

The Driving Force of Achievement? British Atomic Tests in Australia, 1952-1957

by Brad Cooper

In 1952, Great Britain joined the United States and the Soviet Union to become the third country in the world to acquire atomic weapons. Britain, however, would not have achieved this milestone as quickly nor as smoothly, had it not been for the Australian government, who allowed its land to be utilised as a testing ground. Also in the process, money, resources, scientific and military personnel were provided to secure Britain's independent nuclear deterrent. The significance of this relationship and the importance this particular episode holds in the continuing story of the nuclear age should not be understated. Between 1952 and 1957, the British government detonated twelve atomic bombs, collectively labelled as their major trials. Three of these tests were conducted on the uninhabited Monte Bello Islands off the far north coast of Western Australia, with the remaining nine conducted on the mainland in the state of South Australia. In one of the few books that deals directly with the subject, Lorna Arnold's *A Very Special Relationship*, highlights the enduring repercussions of the tests, considering that:

*No other nuclear power developed its nuclear weapons as Britain did by testing them with the co-operation, and in the sovereign territory, of another independent—but non-nuclear nation.*¹

As already alluded to there is a pronounced paucity of information on the subject of British tests in Australia. Any research conducted has tended to generally take one of either two approaches. Early works, such as Margaret Gowing's twin volume series *Britain and Atomic Energy*, covering the years 1939-1945 and 1945-1952; Andrew Pierre's *Nuclear Politics* and Elisabeth Barker's *The British Between the Superpowers*, heavily concentrated on the bomb making process, the political struggles and the tactics of foreign diplomacy, all framed against the background of the fragile and fluctuant Anglo-American partnership. As a consequence Britain receives all the limelight and all the best lines; Australia is either firmly entrenched down-stage or hidden totally in the wings.

With the interest generated by the 1985 Australian Royal Commission into British atomic tests, authors from both Australia and abroad turned their attention to this long ignored subject. In striving to make reparation, however, the approach that was adopted resulted in overcorrection. Work from J.L. Symonds and Lorna Arnold simply re-hashed a lot of the earlier research unearthed by Margaret Gowing but also included a wealth of ministerial correspondence, parliamentary debates, press reports and scientific and military communiqués—not to mention copious amounts of scientific and statistical data in relation to each individual test. It is, of course, valuable information, but because it was not worked into any wider thesis or thematic context, its impact is lost under a welter of repetitive facts and figures.² The other end of the spectrum was occupied by those writers catering for the popular market. Using

¹ Lorna Arnold, *A Very Special Relationship* (London: HMSO, 1987), p.xv.

² **In reference to:** Arnold, *A Very Special Relationship* and J.L. Symonds, *A History of British Atomic Tests in Australia* (Canberra: AGPS, 1985).

the findings of the Royal Commission, such projects adopted a journalistic style of reporting, incessantly digging for conspiracies, scandals and cover-ups.³

Regardless of the approach taken, all these accounts operated on the one basic premise: without the historic imperial connection, Britain as the dominant 'motherland' would never have been able to test its weapons in its former subservient colony. Commensurate with the comments of Commissioner Mr Justice James McClelland, who labelled the man responsible for agreeing to British tests in Australia, Robert Menzies, as nothing more than a 'lickspittle of the British', many writers, such as those already mentioned, also attributed Menzies' Prime Ministership as integral to the consolidation of the imperial bond and the subsequent facilitation of the atomic program.⁴ For reasons that shall become clear, these factors, whilst very significant, fail to illuminate the full complexity of the story. This paper will instead argue that the Australian government's willingness to allow the tests was motivated by self interest; an interest congruent with perceptions of national identity and fuelled by historical 'mythologies', but also sustained by the very real challenges of the prevailing decade. This essay will be divided into two parts: first, to summarise the main events which brought the British and their bombs to Australian shores and second, to highlight some major themes of Australian political and social thought, which directly contributed to allowing the tests and inadvertently assisted in their legitimisation.

1939 – 1951

"Are we so helpless, that we can do nothing without the United States?"
- James Chadwick (British scientist).⁵

With victory emphatically secured in the Pacific in 1945, the isolationist United States of World War I and the neutral United States in the early years of World War II, now, in the wake of unprecedented devastation across Europe, positioned itself as the world's sole superpower. Its task was certainly made a lot easier by its possession of atomic weapons. In order to secure such dominance, namely against the designs of an emerging Soviet Union, the United States Congress in August 1946, passed the Atomic Energy Act, more commonly known as the McMahon Act.⁶ With life imprisonment or death representing the ultimate penalties, the McMahon Act prohibited the passing of any classified atomic information to any other country, including wartime allies Britain and Canada. It was a decision to have repercussions not only across the Atlantic but also across the Pacific.

³ **See, for example:** Robert Millikin, *No Conceivable Injury* (Melbourne: Penguin, 1986) and Adrian Tame and F.P.J. Rowbotham, *Maralinga: British A-Bomb Australian Legacy* (Melbourne: Fontana/Collins, 1982).

