

AUSTRALIAN SCIENTISTS AND THE COLD WAR

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INTRODUCTION

In the late 1940s and through the 1950s, Western countries underwent a period of anti-communist hysteria. As the military necessity for Western alliance with the Soviet Union against Nazi Germany collapsed, earlier anticommunism resurfaced and the Soviet Union was fostered as a feared enemy. The hysteria manifested itself in an elite-sponsored paranoia about communist agents who somehow threatened to topple Western institutions by working from the inside and providing information and comfort to the Soviet state. In practice, anticommunism served to mobilise national chauvinism and to oppose emerging support for internationalism in politics and economics. The cold-war crusade in addition ably served the careers of many politicians who joined the cause, helping them to discredit political opponents.

The anticommunist hysteria was also used to eliminate left-wing and other critical people from a wide range of institutions, including trade unions, schools, universities, artistic endeavours, and science. This process was most intense in the United States, and there is a wealth of documentation on the events there.¹ But other countries were not untouched.

This chapter² examines the nature of the cold-war suppression of Australian scientists, its motivation and impact. As such it focuses on political suppression by the state. With the advent of the "atomic age" the acerbic and sustained assault on scientists was not an isolated attempt to quell dissent among a now strategically placed professional group. The attacks provided a political key for confirming the premises of the cold war in Australia. They also provided a springboard for generalising the attack to other intellectual vanguard groups.

A little-known organisation, the Australian Association of Scientific Workers (AASW) became an unwitting focus of the attempt to gain more concerted control over the future direction of science and the determination of policies for its institutional development. In contrast with the conservative, isolationist mould in which Australian science had grown, the AASW offered a different set of ideals for science — that science be centrally related to social ends and be more vitally connected with industry. AASW's premature demise cannot be considered separately from a whole range of social alternatives that were dislodged in the early cold-war years.

To state the obvious, the price of suppression is always greater than the sum total of individuals damaged in the process. It visibly affects the process by which countervailing orthodoxies may be regenerated and reproduced institutionally. It limits the horizons of what is perceived as possible, feasible or even desirable. The following account attempts to demonstrate skeletally and sharply how state apparatuses can be mobilised to suppress dissent — in this instance, with the belated but ready support of a professional elite.

THE AUSTRALIAN ASSOCIATION OF SCIENTIFIC WORKERS

Formed in July 1939, AASW represented a distinct break in the elitist, "advancement of science" orientation of existing scientific societies. Its membership was open to all scientists irrespective of professional standing and in its heyday it could claim to represent one-third of the total scientific population. Its uniquely broad-based support was facilitated by the outbreak of war, which united scientists of very different political persuasions. Science was projected as a vital national resource, critical for "winning the war, as well as winning the peace" — with scientists at the helm in their role as social engineers.

By 1943 AASW had gained much credibility in government circles and its track record was indeed impressive. It was instrumental in having Australia's first scientific manpower registers compiled and in establishing a Scientific Liaison Bureau. The Bureau's brief was to act as an information and referral service for industry, to relieve "technical" bottlenecks and to overcome duplication of research effort. It set up joint production committees in strategic industries to advise on manufacturing processes, and was represented on numerous wartime committees. It investigated ways of overcoming critical shortfalls of raw materials previously imported from Germany. It lobbied for urgent funding to develop indigenous manufacturing processes for essential supplies such as acetone, butyl alcohol, aluminium sheet and potash salts.

Individual subcommittees made outstanding contributions. For instance the AASW Drugs Committee, a small team of research chemists who worked around the clock to develop pilot-scale synthesis of essential drugs, was a pioneering effort given that Australia had never before undertaken commercial synthesis of drugs. Their breakthrough in developing an anti-malarial drug became as important as ammunition when the incidence of malaria threatened to reach epidemic proportions among troops fighting in New Guinea.

As the gruelling exigencies of war slowly subsided, AASW was able to concentrate on community-based projects, and conducted a series of sweeping investigations into health, industrial relations, safety and work conditions, education, housing, nutrition and family budgets, social security provisions and rationing anomalies. Underlying these efforts was the promotion of science as a means for reducing social inequality.

AASW's twin constitutional goals of promoting science for society as well as the interests of scientists ultimately proved irreconcilable and deeply polarised its membership. Essentially the progressive-liberals argued for piecemeal reform based on incontrovertible "facts", while a small but disproportionately influential radical nucleus³ asserted that socially productive science could not be achieved without radical social change.

This polarisation first became evident in moves to unionise the AASW and later over the question of whether "planned" science was the appropriate strategy for making science publicly accessible and connecting science more vitally with industry and social productivity. In both instances, the progressive-liberals won out over the emerging anti-capitalist critique of its radical core. In the event AASW failed to become a scientists' union and a separate organisation, the Federation of Scientific and Technical Workers, was created for this purpose. The planning controversy, identified in its timing with Labor government moves towards a planned economy and "socialisation" of industry, ultimately alienated a sizeable proportion of AASW's senior "respectable" membership. Even so, AASW's demise at this stage was by no means self-evident.

