

# A CRITIQUE OF “THEISTIC EVOLUTION” AS A SUPPLEMENTARY MODEL OF THE RELATIONSHIP BETWEEN DARWINIAN THEORY AND RELIGION

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## **Abstract**

Advocates of the concept of “theistic evolution” as a model for the marriage of Darwinian theory and religion accept the Darwinian theory of the evolution of nature as a satisfactory explanation. They integrate this theory with religion by saying that the religious theory – to the effect that a transcendent God created nature – underpins Darwinian theory as a first cause. A transcendent creative power backs the Darwinian mechanism. The problem with this model is that it is excessively speculative. It is speculative in the Kantian sense in that, rather than building on empirical observations, the theory is ultimately just a speculative idea. Speculative theory, however, should be avoided because it is impossible to determine whether speculative hypotheses are right or wrong. They risk being merely wishful hypotheses. An alternative to the “theistic evolution” model is a Kant-inspired model. Kant deemed it absurd to hope for an explanation of the emergence of the organismal world in terms of undirected natural laws. In our day, the biochemist Michael Behe has re-affirmed the position that the hopes for an explanation of the evolution of very complex organisms in terms of undirected natural laws and chance remain wishful speculations. But available as an alternative to the Darwinian account of the evolution of the complex organism is the solution suggested by the spontaneous analogical cognition of the organism, which sees it as the result of intelligent design directing its evolution. There is a compelling analogy between the structure of a complex organic system and that of a manmade machine. This phenomenological insight needs to be taken seriously. On this model, the relationship between religion and the Darwinian theory is articulated through the characterization of the latter as a methodological reduction which takes no account of the phenomenological cognition, of which cognition the religious theory is an interpretation. The religious proposal is not speculation. Rather, it is an interpretation of the content informing the phenomenological cognition. On this model, then, the phenomenological analogical insight “mediates” between Darwinian theory and religion.

Those who champion theistic evolution accept Darwinian theory as a satisfactory explanation of evolution of nature. They marry the Darwinian theory up with the religious tenet that the natural world is the creation of a transcendent God by claiming that that God delivers the ultimate underpinning for the truth of Darwinian theory. The theologian John F. Haught belongs to this constituency of thought. In his article “Darwin, Design, and Divine Providence” (in *Debating Design* ed. Michael Ruse and William Dembski, 2004) he sets out some of the standard explanations for how religion can be squared with Darwinian theory.

Haught claims that religious explanations lie at “deeper level of explanation” than their scientific counterparts. Given the fact that they function at two different levels, science and religion are not mutually contradictory. Scientific explanations operate at a more superficial level than religious ones. Religious explanations are answers to very fundamental questions such as “Why there is any order at all, rather than chaos; or why there is anything at all, rather than nothing; or why the universe is intelligible; or why we should bother to do science at all.” (p.237).

It is true that these types of question are pertinent in religious contexts. The question is whether they are relevant to the discussion about the answer delivered by Darwinian theory to the issue of causes behind the evolution of nature and the religious answer to the same question.

It is no part of Darwinian theory to claim that there is order rather than chaos in nature. Rather, given the major role assigned to chance in that theory, Darwinianism must be committed to the claim that nature is chaotic. If the religious take on the issue has it that nature is ordered rather than chaotic, then it contradicts Darwinian theory. As for Darwinian theory, it is very difficult to see what grounds it might have for accepting the religious-type claim to the effect that nature is ordered.

As for the question as to why there should be anything at all rather than nothing, it is true that the Darwinian theory is predicated on a presupposition that it is unable to explain, namely the existence of matter upon which the Darwinian mechanism can act. Religion and the Darwinian theory are mutually compatible and supplementary, then, because Darwinian theory presupposes that there is something rather than nothing, and this presupposition is explained by the religious claim that the natural world is the creation of a transcendent God.

