

# The Philosophical Impossibility of Darwinian Naturalistic Evolution

by Dennis Bonnette, Ph.D.

*Some two decades ago, Josef Cardinal Ratzinger maintained that scientific evidence pointed to some sort of biological evolution. In a homily, he declared, “Since it has been demonstrated that all living organisms on earth are genetically related, it is virtually certain that all living organisms have descended from this first organism. Converging evidence from many studies in the physical and biological sciences furnishes mounting support for some theory of evolution to account for the development and diversification of life on earth.” [1] Still, “mounting support” is not objective certitude, and “some theory of evolution” does not depict its exact form.*

In my book *Origin of the Human Species*, I conclude that we may never know whether the biological theory of human or general evolution is natural scientific fact. [2] I maintain this because of (1) the complexity of the issues raised, (2) evolution’s unscientific unfalsifiability, and (3) the inherent limitations of natural scientific knowledge, especially when dealing with factual events hidden deeply in the recesses of prehistoric time. Indeed, Pope Benedict XVI has aptly pointed out that there is no way to prove or disprove experimentally that evolution actually occurred over immense past ages.

A 1998 survey of the National Association of Scientists found that only ten percent of its members believed in God or immortality, with the number being only five percent among biologists. [3] Most natural scientists, especially biologists, today embrace Darwinian evolutionary theory, which claims to explain life’s origin and development without divine intervention. Still, some scientists continue to challenge such Darwinian presumptions, attacking naturalistic explanations and the claimed “fact of evolution” itself. Philosopher Larry Azar documents how, while leading evolutionists agree about the “fact of evolution,” they often contradict each other concerning proposed mechanisms whereby this “fact” took place. [4] Still, given the genetic evidence that all forms of life appear somehow related, Darwinists remain undaunted in defending their naturalistic claims.

Traditional metaphysicians know that God exists, and that naturalism is simply an intellectually unfounded presumption of “pure” Darwinism. The First Vatican Council defined that God’s existence can be known with certainty, by the light of unaided human reason from created things. [5] Observing created effects leads the mind inexorably back to the Uncreated Cause, God. St. Thomas Aquinas’ famous Five Ways are the classic expression of this intellective process. [6] Properly understood, these rational approaches to God remain irrefutable, despite the misunderstandings of David Hume and a host of modern skeptics. [7] Whether the Cosmos began in time or not, God’s existence remains the sole adequate explanation for its very existence. Darwinists and scientific creationists debate cosmological and biological evolution as if the outcome determines God’s existence. Yet, metaphysicians know this current intellectual combat is utterly irrelevant to the question of God’s existence. They know that any supposed evolutionary process presupposes God’s ongoing ontological support for the Universe itself and for all the chemical and biological mechanisms evolution may entail. Still, notwithstanding this rationally necessary transcendent metaphysical framework, otherwise seemingly naturalistic explanations of biological evolution may still be evaluated for intrinsic adequacy.

Benedict XVI is also reported to have adopted the distinction between “micro-” and “macro-evolution,” as early as the 1980s, with acceptance of micro-evolution, but skepticism about macro-evolution. [8] Micro-evolution is evolution within the same species, whereas macro-evolution is evolution from one species to a new and distinct species. This begs the question, if evolution means transforming from one species to another species, what is a “species?” Darwin was utterly confused by the question, since he desperately needed the concept of species to support his claimed “*origin of species*,” but conceived of evolution in terms of endless mere variations in accidental qualities—thereby undercutting the essential differences needed to render species distinct. [9] His more recent disciples do no better. While some still insist on the extra-mental reality of species, the logical default position of mainstream evolutionists is nominalism, according to which “species” do not really exist, but are merely names we give to describe mid-ranges of ever-blending series of unique individuals. Even the “punctuated equilibrium” hypothesis advocated by Niles Eldredge and Steven J. Gould does not embrace Goldschmidt’s “hopeful monster’s” instant formation, but merely accelerates the transformation process by reducing it to thousands or even hundreds of years—far too rapid to be observed in the fossil record, but still gradualistic in nature.

