CHRISTIANITY AND INTELLIGENT DESIGN
A MULTIDIMENSIONAL APPROACH

Juuso Loikkanen *

School of Theology, University of Eastern Finland, P.O. Box 111, 80101 Joensuu, Finland
(Received 14 November 2015)

Abstract

The theory of intelligent design (ID) has been a subject of heavy debate during the past two decades. One of the most popular questions pertaining to ID has been whether it should be categorized as science, religion, or something else. Proponents of ID hold that it is a proper scientific theory, while many critics see it merely as a pseudo-scientific, religiously motivated nonsense. Recently, Sharon Woodill has suggested that ID should be seen as decidedly Christian and that the core concepts of ID, Michael Behe’s ‘irreducible complexity’ and William A. Dembski’s ‘specified complexity’, are only ‘scientized’ Christian narratives. I argue that the picture painted by Woodill is too simplified. Instead, ID is best understood as a multi-layered phenomenon comprising scientific, philosophical and theological dimensions.

Keywords: intelligent design, Dembski

1. Introduction

The theory of intelligent design (ID) has been a subject of heavy debate during the past two decades, especially in the United States. One of the most popular questions pertaining to ID has been whether it should be categorized as science, religion, or something else. Discovery Institute, a Seattle-based research organization — also called “the headquarters of the ID movement” [1] — defines ID as “a scientific theory that employs the methods commonly used by other historical sciences to conclude that certain features of the Universe and of living things are best explained by an intelligent cause, not an undirected process such as natural selection” [Discovery Institute, Center for Science and Culture, Frequently Asked Questions, http://www.discovery.org/id/faqs/#questions AboutIntelligentDesign, retrieved 10 November, 2015]. Stephen C. Meyer describes ID as “an evidence-based scientific theory about life’s origins” [S.C. Meyer, Intelligent Design Is Not Creationism, The Telegraph, 28 January, 2006, http://www.telegraph.co.uk/comment/personal-view/3622692/Intelligent-design-is-not-creationism.html, retrieved 11 November, 2015]. Although it is in the biological world (in the theory of evolution, in particular) were much of the

*E-mail: juuso.loikkanen@uef.fi
controversy surrounding ID lies, more general definitions not referring explicitly to Biology have also been suggested. For instance, William A. Dembski sees ID simply as “a scientific research program that investigates the effects of intelligent causes” [2], whatever these intelligent causes might be and where they might act. Despite the slight ambiguity of defining ID, all advocates of ID agree on one thing: ID is a proper scientific theory.

Sharon Woodill holds that this kind of view of ID is fatally flawed and misleading. In a recent article [3] and in her PhD thesis [4], Woodill argues that the core of ID is clearly Christian. She maintains that ID is not science but instead a ‘scientized’ Christian enterprise aiming at promoting the (evangelical) Christian faith and strengthening the (fundamentalist) Christian community. According to Woodill [3], “fundamental Christian doctrine constitutes the essence of ID theory” and these two cannot be separated. Certainly, Woodill is not alone with her critique. Richard Dawkins [5], for example, depicts ID as “creationist propaganda,” Michael Ruse [M. Ruse, Intelligent Design Is an Oxymoron, The Guardian, 5 May, 2010, http://www.theguardian.com/commentisfree/belief/2010/may/05/intelligent-design-fuller-creationism, retrieved 10 November, 2015] as “very bad theology” and —although not science at all — “deeply corrosive of real science.” Daniel Greenberg sees ID as a “crackpot concept”, “a pseudo-scientific fabrication more marketable than its crude kin, creationism” [6]. Similar statements are abundant in both academic and popular literature. Some scholars (e.g. Forrest and Gross [7]) have argued that the differences between ID and creationism are merely terminological, not substantive, while others (e.g. Coopersmith [8]) have shown that, despite the similarities, ID and creationism do not share the same intellectual community. Further analysis of the relationship between ID and creationism is beyond the scope of this paper.

