

# Querying the Dawkins View of Science

BY ANDREW BAKER

**The biologist and cultural critic Richard Dawkins promotes “rational science” to counter an epidemic of superstition and religious idealism. It’s time, though, for scientists to explain the scientific process more comprehensively.**

Professor Richard Dawkins has become a prolific writer on the broad sweep of science following his research in the 1970s on biological evolution. In recent books and programs he argues that resurgent movements like “intelligent design” and “astrology” masquerade as reason, debilitate scientific method and restrict science teaching. However, the picture-perfect science that Dawkins portrays is long outdated and needs serious correction to embrace science’s rich complexity.

For example, in *The Enemies of Reason* (2007) Dawkins says: “Scientists and philosophers from Galileo to David Hume had the courage to stand up for individual principles and reason”. Dawkins hails them as pioneers of modern science, which today stands apart from other human enterprise in being rational (i.e. logical).

Yet Hume himself showed science to be inherently irrational because it relies, in part, on assumed theories that must reach beyond what we can ever observe. Dawkins expresses concern that: “Irrationality is woven into the fabric of modern life,” whereas, as Hume long ago demonstrated, irrationality is woven into the fabric of science.

In *The God Delusion* (2006) Dawkins states: “We believe in evolution because the evidence supports it, and we would

abandon it overnight if new evidence arose to disprove it”. But history has shown that the process of change in scientific theory proceeds quite differently. Thomas Kuhn (1962) and Paul Feyerabend (1975) demonstrated how the scientific giants Copernicus and Galileo needed to step outside the confines of logic to bolster support for their theories within the science community.

At the website for Dawkins’ latest book, *The Greatest Show on Earth: The Evidence for Evolution* (2009), we read: “Evolution is accepted as scientific fact by all reputable scientists”. However, a theory like evolution may be composed of facts but it must always extend beyond logical boundaries into the unknown – such are the “facts” of logic on which science rests.

We cannot therefore explain the process of modern science using reason alone as Dawkins would have us believe. While we can accept that science works, how does it? Is it a “miracle”? If so, scientists must discover how advances in scientific knowledge and understanding are procured and not invoke them simplistically before an unsuspecting public. To do otherwise is a disservice to both science and humanity because crucial questions, which might otherwise help strengthen science, are summarily dismissed.

There is no timelier a wake-up call for



Andrew Baker sorts through a mountain stream sample in search for non-biting midge larvae. Photo: Matt Krosch

science than November’s 150th anniversary of Charles Darwin’s landmark publication, *On the Origin of Species*. Undoubtedly, scientists should celebrate the success of science as Dawkins encourages. Nonetheless, as scientists we must also promote more realistically our ongoing struggle to understand and explain what it means to be scientific.

Only in doing so can we hope to improve science’s capacity to explain, which may ultimately make the enterprise more successful for all humanity. We need not discard our long-standing method of science without an alternative, but in disregarding its limitations in the fashion of Dawkins we assure only that science stagnates without hope of improvement.

In an earlier *conScience* column (*AS*, April 2008, p.42) I urged that scientists should “sell science” to the public. This still rings true; scientists cannot afford to sell science short. Veterans and novices in the noble profession alike, we need to engage face-to-face with the general public in genuine dialogue about the nature and processes of science so that they can make informed judgements on the issues raised by protagonists like Dawkins.

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