⁴ **This is quoted in many publications, however, specifically cited in:** Denys Blakeway and Sue Lloyd-Roberts, *Fields of Thunder* (London: George Allen & Unwin, 1985), p.1. **This book also provides a concise summary of the Royal Commission's proceedings.**

⁵ **Quoted in:** Margaret Gowing, "Britain, America and the Bomb", In David Dilks (ed) *Retreat from Power*, vol. 2 (London: Macmillan, 1981), p.132.

⁶ **General background information regarding Britain's atomic program is easily accessed through** Margaret Gowing, *Britain and Atomic Energy 1939-45* (London: Macmillan, 1964) **and by the same author,** *Independence and Deterrence* vol. 1 (London: Macmillan, 1974). **Also helpful as an overview,** Lorna Arnold, *A Very Special Relationship* and J.L. Symonds, *A History of British Atomic Tests*. **Explicit arguments or points of view are duly noted.**

Reception of the McMahon Act in the United Kingdom was mixed. For some, such as the powerbrokers in Whitehall, it was a devastating deathblow to any sort of technological and industrial collaboration sought since 1941. At the dawn of the nuclear age, which incidentally and ironically concurred with the dawn of World War II, Britain's involvement had been integral. McGeorge Bundy argues that, without British help, especially in the early years, the atomic bomb would not have been available to the Americans in 1945.⁷ The event to which Bundy mainly refers, is the scientific work of the Maud Committee, established in the wake of the Peirls-Frisch memorandum, which was released in the spring of 1940 by two physicists in Birmingham England—Rudolf Pierls, a refugee from Germany and Otto Frisch, a refugee from Austria. The memorandum not only gave account of the process required to successfully fissure uranium but also outlined the effects of radiation plus the moral and strategic implications involved with unleashing such a force. Fearful of German progress along similar lines, the urgently assembled Maud Committee had presented to the British Government by the summer of 1941, a report showing the feasibility of an atomic bomb. A copy of this report was taken to the still neutral United States, who then subsequently launched the massive Manhattan Project.

Although Britain had made the early scientific breakthroughs, it was in a distinct disadvantage to develop the bomb. Owing to constant aerial bombardment by Germany, Britain's lack of material and human resources rendered the enormous but essential industrial requirement an impossibility. British scientists and politicians had originally desired for pilot plants to be built in Britain and then moved later to North America, preferably Canada with US assistance. There was the fear, however, that all of Britain's work would be lost if the United States turned isolationist, like it did after World War I. With the gains made by the Maud Committee, the United States had suggested a joint project, but in light of the above fears, the British government was determined that only information would be exchanged. The enormity of the Manhattan Project, however, was to tip the balance of power immeasurably in favour of the United States, relegating Britain to its level of junior status. Whilst the British were still struggling to build their pilot plants, the United States with superior financial, material and human resources had surged ahead by the summer of 1942. Upon realising the upper hand had been lost it was the British government now appealing for a joint project with the United States - but they, however, were too late, had too little to offer and were now not wanted.

Various attempts were made to restore the relationship, such as Prime Minister Churchill's and President Roosevelt's rather clandestine Quebec Agreement, signed in August 1943. It enabled British scientists to participate in the Manhattan Project and to also take part in the exploration and purchase of uranium supplies. It also contained two other important provisions: first, if or when acquired, neither side would use the bomb without the other's consent and second, neither side was to communicate any atomic information to third parties except by mutual consent. After President Roosevelt's death, the Quebec Agreement turned out to be worthless, as no one in the US Administration had heard of it, or at least were not willing to acknowledge its existence.

After these passage of events had transpired, The McMahon Act was a fitting, almost inevitable conclusion. As Robert Millikin writes the Act represented,

⁷ McGeorge Bundy, *Danger and Survival* (New York: Random House, 1988), p.467.

*a new gung-ho attitude towards the atomic bomb in the United States, the view that the Americans must keep a monopoly over this terrifying new technology in order to maintain their new superpower role.*⁸

Concomitant with the mixed reaction the McMahon Act received, other members of the British atomic inner sanctum, such as the scientists and engineers, more aware of Britain's technological and industrial capabilities, believed the American decision presented them with the opportunity to finally pursue their 'independent nuclear deterrent' truly independent of United States assistance, and more pertinently, interference.⁹ As the possession of nuclear weapons both symbolised and transmitted real power from the core of the State, Britain, aware of its flagging influence in international affairs, looked to an independent weapons building program as a 'quick-fix', a panacea for its post-war ills. Whilst strategic considerations were of great importance, such as uncertain defence commitments by the United States in western Europe and the persistent fear of an emerging Soviet Union, it was Britain's desire for status which drove the covert operation. As Margaret Gowing neatly summarises:

*The British decision to make an atomic bomb had "emerged" from a body of general assumptions. It had not been a response to an immediate military threat but rather something fundamentalist and almost instinctive – a feeling that Britain must possess so climacteric a weapon in order to deter an atomically armed enemy, a feeling that Britain as a great power must acquire all major new weapons, a feeling that atomic weapons were a manifestation of the scientific and technological superiority on which Britain's strength, so deficient if measured in sheer numbers of men, must depend.*¹⁰

