The Michael Quinlan Anniversary Lecture, The Ultimate Weapon: Deterrent or Dinosaur? Shirley Williams

Michael Quinlan was the epitome of a great civil servant. He had a brilliant mind, sharpened to crystal clarity by a challenging and analytic Jesuit education. That education was underpinned by a strong sense of ethics and a deep interest in moral philosophy, a distrust of the "isms" that were the virus of the twentieth century, and alongside that scepticism, loyalty to a Church that was not averse to dogma.

It was in his role as Permanent Under-Secretary of the Department of Defence that Michael reached his zenith, though throughout his time as a civil servant he held some of the most influential positions open to him at each stage, including a short period as Deputy Under-Secretary at the Treasury. His civil service career was conducted largely in the context of the Cold War. The metaphor was apt. For most of the time, relations between the Governments of the two major nuclear powers, and even of their lesser brethren, were frozen in a scenario more troubled by proposals for change than by the creaks and strains of a structure increasingly ill –adapted to the world around it.

Michael approved the clear delineation between the East and the West. Poland, he said, obviously belonged to the East, Denmark to the West. But that particular element of stability no longer stands. Countries like Ukraine or Georgia cannot be firmly located on either side.

Michael never dismissed the devastating consequences of nuclear weapons.

The progenitor of the first nuclear bomb, Robert Oppenheimer, called the first test of an atomic bomb "Trinity". At the back of his mind was a favourite and deeply haunting poem, John Donne's Holy Sonnet 14, "Batter my heart, three person'd God". By some strange trick of fate, the British pacifist composer Benjamin Britten, having visited concentration camps in Germany after the end of the war in Europe, decided to set the sonnet to music.. According to the New Yorker's music critic

Alex Ross in his recent book The Rest is Noise, the date was August 6, the very day the first nuclear bomb in Hiroshima was dropped on Hiroshima. Asked the reasons for the depression Oppenheimer suffered after the successful Trinity test, he replied "I keep thinking about those poor little people". So did Michael. But Michael was more realistic about politics. Oppenheimer believed the evidence of what a nuclear bomb could do "would be so great that the people and governments of the world would demand

international co-operation to end war". (Ray Monk, "Inside The Centre; the Life of J Robert Oppenheimer, Jonathan Cape, 2012)

What Michael Quinlan learned from the Cold War was the effectiveness of deterrence. An almost limitless power to destroy on both sides could not bring victory to either. But it could compel both sides to seek a compromise. Quinlan became the great authority on deterrence. It could never be taken for granted. Its effectiveness required commitment on both sides to the safety and security of nuclear weapons, to ensure there would be no accidents or abuse, sophisticated techniques for verifying the identity of nuclear weapons across a wide range of capacity, and to the training of inspectors and staff in their maintenance and modernisation. This latter task became more difficult as memories of the phenomenal destructive capacity of nuclear weapons began to fade.

Most important of all in ensuring the effectiveness of deterrence, according to Michael, was transparency, communication between nuclear powers of their perceptions of threats, their "red lines" which heralded crisis, their early warnings of potential trouble. The clearer such communication was, the more successful deterrence would be in keeping the peace. And so, near miraculously, it has proven.

Michael was rigorous in setting out the conditions for successful deterrence. A total divorce between possession and use, advocated by the US bishops in a famous Pastoral Letter in 1983, simply would not do. Despite his customary courtesy and grace, Michael did not spare the bishops. A deterrent that could never be used would be ineffective, and one that might be used, albeit rarely, would be destabilising. MAD, mutually assured destruction, was, he argued, a remarkably stable situation and one that did indeed bring a solid if sterile peace to the protagonists.

In the harmonious era that followed the dismantlement of the Berlin Wall, George Walker Bush, the US President, proposed huge reductions in strategic nuclear weapons, culminating in the Start 1 treaty, which was ratified by the US Senate, and agreed by Mikhail Gorbachev on behalf of the Soviet Union, on October 1, 1992. The subsequent Moscow Treaty, agreed between Bush and Brezhnev in 2002 on behalf of what was now the Russian Federation, brought further cuts. "All the agreements reached over the past year, beginning with Start", Bush had declared, "will reduce our strategic nuclear forces by about 75% from their 1990 level".

The treaties focussed on deployed strategic nuclear warheads and on delivery vehicles. Despite both countries having considerable numbers of tactical nuclear weapons, in the case of the US many being outside national borders, no serious attempt has yet been

made to limit their numbers though there have been discussions on the subject in NATO. Twenty years on from Start 1, President Obama has called for transparency with regard to TNW, of which Russia has many more than the United States, to reveal the numbers, security and safety of these weapons.

The ratification of New Start in 2010, by both the US Senate and the Russian Duma, made a further round of reductions in strategic nuclear weapons, albeit relatively modest, possible. But the cost of getting Start 2 implemented has been high. The US Senate only ratified on condition of an expensive modernisation programme, withdrawing older weapons and replacing virtually all of them with the latest versions. In the case of Russia, President Putin on his re-election announced a ten-year modernisation programme for the Russian armed forces of \$768 billion, some \$70 billions of this to be devoted to updating the nuclear triad.

