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The Postwar Evolution of the Field of Strategic Studies: Robert O'Neill in Context

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Introduction

This chapter views the postwar evolution of strategic studies as an academic field to illuminate the intellectual and organisational context of Bob O'Neill's scholarly achievements and organising adventures. Bob has been deeply involved in this evolution for over five decades, and has enjoyed a truly global view. Quite apart from his own research, he has been a significant animateur of research and teaching, with an amazing record of attracting and supporting students and colleagues, women as well as men, in Australia, the United Kingdom, the United States, and throughout Asia. Bob is also renowned as the builder and organiser of multiple collaborative efforts and numerous institutions across disciplines and across continents. It has been a remarkable career, but all the more remarkable for the far reaching lessons he has drawn, the wise counsel he has given, and the sense of integrity that Bob has made the standard for judgment and analysis.

I — and a number of others in this volume — have had the distinct pleasure of being along on the journey at different times and in different places. The context in which he has operated has too often

been forgotten; he has led or fought many of the critical battles in postwar strategic studies, always with the same calm and vision. Presenting the evolutionary timeline of the field will time his career, detailed in other essays in appropriate measure.

I apologise that what I present here is far too much of an American view to do Bob's career justice. It is also a personal view based on experiences that sometimes, but not always, have paralleled his. I hope thereby to challenge him to present his version and to write about the rest of the story as he sees it. It has not always been a smooth or a supportive context, especially given his advocacy for a more open and inclusive field, and his embracement of diversity, with emphasis on a more than a 'Europe first' or 'great powers' approach to strategy, and arguing for a greater transparency where possible. But for him, it has always been a journey of seizing and creating new opportunities, with enthusiastic appreciation of the farthest shore ahead. I suspect, too, that it has never been dull.

The Focus of Strategic Studies in the Postwar Period

Writings in the last decades have usually portrayed strategic studies as a child of the 1950s, driven by the almost unimaginable consequences of the nuclear revolution, and glowing most brightly in the risks and successes of the Cold War. In reality, the neat symmetric package of history and ideals is only part of a much longer history.¹ Beginning in the 1920s and 1930s, the building of strategic studies parallels the harnessing of technology, and the recruitment of the best and the brightest in the natural sciences to the preservation of the state and its interests. It was supported by many of the dominant American foundations and Anglo-Saxon scientific societies, those who had earlier transformed science and its advancement into a public good and a public goal. It was thus largely developed in an Anglo-Saxon

1 The classic postwar analysis through early Vietnam is Hedley Bull's masterly (1968) 'Strategic Studies and its Critics', *World Politics* 20(4), pp. 593–605, extended by Betts, Richard (1997) 'Should Strategic Studies Survive?', *World Politics* 50(1), pp. 7–33, and from a different perspective Buzan, Barry and Lene Hansen (2009) *The Evolution of International Security Studies*, New York: Cambridge University Press.

context, with legacy contributions from Britain, the United States, and the Commonwealth countries, all pursuing particular variants reflective of their own new or re-drawn roles in the Cold War and after.

Community members themselves differ on the significance of the contributions made and the range of the policy successes scored. Is it just nuclear policy or a wider domain on the use of any kind of force — the state's natural monopoly — to preserve the state? Is there more than a practical limit to how close to government policy one needs to be or should be? What are legitimate cost–benefit comparisons for social scientists and historians? The long shadow of Vietnam and its ideological battles alone highlights the critical and recurring divides and debates that have occurred and re-occurred.²

Most scholars agree on a core of tasks and principles, basically a set of democratic convictions and optimism about the role of social scientific contributions to policy, that has set them apart from continental or Asian practices and aspirations.³ The key tenets presented here are in their most abstract form:

1. Security writ large is not just the province of the professional military but of informed, engaged citizens. It is not just for a Cincinnatus who comes to the rescue and then returns to his field. In democratic states in particular, it is the responsibility of every citizen, and for those who can, it is a right and honourable profession. Required is the citizen soldier, the public service official, the committed educator, and the impartial policy scientist who must take on the task of advisor and critic.
2. Knowledge that is gained or created in the social and behavioural sciences (the policy sciences) is to be applied in a constant campaign against external threat, experienced at home or abroad. That comes in part through government, but it can and in some ways must come from the outside through daily operations — the research and findings of universities, think tanks, private study groups and foundations, and the leadership of informed individuals.