In later studies, Margaret Gowing has also argued that Britain's crucial and influential war-time atomic role, was an "important factor in obscuring from Britain her changed status in the world".¹¹ The Soviet Union's first successful detonation of an atomic device in 1949, whilst coming as a shock, served only to whet Britain's appetite for more firepower. However, it was also a hunger sustained through the implicit fear of being subjugated by a powerful force—either as a conquered nation by the Soviets or as a government continually coerced and cajoled by the United States. As summed up by Lord Cherwell, a close friend of Winston Churchill and scientific adviser:

*If we are unable to make the bomb ourselves and have to rely entirely on the United States for this vital weapon, we shall sink to the rank of a second-class nation, only permitted to supply auxiliary troops, like the native levies who were allowed small arms but not artillery.*¹²

⁸ Millikin, *No Conceivable Injury*, p.15.

⁹ Gowing, *Britain, America and the Bomb*, p.132.

¹⁰ Gowing, *Independence and Deterrence*, p.184.

¹¹ Gowing, *Britain, America and the Bomb*, p.132.

¹² **Quoted in:** Arnold, *A Very Special Relationship*, p.5.

Whilst the McMahon Act provided no real technological impediment to Britain creating its own atomic weapons, it was to have serious political and strategic limitations, creating diplomatic unease, resentment and suspicion, not to mention destroying many lines of communication. From the United States' perspective, what Britain had to offer was not worth worrying about. Whilst Britain was still struggling to even create an atomic device similar to the one that destroyed Hiroshima, United States President Harry S. Truman had already ordered the development of the infinitely more powerful hydrogen bomb or thermonuclear device. This was successfully tested in the Pacific in October 1952, the same year in which Britain conducted its first ever test. The Soviet Union tested their first hydrogen bomb the following August. Not only did Britain have to devise atomic weapons but it also had to reach thermonuclear status quickly if it was to be taken seriously by the United States. As one US Congressman colourfully pointed out, until Britain could achieve this, atomic collaboration would be akin to "trading a horse with a rabbit".¹³

The tumultuous Anglo-American relationship had also served to hinder Britain's chances of finding a suitable testing ground. American test sites were the first preference, largely because the infrastructure was already in place and it still allowed for the opportunity of collaboration, not a technical priority but very important to the British from a political and strategic standpoint. Test sites in Nevada, Eniwetok in the Pacific and seven sites in Canada were formally surveyed but there were problems: the United States was extremely slow in replying to any British request; when a response was produced it was vague and decidedly non-committal; the United States had also stipulated that in the event of a British test on an American site, all results should be made available to the US authorities—there was, however, no provision for any reciprocity. The British had also come to realise that any knowledge and experience gained independently from the test would be valued far higher by the Americans and would then, therefore, be far more useful in the long-term, as a bargaining chip to negotiate future collaboration.¹⁴

On 26 March 1951, British Prime Minister Clement Atlee sent a long top-secret but personal message to Australian Prime Minister Robert Menzies:

*... my colleagues and I accordingly now wish to ask whether the Australian Government are prepared to agree formally that (a) if necessary the trial should be held next year in the Monte Bello Islands and (b) that preparations to this end should begin forthwith between the authorities concerned in our two countries ...*¹⁵

In contrast to the Americans it was a request to which Menzies quickly assented. The Royal Commission reported that this decision by Menzies was taken in the absence of close consultation with advisers or even reference to his own Cabinet. Permission was duly granted without any scientific knowledge or associated health and environmental hazards fully explained.¹⁶ Seething with incredulity, the Commission attacked personally:

¹³ **Quoted in:** Gowing, *Independence and Deterrence*, p.450.

¹⁴ Arnold, *A Very Special Relationship*, p.22.

¹⁵ *Report of the Royal Commission into British Atomic Tests in Australia* vol. 1 (Canberra: AGPS, 1985), p.12.

¹⁶ *Ibid.*, p.7.

*In taking it upon himself to embrace British interests as being synonymous with those of Australia, and to expose his country and people to the risk of radioactive contamination, Menzies was merely acting according to his well-exposed Anglophilian sentiments. It was consistent with his approach when as Prime Minister in 1939, he announced that as Britain was at war with Germany, Australia also was automatically at war with the same enemy.*¹⁷

Following Britain's rather inconsistent relationship with the United States, the response from the Australian government was welcome relief. Although initial costs would be higher, as a second option the decision to adopt Australia as a testing site was also going to present some first-rate benefits for the 'motherland'. Geographically, the Monte Bello Islands were far remote from any American sites, a symbolic but also very real indication of Britain's determination to 'go it alone'. In terms of topography, the centre of the mainland was flat and expansive, easily comparable to the areas of Nevada or New Mexico. Historically, Britain and Australia enjoyed a long and intimate association in times of peace but more poignantly also in times of war. On a more transcendent level, the two countries shared a thick cultural and political bond, which Menzies affectionately referred to as "our ancient structural unity".¹⁸

From Australia's point of view, the arrival of British bombs was seen as not only another way of cementing the imperial bond but also of furthering long held plans belonging to the national interest. Post-war reconstruction demanded modernisation: the development of industry and the expansion of the country's scientific and knowledge base, primarily to contribute to the Federal government's own atomic energy program. For the British, Australia may have been 'merely the place to test British bombs', as Robert Millikin so bluntly expressed, but Menzies' pro-development administration adopted a far more quixotic view.¹⁹ With a small tertiary sector, Australia had to rely on its traditional primary resources, namely land and personnel, if it was to first appease the wishes of its 'great and powerful friends' and then to advance its own cause for modernisation and economic progress.