Now if this solution to the problem of how Darwinian theory may be reconciled with the religious claim, whose cornerstone is that nature has been created by a transcendent God, is construed in terms of the Thomistic distinction between a first cause and secondary causes, the question inevitably arises as to how well any such model accounts for the relationship between

Darwinian theory and the religious thesis. If, spotting a blackbird in the garden, I should ask what or who created it, I would seem committed to replying that it has evolved through a process involving an unconscious natural selection mechanism working on some random mutations. Is our perception of the particular blackbird at all altered if to this response we add the claim that the evolution of the blackbird via an unconscious Darwinian mechanism presupposes the existence of a transcendent God who set the whole process in train? I fail to see that it is. The problem with the “first cause solution” is that it is too abstract. If we look at the particular creatures of nature, then we do not in fact see them as the result of a creative consciousness.

It is equally obscure how Darwinian theory might relate to the issue of the intelligibility of the universe. The claim that the universe is intelligible is an assertion to the effect that there exists an affinity between our intelligence and the rationality of the universe. The universe was conceived before being apprehended by us. Our thinking about the universe hooks into the thinking through which the universe was created. According to Darwinian theory, the evolution of nature is not the expression of a conscious intelligence and so Darwinian theory can get no purchase on the claim that the universe is the work of an intelligence whose agency explains why its constitution is intelligible.

The final question, which inquires as to why we should bother to do science at all is, as I see it, the ethical question. We should do science because it is for the good of mankind. If science were not to mankind’s benefit but to mankind’s detriment, then we ought not to be doing science. The problem with that question is while it is not irrelevant per se it *is* irrelevant to the key issue of how we view the individual denizens of the natural realm. For that is where the ethical dimension takes hold. Our ethical assessment of the organismal world, to which human beings also belong, depends to a very significant extent on how we perceive it. If we look upon the natural realm as the result of the workings of an unconscious mechanism, we conceive of its members differently than we would if we saw them as a result of the agency of a conscious intelligence. I shall return to this issue in the concluding part of this article.

Haught goes on to claim that not only is it possible to knit together Darwinian theory and religion, but that Darwinian theory can even *enrich* the religious theory of creation. The Darwinian theory can be the occasion for “theological growth and renewal”. Ian Barbour calls this position integration. The fact that chance plays a significant role in the explanation of the evolution of nature readily consists with the theological idea that God is “humble, self-giving love”, Haught claims. If God is self-giving love, he will desist from creating a universe that is deterministic: love does not

compel the loved one. “An infinite love, if we think about it seriously, would manifest itself in the creation of a universe free of any rigid determinism (either natural or divine) that would keep it from arriving at its own independence, autonomy, and self-coherence.” (p.241). Love implies that you “let the other be”. The other is allowed to exercise free will and individual autonomy. This fits well with a theology which has it that God is selfless love, that the universe has been invested with its own autonomous laws of which natural selection is one. God endues the universe with possibilities, and then leaves it alone to actualize and evolve itself. God does not force the universe to do as he wishes, but seeks only to persuade the universe to evolve in the right direction. God does not coerce the universe into obeying his commands, but seeks only to set it on the right course. God takes the “risk of love” – the risk that his creation will make wrong and evil choices. This model for the relationship between God and creation responds to the problem of evil with the argument from free will. “A theology after Darwin also argues that divine Providence influences the world in a persuasive rather than a coercive way. Since God is love and not domineering force, the world must be endowed with an inner spontaneity and self-creativity that allows it to ‘become itself’ and thus to participate in the adventure of its own creation. Any other kind of world, in fact, is theologically inconceivable. If God were a directive dictator rather than persuasive love, the universe could never arrive at the point of being able to emerge into freedom.” (p.243).

This integration model is fraught with problems. It is true that, according to Christianity, the divine essence is selfless love. It is also true that in a genuine love relationship the lovers do not force each other to act in ways that run contrary to their own volitions. Love is free. But does it make any sense to apply these concepts, which relate to the sphere of interpersonal love, to God’s interactions with the universe and nature as a whole? Concepts such as “freedom” and “autonomy” only make sense when used in relation to creatures in possession of consciousness. If, instead, you apply these concepts across the board to nature and the universe it must surely be in a highly metaphorical sense, and indeed, Haught’s text is peppered with quotation marks. A thorough treatment of these issues would require a more probing discussion of process theology, but in the present context that would take us too far afield. Suffice it for me to point out that the weightiest problem facing this religious interpretation of the Darwinian theory is that it is in flagrant contradiction with the theory it purports to interpret. The Darwinian theory claims that the universe and the natural world are the result of unconscious processes. By contrast, the religious interpretation claims that the universe and the natural world are the result of conscious intelligent agency. It is possible to distinguish between a first cause and secondary causes, but it is surely a

