The Disastrous War against Terrorism: Violence versus Enlightenment

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Abstract

In combating international terrorism, it is important to observe some basic principles, such as that international law must be complied with, care should be taken that one does not proceed in such a way that future terrorists are recruited, and one does not oneself become a terrorist. Unfortunately, the war on terrorism, conducted by President Bush, Prime Minister Blair and others since 9/11 in 2001, has violated all of these basic principles. The outcome has been disastrous. In what follows, I take eight such principles in turn, and indicate how they have been violated, and how and why this has had adverse consequences. I then put the problem of terrorism into the context of other, and in some cases more serious global problems such as global warming, nuclear proliferation, war and the threat of war, and raise the question of how humanity can learn to tackle these problems more effectively and intelligently than they are being tackled at present. If these problems are to be tackled democratically, a majority of people in democratic countries need to understand what the problems are and what needs to be done about them. This, in turn, requires a major programme of public education. I conclude by putting forward a proposal as to how this can be brought about.

Introduction

Terrorism is likely to be with us for quite some time. And the chances are that, as time passes, it will become increasingly dangerous. There is always the dreadful possibility that terrorists will get hold of biological or nuclear material that enables them to start an epidemic, or explode an atomic bomb – or at least a conventional bomb laced with radioactive material. The present President of the Royal Society in Britain, Professor Martin Rees, is so worried by these possibilities that he thinks that this might be our final century (Rees, 2003).

Given all this, and given the spate of terrorist attacks both before and after 9/11, it is a matter of major importance that the liberal, democratic nations of the world collaborate in combating terrorism in as effective and intelligent a way as possible, and in a way which does as little damage as possible to those traditions and institutions of civilization we have managed so far to create and maintain. It is no good defeating terrorism in such a way that we destroy along the way the very thing we seek to preserve, what is best in our whole way of life.

If we are to combat terrorism in this effective and intelligent manner, there are certain basic principles which must be observed. They include the following:-

1. International law must be complied with.
2. Terrorism must be combated as a police operation, not a war.
3. Civil liberties must not be undermined.
4. Nations suspected of harbouring or supporting terrorists must be engaged with both by means of diplomacy, and in such a way that intelligence is sought by stealth.

5. If terrorists' acts are motivated by long-standing conflict – as in the Palestine/Israeli conflict – every effort should be made by the international community of nations to resolve the conflict that fuels the terrorism.

6. As far as possible, terrorism must not be combated in such a way as to recruit terrorists.

7. International treatises designed to curtail the spread of terrorist materials must be maintained and strengthened.

8. Democratic nations combating terrorism must exercise care that, in combating terrorism, they do not thereby act as terrorists.

Unfortunately, the war on terrorism, conducted by President Bush, Prime Minister Blair and others since 9/11 in 2001, has violated all of these principles, 1 to 8. The outcome has been disastrous. In what follows, I take these eight principles in turn, and indicate how they have been violated, and how and why this has had adverse consequences. I then put the problem of terrorism into the context of other, and in some cases more serious global problems such as global warming, nuclear proliferation, war and the threat of war, and raise the question of how humanity can learn to tackle these problems more effectively and intelligently than they are being tackled at present. If these problems are to be tackled democratically, a majority of people in democratic countries need to understand what the problems are and what needs to be done about them. This, in turn, requires a major programme of public education. I conclude by putting forward a proposal as to how this can be brought about.

Initially, I take terrorism to be the murdering or injuring of people for the sake of political ends. Any doubts there might be about this brief definition will not be relevant for what I have to say initially. Only when we come to the eighth principle, and the question of whether democratic nations perform terrorist actions, will it be necessary to consider more carefully what we should mean by terrorism.

There are three basic reasons why, in combating terrorism, the above eight principles should be observed. Elementary moral principles relevant to national and international politics should not be violated; we should not undermine our traditions and institutions of civil rights, freedom and democracy under the mistaken idea that this is required to combat terrorism successfully; and we should not proceed in such a way that we cause more and more people to take up terrorism, thus exacerbating the very thing we seek to diminish. We go against one or other – or in some cases all three – of these points in failing to comply with each of the above eight principles. Let us, then, consider the eight principles in turn.

Eight Principles

1. International law must be complied with.

According to the UN charter, the circumstances in which nations can use force legally against other nations is limited to self-defence and collective action authorized by the Security Council. Does this mean that the Afghanistan and Iraq wars, initiated by the US, UK and others in response to 9/11, were legal according to international law?

The Afghanistan war is widely taken to have been legally justified. Resolution 1368 of the UN Security Council, taken on the 12 September 2001 (the day after 9/11) "*Calls* on all states to work together urgently to bring to justice the perpetrators, organizers and sponsors of these terrorist attacks and *stresses* that those responsible for aiding, supporting or harbouring the perpetrators, organizers and sponsors of these acts will be held accountable". This was taken to justify legally the subsequent Afghanistan war. And it is true there was UN involvement in the

subsequent occupation. Resolution 1378 of the 14 November 2001, condemns "the Taliban for allowing Afghanistan to be used as a base for the export of terrorism by the al-Qaeda network" and "*Affirms* that the United Nations should play a central role in supporting the efforts of the Afghan people to establish urgently … a new and transitional administration". There is, however, no Security Council resolution explicitly endorsing the war. The presumption was, nevertheless, that the war had UN approval on the grounds that the US had been attacked, and was justified in defending itself.

But Afghanistan did not perform an act of aggression against the US. The Taliban government refused to release bin Laden on the grounds that he would not receive a fair trial – very reasonable, unfortunately, given the behaviour of Bush's administration. Would the UN Security Council have backed war with Afghanistan if bin Laden's target had been France rather than the US – if the Louvre, perhaps, had been demolished, with a similar death toll? Or was the war deemed legal because the US is the world's superpower? How big an act of terrorism does it have to be for this to make legal a war against a country which harbours the terrorists? At the time of writing, Hillary Clinton has declared that if a terrorist attack occurred in the US her policy would be to attack those responsible. It seems all too likely that the Democrats, when they get into the White House, will continue Bush's policy in this respect. But it seems to me thoroughly reprehensible that criminal acts of individuals, which are not acts of war by states, should be regarded by the Security Council – and thus by international law – as providing grounds for a "war of self-defence". That seems to stretch "self-defence" way beyond what must have been originally intended, and was only allowed because of the US's superpower status.

In my view, then, even if understood to be sanctioned by the Security Council, the Afghanistan war ought to have been declared illegal, an act of criminal international aggression.

The Iraq war of 2003 is quite different. It is clear that neither of the two conditions for war to be legal were met. Iraq was not attacking any other nation – most certainly not the US or UK. The US and UK governments did their utmost in an attempt to convince the rest of the world that an illegal nuclear research programme was underway in Iraq, and that Saddam Hussein possessed "weapons of mass destruction", but the only evidence produced in support of these claims turned out to be fraudulent. There were no grounds for holding there was some kind of link between Saddam Hussein and bin Laden. On the contrary, they were bitterly opposed to each other. All grounds for holding Saddam Hussein had either the intent or the means to attack other nations (let alone the US or UK) turned out to be fake.

George Bush was quite content to attack Iraq without any attempt to get the backing of the UN, but it was recognized that this would create difficulties for Tony Blair, and so the attempt was made to persuade the Security Council to back the impending war. This attempt failed, although the UK government insisted, against the facts, that it had all the UN resolutions needed to justify legally the war.

There is no serious doubt whatsoever: in going to war against Iraq in 2003, the US, UK and other nations involved acted in violation of international law. Saddam Hussein was a monster, and his regime was monstrous. But our only hope for a more democratic, peaceful and just planet is through the observance, strengthening and enhancing of international law; it cannot be achieved by international acts which violate it – that is, by what are, essentially, criminal international actions.