1952 – 1957

There are times when a nation must stand up and be counted; for Australia this was such a time.

- Howard Beale, 1977.²⁰

Prior to Clement Atlee's request to Robert Menzies in 1951, Australia had taken a keen interest in matters relating to the recently formed nuclear world. Invective rhetoric in the Australian press, normally reserved for wartime enemy Japan, was markedly restrained and particularly sobering when initially reacting to the detonation of the atomic bomb on the Japanese city of Hiroshima on 6 August 1945. The *Sydney Morning Herald*, reporting two days later, believed it to be an event of apocalyptic

¹⁷ *Ibid.*, p.11.

¹⁸ **Quoted in:** Millikin, *No Conceivable Injury*, p.55.

¹⁹ Millikin, *No Conceivable Injury*, p.22.

²⁰ Howard Beale, *This Inch of Time* (Carlton: Melbourne University Press, 1977), p.87.

proportions:

The first atomic bomb to be dropped on Japan has done far more than wreck the city of Hiroshima. It has shaken civilisation to its foundations. The impulse to rejoice over the prospective shortening of the Pacific war is tempered at once by consciousness of what this epochal and affrighting discovery must mean for the future of mankind. If the invention of gunpowder revolutionised the art of war, the release of atomic power may very well, in time, spell the end of war itself; either that or the human family is doomed to perish by its own hand ... it is not blindly or exultantly, but sternly and even with foreboding that the Allies have released the deadly new instrument of destruction which science has placed in their hands.²¹

It was not long, however, before the attitude towards atomic energy was to change from one of fear to one of warm embracement. Whilst overseas powers were holding discussions on its military applications, there emerged, as Alice Cawte observes, “a distinctly Australian view of its economic potential”.²² Various Australian newspapers from around the country openly extolled the virtues of atomic energy. Melbourne’s *Age* wrote: “The Labor Government need not waste time nationalising the coal industry and the electric and gas industries, because these industries will henceforth be obsolete”.²³ The *Adelaide Advertiser* exuberantly claimed:

The tremendous explosive power of atomic energy could be used in localities where it was desired to modify the climate by creating mountain ranges. Desalinating sea water by atomic energy could overcome the unremitting problem of drought. In solving these problems atomic industrial energy should help to give Australia the 10 million extra population she needs.²⁴

Possessing a very small industrial base with little scientific resources to draw from, considering nuclear physics was not taught in an Australian university until 1946, Australia was going to have to depend on technical collaboration with either Britain or the United States. The US was simply out of the question owing to its secretive atomic policies but Great Britain presented a different situation. Attending an Imperial Conference in the early months of 1946, the British Government had hoped that the Commonwealth countries would share in defence, primarily to assist Britain in its ambitions to play a role as a great power. Even as early as 1944, Atlee had told his War Cabinet that he hoped for a single Commonwealth power bloc equal to that of the US and USSR. It was a dream never to come to fruition; out of the four major ‘white’ Dominions, Canada and South Africa were very uninterested, and New Zealand was largely ambivalent. Australia was the only country to show any enthusiasm for the project.²⁵

²¹ In F.K. Crowley, *Modern Australia in Documents 1939-1970* (Melbourne: Wren, 1973).

²² Alice Cawte, *Atomic Australia* (Kensington: UNSW Press, 1992), p.9.

²³ *Ibid.*

²⁴ *Ibid.*, pp.9-10.

²⁵ Elisabeth Barker, *The British Between the Superpowers 1945-50* (London: Macmillan, 1983), pp.57-59.

Born out of such enthusiasm was the establishment of the Long Range Weapons Project at Woomera in South Australia, designed to test missile guidance systems. Whilst atomic warheads were not involved, Woomera set a firm precedent for more involved and intimate British-Australian technical cooperation. In a speech to the House of Representatives, the minister in charge of post-war reconstruction and the Woomera project, John Dedman, explained:

*In the Governor-General's Speech, it was stated that Australia will make a larger contribution towards the defence of the British Commonwealth, and that the Government had agreed to set up machinery to ensure Empire co-operation in research, design, development and production of munitions and aircraft. This project is a step in that direction. It will not only increase the capacity of Australia to defend itself with the latest weapons – that is important in view of our small man-power and large territory – but also strengthen the security of the British Commonwealth by providing for the dispersal of its resources. The Defence Science Conference, held in London, fully considered and endorsed this proposal, which is so vital to our defence and security.*²⁶