Whether expressed in terms of cladistics, morphology, or reproductive isolation, the modern biological species concepts all share the same essential defect: they fail to detect essential differences between individuals in diverse “species.” All differences are expressed in terms of sensible accidents, such as configuration of spines, presence or absence of a backbone, ability to reproduce and produce fertile offspring, and so forth. Biological species concepts fail to express essential differences between species—thus undercutting the whole notion of true evolution from one species to another really distinct species. Biologist Ernst Mayr maintains that it is necessary to get past empirical terms, such as “phenotypic, morphological, genetic, phylogenetic, or biological” in order to get to the “underlying philosophical concepts.” [10]

The *philosophical* natural species concept is based on the reality of a metaphysical essence which is undetectable by modern biologists. Penetrating beyond sensible accidents, the philosophical natural species expresses essential properties (*per se* accidents), which are either present or absent. Living things are different from non-living, not merely in degree, but in kind. Animals possess sentient powers absent in vegetables. Human beings possess intellect and will lacking in merely sentient organisms. Since their essential properties differ, human beings, brute animals, and plants differ according to natural species and specific essence. [11]

Evolutionists and anti-evolutionists alike accept intra-specific evolution or micro-evolution, such as the bacteria that grow resistant to antibiotics or the English peppered moths that changed colors during the industrial revolution. But anti-evolutionists absolutely deny that inter-specific evolution or macro-evolution occurs, such as the fishes evolving into land animals. [12] What confuses the issue is that these same anti-evolutionists usually adopt biological species concepts. This leads them to fight the battle in terms of attacking what might be merely variations within the same philosophical natural species. People do not easily conceive that a dog and an elephant actually belong to the same philosophical natural species because they share the same sentient powers even though their biological organization appears markedly diverse.

Darwinian evolution’s real test rests in its claim to climb the ladder of natural perfections through

interaction of unaided matter. That is to say, can matter give rise to life, then to vegetative life, then to sentient life, and then to intellective life—all by itself? Does unaided evolution possess this self-perfecting capability? Or, does this process violate the basic metaphysical principle that the lower cannot give rise to the higher? In *Origin of the Human Species*, I suggest that unaided material evolution might be possible, at least up to the appearance of true man, whose spiritual intellective soul demands creative intervention by God. [13] Now I propose to show that even the initial stages of evolution from lower to higher natural philosophical species cannot be explained adequately merely in terms of purely physical agents. (I include the transition from non-life to life in the broad notion of “evolution,” since materialists presume this process, called “abiogenesis,” also happens naturalistically.)

Using the method of natural philosophy, biologist Thomas J. Kaiser has recently argued that every organism has an essence that governs reproduction so that the parent organism makes use of mutated DNA solely to produce variations within its own species, never to produce a new species. [14] He explains how all purely natural reproduction entails a biological process which assures that the *same* form must be found in the offspring: “All generation in the sense proper to the living involves the separation of a part that participates in the life and therefore, the species of the parent. Generation simply involves the production of a new individual analogous to separating timber from timber. In other words, life does not begin at conception, a new individual life does.” [15] In the case of sexual reproduction of subhuman animals, the ovum appears to need the sperm to remove an impediment to full development, but the moment the ovum is separated from the mother, it becomes a new individual of the same form and species as the mother. If mutations are used by the offspring at all, either they will bring about accidental differences in the same species, or be harmful to the species. There is no purely natural way for the form of a new species to be educed.

While Kaiser offers a significant demonstration against Darwinian evolution, I propose a somewhat different approach. Relying less on empirical biological science, I too employ the metaphysical principles of St. Thomas Aquinas—and application of the hylemorphic (matter-form) doctrine of Aristotle. These are not outdated hypotheses, but rather the only rational explanation of how things can exist in the form of species at all. And “form” is what such *things* are all about. If things above the atomic level actually exist, some real metaphysical principle must account for them existing as single, unified, real beings of such and such nature. Unless form is present to unify and specify the type of being that exists, all reality would ultimately reduce to the world of atomism in which “things” are not really things at all, but merely conveniently named “piles” of atoms existing in a temporary state of equilibrium. Neither cabbages nor kings would actually exist.

Without forms which distinguish them, species cannot be distinguished—and evolution becomes impossible. Form plays several critical roles: (1) it makes a thing one thing, a substantial unity, (2) it determines a thing’s nature and places it into its species, (3) it gives existence to the substance as “this” thing, and (4) it actively determines matter as to its specificity. This last role is critical in understanding why unaided natural inter-specific evolution is impossible.