The idea that Bush's actions were essentially well-intentioned, in that he sought to replace a brutal dictatorship by a democracy, hardly stands up to examination. There are a number of other brutal dictatorships in the world which do not receive similar attention. It is hard not to believe

that in the case of Iraq, the crucial additional factor was oil. Perhaps Bush really did believe his own rhetoric when he declared that democracy in Iraq would be a beacon for democracy in the Middle East. If so, democracy was desirable, for Bush, because – so it was believed – it would be associated with favourable trading arrangements in oil.

The lies peddled by Bush and Blair in the lead-up to the Iraq war do not exactly encourage one to think the war was pursued with noble intentions. At one stage, 82% of Americans believed Saddam Hussein was linked to bin Laden and 9/11, a misconception Bush did nothing to discourage.[1] In fact, on the 22nd September 2002, Bush declared "You can't distinguish between al-Qaeda and Saddam when it comes to war on terror".

But it is above all the way the Iraq campaign was pursued, both during and after immediate hostilities in the Spring of 2003, that makes the idea of good intentions seem so absurd. US soldiers stood by while massive looting took place after initial hostilities had ceased. Vast sums of money were squandered in Iraq – much of it Iraq's own oil funds – corruption being rife. Initially, little was done to establish security, law and order, in and around Baghdad. It should have been obvious to the invading armies, before the war, that there would be a severe security problem after hostilities had ceased, because of long-standing enmity between the Sunni and Shia populations. Saddam Hussein had used Sunni henchmen to persecute and subjugate the Shia population. Many Shia felt hatred towards the Sunni as a result, and the Sunni Iraqis had good cause to fear the revenge of the Shia majority. The occupying US forces acted as if they knew nothing of this history; they acted as if Sunni and Shia alike would feel nothing but gratitude towards them for invading their country and deposing Saddam Hussein.

Not only has there been a disastrous failure to establish even a minimal level of security. There has also been a miserable failure to establish elementary services at a basic level: electricity, water, health, equipment in hospitals. This has been due, partly to corruption, partly to the lack of security and, more recently, because of the exodus from Iraq of professionals and others who are no longer prepared to endure the danger and misery of life in Iraq. Many others, no doubt, would leave if they could.

The whole campaign to bring democracy to Iraq has been a disaster. Hundreds of thousands of Iraqis have lost their lives, and hundreds of thousands more have been crippled. Few Iraqis, even four years after the war, think life in Iraq is better now than how it was under Saddam Hussein. The daily death toll has got worse and worse as time has passed. Prospects for the future look grim.

Allied to the ignorance and stupidity of the US administration in Iraq after the war, there is the sheer brutality of the occupation, the apparent indifference to the killing of civilians at check points, and during hunts for insurgents, like that carried out in Fallujah. A recent Pentagon report revealed that "Approximately 10 per cent of soldiers and marines report mistreating non-combatants (damaged/destroyed Iraqi property when not necessary or hit/kicked a non-combatant when not necessary)". More than a third of soldiers thought torture should be allowed to save the life of a fellow soldier.[2] Even worse, in a number of well-documented cases, US troops have fired on and killed civilians in Iraq since initial hostilities in 2003 came to an end, no one in the US military being brought to account. Well over one hundred thousand Iraqis have been killed during and since the war up to the time of writing.[3] And prospects for the future look grim.

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[1] *Washington Post* poll, 'Saddam Hussein and the Sept. 11 Attacks', September 6, 2003.

[2] 'Iraq war strain leads troops to abuse civilians, survey shows', The Guardian, 5th May, 2007.

[3] Roberts *et al.* (2004) estimate, in a famous article published in *The Lancet*, that about 100,000 Iraqis died as a result of the war and occupation during the period 19 March 2003 to September 2004. This

When the US pulls out, it seems quite likely that Iraq will descend into all-out civil war between Sunni and Shia. Iran, no doubt, will come to the aid of the Shia, the Sunni will be defeated, and a Shia Iran-Iraq axis will be established.

The outcome of the war has been the very opposite of what Bush must have hoped for. It has enormously strengthened Iran in the Middle East. It has unleashed terrorism of almost unparalleled ferocity. The streets of Baghdad have become training grounds for future terrorists who will, no doubt, move on to the UK and the US. It has enormously strengthened the cause of al-Qaeda. And the unspeakable brutality and illegality of the war and the occupation – their sheer criminality – have enraged a proportion of Muslim youth all over the world and will no doubt inspire many to attempt to perform future acts of terrorism in revenge. Bush's "war against terrorism" has served here, as in other ways, to create the very thing that is, ostensibly, being fought to be defeated.

It would be wrong, of course, to blame all this on the illegality of the war. Even if the UN had given the war its seal of approval, and the war had achieved some kind of official, if somewhat spurious legality, all the above disasters might well have ensued. On the other hand, we may take the view that, on this occasion, the UN got it right, the Iraq war was an illegal act of aggression, and there were, on this occasion at least, very good reasons for not going to war.

The other way the "war against terrorism" has violated international law has to do with the treatment of prisoners, and the suspension of the Geneva Convention. Prisoners in Guantanamo Bay have been held by the US for years without being charged, subjected to treatment that is widely regarded as amounting to torture, without resort to the law, in a kind of "legal black hole". These prisoners are classified as "enemy combatants", neither prisoners of war, nor subject to ordinary civil legal processes and safeguards. Treatment of prisoners at Abu Ghraib also clearly violated the Geneva Convention, and there have been accusations of torture sanctioned and aided by the US in prisons elsewhere in the world, victims being transported by means of the secret process of "rendition". Not only is all this a moral and legal outrage; it serves, again, to inspire some Muslim youth to join the war against the infidels, and become terrorists.

2. Terrorism must be combated as a police operation, not a war.

President Bush declared "war on terrorism" in an address to the nation on the very night of the 9/11 atrocity. Even if "war" had been used metaphorically, as in "war on drugs", this declaration would have been a serious blunder from the standpoint of combating Al-Qaeda effectively. Like all terrorists, bin Laden and his associates see themselves as soldiers in a war, not as criminals. To have this confirmed by the President of the US enormously enhances the prestige of al-Qaeda, and is a great aid to recruitment. To suggest that the US must be put on a war footing to combat al-Qaeda gives a vastly over-estimated impression of the strength and danger of the opposition. It suggests that al-Qaeda is on a par with the military might of the US, which is of course absurd.

What was required to combat al-Qaeda effectively was a combination of diplomacy with relevant and potentially friendly nations such as Pakistan, gathering of good intelligence, and police work. The rhetoric of war raises public expectations of battles, very different from the quiet, behind-the scenes work needed to combat terrorism effectively.

But Bush, in declaring "war on terrorism", meant war to be understood in a way much stronger

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estimate excludes those who died in Fallujah. Iraq Body Count (www.iraqbodycount.net) held, on 13th May 2007, that the number of civilians reported killed as a result of the military intervention was between 63, 373 and 69,418. That the maximum figure, here is, for a longer period of time, considerably lower than *The Lancet* estimate makes sense once one appreciates that most deaths go unreported in Iraq.

than the metaphorical. The declaration justified the announcement of a "state of emergency". And it led to literal war, first in Afghanistan, and then, even more disastrously, in Iraq. As I have already mentioned, the American people were encouraged to believe that Saddam Hussein was behind the 9/11 attack. In fact Saddam Hussein and bin Laden were mortal enemies. Iraq had had nothing to do with 9/11. Not only has the Iraq war been a disaster for the hundreds of thousands who have died during it, and subsequently, and the vastly greater number who have been injured, or who have lost loved ones, but it has had the effect of generating terrorism in occupied Iraq to a quite unprecedented extent. As I have already remarked, the embattled streets of Baghdad are training grounds for future terrorists in the US, UK and elsewhere.