2 The shadows of the 'wars of choice' of the twenty-first century are now almost as long, given the use of social science expertise in interrogation techniques that crossed into torture, and in sanctioning ethnic tensions to extremes.

3 See here the threads running through Freedman, Lawrence (2013) *Strategy*, New York: Oxford University Press, and those undergirding Nye, Joseph (1989) 'The Contribution of Strategic Studies: Future Challenges', Adelphi Paper 29(235), pp. 20–34.

3. The goal is to develop critical thinking and focus attention on the important, not just the urgent. Ideally, neither individuals nor organisations should surrender the right to speak truth to power. Nor should they be tied directly to, or subservient to, present government policy, but rather be able to continually stretch toward future goals, and to adopt best practices wherever they come from.
4. In the end, policy represents the result of a broad lens and informed choice, perhaps involving necessary compromise given time and circumstance, but aiming for an optimised solution to the degree possible. It almost inevitably has a political frame, and costs and consequences to be regularly attributed. Uncertainty is to be confronted and narrowed; risk is to be assessed and weighed systematically against other options.

At least for those over 40, most of these principles, while impossibly abstract, have a familiar ring. In the United States and a somewhat more cynical Britain, this corresponds to the aspirations of the civic virtue movement of the late nineteenth century and the 1920s and 1930s. Education and transparency, and sometimes the distance from politicians and political games, it was argued, would yield the best result for a wise decision-maker. One example may suffice: Robert Brookings's conviction, as a merchant magnate in the Midwest, of the need to establish a single institution at the seat of government in Washington DC, to offer the best information and advice to government, and simultaneously to train successor generations of analysts to do the transparent, consistent, scientific analysis needed to identify new problems and unanticipated threats.⁴

Less ethereal perhaps is the tie to the all-out mobilisation against the threat to the state posed by the twin demons of communism and fascism in the 1930s and the Second World War, and the recruitment of many to the cause who had previously seen policy problems as someone else's problem.⁵ There had always been such a tie, expressed often in personal relationships in Britain, but it was now greatly expanded and magnified as the war continued. The United States, in

4 The Brookings Institution was at one period actually a degree-granting university, first as a wing of Washington University in St Louis, and then after the institution was founded in 1927 on its own.

5 See David Ekbladh's analysis of foundations and individuals in the pre-Second World War American stirrings in (2011–2012) 'Present at the Creation', *International Security* 36(3), pp. 107–41.

its first golden age, represented a more dramatic shift. A handful of the best universities and centres — Harvard, Yale, Stanford, Columbia, University of Chicago, MIT, the Hoover Institution, the Princeton Institute for Advanced Study and its predecessor — provided eager players who were anxious to step nearer to government and to serve. Government, but also major philanthropic groups — in the US, Carnegie and Rockefeller, joined later by Ford — provided the needed funds. University and foundation heads alike acted as talent scouts and persuasive disseminators.⁶ There was analysis and intelligence work, but also broader outreach programs of lectures and public policy education, integration of refugees with the most parochial of Americans in political life, and continuing watch over popular moods and tolerance of suffering.⁷

Evolution of the Field: Students, Subjects, and Support

By the time Bob (and I) entered strategic studies as a full-time graduate student player in the 1960s, the field and the supporting infrastructure had attracted significant stature, as well as infrastructure and funding. Some have argued the 1960s and 1970s represented the second golden age of strategic analysis. University centres of excellence existed in growing numbers on both sides of the Atlantic and throughout the Commonwealth. The task was to develop strategic studies as a crucial (and most interesting) sector of a broadened discipline of global international relations. The Third World, the non-aligned movement, nationalism, and terrorism were as valid as issues for study as the old standbys of international law, international organisations, and the diplomacy of the great powers of Europe. There were new curricula, deliberately violating the narrow professionalism of the

6 Ibid. Ekbladh details the pre-war contributions of, among others, Edward Mead Earle, Bernard Brodie, Harold Lasswell, Nicholas Spykman, and William T. R. Fox.