In *Origin of the Human Species*, I examine whether merely material reorganization might account for the appearance of new and higher things: life from non-life, animal life from vegetative life,

human life from animal life. I cite Australian philosopher and theologian Austin M. Woodbury who maintains that such changes are not possible, since “an effect cannot be higher than its cause, and every agent produces a like unto itself.” [16] Thus, inter-specific evolution would appear impossible for two reasons: (1) because the effect (a new and higher form) cannot come from an insufficient cause (the prior and lower form), and (2) an agent in a given species tends only to the production of effects that remain within that same natural species. For both reasons, non-living agents cannot produce living effects, non-sentient organisms cannot give rise to sentient ones, and non-intellective primates cannot give rise to intellective ones.

Still, it may be argued that new and higher forms might arise through *per accidens* causality. Chance interactions of lower agents might result in such reorganization of matter as to befit actualization by higher forms. Philosopher John N. Deely argues that abiogenesis entails no violation of the principle of causality and that no need exists for special divine “concurus (still less intervention).” [17] He argues that inter-specific evolution is possible because it entails, not univocal causation (in which the cause must always be proportionate to its effect), but equivocal causation (in which the cause “need not be proportioned to its effect except *per accidens*”). [18] Deely’s insight is this: “The principle is the involution and mutual activation of the causes: *causae ad invicem sunt causae*.” [19] Thus reciprocal causality might entail chance events resulting in genuine transformism. Philosopher Jacques Maritain explains the classical notion of chance as events occurring from the “intersection of causal chains,” which produce an effect outside the natural finality of the interacting agents. [20] While the activities and end of a specific agent cannot exceed its nature except by a miracle, chance interactions of multiple agents might thus effect new forms present in none of the interacting agents.

This scenario fits the general thesis proposed by evolutionists. Non-living matter might so interact as to produce primitive organisms. Genetic mutations in organisms caused by environmental and other natural factors might cause normal generative processes to produce new genetic material resulting in new species. As a philosopher, the exact mechanisms entailed, and even their scientific feasibility, do not concern me. That is left to the ongoing scientific discussion. My concern is whether this proposed *philosophical* explanation for abiogenesis and transformism is valid. Closer examination reveals it is not.

Woodbury’s objections to inter-specific evolution go beyond noting that lower forms cannot give rise to higher ones. He argues that changes in matter alone are not sufficient because form, specifically substantial form, plays a special role in the coming-to-be of new and higher natural species. Since form determines the entire organism to its proper species, form also places the matter into its species, that is to say, makes it fitting for *this* particular kind of form. Aquinas points out that “matter must be proportionate to form.” [21] Thus it would be impossible to have essentially distinct forms without any real difference in the organization of the matter. Woodbury maintains that only the *final* disposition of the matter occasions the eduction of a new substantial form. That is to say, the new and higher form of living substance becomes possible only at the exact moment in which the organization of the matter is perfectly and completely proportioned to that new form. But, he maintains, “The ultimate disposition [of the matter] is never together with the form which is corrupted, but is together with that which is generated.” [22]

This crucial insight means that the material organization needed for the new and higher form is

never present until that *new* form itself is present. But it is form which is the active principle in the hylemorphic (matter-form) composite, whereas matter is the potential, or passive, principle. This means that form places matter into its proper species, and not *vice versa*. Matter is related to form as potency is to act. Aquinas maintains, “Since it is receptive to act, potency must be proportioned to that act.” [23] Matter, as the potential principle, is receptive to form, which is the active principle. [24] Hence, matter’s ultimate disposition must be determined by the new and higher form. Without that new form simultaneously existing, the ultimate disposition of the matter will never be present to fit that new form. As the active principle in determining which species the matter befits, form possesses *ontological priority* in determining the final organization of the matter which befits that new and higher species. Thus, the prior, or intermediate, or even penultimate disposition of the matter cannot account for the ultimate organization of the matter. The new form alone plays that role. Since (1) the prior less perfect form cannot account for the coming-to-be of the posterior more perfect form, and since (2) no prior state of matter can account for the new form’s eduction, it necessarily follows that some agency outside all the natural material causes at work must explain that new form. In a word, natural evolutionary processes alone cannot adequately explain new and successively higher philosophical natural species. Naturalistic evolution is metaphysically impossible.