The approach offered by Woodill is a novel one, in that it focuses on attempting to show how two of the core concepts of ID, Michael Behe’s ‘irreducible complexity’ (IC) and William A. Dembski’s ‘specified complexity’ (SC), are actually only ‘scientized’ Christian narratives, not real scientific theories (moreover, Woodill, unlike some critics who have labelled ID as religious nonsense, actually presents reasons for her argument). I, however, argue that Woodill’s account of ID is inaccurate. In this paper, I intend to show that ID is, instead, best understood as a multi-layered phenomenon comprising scientific, philosophical and theological dimensions. Even though I agree with Woodill on the fact that ID is motivated by religious belief, the actual core of the theory — in the form presented by Dembski and Behe — can and should be understood and assessed in its own terms with no reference to Christianity or any other religion.

I want to emphasize that my intention is not to offer a detailed reflection on Woodill’s thinking. Rather, I am focusing on the notion of SC and using Woodill’s understanding of ID as ‘decidedly Christian’ phenomenon as an inspiration to construct my own, possibly a more nuanced view of ID.
2. The core of ID

Woodill [3] holds that the core of ID, which she defines to be consisting of the concepts of IC and SC, introduced by Michael Behe and William A. Dembski, respectively, is distinctively Christian. Furthermore, she asserts that this Christian core is intentionally blurred and presented to the public in a disguise of a pseudo-scientific theory, using scientific terminology only symbolically and superficially. Woodill’s thoughts can be explicated as follows:

1. The core of ID is expressed in two basic tenets, IC and SC.
2. IC and SC are “scientized creation narratives that reflect the doctrinal crux of Christianity”. IC entails the Genesis account of creation, SC the Logos story in the prologue of John’s Gospel.
3. The core of ID is a decidedly Christian [3].

It is rather easy to agree with Woodill on the thought that Behe’s IC and Dembski’s SC constitute the core of ID. Behe and Dembski are by far the two most prominent advocates of ID — and, what is more important, as far as I know, they are the only ones who have put in the effort of formulating serious definitions of ID. It is clear that without defining well what the theory is all about, it is impossible to even dream of gaining any credibility for ID in the scientific community. Actually, I am even inclined to think that it is solely SC and not IC that should be understood as the actual core of ID. This is, firstly, due to the fact Dembski’s theory, which deals with theoretical methods of design inference and is applicable to all phenomena, no matter how abstract they are, is much more general than Behe’s, which is only concerned with detecting signs of design in the development of biological organisms. Secondly, the concept of IC has been defined in different ways [9] and, as Woodill [3] puts it, is “somewhat in flux” (compare, for instance, definitions in [10] and [M.J. Behe, A Response to Critics of Darwin’s Black Box, 2001, 17, http://www.iscid.org/papers/Behe_ReplyToCritics_121201.pdf, retrieved 13 November, 2015]; also Dembski [2, p. 285] has formulated his own definition). Therefore, in this paper, my primary focus is on Dembski and SC.

According to Dembski an event (or an object) is designed if it exhibits SC, in other words, if it is both ‘complex’ and ‘specified’ [2, 11, 12]. For Dembski, complexity equals to improbability: if an event is sufficiently improbable, it counts as complex. The crucial level of improbability is $10^{-150}$, which Dembski [12, p. 84–85] calls the “universal probability bound”. The bound is based on Dembski’s calculations on the upper limit of the number of possible interactions between elementary particles in the (observable) universe throughout the history. Dembski holds that an event whose probability is lower than $10^{-150}$ is too improbable to have emerged by chance, so it has to be designed — provided that the event is also specified. In Dembski’s theory, an event is specified if it matches a unique pattern that can be determined independently of the event; such a pattern is, in turn, called a specification [11, p. 136–154]. This is, in a simple form, Dembski’s definition of SC. For a more profound definition, see [11, p. 36–55].
Dembski’s universal probability bound has been criticized for being poorly defined [13; E. Tellgren, On Dembski’s Law of Conservation of Information, 2002, 10–11, http://www.talkreason.org/articles/dembski_LCI.pdf, retrieved 12 November 2015]. Various problems regarding the difficulty of defining specifications have been identified, as well [14, 15]. The purpose of this article, however, is not to determine whether ID can be considered good science — I have commented on that elsewhere [16] and reached the conclusion that SC is not a reliable method of detecting design — but rather to point out that the core of ID, i.e., SC, is actually best seen as scientific construct (albeit an unsuccessful one). In my opinion, every theory deserves a fair chance in scientific discussion and it should not be labelled as creationism or ‘having a Christian core’ if such things are not implied by the theory itself. In the case of SC, nothing points to Christianity — or any other religion, for that matter. Instead, SC is mostly about probability theory and logic.