paradox too far simultaneously to claim that the universe both and is not the manifestation of conscious agency. I find it implausible to claim that chance, which is a central factor in Darwinian theory, and which also plays a role in quantum physics, is not really chance at all but the articulation of the workings of a divine mind. Such a claim fails to take natural science seriously, and undermines it through the addition of pure speculation.

The fundamental problem with “theistic evolution” is that it is far too speculative. It starts from an acceptance of Darwinian theory of the evolution of nature: the theory that the evolution of nature results from the workings of unconscious mechanisms. Bolted onto it is the religious claim that evolution of nature is ultimately the work of a conscious creative power. This is achieved by the posit of a creative consciousness underpinning the Darwinian mechanism. It is obvious why any such theory is necessarily highly speculative: at no point does it connect with empirical observations. By contrast, the Darwinian theory is empirically based. A theory about something underlying the Darwinian theory is not. Add to this the fact that what is alleged to be behind the Darwinian theory contradicts it outright and it becomes obvious that the metaphysics being offered is speculative indeed.

According to Immanuel Kant speculative concepts are concepts not founded on empirical observations but are, rather, constructed from other concepts. Speculative arguments are theories about theories. The concept of natural selection, which involves the operation of a mechanism on random variations, is a concept applicable to empirical findings: it seeks to explain empirical observations, namely how the living organisms, observable by us, emerge. The concept of a first cause seeks not to explain empirical observations, but rather to establish the ultimate cause of natural selection. The inference from natural selection to its possible cause is an inference within the sphere of pure concepts, as Kant puts it. Speculative concepts such as the concept of a first cause do not, according to Kant, represent genuine cognitions but are mental constructs only, unable to be verified or falsified by empirical observations. The idea of a first cause may be useful as a regulative idea: it may stimulate scientists to persevere in the search for more fundamental causes, but this apart, we should refrain from speculation, according to Kant. Speculative conjectures do nothing to advance knowledge since it is impossible to determine whether they are true or merely arbitrary and illusory ideas. Speculation is in vain. How might we ever set about determining whether Haught’s speculations are true or false? We cannot. And when these ideas about what ultimately drives the Darwinian mechanism have so little to recommend them and contribute

nothing to the explanation and understanding of the evolution of nature, which the Darwinian theory is purported to account for satisfactorily, why should we accept them? Haught's theoretical constructs about what lies behind the Darwinian mechanism have little persuasive power. Add to that our knowledge of how concerned he is to unite Darwinian theory and religion and it becomes difficult to avoid the suspicion that his theological speculations are nothing but wishful speculations.

It may be that it is possible to marry the religious claim that the universe is the expression of a creative consciousness with other natural science theories, but if you hold that the Darwinian theory provides a satisfactory account of the evolution of nature, there would seem to be no cogent way of marrying religion and Darwinian theory.

The question remains, however, whether Darwinian theory should be accounted a satisfactory explanation of the evolution of nature. Kant claimed in 1790 that it would be absurd to hope for the emergence of "another Newton" capable of explaining the genesis of a blade of grass from natural laws which were not goal-directed. Darwinists claim that Darwinian theory proffers an explanation that accounts for the emergence of a blade of grass solely by reference to chance and natural laws, not directed by a purpose.

But does the Darwinian theory provide us with a satisfactory explanation of evolution of nature? The biochemist Michael Behe has argued that it is improbable that the Darwinian mechanism is capable of explaining the evolution of e.g. highly complex biochemical systems. Darwinian theory maintains that evolution proceeds through gradual incremental changes, but it is improbable that very complex systems evolve in this way since all the parts of which such a system is composed have to be in place if the system is going to work. If the system lacks any of its component parts, it cannot work at all, and will present no advantage to the organism. Consequently, natural selection would not select for such an unfinished system for further evolution. Behe claims that these biological systems are irreducibly complex and that therefore it is highly improbable that they should have evolved solely as a result of the workings of the Darwinian mechanism.