Immediately after 9/11 there was a world-wide upsurge of sympathy and support for the US. The subsequent pre-emptive wars have had the effect of transforming this sympathy into hostility and fear. Not only does this help recruit terrorists; it undermines the kind of international cooperation required to combat international terrorism successfully.

3. Civil liberties must not be undermined.

It is tempting to think that the threat of terrorism means that certain civil liberties must be suspended. But such measures are inherently undesirable, in that they undermine what every liberal democracy should strive to maintain and strengthen. It is as if, not content with suffering the damage the terrorists do to us, we decide to take the matter into our own hands, and ourselves do further damage to ourselves. Such measures also have the effect of signalling to the terrorist that they are having a major impact, and may thus encourage further acts of terrorism. And finally, if suspending elements of civil liberties means weakening due process of law, so that suspects can be held without trial, or convicted without a proper trial, this may well result in the innocent being imprisoned or convicted, and may incite further terrorism.

Civil liberties have been curtailed in various ways in response to 9/11 in both the US and the UK. Thus in the UK, after 9/11, the Government introduced indefinite detention without charge of foreign nationals. This was replaced by the control order regime which allows government ministers to impose sweeping restrictions on individual freedoms on the basis of secret intelligence and suspicion. Pre-charge detention has been increased from 14 days to 28 days, with further extensions threatened. Legislation has been passed curtailing free speech and the right to demonstrate, and enhancing police powers to detain and search.

4. Nations suspected of harbouring or supporting terrorists must be engaged with both by means of diplomacy, and in such a way that intelligence is sought by stealth.

For many years, Gaddafi of Libya was suspected of supporting terrorists and attempting to develop the nuclear bomb. Pressure and negotiations eventually led Gaddafi to renounce both. Such strategies can meet with success.

Similar strategies need to be adopted in connection with Iran and Syria. But, until very recently (at the time of writing), President Bush has refused to negotiate with either. Instead, there has been threat, not spoken but not denied, that nuclear installations in Iran will be bombed if enrichment of uranium does not cease. Threatening Iran with war, or a bombing campaign, has the effect of strengthening the position of the more hardline and fanatical groups in the country, and at the same time undermining those of a more liberal stance who support negotiations. Once again, the outcome may be the very opposite of what is intended.

Exactly the same considerations apply to countries suspected of harbouring or supporting terrorist groups. The best hope of dealing successfully with such support lies in negotiation and

secret intelligence gathering, and not in refusal to negotiate, withdrawal of diplomatic relations, name calling and veiled threats of military action.

5. If terrorists' acts are motivated by long-standing conflict – as in the Palestine/Israeli conflict – every effort should be made by the international community of nations to resolve the conflict that fuels the terrorism.

Reacting to terrorist atrocities – by curtailing civil liberties, or by giving in to terrorist demands – has the adverse consequence that it leads the terrorists to believe they are having an impact and are meeting with success, and may, as a result, give encouragement and resolve to the terrorists, and help promote recruitment. On the other hand, if serious injustices exist, the fact that terrorists demand an end to them should not be used as an excuse to do nothing to put a stop to them, on the grounds that action would amount to giving in to terrorist demands. Such inaction amounts to allowing terrorists to dictate policy in a negative sense: the mere fact that terrorists make a demand means that nothing can be done, even when something should be done, out of fear this will amount to giving in to the demands of terrorists.

It is possible that this negative influence of terrorism may have played a role in the long conflict in northern Ireland. British governments may have been reluctant to address the legitimate complaints of Catholics out of fear that this would amount to giving in to the demands of the IRA.

And it is conceivable that something similar may have been at work in connection with the long-standing Israel/Palestine conflict. Al-Qaeda demands justice for the Palestinians. If the US takes determined action to procure such justice, this may seem too close to giving in to the demands of al-Qaeda.

The conflict has gone on for so long that it may seem unresolvable. But determined action by the US and the UN could, over time, bring the conflict to an end. What is required is deployment of sufficient peace-keeping troops deployed between Israel, the Gaza strip and the West Bank, pressure on Israel to withdraw from land occupied after the 1967 war, pressure on both sides to acknowledge each other's right to exist as independent states, and to end hostilities. Pressure on Israel would have to take the form of the US threatening to curtail the immense annual budget Israel receives from the US – the budget actually being decreased if mere threats have no effect. It is often said that the Jewish lobby in the US is so powerful it would never permit such policies to be adopted. It is hardly so powerful that it could prevent a President in power from initiating and pursuing policies of this kind. At most it might prevent a President who pursued such policies having a second term. On the other hand, even if assessed in the wholly cynical terms of leaving one's mark on history, it might be deemed more worthwhile to be instrumental in bringing the Israel/ Palestine conflict to an end, than not to do this and be re-elected for a second term.

It seems likely that the current treatment of Palestinians by Israel, the US and Europe does much – along with the continuing hostilities in Afghanistan and Iraq – to aid recruitment to Islamic terrorist groups. And it is possible that fear of being thought to be giving in to the demands of bin Laden and al-Qaeda may be one of the factors deterring action to bring the conflict to an end. In this connection, Louise Richardson in her excellent book *What Terrorists Want* (Richardson, 2006), makes a point of decisive importance. In combating terrorism, it is essential to take into account, and to distinguish, the terrorists themselves, and the community that is sympathetic to the political aims of the terrorists. In combating terrorism, one goal should be to isolate the terrorists from their sympathetic community (since it is from that community that

the terrorists will gain support and recruits). If the community has legitimate grievances, doing something about those grievances may well have the consequence that the community in question cools its sympathy for the terrorists, which in turn may lead eventually to the collapse of the terrorist groups.

All this is highly relevant to the Israel/Palestine conflict. There can be no doubt that the treatment of the Palestinians over the decades has outraged many members of the world-wide Islamic community. Indeed, one does not have to be a member of that community to be outraged. Al-Qaeda terrorists have made it quite clear that one motive for their terrorist action is to highlight the injustice suffered by the Palestinians. Bringing the Israel/Palestinian conflict to an end is overwhelmingly desirable for the sake of the Israeli and Palestinian people. But it is also desirable as one of the measures needed to defeat al-Qaeda in the long term.

6. As far as possible, terrorism must not be combated in such a way as to recruit terrorists.

Some necessary police operations, however sensitively conducted, may have the effect of antagonizing some of those affected, and may prompt them to join the ranks of the terrorists. This can hardly be avoided. Nevertheless every effort should be made to drive a wedge between terrorist groups and potential sympathizers. Above all, terrorism must not be combated in such a way as actually to drive sympathizers into the arms of the terrorists.

This is plain common sense, and yet it has been violated again and again by Bush's and Blair's "war on terrorism", as we have already seen. The most dreadful example is the Iraq war. Saddam Hussein had nothing to do with 9/11. Bin Laden was bitterly opposed to the secular Saddam Hussein. War with Iraq had nothing to do with combating Islamic terrorism. The outcome has been an unleashing of terrorism in Iraq itself of almost unprecedented ferocity. This is very likely to spread to other countries in the future. The war itself, and above all the brutal subsequent occupation and its multiple failures, are calculated to provoke al-Qaeda sympathizers all over the world to become active terrorists. The scandal of the treatment of prisoners, in Iraq, Guantanamo Bay and elsewhere will have had the same effect. Engaging in war, as in Afghanistan and Iraq, mistreating prisoners, and supporting Russia in its ruthless actions in Chechnya, far from combating terrorism, amounts to the exact opposite. It is inflaming terrorism. Bin Laden's hopes for 9/11 were, no doubt, to provoke a massive over-reaction from Bush which would, in turn, cause Islamic youth everywhere to take up jihad. Bush obliged.