The AASW was affiliated with the World Federation of Scientific Workers (WFSW) which was established in July 1946. The WFSW was to provide a forum to promote the political responsibility of scientists, the international collaboration of associations of scientific workers, and to lobby for disarmament and the abolition of nuclear weapons.

Most of the overseas scientists' protest movements (such as the many bodies affiliated with the WFSW) were expressly politically motivated. AASW's constitutional apoliticism was critically at odds with these developments. To the extent that it followed the thrust of

the WFSW, the AASW could not avoid the dilemma of responding politically to the atomic energy and defence debates in Australia and later in countering parliamentary insinuations of espionage.

The AASW scientists' early public visibility and pronouncements about atomic energy were to play directly into the hands of their critics. Eager endorsement of the internationalist ethos of science and appeals for the unfettered exchange of scientific knowledge were later interpreted as either evidence of scientists' ostrich-like naivety or as a subterfuge for sinister acts of disloyalty, even treason.

In its early public statements, the AASW urged the Australian government to initiate research on atomic energy and provide forms of "adequate control and development of Australian resources of uranium and thorium and . . . other sources of atomic energy". "Full international co-operation" was seen as a precondition both for acquiring the technical information and expertise necessary to initiate such a programme in Australia, and for ensuring that this project would in fact be turned to peaceful ends.

In conferences and other statements in the mid-1940s, members of the AASW emphasised the "special duty" of scientists as one in which their "special knowledge lays on them a special responsibility above that of other citizens". The possibility that the interests of governments might conflict with those of scientists and deny them their social engineering role was not an issue directly confronted or tackled. Rather, emphasis was put on the themes of international cooperation, opposition to secrecy, and devising a system of international control of nuclear power and weapons through the United Nations as essential for the future survival of humankind. At the time, it was perhaps impossible to predict how elusive such self-evident objectives were destined to be. Nevertheless, AASW's response to the dilemma the "atomic age" and internationalism posed for the social relations of science could not, and did not, take into account the impending cold war which effectively placed the option on social responsibility beyond its reach.

While for scientists the outcome of secrecy measures and the international control of atomic energy were inextricably linked, the presentation of atomic energy as a *public* issue depended very much on the public's appreciation of a distinction between the spirit of science and the practice of power politics. The timing of espionage charges against scientists in Canada, and potentially in Australia, both complicated and coloured public response to the issue.

THE CANADIAN CONNECTION

According to a statement released by the Canadian Association of Scientific Workers (CASW) in May 1946, thirteen scientists were "virtually kidnapped" during the night of 15 February. They were held incommunicado without access to legal counsel, friends and in some instances without charges being laid, for periods of two to six weeks. Canadian press accounts also commented on the extraordinary nature of the arrests: "the search and seizure powers conferred on police resulted in fantastic excesses of zeal; one policeman, for example, considered that share certificates, Hansard, and a copy of the Basic Writings of Freud were evidence 'that secret information had been communicated' to foreign agents".

The detainees were then subjected to the gruelling cross-examination of a Royal Commission. The Commission had been appointed within hours of revelations being made to the Canadian Ministry of Justice by Igor Gouzenko, a cipher clerk at the Soviet Embassy in Ottawa. Its mandate was to investigate the nature and extent of espionage activities perpetrated by a conspiracy whose immediate objective was to convey "the secret of the atomic bomb to Russia".⁴ Effectively acting as both judge and jury, the Commission proclaimed some of the detained guilty before criminal proceedings had started. It also charged others who "did not so far as the evidence discloses take any part in the subversive activities but would have done so if required".⁵ Specific allegations contained in reports of the Commission's hearing before criminal trials were held made the verdict of trial proceedings a "foregone conclusion".

The CASW in its statement alleged that the Royal Commission's sole justification was that "some of the accused had stated that they had a higher loyalty than that which they owed their country". As CASW dryly observed, "it would be difficult to find many scientists who have been engaged on war work, who though perfectly innocent, could not be convicted under this Act". Beyond deploring the use of legal procedure to repress scientific exchange, CASW found its hands tied. The arrest of Dr Raymond Boyer, then Assistant Professor at McGill University and National Chairman of CASW, made the CASW an easy target for a hostile press.

On 1 May 1946, Dr Alan Nunn May was charged with "communicating information prejudicial to the safety and interest of the State". Formerly Reader in Physics at London University, May had in 1943 joined the British research team to work on atomic energy in the United States, later moving to Canada to continue his research. In his daze May claimed that the information he passed on to the Soviet Union was "mostly of a character which has since been published or is about to be published". May pleaded guilty and was subsequently sentenced to 10 years' imprisonment.

J. B. S. Haldane, for the British Association of Scientific Workers, claimed in May's defence that May's actions occurred at a time when the Soviet Union was still officially an ally, and that he was motivated by the "great tradition of internationalism in science". AASW followed the British Association's lead in protesting against the severity of May's sentence. AASW saw the conviction of May as part of an attempt to stifle protest by scientists. AASW members were also concerned that secrecy restrictions on the technical aspects of atomic energy were being applied in blanket fashion to *all* information with any relevance to atomic processes. With the arrest of prominent Canadian scientists on charges of espionage, the threat of military control of science was seen in some quarters as a "threat of the military control of labour, for it is the beginning of Fascism".