Behe put this claim forward in 1996 and it has been vigorously debated ever since. The biochemist Franklin Harold, himself a Darwinist, discussing Behe's claim however concludes: "We should reject, as a matter of principle, the substitution of intelligent design for the dialogue of chance and necessity (Behe 1996) but we must concede that there are presently no detailed Darwinian accounts of the evolution of any biochemical system, only a variety of wishful

speculations.” (Franklin Harold *The Way of the Cell* 2001, p.205). An explanation of the evolution of an organism is scientifically adequate only if it is able to account for all the incremental steps required for the building of the system. These steps must be so small that their probability can be calculated. Which means that you should actually be able to quantify the probability of every small step, and so prove that it is reasonably probable that it constitutes a step on the evolutionary ladder. You also have to be able to prove that each step presents an advantage to the organism. Currently, there exist no Darwinian explanations of e.g. the bacterial flagellum which satisfy these criteria. Hence Darwinian accounts purporting to account for the emergence of very complex systems are primarily expressions of the hope that the evolution of these systems is explainable by appeal to the Darwinian mechanism. They are wishful speculations. We have to conclude, rather, that we are currently unable to explain the evolution of these systems in a scientifically satisfactory way. We may hope, however, that at some time in the future we shall be able to do so. But, as in the time of Kant, that remains no more than a hope. The contemporary debate within biochemistry confirms Kant’s conclusions regarding the scope of our epistemic access to the processes by which living organisms evolved.

Albeit that Kant deemed it an absurd hope, we cannot in principle rule out the possibility that we shall some day succeed in explaining the evolution of these systems by means of undirected natural laws. There are two things that make such certainty impossible. One is the openness of the future. Nobody can predict the future. New discoveries may be made – new data or new natural laws – which enable us to explain it. The other is that chance is a key factor in the Darwinian explanation. It is not logically impossible that myriad fortuitous mutations occurring simultaneously would explain the emergence of a complex system, but it is not probable. Kant did not declare it impossible in principle that we should one day be able to explain the evolution of living organisms, but he deemed that hope “absurd”.

Does that mean we must stop here and conclude that we simply do not know how these systems evolved? No, because another possibility spontaneously imposes itself – the possibility, predicated on the analogy between artefacts, e.g. machines, and living organisms – to the effect that these complex systems may have been brought into being by an intelligent cause. For it is an essential feature of machines as well as of organisms that the parts of the whole are so configured and integrated that jointly they perform a function which exceeds the capacity of any single part alone. It is very important to emphasize that this is only a structural analogy; it is not a relation of

identity; the organism is not a machine. However, nor is the analogy a piece of speculation; it presents itself spontaneously when you look at, say, the model of the bacterial flagellum. According to this analogy, you are entitled to infer that the emergence of these complex systems is due to an intelligent cause because we know of no artefacts which have not been caused by an intelligent cause. Michael Behe agrees with Kant on this point.

The theory that the evolution of the organism is caused by an intelligent cause has been alleged to be synonymous with pseudo-scientific creationism. But is it? A commitment to creationism presupposes a belief in the biblical account of creation. And since, by the same token, the existence of the God of the Bible will figure as a starting premise when you seek to explain the evolution of nature, your aim will be to have the empirical observations dovetail with the biblical account of creation. Thus runs the charge, but it is unfounded. The theory that the evolution of nature is caused by a conscious intelligence does not presuppose any theistic belief. It presupposes merely that you have confidence in the deliverances of your senses and the soundness of your powers of reasoning. The theory springs entirely from the attempt to explain empirical observations and thus has nothing to do with creationism. It has to do with a profound tradition in European philosophy.