Coterminous with this theme, seven years later in 1953, after three British devices had been detonated on the Monte Bello Islands, Menzies wrote British Prime Minister Winston Churchill a letter that strikes a similar chord of reassurance:

*The basic fact is that we stand or fall together, and that Great Britain will no more need to worry about Australian cooperation in the future than she has in the past. The longer I engage in public affairs the more convinced I am that we must at all times nourish our ancient structural unity which remains the best thing in the free world.*²⁷

Beyond the emollient rhetoric which indicated a moral responsibility to protecting humankind from the evils of communism, the British tests were motivated purely by self interest on the part of both countries. Whilst concentrating primarily on the history of the uranium industry in Australia, Alice Cawte maintains that both countries were equally desperate for the tests to begin but that their sense of urgency was guided by different intentions.²⁸ As has already been outlined Britain needed to test if it was to resume Anglo-American collaboration. For Australia, the need for Britain's bombs was equally intense, not only because it would bring Britain's atomic research into closer proximity, thereby supplementing Australia's then perceived insufficient indigenous conventional fuels, but the presence of atomic weapons would send a clear message to the non-Western and/or communist world, that Australia was an important partner in the protection of Western freedom and democracy.

In January 1953, Minister for Supply Howard Beale, signed in Washington a 10 year agreement with the United States to supply uranium from the Rum Jungle deposit in the Northern Territory. His following convoluted comments reported in the *Sydney Morning Herald*, 9 January 1953, demonstrate, against a *mis en scene* of

²⁶ In Crowley, *Modern Australia in Documents*, p.157.

²⁷ **Quoted in:** Millikin, *No Conceivable Injury*, p.55.

²⁸ Cawte, *Atomic Australia*, pp.38-39.

development and defence, the esteem in which any event related to atomic energy was held:

It safeguards Australia's interests in her own uranium deposits and in no way inhibits what we may do in this country with that part of our uranium resources which we require for our own development. In making available our surplus production to the United Kingdom and the United States we are accepting the responsibility which lies upon this country to assume a proper share in the defence programme of the Western democracies.²⁹

With the Cold War now at its zenith, especially since the Soviets acquired the bomb, age-old Australian fears and prejudices concerning the 'yellow peril' to the north were given greater voice, particularly in light of the Communists under Mao Zedong overrunning China, Korea at war, plus both Malaya and Indo-China increasingly vulnerable. In what reads like an alarmist and at times almost paranoiac address, Menzies explained in his 1950 'Defence Call to a Nation', the role of America's bomb as a strategic necessity:

Do you think this communist enemy would hesitate to overrun Western civilisation if the United States did not have the atomic bomb? Let's not pretend about the bomb. Its real. It is today keeping the world out of a tragic world-wide war. Horrible as it is (and I saw Hiroshima a few weeks ago), it is today not an instrument of war, but of peace. How many years do you suppose will elapse before the communist has it in large quantities? Five? Four? Three? Two?³⁰

Although here referring to the American bomb, it was obvious to prevailing thought that a second ally in possession of atomic weapons could only afford double protection. The willingness to allow British testing was simply a matter of course, commensurate with Australia's long-standing attitude to external relations. As Menzies was to again write in his later years:

Situated as we are in the world, washed on our western and northern shores by potentially hostile seas, and numerically incapable - despite intense defence preparations - of defending ourselves for long against all-out attack by a great power ... if ... a war comes, the business of foreign policy is to see that we enter it with great and powerful friends.³¹

The pre-occupation with external threats is but only one of the major tenets of Australian foreign policy visible in the Menzies era. J.A. Camilleri identifies four others: the racial divide between Asia and Australia; the firm commitment to, and defence of, the status quo; the dependence upon great power protection and the belief in the efficacy of 'forward defence'—a task to anticipate potential external threats and to meet them well before they materialise.³² Camilleri is also quick to point out, that

²⁹ In Crowley, *Modern Australia in Documents*, p.273.

³⁰ **Quoted in:** Cawte, *Atomic Australia*, p.39.

³¹ Robert Menzies, *The Measure of the Years* (London: Cassell & Co., 1970), p.44.

³² J.A. Camilleri, *An Introduction to Australian Foreign Policy* (Brisbane: Jacaranda Press, 1976), pp.14-18.

the Menzies administration's approach to foreign affairs did not "signify a fundamental reorientation of policy, but simply a minor readjustment in the perception of external threats and in the strategic formulation of Australia's response".³³ In other words, perceptions that Australians largely held of their external neighbours had remained virtually constant since white settlement in 1788. It was only a culmination of factors endemic to Australia in the 1950's that gave these perceptions a greater clarity and sense of purpose; factors as those already outlined, such as: instability in Southeast Asia, the 'Communist menace' and the domestic urge for industrialisation—but coupled with Menzian conservatism and a post-war sobriety that manifested a rigid social conformity, demanded an unattainable moral standard and elevated the authority of government to a position that self-proclaimed infallibility.

