# A Taxonomy of the Contemporary Design Landscape

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## Introduction

Brendon Nelson's qualified endorsement last October of the DVD "Unlocking the Mystery of Life" certainly escalated media and public interest in the issue of Intelligent Design (ID).[1] This glossy production, which has been widely circulated by the Campus Crusade for Christ Australia, is part of a well orchestrated promotional program. Not unexpectedly, there was a quick and vigorous reaction from Australian scientists, who, like their secular colleagues elsewhere, have consistently opposed the ID movement. First to appear was an open letter in the major Australian newspapers.[2] More surprising for many has been the strongly negative response from many theists. This has been more strongly articulated over the last few years with the appearance of a number of significant books by Christian and Jewish authors. Although all theists recognise God as the cosmic Designer and Originator there is obvious disagreement over the sense in which this is so and over the optimal formulation of the contemporary Design argument. Accordingly, ID is not the only viewpoint marching under the modern "design" banner, there being no single ownership of this turf.

This paper seeks to chart this fascinating landscape by:

- suggesting some useful taxonomic terms and categories,
- exploring what is meant by "Intelligent Design",
- critiquing the recent secular scientific backlash against it, and
- discussing the negative responses from the other significant theistic groups alluded to above.

It is hoped that this journey will clarify the issues for those Christians currently seeking an adequate viewpoint on the Design issue.

## Some useful Taxonomic Terms and Categories

We begin by suggesting a useful taxonomic nomenclature. The term *philosophical naturalism* essentially refers to an atheistic or "scientistic" stance, whilst its counterpart philosophical theism clearly describes a fundamentally theistic worldview. The remaining two terms are a little more elusive to define. The term *methodological naturalism* may be used to denote the practical pursuit

of the scientific enterprise on the basis of natural phenomena being completely determined by reliable laws which, whilst subtle, are essentially discoverable. The somewhat unsatisfactory but corresponding term *methodological theism* refers to a coalface methodology for studying nature which recognises regular laws but also looks for low-level theistic intervention beyond and even contrary to these laws. These categories may be usefully combined to map the design landscape, as shown in Figure 1. Also indicated is the position of the major players in the Design discussion, together with some key names.

Clearly, it would be difficult to conceive of a position which was at once philosophically naturalistic and methodologically theistic and I am unaware of anyone participating in the Design discussion from this perspective. It is also apparent that the Intelligent Design movement, like Creation Science, is both philosophically and methodologically theist, which would seem to be consistent! Similarly, the scientific "establishment" is both philosophically and methodologically naturalistic, also undeniably consistent. It is no surprise that these two diametrically opposite viewpoints have almost no nexus, indeed one would hardly

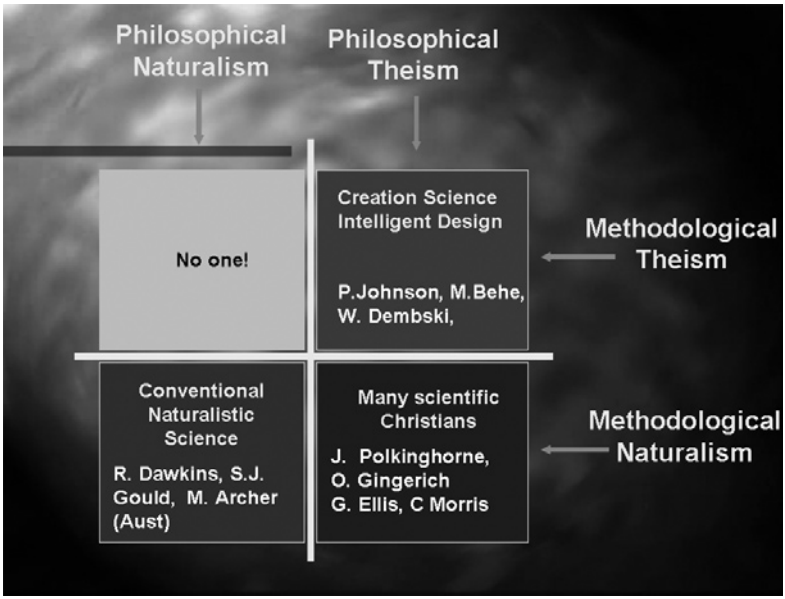



*Figure 1*

expect one. It is also not surprising that the media, with its predilection for antagonism, focuses on these two viewpoints.

