

## From Intelligent Design to BioLogos

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For those familiar with my work here at BioLogos, it might come as a surprise to know that until relatively recently I was a supporter of the Intelligent Design Movement (IDM). In this testimony, I tell the story of my transition to the view that God uses evolution as a creative mechanism.

### Early years

I grew up in northern British Columbia, Canada, in a small town called *Terrace*, where I spent a lot of time in the woods with my father and brother hunting and fishing. Little did I know how spoiled we were – Terrace and its environs are a world-class destination for outdoor pursuits, especially fishing. As a hunter, my father was always interested in patterns in nature: what animals fed on, where they moved at certain times, and so on. Even as a child I can remember being similarly interested in how nature worked. Often, while dad fished, I was the one brandishing a net, bucket at the ready, to see what critters I could scoop up and examine. While my peers at school wanted to be astronauts and firemen, I dreamed of being a scientist some day.

My local church setting was pretty much a wash when it came to science. Science was not held up as a potential vocation, but neither was it denigrated as suspect. Creation science did not seem to be a priority, but rather global missions. As such, science–faith issues were seldom, if ever, discussed in the church I grew up in. I can vaguely recall one dust-up over eschatology, which was perhaps the first time I realized that not all Christians agree on everything when it comes to interpreting the Bible. I cannot, however, recall any similar discussion about the means by which God created.

### High school

Despite evolution being almost a complete non-issue in my local church, I seemed to acquire a generic, evangelical, anti-evolutionary position by default. Certainly I knew of no Christians who accepted it, and I can still recall the feeling of dread I would get even at hearing the word *evolution* spoken aloud. That word, in my mind, was effectively synonymous with *atheism*. Fortunately, even in high school biology class evolution seemed to be a complete non-issue too, for as far as I can recall evolution was not a subject I was exposed to in high school. In fact, in high school I found biology to be intensely boring – it seemed to me to be mere regurgitation of information. Chemistry and physics seemed much more interesting, and I suspect now the reason for the appeal they held for me then was that they were taught from their underlying principles: atomic theory, Newtonian mechanics and Einstein’s theories of special and general relativity. What was missing was the theoretical underpinnings of biology: a way to organize the laundry list of information into a *context*. It would be a long time before I realized that *evolution* was the theoretical underpinning that was missing from my biology experience. Given my dread of the topic, had this been pressed on me in high school I may have never pursued a career in biology.

As a high school student I had left behind my childhood desire to be a scientist. After all, I knew no scientists, and had no notion of how one might become one. In my small-town, northern Canadian setting, a medical doctor was about as close as one came to a scientific career that I was aware of. Accordingly, I set my sights on medicine, and off I went to the University of British Columbia in the fall of 1992. Biology seemed a natural choice for an aspiring doctor, so that was what I chose.

One church incident that I do recall with great clarity happened just before I left for university. There were several recent grads in the congregation: some were headed to Bible College, and others, such

as myself, were off to “secular” universities. Our congregation had a time of prayer for all of us, but the contrast was stark: prayers of thanksgiving and blessing for those bible-school bound, but for those of us heading into the lion’s den, prayers of supplication that we not lose our faith in the process. I can remember steeling myself for the upcoming battle, where professors tried to snare me with their atheistic teachings and peers likewise pressured me to give up my faith. One battle I knew was coming was the evolution one: certainly, as a biology student, this would be one of the challenges I would have to face.

### University 101

To my delight, I found that university was not going to require me to hold my breath spiritually for four years. Soon I was involved with Inter-Varsity Christian Fellowship and enjoying the friendship of many other Christian students. Biology, however, remained boring and laundry-list like. My grades in chemistry and physics were still higher than those within my declared major of biology. The one bright spot was that evolution barely seemed to rate a mention except in passing. Certainly no compelling evidence for evolution was ever mentioned – professors seemed too intent on teaching the details of their fields to provide a wider evolutionary context. Even the introductory survey courses seemed more intent on a mere description of biodiversity rather than any detailed understanding of how that diversity arose. I did note that there was a 400-level evolution course, but thankfully it was an optional elective. Avoiding the evolution issue was easier than I had thought: I simply skipped taking that elective.

At the start of my third year, with my grades still marginal for medical school, I somehow decided to upgrade into a biology “honors” student. This meant two things: working on an undergraduate research thesis with a faculty member, and attending an “honors seminar” class with other students in the same program.

Experiencing my first taste of research was electrifying: here at last was genuine science! Not long after, my upper-level classes seemed a lot more interesting and relevant, and also much easier. My grades improved dramatically, and medical school looked to be a live option once more – except for the fact that my childhood interest in science had blossomed again.