As CASW itself anticipated, there was a strong possibility that the spy scare would be used to discredit the scientific profession and that it would be used to stampede the United States public and legislature into supporting legislation such as the May Johnson Bill. Under the terms of the original May Johnson Bill, the future development of atomic energy would be geared to armament and defence. CASW, along with some of the protest groups of US atomic scientists (which by April 1946 combined to form the Federation of American Scientists) correctly saw the introduction of the May Johnson Bill as compromising freedom of scientific exchange and the chances of developing atomic energy for peaceful purposes.

ATTACKS ON AASW

While some AASW scientists absorbed the shock that the internationalist ethos of science guaranteed no immunity from what they interpreted as a clear-cut case of political chicanery, the Australian press and a few vocal politicians seized on AASW's defence of Canadian scientists implicated in the Gouzenko affair as unequivocal evidence of communist infiltration and treason by AASW.

The Australian Labor Party had formed the national government since 1941. The government's outlook favoured a trend towards centralisation and internationalism. Cabinet documents reveal that the government's views on the uses of atomic energy for industrial power production were entirely consistent with AASW's own position at this time. The parties which formed the parliamentary Opposition — the Liberal and Country Parties — were able to use attacks on the autonomous AASW and on the major government scientific research organisation, the Council for Scientific and Industrial Research (CSIR) as a convenient lever for discrediting the Labor government.

One of those leading the attack on AASW was W. C. Wentworth, an aspiring politician, later elected to the House of Representatives in 1949. His antagonism towards AASW had been earlier aroused at AASW's 1944 Planning Conference. There the provocative interjections of Wentworth and his supporters effectively stymied conference approval of a series of specific resolutions of direct political and social significance. This time,

however, the stakes were rather higher. After the Canadian Royal Commission, Wentworth lost little time in denouncing AASW. Prominently featured in the pages of the *Sydney Daily Telegraph*, Wentworth claimed that Russia was using "her influence on AASW to get the technique to make atom bombs as soon as possible" and that

When [Russia] can make [atom bombs], she proposes to distribute them to Communist agents all over the world, so as to hold the world ransom and blow up our vital centres.

He charged that AASW was "a fifth column for Russia" whose "policy" was "that even if $\frac{3}{4}$ of the people in the world died, that would not matter as long as the remaining $\frac{1}{4}$ were Communists". Wentworth also alleged that

(1) "Russia operates largely through a physics lecturer at Sydney University [Dr R. Makinson], the Australian Association of Scientific Workers, the Australian Federation of Scientific Workers"; (2) "that these last two bodies have infiltrated the Council for Scientific and Industrial Research"; and (3) "[the] man who organised this treasonable conspiracy still remains a Lecturer in Physics at Sydney University".

AASW's fear that Wentworth's attack amounted to an attempt to "frame the left" was confirmed when, six months later in March 1947, Country Party parliamentarian Joe Abbott launched a vitriolic attack against AASW. The timing of Abbott's charges coincided with parliamentary discussion of the Anglo-Australian rocket range proposals, acceptance of which federal Cabinet had approved in principle on 19 November 1946. Meanwhile a protest movement hotly contested the establishment of an experimental testing range for guided projectiles in South Australia, mainly on the grounds that it could endanger the lifestyle of tribal Aborigines. By January 1947 the protest movement gathered momentum and had the support of some 36 organisations, including AASW.

On 6 March 1947, the day before Abbott's first attack on AASW, the government's Committee on Guided Projectiles had released its official report on the rocket range. Through a series of conflational acrobatics, Abbott used a recapitulation of the Nunn May case and the Canadian espionage trials to insinuate a concrete espionage connection between the Canadian and Australian Associations of Scientific Workers. He strongly urged that the government hold a Royal Commission to investigate "the whole of the communist activities of Australia", evidence of "spy rings" and communist associations among AASW and CSIR personnel. Abbott then named six AASW members and a member of the executive committee of CSIR as security risks. Abbott's insinuations were seen as both an attempt to silence AASW's ("expert") opposition to the rocket range proposals and to discredit the Labor government's present security arrangements.

Apart from insisting on a Royal Commission as a means to outlaw the Communist Party of Australia for the second time within five years, Abbott was also engineering a case for instituting security screenings on all CSIR research personnel and, effectively, for the control of science in Australia. In claiming that AASW's executive used "secret study groups" to turn its members into "traitors", Abbott's charges of communist infiltration of CSIR through AASW implied a sinister symbiotic connection between the two organisations. Abbott's attack was consolidated by contributions from several other members of the federal Opposition.

Stung by the allegations made under parliamentary privilege, AASW's scope for redress was by now severely circumscribed. Faced with an "orgy of redbaiting" by the press, AASW's Federal Council was reduced to sending letters of protest to the Prime Minister and sympathetic members of the House of Representatives.

