

Science vs. Myth: Evolution and Climate Change

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Oklahoma Invited Symposium

Southwestern Psychological Association Convention, Wichita, Kansas.

April 12, 2015

Evolution and Belief

By Stephen Weldon
(University of Oklahoma, History of Science Department)

“Science and Myth: Evolution and Climate Change”
Southwestern Psychological Association Convention, Wichita, Kansas.
April 12, 2015



The Weather Channel

Shared publicly - Apr 1, 2015

#ISS

One of the many BREATHTAKING images of Super **#TyphoonMaysak** from space captured by Astronaut Terry W. Virts from the International Space Station. **#ISS**
#Maysak **#typhoon**



+ 838

➦ 123



66 comments



General Justin Elrod aka master of disaster

Apr 1, 2015 +1

damn that things huge



we the people usa and México

Apr 1, 2015 +1

Wow



Jay Manning Apr 1, 2015 +2

beautiful but very deadly. Praying for all the countries in its path



Terry Hallahan Apr 1, 2015 +1

Nature's fury



carlos mora Apr 1, 2015 +1

Wow!!



Emma Forst Apr 1, 2015 +1

WOW!! THAT IS SO COOL!!!!



Berdimyrat Mammedow Apr 1, 2015

All beautiful is killing. (Sorry)



Evangelia Christopher Apr 1, 2015

Wow. Amazing!! 🌀



Blanca Munoz Apr 1, 2015 +1

Wow



Djibril Bidiga Apr 1, 2015 +2

Tres belle image,mais terrifiant sur terre.

Translate



Irene Garcia Apr 1, 2015

Scary



Elisa Monterroso Apr 1, 2015 +1

Scary but amazing



Jose Avelino Duran Alarcon

Apr 1, 2015 +1

INCREIBLE.....



gladys bonet Apr 1, 2015

uuuuuuyyyy Don't Like it



Mónica Cango Apr 1, 2015 +2

:O I feel scary



Anissa Orona-Hemandez Apr 1, 2015 +1

Seriously big



Stephen Muhammad Apr 1, 2015 +1

God's wrath.....the Book of Revelation



Raul Ortega Apr 2, 2015 +2

What a monstrous storm. My prayers for the Philippine people.



Walter Silvera Apr 2, 2015 +1

Nature power



dean wright Apr 2, 2015 +1

wow epic pic that one



Edumath NDOUDI Apr 2, 2015 +1

so beautiful view...



Aena Ferrer Apr 2, 2015 +1

beautiful yet scary.. its like a super typhoon.



fahd nyni Apr 2, 2015 +1

waw rabi bark



Bijan Bhattayacharya Apr 2, 2015 +1

ঐশ্বর কত মহানা! অপূর্ব সুন্দর এই মহাজাগতিক দৃশ্য।



Andrew Moser Apr 2, 2015

+**General Justin Elrod aka master of disaster**, you are on the money. I pray for the people affected by Super Typhoon Maysak and hope that that everything is okay.



General Justin Elrod aka master of disaster

Apr 2, 2015 +1

I do too



Belinda Bossom Apr 3, 2015 +2

That is amazing. Its hard to look @ images like this & not believe there is a God. I stayed open minded but seeing acts of nature/weather like this ~ No way do I believe in Evolution!



