

Topic 4: There are distinctions to be made between the recent ‘Intelligent Design’ (ID) movement and Darwin’s theory of evolution by means of natural selection. How do the views espoused by ID differ from the simpler assertion that the world might be understood to show some evidence of design (as in Darwin’s reference to “laws impressed on matter by the Creator” mentioned in J. H. Brooke, below).

Are there legitimate scientific and religious objections to Intelligent Design, and, if so, what are they?

Introduction.

Ronald L. Numbers’ assessment that “for the past century and a half no issue has dominated discussions of science and religion more than evolution”¹ should not be rejected as simply the aggrandization of his own area of study. Indeed, the publication of Darwin’s *Origin of Species* in 1858 did not only trigger immense short-term debate as Darwin’s theory of evolution threatened to disturb both the scripturally based paradigm of God’s creation of the universe and ideas of human uniqueness but debates over ‘Creationism’, and now ‘Intelligent Design’ (ID) as alternatives to evolution continue to be battled out energetically by theologians and scientists alike. The debate not only has obvious implications on how we understand our origins and God’s interaction (or non-interaction) with the earth, but on how we should educate the next generation, how we should seek to integrate science with religion, and on what we mean by the ‘scientific method’.

The recent ‘Intelligent Design’ movement, championed by thinkers such as Philip Johnson (b. 1940), Michael Behe (b. 1952) and William Dembski (b. 1960) emerged out of the disparate ‘Creationist’ movement and sought to reform an attack against the broadly accepted theory of evolution as an explanation of the origins and development of life. ‘Intelligent Design’ essentially disregards the capability of natural selection, or any natural explanation, to fully explain the existence and development of highly complex life, seeing the existence of an intelligent designer as the most probable alternative. However, the arguments for ‘Intelligent Design’ ought to be rejected. The hypothesis, while highlighting some of the notable limitations of evolutionary science, fails to provide a ‘scientific’, or compelling alternative.

Understanding the ‘Intelligent Design’ Movement in Comparison to Darwinism.

Comparing the ‘Intelligent Design’ movement to Darwinism is a helpful way to conceive the main arguments proposed by thinkers such as Johnson, Behe, and Dembski. Indeed, it is the ideas propagated by Darwin (evolutionary theory), continuing today as “neo-Darwinism”², that ID seeks to form itself against. Essentially, proponents of ID suggest, (here Behe), that “purposeful intelligent design, rather than Darwinian natural selection, better explains some aspects of the complexity that modern science has discovered at the molecular foundation of life”³. Behe argues that the “irreducible complexity” of nature, implies the “active involvement of an intelligent designer”⁴. This concept of ‘irreducible complexity’ is defined by Behe as a highly complex single organic system of “well-matched, interacting parts”, where “the removal of any one of the parts causes the system to effectively cease functioning”⁵. Behe uses the bacterium flagellum and blood clotting system as examples of ‘irreducible complexity’ whereby he deduces that it is seemingly impossible that these complex biochemical structures arose by the “slow process of random mutations”⁶. Instead, akin to

¹ Ronald L. Numbers, pg. 127

² Kent Greenwalt, pg. 237

³ Michael Behe, pg. 685

⁴ Kent Greenwalt, pg. 239

⁵ Michael Behe, pg. 691

⁶ Kent Greenwalt, pg. 248

the argument of William Herschel (1738-1822) proposed a century and a half earlier, the “tight governance of nature” implies the involvement of “intelligence, guided by purpose”⁷.

Reference to earlier proponents of the teleological argument, such as Herschel, is also helpful when considering the ways in which the ‘Intelligent Design’ argument distinguishes itself from earlier movements that seek to infer the existence of God from nature. Thinkers often refer to the simplicity, elegance, unity, and awe of experiencing the natural world as evidence for the existence of a ‘designer God’. Indeed, William Paley’s (1743-1805) analogy of the watch is well known: just as one might infer a ‘watch-maker’ from observing the complexity of a watch, we can logically infer the existence of a ‘world-maker’ from the intricacy and order of the natural world. However, unlike Paley and Herschel, the ‘Intelligent Design’ movement formulates itself in objection to the dominating paradigm of natural selection. Indeed, the main focus of the ID movement, and drive behind Johnson, Behe, and Dembski’s arguments are the failings of evolutionary theory to provide a satisfying explanation for the emergence of complex life. This movement is not simply the assertion that the world might be understood to show some evidence of design, but that ‘Intelligent Design’ is the most probable ‘scientific’ conclusion given the “empirical”⁸ evidence of ‘irreducible complexity’, and the inability of Neo-Darwinist science to explain it. As such, Greenwalt’s assessment that “it is best understood as a theory about the contingent limits of science”⁹ is highly accurate.

