

No Dinosaurs in Heaven. 53 minutes. 2010. Greta Schiller, director/producer. New Day Films, P.O. Box 165, Blooming Grove, NY 10914. <https://www.newday.com/film/no-dinosaurs-heaven>. Purchase: \$299 (colleges and universities); less expensive options available for community colleges, community groups, and one-time streaming.

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In this short documentary, Greta Schiller takes the viewer on a philosophical and geological exploration. The philosophical debate centers on the culture war currently raging between scientists: those who engage in the “real science” and the “real geology,” which accept evolution as a foundational principle, and creationists who argue for a literal interpretation of biblical scripture, which posits that the universe was created in seven days and, by extension, that dinosaurs and humans coexisted.

The geological backdrop for the discussion is the Grand Canyon, which is explored in detail via a rafting trip down the Colorado River. The trip was organized by the National Center for Science Education and its director, Dr. Eugenie Scott, a physical anthropologist and one of the most reputed scholars of creationism and intelligent design in the United States. Schiller also includes a stop at the American Museum of Natural History, where viewers see grade-school children examining and analyzing artifacts and discussing the role of evolutionary adaptation throughout human history.

Schiller’s central concerns include the following: (1) Sixty percent of Americans want creationism taught alongside evolution in public schools. (2) The United States ranks below all “Western” countries in science literacy, except for Turkey. (3) Scientists unequivocally date the deepest exposed rocks in the Grand Canyon at 1.7 billion years old, while creationists date the same rocks as 4,000 years old, arguing that their origins stems from the biblical Noah’s flood in the Book of Genesis.

Schiller’s primary motivation for making this documentary, however, is to make a wider audience aware that despite the separation of church and state, and despite the fact that in 1987 the

Supreme Court declared that teaching creationist science in American public schools is illegal, proponents of creationist science are gaining traction and their ideas are infiltrating public schools across the country.

Schiller’s interest in this topic was piqued initially when she enrolled in a master’s degree program in science education at City College of New York (CCNY), part of the City University of New York (CUNY). The program is aimed at improving the quality of science instruction in public education. Yet, one of her teachers, who openly identified as a creationist, refused to teach evolution. Dr. Femi Otulaja, an adjunct instructor in biology at the time, who received his doctorate from CUNY, no longer teaches at the school, but cursory Internet research suggests that he does still teach science. During a lecture, Mr. Otulaja said that “those who believe in embryonic similarities are propogandists [*sic*] for evolution.” Several students in that class, aside from Ms. Schiller, complained about Dr. Otulaja’s position both directly to Dr. Otulaja in the form of an in-class discussion and later to administrators at CCNY. Dr. Otulaja is interviewed in the documentary and clearly states his position. Otulaja argues that students should be taught both intelligent design (or creationism) and evolution and that students should be free to make up their own minds on which position makes the most sense to them. For Schiller, however, this approach could be extended to teaching students chemistry and alchemy, astronomy and astrology, neurology and phrenology, and then letting the students choose which position they wish to accept. While this approach might be fine if a student is taking the class for general interest, it is rather problematic if the student is enrolled in a program whose central goal is preparing participants to teach science in public schools.

During the rafting trip, many of the teachers grapple with questions such as Would it be possible to teach genetics, anatomy, or physiology without covering evolution? Could a good teacher present material without believing what was being taught? How would an astronomy teacher who has to teach about the 13.6 billion-year-old universe, or a geology teacher who has to teach the antiquity of the earth, do so effectively and with conviction if he or

she really believed that the earth is only 4,000 years old? Further, a number of teachers report experiencing “pushback” from parents who demand that teachers not discuss the earth “evolving” because that insinuates that the earth was not created by God in seven days and thus, by extension, believing in evolution means that one cannot believe in God. Finally, the teachers discuss colleagues who believe they have a “right” to criticize evolution in their classes as part of their “academic freedom” and that students have a “right” to learn about the criticisms of evolution.

A more recent strategy employed by the proponents of creationism is called “Teach the Controversy,” which involves repeatedly and vociferously questioning whether evolution has occurred at all. The response to this strategy by the participants in this documentary is to stress that there is no controversy at all. “Evolution is so basic to every aspect of life—you see it around you all the time from drug-resistant strains, how with climate change animal species are disturbed and diversity is impacted. The earth is dynamic. Nothing is fixed in stone.”

In sum, what Schiller achieves in this documentary is a neatly packaged summary of an attack on science by ideologically driven religious movements whose explicit agenda is to “promote theocracy rather than secular democracy.” Such tactics, viewers are reminded, are not new: The Catholic Church found Galileo guilty of heresy in 1633 and kept him under house arrest, censoring him until his death in 1642. However, these tactics are now far more sophisticated with the introduction of new social media, and thus, the reach is broader and the potential impact is far graver.

The video is beautifully filmed and the message is very clear (albeit unapologetically one-sided). The video is appropriate for college students of all ages, both undergraduate and graduate. The trick for sociology faculty will be adequate preparation before showing the video in anticipation of questions that arise, particularly from students with little or no science background. Preparing a list of

resources and readings, on both sides of the issue, is advised. The video would be most useful in a Sociology of Science or a Sociology of Religion class or in an Introduction to Sociology class in a unit on culture (as an example of the culture war), a unit on religion, or a unit on research methods. With respect to the latter suggestion specifically, the film stresses that knowledge of evolution is based on observation and evidence and that creationism (based on the creation story in the Book of Genesis) is not based on either. As such, this film might make for a welcome break from discussions of methods and methodology that often occur early in the Introduction to Sociology class and for which there are few engaging alternative videos.

While searching for resources to use as supplements to the video, I came across two that provide a very good overview (Berkman and Plutzer 2012; Whitty 2011). I found them very helpful in framing the extent of the problem that Schiller raises. Data from a 2011 National Survey of High School Biology found that only 28 percent of all biology teachers consistently teach evolutionary biology; 13 percent explicitly advocate creationism or intelligent design; and the remaining 60 percent, who are labeled “cautious,” do not fully or consistently address evolution, teach “the controversy,” or stress to students that they are required to teach evolution as part of a state-mandated test (Whitty 2011). I think providing this information will be crucial to a more comprehensive understanding of this issue, as Schiller really provides only one example of a problematic teacher in the video: her experience with Dr. Otulaja.

REFERENCES

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