A cynic might wonder whether Bush, after he had got over the initial shock of 9/11, did not welcome this new "war on terrorism". It provided his presidency with a mission. He quickly became a hero in the eyes of his countrymen. It put new powers into his hands. And it made it possible to do what he had wanted to do all along – go to war with Iraq and depose Saddam Hussein. The armed might of the US, which might have come to look somewhat excessive – even to Americans – after the collapse of the Soviet Union, suddenly had a new rationale, a new enemy: the terrifying menace of international terrorism.

7. International treatises designed to curtail spread of terrorist materials must be maintained and strengthened.

Far from strengthening international treaties, the US tends, unfortunately, to take the view that, as the world's only superpower, it is above compliance with such treaties. As one commentator has put it recently "Of the total number of active treaties (550), the US has ratified only 160 (29%). President Bush has reversed US backing of six pacts: the Kyoto Protocol on Climate Change, Nuclear Non-proliferation Treaty, Biological and Toxin Weapons Convention,

Landmine Treaty, Anti-Ballistic Missile Treaty, and nullified Clinton's signature related to the International Criminal Court. Only Somalia and the US have not ratified the Convention on the Rights of the Child!" (Irish, 2005).

Two international treaties are of particular relevance to our present concerns: the Nuclear Non-proliferation Treaty, and the Biological and Toxin Weapons Convention. The idea behind the Nuclear Non-proliferation Treaty, when it was signed in 1970, was that non-nuclear nations would refrain from acquiring nuclear weapons if the nuclear powers moved towards nuclear disarmament. Neither the US nor the UK has shown the slightest sign of taking seriously their part of the bargain. In the meantime, India, Pakistan and North Korea have acquired nuclear weapons, and it seems likely that Iran is working towards joining the nuclear club as well. As for US support for the Biological and Toxin Weapons Convention, during the 1980's the US sent Anthrax and other biological agents to Saddam Hussein in clear contravention of the Convention (Holland, 2004).

8. Democratic nations combating terrorism must exercise care that, in combating terrorism, they do not thereby act as terrorists.

It may seem outrageous to suggest that the US or UK could stoop so low as to engage in terrorist acts themselves. But if we take terrorism to be the murdering – the unjustifiable killing – of people for the sake of political ends, then it must be acknowledged that the US has, again and again in recent times, performed terrorist actions – aided and abetted, on occasions, by the UK. The Iraq war may indeed be regarded as a monumental act of terrorism – the 2003 war itself, and the occupation afterwards. Hundreds of thousands of Iraqis have been killed, far more than the three thousand who died in the twin towers as a result of 9/11. The US military is directly responsible for a substantial percentage of these deaths. Many were civilians. Repeatedly over the years of occupation, US soldiers have killed civilians, at check points, during house searches, or in response to demonstrations. How does this differ from terrorism? It is, admittedly, a democratic state that has carried out these atrocities, not an anonymous group of fanatics, but that does not weaken the crime involved. It could be objected that the intentions of the US in going to war with Iraq, and occupying the country afterwards, were noble (to topple Saddam Hussein), and quite different from those of real terrorists. But some terrorists may have noble goals: that does not make them any the less terrorists. Terrorism has to do with the means taken – terror – not the character of the aim (except that it is in some way political). And in any case, as we have seen, it is dubious that President Bush's motives in going to war with Iraq were all that noble. It might be objected, again, that the US does not deliberately target civilians. Deliberately targeting civilians is – it may be argued – the defining characteristic of terrorism. But first, this is not what terrorism is ordinarily taken to mean, and certainly not by the US and UK governments. Those who kill soldiers in Iraq are deemed to be terrorists. Five men were arrested in New Jersey, US, on the 7th May 2007, and charged with conspiracy to murder US soldiers (Guardian, 2007). That these men evidently planned to attack an army base and kill soldiers, and not civilians, will not be deemed sufficient to release them from the charge of terrorism. Second, the excuse that civilians are not deliberately targeted only has force if every effort is made not to kill civilians in a legitimate military operation. This cannot be said of many US military operations in Iraq. One example is the attack on Fallujah in the Spring of 2004. The highly respected "Iraq Body Count" has concluded that, of the 800 deaths of Iraqis reported in connection with the attack on Fallujah by the US, somewhere between 572 and 616 were civilians, with over 300 of these being women and children. There have been all too many reports of civilians being killed by US soldiers in

Iraq in circumstances which make it impossible to say every effort was made to avoid the deaths.

Apparent terrorist actions performed by the US did not begin with the Iraq or Afghanistan wars. In 1986, the US bombed Libya's capital Tripoli, killing at least a hundred people. This was in retaliation for a terrorist bomb in Berlin, which killed two American servicemen. Britain colluded in the attack in allowing the planes involved to take off from military bases in the UK. Similar operations have been conducted by the US, over the years, in Pakistan, Iraq and elsewhere. For a list of such operations conducted from 1945 to the present and a brief description of each, see Blum (2006, chapter 17).

The US has also sponsored terrorism enacted by others, as when it has supported the Contras in Nicaragua, the mujahideen in Afghanistan, and groups trying to overthrow Castro in Cuba and Allende in Chile.

Global Problems

To sum up. The current "war on terrorism" violates all eight of the principles, enunciated above. This has had disastrous consequences,[4] and is likely to have further disastrous consequences for decades into the future. The task of combating, or containing, terrorism urgently needs to be transformed so that all eight principles are implemented.

But how is this to happen? It might help if a Democrat is elected to be the next President of the US, but it seems unlikely, given the historical record, that this would suffice to bring about the radical change in foreign policy that is needed, whoever is elected. It is not as if President Bush's administration can be held solely responsible for what has happened, with Blair being charged with some additional responsibility. Both Bush and Blair were re-elected after the 2003 Iraq war, and long after the character of the "war on terrorism" had become all too apparent. What is required, evidently, is a much more widely dispersed understanding, among the electorates of the democratic nations of the world, of how terrorism can be tackled, or contained, intelligently and effectively, in such a way that international law is observed, civil liberties are not undermined, and without resort to terrorist actions. But how is this to be brought about?

Before I attempt to answer this key question, I would like first to put the problem of international terrorism into the context of other urgent global problems. There is the problem of war in general, over 100 million people having died in countless wars in the 20th century (which compares unfavourably with the 12 million or so killed in wars during the 19th century). There is the arms trade, the massive stockpiling of armaments, even by poor countries, and the ever-present threat of their use in war, whether the arms be conventional, chemical, biological or nuclear. There is the sustained and profound injustice of immense differences of wealth across the globe, the industrially advanced first world of North America, Europe and elsewhere experiencing unprecedented wealth while something like three quarters of humanity live in conditions of poverty in the developing world, hungry, unemployed, without proper housing, health care, education, or even access to safe water. There is the long-standing problem of the rapid growth of the world's population, especially pronounced in the poorest parts of the world, and adversely affecting efforts at development. There is the problem of the progressive destruction of tropical rain forests and other natural habitats, with its concomitant devastating extinction of species. And there is the horror of the AIDS epidemic, again far more terrible in the

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[4] I have here given only a brief sketch of the disastrous current "war on terrorism". For much more detailed accounts, see Richardson (2006), Blum (2006), Chomsky (2007), Hiro (2005), Curtis (2003).

poorest parts of the world, devastating millions of lives, destroying families, and crippling economies. And most serious of all, perhaps, there is the problem of global warming.

Most of these problems are interlinked with one another, in complex ways. Global warming may lead, as a result of drought, floods, or rising sea levels, to populations becoming displaced which, in turn, is likely to lead to terrorism and war. The arms trade, the stockpiling of weapons, clearly has implications for war and terrorism. On the other hand, the decision to make "the war on terrorism" the number one issue may have, and may have already had, the effect of distracting attention away from even more serious problems, such as global warming.