After the parliamentary attacks were made on AASW, it became clear to those who still remained sympathetic to AASW's overall platform that they could no longer remain members of AASW without considerable risk to their careers and livelihoods. Initially, many of those who remained with AASW until March 1947 refused to believe that AASW harboured "fellow travellers". After several of its members were named in Parliament in

March 1947, to be a member of AASW *implied* Communist Party membership.

By 12 June 1947 legislation for *The Approved Defence Projects Protection Act* was passed, and on 20 June the Woomera rocket range was declared an approved project. From the point of view of stifling protest and compelling the Labor government to accept the premises of the cold war, the Opposition's campaign had been resoundingly successful.

That the wider base for support for the protest movement's future activities had all but evaporated may be judged by two facts. First, only one Member of Parliament raised any objection to the proposed Approved Defence Projects Protection legislation. Second, earlier trade union moves to organise a black ban on all rocket bomb manufacture and experimentation were successfully countered by the Industrial Groups and other conservative elements in the trade union movement which denounced the proposal as communist inspired.

The *Act* included penalties of up to 12 months' imprisonment and/or £5000 fine for anyone who "by speech or writing advocates or encourages the prevention, hindrance or obstruction or carrying out of any approved defence project". These security measures had obvious implications for the CSIR Division of Aeronautics since the Anglo-Australian Project involved the Division's continued wartime research services on military aircraft for the RAAF and development of a gas turbine engine.

CSIR ATTACKED AND REORGANISED

Early in 1947 the Chief Executive Officer of CSIR, Sir David Rivett, gave an address on "Science and Responsibility" to the Canberra University College. The speech contained a fairly standard defence of autonomy in science:

If national sovereignty demanded the right to prepare secretly for the destruction of other sovereignties, let those who took the responsibility for such a decision keep their projects clear of national scientific institutions in which traditional freedom of science must be maintained.

On 25 March 1947, Abbott quoted from Rivett's address, urging the Prime Minister to ensure that "only those officers of the council be employed on research into guided weapons who dissociate themselves from his views".

To clinch his case of guilt by association, Abbott then asked John Dedman, the Minister responsible for CSIR, to justify Arthur Rudkin's present employment with CSIR, given Rudkin's previous conviction in Perth under the National Security Regulations on 10 June 1940. At that time Rudkin had allegedly used his honorary position as air raids precaution warden at Victoria in Western Australia to convey privileged information⁶ to the Australian and British Communist Parties. Rudkin's "information" was in fact fairly common knowledge in Britain at that time. Rudkin was subsequently sentenced to four months' imprisonment. Soon after his release, Rudkin was given contract work with CSIR's Melbourne Forest Products Laboratory. There he worked on developing plywood products. On 23 April 1947 Abbott produced samples of recent articles written by Rudkin to demonstrate that Rudkin's sympathies had not significantly changed since his conviction in 1940. An example of Rudkin's present "treacherous" activities included his opposition to Nunn May's sentence as an instance of the attempt "to terrorise scientists".

In the following year, any reserves the government might have had to defend the abstract principle of freedom in science were depleted by its struggle to survive a formidable campaign against its bank nationalisation moves. Responding to earlier insinuations against CSIR officers, on 25 August 1948 Chifley instigated a report on CSIR's organisation to be carried out by W. J. Dunk and H. C. Coombs, two high-ranking public servants. Two weeks later, the Opposition lost little time in using the Estimates Debate in Parliament to launch the next battery of indictments against CSIR and Rivett. The Acting Leader of the Opposition, E. J. Harrison, set the pace by asserting that the United States Government would withhold defence information from the United Kingdom and Australia because of the Australian Government's deficient security arrangements for its own science organisation. A similar unsubstantiated claim had been made in the Sydney press some months earlier. This

time, however, Artie Fadden, leader of the Country Party and an inveterate anti-communist, produced a "secret document" listing a series of disturbing allegations. This was the Opposition's trump card against Rivett and the CSIR.

Fadden's "secret document" claimed to be a "minute" of two confidential meetings: the first between Prime Minister Ben Chifley and the Executive Committee of CSIR on 6 July 1947; the second between Chifley and the British Cabinet on 8 July 1947. Specifically, the document alleged that the US Government was reluctant to convey "certain specially secret information" to Australian authorities because of its belief that the Australian CSIR "might not be fully under the control of the Australian Government". Fadden repeatedly refused to table this document in Parliament on the grounds that "the Government cannot and must not be trusted".

The Opposition's case soon degenerated into unrestrained invective against Rivett, Makinson and Rudkin. Using Abbott's well-tried technique of precarious innuendo, Harrison connected Rivett's advocacy of "free trade in scientific knowledge" with that of renowned communists, such as Makinson. Abbott then met Dedman's denial of the Opposition's charges with the rejoinder that Dedman was simply protecting his own appointments in the CSIR and was not sufficiently concerned about communist infiltration.

Again Abbott produced Rivett's Canberra speech as evidence of Rivett's desire to "protect certain shibboleths and faiths, to the detriment of the interests of Australia". Abbott then accused Rivett of preaching "wickedly and wrongly, the most dangerous doctrines to our young scientists". Characterising Rivett's approach as "as near to treachery as one can get", Opposition member Archie Cameron recommended that "the proper thing to do with Sir David Rivett would be to relieve him of his duties". The gravity of the Opposition's assertions and its flair for adding inaccuracies to insults were made at a time when CSIR had only two officers working in the area of nuclear energy research.

