreds and thousands; industrialization and science are the roots of this evil. "Over Cartesian vortices you hover. And perhaps, at mid-day, in the fairest weather, with one half-throttled shriek you drop through that transparent air into the summer sea, no more to rise for ever. Heed it well, ye pantheists!" (163). The pantheists, those who believe in a doctrine identifying the Deity with the entire universe and its phenomena -- these are the men with whom Ishmael identifies. The whale is everything between heaven and hell, and Descartes, that great, logical mathematician has the world in his stranglehold. Life hangs in the balance; Damocles' sword precariously drifts over humanity's neck; trust not in science lest ye flail and fall into the Tarturian abyss!

Science is hopeless. It is the whale, the ambiguity of all things that man must attempt to overcome, "[f]or unless you own the whale, you are but a provincial and sentimentalist in Truth. But clear Truth is a thing for salamander giants only to encounter; how small the chances for the provincials then? What befell the weakling youth lifting the dread goddess's veil at Sais?" (327). Sais -- that city of ancient Egypt; located in the west-central region of the Nile delta, it has served as a residence of kings and dynasties. Do not offend what you do not understand; do not mock

the whale with the feeble ramblings of science and logic, lest the whale would grow passionate as the dread goddess and smite deplorable minds to splinters.

Melville feels that instead of following the false ways of logic and science, man should seek the greatness of the whale:

It does seem to me, that herein we see the rare virtue of a strong individual vitality, and the rare virtue of thick walls, and the rare virtue of interior spaciousness. Oh, man! admire and model thyself after the whale! . . . Like the great dome of St. Peter's, and like the great whale, retain O man! in all seasons a temperature of thine own. (300)

In "The Fountain," Melville decides to deviate from his serious, boding style and in doing this, he even pokes a little fun at the "great scientists" of ages past. "[The whale] is both ponderous and profound. And I am convinced that from the heads of all ponderous and profound beings, such as Plato, Pyrrho, the Devil, Jupiter, Dante, and so on, there always goes up a certain semi-visible steam, while in the act of thinking deep thoughts" (349). One cannot help but nearly laugh out loud at this absurd picture Melville paints.

In the chapter titled "The Mast-Head", Ishmael discourses:

The Egyptians were a nation of mast-head standers . . . an assertion based upon the general belief among archaeologists, that the first pyramids were founded for astronomical purposes: a theory singularly supported by the peculiar stair-like formation of all four sides of those edifices; whereby, with prodigious long upliftings of their legs, those old astronomers were wont to mount to the apex, and sing out for new stars; even as the look-outs of a modern ship sing out for a sail (158)

This statement is ironic in that it is a historical inaccuracy. The Egyptians *did not* construct the pyramids for the purpose of astronomical observation; they laboriously created them as elaborate tombs for their deceased Pharaohs. The fact that Melville, at that point trusting in the scientific knowledge acquired as of 1851, writes at length about this topic, entirely brings his thesis full-

circle to meet itself. Melville wrote about a historical inaccuracy caused by the fallacy of information at that time. He proves his own point by being wrong. Once again, science failed to assuage humanity; Melville couldn't even trust archaeological data gleaned in that time period. Even more ironic is the idea that we believe ourselves to be correct today. The whole precept of science is to trust what one knows until it is proven false. Today, science believes it is correct, and Melville's poignant truth is illustrated clearly: how can we know that we are right simply due to logic? Has science found the truth? Has logic seen God? In that instance Melville was wrong and, possibly, so are we.

In a footnote regarding the flotation of the sperm whale, Melville wrote that “[i]t will be seen in some other place of what a very light substance the entire interior of the Sperm Whale's enormous head consists. Though apparently the most massive, it is by far the most buoyant part about him” (278). Once again, Melville proves his attitude by being mistaken; it is a slight idiosyncrasy, but it illustrates the lack of scientific knowledge during that period. If an object is very massive, by that very definition it cannot be buoyant unless it floats within a medium more massive than itself. Melville confuses the terms “massive” and “voluminous.” The head is indeed voluminous and buoyant; that is the very reason it floats. But it cannot be more massive than the surrounding water; if it was, the whale, upon death, would immediately sink to the bottom of the deep. These ideas are exemplified in the now clarified laws of the philosopher-scientist Archimedes:

Archimedes' principle . . . states that a body immersed in a fluid is buoyed up by a force equal to the weight of the displaced fluid. The principle applies to both floating and submerged bodies, and to all fluids. It explains not only the buoyancy of ships but also the rise of a helium-filled balloon and the apparent loss of weight of objects underwater. (“Archimedes' principle”)