The Need for Public Education

It is now, in my view, of decisive importance to appreciate the following elementary points concerning these interlinked global problems. If we are to tackle these problems effectively, humanely and *democratically*, then it is essential that the electorates of the democracies of the world have a good understanding of what these problems are, and what we need to do to solve them. That in turn requires that people are educated about what the problems are, and what we need to do to solve them. And that in turn requires that our institutions of learning – our schools and universities – are rationally devoted to this fundamental task, to the task of educating the public about what our problems of living are and what we need to do about them, especially our immense, intractable, apparently impersonal global problems, including the problem of international terrorism.

There is, I believe, no evading the conclusion of this elementary argument. We cannot hope to resolve the world's problem undemocratically. It would be foolish or even, perhaps,, suicidal to put our trust in enlightened unelected political leaders. Even if we had elected leaders and governments with the best possible will and understanding in the world, they would still be constrained, in their actions, by what electorates would tolerate. As it is, we do not have leaders and democratic governments with the best possible good will and understanding, and nor are we likely to have them in the future. If our governments are to pursue more intelligent and humane policies, powerful democratic pressure must be put on them to do so. It must be made abundantly clear that a sizeable majority of the electorate demand such policies from their governments, so much so that governments which do not oblige will be kicked out of office at the next election. Electorates must be adept at seeing through the deceptions of governments, so that governments cannot get away with pursuing one set of policies while convincing most of the electorate that quite different policies are being implemented. All this requires education – education about what our problems are and what we need to do to solve them, and education about the realities, constraints, and deceptions, of government.

There is, quite simply, no alternative. If humanity is to tackle its immense problems effectively and humanely, it is essential that humanity has a good understanding of what the problems are, and what needs to be done to resolve them. And this in turn requires that our public institutions of learning – our schools and universities – are rationally devoted to achieving this fundamental goal. This point applies just as much to the problem of international terrorism as it does to global warming, population increase or rapid extinction of species.

The Pursuit of Knowledge

One immediate response may be that schools and universities are already devoting considerable energy to educating the public about these matters. I believe this to be true. It is nevertheless the case that the primary official intellectual aim of academic inquiry is *not* to help

humanity learn how to solve its global problems, make progress towards a better world. It is rather to acquire knowledge and technological know-how. Or rather, the idea is that the primary way in which academia can help humanity make progress towards a better world is, in the first instance, to acquire knowledge. First, knowledge is to be acquired; then it can be applied to help solve social problems. And furthermore, in order to be of benefit to humanity, academia must ensure that authentic, objective, reliable knowledge is acquired. This means that the pursuit of knowledge must be sharply dissociated from all social, humanitarian or political goals. If social, political and evaluative considerations are not excluded from science, the danger is – so it is held – that the pursuit of knowledge will degenerate into mere propaganda or ideology, science will be corrupted intellectually, and will cease to be of value to humanity. In order to make a contribution of value to humanity, paradoxically, science must eschew all considerations concerning what is of human value. And this means universities do not, and cannot, devote themselves primarily to educating the public about what our global problems are, and what we need to do to solve them. Academia must restrict itself, in the first instance at least, to solving *problems of knowledge*, so that knowledge that is acquired can, subsequently, be used to help solve social *problems of living*.

Elsewhere, I have expounded and criticized this immensely influential view as *the philosophy of knowledge*, or *knowledge-inquiry* (see Maxwell, 1984, 1992, 2000, 2004). There can be no doubt whatsoever that the scientific pursuit of knowledge has, over the centuries, helped transform the human condition, and has brought immense benefits to our whole way of life. The modern world is quite simply inconceivable without modern science.

Nevertheless, the pursuit of knowledge dissociated from a more fundamental concern with problems of living – with our global problems – as demanded by knowledge-inquiry, despite the benefits that have resulted, has also had profoundly damaging consequences. It has resulted in all our current global problems, including the lethal character of modern terrorism.

Modern science and technology vastly increase our power to act. This, as I have said, has a multitude of beneficial consequences. But also, not surprisingly, it can have bad consequences as well, either intentionally, in war and terrorism, or unintentionally (initially at least) when modern industry and agriculture lead to global warming, destruction of natural habitats and extinction of species. Modern science and technology make possible hygiene and modern medicine, the rapid growth in the human population, modern industry and agriculture, modern armaments; these, in turn, make possible the lethal character of modern war and terrorism, destruction of natural habitats, global warming, and all our other current global problems. Even the AIDS epidemic has emerged in this way, AIDS being spread by modern methods of travel.

In short, not only does the current devotion of academia to the pursuit of knowledge and technological know-how prevent universities from taking their primary task to be to educate the public about what our global problems are, and what we need to do about them. Even worse, this immensely successful pursuit of knowledge dissociated from a more fundamental concern with global problems of living is actually implicated in the creation of our current global problems.

It is even worse than this. In a perfectly reasonable sense of "cause", our global problems have been *caused* by modern science and technology.

At once the objection may be made that it is not *science* that is the cause of our global problems, but rather the things that we *do*, made possible by science and technology. This is obviously correct. But it is also correct to say that scientific and technological progress *is* the cause. The meaning of "cause" is ambiguous. By "the cause" of event E we may mean something like "the most obvious observable events preceding E that figure in the common sense

explanation for the occurrence of E". In this sense, human actions (made possible by science) are the cause of such things as people being killed in war, destruction of tropical rain forests. On the other hand, by the "cause" of E we may mean "that prior change in the environment of E which led to the occurrence of E, and without which E would not have occurred". If we put the 20th century into the context of human history, then it is entirely correct to say that, in this sense, scientific-and-technological progress is the cause of our distinctive current global disasters: what has changed, what is new, is scientific knowledge, not human nature. (Give a group of chimpanzees rifles and teach them how to use them and in one sense, of course, the cause of the subsequent demise of the group would be the actions of the chimpanzees. But in another obvious sense, the cause would be the sudden availability and use of rifles – the new, lethal technology.) Yet again, from the standpoint of theoretical physics, "the cause" of E might be interpreted to mean something like "the physical state of affairs prior to E, throughout a sufficiently large spatial region surrounding the place where E occurs". In this third sense, the sun continuing to shine is as much a part of the cause of war and pollution as human action or human science and technology.

In short, if by the cause of an event we mean that prior change which led to that event occurring, then it is the advent of modern science and technology that has caused all our current global crises. It is not that people became greedier or more wicked in the 19th and 20th centuries; nor is it that the new economic system of capitalism is responsible, as some historians and economists would have us believe. The crucial factor is the creation and immense success of modern science and technology. This has led to modern medicine and hygiene, to population growth, to modern agriculture and industry, to world wide travel (which spreads diseases such as AIDS), to global warming, and to the destructive might of the technology of modern war and terrorism, conventional, chemical, biological, nuclear.

9/11 is a striking case in point. There is nothing exclusively modern about terrorism itself, any more than there is about war: terrorism goes back at least to Biblical times. But what is distinctively modern is the scale of the threat, and its impact. Those responsible for 9/11 used nothing more high-tech than knives, but they were able to exploit modern technology so as vastly to increase the enormity of their action, and the scale of its impact. They exploited aeroplanes with which to do the deed, and relied on television and modern communications to spread news and images of what they had done round the world instantly, as the horror unfolded. It was modern technology which made the immediate global impact of 9/11 possible.

Before the advent of modern science and technology, lack of wisdom – lack of the capacity to resolve our problems of living intelligently and humanely – did not matter too much. We lacked the power to do too much damage to ourselves, or to the planet (although some damage we did do). But now that we (or some of us) possess unprecedented powers, thanks to modern science, lack of wisdom has become a menace. Humanity urgently needs to learn how to solve its problems more intelligently and humanely than it has done up to the present, and for that, as I have said, we urgently need to develop public institutions of learning rationally designed and devoted to achieving this goal.

