Published in an abbreviated form in *Science and Christian Belief* 25(2):170-171.

Loving evolution from a distance.

A review of: Conor Cunningham, Darwin's Pious Idea: Why The Ultra-Darwinists and Creationists Both Get It Wrong

I was dismayed to see this book... because part of me hoped that I would write it someday. Not a book with this title, mind you, but one in the spirit of this title. As I read, however, I felt better. That book still hasn't been written. As for this book, it does not tell us why the ultra-Darwinists and Creationists get it wrong, nor even really how they get it wrong (which is probably what the author meant, and what I would mean). Mainly it is an extended statement *that* they get it wrong—actually, not so much that the Creationists get it wrong (although the reader will certainly take this away), but mainly that a guild of powerhungry sorcerors called the "ultra-Darwinists" are wrong. More about them later. First, the title needs a bit more deconstruction in order to present this book accurately. "Darwin's Pious Idea" might seem to suggest that Darwin himself found the idea of evolution a pious one. Although the author does refer to some cautious statements of Darwin on this topic, the present book was not given such a title for any particular perspective of Darwin's; indeed that would be a tenuous thesis. Rather, the title is designed to poke fun at a popular book by Daniel Dennett (one very deserving of being poked) called Darwin's Dangerous Idea. Darwin's Pious Idea is intended as a counterpoint to the extreme and simplistic views of evolution and its effect on the meaning of life as has been presented by Dennett and others.

My main criticism of the book is already evident in the title: most of the book follows the title's lead in putting the cart of reference before the horse of thesis. Just as the title leans against some other book and thereby makes its point a little more obscure and hyperbolic, the text within does exactly the same thing. After reading two thirds of the book I truly thought I would review it as an annotated compendium of quotations from hundreds of writers, generally on the topics of human nature, evolution, and the way we should seek to view and explain humanity and the natural world. Interspersed among the small groups of quotations on a particular topic or opinion (I was going to write) are evaluative statements about them by the author, especially endorsement or rejection. And as such this book is excellent-it makes me want to read more. Not more Cunningham, just more in general. More Weil, Chesterton, Lewis, Polanyi... wonderful stuff. And if this book were actually a compendium of quotations, it should definitely include several Cunningham ones in there too, such as this one from p.267: "Thinking atheism and thinking religion alike must conduct their various discussions in a manner that leaves the vulgar rants of all modes of fundamentalist thinking behind." The twin dunderheadednesses of fundamentalist atheism and fundamentalist creationism form a valuable theme in this book. The book's strategy, however, is not primarily to argue carefully against these views, but rather to assemble a conglomerate of provocative statements that together suggest or hint at an alternative. It is in sketching this alternative that the book's chief virtue lies, but that comes way at the end and so we must hazard the rest first.

This book faces two main problems in reaching its stated objective of showing why ultra-Darwinists get it wrong. By the way, I am just going to drop the "creationists get it wrong too" part because that is hardly a focus of the book. There are bits here and there where the author needles creationists, and chapter 6 sees some development (embedded, strangely enough, in a critique of materialism, but this makes some impressionistic sense in the context of that shared dunderheadedness theme). Mainly, however, the author is concerned with taking down the "ultra-Darwinists". The two main errors the book makes in this attempt are in creating the ultra-Darwinist straw man and handling biology abysmally. The "ultra-Darwinist" is portrayed as a received or standard view. This no doubt maximizes the provocativeness of the book; but in fact it is a caricature made up of the absolute worst statements of a very few characters in popular evolutionary thought. His cited examples are sparse—in the first hundred or so pages he applies the label to Richard Dawkins, Daniel Dennett, and Jared Diamond. Leaving their views aside, as long as we are just going to set up quotes on one side up against quotes on the other like toy soldiers, the book is going nowhere. So I, as most biologically informed readers would, looked for the places where the author gets away from an inordinate focus on individual people (a bad habit from philosophy), and descends into the nuts and bolts of what ultra-Darwinism actually is and how it departs from evolutionary biology. There I became even more disillusioned: the book gets biology wrong about as often as it gets it right, either in the description of the theory or process, or in the subsequent discussion about its implications. Much of the book is a critique of biologists, or of a view of biology and its place in explanation; so a reader who loves evolutionary biology will be devastated to find the biology terribly slighted. When it is brought to bear, it comes with factual errors, semantic gaffes, and misleading blanket statements in place of the rich produce of that field. We shouldn't have to read, in a book about evolution, that allopatric speciation is some relationship between a species and its common ancestor, whereas sympatric speciation is when species split into two and both continue to persist (p.15 and note on p.428). We shouldn't have to put up with a claim that individual selection cannot explain avirulence (p.39). Readers with a view of nature that has been transformed by an understanding of evolution will not appreciate a book taking off with an endorsement of the Great Chain of Being (p.3), and respecters of Darwin's ideas will not take kindly to having him philosophically pigeonholed in a way that would make him cringe (p.29).

