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Sir — In their Commentary on the prospects of future climate change, Martin Parry et al. state that the Kyoto Protocol "is an agreement to a 5.2 per cent reduction in greenhouse-gas emissions by about 2010 (relative to 1990), and constant emissions thereafter" (Nature 395, 741; 1998). Any reader of the actual text will see that it says no such thing (http://www.unfcc.de).

The protocol — like its predecessor, the United Nations Framework Convention on Climate Change — sensibly takes a step-bystep approach, setting targets only for the budget period 2008–2012. What countries choose to set as future commitments, and who will be involved in those commitments, is a matter for future negotiation. Periodic review of commitments is required under the convention and the protocol. The protocol commits parties to agreeing commitments for future budget periods by 2005 at the latest.

Regrettably, therefore, some of the subsequent argument in the Commentary breaks down. It is, however, a reminder of what would happen if countries were complacent in those subsequent review periods, and a warning that even the most ambitious steps will leave some parts of

the world with serious adaptation issues. **David Fisk** 

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Parry et al. reply — David Fisk is correct in drawing attention to our interpretation of the Kyoto Protocol. Because the protocol sets targets only through to 2008–2012, we assumed that emissions would be constant thereafter, but only as a starting point for our analysis. We recognize, and indeed hope, that further reductions in emissions beyond 2012 will be agreed under the protocol, and we gave estimates of impacts

Table 1 Estimates of global warming for the year 2050			
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following substantially greater reductions.

Contrary to what Fisk states, our argument about the necessity for adaptation remains intact. Indeed, under two more progressive assumptions about post-2012 emissions targets, global warming by 2050 — and the associated impacts — will still be substantial (Table 1). The assumption of continued reductions in 38 industrialized 'annex I' countries, and the involvement of non-annex I nations by 2020, reduces warming by the year 2050 by only 0.15 °C. Such post-2012 commitments will of course yield larger benefits in the longer term, but the inertia in the carbon cycle and climate system means that we will need to 'adapt to the inevitable' in the medium term.

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# urvwyt

Sir—The issues of peer review and authorship are of central importance to scientists, and are frequently debated in journals. But many such discussions fail to refer to the increasing number of critical investigations into the workings of the publishing process.

The 15 July issue of the *Journal of The American Medical Association*, for example, contains 33 articles based on presentations at the 3rd Congress of Biomedical Peer Review in Prague in 1997, and constitutes a rich source of analyses of current and proposed publication procedures in biomedical research. Such studies suggest that two easily implemented systems could improve current practice.

Listing authors' contributions, and listing those who could guarantee the integrity of an article, offer a big improvement over the current ways of dealing with authorship. Similarly, the predominant system of editorial review, where the reviewers are unknown to the authors, is considered unfair. The two justifiable systems are a fully closed one (where the reviewers, authors and ideally the editors are unaware of each others' identities) and a fully open one (where all

the parties know each others' identities). Research shows that the fully closed system suffers from poor success in masking identities, suggesting that the fully open system is the more favourable alternative.

It is encouraging that both explicit listing of contributions and open peer review are starting to be adopted (for example in *The Lancet* and *Cell Calcium*, respectively). But faster and more general implementation of these systems would be facilitated by a leading interdisciplinary journal such as *Nature* showing the way.

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Sir — Your editorial on the sharing of research tools called for a uniform materials transfer agreement (MTA) (Nature 396, 97; 1998). As a research scientist, I endorse this proposal, but there is a problem that requires urgent attention.

The legal security that MTAs offer to those who sign them requires a legal basis — but which law should apply? MTAs

issued by the US National Institutes of Health (NIH) require that US law applies. The NIH also insists that anybody providing it with material signs an indemnity clause in its favour. This means that my institution would be liable for damages resulting from the use of any research material that I sent to the NIH.

Anyone who provides research tools should take responsibility for their safety. However, they must be allowed to express the reservation that the material might be partially unknown and potentially hazardous, so removing liability for incidents that might result from its use in experiments. It also worries my research institution, which cannot accept the NIH's MTAs, that US law should apply to material we send to them. We insist that German law applies, because donors must be in a position to assess the legal consequences if they give sensitive material to others. This is particularly important given the US enthusiasm for litigation.

Solving this problem should be a challenge for the lawyers, the enjoyment of which might even compensate for their loss of business if MTAs are made simpler.

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