### Standing against evolution

The undergraduate thesis seminar class included an assignment that required students to familiarize themselves with the research of one of the professors in the department. As the list of potential faculty and their research interests was read, one caught my attention: the work of [Dolph Schluter](#) on experimental evolution. I decided to take the opportunity to score a few hits on the so-called “theory” by signing up for this topic. What followed can only be described now as a painful memory: full of ignorance and confidence, I trotted out every long-refuted, anti-evolutionary argument in the book (in fact, if memory serves, my “research” was nothing beyond skimming one anti-evolutionary book for its arguments). I remember that the class was quite engaged by the presentation, and there was some vigorous back-and-forth with some of the students who knew the science better than I because of their research work. I can only imagine what the thesis class faculty supervisor was thinking at the time. The worst part was that Dolph himself arrived early for his own presentation to the class, which was to follow my own. As such, he was able to hear a good portion of my nonsense.

Fortunately for me, Dolph had no interest in what would have been a very easy dressing-down. Rather, he restrained himself to a few words to the rest of the class on their lack of knowledge. Personally, I thought I had scored a victory for the faith, against the evils of evolution.

## My introduction to Intelligent Design

It was not long after my (now embarrassing to me) actions that I was first introduced to the ID movement through the work of Michael Behe. While I had been vaguely aware of Phillip Johnson's 1991 book *Darwin on Trial*, I had not yet read any ID work in any depth. Ironically enough, I was introduced to ID by a vocally pro-evolution professor who ran a lab down the hall from the lab I worked in. She maintained a section of bulletin board outside her lab entitled "Crackpot's corner" that featured all manner of creationist materials. One day, an essay by Behe entitled "Molecular Machines" appeared on the board. This essay presented the argument from "irreducible complexity" that later appeared in more detail in Behe's 1996 book *Darwin's Black Box*. That book appeared right when I was transitioning into graduate school, and I read it as a brand-new PhD student in late 1996, I believe.

I found *Darwin's Black Box* electrifying, and confirming in great detail what I already believed: *of course* evolution could not produce anything genuinely novel. *Of course* evolution was powerless to explain the intricate complexity that I knew (at a surface level) from my undergraduate biology and biochemistry classes. *Of course* the irreducible complexity of life called out in clear terms for a Designer, given that natural mechanisms were powerless to explain it. Of course Darwinism had failed and was propped up only because atheistic scientists were not willing to face the consequences of admitting the universe had a Creator.

## Divergence

Though having read only one book, and certainly no critical commentary on it or its arguments (or ID arguments in general), I felt satisfied. Having "sorted the issue out", I promptly shelved it and went on to other things. Graduate students have a lot on their plate, and I was busy, busy, busy – not least that I was learning how to teach Mendelian genetics for the first time as a Teaching Assistant, and getting my PhD research up and running – which meant a large amount of fruit fly (*Drosophila*) genetics. Slang for "Drosophila geneticist" is "fly pusher" – and I soon learned why: I was spending hours and hours glued to my stereomicroscope sorting anesthetized flies with a fine paintbrush: literally pushing flies. It didn't take a Ph.D. to figure out that I had a lot of "dead" time on my hands with all this work, and I looked for ways to engage my brain in something constructive while mindlessly shoving diminutive insects around. While many students doing similar work often simply listened to music, I didn't (and to this day I seldom do, for whatever reason).

I then made a pleasant discovery: as a graduate student at UBC, I was entitled to a library card at neighboring [Regent College](#) at no cost (free is always good when you're a grad student). Regent is known internationally as a seminary with renowned scholars (J.I. Packer, Bruce Waltke and Gordon Fee taught there at this time, for example) and I soon went over looking for reading material. What I found was even better: Regent recorded most of their classes on cassette tapes and put those tapes into the library as items that could be checked out. There, for the taking, was the equivalent of auditing several decade's worth of classes in exegesis, hermeneutics, and the like. I happened to attend Gordon Fee's church at the time, so I started with one of his classes on one of Paul's letters. I lugged in a tape deck and headphones from home, set it up by my stereoscope, and plugged in to the world of Pauline scholarship. I was hooked. Over the next few years, I would eventually exhaust the Regent library collection of Fee's classes and move on to Waltke, N.T. Wright (a sometime visiting scholar at Regent), and many others.

Likewise, my understanding of science was maturing as a graduate student. One frequent activity in grad school was participating in what are known as "journal clubs" – a group of scientists and their grad

students who get together to hash through a recent paper relevant to their discipline. What one learns in this sort of setting is invaluable – not least that not all papers, published though they may be, are of equal quality. Here I would see papers trashed for their poor experimental design and lack of appropriate controls, or vaunted for their elegance and powerful approach. I learned what makes a good experiment and what doesn't. For the first time, I was approaching science as a (young) *scholar*, not as a student.