In fact, the formulation of SC which Woodill [3] relies on confirms my point. She quotes the following passage from Dembski [W.A. Dembski, Detecting Design? A First Response to Elliott Sober, Metaviews 167, December 29, 1999, http://www.discovery.org/a/46, retrieved 12 November, 2015]: “Specified complexity is a reliable empirical marker of intelligent design. A long sequence of random letters is complex without being specified. A short sequence of letters like ‘the,’ ‘so,’ or ‘a’ is specified without being complex. A Shakespearean sonnet is both complex and specified. Thus in general, given an event, object, or structure, to convince ourselves that it is designed we need to show that it is improbable (i.e., complex) and suitably patterned (i.e., specified).” Drawing from this definition, in my view, it does little justice to Dembski to depict SC as a Christian concept.

3. Christian motives behind ID

Of course, it is not a secret that many of the proponents of ID are confessing Christians. Behe, for example, is a lifelong Roman Catholic, while Dembski seems to be affiliated with both Evangelical Protestantism and Eastern Orthodoxy, having previously held somewhat atheistic views [17; L. Kern, In God’s Country, Houston Press, 14 December, 2000, http://www.houstonpress.com/2000-12-14/news/in-god-s-country, retrieved 12 November, 2015]. Many critics think that this necessarily has implications to the credibility of ID: a theory constructed by religious people cannot avoid being a religious theory, even though it would be disguised as a neutral, scientific one. Alister McGrath states that “although the [ID] movement avoids direct identification of God with this intelligent designer (…) it is clear that this assumption is intrinsic to its working methods” [18]. Woodill [3] agrees, believing that “Dembski intentionally separates the theory of SC from Christian theology in order to assert what he claims to be the scientific merit of his theory, but this theory is untenable within the (conventional) scientific context”. Barbara Forrest is certain that despite its pseudo-scientific appearance, ID is “religious to its core” [19].
Woodill argues that “religion, not knowledge, is the primary driver for the creation of ID” [4, p. 11]. Consequently, as seen above, she takes the core of ID to be distinctively Christian. I do not disagree with the thought that religion, Christianity in particular, is a major, even primary, driver behind ID. Dembski himself does little to hide his Christian background and motives. In many of his writings he makes it clear that he believes that “God exists, interacts with and sovereignly rules the world” [20]. This has led Dembski to think that perhaps God has so arranged the physical world that the natural intellect of humans can discover evidence of him [20]. For Dembski, Christian faith seems to have triggered the intuition to formulate a potential scientific theory for detecting (supernatural) design.

Yet, ID, like all theories of Science, needs to be proven valid by scientific methods, e.g. the use of logic and empirical observations. Possible religious or other motives behind ID are completely irrelevant when it comes to assessing the actual content of the theory. It simply does not matter what Dembski’s personal reasons for constructing the theory are. The only thing that matters is whether SC is a well-defined concept and a reliable tool for detecting design. As Henri Poincaré famously stated: “It is by logic that we prove, but by intuition that we discover” [21]. I completely agree with Bradley Monton’s view on ID: “intelligent design should not be dismissed on the grounds that it is unscientific; intelligent design should be dismissed on the grounds that the empirical evidence for its claims just isn’t there” [22].

