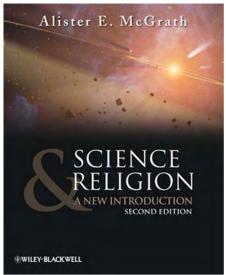
Exploring the New Atheist Movement with Wilhelm Ostwald, Early Physical Chemistry's "New Atheist"

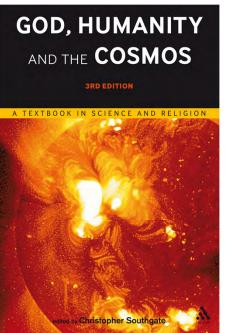
Stephen M. Contakes

Department of Chemistry Westmont College

scontakes@westmont.edu

The History of Physical Chemistry Provides an Opportunity to Discuss the New Atheism







Has Science killed God?

Alister McGrath



Annals of Science, 49 (1992), 525-544

Science Deified: Wilhelm Ostwald's Energeticist World-View and the History of Scientism

C. HAKFOORT

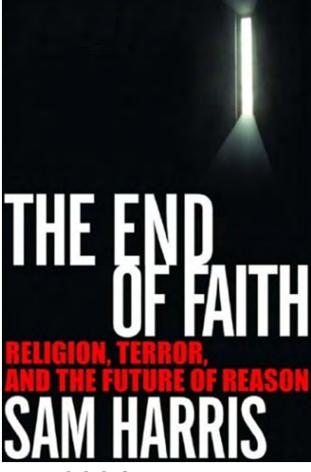
University of Twente, Department of History, P.O. Box 217, 7500 AE Enschede, The Netherlands

The New Atheism and Why It Matters



September, 11, 2001



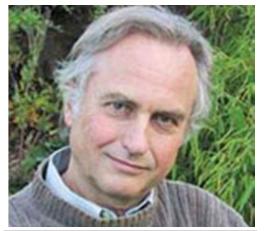


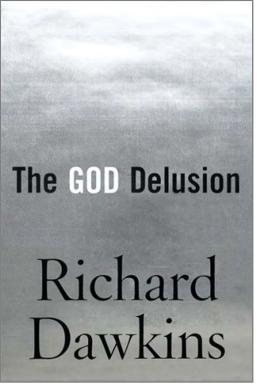
August, 2004

The picture of 9/11 is taken from www.september112001.com/

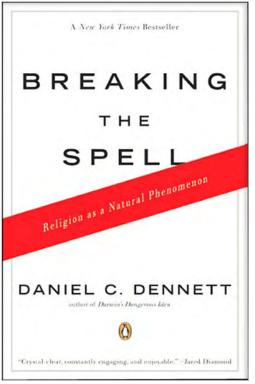
The picture of Sam Harris is taken from http://www.amazon.com/Moral-Landscape-Science-Determine-Values/dp/1442300140 The cover image is taken from http://www.uncrediblehallq.net/blog/wp-content/uploads/2011/06/End-of-Faith.jpg

