

Student Pugwash Cambridge Seminar

Monday 2nd March 2009

Soldiers in the laboratory – the militarisation of the university

Dr Chris Langley will report on a major research project undertaken by Scientists for Global Responsibility which examines the military influence on science, engineering and technology (SET) in the UK. He will present an overview of the key findings of the project, the effects this influence might have on teaching, training and research, as well as the broader values of the university, and why this is of importance and deserves a fully informed debate.

-
1. **Thank you** to Mark Rosin and colleagues for inviting me here today.
 2. What I intend to do is to provide you all with an overview of the Scientists for Global Responsibility project with which I've been involved since 2004. The project examines the involvement of the military sector – corporate and government - in science, engineering and technology in the UK. I'll talk about the various publications which arose and the milestones provided for

understanding the presence and influence of the military sector in SET and what effects this has on both SET and the UK's security stance.

I'm only going to be able to point out some of the more obvious peaks and ridges in what is a very complex landscape – but that landscape is better mapped now thanks to our activities over the past **FIVE** years, and we are able to challenge the role of SET in the UK's military stance.

Scientists for Global Responsibility was formally set up in 1992 and is an advocacy group representing scientists, engineers, IT professionals and architects. SGR's task is to help build and sustain an ethical science and technology, primarily directed at the public good and sustainable approaches to the real needs of the world and thus safeguard the global environment and all its inhabitants.

I'd like to place the project into context, describe the phases of the work and leave plenty of time for free-ranging discussion and questions.

Some context:

3. The last twenty years in the UK have seen a number of profound changes take place, many of which are set within the overarching context of economic globalisation, and latterly the so-called 'War on Terror' following from 9/11 and similar atrocities.

Globally the world spends around \$1.3 trillion per year on military goals – this includes around \$96 billion on military R&D – contrast this sum with the \$56 billion spent on R&D for health and environmental protection, and around \$1 billion on R&D on renewable sources of energy.

Keeping with context I'd like to focus on **THREE** specific areas where change has occurred and how this relates to our project:

Firstly - The universities – Universities have changed significantly over the past twenty years, in ways which have implications for understanding the importance of the military sector involvement with UK universities. Overwhelmingly universities are part of the

knowledge economy with its commodification of both knowledge and related skills, including teaching.

Universities are expected to behave like businesses. Thanks to a snowstorm of papers and Reports from both government and business, universities must now have a primary economic focus – in teaching, training and research as well as in their wider societal role.

Secondly - Security – In the last **TWENTY YEARS** there's been a so-called Revolution in Military Affairs. This involves the creation of high technology, network-centric means of framing security and responding to actual events in both the military and increasingly in civilian areas. Such a high technology approach to security supports UK foreign policy too and impacts on civil society. The recent erosion of privacy and freedom owes much to the combination of security thinking and the neoliberal mindset in the UK.

Thirdly - Government – We've seen the rise of an increasingly neoliberal approach by government to personal freedom, to identity and privacy and of course the role of universities, their value and

their business friendliness. The rise of the commercialised university catalysed by government has embedded within it a set of business values – including secrecy, commercial sensitivity and managerialism. Such widespread commercialisation across the universities erodes the academic ‘commons’ and reduces transparency and many of the academic freedoms that universities have cherished.

4. Keeping these **THREE** areas – the **universities**, **security** and **government** and most importantly how they interact in mind let’s have a look at the military influence project and the milestones which mark the period from 2004, when the research began, to the launch of the SGR Report *Behind closed doors* recently. The project gathered data from public sources, through interviews and discussions. We looked at press releases and websites from universities, commercial and government sectors. We also spoke with those in universities funded or not by the military sector and those whose expertise was in security in its widest sense.

This first phase of the project resulted, in January 2005 in the publication of *Soldiers in the laboratory*.