As to Woodill’s claim that SC is connected to Christianity and to the works of the divine Logos, Dembski appears to have no objections. He admits that “there is a deep and fundamental connection between God as divine Logos and God as intelligent agent” [23]. God acts through the divine Logos to create the world and to shape its details, generating SC where he sees fitting. In addition, through Logos, God renders the world intelligible for humans, thus making SC detectable [23]. I believe that Dembski, who (as we will soon see) holds that SC is founded on information input, would gladly concur with Woodill’s [3] claim that “the Logos — God’s word — is (...) understood as the transmission of information from the spiritual to the material realm”. Still, the connection between SC and Logos is not implied by Dembski’s theory of SC itself. Instead, it is only in the light of Christian presuppositions that SC can be interpreted as a sign of the God’s action.

So when Woodill identifies SC with the divine Logos, she is moving to a dimension that has very little to do with the core of ID, which, I argue, is — or at least aims at being — a scientific one, based on SC. When Woodill [3] describes how SC entails the Logos story of the prologue of John’s Gospel, she is actually doing theology. The concept of SC, which, to repeat, is only concerned with whether an event is specified and complex, has no theological implications in itself. Instead, this is a question of compatibility between ID and Christian theology. The matter will be discussed further later in this paper. Before that, however, let us consider more general philosophical implications of ID.

77
4. Philosophical Implications of ID

As hinted above, another way of looking at ID is the perspective of information theory. According to Dembski [2, p. 140–145], when an event exhibits SC, it actually means that there is complex specified information (CSI) present in the event. CSI is defined analogously to SC: if the amount of information associated with an event is higher than 500 bits — which Dembski’s calls the “universal complexity bound” — and the pattern describing the event (specification) can be constructed independently of the event, the event exhibits CSI. Dembski [2, p. 151–159] explains that CSI can only be produced by an intelligent designer; natural causes, i.e., chance and necessity, are too ‘weak’ for that purpose. (The information measure that Dembski uses is $I(p) = -\log_2 p$, where $I$ is the amount of information and $P$ the probability of an event occurring. Since $I(10^{-150}) = -\log_2 10^{-150} \approx 500$, the universal complexity bound corresponds to the universal probability bound.)

If we accept the assumption that the Universe is a closed system, there are two ways how CSI could have gotten into the system: 1) either it has been in the system forever, or 2) it has been entered into the system exogenously at some earlier moment in time. In the latter case, the system has had to be open at the time of information input [2, p. 163–164]. In other words, all CSI in the Universe was either present already at the moment of the beginning of the Universe (assuming such a moment has existed) or it was added later by some extremely powerful supernatural being with the ability to affect physical states. The actual method of transmitting information, however, remains somewhat unclear — although Dembski mentions that it is, of course, energy that makes information move. Dembski’s [24] understanding of energy, however, is an unconventional one. He divides energy into ‘material’ and ‘non-material’ energy, the former of which is energy in the sense of Physics, while the latter is involved in causal interactions between non-material entities and unobservable to Science. How this non-material energy is transmitted, is not explicated by Dembski.

It is worth noticing that Dembski defines intelligence very widely as “any cause, agent, or process that achieves an end or goal by employing suitable means or instruments” [25]. So, against intuition of many, the supernatural intelligent designer is not necessarily even a personal agent. As Dembski [23, p. 252] explains it: “To be sure, the designer is compatible with the Creator-God of the world’s major monotheistic religions like Judaism, Christianity and Islam. But the designer is compatible with the watchmaker-God of the deists, the demiurge of Plato’s Timaeus and the divine reason (i.e. logos spermatikos) of the Ancient stoics. One can even take an agnostic view about the designer, treating specified complexity as a brute unexplainable fact.” In other words, ID implies the existence of a supernatural intelligent designer who is powerful enough to act in the world but ID has no tools whatsoever for revealing the identity of the designer.
In fact, this is also characteristic to many other design arguments – a fact that has often been ignored in Western philosophical discussion. For example, the traditional cosmological argument only asserts that there must exist some being that has caused the Universe and everything in it to exist but takes no stand on the identity of the designer. Aristotle [26; 26, vol. 2, 1552–1728] argues that there exists a “first immaterial mover” that has caused material objects to move. Thomas Aquinas [27] teaches that there is a “first cause” that has caused thing to exists (to be sure, Aquinas adds that this first cause is what “everybody [in the Western society] takes God to be”, but it could be something else, as well). As a contemporary example, William Lane Craig’s [28] version of the *kalām* argument merely states that the Universe was caused to exist by some supernatural being. One can also speculate whether William Paley [29] would have identified his famous clockmaker with the God of Christianity, had he lived somewhere else than in eighteenth-century England.