MAD does not preclude steps towards disarmament, though it does preclude Global Zero, the abolition of all nuclear weapons. Numbers of deployed warheads can be reduced far beyond what is envisaged in the New Start treaty. In his recent publication, Less Is Better, Malcolm Chalmers of the Royal United Services Institute suggests that Russia and the United States could reduce their arsenals of deployed nuclear warheads to 700 or 800 each by the end of this decade while retaining an effective deterrent.

General James Cartwright, former vice-chairman of the Joint Chiefs of Staff and President George Bush Junior's former head of nuclear services, last year recommended that the United States could reduce its arsenal of nuclear warheads by 80%, take its weapons off high alert and eliminate ICBMs. If Russia reciprocated, not only could huge sums of money be saved, but "the security and safety of the weapons (would be) much easier to guarantee". Stocks of fissile materials can be regulated and reduced.

Responding to Michael Quinlan's emphasis on transparent communication, early warning systems and hot lines could be comprehensively installed, not least among the official nuclear powers, the P5, and the outside possessors of nuclear weapons, India, Pakistan, Israel and North Korea, currently in fraught relations with one or more of their neighbours, but paradoxically far less equipped with means of communication with those neighbours.

The absence of transparency and of effective communication greatly heightens the danger of nuclear conflict between these countries. The lack of continuous diplomatic dialogue, for instance between the United States and North Korea, or the United States and Iran, further increases misunderstanding. In a nuclear world, the deliberate withdrawal of diplomatic relations becomes an unnecessary dicing with danger. The US

has no formal relations with Iran, and indeed has not had for over thirty years. What dialogue there is has been conducted by way of United Nations resolutions and sanctions. It does not help in understanding this complex country in which religious and secular powers interact, and many young people are attracted to Western culture and Western freedoms.

Iran practices a complicated minuet with the International Atomic Energy Authority (the IAEA) in which it appears to stay just within the limits of the Non-Proliferation Treaty, while shaving down the gap between the legal limits of refinement of nuclear materials, like uranium 235, and the length of time required to achieve an effective nuclear weapon. Another unusual characteristic of Iran has been the readiness of its Prime Minister, Mr Ahminedejad, now nearing the end of his term of office, to invite American experts to New York on his periodic visits to sessions of the

United Nations General Assembly, to openly discuss nuclear issues with him. Resumption of diplomatic relations would be highly controversial in the United States, but establishing relationships through cultural and religious exchanges might be a valuable step.

North Korea presents even more difficult problems. Its recent nuclear test, apart from being in open defiance of UN resolutions and of the Nuclear Non-Proliferation Treaty, was, according to its government, directed towards developing a minituarised but more powerful warhead. Any such development would raise the possibility of an intercontinental nuclear weapon able to reach American cities. Hopes of a more cooperative North Korea, which were entertained after the succession of Kim Jong II following his father's death, are fading.

China is reluctant to rein the country in, for fear of its collapse and consequent uncontrollable outflows of refugees across the border. Deterrence has not proved effective in the case of a government that seems more concerned about regime collapse than civilian massacre.

Although thankfully it does not possess nuclear weapons (but has a substantial arsenal of chemical weapons), the same might be said of Syria, another desperate country whose regime puts its own safety well ahead of the welfare of its citizens. Deterrence theory does, it seems to me, depend upon whole-hearted acceptance of the first duty of governments, to protect their own people.

Michael, a tough-minded realist, favoured moving towards smaller, more easily controlled stocks of nuclear weapons and materials. But he did not favour retreating from a level that made deterrence credible.

The World Today

We live today in a world different in crucial respects from Michael's. The Cold War was a duel conducted between two Great Powers and their allies. Today the possession of nuclear weapons is multipolar. True, the difference in scale between these lesser nuclear powers and the big two is immense. But even a few nuclear bombs can give a lesser nation near infinite destructive power

over their non-nuclear adversaries. Maintaining a stable deterrent system is not easy when nuclear possessors have different views of what they need to deter.

Communication, as already pointed out, is difficult and may prove untrustworthy. Even more challenging, the nuclear scene is not composed any longer of stable governments with authority over their countries. It includes, at least potentially, non-state actors, governments who cannot or do not control their military or intelligence communities, and even governments who would risk total destruction of their homelands rather than a change of regime. The deterrent case has become much less easy to deploy.

There is another factor as well, one this rational, calm and sensible man encountered only in the last few years of his tenure at the Ministry of Defence, though in greater depth during his and Mary's distinguished leadership of Ditchley. It was the growing willingness of ordinary men and women to assert themselves against their rulers, a willingness fuelled by improved education and by the potentially incendiary gospel of human rights. The rapid spread of resistance to Soviet rule in Central Europe culminated in the destruction of the Berlin Wall, and the flow of people to the West. Unlike his predecessors, Mikhail Gorbachev refused to order his troops to suppress the insurgents. The thaw had begun.