Press coverage of the debate largely endorsed the Opposition's attack on CSIR, against men with no right of reply or redress. The *Sydney Daily Telegraph* went so far as to suggest that "Mr Fadden holds a whip which he should use without mercy".⁷ In turn press reportage had the effect of revitalising the Opposition's unrelenting and scurrilous campaign when the debate resumed on 1 October 1948. With few exceptions, little press attention was given to the statements of Sir Henry Tizard, then Chairman of the British Government's Research Policy Committee, which emphatically denied that Australian security presented any problems for negotiations between the UK and the US governments.

Most of the government's defence was sidetracked into attacking Fadden's secret document as a forgery or itself a breach of security. The press interpreted this evasion as a convenient smokescreen which thoroughly vindicated Fadden's claims. Certainly there is circumstantial evidence to suggest that Fadden's allegations had some basis in fact. The government's denials put it at a severe tactical disadvantage. It gave credence to more serious charges later.

But by this time the attacks had led to a number of major concessions by the government. In December 1948, Public Service Bill (No. 2) was ratified in Parliament, enabling the government to transfer work performed by CSIR to other Commonwealth departments. The Division of Aeronautics was duly transferred to the Department of Supply and Development in February 1949. On 19 May 1949, with the passing of amendments to the *Science and Industry Act of 1926*, CSIR was reconstituted and renamed the Commonwealth Scientific and Industrial Research Organisation (CSIRO). A new executive, without Sir David Rivett, took office.

With these amendments, the government assumed full responsibility for CSIRO through the chairman of its executive council, now to consist of five members, three of whom were scientists. The executive council was to be appointed by the Governor-General on the advice of the responsible Minister, and would be in charge of initiating research and investigations and for making funding recommendations to government. All scientific

officers were to be employed by the Minister, not the Public Service Board. CSIRO employees were now required to take an oath of allegiance. As Dedman put it, "the present staff would have to pass a 'character test'. There would not be any political test".

Despite AASW's earlier dire warnings, it was not until after the parliamentary attack on Rivett and the CSIR that other scientific bodies reacted sharply to the inevitability of secrecy provisions and the threat that "political exercise of control" in science represented. By this time, such protests awkwardly conceded the necessity for security restrictions in military science, while offering varying rationalisations as to why similar conditions in the conduct of fundamental research would irrevocably compromise its future progress. Not surprisingly, these arguments met a cool response in military circles. The scientists' protests were largely ineffectual.

The *Melbourne Herald's* tribute to Rivett on his retirement as a "genius for getting things done" and someone who collected honours and exhibitions "as easily as a housewife gathers flowers" must have been small comfort for someone who had made such outstanding contributions to Australian science and to two world wars.

AASW's DEMISE

Between the passage of the Public Service Bill of 1948 and the 1949 amendments to the *Science and Industry Act*, Jack Lang, a right-wing Labor parliamentarian, renewed the attack on AASW, joining in what had been a campaign conducted by the Opposition. On 5 November 1948, following the parliamentary debate on communism, Lang made several allegations against two former executive members of the AASW, Spencer Smith-White, a geneticist, and Paul Klemens, a postgraduate student in theoretical physics. Both had been signatories to outspoken statements against Abbott's earlier offensives.

In pointing out Smith-White's connections with the "communist-controlled" AASW and his Communist Party membership, Lang called on Chifley to establish whether Smith-White had "gone abroad on a government mission and, if so, will the Prime Minister obtain a report of his communist activities, and forward it to the British authorities?" Given Smith-White's then occupation as lecturer in botany at Sydney University, Lang's insinuations about Smith-White's capacity for espionage were rather far-fetched. In his defence Smith-White denied Communist Party membership, asserting that his loyalties "are neither Russian nor American but British, and that as a geneticist the 'Genetics Controversy' in Russia has caused me considerable concern".⁸

Lang's attack on Paul Klemens was hardly more legitimate, and was clearly designed to curtail any future academic career Klemens might have had in Australia. Criticising the government for rewarding Klemens with a postgraduate scholarship to Cambridge, Lang asked what precautions the government had taken

to make certain that such scholarship holders are not affiliated with Communist organizations, prior to their being given credentials for overseas study, especially studies that involve contact with the work of nuclear physics? Is Klemens to return as a lecturer in physics at the Australian National University in Canberra?

Klemens, then based at Oxford, not Cambridge, was quickly defended by Ian Clunies Ross, CSIRO's new Executive Chairman. A university medallist awarded a postgraduate scholarship on the recommendation of Mark Oliphant, Klemens had evidently accepted the position of Acting Secretary of AASW in an attempt to counterbalance "increasing influence of extreme left-wing activists".⁹ A letter from H. C. Coombs to the Prime Minister's Department reveals that the "Registrar of the National University has been good enough to let me have some information *re* Klemens".¹⁰ (Klemens subsequently had a successful academic career in the US and now holds a professorship at the University of Connecticut.)