5. **ID, Christianity and Divine action**

Let us next examine the relationship between ID and Christian theology. If we assume, for the sake of argument, that ID is correct, i.e., that some features of the world actually exhibit SC/CSI, there are two main theological scenarios that are compatible with this. The first option, that CSI has been in the Universe forever, leads to deism. There exists — or has existed — a God who has ‘pre-programmed’ the world to develop as it does, making CSI emerge and become detectable at convenient times and places. One of the most prominent supporters of deism was Gottfried Wilhelm von Leibniz. In a letter to Samuel Clarke, he rejects the thought of a God who would have to interfere with his perfect creation afterwards: “Sir Isaac Newton, and his followers, also have a very odd opinion concerning the work of God. According to their doctrine, God Almighty wants to wind up his watch from time to time: otherwise it would cease to move. He had not, it seems, sufficient foresight to make it a perpetual motion (…) According to my opinion, the same force and vigour remains always in the world, and only passes from one part of matter to another, agreeably to the laws of nature, and the beautiful pre-established order.” [30].

Deism, however, has never been very fruitful approach in mainstream Christian theology. Christian churches have always taught that God actively acts in the world and is present in the lives of Christians, “sustaining all things by his powerful word” (Hebrews 1.3, NIV). For instance, the Catechism of the Catholic Church [31] declares that “God does not abandon his creatures to themselves. He not only gives them being and existence, but also, and at every moment, upholds and sustains them in being, enables them to act and brings them to their final end.” Or, as Willem B. Drees puts it, “a purely deistic concept of God is not a serious option within contemporary theology, because such a God would not be relevant to us and the ways we shape our lives” [32]. Dembski himself is very clear on the matter: “Christians are not deists. God is not an absentee landlord.” [20, p. 222]
Therefore, the second option, i.e., that CSI has been entered into the Universe by means of sudden information boost at some later moment in history, is a more relevant approach. This, of course, requires that we accept that God is able to intervene with the natural order, but as we saw, from the point of view of Christian theology, this is not an unwarranted assumption. In fact, it might be the only reasonable assumption. Dembski is convinced that “within Christian theology there is one and only one way to make sense of transcendent design, and that is the divine act of creation. (…) God speaks and things happen.” [23, p. 224] By speaking the Logos, by divine intervention, God creates a novel situation, which is then accommodated by the laws of nature. Dembski’s thoughts are similar to those of C.S. Lewis [33], who writes: “If God annihilates or creates or deflects a unit of matter, He has created a new situation at that point. Immediately all Nature domiciles this new situation, makes it at home with in her realm, adapts all other events to it. It finds itself conforming to all the laws.”

So according to Dembski, God is the supernatural being who inputs CSI into the Universe. Dembski [23, p. 192–195] sees Christianity as unique in the way that it offers epistemic support for ID: accepting the claims of Christianity (God’s active acting in the world) justifies the acceptance of claims of ID (signs of supernatural design in the word) — and vice versa. For Dembski [23] ID is “a bridge between Science and [Christian] Theology”. But Dembski does not stop there. He goes on to argue that Christian theology is actually essential for correctly understanding all scientific endeavour, not just ID: “Theology transcends, informs and unifies all disciplines, (…) All disciplines find their completion in Christ and cannot be properly understood apart from Christ.” [23, p. 26] Whereas Karl Barth employed Christology as the lens through which to understand the entirety of Christian theology, Dembski uses it to understand all disciplines. Dembski deduces that if humanity’s chief truth is the reconciliation of the world to God through Christ, then any scientific theory that ignores Christ is incomplete [23, p. 205–210]. It is obvious that Dembski is here moving quite far away from the core of ID and speaking purely as a theologian.