Therefore, while even Darwin himself suggests that the world shows some evidence of design, and that we should regard the laws of nature as “impressed on matter by the Creator”¹⁰, for ID proponents, the Intelligent Designer (not necessarily the Christian God) does not impress on nature the laws that drive evolution. Instead, as Matzke articulates, “intelligent design means that various forms of life began abruptly through an intelligent agency, with their distinctive features already intact”¹¹. Darwinian gradualism is rejected as an insufficient scientific explanation, even in the form of ‘theistic evolution’¹². Robert Pennock’s summary of ID as the position that “no natural processes can produce biological complexity, and that design must therefore come from outside the system of nature”¹³ lucidly summarises this rejection of scientific naturalism to explain complexity. Indeed, Johnson’s statement that Darwinian evolution is “idolatry and nature worship”¹⁴, and Dembski’s that “design theorists are no friends of theistic evolution”¹⁵ demonstrates the ways in which the ID movement forms itself in response to the perceived failings of evolutionary science and seeks to distinguish itself from the suggestion that God has designed the natural world with the tools of natural selection.

A Critical Assessment of the ‘Intelligent Design’ Arguments.

The question then arises of whether the recent ‘Intelligent Design’ movement stands up to the multiple and varied scientific and religious objections levied against it. Amongst these are the problem of evil, and the rejection of ID as unscientific and implausible. While it is certainly the case that the ID movement is helpful in drawing our attention to the limits of science and evolutionary theory to explain some aspects of complex life (indeed, the absence of fossil records renders our understanding of the development of the human eye to be blurry), this is the limit of its meaningful contribution.

⁷ John Hedley Brooke, pg. 12

⁸ Michael Behe, pg. 702

⁹ Kent Greenwalt, pg. 251

¹⁰ John Hedley Brooke, pg. 1

¹¹ Robert Pennock, pg. 4

¹² Theistic evolution: The belief that God created the universe and the various processes driving physical and biological evolution. This position is not in contrast with Darwinian gradualism and natural selection (Behe, 2001, pg. 696).

¹³ Robert Pennock, pg. 10

¹⁴ Robert Pennock, pg. 5

¹⁵ Ronald L. Numbers, pg. 138

Problem of Evil.

Before we consider the numerous ways in which the scientific community have rejected the ID movement, it is worth appreciating that religious leaders are also dismissive¹⁶. Indeed, Dembski admitted that “it is ironic that the design theorists have received an even cooler reception from the theological community than from the Darwinist establishment”¹⁷. One of the main reasons for this are the implications ID has for our understanding of God (if we presume the intelligent designer is, say, the Christian God). Amongst these are the objections to ID’s heightened responsibility of God for the existence of evil in nature. Not only do the existing dilemmas of human suffering, natural disasters, and the savagery of the animal kingdom, as Tennyson describes “red in tooth and claw”¹⁸ still persist, but what is more objectionable to theologians is the direct culpability of the designer. Interestingly, it was this idea of governance that Darwin himself vehemently rejected, writing in a letter to Mary Boole in December 1866:

*“It has always appeared to me more satisfactory to look at the immense amount of pain and suffering in this world, as the inevitable result of the natural sequence of events, i.e. general laws, rather than from the direct intervention of God”*¹⁹.

Indeed, formulating an ‘Intelligent Designer’ as the explanation for complex life implicates this designer for the existence of ‘finely tuned’ debilitating parasites, cancerous growth, and ‘irreducibly complex’ pathogens. Since ID attests to the direct and purposeful intervention of God into the state of nature, the existence of evil and suffering in the world is brought into sharp focus, and the implications this has for the nature of the intelligent designer are highly unconvincing.

Scientific objections.

One of the most consistent objections among scientists against the ‘Intelligent Design’ argument is against the surprising claim of ID to “rest wholly on empirical evidence” and “deserve the appellation ‘scientific’”²⁰. This debate has been of educational and democratic importance in recent years with cases such as *Kitzmiller v. Dover* (2005) seeking to determine what is constitutionally permissible for schools to teach in their science curricula. It is worth noting, as Kent Greenwalt observes, that “we have no canonical treatment of what constitutes a scientific theory”²¹. As such, it is difficult to dismiss ID outright as unscientific by definition, particularly considering that ID uses empirical evidence of complexity in nature and supposedly “basic logic”²² to infer an intelligent designer. However, we should not overlook the fact that the existence of an intelligent designer is simply not a natural explanation²³, and it is here that ID contravenes the methods of scientific naturalism, however ill-defined. ID proposes ineffable, and supernatural causation, and is thus invokes the miraculous. What’s more is that ID is unfalsifiable. While Behe is justified in his defence of ID that some of its claims can be falsified (such as if scientists could provide an evolutionary explanation for the development of the bacterium flagellum), the overall hypothesis for Intelligent Design seems untouchable. Indeed, Jerry Coyne’s suggestion that that “ID is unfalsifiable as there will always be something that we cannot explain by Darwinist evolution alone”²⁴ is acutely accurate and descriptive of where ID lies: in the gaps left behind by science.