While Lang's attack on Smith-White, Klemens and the AASW was mild in comparison with his earlier anti-communist attacks on the Chifley Government, it was motivated by a

deep-seated xenophobia with a strong anti-intellectual thrust. Lang made other attacks on Australian intellectuals, particularly those employed by government instrumentalities and writers and artists in receipt of Commonwealth grants.

With Lang's attack on Smith-White and Klemens, AASW's decision to dissolve was sealed. AASW formally wound up its affairs on 31 July 1949. In other circumstances, the organisation might have provided a fertile breeding ground for a coherent rather than an ad hoc scientists' protest movement. The expedient attack effectively put an end to the public articulation of social responsibility in science for a generation of scientists in Australia. The changed ideological climate of the cold war had the effect of turning the quest for autonomy into a utilitarian pursuit for greater funding for fundamental research. Apart from the obvious repercussions this had for the future articulation of science policy, it also cemented the prospect that science in Australia would continue to be marginalised. In an important sense then, AASW's premature demise marked a watershed in the attempt to negotiate a central relevance for science in society and to break down the isolationist mould of scientific production in Australia.¹¹

COLD-WAR CASUALTIES

Not surprisingly, most of those attacked in the internal cold-war offensive were physicists or research scientists whose public outspokenness and sympathy for the Soviet mode of science made them ready victims. While some AASW members named in Parliament recovered forfeited promotions ten years later, the scars were to remain permanent. A number of other scientists chose to remain in voluntary exile overseas following the institution of mandatory security checks in several Australian universities. A few were unfortunate enough not to regain professional admission in their chosen area of specialised research.

Following the intemperate parliamentary attacks on Dr R. E. B. Makinson, an officer of the Commonwealth Investigation Branch (CIB) sent a report to Professor V. A. Bailey in an attempt to block Makinson's application for the Chair of Nuclear Physics at Sydney University. With the delicacy of a sledgehammer, this communication states:

As Chairmanship of Nuclear Physics will carry with it research into atomic energy, you may feel with me [CIB] that the matter of an appointment is of very great national significance and the fact that Dr. Makinson is a professed Communist should be taken into account.

The concern expressed by the CIB evidently carried some weight since this Chair of Physics was to remain vacant for the next seven years.

Following his election to the House of Representatives in 1949, W. C. Wentworth's continuing vendetta against Makinson did little to alleviate Makinson's plight. As late as 1952 Wentworth was still able to gain political mileage by dubbing Makinson a "traitor" on the basis of his "influence" in the now defunct AASW. Makinson was to share the distinction, with fellow founding AASW veteran Jack Legge, of being one of the very few of his academic contemporaries never to be promoted to a professorship.

A different sort of consequence in the wake of attacks on CSIR was a reversion to strictly professional obligations and loyalties by the scientific community. In this context, the neutrality of science was offered as both a defence for, and rationalisation of, the need to protect autonomy in science. Few perhaps understood this dynamic as keenly as Ian Clunies Ross in his handling of the "Kaiser affair".

This incident occurred in late 1949, soon after legislative changes to the *Science and Industry Act*, and renewed the newly formed Executive's anxiety that the government would exercise greater political control over CSIRO. One of its officers, Tom Kaiser, on overseas leave to complete a Ph.D., was involved in a public demonstration outside Australia House in London. Kaiser had distributed leaflets protesting against the gaoling of eight trade union leaders during a recent coal strike in Australia. Kaiser was himself the son of a factory worker and a number of his relatives were working in mines at the time. He had previously been

engaged on radiophysics research with CSIRO, and had made a "valuable contribution to the Australian war effort in helping to develop means of countering Japanese radar". In 1947 he went to the Clarendon Physics Laboratory, Oxford University, to begin basic research work in nuclear physics. Having completed his Ph.D., Kaiser at the time of his participation in the demonstration was set to return to the Radiophysics Division of CSIRO.

The Australian Government instructed the High Commissioner in London to conduct an enquiry into Dr Kaiser's actions. Press reports seized on the Kaiser incident as an episode in "national humiliation" with serious repercussions for Australian diplomacy. Kaiser's actions, it was claimed, "will undo much work done in recent months to allay British and American suspicions that Australia cannot be trusted with secret information about modern weapons". Rumour also had it that only two months before the Kaiser incident Australian officers were excluded from a British military demonstration of "certain secret types of American weapons". This exclusion was evidently based on American "awareness that some Australians sent abroad on technical missions are Communists". The press was also quick to point out that "when a student is assigned to research on nuclear physics, with the backing of his Government, he is placed in work where no sure line can be drawn between harmless and potentially dangerous knowledge". In the circumstances, an expected "government purge of scientists" seemed more realistic than Dedman's "ridiculous assurance that Kaiser had no access to secret information".¹²

On 19 August 1949, the CSIRO Executive ordered Kaiser's immediate return to Australia, but stated that it "cannot agree to your return to radio physics or to nuclear physics". The Executive insisted that failure to comply would mean immediate termination of Kaiser's employment with CSIRO. Kaiser rejected these directives on the grounds that "just as during the war I regarded it as my first duty to contribute to the defeat of tyranny in other countries, so . . . I will in the future apply my energies to fighting for the retention of free science as the only one that can flourish and raise the prestige of Australian science in the way that C.S.I.R.O. has done since its foundation". What followed for Kaiser was a period of considerable personal and financial hardship, during which time he found it necessary to undertake study of a separate branch of physics — theoretical physics — to gain future employment in England. The flowering of Australian radiophysics during the post-war years is indicative of the professional price Kaiser was to pay for his decision to change research areas. Kaiser later took up a position at Sheffield University where he is now Reader in Physics.