The Present Scene

The fall of the Berlin Wall came at the end of Ronald Reagan's presidency. A Republican, but one who was a great supporter of Franklin Roosevelt and an admirer of the New Deal, Reagan had long dreamed of a world without nuclear weapons. He found the idea of MAD, mutually assured destruction, appalling. His personal history of working within the film industry enabled him to move easily between fact and fantasy, sometimes slipping from one to the other. Films about space travel and space wars inspired Reagan's vision of star wars, a system of ballistic missile defence that would render nuclear weapons ineffective. In Gorbachev, he found a fellow leader who shared that dream and might help him to achieve it.

President Obama's famous Prague speech in 2009, while not pursuing the star wars dream, held out the goal of eliminating nuclear weapons over time. His controversial appointments in 2012, of John Kerry as Secretary of State, and Senator Chuck Hagel as Secretary of Defence, ran into predictable trouble during the confirmation hearings by the Senate. Mr Kerry watered down the administration's objectives, describing the goal of a nuclear weapons- free world as an aspiration, and associating Senator Hagel with his responses by describing him as "realistic" about Global Zero, a movement which Hagel had openly commended. The US administration has had to bend to Republican pressure, something described as flexibility; in effect it has conceded that treaties making substantial progress on nuclear disarmament not cannot be got through Congress.

This does not mean there can be no further progress. President Obama has clearly dedicated his second term to doing so. One area where progress could be made is in the attempt to agree on a fissile material cut-off treaty. Both the US and Russia, by far the largest possessors of both strategic and tactical nuclear weapons, favour the proposal. In this case the unmoveable opponent

is Pakistan, which has vetoed every attempt to get such a treatyoff the ground in the Geneva-based Conference on Disarmament. The Government of Pakistan needs the support of its powerful military, and its even more powerful intelligence agency, the ISI. Pakistan certainly has nuclear weapons, but its arsenal is smaller than that of its potential adversary, India. Most other members of the UN General Assembly strongly favour a FMCT as an important step towards reducing nuclear weapons in the future.

So on the margins of the NPT, the five official nuclear weapons powers have been conducting quiet discussions with the governments that possess nuclear weapons but are not among the P5, in an attempt to get a negotiation going. Discussions where all nuclear armed states participate in an open and cooperative manner, assessing each other's positions and concerns, agreeing to verification measures and providing assurances, are vital. This form of dialogue may help to address major obstacles between these countries such as concerns over verification and existing material stockpiles. Furrthermore, these meetings bring the P5 and the other nuclear weapons powers together, a framework that might be utilised for other discussions too, such as early warning systems and improved communications. The comprehensive and detailed system of inspection in the New Start treaty provide another valuable and tested model too.

Another area in which tentative suggestions are being made, in effect to bypass national obstacles to progress, is that of synchronised mutual reductions in nuclear weapons beyond that envisaged in the New Start treaty – or possibly as a way of speeding the treaty reductions up. The US president could authorise such reductions without having to get Congressional approval, and it is safe to assume that the Russian President could do the same.

Negotiations between the two main nuclear powers could also address the targeting and deployment of ballistic missiles. Russian suspicions on this front are acute. Russia simply does not believe American assurances that these missiles are directed at containing Iran,not at Russia. Already certain Congressmen have warned against an "end-run" round the President, but their vetoes, not just on disarmament but on financial and economic matters too, are driving the executive power to new constitutional expedients. The anachronistic elements of the US constitution, such as the right of state legislatures to delineate Congressional districts to ensure the success of incumbents, are making the federal legislature less and less representative of what US voters have voted for.

Meanwhile weapons have moved on – not so much nuclear as cyber – attacks like the Stuxnet worm which targeted and destroyed centrifuges used in Iran's uranium enrichment programme, demonstrate that cyber weapons can pose a serious threat, while Distributed Denial of Service (or DDoS attacks), as in 2007 in Estonia, have the capacity to disrupt key basic services within a nation. Cyberwar could be the answer to the aspirations of non state actors or of weak frightened governments constructed on the vast increase in knowledge of, and the spread of familiarity with, computers – mobile telephones, hackers, determined or obsessive individuals.

Does it make sense to spend billions of dollars and the energies of skilled men and women on a nuclear deterrent that cannot deter the new adversaries, a twentieth century Maginot line? Perhaps, like the French Army in 1940 or the British Navy in Singapore, we are lavishing our resources on a threat that has passed, not on the ones that are emerging.

I will give the last word to one of this country's most distinguished and original military leaders, Field Marshall Lord Bramall. "The first question, from a military point of view, is whether we still need the successor to Trident which the Government presently seem to have in mind. Will it be able to go on doing the job it is supposed to do under any relevant circumstances? To this I believe the answer is unquestionably no. For all practical purposes it has not and, indeed, would not deter any of the threats and challenges-now

more economic than military-likely to face this country in the foreseeable or even longer-term future. It has not stopped any terrorist outrage in this country nor, despite America's omnipotent deterrent, did it prevent the very traumatic 9/11. It did not stop the Argentines trying to take over the Falklands, nor did any nuclear deterrent stop Saddam Hussein marching into Kuwait or firing missiles into Israel. Nor indeed, in a now intensely globalised and interlocked world, could our deterrent ever conceivably be used-not even after a serious hostile incident which it had presumably failed to deter-without making the whole situation in the world infinitely worse for ourselves as well as for everybody else."