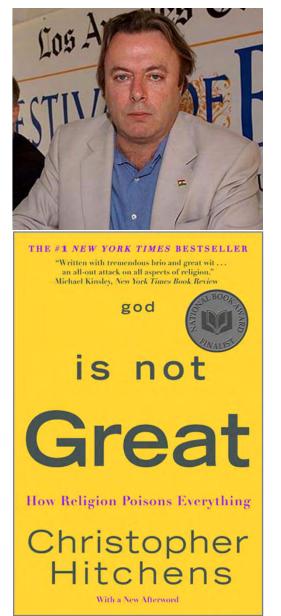
The New Atheism and Why It Matters









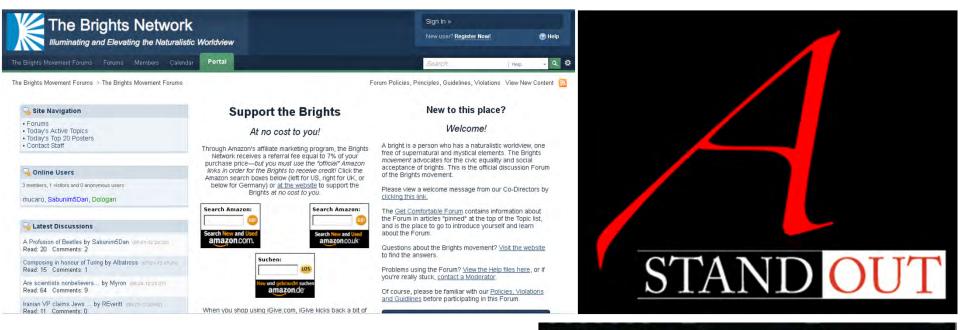


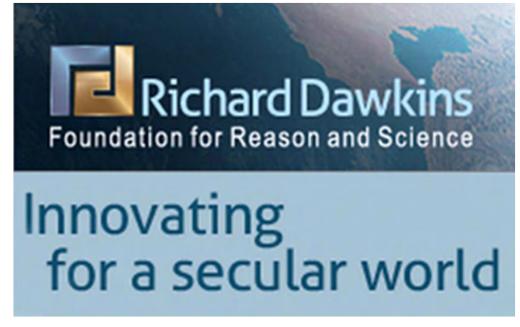
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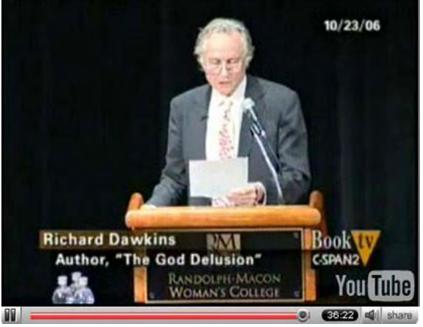
FOUR HORSEMEN RICHARD DAWKINS - DANIEL C. DENNETT SAM HARRIS - CHRISTOPHER HITCHENS

The four horsemen movie image is taken from http://atheistmovies.blogspot.com/2009/01/four-horsemen.html

The New Atheism is a Social Phenomenon







Characteristics of the New Atheism

1. Evangelistic anti-theism, coupled to the claim that religion is harmful.

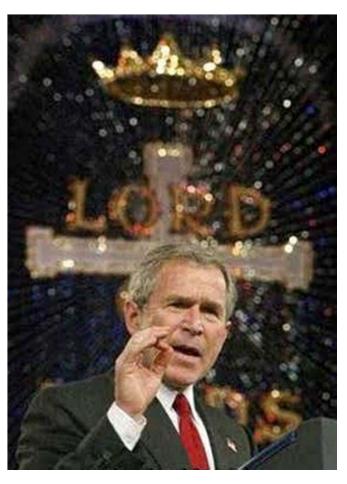




The figure at left is taken from http://richarddawkins.net/articles/3567-science-flies-you-to-the-moon-religion-flies-you-into-buildings. The figure at right is taken from http://deadwildroses.files.wordpress.com/2012/01/imagine-no-religion-towers1.jpg

Characteristics of the New Atheism

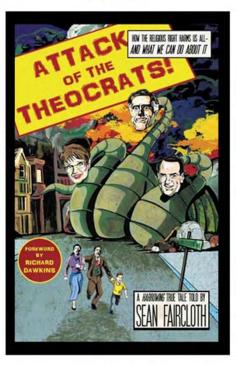
2. Antagonism to the religious right and political advocacy of secular humanism.



Secular Student Alliance at the University of Texas at Austin presents

sponsored by





Sean Faircloth

DIRECTOR OF STRATEGY AND POLICY FOR THE RICHARD DAWKINS FOUNDATION FOR REASON & SCIENCE

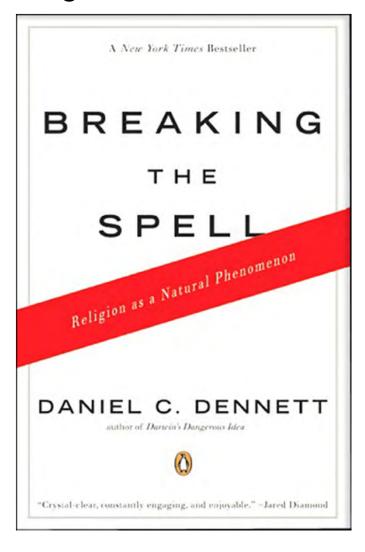
on his **strategic plan** to return America to its **secular roots.**