Kant did not think, however, that this theory is part of natural science and here Michael Behe disagrees with Kant. Behe is of the view that intelligent design theory is indeed a natural science theory. However, I agree with Kant. I subscribe to the position that in our tradition natural science is a project defined by a methodological constraint to the effect that explanations of natural phenomena must appeal only to unintelligent causes. Natural science is the endeavour to advance our knowledge under the constraint that only unintelligent causes such as natural laws and chance are legitimately invoked in our explanations. In natural science, appeal to intelligent causes is off limits. Since it refers to an intelligent cause, intelligent design theory does not qualify as science.

The fact that intelligent design theory is not science, however, does not automatically place it in the realm of arbitrary subjective cognition. For this insight has a universal validity. We can think of a whole host of explanations which we consider to be valid even though they are not scientific explanations. It is, for instance, impossible to explain the emergence of the mobile phone scientifically. We cannot appeal to the operation of some natural law for the emergence of the mobile phone is a contingent phenomenon. Nor is it caused by chance, nor any combination of natural law and chance. It results from intelligent agency. This is universally acknowledged to be the case; who can deny it? But it is not an explanation in natural science. Likewise, *mutatis*

*mutandis*, for the insight to the effect that evolution of the organism is the result of intelligent agency.

What's more, there is complete consensus on the phenomenological description of the organism, with everyone, including the proponents of Darwinian theory, claiming that it is integral to the structure of a living organism that it comprises a whole whose parts are so arranged and integrated that together they perform a function which no single part can perform alone. This explains why biochemists, for instance, refer to proteins as nano-*machines*. The Darwinist Richard Dawkins defines biology thus: "Biology is the study of complicated things that give the appearance of having been designed for a purpose." ( Richard Dawkins *The Blind Watchmaker* 1987, p.6). Biological entities *appear* to be designed. It is very important to note that everybody agrees on *the phenomenological description* of the living organism. Disagreement sets in when it comes to explaining the nature of what everybody observes. Is it possible to account for the evolution of the complex organism by appeal to unintelligent causes alone, or does an intelligent cause need to be invoked?

The most obvious conclusion to draw is that, owing to the strength of the analogy between a manmade machine and an organism, an intelligent cause is needed. This perception of the matter is the one that most readily imposes itself upon us and has done for centuries. If you think otherwise, the burden of proof rests squarely with you. William Dembski is right on this point. "If a creature looks like a dog, smells like a dog, barks like a dog, feels like a dog and pants like a dog, the burden of evidence lies with the person who insists the creature isn't a dog. The same goes for incredibly intricate machines like the bacterial flagellum: the burden of evidence is on those who want to deny its design." (William Dembski *The Design Revolution* 2004, p.222). If the Darwinian explanation of e.g. the bacterial flagellum is unpersuasive, there is no reason to believe that the phenomenological description and analogical inference are unreliable epistemic guides. The phenomenological insight has, as it were, the right of primogeniture. Of course, spontaneous, intuitive, analogical insights can turn out to be false, but since this is true of any kind of cognitive claim it does not amount to a decisive argument for maintaining that whatever is grasped through analogical cognition is false. Any argument to that effect would be metaphysical, not scientific, in character. Phenomenological philosophy has shown that phenomenological cognitions are valid cognitions in their own right. There is no case for disqualifying this mode of cognition per se. If scientific findings show a particular phenomenological insight to be spurious, its claims to validity will have been undermined. But if this is not the case, there is no reason not to have confidence in it. Natural

science thus affords a test of the validity of phenomenological insights. However, the phenomenological insight to the effect that nature is the expression of a conscious intelligence has not been repudiated; hence, there is no reason not to have confidence in it.

This defence of the phenomenological cognition has nothing to do with the argument from ignorance. The distinction between a stereotypical argument from ignorance, to the effect that “Ghosts and goblins exist because you have not shown me that they do not exist”, and, contrariwise, the claim that the phenomenological insight into the nature of the evolution of the organism holds, in that the latter remains unrebutted by scientific evidence. For ghosts and goblins are the fictions of subjective imaginings while the phenomenological perception of the structure of the organism has universal validity.

