Guardian Climategate Debate—Opening Statement

Douglas J. Keenan, 14 July 2010

I have alleged that Phil Jones committed fraud in his work on the 2007 IPCC Report. My allegation was published in a peer-reviewed journal. It was also widely publicized, including in a front-page story in *The Guardian*. Yet neither the Russell Review nor the Oxburgh Review considered any of the evidence for the allegation.

Other people have also had their allegations against researchers at CRU not properly investigated. David Holland's allegation, for example—where the Review panel essentially just asked CRU researchers and their supporters if the researchers were guilty—and then accepted the replies without question, or asking Holland for comment. That is not how justice is achieved.

Both the Russell Review and the Oxburgh Review are clearly whitewashes. But that is not the problem. The real problem is the lack of systemic accountability. There should be some general mechanism in place whereby allegations of improper behavior are dealt with. What kind of a society would we have if there were no police, judiciary, or prisons? That, in effect, is the system in place in science today.

There are tens of thousands of scientists in the United Kingdom. As far as I know, *none* have been convicted of research fraud in at least twenty years. That is not credible: even among much smaller groups of respected people—for example, members of parliament, Catholic priests, police detectives—frauds do occur.

Moreover, in my experience, bogus research is widespread. I was in Sweden last week, and one of the people I met told me that he thought bogus research occurs relatively often there, because Sweden is small country. A few years ago, a researcher in America told me that bogus research occurs relatively often there, because America is a big country. In the tiny field of in archaeo-astronomy, I have published two papers exposing bogus research; one researcher in this field told me that bogus research occurs commonly in archaeo-astronomy, because the field is small. Someone I met once who researches in oncology told me that bogus research occurs commonly in oncology because the field is large. Obviously, not all of these explanations can be correct. In fact, none of them are correct. Bogus research is widespread, and I could give many examples—and you can see some on my web site.

The Russell Review and the Oxburgh Review are ad hoc responses to a tiny set of allegations. The reviews should never have taken place. There should have been a systemic mechanism for accountability in research.

One common problem with research in many fields is statistical improbity. I want to give some examples using what statisticians call "significance". In statistics, an event is said to be "significant" if it is unlikely to have occurred by chance alone. For example, if a coin was flipped ten times and came up Heads every time, that would be called "significant".

In 2007, I published a peer-reviewed paper pointing out that some research by Phil Jones was invalid, because it did not consider statistical significance. Jones was sent a copy of the paper for peer review; although he had many comments—all of which are on my web site—he did not attempt to dispute my criticism. Since then, all of Jones' work has considered statistical significance. Possibly the timing of Jones' change is just a coincidence, but in any case, Jones now clearly recognizes that it is critical to consider significance in his research.

It is good that Jones now recognizes this, but there is still a problem. The way in which Jones calculates significance is erroneous. Moreover, a similar problem occurs with the chapter in the IPCC report for which Jones was a Coordinating Lead Author. The IPCC chapter treats temperatures over the past 150 years or so. Demonstrating that those temperatures have been significantly increasing is fundamental for global-warming alarmism. The chapter does indeed claim to demonstrate that. But, its calculations are erroneous.

Several of the e-mails leaked in Climategate discuss statistical methods. It is clear that at least some of the scientists are familiar with techniques that would be more appropriate for the IPCC chapter; yet nothing has been done to address the errors. In other words, not only has the IPCC not demonstrated that instrumental temperatures have been significantly increasing, but some of the researchers must be aware of this.

The fundamental point here is that scientists are human, and scientific research is a human affair. We've known for millennia that prerequisites for integrity in human affairs include things like transparency, accountability, and checks and balances—and we need those things in scientific research.