Nevertheless, Dembski emphasizes that his view cannot be proven by Science or Philosophy and that supporters of other religions could all embrace ID from their different perspectives. For him, the God of Christianity is by far the best candidate for the supernatural designer producing CSI but for others it is likely to be something else. Dembski reminds that he has found “an enthusiastic reception for [his] ideas not only among traditional theists like Jews, Christians, and Muslims, but also among pantheists, New-Agers, and agnostics” [W.A. Dembski, Intelligent Design Coming Clean, Metaviews, November 7, 2000, http://www.discovery.org/a/534, retrieved 13 November, 2015]. I suggest that ID is even compatible with atheism, if the designer is understood to be some impersonal cosmic force whose attributes are, at least at present, unknown to Science.
6. Conclusions

I argue that ID is best understood as a multi-layered phenomenon, comprising scientific, philosophical and theological dimensions (Figure 1).

![Figure 1. The dimensions of ID.](image)

The argument can be summarized as follows:

1. Scientific dimension: ID as a formal method of detecting design. Proponents of ID maintain that — in the form presented by Dembski — ID is a scientific theory and a reliable method of detecting design. The core of the theory is expressed in Dembski’s notion of SC/CSI. However, SC has been criticized for not being sufficiently well defined, and ID is yet to establish itself as a scientific theory.

2. Philosophical dimension: ID as an inference to a supernatural designer. Assuming, arguendo, that SC would be a valid marker of design and there would actually be objects displaying SC in the natural world, there would have to exist a supernatural designer who has designed and created these objects. Yet, the identity and motives of the designer are beyond the reach
of ID. In consequence, ID is compatible with a variety of different worldviews.

(3) Theological dimension: ID as evidence of the works of God. Most advocates of ID have a Christian background and hold that the supernatural designer implied by ID is the God of Christianity. Dembski, in particular, believes that CSI is inputted into the world by God through speaking the Logos. According to Dembski, ID and Christianity provide unique mutual support for each other.

These three dimensions are connected, in varying ways. The scientific dimension implies the philosophical dimension: if CSI exists, then there necessarily also exists a supernatural designer. The philosophical dimension, however, does not directly entail the theological dimension: if a designer exists, it is not necessarily God. The connection works in the other direction, as well. The philosophical dimension may have an effect on the scientific dimension. If one is convinced that there exist a supernatural being who acts in the world, (s)he may also be inclined to think that this being leaves behind empirically detectible signs of its action. As far as I can tell, this is exactly the driving impetus behind Dembski’s construction of SC. On the other hand, a person who is committed to naturalism and denies the philosophical dimension of ID, is sure to reject any scientific claims of ID, as well. Again, the theological dimension is more loosely connected to the other two: one may or may not think that the supernatural agent acting in the universe is God.

Indeed, the theological dimension is somewhat separate from the other dimensions. One can accept that SC is a reliable indicator of design without having any religious commitments. On the other hand, believing that God exists and acts in the world clearly does not require taking a stand on ID or the validity of SC. From this perspective, Woodill’s claim that “fundamental Christian doctrine constitutes the essence of ID theory” [3] does not come across as convincing. Surely, the three dimensions of ID are compatible and even supportive of each other, but it is in no way necessary to take a ‘leap of faith’ to the theological dimension.

Moreover, as I have stressed above, the direction of the leap depends on one’s worldview. For Christians, the model of epistemic support between ID and Christianity suggested by Dembski might be persuasive (although I doubt that many would be willing to go as far as Dembski does in his Christological ideas), people stemming from other traditions might find his line of argumentation less attractive.

Another thing that needs to be highlighted is that, in practice, the scientific dimension of ID rests on rather shaky grounds. In order for ID to become a credible theory, the idea of SC needs to be developed further, with particular attention to more rigorously defining the concepts of ‘specification’ and ‘complexity’. Nevertheless, I hope the multi-dimensional model I have presented here is useful in illuminating the different aspects of ID and explicating the difference between just any supernatural designer (the existence of whom is implied by ID) and the God of Christianity (whose existence cannot be proven.
by ID). To sum up, ID has a scientific — or a pseudo-scientific — core (SC) which is compatible with many different worldviews, Christianity being one of them.

References