7 At one point, one of the pre-eminent researchers on public opinion, Hadley Cantril of Princeton, was actually brought with his team into the White House to provide daily measures of popular support.

more traditional war colleges,⁸ focused on the military, political, and economic challenges to the security of the state, and the options available to protect and defend its interests. In the United States, the student base was expanded quite decisively with the extensive funding available under several national laws, particularly under the *National Defense Education Act*, a piece of legislation designed as a response to Sputnik and loss of space superiority in 1958.

Funding was plentiful. Government agencies, especially those related to defence and intelligence, saw education as a recruitment tool for later employment or mobilisation, and project support as providing wider options for decision-makers. Carnegie, Rockefeller, and a host of other foundations, with some government prompting, offered funds to support study and study-related field work overseas. Ford pursued both these goals at a new extensive program of centres to ensure area studies of the highest quality — literature, culture, and personalities as well as military traditions and strategic arsenals. There were also government funds for publishing houses and magazines,⁹ and regular free distribution of relevant analysis for both the governmental sector and the informed audiences strategic studies was so anxious to attract.

One new feature was the development of international specialised centres for research and policy debate, funded by governments and foundations, especially the International Institute of Strategic Studies (IISS), which Bob O'Neill led with such skill and grace in the 1980s. Founded by Alastair Buchan in 1958, it was originally focused largely on Britain, with selected American visitors. But it quickly went global, attracting more Americans, those from the dominions, co-optees from the Third World, and eventually, the communist sphere.

IISS was not the usual foreign affairs and diplomacy centre, such as the Council on Foreign Relations or Chatham House, which had its roots in the genteel debates of the 1920s and the somewhat rowdier

8 The service war colleges were themselves ultimately transformed in the 1970s and the 1980s to teach to a broader strategic studies vision, one emphasising history, economics, and political science, as well as doctrine and operations management. The 'Turner revolution' at the Naval War College in Newport, Rhode Island, in the early 1970s is perhaps the best known in detail. See Hattendorf, John B. et al. (1984) *Sailors and Scholars: The Centennial History of the U.S. Naval War College*, Newport: Naval War College Press.

9 Perhaps the most dramatic revelation was the discovery in the late 1960s of CIA's Cold War financial support for the arts, especially magazines (*Encounter* and *Der Monat*, for example), that until then had been viewed as bastions of intellectual commentary and liberal criticism.

discussion in the 1930s. It was rather a membership organisation with an expert staff, designed to mobilise, educate, inform, and influence in strategic studies. The target audience, convened annually, was originally the elite who needed to be educated on the external threats to the NATO alliance and individual countries. It later expanded to working officials, promising students, and young policy hopefuls. Most were civilians and men, initially with only the rarest female stars, with Coral Bell of Australia, Margaret Gowing of Oxford, and Flora Lewis of the *New York Times* in the regular ranks. There were a range of specialist publications, which eventually included *Survival*, a magazine that ranked with *Foreign Affairs*, and the Adelphi Papers on emerging topics or crises, commissioned globally. There were also items for the analyst's right hand: annual tomes of information that established ground truth, thus creating a common global data base, through *Strategic Survey* and *The Military Balance*.

