

The real inconvenient truths

How Al Gore distorts science and spreads speculation

Chris de Freitas

It is no surprise former US vice-president Al Gore's global warming movie, *An Inconvenient Truth*, is a box office success.

Violent weather and worst case scenarios are scary, easily dramatised and thus captivating. But when exaggerated and distorted information is presented to the public as factual and as a basis for public policy, the issue of social responsibility arises.

As a scientist, I am appalled. *An Inconvenient Truth* presents speculation as fact. There is no mention of doubt or debate; only complete consensus.

Only the most blinkered critic would find this credible. The scientific literature on global warming, glaciers and tropical cyclones is full of evidence to the contrary. Consider the following examples.

Carbon dioxide: Much is made of the increase in emissions into the atmosphere over the past 50 years. What is not mentioned is that carbon dioxide's effect on global temperature is already close to its maximum, so adding more has an ever decreasing effect.

To illustrate this, compare painting over a window. The first coat of paint cuts out some light, the second some more, but beyond this, additional coats have a decreasing effect on light shining through.

Heat waves: The movie portrays the summer heat wave in northwestern Europe in 2003 as both unusual and an omen of things to come. But the event was caused by a regional weather phenomenon that had nothing to do with global warming.

The official explanation blames an anticyclone anchored over the region that deflected warm dry air over Africa northward. A similar weather pattern caused the European heat waves of 1947, 1976, 1983 and 1994. None of those heat waves were blamed on human activity then. Why would we blame humans now?

Arctic temperatures and polar bears: The movie shows dramatic pictures of melting Arctic sea ice and suffering polar bears, but fails to mention that temperatures in the Arctic are as warm now as they were in the 1930s.

The graphic display of Arctic temperatures does not go back this far, so does not show this earlier warm period that preceded the rise of carbon dioxide.

To further dramatise the current warming, a graph is used in which the temperature trend line starts during the coolest period in the past few decades, around 1975.

According to the best information from the Canadian government's wildlife authorities, polar bears are not becoming endangered. Most population clusters in North America are stable or increasing in number.

African snow: The movie presents dwindling snow cover on Mount Kilimanjaro as clear-cut proof of human-caused global warming. But it is well established that the snow is disappearing because of local regional climate change that began long before humans starting pouring large amounts of carbon dioxide into the atmosphere.

Melting glaciers: What is not shown is 300 years of proxy climate data from around the world that illustrate that while some glaciers advance others retreat. The amount of snow that falls is the key determinant of the advance and retreat of glaciers.

Warming periods: The movie dramatically declares that the current warming is preceded by 1000 years of near constant temperature. But the established climate record shows this is not case. During

the Medieval Warm Period, from 900 to 1200 AD, the Vikings sailed in Arctic waters that by 1700 had turned to permanent sea ice, and farmed in Greenland soil that soon became frozen solid.

The Medieval Warm Period was followed by the Little Ice Age which ended around 1850. It in turn was followed by another warm period. The hottest year since 1850 was 1998. In the seven years since then, average annual global temperature has not risen.

Violent storms: It is claimed these are on the rise and scenes of turmoil are used to dramatise the message. But in those regions for which we have good data, this is not the case.

For example, hurricanes in the Caribbean are not increasing in frequency or intensity. Interestingly, no hurricanes have struck the US coast so far this year and the 2006 hurricane season is all but over.

Records for numbers of tornadoes are set because we can now better record tornadoes, especially small ones using modern radar and satellite technology. The June, 2003, issue of the scientific journal *Natural Hazards* was devoted to assessing whether global warming causes extreme weather. The editors concluded that there is no proven connection.

SCARY MOVIE: Many inconvenient truths are conveniently missed out

Coral reefs: Their predicted demise is blamed on global warming but the movie fails to mention that coral reefs have survived through hundreds of millions of years during which time temperatures have been warmer and cooler than today.

Sea levels: These too, are offered as proof of human-caused global warming, but they have been rising over most parts of the world for the past 300 years, as the Earth recovers from the recent Little Ice Age. Surprisingly, sea level change in the tropical Pacific, such as around Tuvalu, has stabilised over the past 15 years.

Disease: Warnings of the spread of diseases linked to climate such as malaria are mooted. But malaria is not uniquely a tropical disease. It was rife across Europe and Russia until the mid-20th century.

‘Consensus science’

There an overarching air of authenticity in the movie’s claim that all the information is underpinned by a "consensus science" on global warming. This implies that advancement of scientific understanding is a matter of voting, or that scientific authority is granted by official declaration.

In a lecture in 2004, author and scientist Michael Crichton said: "The work of science has nothing whatever to do with consensus. Consensus is the business of politics."

Professor Paul Reiter of the Pasteur Institute, Paris, reminds us of Trophim Lysenko, "who used pseudoscience and myth-making to establish ‘scientific proof’ of Marxist genetics. Lysenko dominated Soviet science for more than two decades by propaganda and ruthless liquidation of his opponents. Popular knowledge of scientific issues is again awash with misinformation."

Professor Reiter explains: "Alarmists use the language of science to manipulate public perceptions by judgmental warnings. Scientists who challenge them are branded as a tiny minority of ‘sceptics’. One of the few geneticists who survived the Stalin era wrote: ‘Lysenko showed how a forcibly instilled illusion, repeated over and over at meetings and in the media, takes on an existence of its own in people's minds, despite all realities.’"

"To me, we have fallen into this trap. A genuine concern for mankind demands the inquiry, accuracy and scepticism that are intrinsic to science. A public that is unaware of this is vulnerable to abuse."

An Inconvenient Truth is billed as the scariest movie you'll ever see, and it may well be. But that’s because many inconvenient truths are conveniently missing.

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