However, it is at least interesting that many evangelical scientists and theologians, to say nothing of most Catholics and Episcopalian scholars and some Jews, whilst seriously theistic at the level of worldview, adopt the methodologically naturalistic perspective when practicing science. Such take the view that this is really the only way to actually do science, predicated as it is, on regularity, natural causality and process. They point out that this approach best approximates the foundational work of many great scientific pioneers, such as Boyle and Newton, and that it in no way compromises a theistic worldview.

**What is Meant by "Intelligent Design"?**

Arguments for the existence of an external Causality from the apparent complexity and purpose evident within the universe go back as far as scripture, with the 1802 publication of Paley's *Natural Theology* often considered the high point of the genre. However, it has been widely accepted that the eighteenth century attack by Hume and the later critique by Darwin fatally compromised such arguments. To the surprise of the secular mind, however, a significant revival of such notions has occurred over the last few decades, particularly due to unexpected discoveries in molecular biochemistry and cosmology which have suggested that more has been claimed for naturalistic evolutionary mechanisms than could be demonstrated. Understandably, these revelations have been embraced by theists of every persuasion, giving rise to a burgeoning literature on "design".

Currently the most visible version of this argument is "Intelligent Design" (ID). Most correctly and usefully, this term should be applied to the viewpoint of the Intelligent Design Group, or "The Wedge" movement, probably best represented by the Centre for Science and Culture (CSC), which began as the Centre for the Renewal of Science and Culture (CRSC) in 1996.[3] The CSC is closely associated with the Discovery Institute, and based in Seattle, Washington. The University of California (Berkeley) law professor Phillip Johnson is usually regarded as the founder of the ID movement.[4] He commenced his attack on the scientific establishment with the publication in 1991 of his book *Darwin on Trial*.[5] The DVD, "Unlocking the Mystery of Life"", suggests that it was the gathering in 1993, at Johnson's invitation, of a number of sympathetic scientists at Pajaro Dunes, California, which marked the beginning of the ID movement as such. Works by a number of authors, many of whom were present at that initial meeting have contributed significantly to the

wide following currently enjoyed by the ID movement.[6]

Intelligent Design proponents insist that what they do is **authentically scientific** and cannot be dismissed as religious dogma. It is important to note that their viewpoint essentially perceives evidence for design in those features, particularly of the biosphere, **which natural law and process seems unable to explain or produce**. Behe's notion of "irreducible complexity" and Dembski's "explanatory or causal filters"and "specified complexity" are considered to be important identifiers of such instances of design. Accordingly, card-carrying "Intelligent Designers" perceive design very much as taking place **at the organism level rather than at what may be regarded as the more fundamental level of the setting up of natural laws** capable of nurturing life. This important point may be further illustrated by noting that causality in nature arises from both natural law and contingency. While the ID movement presumably regards natural law as originating in the Divine Mind, it also insists that these laws provide inadequate explanations for some phenomena, and hence see God acting contingently as well as through natural law.

However, while there is coherence among IDers to this extent, individual differences in emphasis and viewpoint make it difficult to identify their stance on other issues, or even to determine if they have one. For example, no time scale for life on earth is spelled out by most exponents of this group. Although it is probably true that many adherents would espouse a recent life history, some definitely do not. Correspondingly, evidence suggests that this group includes both theistic evolutionists and special creationists. Another interesting point to note is that some prominent ID purists actually make a point of *not* attempting to identify the designer, being content to simply seek evidence for design.