### Stasis

Looking back, this period of my life was profoundly formative and would later influence my coming reevaluation of evolution. I was learning science at a scholarly level for the first time as a graduate student, but also scholarly *theology* as well. Growing up in a church setting had not prepared me well for either, since evangelical communities (outside of major metropolitan settings near universities or seminaries) seldom have role models within the church to demonstrate how the life of the mind is not a threat to faith. Interestingly enough, my growth in these areas did not, at the time, affect my antievolutionary views, even as I learned the details of developmental genetics and explored scholarly ways of approaching the Bible, including Genesis. The only effect I can recall was that I became less interested in antievolutionary apologetics in general: not that my views changed, but that I was less eager to whack folks over the head with them. As such, I fell into a “holding pattern” that would persist until after my Ph.D. and landing a job at Trinity Western. It would be at an evangelical institution where at last I would be forced to revisit my views on evolution.

After graduating from University of British Columbia (UBC) in 2003, I stayed on as a Post-doc to finish up a few experiments and get my “PhD paper” through the publication process. During this time I was casting about for the next step for myself and our young family (it was touch-and-go whether our first child would arrive in time to see daddy get his Ph.D.: as it was, he arrived a few days after). As I was travelling around and interviewing for postdoctoral positions, the job posting for Trinity Western University (TWU) came to my attention. Thinking it a long shot, I applied, and to my surprise got an interview – and later found out that my extra-curricular study at Regent College had made all the difference. So, in the fall of 2004, I took up a full-time job as a young assistant professor in biology at the largest evangelical university in Canada.

### Early career at TWU

This was another “busy, busy, busy” phase – teaching courses for the first time, and getting my research up and running. It's not surprising that this time was one of little reflection on evolution – there simply wasn't the time. It was a topic, however, that came up more than it had at UBC: students at TWU were not afraid to ask questions about it, or to consider its theological implications. I also now had Christian colleagues with settled views on evolution: most in the biology department overtly accepted it, while one in environmental chemistry was (and is) an open supporter of the ID movement. When opportunity arose (for example, when I was away at conferences), I would invite this latter colleague to present his ID work to my introductory classes. These presentations received positive reviews from the students, and I used them to support my own, more subtle, intimations that evolution was an easily dismissed and highly speculative science. As such, the basic approach to evolution I had accepted as an uncritical undergrad / early grad student continued to hold, and I saw no reason to change it. Certainly the

hectic pace of those early days (including a daughter born in the spring of my first year of teaching) was a contributing factor. There simply wasn't time for any considered reflection on the topic.

### Opportunity knocks

In the fall of 2007 I was given an opportunity few young scholars can afford to pass up: the opportunity to publish an invited paper. Years before my arrival at TWU, a collection of essays had been written by several TWU faculty based on the general theme of "A Christian Perspective on..." that covered the various academic disciplines, from art to chemistry to philosophy. This collection was intended to be published in book form, but languished for over a decade for lack of finding a publisher. In 2007, however, a publisher was finally found, and the call was put out for everyone to revisit their decade-old work and polish it up for publication. Now a ten-year delay might not mean much for certain disciplines, but a decade in biology is a lifetime. For example, the biology chapter was written before genome projects were even on the radar. Clearly some major updating would be in order. As it happened, the author of the biology chapter had just retired and was not of a mind to rework the paper. He suggested that I come on board as a co-author to do the revision, and I happily agreed, thinking it an easy route to an all-important publication. This was all agreed to just before I was scheduled to leave for a conference – the 2007 National Association of Biology Teachers (NABT) meeting. Fine, I remember thinking – I can get cracking on this essay once I'm back from the States.