Centrally located within Australian foreign policy at this time was the psychology of fear and the politics of irrationality. Camilleri argues that in the concoction of certain scenarios to justify the very existence of 'a foreign policy', there is a huge chasm between what might occur and what really will occur. In the Australia of the 1950's, the presumptive basis of foreign policy was even more acute, considering that :

*The difficulty with most of these and other similar scenarios is that they impute intentions and attribute capabilities without any real attempt to establish a cogent link between prediction of the future and assessment of the past or the present. To enumerate certain advantages in Australia's geographic, strategic or economic situation is one thing. To suggest that these advantages are coveted by other countries is another. To argue that anyone country has secret designs to avail itself of those advantages is another still. To conclude that this one country has decided to further those designs by resorting to military means, rather than by exploring the many other peaceful avenues, is to indulge in judgments which require far greater empirical evidence and much more logical argument than have so far been advanced by the proponents of these forecasts.*³⁴

Perhaps it is, however, unfair to point the finger of blame squarely in the direction of the Menzies government and the somewhat skewed perception of their northern neighbours. This factor alone did not contribute to the allowance of British tests on the continent. There is a massive body of literature that seeks to explain why particular countries involve themselves with nuclear weapons. Most of this research is focused on the big stockpiling countries, like the United States and to a lesser extent the former Soviet Union. Yet whilst there are certain variables which will mitigate any uniform and universal picture from emerging, the very nature of nuclear weapons—as symbols of political power and as the figurative but fearsome caged lion, rarely seen but ever present in the public imagination—renders them an eerie extension of what is common to all people on the planet: the human psyche.

American socio-historical psychologist Ralph White attributes xenophobia or Sigmund Freud's concept of 'neurotic anxiety' as a central factor in a country's decision to associate, in any shape or form, with nuclear weapons. White maintains that neurotic anxiety not only afflicts on the level of the individual but pervades the

³³ *Ibid.*, p.16.

³⁴ *Ibid.*, p.25.

machinery of government, which in turn is transposed onto the community, creating a stifling climate of fear and foreboding. To quote Freud,

*We find a general apprehension in them, ready to attach itself to any thought which is at all appropriate, affecting judgements, inducing expectations, lying in wait for any opportunity to find a justification for itself. People who are tormented with this kind of anxiety always anticipate the worst of all possible outcomes, interpret every chance happening as an evil omen, and exploit every uncertainty to mean the worst.*³⁵

Contrary to the point of re-action, fellow American socio-historical psychologist Jerome Frank attributes the desire for nuclear weapons as a result of pro-action, that is, the drive for power. Frank articulates three instances where the drive for power within the context of nuclear development has manifested itself: first, the infantile and biological need of all living creatures to control their environment—a situation that stems from narcissism and places great importance on technological and scientific prowess; second, the belief in nuclear weapons as instruments of salvation, eradicants of plague and pestilence, such as ‘godless communism’ or ‘capitalist imperialism’—thereby building a sense of community whilst simultaneously demanding total obedience to law and central authority; third, the drive for national power which is “customarily cloaked by the euphemistic phrase, ‘protection of the national interest’”.³⁶

Even a cursory glance of Australian history would reveal any one of these theories to be particularly relevant. It is out of the scope of this essay to explore any of these themes in great detail, however, Frank’s concept of “national interest” as a government employed semantic tool, to camouflage a drive for power *vis-a-vis* nuclear weapons, is more congruent with some of the earlier discussion and the original aim of this paper. Historian and political theorist Philip Lawrence contends that a government’s desire for nuclear weapons is more than just inextricably bound to the national interest, the two are in fact practically synonymous. To explain further, Lawrence frequently employs the term *nuclearism*: a whole pattern of psychological, social and political attitudes which coalesce into one cohesive unit to justify the creation, procurement and ultimate use of nuclear weapons. As a result nuclear weapons, although a very real destructive force, take on a more symbolic aura, a ‘surrogate for national will’, and because the development of nuclear weapons is determined from the very centre of the State, it is easily absorbed into the national psyche and regurgitated in conniptions of patriotism.³⁷

Similarly, J.A. Camilleri argues that appeals to nationalism and national loyalties feature prominently in government campaigns to gain public acceptance of the ‘nuclear option’.³⁸ Whilst admitting that historical traditions and national psychology may vary widely from country to country, there are several interconnected themes which the advanced industrial state uses on the general public when developing nuclear policy: economic growth, modernisation, technological

³⁵ **Quoted in:** Ralph White, "The Role of Fear", In Ralph White (ed), *Psychology and the Prevention of Nuclear War* (New York: New York University Press, 1986), p.240.

³⁶ Jerome Frank, "The Role of Pride", In Ralph White (ed), *Psychology and the Prevention of Nuclear War*, p.221.

³⁷ Philip Lawrence, *Preparing for Armageddon* (Sussex: Wheatsheaf Books, 1988), pp.6-10.

