

A Review of *EXPULSED: NO INTELLIGENCE ALLOWED*

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The movie, *Expelled: No Intelligence Allowed*, was released in theaters nationwide earlier this year. The premise of the movie is that there are scientists who favor the theory of intelligent design (ID), in lieu of at least some of the theories comprising evolutionary biology. These scientists claim they are being systematically precluded from expressing their views in the scientific mainstream. As the NHM is committed to accurately conveying the nature of science to the public, it is important that we make ourselves aware of the positions espoused in this movie.

With actor Ben Stein playing the foil, we're carried along on a journey into the purported nefarious activities of scientists to squelch objections to evolutionary biology. Big time science, we're told, precludes freedom of expression, and it's current supposed victims are the proponents of ID. But, as with all one-sided promotions of a questionable point of view, crucial details get conveniently ignored. *Expelled* is a study of the attempts by non-scientists and some scientists alike to convince the general public that science, at least when it comes to evolutionary biology, is incomplete and/or incorrect.

There are four themes you'll find throughout this movie that are gross misrepresentations of the workings of science in general, and evolutionary biology in particular. First, there's the claim that science precludes expression of thought. In the context of ID, such a claim of overt suppression is inaccurate. Science is a process of acquiring ever-increasing causal understanding, and such a process has as its hallmark the continual critical evaluation of the theories and hypotheses we claim lead to such understanding. It cannot be overemphasized that ID is a theory that is not amenable to being

tested.¹ Science is not able to evaluate the supernatural. A theory that is immune to testing provides individuals with the ability to arbitrarily explain anything with impunity. This is not a position any field of science would condone. So, freedom of thought regarding ID is not being suppressed in science. ID is simply a theory that lies outside the realm of all the sciences, and as such is not worthy of serious consideration as a vehicle for acquiring rational understanding.

Second, the subject of the origin of life is raised on several occasions in *Expelled*, and usually in relation to evolution. Research into the origin of life falls within fields of study such as geochemistry, organic chemistry, cosmology, and physics – *not* evolutionary biology.² Evolutionary biology provides us with causal understanding *subsequent* to the origin of life, *not* the causal conditions that enabled the origin of life. Attacking evolutionary biology by way of asking how life originated is nothing but a straw man. Ironically, the movie conveniently sidesteps interviewing any of the notable individuals currently involved in origin of life research.

The third point in the movie is that ID simply provides an explanatory framework, that it is not a religious argument, and is a minimal commitment to the possibility of detecting

¹See my articles available on this website: *Science and Religion: Compatible or Incompatible?*, *Evolutionary Biology versus Intelligent Design: Resolving the Issue*, and *The Mechanics of Testing a Theory: Implications for Intelligent Design*.

²For an excellent overview of origin of life research, see: Hazen, R.M. 2005. *Genesis: The Scientific Quest for Life's Origin*. Joseph Henry Press, Washington DC.

intelligent design. These claims, supposedly worthy of scientific consideration, don't stand up to even mild scrutiny. First, any explanatory framework is dependent upon theories that must be open to critical evaluation, which ID is not. Second, ID is regularly associated with a religious perspective. For instance, in his book, *Intelligent Design: The Bridge Between Science and Theology* (1999: 13, emphasis added), author William Dembski, who is one of the founders of the ID movement and a participant in the movie, tells us that, "Intelligent design is three things: a scientific research program that investigates the effects of intelligent cause; an intellectual movement that challenges Darwinism and its naturalistic legacy; and a way of understanding divine action." In *Understanding Intelligent Design: Everything You Need to Know in Plain Language* (2008: 177), William Dembski and Sean McDowell are more direct: "Our calling as Christians is to bear witness to the truth [*sic*], both the truth of God's work in Christ and the truth of God's work in creation." Regardless of claims to the contrary, ID is just another shade of creationism, thus lying outside the purview of all the sciences.

And fourth, beyond the misrepresentations of how science does operate, what is probably the most disturbing aspect of the movie is that it implies that evolutionary biology contributed to the rise of Nazism, the Holocaust, and eugenics.³ Such a charge, whether tangential or spurious, can in no way impugn the credibility of the scientific merits of evolutionary biology. Let us not forget, such activities as religious-based infanticide, anti-Semitism, slavery, and the 800-year Roman Catholic inquisition are events that occurred long before Darwin. Humans don't need concepts as benign as scientific theories as excuses to commit atrocities against other humans.