### NABT 2007

I was off to the NABT meeting to give a paper on some innovations I had hit upon for how to teach with fruit flies at a small institution. [I had published a paper on this topic](#) the year before, and that was enough to land me a presentation slot at the conference. Landing a slot meant I could get institutional support for attending, and off I went. Little did I know at the time how relevant this conference would be for the essay I needed to rework when I returned home. The headline speakers at the conference were all relevant. The keynote speaker was Francis Collins, speaking on the human genome project and mapping common genetic variation within human populations. I had heard Francis speak a few years before, so I was aware of his pro-evolution stance even though his talk at this conference was not about evolution per se but rather the personalized genomics revolution. The other featured presenters were all connected with the *Kitzmiller vs. Dover Board of Education* trial that had occurred in Pennsylvania a few years before: Ken Miller, biology professor at Brown University and expert witness for the prosecution, and the teachers from the Dover school who had refused to follow along with their school board's decision to teach about Intelligent Design. The court case that resulted from the board adopting a pro-ID policy tested the constitutionality of teaching ID in the US public school system, and it was a dismal failure for the ID side. I had heard nothing about the case before, nor anything about any key players in the ID movement since the mid 1990s. So great was my ignorance that I raised my hand in a question period to ask the Dover teachers if they had had any feedback from theistic evolutionists on their ordeal. They laughed, and pointed out a few upcoming sessions to be given by Ken Miller, whom I had not heard of before. Later, I found a PBS NOVA documentary about the trial available as a DVD for purchase at the conference, so I bought a copy and watched it on my laptop that evening in my hotel room. It featured transcripts from the trial word-for-word as a re-enacted courtroom drama, and I was fascinated. I was catching up in a hurry, but I still was uncertain about where I stood on things personally.

On the flight home, my head was spinning. If nothing else, I realized that I knew virtually nothing about evolution or Intelligent Design; I had never seriously looked into either. If I was going to write anything even remotely credible on the topic, as I had now agreed to do, I had my work cut out for me. I also knew that Behe had just come out with a new book (*Edge of Evolution*), so I decided that I would start there upon my return. I had heard quite a bit of anti-ID rhetoric at the conference, and I remember thinking it best to look at the case for ID first, before looking at the case for evolution. It would turn out to be a fateful choice.

Upon returning from the conference, I set to work on revising the essay. It turned out to be a lot more work than I had expected: in the end, only 10% of the original piece remained. The original had also avoided the creation / evolution issue almost completely, so there was lots to be done. As I had decided, I intended to start my research by reading Behe's then-new book *Edge of Evolution (EoE)*. I wanted to give the ID movement a fair chance to make its best case before I looked into the evidence for evolution. I checked with my pro-ID colleague down the hall, and sure enough he had a copy I could borrow. I poured myself a cup of coffee, closed my office door, readied note pad and paper, and settled in.

### Losing my (ID) religion

To this day I wish I could have recorded myself reading those opening chapters of *EoE*. It was not long before the first suggestion of a frown would appear. Not many pages hence the frown would deepen into a furrow. I could hardly believe what I was reading: where was the Behe of *Darwin's Black Box* that had so captivated me years ago? Though it is not polite to recount it (and I want to be clear that I hold no animosity towards Dr. Behe, but merely want to share my initial reaction) I clearly recall putting *EoE* down on my desk thinking, "What is this?" I was shocked: I had fully expected to once again be amazed and amused watching Behe take evolution down a peg or two. Yet here I was, knowing virtually nothing of evolution, and already I was seeing nothing but holes in Behe's argument. Later on, when Behe began to discuss a topic I was familiar with (population genetics) I confirmed what I suspected: Behe was out of his area of specialty and out of his depth. Later work would convince me that this pattern applied to the whole of the book and the core of Behe's arguments. My note pad was filling up, but not with what I had expected.

Before I had finished *Edge of Evolution*, I was done with ID. I would lose my faith in ID not by comparing it to the science of evolution, but by reading one of its leading proponents and evaluating his work on its own merits. ID, I decided, was an argument from analogy, ignorance and incredulity. I was looking for an argument from evidence. Due to an interesting set of circumstances, I was able to read Behe both as a credulous lay reader and as a skeptical trained scientist. Behe, I realized, hadn't changed: I had changed, and what a difference it had made.

### Gaining Evolutionary Creation

Having rejected ID, I began to look into the evidence for evolution. I can also clearly recall this transition, and, if memory serves, it happened on the same day I rejected ID. This transition, however, required only ten or fifteen minutes - just as long as I needed to read the first research article on my reading list: the 2005 *Nature* paper comparing the human and chimpanzee genomes. I put the finished paper down on my desk, said "well, that's that, then" out loud to my empty office, and sat back in my chair. The contrast with ID could hardly have been starker: here was nothing but argument from evidence. As a

geneticist, I was fully capable of evaluating that evidence, and it was compelling. Humans and chimps were close relatives, and I was no longer an anti-evolutionist. Game, set, match. Moreover, my eyes were now open to the wonder and scope of evolution as a foundational theory of biology: everywhere I looked, evolution informed what I knew, whether in cell biology, genetics, immunology or developmental biology. In an instant, the pieces clicked together, and I reveled in the deeper understanding.