The handling of the Kaiser affair was perhaps the logical consequence of Clunies Ross's concern to appease any doubts the government may have had about CSIRO's ability to deal with its own affairs. To do less would have been to jettison any further appeals to autonomy which was to become the fulcrum in CSIRO's future funding and policy formation.

Following Kaiser's dismissal, Clunies Ross issued a memo to all CSIRO officers forbidding employees from participation in "controversial political issues", including the following justification:

There may be a few amongst us who confuse scientific freedom with political licence, even to the extent of claiming the right to bring public discredit on the Organization or the Government of which they are the servants . . . Even were there no other consequences arising from the involvement of C.S.I.R.O., however indirectly, in political controversy, scientific discredit may still be brought upon us, since, in such controversy, objective truth and scientific analysis are almost inevitably confused by hearsay, prejudice and emotion . . . [I]n fairness to those who may be tempted to disregard these responsibilities it is only right to let them know the serious view the Executive must take of any such disregard in the future.

As one CSIRO officer later commented, the effect of this memo¹³ was to place a binding, "voluntary" censorship on any discussion of political issues on CSIRO premises for a

considerable period of time. At the time of Kaiser's likely dismissal, Dr Ralph Traill, Chairman of the Victorian Division until AASW's demise, commented that

It is not political freedom merely to be allowed to hold what views you like; but to be able to express them in political action . . . Kaiser has apparently considerably embarrassed the [CSIRO] Executive; and this clearly shows its dependence on the Government, the opposition, and the powers that stand behind them both.

Eric Burhop was another keenly active and outspoken founding member of AASW's Victorian Division. Early in the war years, Burhop was seconded to CSIR's Radiophysics Laboratory to carry out pioneering work on the production of centimetre valves. In a collaborative effort with Dr D. F. Martyn, he produced Australia's first laboratory model of a magnetron in May 1942. A few months later Burhop was transferred back to Melbourne and, in his capacity as officer-in-charge of the Maribyrnong Munitions Supply Laboratory, was responsible for the pilot production and testing of resonant cavity magnetrons in Australia. However, Burhop's later international reputation evolved from his connection with the Manhattan Project. In 1944 he joined the British party which had been working with the United States team at Berkeley, California, on the electromagnetic separation of uranium isotopes.

Burhop found it impossible to regain employment in his capacity as radiophysicist in Australia after the war. His application for the Chair of Physics at the University of Adelaide was rejected. Shortly afterwards, Burhop was offered lectureships in applied mathematics and later physics at the University College of London, obtaining the Chair of Physics there in 1960. In view of Burhop's superlative contribution to Australian science during the war years, the rejection of his application for academic appointment in Australia was most likely not decided on academic grounds alone, especially considering that at the time most Australian universities required security clearances.

Like his Australian contemporary Mark Oliphant, Burhop was to devote much of the rest of his life working towards disarmament. In 1957 he acted as one of the intermediaries between Joliot-Curie and Bertrand Russell in calling a conference following the Einstein – Russell statement against the hydrogen bomb. These negotiations resulted in the first of the Pugwash conferences in July 1957. In 1969 Burhop became President of the WFSW and was awarded the Joliot-Curie Medal of the World Peace Council. He was belatedly elected a fellow of the Royal Society of London in 1963.

While Burhop's career was not irrevocably impaired by his exclusion from Australian academia for security reasons, his later achievements testify to qualities of personal and political resilience and breadth of vision — qualities which were actively denied expression in Australia's cold-war years.

Less fortunate was the more gradual, although no less invidious outcome in the 1950s for other members of the now defunct AASW who redirected their energy into the peace movement. John Callaghan, a founding member of the Queensland Division of AASW, was sacked from his position as biochemist at the Institute of Medical Research for taking three months' leave of absence to act as the Queensland Peace Council's delegate to Peking in 1952. According to interview sources, the Institute refused to confirm approval or refusal of his request for leave of absence until after the date he had officially requested that the leave begin. He subsequently faced six years' unemployment with a family of seven to support. Dr Steve Macindoe forfeited his career promotion prospects for ten years over his involvement with the Australia–China Friendship League. Dr Len Hibbard's position in CSIRO was placed in jeopardy over the Petrov Affair (which claimed many victims outside science).¹⁴ Most of the AASW members named in Abbott's original parliamentary attack were to experience setbacks in subsequent career options. Particularly poignant was the blacklisting of Arthur Rudkin. Rudkin's appointment with CSIR(O) was terminated in late 1948.