But how is this to be done? Who could get academics to agree to transform the whole academic enterprise in the way that is, it seems, required? What guidelines could there be for creating a kind of inquiry rationally devoted to promoting wisdom? Might not the whole endeavour be a disaster, in that the only outcome would be the undermining of the objectivity, the intellectual integrity, of science, and thus its human value? Is it not an absurd over-reaction to cry for the transformation of academia so that the public may be better educated about the problems

of the world? Is it not hopelessly utopian to think, in any case, that it is possible for humanity to learn wisdom?

Correcting the Blunders of the Enlightenment

A perfectly acceptable answer to these questions stares us in the face. And yet it is one that almost everyone overlooks. Modern science has met with astonishing success in improving our knowledge of the natural world. It is this very success, as we have seen, that is the cause of our current problems. But instead of merely blaming science for our troubles, as some are inclined to do, we need, rather, to try to learn from the success of science. *We need to learn from the manner in which science makes progress towards greater knowledge how we can make social progress towards a better, wiser world*.

This is not a new idea. It goes back to the Enlightenment of the 18th century, especially the French Enlightenment. Voltaire, Diderot, Condorcet and the other *philosophes* of the Enlightenment had the profoundly important idea that it might be possible to learn from scientific progress how to achieve social progress towards an enlightened world. They did not just have the idea: they did everything they could to put the idea into practice in their lives. They fought dictatorial power, superstition, and injustice with weapons no more lethal than those of argument and wit. They gave their support to the virtues of tolerance, openness to doubt, readiness to learn from criticism and from experience. Courageously and energetically they laboured to promote reason and enlightenment in personal and social life. And in doing so they created, in a sense, the modern world, with all its glories and disasters.

The *philosophes* of the Enlightenment had their hearts in the right place. But in developing the basic Enlightenment idea intellectually the *philosophes*, unfortunately, blundered. They botched the job. And it is this that we are suffering from today. The *philosophers* thought that the proper way to implement the Enlightenment Programme of learning from scientific progress how to achieve social progress towards an enlightened world is to develop the social sciences alongside the natural sciences. If it is important to acquire knowledge of natural phenomena to better the lot of mankind, as Francis Bacon had insisted, then (so, in effect, the *philosophes* thought) it must be even more important to acquire knowledge of social phenomena. First, knowledge must be acquired; then it can be applied to help solve social problems. They thus set about creating and developing the social sciences: economics, psychology, anthropology, history, sociology, political science.

This traditional version of the Enlightenment Programme, despite being damagingly defective, was immensely influential. It was developed throughout the 19th century, by men such as Saint-Simon, Comte, Marx, Mill and many others, and was built into the intellectual-institutional structure of academic inquiry in the first part of the 20th century with the creation of departments of the social sciences in universities all over the world.

Academic inquiry today, devoted primarily to the pursuit of knowledge and technological know-how, is the outcome of two past revolutions: the scientific revolution of the 16th and 17th centuries which led to the development of modern natural science, and the later profoundly important but very seriously defective Enlightenment revolution. It is this situation which calls for the urgent need to bring about a *third* revolution to put right the structural defects we have inherited from the Enlightenment.

But what, it may be asked, is wrong with the traditional Enlightenment Programme?
Almost everything.   In order to implement properly the basic Enlightenment idea of learning from scientific progress how to achieve social progress towards a civilized world, it is essential to

get the following three things right.
1. The progress-achieving methods of science need to be correctly identified.
2. These methods need to be correctly generalized so that they become fruitfully applicable to any worthwhile, problematic human endeavour, whatever the aims may be, and not just applicable to the one endeavour of acquiring knowledge.
3. The correctly generalized progress-achieving methods then need to be exploited correctly in the great human endeavour of trying to make social progress towards an enlightened, wise world.

Unfortunately, the *philosophes* of the Enlightenment got all three points wrong. And as a result these blunders, undetected and uncorrected, are built into the intellectual-institutional structure of academia as it exists today. Academia today is, in other words, the outcome of a botched attempt to learn from scientific progress how to make social progress towards a better world.

First, the *philosophes* failed to capture correctly the progress-achieving methods of natural science. From D'Alembert in the 18th century to Popper in the 20th, the widely held view, amongst both scientists and philosophers, has been (and continues to be) that science proceeds by assessing theories impartially in the light of evidence, *no permanent assumption being accepted by science about the universe independently of evidence.* But this standard empiricist view is untenable. If taken literally, it would instantly bring science to a standstill. For, given any accepted scientific theory, T, Newtonian theory say, or quantum theory, endlessly many rivals can be concocted which agree with T about observed phenomena but disagree arbitrarily about some unobserved phenomena. Science would be drowned in an ocean of such empirically successful rival theories if empirical considerations *alone* determined which theories are accepted, which rejected.

In practice, these rivals are excluded because they are disastrously disunified. *Two* considerations govern acceptance of theories in science: empirical success and unity. But in persistently accepting unified theories, to the extent of rejecting disunified rivals that are just as, or even more, empirically successful, science makes a big persistent assumption about the universe. Science assumes that the universe is such that all disunified theories are false. The universe has some kind of unified dynamic structure. It is physically comprehensible in the sense that explanations for phenomena exist to be discovered.

But this untestable (and thus metaphysical) assumption that the universe is comprehensible is profoundly problematic. How can we possibly *know* that the universe is comprehensible? Science is obliged to assume, but does not know, that the universe is comprehensible. Much less does it know that the universe is comprehensible in this or that way. A glance at the history of physics reveals that ideas about how the universe may be comprehensible have changed dramatically over time. In the 17th century there was the idea that the universe consists of corpuscles, minute billiard balls, which interact only by contact. This gave way to the idea that the universe consists of point-particles surrounded by rigid, spherically symmetrical fields of force, which in turn gave way to the idea that there is one unified self-interacting field, varying smoothly throughout space and time. Nowadays we have the idea that everything is made up of minute quantum strings embedded in ten or eleven dimensions of space-time. Some kind of assumption along these lines must be made but, given the historical record, and given that any such assumption concerns the ultimate nature of the universe, that of which we are most ignorant, it is only reasonable to conclude that it is almost bound to be false.

The way to overcome this fundamental dilemma, inherent in the scientific enterprise, is to

construe science as making a hierarchy of metaphysical assumptions concerning the comprehensibility and knowability of the universe, these assumptions asserting less and less as one goes up the hierarchy, and thus becoming more and more likely to be true. In this way a framework of relatively insubstantial, unproblematic, fixed assumptions and associated methods is created within which much more substantial and problematic assumptions and associated methods can be changed, and indeed improved, as scientific knowledge improves. Put another way, a framework of relatively unspecific, unproblematic, fixed *aims* and methods is created within which much more specific and problematic aims and methods evolve as scientific knowledge evolves. (A basic aim of science is to discover in what precise way the universe is comprehensible, this aim evolving as assumptions about comprehensibility evolve.) There is positive feedback between improving knowledge, and improving aims-and-methods, improving knowledge-about-how-to-improve-knowledge. This is the nub of scientific rationality, the methodological key to the unprecedented success of science. Science adapts its nature to what it discovers about the nature of the universe. For a detailed exposition and defence of this hierarchical, aim-oriented empiricist conception of science see Maxwell (1998; 2001, chapter 3 and appendix 3; and 2004, chapter 1 and 2 and appendix; 2007, chapter 14).

So much for the first blunder of the Enlightenment.