¹⁶ Robert Pennock, pg. 14

¹⁷ Robert Pennock, pg. 14

¹⁸ John Hedley Brooke, pg. 11

¹⁹ John Hedley Brooke, pg. 22

²⁰ Michael Behe pg. 702

²¹ Kent Greenwalt, pg. 249

²² Michael Behe, pg. 702

²³ Kent Greenwalt, pg. 250

²⁴ Michael Behe, pg. 696

We must not forget that the ‘Intelligent Design’ movement not only argues that “natural selection, as presently conceived by neo-Darwinian theory, cannot fully explain the development of complex life”, but that “no reformulated or developed neo-Darwinian account (or any natural explanation) ... will ever account persuasively for the development of complex life”²⁵; ID not only rejects *existing* scientific explanations for complex life, but the ability of the *method* of scientific naturalism to ever do so. This is where my main objection lies; while it is true that scientists are unable to demonstrate the chain of variation that caused the emergence of some complex physical and biological structures, and that this has formed a sort of “black box”²⁶, this does not lead logically to the rejection of the ability of scientists to provide a natural explanation in the future. If we take the example of the human development, it may be seen as ‘basic logic’ to infer that the babies could not develop from a single cell (zygote) without God’s creative hand²⁷, but we now know that a natural explanation exists. Why then, should we abandon methodological naturalism as the means to explain the emergence of complex life such as the bacterium flagellum and blood-clotting system, particularly considering the propensity for science to expeditiously fill in the gaps in our knowledge? ID does not answer this and considering that it poses the hypothesis of an intelligent designer using the argument of plausibility, it is much more plausible that physical events will have natural causes “explicable in terms of uniform laws that do not invoke the supernatural”²⁸.

Unnecessary conflict.

When considering the rhetoric used by proponents for ‘Intelligent Design’, one becomes quickly aware of the ways in which their arguments are formed around the perception of religion and science in inexorable conflict. Proponents of ID repeatedly associate explanations for complex life though Darwinist evolution alone with atheism, as a threat to faith, morality, and the existence of a metaphysical afterlife. Dembski regards making “methodological materialism a defining feature of science” as a “premodern sin”²⁹, indicative of idolatry and opposed to religion. This perception of conflict characterises the hostile rhetoric directed against evolutionary explanations for the world with Dembski referring to the “‘Darwinian stranglehold’ on public education that will suffer a ‘Taliban-style collapse’, and that his opponents have ‘met their Waterloo’”³⁰. However, the conflation of methodological naturalism with metaphysical naturalism and atheism is unwarranted; Darwinian evolution need not be seen as a ‘pre-modern sin’ in conflict with religion, or the existence of a designer God. Indeed, it is this creation of a false culture war that forces partisanship and limits the meaningful interaction between science and religion.

²⁵ Kent Greenwalt, pg. 253-254

²⁶ Michael Behe, pg. 693

²⁷ Kent Greenwalt, pg. 248

²⁸ Kent Greenwalt, pg. 246

²⁹ Robert Pennock, pg. 1

³⁰ Robert Pennock, pg. 14

Bibliography.

John Hedley Brooke, 'Darwin on Law and Order – and God'

Kent Greenawalt, 'Intelligent Design: Scientific Theory or Religious Conviction?', in *Journal of Church and State*, vol. 45, no. 2 (Oxford University Press, 2003)

Michael Behe, 'Reply to My Critics: A Response to Reviews of Darwin's Black Box: The Biochemical Challenge to Evolution', in *Biology and Philosophy* (Netherlands: Kluwer Academic Publishers, 2001)

Robert T. Pennock, 'The Pre-modern Sins of Intelligent Design', in *The Oxford Handbook of Religion and Science*, ed. Philip Clayton and Zachary Simpson (Oxford: Oxford University Press, 2006)

Ronald L. Numbers, "Scientific Creationism and Intelligent Design" in *The Cambridge Companion to Science and Religion* (Cambridge: Cambridge University Press, 2010)