At this point, those more versed in natural science than in Aristotelian-Thomistic philosophy are doubtless incredulous that philosophers could be so naïve about the proper role that mutations play in explaining the appearance of new and higher organisms. As Kaiser points out, to most natural scientists today, the DNA and genes alone determine the species of an organism. [25] Thus, mutations alone would suffice to explain transformism. On the contrary, (1) this is not a natural scientific analysis, but one of *philosophical* science, and (2) unless one reverts to some sort of crypto-atomism, the role of form in the production of new organisms dictates Woodbury’s inference.

It matters not whether natural scientists can discern when genes or DNA or even more precise determinations of material organization necessary for a given natural species are present. What matters is that by the time such material organization is present it is already *being* specified by the appropriate substantial form. The question then is whether matter’s disposition is responsible for the presence of that new form, or form’s presence is responsible for that matter’s ultimate disposition. Natural scientists think that proper material organization alone *is* what constitutes new species, and hence, assume that material changes alone can explain them. They reveal inherently materialistic philosophical presuppositions. Unless one is a crypto-atomist, the reality of things above the atomic level demands some sort of matter-form composition in which form dominates and specifies material organization—so that it is the new form that accounts for the material organization that natural science discerns. The only *philosophically* adequate explanation is that it is the new form which is responsible for the ultimate material organization—not the reverse.

Cartesian dualism dominates many people’s thought. For example, they think that a human soul could just be added to a subhuman primate to produce a human being. But, then, man would not be *one* being, but a composite of two things: (1) a human form (soul) and (2) an atomic organization somehow suited to sentient activities. On the contrary, Aristotelian hylemorphic doctrine preserves the existential unity of things, especially of man himself. We are *one* being, *one* substance. Form and matter compose a single unified living thing. Form actively dominates and

organizes matter so as to render it perfectly fitted to the species to which the organism belongs. This means that man's matter is not simply "animal matter" with a human form, but *human* matter because it has a *human* form. Because man has a human form, he is capable of intellectual and volitional activities supported by his specifically human material organization.

We have no way of ascertaining the exact material organization needed for actuation by a given form. But we know, for example, that the formal organization of a human being is *different* from that of a merely sentient organism, or else, that sentient organism *would be* a human being. Gross morphology is not a reliable indicator of matter's fittingness for a given form. A human corpse's macro-organization may appear more fitted to human life than that of a human zygote, but its micro-organization is not. Since forms of diverse species are really diverse, they must make a real difference in the matter of those species. Hence, the matter of the lower species cannot be the same as the matter of a higher species. Even the penultimate matter of the prior, lower species is not suited to the form of a higher species. Only when the new form appears does matter's "micro-organization" become fitted to the higher species. While natural science might even be able to detect that matter suddenly appears appropriate to the new, higher species, by that moment in time the new form is already present. But where does the new form come from? From the previous material conditions? No, because they were not fitted to the new form. From the previous form? No, because the lower cannot give rise to the higher. From the new organization of the matter? But that matter receives its new organization from the new form! Whence, then, the new form?

To argue that the matter is the same before and after such a change is to fail to heed the necessary fittingness of matter to form, and the dominance of matter by its form. To say that evolution reorganizes the matter and that, thereby, the new form is educed, is to put the cart before the horse—since it is the new form which is responsible for determining the matter as proper to a new specific type of living organism, and not the reverse. Solely the new and higher form's appearance enables matter to achieve its proper organization for this new species. But, the prior material organization and form cannot account for the appearance of the new form. Evolutionary material processes alone cannot account for new and higher natural philosophical species.

This philosophical conclusion is compatible with methodological naturalism in natural science, which remains free to seek natural reasons for genetic changes. Natural scientists may propose mechanisms claiming to bridge even inter-specific evolution to new philosophical natural species. But competent metaphysicians will know such mechanisms are not the entire story. Genuine transformism from lower to higher natural species requires preternatural intervention, though such intervention need not be discernible to natural scientists.

Since natural agents alone cannot account for the coming-to-be of life forms, or of higher life forms from lower ones, merely discovering physical conditions suitable for life does not warrant empirical scientists' nearly universal assumption that life abounds throughout the cosmos. If such does occur, preternatural agency must intervene in every instance. Proper understanding of Aquinas' First Way of proving God exists reveals that God constantly acts in the natural world so as to explain the coming-to-be of all things subject to change. [26] Divine providence might ordain that life in many forms fills the universe. Yet, His ways are inscrutable. Short of their actual encounter, no scientific evidence or speculation entails that such life must be found. We shall only

know that we are not alone when we actually first meet our extraterrestrial neighbors—even microbial ones. Even so, Darwinian naturalism will not adequately explain why they are there.