Formerly described as "a brilliant chemist", Rudkin later found work in a boot factory. Rudkin eventually found employment with the Sydney Metropolitan Water Sewerage and Drainage Board as an assistant chemist in the Research Branch. Some fifteen years later, he opted for the precarious vagaries of freelance work as a part-time tutor/demonstrator in physics and chemistry at Sydney University and the University of New South Wales, and translation of scientific papers.

"Victimisation", however, cannot be indexed according to the career loss alone. Arguably, far more damaging was the pervasive environment of political and social repression which stunted the burgeoning of intellectual and cultural life so evident in the early to mid-1940s. The arrival of the *Lucky Country* with the post-war boom was a bitter palliative for those whose earlier endeavours became recessed within the walls of material expansion that Australia enjoyed in the 1950s and 1960s.

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References

1. See especially Cedric Belfrage, *The American Inquisition 1945-1960* (Indianapolis: Bobbs-Merrill, 1973) and David Cate, *The Great Fear: The Anti-Communist Purge under Truman and Eisenhower* (London: Secker and Warburg, 1978). See also for example Robert Justin Goldstein, *Political Repression in Modern America from 1870 to the Present* (Cambridge: Schenkman, 1978); Chandler Davis, "... From an exile", in Robert O. Bowen (ed.), ... *The New Professors* (New York: Holt, Rinehart and Winston, 1960), pp. 182-201. For specific accounts of Australia's period of "McCarthyism", see N. R. Whitlam and J. Stubbs, *Nest of Traitors* (Queensland: Jacaranda Press, 1974); H. Radi and P. Speeritt, *Jack Lang* (Sydney: Hale & Iremonger, 1977); the *South Australian White Report* (1978); and J. B. Paul, "Labor's Petrov legend", in R. Manne (ed.), *The New Conservatism in Australia* (London: Oxford University Press, 1982), pp. 114-40, 283-5.
2. Most of the material in this chapter is directly taken from or based on Jean Moran, "Scientists in the Political and Public Arena: A Social-intellectual History of the Australian Association of Scientific Workers, 1939-49" (M.Phil. thesis, School of Science, Griffith University, 1983). Sources for all quotes and other material not explicitly documented in this chapter are given in this work.
3. At this early stage the progressive-liberals numerically outnumbered the more radical members and the progressives had a decided influence on AASW's official line at a policy level. Even so, the influence of the radicals can be said to be "disproportionate" to their numbers in that they were far more active in subcommittee and lobbying activities which to a large extent sustained the momentum of many AASW platforms. The radicals' input was most visible in the Victorian and New South Wales Divisions where, after the resignation of AASW's more senior and "respectable" membership in the mid-1940s, their influence registered even more sharply.
4. R. Bothwell and J. L. Granatstein (eds), *The Gouzenko Transcripts* (1982), p. 4.
5. Paul Dufour, "'Eggheads' and espionage: the Gouzenko affair in Canada", *Journal of Canadian Studies*, vol. 16, nos 3-4, Fall-Winter 1981, p. 190.
6. Rudkin had forwarded a brief account of existing ARP provisions in Australia to Professor J. B. S. Haldane (then adviser to Churchill on ARP and scientific matters) and sought his advice as to how these could be improved. This request and Rudkin's appraisal of the inadequacy of Australian ARP were later interpreted by security

personnel as an attempt to "sabotage" (rather than improve) existing ARP arrangements. (Personal communication from A. Rudkin, 10 December 1983.)

7. Sydney *Daily Telegraph*, 18 October 1948.
8. Australian Archives, CRS A461 Item 327/1/4, 6 November 1948.
9. *ibid.*
10. *ibid.*, 12 November 1948.
11. AASW's fate was paralleled by that of several other radical and reformist groups of the period, such as the Studio of Realist Art whose history has been documented by Richard Haese, *Rebels and Precursors: The Revolutionary Years of Australian Art* (London: Allen Lane, 1981).
12. The newspaper quotes are from, respectively: *Melbourne Herald*, 1 August 1949; *Sydney Morning Herald*, 29 July 1949; *Melbourne Herald*, 2 August 1949; *Melbourne Herald*, 1 August 1949; *Sydney Sun-Herald*, 31 July 1949; *Melbourne Herald*, 1 August 1949.
13. Clunies Ross was also alleged to have announced that any officer objecting to the dismissal of subordinates would himself be dismissed.
14. See Bruce McFarlane, "Asio: the past", in Pat Flanagan (ed.), *Big Brother or Democracy?* (Adelaide: Department of Continuing Education, University of Adelaide, c. 1980), pp. 8–23; Don Watson, *Brian Fitzpatrick: A Radical Life* (Sydney: Hale & Iremonger, 1979). On the effect of ASIO and security checks in the cold-war period, see K. P. Barley, letter, *Australian Journal of Science*, vol. 19, April 1957, pp. 203–4; R. M. Hartwell, letter, *Vestes*, vol. 3, no. 4, December 1960, p. 51.