

Sydney-Tilburg Conference
The Authority of Science



Sydney, 08.04.2011 - 10.04.2011

Synopsis

From climate change to the classification of illegal drugs the extent to which scientific opinion should prevail over other voices in determining public policy is hotly contested. What are the scope and limits of the authority of science? The founders of modern philosophy of science, including Sir Karl Popper and members of the Vienna Circle like Otto Neurath, saw it as part of their role to explain the authority of science. Scientific opinion deserves special authority for epistemological reasons because of the nature of scientific method. A key motive for Poppers demarcation criterion distinguishing science from pseudo-science was to restrict the authority of science to disciplines which used the scientific method as Popper understood it.

Since the 1970s the authority of science has been primarily a topic for history of science and sociology of science. These studies have taught us a great deal about how science gained its current, privileged position, and why that position has come under attack. But historical and sociological studies do not address the question of whether and when the authority of science is deserved. The aim of this conference is to direct the attention of philosophers of science and epistemologists back to this issue. What is it about the nature of science that confers epistemic authority on scientific opinion, and what are the scope and limits of that authority? Recent developments in philosophy of science offers new resources to address this question, and to address it in ways that have direct relevance to the practice of contemporary science and its application in public policy.

Co-presented with Sydney Ideas, the conference will open with a public discussion between four distinguished scientists with extensive experience of the science-policy interface: "Is science just another voice in the policy debate?" Their perspectives on the authority of science in practice will provide a vital and challenging context for all those committed to the practice of contemporary science and its application in public policy.

Organizers: Mark Colyvan (University of Sydney), Paul Griffiths (University of Sydney), Fabien Medvecky (University of Sydney), Rodney Taveira (University of Sydney)

Invited Speakers

Mary O'Kane (Executive Chairman of Mary OKane & Associates Pty Ltd),

Theodore L. Brown (University of Illinois), Christian List (LSE), Rosemary Lyster (University of Sydney)

Friday, April 8

4.30-5.00 - Registration, New Law School Foyer

5.00-7.00pm

Roundtable: New Law School foyer

"Is science just another voice in the policy debate?"

Discussants: Theodore L. Brown, David Castle, Christian List, Rosemary Lyster

Moderated by Paul Willis

Saturday, April 9

8.30-9.00, Registration, Level 1, New Law School Building, outside Room 100 and 102

9.00-10.00am

Plenary I: Law School Lecture Theatre 106

Christian List

The Voice of Science?

Introduced by Stephan Hartmann (Director, Tilburg Center for Logic and Philosophy of Science)

10.00-10.30am

Coffee break

10.30am-12.30pm

Parallel session A

A1: Seminar Room 100

A2: Seminar Room 102

A3: Seminar Room 105

"Authority of Instruments" panel:

Victor Boantza

Elements as Instruments of Analysis: Exploring the Authority of Instruments in Early Modern Chemistry

Ofer Gal

Radical Instrumentalism
Margaret Carlyle
Modelers and Makers, Midwives and Medical Men: Debating the Authority of Birthing Instruments in Enlightenment France

Ian Wills

Thomas Edison and the authority of inventions

Stefaan Blancke and Maarten Boudry
Science as a rhetorical device: The authority of 'science' in the evolution/creation debates

Maarten Boudry and Stefaan Blancke
Nec plus ultra - restricting the epistemic authority of science
Pamela Lyon
Ground on which to stand: biology and the authority of science

This session finishes at 12.00

Jim Franklin

Evaluating extreme risks: expert authority and data-free statistics

Mark Burgman et al.

Expert performance and the psychology of status

Stephan Hartmann

Voting, Deliberation, and Truth

Jan Sprenger

Applying the Precautionary Principle to various forms of uncertainty

12.00-1.30pm

Lunch

1.30-2.30pm

Plenary 2: Law School Lecture Theatre 106

Theodore L. Brown

The Voice of Science in Society

Introduced by Jan Sprenger (Resident Fellow, Tilburg Center for Logic and Philosophy of Science)

2.30-4.00pm

Parallel session B

B1: Seminar Room 100

B2: Seminar Room 102

B3: Seminar Room 105

David Castle et al.

Democracy deficits and

Mark Colyvan

The Science of Decision

Craig Dalton

The scientific authority of

epistemic deficits in the assessment of new technologies

Artur Koterski

The Problem of Meta-Criterion of Demarcation Between Science and Pseudo-Science

Anna Stoklosa and David Castle

The authority of scientific evidence in Health Technology Assessment models

Fabien Medvecky

Interest and opportunity: Disagreeing authorities in climate change

economics

Huw Price

Conduct Unbecoming: Eddington on Intuition versus Physics

public health in the philosophy-free zone

Jacob Pearce

Fluoridation in Victoria: the authority of science, public health policy, and culture

Joan Leach

Authority and Popular Science

4.00-4.30pm

Coffee break

4.30-5.30

Plenary 3: Law School Lecture Theatre 106

Rosemary Lyster

Rescuing Climate Science from Politics

Introduced by Mark Colyvan (Director, Sydney Centre for the Foundations of Science)

Sunday, April 10

9.00-10.00am

Keynote I: Law School Lecture Theatre 106

Sir Peter Gluckman

Evidence and Policy Formation - The Challenge of "Post-Normal Science"

Introduced by Paul Griffiths (Deputy Director, Sydney Centre for the Foundations of Science)

10.00-10.30am

Coffee break

10.30am-12.00pm

Parallel session C

C1: Seminar Room 100

Silvia De Bianchi

The Authority of Science and H. Weyl's

Epistemology: a Kantian Legacy? Observation on the 'anthropological criterion'

Kirsty Kitto

The failure of objectivism in science: context and complexity

Darrell Rowbottom

The Authority of Science vs. The Demarcation of Inquiry

C2: Seminar Room 102

Nathalie Gontier

Towards a universally applicable evolutionary methodology: a new look upon the units and levels of evolution debate

Paul Griffiths

History and Philosophy of Biology meets Public Understanding of Genetics

Emanuele Serrelli

Pitfalls and strengths of adaptation in biology education: how can philosophy of science help

C3: Seminar Room 105

Adam La Caze

When Randomized Trials **Robert Farrell and Cliff Hooker**

The fundamental power and limits of science are those of its uniquely constrained SDAL cycling organization

Cliff Hooker

On the distinctive power and limits of working with complex systems models in science

12.00-

Please join us for lunch and afternoon drinks at the Rose Hotel, 54 Cleveland St, Chippendale.

Follow the locals - it's a short walk.