

Holy Apostles College & Seminary

Evolution: Debunking "The Blind Watchmaker" Theory with Aristotle

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To consider evolution of natural things, first there is nature, and what is within nature for our study is that which lives versus that which is not living, such as rocks and machines. It is also important to note that not only agents, but the environment and other animals, plants, and materials can shape the behavior and even the life or death of organisms. For example, was a hooked beak always in an organism or was it received by some other thing? Aristotle would have argued a hooked beak was within the organism's form for it to come out. In contrast, the Blind Watchmaker thesis claims it came about by a mindless mechanistic process. Would a blind process result in a hooked beak, or would it make a bird that fishes a better bird?

Richard Dawkins, in his theory and book "The Blind Watchmaker," makes three errors in his claim that evolution is a blind, unconscious, mechanistic and automatic process.<sup>1</sup>

In this article we shall progress through the main examples of the Blind Watchmaker theory, establish common definitions, and then examine three errors in the examples as it relates to Aristotelian thought. First, there is the *empty spaceship found* Blind Watchmaker theoretical example to defend improbability of discerning intelligence in objects. Second there is the *bashing monkey* writing Shakespeare Blind Watchmaker example to be skeptical of intelligence and obscure cumulative change. Lastly, and taking up a good part of the book that contains the Blind Watchmaker theory of evolution is an attack on agency with another theory as it relates to evolution.

## **DEFINITIONS**

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<sup>1</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 9 Kindle Edition

*Darwinism* is the idea and theory of non-random reproduction, where hereditary variation has consequences that are far reaching if there is time for them to be cumulative.<sup>2</sup> More simply, the species of an organism may experience cumulative change physically if they reproduce and are given time for their offspring to reproduce and so on. Dawkins refers to “Dawinism” as something more general; more as an undefined theory and focuses more on natural cumulative selection, (a specific theory of natural selection) as the substance rather than the unsupervised, impersonal, unpredictable genetic modification.

*Natural cumulative selection*, is a non-random process where survivors of one generation of organism’s survival can be attributed to that organism’s traits and consistently are able to reproduce from one point in time to present, (or another point in time).<sup>3</sup> It is essentially the definition of practical Darwinism, with a start and stop point through time to measure the differences, and postulate what differences from, say time  $t_0$  to  $t_1$  helped the species of the organism to flourish, (or at least survive to reproduce in sufficient numbers). Interestingly natural cumulative selection is very close to the definition of Aristotelian *form* of a species of animal such that we would not expect a cat from a pig, or something other than a cloud from another cloud.

*Blind Chance* is called a dramatization as living organisms create their own lives with behavior.<sup>4</sup> What this means in reality is a sort of weighted chance exists with a natural cumulative change step that something may differ from one organism to the next from heredity, (or not). As

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<sup>2</sup> Dawkins, *The Blind Watchmaker*, 112 Kindle Edition

<sup>3</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 61

<sup>4</sup> Dawkins, *The Blind Watchmaker*, 112

stated in the cumulative selection definition, blind chance is needed to measure the difference from nonrandom. In a way, blind chance is necessary to prove a null hypothesis.

*Evolution* is the theory of gradual change step in an organism, (or thing) due to natural cumulative selection. For example, at  $t_0$ , species X evolved into two species Y and Z at time  $t_1$ . Evolution in this sense blurs species as mere stages of natural things versus any sort of permanence. It has also been called an unsupervised, impersonal, unpredictable and natural process, with the terms “unsupervised” and “impersonal” to denote God was not involved.<sup>5</sup> Today the NABT defines Evolution as not a controversial topic in the scientific community, but does not define it (neither does Dawkins) other than it is a massive and complex theory much like the National Association of Biology Teachers (NABT), who also do not have a definition of what evolution is, and simply put forward as the definition “Scientific data overwhelmingly supports the theory of evolution,” and like Dawkins devote the rest of their work mainly on attacking intelligent design and the “supernatural.”

*Embryo*; we will use as a universal term to describe matter inside or outside its parent that has the potency to grow into an adult organism. Dawkins explains it is not known exactly how animals develop from embryos and highlights two theories: “blueprint” and “recipe.”<sup>6</sup> In either case, the blueprint theory is akin to Aristotle’s formal cause, and the recipe theory is essentially material cause with different words.

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<sup>5</sup> Meyer, Keas, “The Meanings of Evolution,” Steven C. Meyer (blog) 2001, at <https://stephencmeyer.org/2001/05/16/the-meanings-of-evolution/#>.

<sup>6</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 417

*Intelligence:* This is one concept that stands in stark contrast in Aristotelian thought. Dawkins goes to great lengths to give examples of those things of which appear an intelligence existed when in reality it does not.

*Intelligent design:* Also known as “God of the Gaps” in general uses science or remarkable structures or observations of which are not clearly understood as proof God exists.