As the essay took shape, I was able to put my brand-new outlook on to paper in a coherent form. As I knew, other Christians had walked this road before, and I found two books especially helpful: *Finding Darwin's God* by Ken Miller, and *The Language of God* by Francis Collins. Though colleagues at TWU counseled against being “too open” about my new views, I was determined that the essay reflect what I thought to be the best way to put science and faith together. In the end, the essay would receive positive reviews despite its embrace of evolution as one of God’s creative mechanisms, and its lack of support for the Intelligent Design movement, Young-Earth creationism or Old-Earth creationism. For better or for worse, I had nailed my colors to the mast.

### Looking forward, looking back

Though I didn’t know it then, the coming years would provide additional opportunities for engaging science-faith issues. What I had previously largely avoided was now an area of interest, and a natural fit for both my training in the sciences and my commitment to evangelical Christianity. It would also provide an opportunity to make amends for a previous mistake.

### Theological tools for the journey

As I related earlier, my transition from aligning myself with the Intelligent Design Movement to accepting evolution was rather sudden. Looking back on this transition, I realized that a few factors had helped. Of course, my training as a geneticist had been invaluable: most evangelicals cannot read the primary scientific literature on evolution as part of their own journey, and as such they are beholden to how other Christians represent (or misrepresent) it. Yet beyond this obvious advantage, there were other factors that helped from a theological perspective. One such factor in easing the shift was the rich theological material that I had spent years listening to as a graduate student. Through that material I had learned that the simple, straightforward, Sunday-school approach to the Bible that I had learned as a child and teenager was merely a façade: Scripture was interwoven with mystery, tensions and scholarly issues that are simply not discussed in the average evangelical church. Though many pastors learn about these issues in seminary, most will never mention them from the pulpit for fear of unsettling the faith of their congregations. Discovering them, and then working through some of these issues had slowly, but surely, washed away tendencies of rigid thinking: I now knew that Scripture had widely varied genres within it. I now knew that the opening chapters of Genesis had the hallmarks of an ancient near-eastern worldview. As such, the realization that evolution, including human evolution, was a well-supported scientific theory did not precipitate a theological crisis for me. Ironically, what many pastors fear to touch in a Sunday morning sermon was just what I needed to handle this shift. This did not mean, of course, that I had everything worked out theologically then (or that I do now). Rather, it had created habits of mind that were more at ease with exploring uncomfortable questions, and reevaluating long-held assumptions.

An additional factor that eased this transition was the fact that my experience of God had grown and deepened over my undergraduate and graduate school years. Specifically, I had come to experience

the power of God the Holy Spirit in ways that I had not during my, until then, relatively conservative church experience. As such, my relationship with God was not tied to a specific interpretation of Genesis or literal mode of Biblical interpretation, because I was experiencing His power and presence personally. That experience did not suddenly evaporate the moment I understood the evidence for our evolutionary history. Instead, God's empowering presence continued to be part of my life as I explored a method of His creative activity that I had previously denied.

### **Making amends**

In 2009, I had a unique opportunity. That year was the 200th anniversary of Darwin's birth, and the 150th anniversary of the publication of Darwin's opus *Origin*. It was also the year I was to host an annual meeting of biology instructors from universities and colleges all over British Columbia for a professional development day. Accordingly, I needed to arrange a plenary speaker. The theme, given the year, was an easy one. As I wracked my brain for a local speaker with expertise in evolution, [Dolph Schluter](#) came to mind. Dolph does internationally-known work on the evolution of freshwater sticklebacks, small fish that are descended from sea-living ancestors. There are multiple coastal lakes in British Columbia that were colonized with marine sticklebacks in the last 10,000 years, making my home province a natural laboratory for adaptive radiation. As I previously recounted, Dolph's research was also once the target of my antievolutionary views as an undergraduate, some twelve years prior. Dolph would be perfect for this talk, in more ways than one. Would he remember? Would he be willing to come?

Wonderfully, Dolph was available and more than happy to come out. As I introduced him to the crowd of faculty and students that attended his lecture, I recounted the story of our previous encounter and some of my personal transition to accepting evolution. His talk (and other talks given that day on teaching evolution and interacting with students threatened by it) generated much helpful discussion. All in all it was a very enjoyable day, and a significant milestone on my journey.

### **Conclusion**

Like evolution itself, my path was at times slow, and other times rapid. Small changes, whether in my thinking or in my experiences, later combined to produce larger effects. Through it all, I have no doubt that this journey was ordained and sustained by my Creator, as He patiently led me into a deeper understanding of His creation. As I mentioned in a recent [NPR interview](#), this understanding is to be welcomed, not feared. All truth is God's truth, and the book of His works is one that He desires us to take, read and celebrate.