Second, having failed to identify the methods of science correctly, the *philosophes* naturally failed to generalize these methods properly. They failed to appreciate that the idea of representing the problematic aims (and associated methods) of science in the form of a hierarchy can be generalized and applied fruitfully to other worthwhile enterprises besides science. Many other enterprises have problematic aims; these would benefit from employing a hierarchical methodology, generalized from that of science, thus making it possible to improve aims and methods as the enterprise proceeds. There is the hope that, in this way, some of the astonishing success of science might be exported into other worthwhile human endeavours, with aims quite different from those of science.

Third, and most disastrously of all, the *philosophes* failed completely to try to apply such generalized progress-achieving methods to the immense, and profoundly problematic enterprise of making social progress towards an enlightened, wise world. The aim of such an enterprise is notoriously problematic. For all sorts of reasons, what constitutes a good world, an enlightened, wise or civilized world, attainable and genuinely desirable, must be inherently and permanently problematic. Here, above all, it is essential to employ the generalized version of the hierarchical, progress-achieving methods of science, designed specifically to facilitate progress when basic aims are problematic.

Properly implemented, in short, the Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world would involve developing social inquiry as social *methodology,* or social *philosophy*, not primarily as social *science*. A basic task would be to get into personal and social life, and into other institutions besides that of science – into government, industry, agriculture, commerce, the media, law, education, international relations – hierarchical, progress-achieving methods (designed to improve problematic aims) arrived at by generalizing the methods of science. A basic task for academic inquiry as a whole would be to help humanity learn how to resolve its conflicts and problems of living in more just, cooperatively rational ways than at present. This task would be intellectually more fundamental than the scientific task of acquiring knowledge. Social inquiry would be intellectually more fundamental than physics. Academia would be a kind of people's civil service, doing openly for the public what actual civil services are supposed to do in secret for governments. Academia

would have just sufficient power (but no more) to retain its independence from government, industry, the press, public opinion, and other centres of power and influence in the social world. It would seek to learn from, educate, and argue with the great social world beyond, but would not dictate. Academic thought would be pursued as a specialized, subordinate part of what is really important and fundamental: the thinking that goes on, individually, socially and institutionally, in the social world, guiding individual, social and institutional actions and life. The fundamental intellectual and humanitarian aim of inquiry would be to help humanity acquire wisdom – wisdom being the capacity to realize (apprehend and create) what is of value in life, for oneself and others, wisdom thus including knowledge and technological know-how but much else besides.

One important consequence flows from the point that the basic aim of inquiry would be to help us discover what is of value, namely that our feelings and desires would have a vital rational role to play within the intellectual domain of inquiry. If we are to discover for ourselves what is of value, then we must attend to our feelings and desires. But not everything that feels good is good, and not everything that we desire is desirable. Rationality requires that feelings and desires take fact, knowledge and logic into account, just as it requires that priorities for scientific research take feelings and desires into account. In insisting on this kind of interplay between feelings and desires on the one hand, knowledge and understanding on the other, the conception of inquiry that we are considering resolves the conflict between Rationalism and Romanticism, and helps us to acquire what we need if we are to contribute to building civilization: mindful hearts and heartfelt minds.

Another outcome of getting into social and institutional life the kind of aim-evolving, hierarchical methodology indicated above, generalized from science, is that it becomes possible for us to develop and assess rival philosophies of life as a part of social life, somewhat as theories are developed and assessed within science. Such a hierarchical methodology

"provides a framework within which diverse philosophies of value – diverse religions, political and moral views – may be cooperatively assessed and tested against the experience of personal and social life. There is the possibility of cooperatively and progressively improving such *philosophies of life* (views about what is of value in life and how it is to be achieved) much as *theories* are cooperatively and progressively improved in science. In science diverse universal theories are critically assessed with respect to each other, and with respect to *experience* (observational and experimental results). In a somewhat analogous way, diverse philosophies of life may be critically assessed with respect to each other, and with respect to *experience* – what we do, achieve, fail to achieve, enjoy and suffer – the aim being so to improve philosophies of life (and more specific philosophies of more specific enterprises within life such as government, education or art) that they offer greater help with the realization of value in life" (Maxwell, 1984, p. 254).

All in all, if the Enlightenment revolution had been carried through properly, the three steps indicated above being correctly implemented, the outcome would have been a kind of academic inquiry very different from what we have at present. We would possess what we so urgently need, and at present so dangerously and destructively lack, institutions of learning well-designed from the standpoint of helping us create a better, a wiser world.

We have travelled far from our initial topic, the disastrous "war on terrorism". And yet, the transformation in our instruments of public learning that I have (briefly) argued for, are highly relevant to our capacity to deal effectively and humanely with terrorism. What our initial discussion of the eight principles that need to be observed in combating terrorism revealed is that,

again and again, the current "war on terrorism" is achieving the very opposite of what was intended. Terrorism is being actively promoted, even implemented, not contained and curtailed. The aim of combating terrorism, like so many other aims in life, is inherently problematic. If we do not proceed intelligently, learning from past mistakes, it is all too likely that we will achieve the very opposite of what we seek. Hence the fundamental importance of a kind academic inquiry, a kind of learning, which emphasizes the need to subject problematic aims to sustained criticism and improvement.

It would be absurd, of course, to argue that we need to transform academia so that we can learn how to combat terrorism intelligently. That is not what I have argued. Rather, my claim is that international terrorism is one of a number of global problems that confront us and that, if we are to tackle these problems intelligently, humanely and *democratically* (as we must do), people quite generally must have a much better understanding of what these problems are, and what needs to be done about them, than they do at present, this in turn requiring a kind of inquiry rationally designed to promote such public education about our problems, this in turn requiring a revolution in our schools and universities. Learning how to tackle terrorism more intelligently would be a beneficiary along with learning how to tackle more intelligently our other global problems.

I must emphasize, however, that the reasons for the revolution in the aims and methods of inquiry that I have indicated are not only *humanitarian*. There are also absolutely decisive *intellectual* reasons. The kind of inquiry that would emerge – *wisdom-inquiry* as I have called it – would be *both* more rigorous intellectually, and of greater human value, than what we have at present. The revolution is needed in the interests both of the intellectual and the practical aspects of inquiry.

But will it happen? I first spelled out the argument over thirty years ago (Maxwell, 1976). It was spelled out again, in very much greater detail, in my second book (Maxwell, 1984). This received many excellent reviews, in particular a glowing review from Christopher Longuet-Higgins in *Nature*, who remarked, during the course of his review, "Maxwell is advocating nothing less than a revolution (based on reason, not on religious or Marxist doctrine) in our intellectual goals and methods of inquiry ... There are altogether too many symptoms of malaise in our science-based society for Nicholas Maxwell's diagnosis to be ignored" (Longuet-Higgins, 1984). Unfortunately it has been ignored. With agonizing slowness, in a wholly piecemeal and confused fashion, some changes have taken place in science, and in academia more generally, that are somewhat in the direction that I have argued for, but in complete ignorance of my argument (and often masked by other changes that take things in the opposite direction): see Maxwell (2007, chapters 6 and 12); see, also, Iredale (2007). Academia is supposed to be about innovation but, when it comes to the rules of the game, dogmatic conservatism tends to take over. It is difficult, too, to arouse public interest in the current damaging irrationality of academia. In the popular mind, "academic" is almost synonymous with "irrelevant" or "pointless". That judgement is part of the problem.

On the other hand, the revolution that we need might be compared in significance to the Renaissance, to the scientific revolution, or to the 18th century Enlightenment. Intellectual revolutions as profound and far-reaching as these do not happen overnight. Thirty years of inaction, when the matter is viewed in that light, is perhaps not such a long time interval.

But the question that haunts me is this: Given the state of the world today, given the enormity of the problems that face us, can humanity afford to put off any longer creating institutions of learning rationally designed to help us discover how to tackle our problems in wiser, more

cooperatively rational ways?