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## ENDNOTES

- [1] *In the Beginning...: A Catholic Understanding of the Story of Creation and the Fall* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1995), paragraph 63.
- [2] Dennis Bonnette, *Origin of the Human Species* (Naples, FL: Sapientia Press, second edition, 2003, 2007), p. 210.
- [3] Gregory W. Graffin and William B. Provine, “Evolution, Religion and Free Will,” *American Scientist*, 95:4 (July-August 2007): 294-7.
- [4] Larry Azar, *Evolution and Other Fairy Tales* (Bloomington, IN: AuthorHouse, 2005), pp. 356-69.
- [5] Denzinger, *Enchiridion symbolorum*, 1806.
- [6] *Summa theologiae*, I, q. 2, a. 3.
- [7] Reginald Garrigou-Lagrange's book *God: His Existence and His Nature* (St. Louis, MO: B. Herder Book Co., 1939) remains the classical exposition of the *Quinque Viae*, fully treating their metaphysical presuppositions and exhaustively refuting David Hume, Immanuel Kant, various process philosophers and their like. My book *Aquinas' Proofs for God's Existence* (The Hague: Martinus-Nijhoff, 1972) defends the impossibility of infinite regress of proper causes, a key premise of the Five Ways.
- [8] John L. Allen, Jr., “Benedict’s Evolving Thought on Evolution,” *National Catholic Reporter*, 42:39 (September 8, 2006): 5.
- [9] Azar, *Evolution and Other Fairy Tales*, pp. 168-72.
- [10] Mayr, *The Species Problem* (Washington, D.C.: American Association for the Advancement of Science, 1957), p. 17.
- [11] Bonnette, *Origin of the Human Species*, pp. 27-39.
- [12] *Ibid.*, pp. 6-7.
- [13] *Ibid.*, pp. 41-63, 107-10.
- [14] Thomas J. Kaiser, “Whether Darwinian Evolution Is Possible,” *The Aquinas Review*, 13 (2006): 1-35.
- [15] *Ibid.*, p. 24.
- [16] Austin M. Woodbury, *Philosophical Psychology* (Sydney, N.S.W.: Aquinas Academy, unpublished manuscript, 1945), p. 59.
- [17] John N. Deely, *The Philosophical Dimensions of the Origin of Species* (Chicago: Institute for Philosophical Research, 1969), pp. 324-5.
- [18] *Ibid.*, p. 324.
- [19] *Ibid.*, p.321.
- [20] Jacques Maritain, *Preface to Metaphysics* (New York: Sheed & Ward, 1939), pp. 141-51.
- [21] *Summa theologiae*, I, q. 76, a. 5, ob. 1.
- [22] Austin M. Woodbury, *Cosmology* (Sydney, N.S.W.: Aquinas Academy, unpublished manuscript, 1949), p. 68.
- [23] *Summa theologiae*, I., q. 75, a. 5, ad 1.

- [24] “First, he [Aristotle] explains that the form is substance to a greater degree than the composite....Third, he shows that the form and the composite are substance to a greater degree than matter.... He accordingly says, first, ‘that the specifying principle,’ that is the form, is prior to matter. For matter is a potential being, and the specifying principle is its actuality; and actuality is prior to potentiality in nature. And absolutely speaking it [form] is prior in time because the potential is brought to actuality only by means of something actual....Hence it is clear that form is prior to matter, and that it is also a being to a greater degree than matter....Hence form must be being to a greater degree than matter.” *In VII Meta.*, 2, n. 1278. St. Thomas Aquinas, *Commentary on the Metaphysics of Aristotle*, John P. Rowan, trans. (Chicago: Henry Regnery Company, 1961), Library of Living Catholic Thought, Vol. 11, p. 498.
- [25] Kaiser, “Whether Darwinian Evolution Is Possible,” p. 25.
- [26] *Summa theologiae*, I, q. 2, a. 3; See Dennis Bonnette, “A Variation on the First Way of St. Thomas Aquinas,” *Faith & Reason*, 8:1 (Spring, 1982): 34-56.