RAND in Santa Monica, California, was and remained something quite different, close to government but often standing on its own well into the 1980s. There were other specialised shops close to particular services — Center for Naval Analyses to the Chief of Naval Operations, and Institute for Defense Analyses to the Chairman of the Joint Chiefs — but RAND, even in its earliest incarnations, had a commitment to broaden the dialogue and improve analysis. It used its openness to draw the best and near-best practitioners, and the most innovative applications from economics, game theory, mathematics, operations research, and psychology. At a distance well removed from Washington DC, its ability was set to range more freely than inside-the-DC-beltway analysis, and its overall enthusiasm for experimentation, gaming, good writing, and effective presentation attracted intellectual fans in and outside of the United States. Early on, it was the envy and the model for close-to-government think tanks in France, Germany, and Japan. Many RAND publications were unclassified and broadly circulated.¹⁰ Further, the RAND staff was diverse, with notable women analysts, such as Roberta Wohlstetter and later Lynn Davis.

RAND also represented a new civil-military model of analytic engagement. Led and populated originally by veterans of war-time policy analysis and retired military personnel, it drew almost all its

10 RAND itself became a graduate studies program, gaining accreditation in 1975.

funding from Project Air Force or other government monies. In some divisions there was a marked military presence, although seemingly never at the expense of direct analysis. Lunchtime debate at RAND was unique, with civilians totally in charge, no uniforms required, and no set work hours or effort to coordinate vacation time.

Divisions were generated by the war in Vietnam and the lingering questions it raised. The challenges came from those who vigorously opposed the war, reformers within the strategic studies community, and protestors within universities generally.¹¹ The charge was what they deemed the perversion of strategic studies independence, its analytic processes, and the subsequent suppression of dissent and challenge.¹²

The rifts and splits within and across disciplines over these issues went deep. The reformers saw what they defined as the insidious militarisation of American intellectual life and the sins of loyalty to government dogma and objectives, not the use of science and knowledge to the limits of independent inquiry in the service of ethical goals. The traditionalists and the operators responded with challenges to the loyalty of those who questioned legitimate government goals that had been and were still supported by popular majorities. They rejected those who set their own ethical preferences and refused to acknowledge the critical risks to state interests at stake.

By the mid-1970s, at RAND and elsewhere, it had become too often a dialogue of the deaf. The choice of which path to follow, at least in the United States, was stark. In public, distinctive subcultures emerged, with universities now rejecting centres or projects with government funding or the assignment of students to Reserve Officers' Training Corps units, and research centres were too superficially divided into good non-profits or presumably less good for profits. For the reformers, the ironic twist was that much of the government-specific funding and

11 Daniel Ellsberg had been a contributor at OSD and had initially worked for Nixon in 1969. Ellsberg tried — at first unsuccessfully, then, in 1971, successfully through the *New York Times* — to leak the study, against massive opposition from administration. The break-in of Ellsberg's psychiatrist's office, conducted to gather evidence against Ellsberg, constituted only one of Nixon's efforts to discredit Ellsberg and his colleague, Leslie Gelb.

12 See the analysis of these charges in the critiques published by two younger American historians: Rohde, Joy (2013) *Armed with Expertise: The Militarization of American Social Research during the Cold War*, Ithaca: Cornell University Press; Bessner, Daniel (forthcoming) *Democracy in Exile: Hans Speier and the Rise of the Defense Intellectual*, Ithaca: Cornell University Press.

projects critical for strategic studies disappeared from public view, into classified realms of compliant contractors, essentially withheld from debate, question, or democratic oversight. Traditionalist analysts, on the other hand, far too often found themselves held back by those now in an instinctive defensive crouch against any change or the new, and with a preference for safe subjects or consensual judgements. Some of the splits and fights continue in muted tones into the present, as is most recently evident in the argument in anthropology and sociology over the orientation and uses of the Human Terrain Research projects during the war in Afghanistan.