Near the end of the movie, Ben Stein "confronts" one of the "modern architects" of the supposed academic wall between evolution and

design: Richard Dawkins. Stein asks Dawkins what number he would assign to the probability that God exists – a question relevant to atheists and theists, but not agnostics. It is in his book, *The God Delusion* (2006), that Dawkins asserts that the existence of God is a scientific hypothesis, and thus we can assign to it a probability (very low, according to Dawkins). I deny Dawkins' position has scientific merit. The probability given any hypothesis is contingent upon the relevant empirical evidence supporting it in lieu of alternative hypotheses. Evidence for the God hypothesis would, by definition, have to be supernatural, not natural. This of course pushes the matter up to the more general proposition that we must rely on a theory of the supernatural in order to infer the God hypothesis (which is itself contingent on a theory of God), much less ascertain the latter's merits relative to any hypotheses inferred from naturalistic theories. As of yet, science has no means of elucidating evidence to critically evaluate any supernatural theory or hypothesis, *contra* Dawkins or ID advocates. Not surprisingly, in the movie Dawkins is unable to justify why any specific probability value can be assigned to the God hypothesis. But, what is most unfortunate is that his attempt to treat the hypothesis as one belonging in the realm of science incorrectly connotes that atheism is less irrational than theism. The minimally irrational position regarding the supernatural is agnosticism, i.e. science is silent on the matter. The consequence is that atheism, as well as theism, are equally irrational propositions.⁴

I encourage you to read more about *Expelled* by looking at *ExpelledExposed.com*, which is maintained by the National Center for Science Education. It is an enlightening resource for discovering how the movie is derived from claims ranging from half-truths to complete fabrications. *Expelled* is a movie that actively avoids the accurate representation of science – something none of us should condone.

³See *Expelled versus Charles Darwin – Ben Stein's quote mining*, next page.

⁴See *Science and Religion: Compatible or Incompatible?*, especially Figure 1, available on this web site.

***Expelled* versus Charles Darwin – Ben Stein’s quote mining**

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In the movie, *Expelled: No Intelligence Allowed*, Ben Stein reads what sounds like a single passage from Darwin’s (1871: 167-169) *The Descent of Man and Selection in Relation to Sex*, as part of his endeavor to associate evolutionary biology with Nazism, the Holocaust, and eugenics. Stein quotes *The Descent of Man* thus:

“With savages, the weak in body or mind are soon eliminated. We civilised men, on the other hand, do our utmost to check the process of elimination. We build asylums for the imbecile, the maimed, and the sick. Thus the weak members of civilised societies propagate their kind. No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man. Hardly any one is so ignorant as to allow his worst animals to breed.”

Let’s look at the entire paragraph from which Stein excised his statements, followed by the next paragraph. Beyond Stein selectively quoting from the first paragraph, what is significant is that had he included the second paragraph, Darwin’s statements in the first paragraph would be placed in proper context. What we find is that Darwin’s position is diametrically opposed to what Stein intimated. Herein the two paragraphs in their entirety; the portions that formed the quote in *Expelled* are indicated in italics:

“**Natural Selection as affecting Civilised Nations.** – I have hitherto only considered the advancement of man from a semi-human condition to that of the modern savage. But some remarks on the action of natural selection on civilised nations may be worth adding. This subject has been ably discussed by Mr. W. R. Greg, and previously by Mr. Wallace and Mr. Galton. *With savages, the weak in body or mind*

are soon eliminated; and those that survive commonly exhibit a vigorous state of health. We civilised men, on the other hand, do our utmost to check the process of elimination; we build asylums for the imbecile, the maimed, and the sick; we institute poor-laws; and our medical men exert their utmost skill to save the life of every one to the last moment. There is reason to believe that vaccination has preserved thousands, who from a weak constitution would formerly have succumbed to small-pox. Thus the weak members of civilised societies propagate their kind. No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man. It is surprising how soon a want of care, or care wrongly directed, leads to the degeneration of a domestic race; but excepting in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed.

The aid we feel impelled to give to the helpless is mainly an incidental result of the instinct of sympathy, which was originally acquired as part of the social instincts, but subsequently rendered, in the manner previously indicated, more tender and more widely diffused. Nor could we check our sympathy, even at the urging of hard reason, without deterioration of the noblest part of our nature. The surgeon may harden himself whilst performing an operation, for he knows that he is acting for the good of his patient; but if we were intentionally to neglect the weak and helpless, it could only be for a contingent benefit, with an overwhelming present evil. We must therefore bear the undoubtedly bad effects of the weak surviving and propagating their kind; but there appears to be at least one check in steady action, namely that the weaker and inferior members of society do not marry so freely as the sound; and this check might be indefinitely increased by the weak in body and mind refraining from marriage, though this is more to be hoped for than expected.”