Elizabeth Sorgenfrei Apr 3, 2015 +1

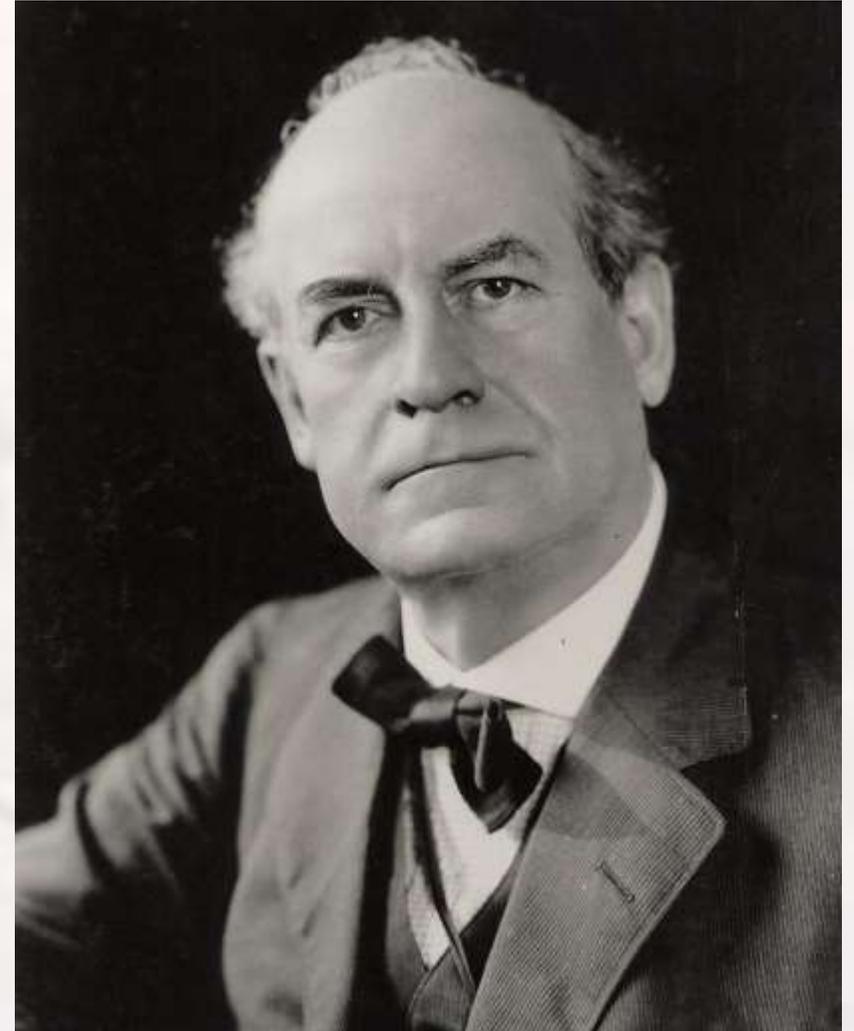
I agree amazing!

Outline of talk

- Antievolution in the 1920s
The moral and legal issues
- The legal environment after 1968
The separation of church and state
- The moral issues driving anti-evolution
The dignity of man; freedom of the will
- Creation science and intelligent design
Criticizing evolution through logical and empirical arguments

The Anti-evolution Crusade of the early 1920s

- Spearheaded by William Jennings Bryan
- Resulted in the Scopes Trial in which a teacher was charged with teaching evolution in defiance of a Tennessee Law
- Was fundamentally about morality, not about scientific evidence



William Jennings Bryan

In schools supported by taxation we should have a real neutrality wherever neutrality in religion is desired. If the Bible cannot be defended in these schools it should not be attacked, either directly or under the guise of philosophy or science. The neutrality which we now have is often but a sham; it carefully excludes the Christian religion but permits the use of the schoolrooms for the destruction of faith and for the teaching of materialistic doctrines.

(Bryan, *The Menace of Darwinism*, 1923)

“One hundred years without Darwin are enough.”

Hermann Muller (1959)

- By the early 1960s, educators and scientists pushed to create a national biology curriculum with evolution at its core
- One of the few remaining states with an antievolution statute, Arkansas, was challenged
- *Epperson v. Arkansas*, decided by the Supreme Court in 1968, forbid the states from restricting the teaching of evolution on religious grounds



Hermann Muller

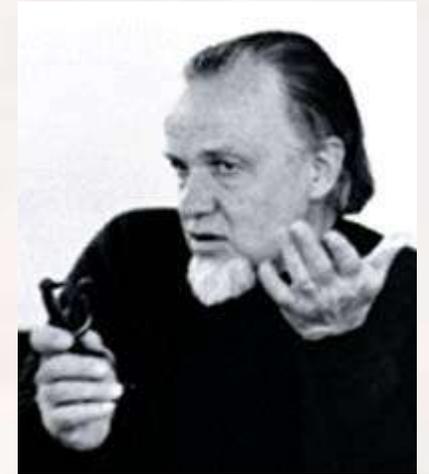
The legal environment in the United States had changed