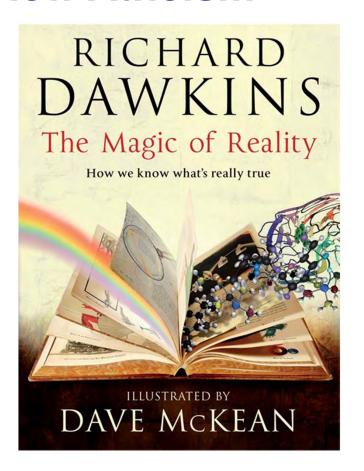
April 12, 2012 7 pm GEA 105

The image of George W. Bush speaking in front of a cross is taken from http://blogs.e-rockford.com/applesauce/files/2008/01/bush-theocracy.jpg The Poster is taken from http://2.bp.blogspot.com/-UcJncBwixxY/T6Mj7Pew1wl/AAAAAAAABel/zD9beM4PssU/s1600/attack%2B_image.jpg

Characteristics of the New Atheism

3. Elevates evolutionary biology as the "grand narrative" of the universe...





...while using the cognitive science of religion and Dawkin's meme hypothesis to explain away religion as an unimportant "natural phenomenon."

Wilhelm Ostwald was Early Physical Chemistry's "New Atheist"

"... mankind's appreciation and acceptance of scientific progress has steadily accelerated.

... nowadays ...the Church is at pains to prove that its teachings are compatible with those of Science. In other words, the Church acknowledges Science as the higher authority."

Wilhelm Ostwald Nobel Prize Acceptance Speech, 1909



Ostwald's Abilities and Views Led Him to take a Leading Role in the German Monist League



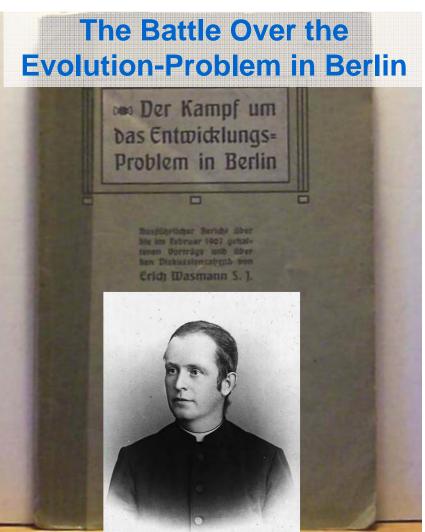


The figure at left is taken from http://idw-online.de/pages/de/image?id=26710&display_lang=de_DE The figure at right is taken from http://www.freigeistige-aktion.de/weltanschauung.htm

Haeckel's Monism Emphasized Evolution & Took on an Anti-Clerical Character

Haeckel and Wassmann H [Haeckel]: "Yes, sir, but when you use the magnifying glass the cross

will be a hindrance.



The book at right is from http://www.zvab.com/buch-suchen/titel/der-kampf-um-das/autor/wasmann The photograph of Wassmann is taken from http://en.wikipedia.org/wiki/File:Erich_Wasmann.jpg The cartoon at left is from http://en.wikipedia.org/wiki/File:Erich_Wasmann.jpg The cartoon at left is from http://www.payer.de/religionskritik/karikaturen135.htm

Under Ostwald, the Monists Helped Lead the Wider German Church Withdrawal Movement

Ketschendorf! Oeffentliche Verlammlung Sonntag, den 28. Dezember 1913, nachmittags at Uhr im Cofale von Weidemann mit dem Thema: Der Massenstreik gegen die Staatskirche. Referent: Schriftfteller Genosse Ernft Renter-Balenfee. Mach dem Bortrag freie Diskuffion.

KAISERIN FIGHTS ENEMIES OF CHURCH

Agitation Going On in Prussia for Withdrawal from the State Institution.