³⁸ J.A. Camilleri, *The State and Nuclear Power* (Sussex: Wheatsheaf Books, 1984), p.17.

independence, energy security and military preparedness.³⁹ Linguist and neo-Marxist Paul Chilton has coined the term ‘nukespeak’, which he defines as a “specialised vocabulary for talking about nuclear weapons and war together”.⁴⁰ He further argues that because the development of the atomic bomb was such a huge leap from previous military hardware, the language used and the images conjured by governments, had to “slot the new reality into the old paradigms of our culture”.⁴¹ However Chilton is astute enough to acknowledge that although ‘nukespeak’ is a controlled attempt to familiarise nuclear weapons, its construction is largely unconscious—“a symptom of the nuclear culture we have forged for ourselves, as an indication of the depth of its penetration into our mentality”.⁴²

This theorising is again directed mainly towards the United States, a country that possesses the world’s largest nuclear arsenal; however, there are certain aspects of this argument which can be applied to the Australian context with similar cogency. It hardly needs to be said that contemporary Australia is a committed non-nuclear nation but in the 1950’s nuclear technology was considered a viable option for the Commonwealth to further develop - British tests were integral to this process. The following announcement by Howard Beale delivered to the Australian public in 1955 just prior to the establishment of the Maralinga range, neatly demonstrates some of the previously discussed themes:

*It is a challenge to Australian men to show that the pioneering spirit of our forefathers who developed our country is still the driving force of achievement. The whole project is a striking example of inter Commonwealth cooperation on the grand scale. England has the bomb and the know-how; we have the open spaces, much technical skill and a great willingness to help the Motherland. Between us, we shall help build the defences of the free world and make historic advances in harnessing the forces of nature.*⁴³

By the latter half of the decade, such unbridled enthusiasm for atomic testing was not shared by the majority of the Australian population. A 1957 survey uncovered a substantial 66% who wanted all tests stopped by international agreement—a dramatic pendulum swing away from the 58% who were in favour in 1952. There was also vociferous objection to the tests from the trade union movement in Brisbane and Adelaide, and from notable Labor politicians Herbert Evatt and leader of the opposition Arthur Calwell.⁴⁴ Detonating a balloon suspended 25 kiloton device, the last major test conducted on the Australian mainland was at Maralinga on 9 October 1957. Although the British and Australian governments took public opinion, especially unfavourable public opinion, very seriously, and the fact that a Federal election was pending in 1958, timing for the cessation of the tests was quite fortuitous and determined well beyond the control of the local protagonists.

³⁹ *Ibid.*, p.18.

⁴⁰ Paul Chilton, “Nukespeak”, In Crispin Aubrey (ed), *Nukespeak: The Media and the Bomb* (London: Comedia Publishing, 1982), p.95.

⁴¹ *Ibid.*

⁴² *Ibid.*

⁴³ **Quoted in:** Millikin, *No Conceivable Injury*, p.93.

⁴⁴ **Joseph Siracusa and Yeong-Han Cheong**, *America's Australia: Australia's America* (Claremont, CA: Regina Books, 1997), p.68

In October 1957 the American people woke to the news that the Soviet Union had launched the world's first satellite Sputnik I. Fears that the Soviets were overtaking the United States in technological capability, prompted US President Eisenhower to invite British Prime Minister Macmillan to Washington for high level talks. The main topic on the agenda was cooperation on the military applications of nuclear energy. It was the break that the British government had been waiting for since the conclusion of World War II. In the Declaration of Common Purpose, Eisenhower committed his administration to the amendment of the Atomic Energy (McMahon) Act, so as to "permit close and fruitful collaboration of scientists and engineers of Great Britain, the United States and other friendly countries".⁴⁵ One day after the McMahon Act was amended on 2 July 1958, a bilateral defence agreement was signed to enable the sharing of weapons data and designs. By 1962 this had led to joint weapons testing, underground at the Nevada Test Site and atmospheric testing in the Pacific.

Atmospheric testing had long been an issue of concern in the public domain. At the Anglo-American Bermuda conference in March 1957, both countries discussed ways of limiting global fallout. It was a clear admission that serious health risks were posed by atmospheric testing. Whilst both Britain and the United States were concerned with adverse public opinion, they were also both equally adamant that such tests should continue.⁴⁶ Such a stance could have only made the Australian public more restive, following reports that the Marshall Islands had been contaminated along with the occupants of a Japanese fishing vessel found in the area in February 1954. The Americans also added to their litany of transgressions when they started testing Hydrogen bombs at Bikini Atoll and Eniwetok in 1956. Robert Millikin writes that prior to atomic testing the Australian public "were not quite sure whether to expect magic or mayhem from nuclear power".⁴⁷ Twelve tests and five years on, the Australian public had decided on the latter.