What distinguishes a theory which claims that the emergence of life and the evolution of nature was produced by an intelligent cause, on the one hand, from the Darwinian theory as a theory in natural science, on the other, is the fact that the Darwinian theory is the result of a methodological reduction. The scientific investigation of nature is subject to deliberately chosen constraints. It is our decision, qua scientists, to study nature and produce explanations of the phenomena under scrutiny which appeal only to unintelligent causes such as natural laws and chance. This reductive element means that we neglect our spontaneous phenomenological determination of nature as the expression of conscious intelligence. According to phenomenological philosophy, by contrast, our phenomenological insights are primary, and logically prior to all scientific cognition. Scientific cognition is a secondary, chosen, perspective.

The relationship between this theory and religion is, that a religious interpretation to the effect that the evolution of nature is caused by a transcendent creative power is a possible but not necessary inference from the theory that the evolution of nature is caused by a conscious intelligence. This theory allows but does not enforce the interpretation that the evolution of nature is owed to a transcendent creative power. The theory is not a proof of God’s existence, but is hospitable to that interpretation. It is certainly possible to think that the intelligent cause which can be inferred from the analogy between the organism and the manmade machine is a manifestation of a transcendent creative power. This religious interpretation is not a speculative conjecture about a primary cause underlying a secondary cause; it is an interpretation that focuses more minutely on what the cause might be. It is not a speculative idea, a theory about a theory, but an attempt to identify the intelligent agent. Moreover, there exists no conflict between the theory that the evolution of nature is caused by an intelligent cause and the religious interpretation. The two are

eminently compatible. Both the analogical argument and the religious hypothesis agree that nature is an expression of a conscious intelligence.

According to Kant's analysis of the possibility of knowledge concerning how living organisms evolved, Darwinian theory and religion cohere together, since Darwinian theory is the result of a methodological reduction. According to this model both Darwinian theory and the religious theory are legitimate theories. The Darwinian theory is a legitimate theory functioning as a working hypothesis in the natural science project, an investigation of how far we can get in explaining natural phenomena by appeal to unintelligent causes alone. The religious theory is legitimate, by contrast, as a possible interpretation of the phenomenological cognition. We do not have to choose between religion and the Darwinian theory, not because the two theories harmoniously supplement each other, but because the Darwinian theory as a contradictory theory serves as a test of the validity of the religious interpretation of nature. As for the present the Darwinian theory has not yet been able to falsify the religious theory, and vice versa, the Darwinian theory has not yet been falsified. This may change, nobody knows the future. We do not have to choose between the two theories because both are still fruitful.

According to this model the Darwinian theory and the religious theory represent two distinct perspectives on nature. However, this is not postmodern perspectivism. According to postmodernism, all perspectives count as equal and are not interconnected. According to the Kant-inspired model, the natural science perspective is subordinate to the religious perspective because the phenomenological cognition is primary and hence essentially prior to scientific cognition. The natural science perspective results from a methodological reduction. Moreover, the perspectives are not on a par in the sense that we are committed to accepting two or more truths as in postmodernism. If we inquire after the cause of evolution of nature, then the answer is that as far as we know it is a transcendent conscious creative power. The Darwinian theory is not a truth, but a working hypothesis.

It seems to me that this Kant-inspired model for the relationship between religion and the Darwinian theory is much more convincing than the "theistic evolution" model. The "theistic evolution model" fails to convince because of its speculative character. On it, you add a further speculative layer to a theory that is already speculative. This amounts to wishful speculation twice over, which is surely too much.

The phenomenological model is not speculative. On that model, instead of constructing a speculative conjecture about what might lie behind the Darwinian theory, you perceive that theory

to be a legitimate methodological reduction of the phenomenological analogical insight to the effect that nature is the expression of intelligent agency. The religious interpretation of that insight is not a theory of something further behind this intelligence. It is an hermeneutical attempt to home in on what this intelligence might be. It is not a theory about a theory.

The discussion about the relationship between the Darwinian theory and religion has gone awry because the significance of the phenomenological insight has been overlooked. The understanding has been that we stand before two theories which are mutually incompatible: a Darwinian theory of nature which sees it as the outcome of the workings of unconscious mechanisms and a religious theory that holds that nature is the expression of a conscious intelligence. This leads to either an irresolvable conflict, which both creationists and Richard Dawkins agree to be the case, or it leads to highly speculative religious theories about what ultimately lies behind the purported Darwinian mechanism. But speculative religious constructions seek to unite irreconcilables. The two theories are mutually exclusive. It is only possible to accept both given the existence of an intermediary “middle term”, which can “mediate” between them. This “middle term” is the phenomenological insight.