### **EXQUISITE SPACESHIP FOUND OR EXPLAINING THE IMPROBABLE**

Dawkin’s first point is an attack is on intelligent design by posing the question that if a spaceship, (complex object like organisms are complex), on a different planet was found, that would be proof that *intelligent* biological organisms existed on that planet.<sup>7</sup> He goes on by saying that since spaceships are complex objects, just as biological objects are complex, the spaceship can be considered a biological object as complex machines are complex. The logic is the complex artificial object, (spaceship, car, computer) could be seen as similar to a fossil record of a unique species.

There is truth in complexity of biological objects versus machines or even the universe. There are approximately 30 trillion cells in a human body, so a human biological object is a tremendous constellation of living things. There are indeed thousands of processes that go on every second that we do not realize or think about even when thinking about it. However, a tiny DNA protein is a natural organism, and gold watches called by another name, (in this case an empty spaceship), are not natural organisms simply because they are complex. By getting “rid”

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<sup>7</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 4

of the watchmaker, the watch (or spaceship) must be dealt with, where Dawkins conveniently “kills off” or makes the designer an extinct species in his construct.

What Dawkins did the first move was to simply wish away the designer of the spaceship into non-existence or extinction leaving us with an artifact. The purpose is to equivocate organisms and machines such that the category of complexity is the genus of all species, living and artificial. However, the spaceship and/or watch was only a placeholder we will see, as the true target is its cogs and springs.

The next step attacks William Paley’s *Natural Theology*’s watchmaker, (or the now deceased/extinct spaceship builder), and criticizes the builder for the lack of internal cogs and springs, (versus the watch or spaceship directly):

A true watchmaker has foresight: he designs his cogs and springs, and plans their interconnections, with a future’s purpose in his mind’s eye. Natural selection is the blind, unconscious, automatic process...which we now know is the explanation for the existence and purposeful form of all life.<sup>8</sup>

First, calling a machine a biological object in this way is similar to the “burying the bed and expecting sprouts” example in Aristotle’s physics.<sup>9</sup> Are we to think then that by burying this spaceship that something would sprout from its material cause? Let us replace the terms in Dawkin’s example with Aristotle:<sup>10</sup>

A human being comes about by a human being, but not a *spaceship* from a *spaceship*. On this account they say that not the shape but the *cogs and springs* is the nature, since if it were to sprout, it would become not a *spaceship* but *cogs and springs*...the growing thing does proceed from something into something. What then is it that grows? Not the from-which, but the to-which. Therefore, nature is the form.

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<sup>8</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 8

<sup>9</sup> Joe Sachs, *Aristotle’s Physics: A Guided Study* (Rutgers University Press: 1995), 192b 10 Kindle edition.

<sup>10</sup> Sachs, *Aristotle’s Physics: A Guided Study*, 193b 18 Kindle edition.

By equivocating organisms with machines, it is easier appearance-wise to be able to call (ironically) natural cumulative selection as more robotic and mechanistic. I say ironically as “natural” is right in the name of the theory that is being defended as if there wasn’t anything natural about it. He goes on his mechanics of his theory then likening these new mechanistic yet biological objects are products of brains.

Dawkins in a way states that something would in fact sprout from the spaceship or a buried watch – that machines of complexity are offspring of biological objects known as human brains.<sup>11</sup>The justification is that biological objects are so complex, more complex than a machine, so biological objects are simply better described as biological machines. The problem is in reality organisms are their own agents with a natural form and matter, *intrinsic* to the life form. Dawkins would like us to believe that life forms rely on *extrinsic* causes of the efficient cause of nature, and hijack the final cause of one or many organisms to a nebulous machine-like existence.

Second, Dawkins replaced the agent by personifying nature as the Watchmaker as a sort of extinct, disabled spaceship designer person/agent. Do not rational animals or even animals have agency and autonomy? There seems to be something off with regards to intrinsic and extrinsic causes.

The problem with the *complex spaceship from a discovered dead designer* thesis Dawkins really never did get rid of the designer, he simply killed them off like dinosaurs from a hypothetical unknown cataclysmic event, yet their design remained as proof of their existence.

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<sup>11</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 5

Thinking the designer now safely extinct and dead, to defend his anti-intelligent-design thesis. But this would be an error as with an empty spaceship brings up the fact that *a spaceship factory exists*.

Note in the anti-intelligent design attack there is no mention of the watch, or the spaceship, which has been reduced to *cogs and springs (parts) and an extinct designer, and a buried spaceship demanding cogs and springs sprout* in the defense – Dawkins never is able to get rid of the watch, thus the watch still remains only by a different name (cogs and springs) which in addition points to a cog and spring factory. This reductionist move was necessary per Dawkins, as explanations at high levels in the hierarchy are quite different than the suitability in the lower levels.<sup>12</sup> The rest of the book is mainly a defense of *procedural* natural selection versus *random* natural selection and Neo-Lamarckism.