University centres themselves were developing ranges of specialties and areas of analytic specialisation. Bob experienced this first in Canberra and later when leading his own Oxford program. Student interest and recruitment was high, especially transatlantic student interest, at both the undergraduate and graduate levels. Cambridge, Massachusetts, long an IISS rampart, often claimed first place. In the 1950s and 1960s, the Harvard complex (Law School, Graduate Faculty, and in the 1970s, the JFK School) and the MIT Center for International Studies allowed cross registration; the faculties represented a major node of arms control study and discussion outside of Washington, which was almost unfailingly influential through its alumnae, increasingly not all male, in Washington. The relevant officials had often been their classmates or their students. A parallel development to the Cambridge clusters came with the increasing interest in strategic studies at the Center for International Security and Arms Control at Stanford, partnering with the growing centres at the University of California campuses at Berkeley and San Diego, and within the somewhat more conservative view of the Hoover Institution.

The analytic networks spread globally and grew at a steady pace in the 1970s, and less so in the early 1980s. *International Security*, born in Cambridge, joined *Survival*, a journal more academic in focus, and a number of smaller journals emerged and flourished. Bob was among the creators of a wide-reaching informal Asian group, made up of influential players, students, and former students (many who had come to Australia for training) that stretched across disciplines and borders. It was often a path for influence, or at least for an intellectual fellowship that opened doors to collaboration and cooperation.

It sometimes even stimulated negotiated outcomes, although without the multilateral exchanges and tendencies that NATO and especially Bob's IISS had informally fostered from the early 1960s onward.

In the Reagan era of the 1980s, Washington hosted not just partisan or contractor job shops (American Enterprise Institute, Heritage Foundation, Cato Institute) or the non-partisan greats (Brookings, Carnegie Endowment for International Peace), but for the first time, also several university centres. Georgetown and its Center for Strategic and International Studies (soon to become independent and more engaged in the daily political fray) were at the more conservative pole. At the other end, the emerging Center of International and Security Studies at Maryland worked closely with the National Academies of Sciences in the Soviet Union and in Washington on technical weapons and scientific expert exchanges, as well as broader programs within the framework of cooperative security.

As the 1980s drew to a close, the strategic studies field began to change again. Most programs essentially moved closer to the subfields of traditional international relations: arms control and disarmament, non-proliferation, or detailed studies of civil unrest and political change. Something close to Bob's first graduate research interests engaged us both with increasing significance: the awakening detente relations with Gorbachev and the Soviet Union, and the new frictions between politicians and military leaders. In critical London meetings, Bob highlighted the number of new control agreements in nuclear and conventional areas that increased the chance for future change, and downplayed the now traditional European security scenarios and even the traditional defence budgets. These issues were not new to those of us who had been patiently observing and working to deepen slow changes over the last two decades. But the big questions had to do with new frameworks and new methods of verification, of further limits on tests and technologies, and conflicts outside of Europe. Would or could Russia enter the European 'home'? And what was to be Eastern Europe's future?

One driver of change in this was the substantial new funding available through the MacArthur Foundation's Peace and Security Program. Under Ruth Adams, MacArthur funded 12 new or renewed university programs globally, established an international fellowship competition that would eventually award over 140 graduate fellowships over

10 years through the Social Science Research Council, and provided generous funding for international collaborative research for the next 20 years. The Carnegie Corporation, under David Hamburg, and Ford, under McGeorge Bundy and Enid Schoettle, became co-conspirators, highlighting security partnerships and the new security cooperative options for Russia and the United States. Bob, first at IISS and then Oxford, was a stakeholder and an advisor in these foundation efforts. Often in tandem with Lawrence Freedman, he regularly testified to intellectual need and to scholarly value, devised new curricula, and argued for the analytic standards that should be required. MacArthur's goal was to broaden the basis of security studies to include new external global threats: the environmental crisis, resource crises, civil security and unrest, and the new chemical and biological risks overshadowed for so long by the nuclear threat.

New divisions occurred within strategic studies in response. Some found this shift in overall focus to be a turning away from the primary threat of avoiding nuclear conflicts and risks. An underground controversy in the United States and Europe bubbled for several years over whether the true essence of strategic studies was analysis only on the use of force and its conditions, or requirements for military structures and future planning.¹³ But the reach of the field clearly broadened and the fellowship tracks definitely strengthened the efforts at diversity.