There were signs that fatigue had also begun to pervade the higher echelons and that the relationship had begun to sour, owing to almost obsessive secrecy in Britain's conduct with Australian scientific and military personnel, especially problematic as Britain neared closer collaboration with the United States. There was also less urgency on Australia's part for the development of atomic energy, as the mining boom in conventional fuels began to be realised from the middle of the decade. It is ironic that although the export market for uranium had wizened by the early 1960's, the burst of uranium discovery between 1949 and 1954 had helped generate other research and exploration, particularly in the northern half of the continent.⁴⁸ Although the building of the Lucas Heights reactor was part of a fledgling atomic program, atomic energy, in relation to Australia's rich coal and oil reserves, was to remain a poor alternative—too expensive, too dangerous and too contentious.

These developments, however, did not totally preclude the British from conducting more tests. The decidedly more low key 'minor trials' or assessment tests, which engaged the use of plutonium to support weapons development and safety research, were conducted at Maralinga until 1967. Throughout this time the British,

⁴⁵ **Quoted in:** Arnold, *A Very Special Relationship*, p.229.

⁴⁶ Arnold, *A Very Special Relationship*, p.221.

⁴⁷ Millikin, *No Conceivable Injury*, p.34.

⁴⁸ Geoffrey Blainey, *The Rush that Never Ended* (Carlton: Melbourne University Press, 1993), p.330.

with Australian compliance, left open the option of underground testing. The dearth of suitable locations and the subsequent cooperation with the Americans at Nevada, prevented any such tests from occurring. The Termination of the Memorandum of Arrangements signed on 23 September 1967 finally brought British testing on the Australian continent to an end. Considering the half-life of plutonium is calculated at 24,000 years, the legacy has remained, and will continue to remain, a painful and persistent scar.

The immediate results of the tests enabled Great Britain to resume defence collaboration with the United States. Apart from some short-lived imperial triumphalism that dominated political rhetoric, the effects upon Australia, whether beneficial or deleterious, is a matter of some conjecture. On a political level, the British tests served as a bridge to close the power gulf between protector and would-be protected. The efficiency and precision with which the tests were conducted, would also serve as an invaluable precedent that the Australian government could call on in the wooing of the Americans and their military installations.

For some, however, this result could be seen as something of a Pyrrhic victory. Precipitating the Royal Commission was the presentation of hundreds of Australian ex-service personnel, who whilst young recruits at the time of the tests, suffered in their later years disproportionate amounts of severe ill-health, blindness or terminal cancers.⁴⁹ The land upon which the tests were conducted is now regarded as poisoned. The decision to allow the tests in the first place was predicated upon a blatant misreading of the Australian environment as a benevolent provider for utilitarian needs. The decision was also taken in complete ignorance of the land's original custodians. In an ominous echo of 'terra nullius', the Royal Commission reported that prior to, and during the Buffalo series of tests, between 27 September 1956 and 22 October 1956:

*a site was chosen on the false assumption that the area was not used by its traditional Aboriginal owners. Aborigines continued to move around and through the Prohibited Zone and inadequate resources were allocated to locating them and to ensuring their safety. The reporting of sightings of Aboriginal people was discouraged and ignored.*⁵⁰

Encapsulating the sum total effect upon Aboriginal people during the course of the tests on the mainland, the Commission wrote again:

*The traditional owners of the Maralinga lands were denied effective access to these for over thirty years as a result of the British test program. This denial has contributed to their emotional, social and material distress and deprivation.*⁵¹

The picture that is usually drawn of 1950's Australia is often presented in bland monochrome and condemned to chronic inertia. Debunking such perceptions, the episode of British atomic testing presents an irresistible subject, not only for Australian social or political historians, but also for any researcher involved in the

⁴⁹ Blakeway and Lloyd-Roberts, *Fields of Thunder*, pp. 179-92.

⁵⁰ *Royal Commission*, p.20

⁵¹ *Ibid.*, p.28.

study of nuclear politics or culture. Located in the foreground is the interplay between governments, diplomatists and strategists, whilst juxtaposed against a moving background of social change and a people forced to reconcile new and foreign weapons to their own local experience.

This essay has taken a first tentative step down a seldom explored path of historical research. It has, admittedly, borrowed heavily from the early research conducted into Britain's atomic program but has then attempted to posit this information onto a specific Australian cultural continuum. It has briefly touched on some major 'traditional' themes: the deference to great powers, but also the fear of the 'other', and the emphasis upon development which came at a huge cost to the environment and some of the nation's original inhabitants. As stated earlier in the paper, a rich reward awaits any researcher who attempts to develop these areas further.

Apart from garnering some mention in the concluding paragraphs, this essay has quite deliberately failed to expand on both the opposition that mounted throughout the course of the tests and the 'minor trials' that continued regardless until 1967. Although very appealing, it was also thought judicious not to focus on Australia's developing intimacy with the United States, which, with the signing of ANZUS in 1951, ran largely parallel with Australia's commitment to the British. Again, an analysis of this affair and Australia's conduct as a two-timing coquette would uncover immeasurable treasures. In some respects the telling of this particular story is a sequel to 1952-1957, demonstrating not only a new chapter in both British and Australian policy commitments but also a change in Australian society itself—a time where a lot of those aforementioned plus many other 'traditional' themes came under direct challenge, and where a nation prepared itself for an utterly more complex and uncertain postmodern world.

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