

## Building confidence in the nuclear age

**Alan Cottey recommends a new look at Niels Bohr's early ideas concerning openness on nuclear issues as a path to international confidence and a new world order.**

The UK is currently reviewing its nuclear policy in the two great areas, nuclear weapons and nuclear power generation. Will the UK replace the Trident nuclear weapons system, and if so, how? Will the outcome of the government's current energy review include a decision to build a new series of nuclear power stations?

Judging by the UK's current nuclear posture, and especially by its long record of secretive decision-making, the UK is an undeveloped country. A developed nuclear country would have been continuously working, since 1945 at the latest, when the most essential facts of the nuclear age became public knowledge, on "*the adjustment of international relations*". This phrase comes from an open letter that Niels Bohr wrote to the United Nations in 1950<sup>1</sup>. Bohr was unique among scientists and all others, including political, diplomatic and military leaders, in the depth of his early appreciation of the implications of nuclear weapons. The 1950 open letter followed the failure of his prolonged efforts – starting in 1944, well before any A-bomb had been tested – to convince political leaders, notably President Roosevelt and Prime Minister Churchill, that early and bold steps towards the international control of atomic energy were needed.

Long before anyone else, Bohr foresaw the post-war conditions – the mistrust, the nuclear arms race, the effect of nuclear fear and secrecy on international relations. He thought it through and identified "*openness as a primary condition for the progress and protection of civilization*"<sup>2</sup>.

Roosevelt and Churchill understood and rejected Bohr's message. They clung to international relations as usual. To them, it was unthinkable to tell Stalin of even the existence of the Manhattan Project before the Bomb had been tested. Bohr, however, recognized that delay would render a nuclear arms race virtually inevitable. Likewise, his 1950 Open Letter to the UN had little impact, partly because the Korean War started only a few weeks later. Other factors explaining the limited take-up of Bohr's ideas, then and since, are their radical nature, his tiresome prose style and his patrician approach (he did not get involved with others' peace initiatives lest his grand idea be diluted).

I believe, however, that Bohr's analysis remains relevant and it is worth trying to understand exactly what is the principal obstacle. Obviously, 'prose style' and 'patrician approach' are weaknesses that could easily be corrected. That leaves 'radical nature'. I will here focus on Bohr's use of the concept 'confidence'. This word appears – in the sense 'firm trust' – in the Open Letter no fewer than thirteen times. Bohr argues that openness will instil confidence. It was, however, exactly the lack of confidence in the first place that prevented political leaders, the UN, other peace activists and the public from running with the big idea.

Bohr's vision was uncompromising. He spoke of "*full mutual openness*" in international relations. The question for us today is: how to get from here to there? I suggest that openness and confidence can only be enhanced together, in small steps. Further, solid progress is made when leaders and the public move forward together, never being far out of step. Just as important as political lobbying and legislation is the spiritual and moral development of our culture, and this in turn is the sum of the spiritual and moral condition of each individual.

It will, no doubt, be readily agreed that the world's nations and their leaders have, throughout the nuclear age, lacked the confidence in each other to go more than a short distance towards the kind of openness that Bohr considered essential. Less recognised, perhaps, is the notion that we all, as individuals, need some appropriate development – of our confidence – if we are to move towards the open world that Bohr envisaged.

What might *personal* confidence and openness, sufficient to take us to a peaceful and sustainable world, mean? I believe it means having the self-assurance to face our deepest fears and anxieties, and to communicate frankly with others about them. The problems, fears and anxieties that oppress depend on the person. Some of the common ones concern esteem, identity, sex, suffering, death, access to resources. To be personally open about such matters is *scary*. It demands confidence of a high order. In many respects Bohr had such confidence<sup>3</sup>.

I end with the suggestion that debates about political affairs could usefully be supplemented by more attention to whether we could all – *each individual* – develop more of the needed confidence, openness and trust. Some might say 'this is all very well for the

few Bohrs of this world but what of the average person and even more so of the dispossessed and oppressed?' I answer this with the proposition that most (and perhaps all) of us contain within us the *potential* for a discriminating confidence, openness and trust. These qualities would be the driving force behind progressive and rapid political negotiations of the kind that Bohr envisaged.

Unfortunately we, again as individuals, also have the potential to fall into states of fear, secretiveness and mistrust. If environmental and social conditions combine with these in a strongly negative manner, the results can be atrocious, at the personal and the collective levels.

What do these general observations imply for the UK energy review and the question of a possible replacement of the Trident nuclear weapons system? First, we have to recognise that UK political culture is secretive and manipulative but it does not have to remain so indefinitely. Moving towards a more open culture requires confidence, with political leaders and the public moving more-or-less in step. In that more confident culture, caring for the planet and for other people everywhere will be normal. It will be a pleasure rather than a sacrifice. Sparing and efficient use of energy, drastically reduced carbon dioxide emissions and listening to the disaffected (rather than threatening them) will be common sense.

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### Notes and references

1. <http://nobelprize.org/physics/laureates/1922/bohr-bio.html>
2. As [1]
3. Moore, R. (1985). Niels Bohr. MIT Press