Conclusion

In the meantime, all is not lost. Louise Richardson's *What Terrorists Want* seems to me exactly the kind of work that academics today should be writing: intelligent, informative, wise, highly readable and well-written, it provides genuine insight into the motives and character of terrorism, and comes up with sensible proposals as to how the problem should be tackled. It is clearly intended to contribute to public education. It is an exemplary contribution to wisdom-inquiry.

Here, to conclude, is a summary of the changes that need to be made to science, and to academic inquiry more generally, to put right the blunders we have inherited from the Enlightenment, thus creating a kind of inquiry rationally designed to help humanity learn how to create a better world.

1. There needs to be a change in the basic intellectual *aim* of inquiry, from the growth of knowledge to the growth of wisdom — wisdom being taken to be the capacity to realize what is of value in life, for oneself and others, and thus including knowledge, understanding and technological know-how.

2. There needs to be a change in the nature of academic *problems*, so that problems of living are included, as well as problems of knowledge. Furthermore, problems of living need to be treated as intellectually more fundamental than problems of knowledge.

3. There needs to be a change in the nature of academic *ideas*, so that proposals for action are included as well as claims to knowledge. Furthermore, proposals for action need to be treated as intellectually more fundamental than claims to knowledge.

4. There needs to be a change in what constitutes intellectual *progress*, so that progress-in-ideas-relevant-to-achieving-a-more-civilized-world is included as well as progress in knowledge, the former being indeed intellectually fundamental.

5. There needs to be a change in the idea as to where inquiry, at its most fundamental, is located. It is not esoteric theoretical physics, but rather the thinking we engage in as we seek to achieve what is of value in life.

6. There needs to be a dramatic change in the nature of social inquiry (reflecting points 1 to 5). Economics, politics, sociology, and so on, are not, fundamentally, *sciences*, and do not, fundamentally, have the task of improving knowledge about social phenomena. Instead, their task is threefold. First, it is to articulate problems of living, and propose and critically assess possible solutions, possible actions or policies, from the standpoint of their capacity, if implemented, to promote wiser ways of living. Second, it is to promote such cooperatively rational tackling of problems of living throughout the social world. And third, at a more basic and long-term level, it is to help build the hierarchical structure of aims and methods of aim-oriented rationality into personal, institutional and global life, thus creating frameworks within which progressive improvement of personal and social life aims-and-methods becomes possible. These three tasks are undertaken in order to promote cooperative tackling of problems of living — but also in order to enhance empathic or "personalistic" understanding between people as something of value in its own right. Acquiring knowledge of social phenomena is a subordinate activity, engaged in to facilitate the above three fundamental pursuits.

7. Natural science needs to change, so that it includes at least three levels of discussion: evidence, theory, and research aims. Discussion of aims needs to bring together scientific,

metaphysical and evaluative consideration in an attempt to discover the most desirable and realizable research aims.

8. There needs to be a dramatic change in the relationship between social inquiry and natural science, so that social inquiry becomes intellectually more fundamental from the standpoint of tackling problems of living, promoting wisdom.

9. The way in which academic inquiry as a whole is related to the rest of the human world needs to change dramatically. Instead of being intellectually dissociated from the rest of society, academic inquiry needs to be communicating with, learning from, teaching and arguing with the rest of society — in such a way as to promote cooperative rationality and social wisdom. Academia needs to have just sufficient power to retain its independence from the pressures of government, industry, the military, and public opinion, but no more. Academia becomes a kind of civil service for the public, doing openly and independently what actual civil services are supposed to do in secret for governments.

10. There needs to be a change in the role that political and religious ideas, works of art, expressions of feelings, desires and values have within rational inquiry. Instead of being excluded, they need to be explicitly included and critically assessed, as possible indications and revelations of what is of value, and as unmasking of fraudulent values in satire and parody, vital ingredients of wisdom.

11. There need to be changes in education so that, for example, seminars devoted to the cooperative, imaginative and critical discussion of problems of living are at the heart of all education from five-year-olds onwards. Politics, which cannot be taught by knowledge-inquiry, becomes central to wisdom-inquiry, political creeds and actions being subjected to imaginative and critical scrutiny.

12. There need to be changes in the aims, priorities and character of pure science and scholarship, so that it is the curiosity, the seeing and searching, the knowing and understanding of individual persons that ultimately matters, the more impersonal, esoteric, purely intellectual aspects of science and scholarship being means to this end. Social inquiry needs to give intellectual priority to helping empathic understanding between people to flourish (as indicated in 6 above).

13. There need to be changes in the way mathematics is understood, pursued and taught. Mathematics is not a branch of knowledge at all. Rather, it is concerned to explore problematic *possibilities*, and to develop, systematize and unify problem-solving methods.

14. Literature needs to be put close to the heart of rational inquiry, in that it explores imaginatively our most profound problems of living and aids personalistic understanding in life by enhancing our ability to enter imaginatively into the problems and lives of others.

15. Philosophy needs to change so that it ceases to be just another specialized discipline and becomes instead that aspect of inquiry as a whole that is concerned with our most general and fundamental problems — those problems that cut across all disciplinary boundaries. Philosophy needs to become again what it was for Socrates: the attempt to devote reason to the growth of wisdom in life.

This is the revolution we need to bring about in our traditions and institutions of learning, if they are to be properly and rationally designed to help us learn how to make progress towards a wiser world.

References

Blum, W. (2006). *Rogue State*. London: Zed Books.

Chomsky, N. (2007). *Failed States*. London: Penguin.

Curtis, M. (2003). *Web of Deceit*. London: Vintage.

The Guardian, UK. (9th May 2007). 'Jihad DVD find foiled terror plot, says FBI'.

Hiro, D. (2005). *Secrets and Lies*. London: Politico's.

Holland, G. (2004). 'Biological and Toxin Weapons Convention and Iraq: A report for Parliament on the British Government's response to the US supply of biological materials to Iraq'. School of Social Sciences and Cultural Studies, University of Sussex. Online.

Iredale, M. (2007). 'From knowledge-inquiry to wisdom-inquiry: is the revolution under way?', *London Review of Education*, July 2007.

Irish, D. (2005). 'Routes not Taken / Roles not Played (for peace and democracy)', *North Country Peace Builder*, vol. 56, no. 2. Online.

Longuet-Higgins, C. (1984). 'For goodness sake', *Nature, vol. 312,* 15 November 1984, p. 204.

Maxwell, N. (1976). *What's Wrong With Science?*. Frome, UK: Bran's Head Books.

_____ (1984). *From Knowledge to Wisdom*. Oxford: Blackwell.

_____ (1992). 'What Kind of Inquiry Can Best Help Us Create a Good World?'. *Science, Technology and Human Values 17*, pp. 205-27.

_____ (2000). 'Can Humanity Learn to become Civilized? The Crisis of Science without Civilization, *Journal of Applied Philosophy 17*, pp. 29-44.

_____ (2001). *The Human World in the Physical Universe: Consciousness, Free Will and Evolution.* Lanham: Rowman and Littlefield.

_____ (2004). *Is Science Neurotic?*. London: Imperial College Press.

_____ (2007). *From Knowledge to Wisdom: A Revolution for Science and the Humanities.* Second enlarged edition, London: Pentire Press.

Richardson, L. (2006). *What Terrorists Want*. London: John Murray.

Rees, M. (2003). *Our Final Century*. London: Arrow Books.

Roberts, L. *et al.* (29th October 2004). 'Mortality before and after the 2003 invasion of Iraq: cluster sample survey', *The Lancet*. Online.

Washington Post (6th September 2003). 'Saddam Hussein and the Sept. 11 Attacks'.