However, many teachers, scientists, and media participants in the recent discussion seem unaware that the term "Intelligent Design" carries the specific connotations noted above and apply it much more generally, often to any formulation or aspect of the design argument. This has often been fatal to clarity. For example, Paul Willis, introducing the ABC's "Catalyst" program on Intelligent Design in October, 2005, said, "Now there's a new kid on the block. It's a theory that says Darwin got it wrong. ..... It's called Intelligent Design." [7] Willis seems unaware of the following significant points:

- Ever since the appearance of the *Origin of Species* in 1859 there have been claims, mostly, although not always by Christians, that Darwin "got it wrong." So there is nothing particularly new in this respect about ID.

- Many ID purists have little problem with a predominantly evolutionary development for much of life. Their principal objections are to a *strictly naturalistic* process and to the use of any evolutionary explanation for what they see as cases of irreducible complexity.

Martin Kettle describes ID as "the conceit that the complexity of the natural world can only be explained by the intercession of a supreme being".[8] He seems unaware that some sympathy for this "conceit" goes well beyond just the subscribers to ID. To make it even more confusing, ID is frequently confused with, or conflated with creation science. One suspects by the nature of their comments that George Bush and Brendon Nelson are among those unaware of these finer distinctions.

This variety of usage for such a key term understandably gives rise to confusion! As we shall see shortly, this distinction is less significant when discussing the secular reaction, since the naturalistic evolutionary establishment typically opposes ID simply as the most visible and threatening incarnation of design/theism. However, when discussing the differences between ID and other Christian perspectives it is crucial to define the former with some clarity.

**Understanding the Secular Response to ID**

The reaction of the secular scientific establishment against the ID movement has been strong; sometimes extending to open ridicule, as in the open letter by Australian scientists mentioned earlier. However, although aimed in the general direction of ID, these responses are generally shot blasts against any theistic perspective at all. This is an important point to note, although as we have observed, it is frequently missed by media commentators. This lack of specificity effectively alienates all potential theistic allies and defocuses the protagonist's case against the ID platform *per se*. One of the contributing factors to this end has been a frequent failure by many secular scientists to realise that they too have adopted a philosophical stance. Their position goes well beyond the methodologically naturalistic processes of science which they are solely purporting to defend.

It is hardly surprising that those who define science in narrow naturalistic terms should object to the inference of a designer. However, it is ironic that some objectors who dismiss what they see as narrow, fundamentalist Christian viewpoints can be just as narrow and fundamentalist in their definition of science! Surely it is fair to ask those of this persuasion whether it is in the widest interest of truth to disallow *a priori* any "supernatural" involvement.

Scientists wishing to exclude God should also recognise some inconsistency between their insistence on philosophical naturalism and their debt to scientific pioneers; many of whom, including Galileo, Newton and Boyle, were devout Christians. Objectors might also do well to reflect on the fact that, as has been well documented, science grew out of a Christian worldview.[9]

Ideology aside, however, the antipathy of the scientific establishment to ID is also due to the latter's strong political agenda. A number of recent books from the naturalistic sector have attempted to expose this agenda and to explore its weaknesses. Many scientists see little separating ID from Creation Science and the far religious right, with whom their horns are already locked. Indeed, Prof Michael Archer has described ID as just "creationism in a tuxedo".[10] There seems little doubt that, particularly under the auspices of the Discovery Institute, the promotional activity of ID interests is increasing, so the secular opposition can be expected to escalate.

Another reason why this group is cautious of ID is the insistence by many of its exponents that they are not attempting to identify the designer. By anyone's admission there are not a lot of alternatives. While their claim may be technically correct, it is seen by most as hollow rhetoric and somewhat less than honest.