## **THE BASHING MONKEY INTELLIGENCE AND THE WHITE CLOUD**

Dawkins then attacks intelligent design again, but this time with the idea that a typewritten line of Shakespeare is not necessarily evidence of intelligence. He provides proof with a computer simulation of random letters, himself bashing letters, and eventually, after cumulative selection, comes up with a line of Shakespeare written from that process.

There are two things to note in the “Monkey Shakespeare” and random computer tests in that Dawkins used *natural cumulative selection, which is non-random selection*. What this means is that a form of matter was selected, and as the bits of letters filled in the gaps of the desired Shakespearian sentence (form), it stayed. This is very important because if one letter happened to

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<sup>12</sup> Richard Dawkins, *The Blind Watchmaker*. (2006 Penguin Books), 21



be in the right sequence and all were discarded, it would take possibly longer than the Earth has years to solve and be closer akin to material cause with no form.

Dawkins adds a special note for philosophers at this point in the book in that while chance is a minor ingredient in Darwinism, it is the most important in cumulative selection which is essentially nonrandom, (but does not go so far as to explain where the non-random comes from, agent or environment). To this, Dawkins gives an example of clouds breaking off other daughter clouds, then he adds this caveat:<sup>13</sup>

It is also necessary that the ‘progeny’ of any given cloud should resemble its ‘parent’ more than it resembles any ‘old’ parent in the population.’ This vitally important point is apparently misunderstood by some philosophers who have taken an interest in the theory of natural selection.

What Dawkins seems to be struggling with is the formal cause and accidentals. As a reductionist, it is apparent he sees everything as material cause, (matter, heaps of stuff, material, etc) that goes through the natural cumulative selection process (efficient cause), with the species as more of a marker into some unlimited progression than something stable as a species, (formal and final cause). Why should we expect some other form than air and water in clouds? Certainly we can watch them in the sky to come together and drift apart into daughter clouds, but a cloud will always be a cloud, it is not in its nature as animal is to animal.

In sum, Dawkins uses the “Monkey writing Shakespeare” and “White Clouds” examples to fight intelligent design, but at the expense of clearly making an error with Aristotle’s, (and by extension, Aquinas’s) concept of form and natural form, (as nature is a form in itself). The

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<sup>13</sup> Dawkins, *The Blind Watchmaker*, 71

consequence is that in Dawkin's theory, living things and species are not unique from other matter, and have no formal nor final cause.

## **THE NATURAL AGENT VERSUS MINDLESS EVOLUTION**

All organisms have senses and stimuli or rudimentary mind of some kind that react to their environment, however Dawkins claims organisms are unguided and unintelligent in the evolutionary process – that all that occurs is natural cumulative selection despite the range of life activities an organism makes. The reason Dawkins takes this position is to counter *Lamarckism*.<sup>14</sup>

Lamarckism, (and now Neo-Lamarckism) is a historical Darwinian rival theory that an organism's actions in life affects its offspring by some process, specifically use and disuse of the body. For example, organisms that run barefoot will lead to offspring with tougher feet. The problem with this theory is that any trauma to the organism would also then appear in the offspring. For example, if you were to break all your bones and have your legs amputated in an accident, Lamarckism would dictate your children would be born with broken bones or missing legs. So, Dawkins has a point that Lamarckism has some problems, but never addresses or takes on the criticism that evolution is a "mindless" process by organisms and agents.

It is not entirely clear nor explained in Dawkin's book as to why he spent so much time on Lamarckism, but it seems after taking all the content in it was to further the point that human intelligence, (or perhaps a greater intelligence) does not have anything to do with living life, or evolution in general. It also furthers the idea that living organisms are more passive in their existence, and nothing they do in life makes much difference to their offspring. Lamarckism was

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<sup>14</sup> Dawkins, *The Blind Watchmaker*, 407

the other extreme to that position – that everything in life affected and made a difference in offspring. So, if a person brings up the fact that natural agents can influence the next generation of organisms in an area or world, they would be labelled Lamarckists.

## CONCLUSION

While Richard Dawkins successfully attacks intelligent design in his book *The Blind Watchmaker*, he cannot avoid the logic of natural form, form, or the four causes. In his spaceship found on another planet example, he cannot get rid of both the designer and the spaceship without there being a spaceship factory and a spring and cog factory. He also falls victim to the absurdity that burying a spaceship would sprout cogs and springs from analogy with Aristotle's burying a bed in his *Physics* as nature is the form Dawkins was looking to bury. Form comes into play again with natural cumulative selection and the concept that like-thing comes from like-thing, (purely, or with accidents), but it is clearly an error to call this process purely random, (in fact the contrary has more substance). Finally, the idea that living things have agency, and make decisions that may impact their offspring or the offspring of others is sound logic, however proponents of Dawkins would in error call that idea Lamarckism in error in their zeal to defend a theory.

Despite the errors made to combat intelligent design, Dawkin's core concept, natural cumulative selection is sound in that the cumulative designation can be used synonymously with natural formal selection, (or survival) of a species.