But does it at all matter whether you see nature as the expression of unconscious mechanisms or as the expression of a conscious intelligence? Or is the disjunction merely an academic issue without practical consequences? In fact, it makes a crucial difference. It impacts significantly upon how we view the realm of nature, which includes human beings. If we look upon our fellow-creatures in the natural realm (and indeed upon ourselves) as the upshot of the agency of conscious intelligence, we see them (and us) as having intrinsic value. What we see as the upshot of a sequence of unconscious processes, we see as bereft of intrinsic value.

We can draw an analogy with a work of art. A painting by, say, the Russian painter Kandinsky is regarded as a valuable object. It will fetch several million dollars on the market, but it also has an artistic value which makes it irreplaceable. If we were to lose the painting, we would consider the loss irreparable. We are at great pains to safeguard such works of art. They are held in art galleries in which the humidity and temperature is carefully controlled, etc. If, on a freezing cold day, we took the painting and used it to build a fire in the hearth, everybody would consider our act outrageous and shameful. But what would happen if we were told that this painting was not Kandinsky’s work? That a three-year-old child had produced it by scrawling random lines across a

canvas before spattering it with paint? The painting would immediately lose all value, and nobody would think it scandalous or shocking to use it as firewood.

The analogy between a work of art and nature's creatures is that just as we see a work of art as a harmonious composition of parts, lines, figures and colours, orchestrated into a compelling whole, so also do we see plants and animals and human beings as felicitously integrated wholes. Indeed, nature provides the artist with an inexhaustible source of inspiration. Recall, for instance, the poem of William Blake on the tiger: "Tyger! Tyger! Burning bright / In the forests of the night, / What immortal hand or eye / could frame thy fearful symmetry." A sociological survey conducted in Denmark could report that 77% of all Danes believe that "that no work of art is of as great value as the most beautiful natural objects." (Karen Schousboe *I naerheden – om det vaerdifulde* Copenhagen 2004, p.61) Inherent in our phenomenological experience of nature is the identification of an analogy between a work of art and natural phenomena, and hence we see the denizens of the natural world too as having an intrinsic value. Just as we find it shameful to destroy a work of art in the absence of a compelling reason for doing so, so do we regard it shameful to destroy one of nature's creatures without very good reason. A commonplace example is that nobody would seek to defend our rendering whales extinct by using their blubber for margarine.

The implication of the Darwinian theory is that the phenomenological import of our experience – our phenomenological insights – is illusory. The living world is not the expression of anything – not of any intelligent designer, artist, etc. It comprises nothing other than the products of unconscious mechanisms. When we perceive nature's creations as analogous to works of art and as bearers of intrinsic value, we are the victims of an illusion. Nature's credentials as art are phoney. There is no reason why we should not use nature solely as a means to our ends. It has no intrinsic value. There is no outrage in condemning a species to extinction. Nothing of unique value is lost.

There is no question of founding an ethics of nature on the basis of Darwinian evolutionary theory. It may be possible, on that basis, to argue that it is stupid to destroy certain parts of nature because so doing may damage our chances for survival. But as a motive for the conservation of nature generally, this is wholly inadequate. There exist countless species whose loss would have no effect upon our survival chances. We could easily survive without whales, for example. If the Darwinian theory is our only perspective on nature, we can only act stupidly, not shamefully. There is no question that our ways of looking at nature have implications for how we interact with it. What we consider a thing essentially to be determines how we treat it. If we consider nature to be devoid of intrinsic value, we treat it accordingly.

A fundamental flaw of theistic evolution is that it leads us to look upon the individual denizens of the living world as evolving from unconscious mechanisms and therefore as organisms with no intrinsic value. Any speculation to the effect that a first cause lies behind the Darwinian mechanism leaves those Darwinian implications intact.

The only conception of nature capable of underpinning an ethics of nature is the view that the living world is the expression of conscious intelligence.