MEETINGS WERE FORBIDDEN

Arranged for Last Wednesday, Repentance Day, and Prohibition is Said to Have Been Due to Empress.

Special Cable to THE NEW YORK TIMES.

The figure at left taken from http://de.wikipedia.org/wiki/Datei:Ernst_Reuter_Sprecher_Veranstaltung_Kirchenaustrittsbewegung_1913.jpg The headline is from the November 23, 1913, *New York Times*.

Under Ostwald, Thermodynamics Became the Central Science of the German Monist League

"There is really an idea which bridges not only the chasm between force and substance but also that between mind and matter, and which is of a nature sufficiently manifold to embrace the totality of all our experiences, the interior as well as the exterior.

That idea we term energy."

Wilhelm Ostwald, "The Philosophical Meaning of Energy", 1903*

"energy [is] the sole universal generalization. All phenomena are reduced to properties and relations of energy, and especially matter, in so far as such a concept would at all prove useful, is to be defined in terms of energetics."

Wilhelm Ostwald, "The Modern Theory of Energetics", 1907**

^{*} The International Quarterly 1903, 300-315.

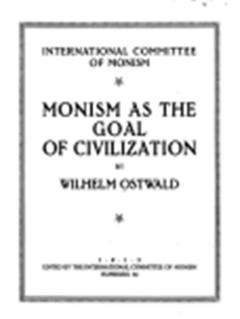
^{**} The Monist 1907, 17(4 October), 481-515.

Ostwald Even Developed Ethical & Social Programs Based on "Energetics"

"The energetic imperative [is] 'Waste no energy; turn it all to account!'

... there is no human action which could not be brought within the viewpoint of this energetic imperative. Here, therefore, we have a genuine and far reaching Monism."

Wilhelm Ostwald, Monism as the Goal of Civilization, 1913



Happiness =
$$E^2 - W^2 = (E + W)(E - W)$$

where E = energy willingly applied and W = energy exerted unwillingly

Ostwald's Ethical System Provided a "Scientific" Basis for Monist Morality

"the suggestion [of the churchmen is] that virtue is possible only in the path of religion; on the contrary ... just as the other sciences have gradually freed themselves from the influence of the church, ethics must now also be set free from the old influences which the different churches have exerted on it, and still at present claim to exert."

Wilhelm Ostwald, Monism as the Goal of Civilization, 1913*

"A particular merit of Ostwald's monistic nature-philosophy [is] that he constantly endeavors to promulgate in all directions not only its theoretical part, the rational worldview, but also its practical manifestation, a wholesome conduct of life."

Ernst Haeckel, 1914**

^{*} Pages 34-35.

^{**} Haeckel, E. "Wilhelm Ostwald: President of the German Monist League" The Open Court 1914, 97-102.

Ostwald's Monism Made Science into an Ersatzreligion (Substitute Religion)

"We expect from science the highest that mankind can produce and win on this earth...Everything that mankind, in terms of its wishes and hopes, its aims and ideals, combines in the concept God, is fulfilled by science."

Wilhelm Ostwald, Monism as the Goal of Civilization, 1913*

^{*} The quote is taken from "Science Deified: Wilhelm Ostwald's Energeticist World View" Annals of Science 1992, 49, 525-544.

Ostwald's Monism Made Science into an Ersatzreligion (Substitute Religion)

Moπistische
Sonntagspredigten
(Monisite Sunday Sermons)

ēon

Withelm Ostwald

Bibliotheks-Husgabe.

Erste Rethe

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trelpzig Akademische Verlagsgesellschaft m. b. H. Erste Predigt. (sermon one)

Warum sind wir Monisten? (Why are we Monists?)

Dreizehnte Predigt. (sermon thirteen)

Der energetische Imperativ. (The Imperatives of energy)

Sechzigste Predigt

(sermon sixty)

STOFF, KRAFT, GEIST UND ENERGIE (Matter, Power, Spirit, and Energy)

Ostwald's Monism Made Science into an Ersatzreligion (Substitute Religion)

Monistische
Sonntagspredigten
(Monisite Sunday Sermons)

ēon

Wilhelm Ostwald

Erste Rethe

Bibliotiteks-Husgabe.



treipzig Akademische Verlagsgesellschaft m. b. H. Sechsundzwanzigste Predigt. (sermon twenty-six)

Das Gebet. (Prayer)

Neununddreißigste Predigt.