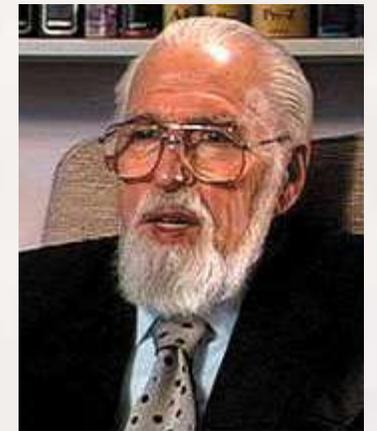
- Several Supreme Court cases before *Epperson* had laid the groundwork for a more secular interpretation of the First Amendment:
 - No religious instruction in the public schools
 - No Bible reading in the public schools
 - No prayer in the public schools
- *Epperson* was simply the most recent of a string of cases
- Evangelicals found this patently unfair

The moral arguments of the anti-evolutionists

- Antievolutionists believed that evolution contradicted the basic values of human dignity and human freedom:
 - Human beings were either mechanistic and machinelike
 - Or they were animalistic and driven by passions
- They could not accept these evolutionary values. God's creation of mankind was essential to our culture
- Francis Schaeffer, Rousas J. Rushdooney, and other Christian apologists expressed these concerns as large moral issues, not simply issues of the words of scripture



Francis Schaeffer



Rousas J. Rushdoony

Evolution's moral universe was identified with Nazi morality



Max Rafferty

- Max Rafferty's "Guidelines for Moral Instruction in California Schools" (1969)
 - He linked evolution, sex education, and modern educational psychology techniques to the rise of a powerful authoritarian elite.
 - He compared sex education to Nazi indoctrination of Hitler Youth, claiming they by sponsored sex orgies for teenage boys.

"This conditioning through emotional, animalistic responses has been developed by the Communoid forces, who apply these techniques to control of group behavior."

Creation science

- The concerted attack on the science of evolution was relatively new.
- Scientifically trained evangelicals put forward logical and empirical arguments that attacked evolution
- Some examples:
 - Something cannot come from nothing; inanimate matter cannot be creative.
 - Natural selection (“survival of the fittest”) is a tautology: we define fit as those who remain alive.

Intelligent Design: Building a science-based case against evolutionary science

- In the early 1990s, Phillip Johnson, a lawyer, wrote *Darwin on Trial*, where he put forth some of the claims that scientists were hiding something as they tried to protect the theory of evolution.
- Other scientists with strong religious beliefs began working on ideas that sought to develop mathematical and biological demonstrations that would undermine evolution.
- The Discovery Institute, a think tank, got behind Intelligent Design as a scientific argument.



Phillip E. Johnson, William Dembski, and Michael Behe

Photographs: http://www.law.berkeley.edu/img/Johnson_Philip.jpg,
http://en.wikipedia.org/wiki/William_A._Dembski#/media/File:Dembski_head_shot.jpg,
http://en.wikipedia.org/wiki/Michael_Behe#/media/File:MichaelBehe.jpg

The antievolution movement today

- The moral arguments continue to resonate strongly.
- The political environment is ever more polarized.
- There is significant distrust of science and the scientific enterprise, at least in certain fields, like biology, fomented by anti-evolutionists.
- State legislatures around the country yearly debate bills promoting discussion of scientific controversies in the classroom.

1 STATE OF OKLAHOMA

2 1st Session of the 55th Legislature (2015)

3 SENATE BILL 665

By: Brecheen

4
5
6 B. The State Board of Education, school district boards of
7 education, school district superintendents and school principals
8 shall endeavor to assist teachers to find effective ways to present
9 the science curriculum as it addresses scientific controversies.
10 Teachers shall be permitted to help students understand, analyze,
11 critique and review in an objective manner the scientific strengths
12 and scientific weaknesses of existing scientific theories covered in
13 the course being taught.



Thank you.