One example can serve as an object lesson: the author quotes someone who derides both the Church Fathers and the evolutionary psychologists for considering the whole point of sex to make babies (p.232). The author wants to use this to bash the evolutionary psychologists, but before he does this he makes an aside that of course this is too simplistic a statement about the Church Fathers. Then he delivers his rant: can one believe how ridiculous those evolutionary psychologists are, never once to have considered the existence of such inconsistencies as birth control or homosexuality or masturbation? How easy are the views of these silly ultra-Darwinists destroyed! But, no. Actually, the same trap to which he alerts us regarding the Church Fathers, he leaps headlong into when the evolutionary psychologists are in the sights. In reality the consensus among evolutionary psychology broadly construed is that most sexual activity in humans functions in strengthening the pair bond. Evolutionarily this derived from the advantage of biparental care, which was advantageous because of the ever greater social competition the offspring would face as humans grew in intelligence. Not so obviously dumb anymore, is it? At least it deserves consideration. And certainly it is miles away from "sex is only to make babies". The moral of the story: beware of a book that is careful with what the author likes, but sloppy with what he dislikes.

This mishandling of biology saturates the first 5 of the 7 chapters of the book, as can be described in a brief tour. Chapter 1 is occupied with the mistaken position that something bad called ultra-Darwinism is the received view in evolutionary biology. Chapter 2 is mainly an argument against gene-level selectionism based on rudimentary molecular biology. Aside from the fallacy of the argumentation, the core message of the chapter misunderstands the nature of selection, which can be considered gene-level as easily as individual-level depending on how one describes it—it is exactly the same process. (Granted, even many biologists don't realize this, but those people aren't generally writing chapters against gene-level selectionism). Moreover, the chapter confuses the "one gene-one trait" view with genes as selfish entities, misstates the importance of genome size, makes a mess of pleiotropy, etc., etc. Let us move on. Chapter 3 is composed of exhausting and exhausted arguments against extreme adaptationism, and concludes that issues such as protein folding render selection incomplete as an explanation for life-something nobody out of Introductory Biology could contradict, which is why nobody does in fact contradict it. The argument is simply playing on what we mean by a "complete explanation". Is there another process in nature that we know of besides selection that can produce functionally integrated traits in a consistent way? No. Are there other mechanisms going on at other levels in the organization of life that should feature in a complete explanation? Yes. The author's conclusion from the incompleteness of selection is much more radical. Function is declared to follow form (whereas an understanding of natural selection shows precisely that there is an interactive relationship between these two). Then the author claims some things to be inherent in nature (a statement without substance in this context), a point which leads to the abandonment of physicalism. The positive conclusion is that evolution is an emergent process. This may indeed be so, but a misguided critique of adaptationism is not going to get us there. Chapter 4 is a vague and rhetorical defense of progressivism in evolution, nearly completely disconnected from the last century of discussion on this topic among people who understand evolution. It argues for one sense in which any history at all would necessarily be progressive, and another sense that places humans at the pinnacle of evolution. Speaking of pinnacles, Chapter 5 on the evolution of human psychology is the apex of this book's mischaracterization of evolutionary biology-not surprisingly, as impulsive thinking about evolutionary explanations of humans is rampant in popular science, which is where the author gets his information. The three groups of villains in this diatribe are the social darwinists, the sociobiologists, and the evolutionary psychologists. Although some of his arguments are good here, the target the chapter sets up is too broad and the chapter displays too little knowledge about it. The author must invent a group in order to argue against everybody with one sweep of a chapter, not so differently than what Dawkins does to Christians in The God Delusion. In general, these first few chapters would have worked better if they had been cut down to a quarter of

their size (reserving the quotations, which as I mentioned are excellent), and if the author had simply sketched out the views and said "I do not like this view—here is one I like better", rather than attempting to refute them.