Although it might be surprising to some, many scientists presenting evidence which seems to point to design have not been theists. In 1913 Laurence Henderson pointed out the amazing compatibility between earth's natural environment and the esoteric requirements of living systems in his *The Fitness of the Environment*.[11] Michael Denton's *Nature's Destiny*[12] is essentially an update on this work. It was Denton's earlier work *Evolution: a theory in Crisis*[13] which is often credited with helping to launch the ID argument.[14] Interestingly, even ID authors acknowledge their debt to Denton, although his books do not support many of the specifics of the ID movement. Barrow and Tipler's *The Anthropic Cosmological Principle* also points out the fine tuning and apparent design within our universe.[15] Well known physicist Paul Davies has also written extensively on this topic.[16] Design theorists of every hue have drawn heavily on these secular sources.

**Negative Responses to ID From Other Christians**

However, secular voices are not the only ones heard in opposition. Although strongly endorsing a general argument from design, many theistic groups and apologists are offering their own objections to Intelligent Design, although in a less strident fashion. This group generally accepts an old age for the biosphere as well as for the inanimate universe. Irrespective of whether one agrees

with this position it is apparent that among those who hold to it are some of the most articulate and effective contemporary Christian apologists.

In contrast to ID, this group, which includes scientists of all disciplines and many faith traditions, sees evidence for design primarily in what **can** be understood by natural law rather than in what cannot. This is a most important differentiation. The hand of the designer is seen in the incredibly nuanced balance of natural law, ie the anthropic nature of the universe, whether at the biological or the cosmic scale.

John Polkinghorne KBE, FRS introduced a paper on issues related to design at a recent Grafton Festival with the words:

> I want to propose a worldview that takes absolutely seriously all that science can tell us about the universe in which we live, and then deepens that understanding by viewing it in the wider and more profound setting of theistic belief. *Of course, I am not supposing that the world is full of objects stamped 'made by God'* (Italics supplied).[17]

From the context of this remark it seems most likely that this is a shot across the bow of the ID movement in Polkinghorne's typical style of mannerly British understatement. His many publications emphasise his commitment to both philosophical theism and methodological naturalism.

An identical stance is articulated by Owen Gingerich of Harvard, whose four paternal great, great grandfathers were Amish bishops. In his lecture "Dare a Scientist Believe in Design?" Gingerich recalls participating some years ago in a scientific conference at Dallas during which, in discussion with a number of atheistic scientists, a group of Christian biochemists led by Charles Thaxton argued that aspects of evolution were untenable. Gingerich comments:

> I soon found myself in the somewhat anomalous position that to me, the atheists' position was much more interesting than the theists'. That particular group of Christian biochemists had concluded that ordinary science didn't work.... and they attempted to delineate an alternative 'origin science' in which the explicit guiding hand of God could make possible what was otherwise beyond probability. The reason I admired the atheist biochemists so much was that they hadn't given up.... 'Let us not flee to a supernaturalistic explanation', they said, 'let us not retreat from the laboratory.' Now it might be that the chemistry of life's origins are *forever* beyond human comprehension, but I see no way to establish that scientifically. Therefore it seems to me to be part of science to

> keep trying. . . But meanwhile, a new generation has reclothed some of these same ideas under the name 'intelligent design'. . . My theological presuppositions incline me to be sympathetic to this point of view, but as a scientist I accept methodological naturalism as a research strategy.[18]

Echoing these sentiments, Nobel Prize-winning physicist Eric Cornell, who I suspect is a Christian, wrote recently in *Time* magazine:

> But as exciting as intelligent design is in theology, it is a boring idea in science. Science isn't about knowing the mind of God; it is about understanding nature and the reasons for things. The thrill is that our ignorance exceeds our knowledge; the exciting part is what we don't understand yet. If you want to recruit future scientists, you don't draw a box around all our scientific understanding to date and say, 'Everything outside this box we can explain only by invoking God's will.'[19]

About 350 years ago Robert Boyle bequeathed funds to sponsor an annual lecture for the purposes of "proving the Christian religion against notorious infidels".[20] After a long lapse these lectures have been recently recommenced. The 2005 Boyle Lecture was presented by Prof Simon Conway Morris, who suggested that "science reveals unexpected depths to Creation while religion informs us what on earth (literally) we are going to do about it." A little later in his lecture he asserted that:

> . . . it is easy to appreciate the intellectual attraction of the quasi- scientific/quasi-theological movement known as intelligent design (ID). Before you react with consternation and dismay at the prospect of Intelligent Design's having gained another recruit, let me hasten to assure you—not a bit of it! In my opinion ID is a false and misleading attraction.

