The opening lines of my paper on risk research have upset an anonymous reader. He produced an interesting comment as a result. It shows how hard it is to develop the balance of emotions that we need in the face of disasters. On October 17, 1989, a 6.9 magnitude earthquake killed 63 people in California. On January 12, 2010, a 7.0 magnitude earthquake killed more than 40 000 people in Haiti. While the two events differ in many respects, there can be no reasonable doubt that the difference in casualties is due primarily to the fact that California is one of the richest and technologically most sophisticated places in the world, while Haiti is among the poorest nations worldwide and lacks the technological and institutional resources available in California. In view of natural disasters, this contrast is not an exception, but the rule. And it is difficult to make such comparisons without dismissing the relatively few deaths in California as irrelevant – or ignoring the cruel injustice of the much bigger earthquake impact in Haiti.

It seems to me that there are two major consequences to be drawn. First, overcoming poverty is a hugely important contribution to reducing the impact of a wide range of disasters. Second, an equally important contribution is to make the institutions, technologies and methods used for risk governance in rich countries accessible worldwide. This includes the specific idea of rationality that underpins risk governance in those countries.

That very idea of rationality, however, has played a key role in generating the new systemic risks we are faced with today. This is why the breakthrough in risk research mentioned in the title of the paper is called for.

New systemic risks, e.g. those of climate change, are often discussed primarily as a matter of external effects, and the relation between risk and external effects is a second interesting point about Anonymous' comment. It is important to realize that risks often arise without external effects: neither the risk of breaking a leg by jumping from a ladder nor the risk of human life being wiped out by an asteroid are a matter of external effects. Externalities are effects on the well-being of others not mediated by markets, and this may or may not involve risk. For whatever reason, people sometimes want to be nasty to each other without any market transaction involved, and this is a negative external effect even when the unpleasant effect is certain.

The relation between risk and external effects is an important one, but as I did not want to discuss everything under the sun I left it out. The comment makes clear that a good paper on this relation (as far as I can see it has not been written yet) would be useful, especially in view of new systemic risks.