This Report was the first time in almost 40 years that a thorough analysis was undertaken and published of the military presence within teaching, training and research in the UK. *Soldiers in the laboratory* used case studies to compare the military and non-military uses of SET, and provided detailed descriptions of the multitude of ways that militarisation entered the universities. We also spent some time discussing the ethical questions of the involvement of the military sector in teaching, training and research and the framing of the UK's defence position. We examined in detail the narrow conception of security. The Report ended with some recommendations to regain some kind of balance in the use and value of SET.

Some of the conclusions or **milestones** found in the Report are:

A. We found and described a **wide ranging variety of partnerships** – involving mixtures of: government, corporate and research council funding or all three with university researchers – very briefly these are:

First Defence Technology Centres: **Four** at present: Data and information handling; autonomous engineering; human factors; electromagnetic remote sensing.

Secondly - Towers of Excellence – Corporate-led with university involvement **FIVE** to date – areas include radar; guided weapons; electronic warfare and underwater sensors.

Thirdly - Defence Aerospace Research Partnerships – **MoD, EPSRC & DTI** funded: 14 projects at **SEVEN** universities.

Fourthly - Joint Grants Scheme – **Ministry of Defence plus research councils** – latest figure for the value was around £6 million per year. This scheme is under review following the Defence Technology Strategy.

Fifthly - Interdisciplinary Research Centres – **Two** in nanotechnology and **one** in quantum processing.

Sixthly - Rolls Royce University Technology Centres – a total of 20 or so in the UK and Scandinavia; they involve university researchers working within the UTCs on R&D of interest and value to the company. UTCs also interact with other military-funded groups within the universities on military R&D.

There are also a mixed bag of entirely or predominantly corporate programmes ranging from centres undertaking R&D in for instance manufacturing and composites, through research project support, staff funding, student bursaries, and training schemes in universities funded by the military corporations. There are also a swathe of corporate PR programmes involving school and colleges.

B. Our **second milestone** concerns the discovery of a **complex nexus of university-military interactions** connected to the partnerships I've just described which tends to drive the high technology national security stance. Business, as you can see from this overhead is located within the nexus of influence. This is one of the most worrying aspects which involves business in committees and decision-making

bodies – this nexus is not open and it's partisan, dissenting voices are absent. The Report maps this nexus in some detail.

C. A **third milestone** is the finding that science and engineering, its research and teaching, its image and funding is coloured by the military influence. By this I mean that researchers and university managers see military funding as bringing prestige to their establishment, once military monies come in more will follow, with the department being seen to thereby gather added value.

D. Related to this observation is that the high technology security stance is increasingly supported by an R&D depending on university expertise, **even though MOST R&D is undertaken within corporations and the few remaining government military laboratories.** This trend tends to sideline non-violent approaches to conflict resolution and peace building. It's also clear that even in the most research active departments military sector support creates conservatism – new initiatives are difficult to undertake.

E. The commercialised university in which the military is funding research or teaching programmes for business tends to compromise its old ethos – there is a loss of many of the traditional values which the universities were once keen to safeguard – examples such as conviviality, openness with the sharing of ideas and methods.

F. Another **milestone** from our first phase of the project is that studies have shown that military investment gives rise to military products despite the claim that military funding has non-military value - the path from military funding to non-military utility being long and complex – technology transfer has been weak over the past 20 years in the UK, despite claims made by the military sector.

G. We were acutely aware of the various US-UK special relationships, supporting the Revolution in Military Affairs and also the deeply flawed **Missile Defence posture**; it is dovetailed into the SET programme within UK and US universities and government laboratories.

H. Privatisation of the former government defence laboratories – DSTL and QinetiQ - highly contested and remaining a very sore point today. This privatisation programme helped to draw universities into military R&D.

The Report *Soldiers in the laboratory* was disseminated widely and we spoke at many different venues in the UK and in Europe.

Because of the continuing problems in Iraq and Afghanistan where RMA is actively being used – and the high technology incursions of Israel and the launch of the government’s Defence Industrial and Technology Strategies we were prompted to revisit and update the material in *Soldiers in the laboratory* in 2007. We undertook more research including interviews with researchers and produced the Report *More soldiers in the laboratory* –

Some milestones from this Report:

A. The Defence Technology Strategy 2006 which had a major corporate input stresses yet more university involvement with military R&D.