Morris goes on to suggest that ID's biggest failing is theological in that it is "surely the deist's option. . . It is a theology for control freaks."[21]

It seems that many other Theists agree. Darryl Falk, a committed evangelical Christian and the author of *Coming to Peace with Science*[22], who recently lectured in Sydney on the topic "Intelligent Design: Can we Use the Tools of Science to Explore the Realm of Faith?", wrote in his advertising:

> The growth of the Intelligent Design movement has been fueled in part by the belief that this approach works, that scientific data already in hand provides strong evidence for the existence of an intelligent designer. How strong is that evidence? This

> paper will touch on advances in science, and especially genetics, and explore the scientific weaknesses of this movement and address the issue of why those who choose to believe in the God of Christian theology should not be surprised that a scientific research program of this sort would remain sterile.

Richard Colling, writes in connection with ID:

> As a devout Christian and university biology professor, I can certainly appreciate the sincere efforts of school officials: the possibility of an intelligent creator should not be patently excluded from science classroom discussion! However, as a measure that promotes sound science while also preserving the long-term viability of faith, intelligent design fails both tests. . .
>
> Intelligent design is not a recognised process within the general scientific community—even among conservative Christian biologists. It . . . leads to no testable hypotheses. . .
>
> If the goal of religious conservatives is to preserve an element of faith, intelligent design ideas provide but a temporary solution by positing an intelligent designer to explain perceived gaps in current scientific understanding. This approach is fraught with liability, and actually counterproductive to the stated purpose. If history teaches any lesson, it is this: as understanding in science and biology inexorably march on the perceived mysteries of today will inevitably give way to well-understood processes, and science will systematically erase the prospects of a designer—one data point at a time.[23]

In his recently released book *Random Designer* he also states that "Ironically, at the precise moment we scientifically proved or disproved God's existence, our definition of God would have to be changed."[24]

Although, of course Michael Behe comes from a Catholic tradition, the response of a number of other Catholic scholars to ID has been very measured and cautious. Ken Miller, author of the well known *Finding Darwin's God* argues for design on the basis of cosmological fine-tuning but does not endorse the ID schema.[25] Peter Coghlan of the Australian Catholic University, while noting that critics of ID often weaken their case by confusing science with philosophy, also critiques the ID movement on a number of points, particularly Behe's notion of "design beyond laws". He asks "Are we to suppose that the emergence of every instance of an irreducibly complex system in the natural world is a miracle?"[26]

Jewish author Gerald Schroeder, in his book *The Hidden Face of God*[27], while not directly addressing the issue of ID, would seem to present a similar view of Divine causality and wisdom to those presented above.

Interestingly, all these responses appear to be in close agreement with sentiments expressed by C A Coulson FRS some 50 years ago. He regarded the attempt to define boundaries for science within the natural order as "a fatal step to take". He cited the deplorable example of Newton himself, who once wrote that since the diurnal rotations of the planets could not be derived from gravity, a Divine arm must be impressing it on them. Coulson took the view that this was not his most insightful statement! Using the wave-particle duality of the electron as an example, Coulson stressed that when we encounter the edge of our knowledge we should not regard it as the "gateway of religion" but be led to "think a little more deeply about our science",. . .[28]