(sermon thirty-nine)

Weihnachten. (Christmas)

...Secularizing Christian Symbols and Rituals in the Process

"Given [prayer's positive effects on Sechsundzwanzigste Predigt. mental states], it is valuable to examine more closely the effects of praying to determine to learn how these are achieved ...[as] a natural science of long-term human experience..."

Wilhelm Ostwald

(sermon twenty-six)

Das Gebet. (Prayer)

"Through the appropriate development of [the Christmas festival] ... the importance of energy will be moved out of the realm of the purely intellectual into the more varied and impressive realm of feelings."

Wilhelm Ostwald

Neununddreißigste Predigt.

(sermon thirty-nine)

Weihnachten. (Christmas)

Ostwald Supported Singing Monist "Carols"

Up to the Light*

According to: Silent Night, Holy Night

Out of the dark night / intellectual power / climbing upwards, / above / it's former beginnings in the animal kingdom./ From ages ago life came;/ :/: fighting and struggling to the light :/.:

Flame, Spring, Wind. / Stone, Tree, and Bush/ Each animal / he feels there/ in the innermost being related / for he detects the meaning of life / :/. from the Law of nature :/:

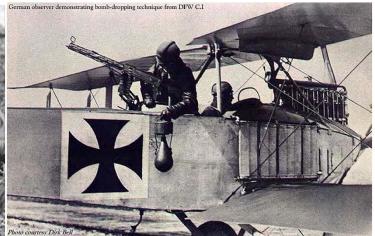
^{*} Translated from the German in F. Theime; Ruppert, P. (eds.) Liederbuch für monistische Kreise zu Geselligen, Ernsten, und Heiteren Stunden (Songbook for Monistic Groups for Sociable, Serious, and Cheerful Hours), Leipzig, 1910, as quoted by Haakfort, C. Annals of Science 1992, 49, 525-544.

Ostwald's Monist Activities Diminished During and After World War I







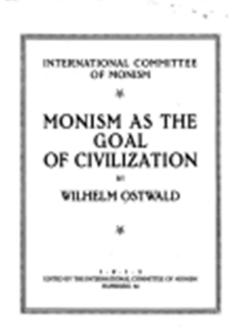


The flamethrower image is taken from http://www.firstworldwar.com/weaponry/flamethrowers.htm The machine gun picture is taken from http://www.firstworldwar.com/weaponry/flamethrowers.htm The machine gun picture is taken from http://www.firstworldwar.com/weaponry/flamethrowers.htm The machine gun picture is taken from http://www.firstworldwar.com/weaponry/flamethrowers.htm The machine gun picture is taken from http://www.firstworldwar.com/weaponry/flamethrowers.htm The machine gun picture is taken from http://www.firstworldwar.com/media/wwi-pictures.php The bomb dropping picture is taken from http://www.firstworldwar.com/media/wwi-pictures.php The bomb dropping picture is taken from http://www.firstworldwar.com/media/wwi-pictures.php The bomb dropping picture is taken from http://www.firstworldwar.com/photos/landoni/3630904103/ The image of John Singer Sargent's painting "Gassed" is taken from http://www.firstworldwar.com/photos/landoni/3630904103/ The image of John Singer Sargent's painting "Gassed" is taken from http://www.firstworldwar.com/photos/landoni/3630904103/ The image of John Singer Sargent's painting "Gassed" is taken from http://www.firstworldwar.com/photos/landoni/3630904103/ The image

Wilhelm Ostwald's Life and Work Exemplify the Ideas of the New Atheism

"Success in probing the secrets of nature...fostered an impatience with revelation and a generous optimism concerning what could be accomplished ...through science. ...Ostwald, as a chemist, translated the doctrines of his time into terms of energy."

Morris E. Opler*



^{*} Morris E. Opler American Anthropologist, New Series, Vol. 64, No. 3, Part 1 (Jun., 1962), pp. 524-547.