B. QinetiQ – comprising researchers from the former government defence laboratories is now totally privatised and so we cannot ask it about its involvement with the universities – FoI Act does not cover business. It is clear from a variety of sources, that QinetiQ has a very active programme of university collaboration and also provides voices on the research councils (including the MRC) and in government departments.

C. The War on Terror drives up the military corporations' profits and this helps to expand their sphere of influence

D. During conversations with those in UK universities we began to hear concerns being voiced about both commercial and military influence within the research community and the subsequent effects on the ethos of the university.

E. Some indication that there are those in government who question heavy reliance upon high technology weapons and their support platforms

F. We used the FoI Act and found evasion and refusal to speak with us from those approached, something which called for further investigation.

These 2 Reports have stimulated a great deal of discussion within the research community, peace and green groups and also helped us to contact and become involved in networks of people trying to change the universities to be more transparent, as well as question the involvement of the military sector with university researchers – the activist-scholar, also an active student body questioning not only collaboration but also investment in the military.

In discussions and conversations it became clear that we simply do not know in depth what happens on a day-to-day basis in those research groups or departments that attract significant military funding. We felt that it would be useful to know more about this and so we contacted those who worked in the military partnerships or not to hear what their experiences were. We were lucky to obtain further funding to explore this area using the FoI Act again and the

result is *Behind Closed Doors* which has generated the most interest from the media, by various groups and by visits to the SGR website so far.

Some landmarks from our latest Report:

A. There is an underestimate – by a factor of FIVE of the amount of R&D undertaken for military (‘defence’) objectives in UK universities.

B. From our 3 studies that I’ve mentioned and *Study War No More* it is clear that the military is involved throughout the academic community – all universities which have been sampled have some funding from the military sector.

C. Of the 80 or so people that we made contact with for BCD there was a **far higher response from the non-military funded groups (40%) than those receiving military money (20%).**

D. Despite claims of ‘corporate responsibility’ on the 16 university’s websites no VC would talk with us, nor would they suggest others to speak on behalf of the university.

E. Similarly, QinetiQ and BAE Systems simply did not respond to numerous approaches. Rolls Royce answered our questions but refused to engage to clarify points in the responses.

F. Many academics including senior ones voiced disquiet about military funding of research and of training programmes run by their universities for the benefit of the funding companies.

G. Because of evasion and refusal to speak we still do not know the fine detail of university-military collaboration nor do we know what pressures are brought to bear, if any, to conform to commercial practices occurring in the range of military-university collaborations.

I wish to end on a positive note and to stimulate your questions and thoughts:

Some of the highlights from the past **FIVE** years:

1. We now know a great deal about the extent and nature of the military sector involvement with SET in the UK, and also the pathways by which high technology is harnessed to the national security stance. This information is crucial to questioning the status quo, stimulating change and addressing security threats.
2. We have given voice in our Reports and presentations to many within the SET research communities (not only SGR members) who wish to challenge the loss of traditional values and the birth of the commercialised university.
3. There are the beginnings of a variety of discussions and student interest in military-university partnerships and investment in military companies – we have played a key role in supporting and stimulating questioning.
4. An encouraging activist-scholar network to be found in the UK which contests the involvement of powerful corporations in

universities. Here we have developed a role to empower and inform such networks.

5. We are getting a hearing in government and in the academic community. We have drawn attention to security being far more than smart weapons and ever more expensive support systems. Our view is now being expressed by many others – Oxford Research Group and Institute for Public Policy Research Security Group
6. The new National Security Strategy launched by the government in March 2008 does in fact take a far wider view of what constitutes security and how we need a variety of approaches to ensure that peace is supported and safety guarded. We think that our input to this process added to a critical mass from a variety of other places for our masters to listen to what was being said.
7. Our message has been well received by professional bodies in SET, including the Royal Society and we have reached a very wide variety of audiences, who are unhappy about using force projection as the major way of dealing with conflict.

Thank you!