Incidentally, one might ask why the author so coarsely shortchanges biology in a book about biology. After all, his reading is extensive—it's not that he "couldn't get to it" and he is remarkably intelligent—it's not that he "couldn't get it". So why?! My own hunch (and here I must be careful because I really don't know) is that the author's view, deep down, of science leaves him uninterested in processing it. He doesn't much like science, so he doesn't bother with it much. He characterizes a naturalistic or scientific approach as "bracketing the divine" (p. 265), i.e., leaving God out by fiat at least as a method if not as a metaphysic, and of course this is not where he would like us to go. But to this I would reply that he has science all wrong. Science will consider whatever, *whatever*, is testable. If there were some self-correcting method of testing propositions about God, then the divine would be scientifically accessible. Science does not leave out the divine as a matter of policy, but ends up leaving it out because of what has turned out to be a practical impossibility of testing major hypotheses about the divine.

In chapter 6, slowly, like evolution, a change begins to come over the book. This, the longest chapter, though it begins as a critique of materialism and views that resemble it, begins positively to offer something, begins more seriously to present a view. Whether because I was impressed by the view or because I was just curious and surprised that such an argument exists in the twenty-first century I don't know, but I became increasingly captivated over the course of this chapter by this case... for *idealism*: not the contention that the basis for ethics is what should be rather than what is, nor that physical things have a spiritual side, but the full-blown notion that "mind goes all the way down", that spirit is more fundamental in the universe than matter. Just as George Berkeley's (similarly Christianity-inspired) repulsion by the matter-obsession of his day led him to leap to the opposite pole and declare matter nonexistent, Cunningham reinterprets this spirit and says intriguingly that "we have lost matter" (p.326); matter is not the hard and fast thing we thought it was, but is itself mysterious. In a way even this view is representative of the book's trend towards defining one's view primarily in relation to others, because the argument for neo-Berkeleyan idealism seems dependent on or instigated by the excesses of the other side. So even though there is something here, I would be more careful with matter, if I were the author. As he says of Dawkins' (infuriating) tendency to define religion by some bad things done by the religious, *abusus* non tollit usus. Just because alcoholics exist doesn't mean you have to be a teetotaler.

The last chapter, the shortest since the first chapter's caricature of the enemy, is where Cunningham really comes into his own. Now we see what drives him—what he is *really* interested in, why he doesn't like what he doesn't like and why he has told us throughout the book to take this way instead of that. Here is a proposal for a nuanced Christian view of existence, an elaboration of a doctrine (or at least a vision) of Creation-Fall-Redemption. Precisely where some other reviewers have seen this book taking an odd detour into theology, we should rather see him finally showing the cards he has been holding the entire time. Granted, he wasn't exactly pokerfaced. One could have gathered on p.78 that the following statement was at the heart of the book: "natural selection actually challenges physicalist reductionism (hence the 'piety' of Darwin's idea)". But even this was merely a preparatory suggestion, and a negative one at that. Not until this short theological chapter do we really see where the author is coming from. The average reader, however, even a reader of this obviously pro-theist book, might experience some difficulty in following some of his instant adages (e.g., "making grace religious makes it atheistic", p.383). Such statements are neither meaningless nor intentionally obscure, though. They arise out of his general goal of increasing the dimensionality or richness of our thought, away from the fundamentalism of either atheism or creationism. Whether or not one agrees with the specifics of the program, its elaboration avoids the reactionary, polarizing, simplistic and outdated approach that characterizes the polemic part of the book. Again, the author is good at what he likes. Anyone should read this chapter closely who wishes to adhere to—or construct—a Christian philosophy that incorporates evolution.

Let us close by returning to the title, and in general the contention that "the theory of evolution is a 'pious idea'" (p.xvi), in reaction to the view that it is inherently dangerous and atheistic. I think it is neither. We can decide whether or not to be pious, but evolution is merely what is. It happens, and happened before there was any piety or atheism among its products. Evolution is no more a pious idea than money is bad. Such values emerge from how one views it and what one does with it. The author is the one with the pious idea, and he also likes evolution—at least from a distance. So he tells us (a bit, at the end of the book) how we can take a pious perspective on it.

David C. Lahti City University of New York