One of the many MacArthur initiatives in which Bob and I had a major hand, with Ernest May and Uwe Nerlich, was the multi-year Nuclear History Program. It joined scholars and some retired military officials from the US, France, Britain, and Germany in the attempt to make clear each country's nuclear past and set about training and supporting a new generation of scholars in writing original monographs. Bob's students produced three or four of the best theses. Perhaps 15 top flight monographs were produced across the four countries, and research continues today based on the materials that were declassified or found. Energising other foundations to action, MacArthur underwrote the DC National Security Archive, a trove of recently declassified documents from all four countries, and encouraged younger scholars to write theses or books on a range of nuclear topics, some 25 works in all.

13 A notable scholar and commentator said to me at the time: 'MacArthur will have us all doing embroidery.'

The Washington effort was gradually reflected in the other capitals as well. This was a major shift toward openness, when almost everything had been previously closed or hidden behind the 30-year rule.¹⁴ It constituted a true transformation from earlier scattered efforts and years-long frustrating attempts to get the declassifications. Bob clearly also pursued these lessons in the work he later did with the Imperial War Museum in London and on other official historical boards.

From the end of the Cold War until almost the present, strategic studies has been in a relatively muted phase, not unusual in times when threat of direct conflict is low and defence forces and monies are in relative decline. Bob himself remained active in research and outreach, from Canberra as founding Chairman of the Australian Strategic Policy Institute, and from Sydney as a Director of the Lowy Institute, as well as his role in the prestigious commissions on the future role of nuclear weapons (Canberra Commission) and the strategic challenges inherent in a multipolar world, especially in Asia. But what conflicts there were — the wars of Yugoslav succession in the 1990s, and the ‘wars of choice’ in Afghanistan and Iraq under George W. Bush in the first decade of the twenty-first century — were, for much of the strategic studies community, throwbacks to the expeditionary wars of the past, or not worthy of extended analysis. University studies remained static or fell away; the career paths into government or independent analytic futures were markedly narrower. Funding for anything but non-proliferation and arms control was limited. Europe was at the ‘end of history’ and the only great strategic questions concerned the adjustment of a shrunken Russia to its new global status and the rapid rise of China, along with the other emergent economic powers.

What has brought renewed interest and growing university enrolments in the last several years is the growth of international crises and transformative political change, beginning perhaps with the seismic shifts of the Arab Spring. Strategic studies has been particularly focused on the steady strategic growth of China — always close to Bob’s agenda — and the actions of a red-toothed Vladimir Putin in Crimea, Ukraine, and Syria in challenging or negating the framework of cooperative security in Europe. Strategic studies itself

14 Throughout the George W. Bush Administration, there was, however, a successful effort, often led by those close to Vice President Cheney and Secretary of Defense Rumsfeld, to reverse historical declassification and to reclassify critical documents and files.

has lost some venues — with the exception of newcomers Stanton, Robertson, and long-time stalwart Carnegie, foundations are on the whole less interested in funding fellowships or supporting continuing surveys and core-building studies. University faculties are generally satisfied when there are one or two ‘strategic’ experts on their rolls. Yet there are new or renewed institutions — a nuclear boot camp or two, new publications and commentaries on the Web and social media networks, and a growth in practitioners and students interested in re-examining traditional wisdom on the workings of deterrence, the impact of new technologies, the possibility of limited nuclear war, or the future of formal arms control and disarmament. There seems to be deep, continuing interest in strategic studies, and more than enough work to be done to understand the challenges of new forms of warfare, from cyber to hybrid, and of the new risks but also new responses to proliferation through monitoring and formal and informal control. And then there are the tasks of re-inventing, for new generations of politicians and younger voters, many of the original precepts of strategic studies that they have largely forgotten or have never known.