Not long after Ahab swears the crew of the *Pequod* to their doomed fate, Ishmael relates how Ahab performs a ritualistic rite, having the mates, Starbuck, Stubb, and Flask, approach him, while he declares:

“Advance, ye mates! Cross your lances full before me
” [Ahab was] glancing from Starbuck to Stubb; from Stubb to Flask. It seemed as though, by some nameless, interior volition, [Ahab] would fain have shocked them into the same fiery emotion accumulated within the Leyden jar of his own magnetic life. The three mates quailed before his strong, sustained, and mystic aspect. Stubb and Flask looked sideways from him; the honest eye of Starbuck fell downright. (Melville 169)

This allusion to the Leyden jar can be explained by the following citation:

The Leyden jar, a form of capacitor invented at the Univ. of Leiden in the 18th cent., consists of a narrow-necked glass jar coated on part of its inner and outer surfaces with conductive metal foil. (“Capacitor”)

Ishmael compares this frightful, illogical ritual to his true vision of science, a Leyden jar which stores electricity, and in Ahab’s case, the energetic monomania of his insanity. This scientific tool is a conduit for the ambiguity of their fate.

So, swinging his seated form to the roll of the ship, and with his astrological-looking instrument placed to his eye, he remained in that posture for some moments to catch the precise instant when the sun would gain its precise meridian. Meantime . . . the Parsee was kneeling beneath him on the ship’s deck, and with face thrown up like Ahab’s, was eyeing the same sun with him; only the lids of his eyes half hooded their orbs (Melville 470)

Here one sees Fedallah and Ahab compared and contrasted. At this point, Ahab is using his quadrant, a scientific instrument, to gaze into the sun, while his counterpart and spiritual guide stares into the sun for the mere Holy reverie it induces. But science fails Ahab.

To Melville, the whale, the great Leviathan, represented the obsession and the problems that confront man on his quest through this vast ocean of truth. He knew that science alone could not avail man:

In connexion with this appellative of “Whalebone whales,” it is of great importance to mention, that however such a nomenclature may be convenient in facilitating allusions to some kind of whales, yet it is in vain to attempt a clear classification of the Leviathan (143)

These life problems are unsolvable; no Leyden jar can remedy the enigma; no equation of physics will predict the whereabouts of the leviathan; no quadrant will lead Ahab to Moby Dick:

“Foolish toy! babies’ plaything of haughty admirals, and commodores, and captains; the world brags of thee, of thy cunning and might; but what after all canst thou do, but tell the poor, pitiful point, where thou thyself happenest to be on this wide planet, and the hand that holds thee: no! not one jot more! Thou canst not tell where one drop of water or one grain of sand will be to-morrow noon; and yet with thy impotence thou insultest the sun! Science! Curse thee, thou vain toy; and cursed be all things that cast man’s eyes aloft to that heaven, whose live vividness but scorches him, as these old eyes are even now scorched with thy light, O sun! Level by nature to this earth’s horizon are the glances of man’s eyes; not shot from the crown of his head, as if God had meant him to gaze on his firmament. Curse thee, thou quadrant!” (471)

Ahab is enraged at the folly of science. His mad passion drives him to destroy the foul instrument which has inhibited his capture of Moby Dick, his fruition of monomaniacal satiation. “[N]o longer will I guide my earthly way by thee; the level ship’s compass, and the dead-reckoning, by log and by line; *these* shall conduct me, and show me my place on the sea” (471).

In his explosive soliloquy, Melville, speaking through Ahab, thoroughly attacks and curses science for what it has done to man. It has lead him astray; its presumptuousness has brought God’s fury into the minds of men, and scorched their Holy vision. Ahab condemns this and chooses to follow his own heart, as corrupted and imbued with malice as it may be; he still

believes it to be a more accurate guide than the “vain toy” he had previously relied upon. “[And] thus I trample on thee, thou paltry thing that feebly pointest on high; thus I split and destroy thee!” (471).

Moby Dick is not a novel: it is a life of philosophy laid down in the leather-bound pages of a corporeal book. Of this massive metaphysical doctrine, one can realize that while Melville was unrecognized for his genius, unpraised for his work, and depressed in his lifetime, he knew the heart of man. This is why he advocated following the truth of one’s heart and casting aside the teachings of science. Melville died penniless, but in his mind rested the treasure troves of humanity’s struggle. In the end, science failed; logic does not avail the *Pequod* or her crew. In the end, science is dragged into the hellish sea along with the ship, Ahab, and mortal ambition, while the great white whale swims on through the oceans.

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