This group of scholars clearly views the ID movement as straying perilously close to the old "God of the Gaps", where advances in science inevitably reduce the need for a God until, like the Cheshire Cat, only His benign smile remains! They endorse the ID opposition to the philosophical naturalism of contemporary science but maintain that it is possible, in fact essential, to practice science from a perspective of methodological naturalism. In other words, a Christian actually **does** science in a manner indistinguishable from that of his/her secular colleagues. What is actually happening in the universe and the relationships which seem to govern it comprise one level of reality. The ultimate metaphysical and religious significance of it all is another. In C S Lewis' *The Voyage of the Dawn Treader*, Eustace meets Ramandu, a retired star of the Narnian skies, and comments that back in his world a star was a huge ball of flaming gas. Very insightfully, in the context of our current discussion, Lewis has Ramandu reply: "Even in your world, my son, that is not what a star is but only what it is made of."[29]

Another reason for their caution is the somewhat simplistic usage of terms such as proof and disproof sometimes encountered within ID. As Owen Gingerich points out, modern science chooses between competing theories on the basis of the hypothetico-deductive method, which stresses cohesion, coherence and consistency.[30] This group prefer to say that, all things considered, the theistic option fits the primary data better and more easily than naturalistic alternatives. However, to go beyond this and seek to identify specific instances of design against a background of "natural" phenomena they would see as both futile and unnecessary. As evidence of the

impossibility of correctly identifying irreducible complexity they cite the very considerable advances made by modern science in establishing mechanisms whereby often quoted features, such as the bacterial flagellum, could have evolved.

Yet another dimension, presented by Polkinghorne, fundamentally critiques the terms "natural" and "supernatural".[31] According to this view, what we interpret as natural laws are simply the moment by moment implementation of God's will in the universe. The Divine Will is constant enough upon which to build science but can be, and indeed has been, differently manifested in what we have commonly but misleadingly called miracles. In fact, all reality reflects God's ultimate causality and can be regarded as either "natural" or "supernatural" as one chooses. Accordingly, God is as surely the Creator today as He ever was. This view is perhaps also suggested by the question on the dust cover of *Random Designer* when, in response to the view of natural law as being totally undirected Colling asks, "by what authority do you call God's natural laws mindless?"[32] Within this lawfulness Polkinghorne suggests that the ontological openness reflected by quantum mechanics and chaos theory are possible mechanisms by which God's specific mediation is accomplished. Clearly, Polkinghorne's suggestion effectively removes the divide upon which ID is based, the idea of "special" Divine intervention. I suspect that most of the theists quoted above would resonate with this view. If this is so, however, Gibson's divide in terms of an active or inactive God is not accurate.[33]

Another group which has demonstrated a cautious approach to ID, although for opposite reasons to those noted above, is the Creation Science movement. While thankful that ID "has kept the anti-creationists occupied on another flank" and appreciative of the fact that ID "draws attention to the fact that the teaching of Darwinism is not philosophically/religiously neutral", Carl Wieland of AiG regrets that it "doesn't go as far as we like." He goes on to lament that ID exponents "refuse to be drawn on the sequence of events, or the exact history of life on Earth or its duration", but graciously concedes that "God, who used even the pagan king Cyrus for His purposes, may use the ID (movement) in spite of the concerns we have raised." The ID movement's reluctance to clearly identify the designer involved is also identified as a problem.[34] Since Creation Science asserts that God created the entire cosmos within the comparatively short time-scale of 6,000 -10,000 years, it is not surprising that these tensions have risen.

**Conclusion**

It seems apparent that the last few decades have been considerably kinder to theists than non-theists.

However, Christians of differing ideology and awareness have reacted to this windfall in quite different ways, as we have seen. Even the traditional divides over the "when"and the "how" of creation are more diffuse when projected onto the design landscape. Ultimately we may have to recognise such divergence as a consequence of minds being differently constituted. Referring to a statement by Cardinal Newman, Coulson wrote that "we reach certainties not through logic but by some sort of intuitive perception, building up from the 'cumulation of probabilities'" He went on to say that " . .what is true for one person may not have the same compelling power over another".[35]

**Questions**

1. What aspects of the ID movement fit best with traditional Adventist understandings of origins and which aspects are in some tension with traditional Adventism?

2. Do you feel that Intelligent Design is essentially a "God of the Gaps" concept?

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