The New Agenda

What is the shape of the new agenda that strategic studies confronts? What are the prospects for even partial solutions or resolutions over the next decade and beyond? Seven critical areas come easily to mind which we can identify here only in telegraphic form. Only one or two are areas in which Bob has not already done significant thinking and work, or challenged his students and colleagues. Briefly tagged are:

1. Strategic analysis in a multipolar framework: two-sided games are no longer enough.
2. Understanding a more complex past — sufficient history?
3. The creation and breaking of taboos, blurring the nuclear/conventional divide, defining the new nuclear era of congruent safety and security.
4. The inclusion paradox — how to ensure and exploit diversity in thinkers and operators and the new divisions in civil/military roles?
5. Who will fight the next war — the man/machine mix?

6. Escalation theory and distributed lethality models — will it be better or worse in 2025?
7. The rediscovered but un-integrated threat — economic weapons, sanctions, and market denial.

To take up only several of these themes sketched in the briefest detail:

Almost from the outset, strategic studies has persisted with models for analysis and education that are at their core most appropriate for two-sided conflict and cooperation. Very little attention has been devoted to incorporating insights from multi-layered, multi-player games in which there are complex and interactive payoffs for both cooperation and competition. These are very hard problems, and not a declared arena for solutions by consensus.

But it is hard to see how in the strategic framework of the present we can avoid trying to unpack these problems in a more rigorous and systematic way. The rise of a maturing ambitious China and the effects of a deliberately disruptive Russia pose choices not faced by the United States since the early 1970s and the Nixon/Kissinger balancing acts. The George W. Bush/Dick Cheney dream of technological dominance as the answer seems less relevant in the era of hybrid or cyber warfare or the creation of new strategic islands.

In the past two decades there have been valiant efforts to develop resources for historical understanding about the use of force in concrete situations, particularly in the assessment of risk. But there are fewer than there must be in order to systematise and codify lessons about nuclear decision-making and its risks. We have also concentrated largely on a diagnostic approach — what went wrong, and what must be avoided. Little research or teaching has emphasised what must go right, the minimum that allows us to create scenarios for the realistic avoidance of bad choices or practices. Here we are stuck in Cold War protocols and the wisdom of dead strategists, or worse, the results of single-outcome gaming, and dogmas from the age of nuclear plenty in a bipolar world.

Moreover, historic analyses need time and space, and careful focus on interrelationships. Few institutions now exist that can and do follow the path of systematic estimate and experimentation — that is, assessing the interrelationships between the use of force and outcomes — except if led by a resolute leader (for example, the Turner

revolution in naval education at Newport) or team (for example, the related efforts in diplomatic history of Gaddis and Kennedy at Yale). Major themes require continuity and repeated intellectual attacks. To cite only a few: In the wake of the still-untested Iran deal, will the tenets of the nuclear revolution still hold? Will deterrence change at lower numbers or a slowing pace of proliferation? What are the parallels to the tri-polar competition among the major powers in the Pacific?

What are the critical technologies for the future — and how will we not only control their application but also recognise them?

What efforts can we make now to adjust and adapt, and to understand the process for doing so with the framework of strategic studies? The age of mass mobilisation is well behind us, but what of mass education and even training on these crucial issues and the choices that will have to be made? We test weapons, but not intellectual or organisational processes for making choices; we train for consistency, but not innovation or confrontation with uncertainty, and we leave more than necessary room for muddling through at the point of decision.

Concluding Words

The longer context narrative here should highlight why we must now take the time and the best talent to consciously assess the patterns and lessons of the past and to define the analytic tasks for the future. Change, while it appears to be rapid, occurs rather more slowly than we believe. Its assessment requires the best applications of the knowledge gained in intellectual research and observation (as well as operational practice) wielded by civilian and military analysts. New options and new choices may exist; inevitability exists only in literature and partisan history. Bob's career path, and the achievements of the cadre of students and colleagues he has brought along with him, assure us that there are always informed choices to be made, and options to be assessed toward better outcomes, if we have but the wit to find them.

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